CITY OF KIRKLAND
Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033 425.587-3225
www.ci.kirkland.wa.us

MEMORANDUM

To: Kurt Triplett, City Manager

From: Teresa Swan, Senior Planner
Paul Stewart, Deputy Director of Planning
Eric Shields, Planning Director

Date: July 26, 2010

Subject: **Final Adoption and Codification of the Shoreline Master Program Update and Related Minor Zoning Amendments and Kirkland Municipal Code Amendments. File No. ZON06-00017**

I. RECOMMENDATION

Staff recommends the City Council adopt four ordinances approving the Shoreline Master Program and authorize the Mayor to sign the attached letter to the Department of Ecology. The ordinances and their subject matter are noted below.

- Adopt **Ordinance 4251** approving the Shoreline Master Program Update (SMP) as approved by the Department of Ecology. The Ordinance includes:
  - **Shoreline Environment Designations Map** (see Attachment A to O-4251)
  - Shoreline **goals and policies** for the Comprehensive Plan (see Attachment B to O-4251)
  - **Shoreline regulations,** and revised and new **plates** for the Zoning Code (see Attachment C to O-4251)
  - **Shoreline Restoration Plan** (see Attachment D to O-4251)
  - Repeal of **Title 24 KMC** for the existing Shoreline Master Program (see Attachment E to O-4251)

On December 1, 2009, City Council adopted a *Resolution of Intent to Adopt* the SMP update (see Enclosure 1) approving the SMP update. The Washington Department of Ecology (DOE) has final approval jurisdiction over the SMP. DOE has transmitted a letter to the City approving the SMP (see Enclosure 3).

The final stage of the SMP update approval process is for the City Council to review the DOE required minor changes to the SMP (see Enclosure 5), authorize a letter to be forwarded to DOE responding to the minor changes (see Enclosure 8), and adopt the

ordinances so that the SMP documents can be codified. The SMP Ordinance 4251 reflects the required changes from DOE.

- Adopt **Ordinance 4252** for minor **Zoning Code Amendments** relating to the SMP update. These amendments are not subject to DOE's approval.

  On December 1, 2009, the City Council also adopted a *Resolution of Intent to Adopt* (see Enclosure 2) for Part 1 of the minor code amendments (see Part 1 of Attachment A to 0-4252). Part 2 contains subsequent additional minor code amendments that City Council has not previously reviewed (see Part 2 of Attachment A to 0-4252).

- Adopt **Ordinance 4253** for minor amendments to the **Subdivision Ordinance** in the KMC relating to the SMP update (see Attachment A to 0-4253). The City Council has not previously reviewed these amendments. These amendments are not subject to DOE's approval.
- Adopt **Ordinance 4254** amending the Planning Department's **Fee Schedule** of KMC 5.77.070 relating to the SMP update (see Attachment A to 0-4254).
- Authorize the Mayor to sign the attached **letter to the Department of Ecology** on behalf of the City (see Enclosure 8) accepting the few minor amendments to the SMP required by DOE as outlined in Enclosure 5 of this memo.

II. DOE'S APPROVAL OF KIRKLAND'S SMP UPDATE (Ordinance 4251)

A. DOE Approval and Required Changes

The City has spent the past five years developing the SMP update, working closely with DOE, state and local agencies and affected tribes, environmental groups and property owners, and providing extensive public outreach opportunities. It has been a long and challenging process and involved considerable work on the part of the Planning Commission, Houghton Community Council, City Council and staff to understand complex shoreline issues and to balance state and federal directives with concerns of Kirkland shoreline property owners.

Following City Council's approval on December 1, 2009 of R-4786 a resolution indicating the Council's "Intent to Adopt" the SMP, the Kirkland SMP update was transmitted to the Department of Ecology for approval.

On July 26, 2010, DOE transmitted a letter (see Enclosure 3) approving Kirkland's SMP with the condition that the City accepts a few minor clarifications and updates to the shoreline regulations listed in Enclosure 5 (noted as DOE's Attachment C).

It is important to note that none of the changes required by DOE concern policy issues or substantive changes. In fact most of the changes were clarifications, section references, and corrections identified by City staff. With the exception of the minor changes, the SMP regulations are the same as approved by the Council in December and were the basis for Ecology's approval.

DOE's **minor amendments to the SMP** included the following:

- City staff recommended to DOE some follow-up **minor clarifications to the pier and dock standards** in Section 83.270-290 KZC, **shoreline modification submittal requirements** in Sections 83.300 and **shoreline exemptions** in Section 141.40 KZC (pages 1-3 and 12 of Enclosure 5).
- DOE requested the **5 plates** referenced in the shoreline regulations of Chapter 83 KZC be **assigned plate numbers** now instead of waiting for final codification. DOE also recommends omitting Plates 22, 27 and 28 from the SMP update since the plates are not referenced in the shoreline regulations, but in other chapters of the Zoning Code (pages 4-11 of Enclosure 6). These plates are now attached to the miscellaneous Zoning Code Amendments in Ordinance 4252.
- Changes are needed to **Chapter 141 KZC Shoreline Administration** concerning procedures for Substantial Development Permits, Conditional Use Permits and Variances to reflect **HB#2935** that was passed by the legislature after the City approved and transmitted the SMP update to DOE in December 2009. The House Bill revised the decision and appeal processes.

In addition to DOE's letter of approval and the list of minor changes to the SMP update, the Department of Ecology has forwarded the following documents that support approval of Kirkland's SMP:

- **Enclosure 4: Findings and Conclusions** – an analysis discussing how the Kirkland SMP meets the Shoreline Management Act and the new State Guidelines.
- **Enclosure 6: Public Comments –** a summary of public comments submitted to DOE, the City's responses to the comments and DOE's conclusions.
- **Enclosure 7: SMP Submittal Checklist –** a submittal checklist that demonstrates the City is compliant with all of the requirements of the Shoreline Management Act and the SMP Guidelines adopted by the legislature.

Staff has prepared a **letter for Council review** (see Enclosure 8) agreeing to the minor changes to the SMP and recommends that the City Council authorize the Mayor to sign the letter on behalf of the City. The SMP will be in effect when the City transmits the letter to DOE agreeing to the minor changes. If the City Council authorizes the Mayor to sign the letter to DOE, the SMP will be in effect on August 4, 2010.

B. DOE COMMENDS KIRKLAND ON ITS SMP UPDATE

Kirkland is the first jurisdiction on Lake Washington to receive approval of its SMP update. DOE staff has told City staff and other Lake Washington jurisdictions that Kirkland's SMP is a good example for others to use as model for its innovative approaches, incentives, and flexible options to regulations on shoreline setbacks, piers and docks, shoreline stabilization (i.e. bulkheads) and vegetative management (see Enclosure 9).

DOE is also hopeful that other Lake Washington jurisdictions will follow in the footsteps of Kirkland by **reflecting the federal preferred standards for piers and docks** in their regulations as Kirkland has done. This past June, City staff met with the federal Army Corps of Engineers and National Marine Fisheries Service (NOAA) to discuss a **new expedited review process** if applicants follow Kirkland's basic pier and dock standards that mirror the

federal preferred standards. Instead of a 6-9 month review process, the federal agencies will complete their approval in less than a month. DOE is promoting Kirkland's SMP as a way to shorten the overall review process for piers and docks (see Enclosure 9).

DOE has told City staff that the Kirkland SMP has also gone an extra step in creation of a **decision tree feasibility analysis** of different shoreline stabilization alternatives to assist in implementation of their updated requirements for shoreline protection. This decision tree is the new Plate 43 found in Attachment C of Ordinance 4251. DOE is encouraging other jurisdictions to use the same decision tree if appropriate for their shoreline conditions or to prepare a similar decision tree reflective of their shoreline conditions (see Enclosure 9).

III. BACKGROUND INFORMATION ON SMP

The City was required to update its Shoreline Master Program (SMP) by December 1, 2009. The SMP update must implement the policies and principles established in the Shoreline Management Act (RCW 90.58) and reflect the new State Guidelines of WAC 173-26. Some of the new provisions found in the State Guidelines are "no net loss" of ecological function, mitigation sequencing, specific standards for shoreline stabilization, and required standards for piers, docks and shoreline native vegetation. In addition, a cumulative impact analysis must be prepared to confirm that the new shoreline regulations will result in "no net loss" of ecological function citywide over time and a restoration plan must be created for improving the ecological function of the city's shoreline over the next 20 years.

Over the course of the past five years, the City has held over 18 public meetings on the SMP update with the Planning Commission and Houghton Community Council recommending approval following two public hearings. The City Council considered the SMP update at three study sessions on **October 22nd** **November 2nd** and **November 23,** 2009 and then directed staff to prepare two resolutions of **intent to adopt** for consideration at the **December 1. 2009** meeting (see Enclosures 1 and 2).

Resolution 4786 was adopted approving the SMP update and Resolution 4787 was adopted approving related miscellaneous Zoning Code amendments (Part 1 in Attachment A of Ordinance 4252). On December 14, 2009 the Houghton Community Council approved the SMP. Additional background information on the SMP update is available at the City's **SMP web site**.

The City met the State adoption deadline date of December 1, 2009 when the City Council adopted a Resolution 4786 that approved the SMP update. The SMP update was then transmitted to the Department of Ecology as they have final approval over all SMPs. DOE's 7-month approval process included a comment period, a public hearing and an opportunity for the City to respond in writing to the comments (see Enclosure 6).

DOE has determined that the Kirkland SMP update complies with the Shoreline Management Act (SMA) and the SMA Guidelines (see Enclosures 4,7 and 9) and approved the SMP with a few minor changes (see Enclosure 3 and 5). The final SMP approval process is for the City to agree to the minor changes required by DOE in writing (see Enclosure 8). Once the letter from the City is transmitted to DOE, the SMP is in effect.

IV. MINOR ZONING CODE AMENDMENTS (Ordinance 4252-Parts I and II)

The amendments are not subject to Department of Ecology approval.

A. Proposed Amendments

Various minor amendments to the Zoning Code are needed to integrate the new shoreline regulations of Chapters 83 and 141 into the Zoning Code and to make the existing code consistent with the new shoreline regulations. On December 1, 2009, the City Council reviewed the amendments listed in **Part 1 of Attachment A in Ordinance 4252** and passed Resolution R-4787 awaiting final approval of the SMP update.

Subsequent to completion of the SMP update, staff completed a follow-up review of the Zoning Code and determined additional housekeeping amendments relating to the SMP update were needed (see **Part 2 of Attachment A of Ordinance 4252**). On May 27, 2010 the Planning Commission held a study session on the amendments and then on June 24, 2010 held a public hearing on the amendments. The Planning Commission recommended approval of the additional amendments at the June 24th meeting. The Houghton Community Council held a courtesy hearing on June 28, 2010 and recommended approval of the amendments to the City Council. No one attended or spoke on the amendments at either the Planning Commission or Houghton Community Council hearings.

The amendments in Part 2 of Attachment A of Ordinance 4252 are housekeeping in nature or are a follow-up from the amendments approved under the Intent to Adopt Resolution 4787 adopted by the City Council on December 1, 2009.

A **summary of the amendments in Part 2** is listed below:

- Chapter 1 - User Guide: add a reference to the new shoreline chapters.

- Chapter 5 – Definitions: delete definitions that have been revised and moved to the new shoreline chapter of Chapter 83; insert references in several definitions to Chapter 83; and revise a few definitions to be consistent with Chapter 83.

- Chapter 20.05 – Multi-family and Chapter 30.20 - WDII: add a new General Regulation to allow a private shoreline park (beach) associated with residential developments in the Residential Multi-family (RM) zone and in the Waterfront District II (single family shoreline) zone. There is one private beach west of Juanita Beach Park in a RM 1.8 zone and one private beach in the north potion WDII. The beaches are owned by adjacent residential properties.

  A private park is not an allowed use under the current WDII and multi-family use zone charts. However as a water dependant use, the use is appropriate for the shoreline and should be allowed.

- Chapters 75 (Historic), 85 (Geologic Hazardous), 90 (Drainage Basins), 95 (Tree Management and Landscaping), 100 (Signs), and 105 (Parking): make references to the applicable sections in Chapter 83, and change the rounding up of fractions to determine the density for multifamily development in Chapter 90 from 0.66 to 0.50 to match the fraction used for the maximum density calculation in the new shoreline regulations and in Chapter 115 (see discussion below for Section 115.125).

- Chapter 112 – Affordable Housing Incentives: clarify that some of the permitted modifications to dimensional standards in Chapter 112 would require a shoreline variance for properties along the shoreline. The Department of Ecology would need to approve the modifications to the shoreline setback, lot coverage and possibly height. In some cases, the height allowance under the Shoreline Management Act is greater than under the Kirkland Zoning Code in which case the height modification could be approved without shoreline variance. When the maximum allowable height under the Zoning Code is less than allowed under the shoreline regulations, the Zoning Code height takes precedence.

- Chapter 115 – Miscellaneous Use Development and Performance Standards:
    - 115.40- revise regulation on fences to be consistent with Chapter 83
    - 115.45- reference Chapter 83 for screening of garbage and receptacles regulations
    - 115.47- reference Chapter 83 for loading and service areas regulations
    - 115.60- reference Chapter 83 for height exceptions regulations
    - 115.85- reference Chapter 83 for lighting regulations
    - 115.90- reference Chapter 83 for lot coverage regulations
    - 115.105- reference Chapter 83 for outdoor storage regulations
    - 115.115- reference Chapter 83 for required yards regulations
    - 115.120- reference Chapter 83 for rooftop appurtenances regulations
    - 115.125- amend section on rounding up of fractions for multi-family dwelling units to be consistent with the density standards in the new shoreline regulations of Chapter 83. The rounding up would change from 0.66 to 0.50, such that one additional unit would be allowed if the lot size divided by the minimum density standard (i.e. 3600 sq ft) results in a fraction of 0.50 or greater. The City Council discussed this change in fraction during the study sessions in October and November 2009 as part of the SMP update review and agreed to extend the change in rounding up to the entire city. King County also uses 0.50 for rounding up to the next unit number in the future annexation area so the change in fraction would provide annexation property owners the same density standards as they have now.

- Chapter 117 – Wireless: reference Chapter 83 for wireless facilities regulations and clarify that new cell towers are not permitted in the shoreline area as regulated in Chapter 83.

- Chapter 162 – Non-Conformance:
    - 162.05 – reference Chapter 83 in User Guide
    - 162.35 - revise subsection 7 and delete subsection 9 since part or all of these subsections are now in Chapter 83

B. Decisional Criteria for Amending the Zoning Code

The Kirkland Zoning Code Section 135.25 establishes criteria for evaluating text amendments to the Zoning Code. These criteria and how the proposed amendments meet the criteria are discussed below:

Criteria 1 - The proposed amendment is consistent with the applicable provisions of the Comprehensive Plan; and

The Zoning Code amendments are consistent with the Comprehensive Plan, including the new goals and policies established for shoreline management.

Criteria 2 - The proposed amendment bears a substantial relation to public health, safety, or welfare; and

Consistent with the provisions of RCW 90.58.020, the proposed regulations provide for the public health, safety and welfare by further implementing the City's SMP update and making the SMP update and existing Zoning Code consistent.

Criteria 3 - The proposed amendment is in the best interest of the residents of Kirkland.

The amendments are in the best interest of the residents of Kirkland in that they make the Zoning Code internally consistent and further implement the new shoreline regulations as mandated by the Shoreline Management Act and the new State Guidelines.

V. KIRKLAND MUNICIPAL CODE AMENDMENTS

The amendments are not subject to Department of Ecology approval.

A. Subdivision Ordinance, Chapter 22 KMC (Ordinance 4253)

A few minor housekeeping amendments are needed to Chapter 22, Subdivision Ordinance, in the Kirkland Municipal Code. The amendments involve referring to the new stream definitions and platting requirements found in the new shoreline Chapter 83 in the Zoning Code.

The Planning Commission and Houghton Community Council considered the Subdivision Ordinance amendments along with the amendments to the Zoning Code (see Section IV above) at their hearings in June 2010 and recommended approval of the amendments.

B. Fee Schedule of Section 5.74.070 KMC (Ordinance 4254)

Staff recommends the following new fees relating to the SMP update:

Exemptions from Shoreline Substantial Development Permit - $200
Under WAC 173-14-040, some types of development and activities are exempt from obtaining a shoreline permit. However, the City must still review the developments and activities for compliance with the City's shoreline regulations and policies. Staff must complete a review, prepare a memo and send an exemption notice to DOE and affected tribes.

Alternative for Tree Replacement and Shoreline Vegetation Compliance - $200
Chapter 83 KZC contains two provisions where an applicant can request an alternative approach to meeting the tree replacement and/or shoreline vegetation standards. Staff will need to review the alternative approach to determine if it will meet the Not Net Loss of

ecological function provisions in Chapter 83 and if the approach is equal or superior to the basic standard in the code. It is likely that the City's arborist will be involved. Staff recommends a fee to cover staff time to review and approve the alternative approaches.

Both of the above fees are the *lowest fee rate* charged by the Planning Department. Over the next year, City staff will monitor the time it takes to review and issue exemption requests and review alternative option requests to determine if the $200 fee is sufficient to cover the cost to the city.

Lastly, the term "General Moorage Facility" used in the Fee Schedule has been changed with the new shoreline regulations to "Piers and Docks Associated with Multifamily Development and Marinas and Moorage Facilities Associated with Commercial Uses" to be consistent with the terminology used in the new State Guidelines. Staff recommends revising the terminology in the Fee Schedule to be consistent with the new shoreline regulations.

VI. SEPA COMPLIANCE

On May 20, 2010, the City complied with the requirements of SEPA for the minor code amendments by issuing a SEPA Addendum to the City's 2004 Environmental Impact Statement relating to the required GMA update to the City's Comprehensive Plan and development regulations (see City official file for the SEPA Addendum).

ATTACHMENTS

Enclosure 1 – Intent to Adopt the SMP update, Resolution 4786
Enclosure 2 – Intent to Adopt Zoning Code Amendments, Resolution 4787
Enclosure 3 – Department of Ecology (DOE) approval with conditions, dated July 26, 2010
Enclosure 4 – DOE's Attachment B: Findings and Conclusions
Enclosure 5 – DOE's Attachment C: Amendments to Kirkland's SMP
Enclosure 6 – DOE's Attachment D: Comments on Kirkland SMP
Enclosure 7 – DOE's SMP Submittal Checklist
Enclosure 8 – Draft letter from the City Council agreeing to the SMP changes
Enclosure 9 – DOE's Internal Memo on Kirkland's SMP

<u>Ordinance 4251 (SMP)</u>
Attachment A – Shoreline Environment Designations Map
Attachment B – Shoreline Area Chapter of the Comprehensive Plan
Attachment C – Chapter 83 and 141 KZC and revised Plate 19 and new Plates 41-44
Attachment D – Shoreline Restoration Plan
Attachment E – Repeal of Title 24 KMC
Summary Ordinance

<u>Ordinance 4252 (Zoning Code amendments)</u>
Attachment A – Miscellaneous amendments relating to SMP update: Parts 1 and 2, including revised Plates 22, 27 and 28 and new Plate 36
Summary Ordinance

<u>Ordinance 4253 (KMC amendments)</u>
Attachment A – Subdivision Ordinance amendments relating to SMP update – Sections 22.08.054, .055 and .056, 22.12.010 and 22.20.010 KMC

Summary Ordinance

Ordinance 4254 (KMC amendments)
Attachment A – Fee Schedule, Section 5.74.070 KMC

ENCLOSURE 1

RESOLUTION R-4786

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND APPROVING THE PROPOSED KIRKLAND SHORELINE MASTER PROGRAM UPDATE AND THE ACCOMPANYING GOALS AND POLICIES, ENVIRONMENTAL DESIGNATIONS, REGULATIONS, RESTORATION PLAN AND CUMULATIVE IMPACTS ANALYSIS, AND DIRECTING THAT THE APPLICABLE SHORELINE MASTER PROGRAM UPDATE MATERIALS BE PROVIDED TO THE STATE DEPARTMENT OF ECOLOGY FOR ITS REVIEW, FILE ZON06-00017.

WHEREAS, the Washington Shoreline Management Act (RCW 90.58, referred to herein as "SMA") recognizes that shorelines are among the most valuable and fragile resources of the state, and that state and local government must establish a coordinated planning program to address the types and effects of development occurring along shorelines of state-wide significance; and

WHEREAS, the City of Kirkland ("City") is required to update its Shoreline Master Program ("SMP") pursuant to the SMA and WAC 173-26; and

WHEREAS, on December 1, 2006, the City did issue a Final Shoreline Analysis Report, an inventory and characterization of the city's shorelines to assess ecological functions and ecosystem-wide processes operating within the city's shoreline jurisdiction and to serve at a baseline from which future development actions in the shoreline jurisdiction will be measured; and

WHEREAS, there has been extensive public participation with respect to the SMP Update, including but not limited to the following: public meetings before the Houghton Community Council and the Kirkland Planning Commission, shoreline tours, public forums, open houses, meetings with property owners and neighborhood meetings; and

WHEREAS, the Kirkland Planning Commission, after numerous study sessions and public meetings and hearings, recommended approval of the SMP Update at its September 10, 2009 meeting; and

WHEREAS, the Kirkland City Council considered the SMP at study sessions dated October 22, 2009, November 2, 2009 and November 23, 2009; and

WHEREAS, the Kirkland City Council did conclude that the SMP will result in "no net loss" in shoreline ecological function relative to the baseline due to its implementation and will ultimately produce a net improvement in shoreline ecological function; and

WHEREAS, on July 16, 2009, the Kirkland City Council concludes that the SMP is consistent with and meets the Guidelines established under WAC Chapter 173.26; and

WHEREAS, the Kirkland City Council concludes that the SMP is consistent with and implements Shoreline Management Act (RCW 90.58 and the Growth Management Act (RCW 36.70);and

WHEREAS, the State Department of Ecology is authorized under the SMA to approve, deny or proposed modifications to the City's SMP; and

WHEREAS, on July 16, 2009, the City's State Environmental Policy Act responsible official issued an Environmental Impact Statement Addendum to the 2004 Environmental Impact Statement for the 2004 City of Kirkland Comprehensive Plan 10-Year Update.

NOW, THEREFORE, be it resolved by the City Council of the City of Kirkland as follows:

Section 1. The City Council hereby approves the proposed City of Kirkland Shoreline Management Plan Update as set forth in Attachments A through G attached to this resolution of intent and incorporated by reference:

Shoreline Environment Designation Map as set forth in Attachment A;

Amendments to the City's Comprehensive Plan Goals and Policies as set forth in Attachment B;

Amendments to the Kirkland Municipal Code deleting KMC Chapter 24.05 and 24.06 as set forth in Attachment C;

Amendments to the Zoning Code adding a new Chapters 83 and 141 and amending Chapter 180 – Plates as set forth in Attachment D;

Shoreline Restoration Plan set forth in Attachment E; and

Shoreline Cumulative Impacts Analysis as set forth in Attachment F.

Section 2. The City Council directs City staff to forward the appropriate SMP documents to the State Department of Ecology for formal review and approval.

Passed by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 2009.

Signed in authentication thereof this ____ day of _____, 2009.

_____
MAYOR

Attest:

_____
City Clerk

RESOLUTION R-4787

AN RESOLUTION OF THE CITY OF KIRKLAND RELATING TO ZONING, PLANNING, AND LAND USE ASSOCIATED WITH THE SHORELINE MASTER PROGRAM UPDATE, FILE NO. ZON06-00017.

WHEREAS, the City Council has received recommendations from the Kirkland Planning Commission and the Houghton Community Council to amend certain sections of the text of the Kirkland Zoning Code, Ordinance 3719 as amended, all as set forth in that certain report and recommendations of the Planning Commission and the Houghton Community Council dated September 10, 2009 and bearing Kirkland Department of Planning and Community Development File No. ZON06-00017; and

WHEREAS, prior to making said recommendation, the Kirkland Planning Commission, following notice thereof as required by RCW 35A.63.070, on June 25, 2009, held a public hearing, on the amendment proposals and considered the comments received at said hearing; and

WHEREAS, prior to making said recommendation, the Houghton Community Council, following notice thereof as required by RCW 35A.63.070, on June 22, 2009, held a courtesy hearing, on the amendment proposals and considered the comments received at said hearing; and

WHEREAS, pursuant to the State Environmental Policy Act (SEPA), there has accompanied the legislative proposal and recommendation through the entire consideration process, a SEPA Addendum to Existing Environmental Documents issued by the responsible official pursuant to WAC 197-11-600; and

WHEREAS, in regular public meeting the City Council considered the environmental documents received from the responsible official, together with the report and recommendations of the Planning Commission and Houghton Community Council; and

WHEREAS, the City Council wishes to state its intent to adopt the attached proposed Zoning Code text upon approval of the City's Shoreline Master Program by the State Department of Ecology; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Kirkland as follows:

Section 1. The City Council hereby approves the proposed Zoning text amendments of Ordinance 3719 as amended, the Kirkland Zoning Ordinance as set forth in Attachment A attached to this resolution and incorporated by reference. The City Council intends to adopt the proposed Zoning text amendments set forth in Attachment A upon the City's final adoption of its Shoreline Master Program.

PASSED by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 20__.

SIGNED IN AUTHENTICATION thereof this _____ day of _____, 20__.

_____
Mayor

Attest:

_____
City Clerk

Approved as to Form:

_____
City Attorney

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 26, 2010

The Honorable Joan McBride, Mayor
City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033-6189

Re: City of Kirkland's Shoreline Master Program Comprehensive Update Resolution R-4786

Dear Mayor McBride:

I would like to take this opportunity to commend the City of Kirkland (City) for its efforts in developing the proposed Shoreline Master Program (SMP) Update. It is consistent not only with the needs of the City, but also with the policy and procedural requirements of the Shoreline Management Act and the Shoreline Master Program Guidelines.

As we have already discussed with your staff, the Washington State Department of Ecology (Ecology) approves the proposed amendment, **subject to the City's agreement to the required changes detailed in Attachment C**. The findings and conclusions that support Ecology's decision are also enclosed (Attachment B).

Because a change is required, the amendment will not become effective until Ecology receives written notice that the City agrees to the changes[1]. The effective date of the SMP update will be the date on which Ecology receives written notice of your agreement.

As a reminder, shoreline procedural rules[2] require the City to publish a notice that Ecology has taken final action on this SMP update. Therefore, once Ecology acknowledges receipt of your written agreement, the City should publish a public notice.

Finally, the City must forward two hard copies and one digital copy of the final complete package of SMP amendments to Ecology.

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[1] WAC 173-26-120(7)(b)(i)
[2] WAC 173-26-120(9)

To summarize, if the City agrees with the required changes, it must:

1. Notify Ecology in writing.
2. Wait to hear from Ecology that we received your notice of agreement.
3. Publish a notice that Ecology has taken final action.
4. Forward two hard copies and one digital copy of the final amendment package to Ecology.

Thank you again for your efforts. If you have any questions, please contact our regional planner Joe Burcar at joe.burcar@ecy.wa.gov/ (425)-649-7145.

Sincerely,

Ted Sturdevant by Polly Zehm

Ted Sturdevant
Director

Enclosures

By certified mail [7003 1010 0005 0569 1390]

cc: Joe Burcar, Ecology Northwest Regional Office
Peter Skowlund, Ecology HQ
Paul Stewart, City of Kirkland
Teresa Swan, City of Kirkland
Geoff Tallent, Northwest Regional Office
Interested Parties

ATTACHMENT B
FINDINGS AND CONCLUSIONS
FOR PROPOSED AMENDMENTS TO THE CITY OF KIRKLAND
SHORELINE MASTER PROGRAM

SMP Submittal January 6, 2010, *Resolution R-4786*
Prepared by Joe Burcar, on June 27, 2010

Brief Description of Proposed Amendments:

The City of Kirkland (City) has submitted to Ecology for review a comprehensive amendment to their Shoreline Master Program (SMP). The updated master program will reside as a 'stand-alone' SMP codified within Chapter 83 and 141 of the City of Kirkland Municipal Code, these elements including changes required by this approval (**Attachment C**) constitutes the City's complete Shoreline Master Program.

FINDINGS OF FACT

Need for Amendment: The proposed amendments are needed to comply with the statutory deadline for comprehensive update of the local Shoreline Master Program pursuant to RCW 90.58.100.

SMP Provisions to be changed by the Amendment as proposed: This comprehensive SMP amendment is intended to replace the City's existing SMP in entirety.

Amendment History (Timeline summary): The City initiated the comprehensive SMP update consistent with a scope of work described within *SMA Grant No. GO600236,* the original grant was subsidized through additional grant funding (*G0900254*) in 2009. The City's statutory deadline pursuant to RCW 90.58.080 is December 1, 2009, however, the City applied for grant funding as an 'early adaptor', starting their comprehensive SMP update prior to their scheduled (RCW 90.58.100) grant cycle. The grant agreement originally provided $68,000 to be allocated to the City over two years between July 1, 2005 and June 30, 2007. The grant agreement was signed by both parties on February 6th, 2006, initiating the two-year update process. Pursuant to a legislative amendment to RCW 90.58, a third year was provided for jurisdictions determined to be making "progress toward completing their SMP-update", thus extending the City's grant deadline to July 1, 2008. In addition, the City formally requested an additional $9600 of grant funding to finalize the local SMP update process in the spring of 2009. Ecology awarded to the City the additional funding, increasing the total grant allocation to $77,600 spread out over 4-years between 2005 - 2009.

The City committed to locally adopt a SMP on December 1, 2009 through *Resolution #4786*, for which a formal submittal including supporting materials was provided to Ecology on December 17, 2009. In a letter dated January 6, 2010, Ecology acknowledged a complete SMP submittal initiating the formal State review process. Ecology held a public hearing related to the updated SMP on February 9, 2010, also accepting written comment from February 1st, 2010 through March 5, 2010. After completion of the comment period, Ecology summarized in a letter dated March 19, 2010 all of the comments received along with a request that the City provide a final

response to these comments. The City provided Ecology with the requested final response in a letter dated May 11, 2010.

Amendment History (Local Review Process) The City produced a *draft Inventory/Characterization Report* requesting public and agency comment on the analysis in October of 2006. Ecology provided the City with specific written comments on the report in a letter dated October 4th, 2006. After consideration of public and agency comments, the City produced a revised final *Inventory/Characterization Report* dated December 2006, which served as a basis of existing conditions, restoration and protection opportunities for the remainder of the update.

The City produced a *draft SMP Designation/General Policy Report* in June 2007, which served as a starting point for the final draft SMP produced in June 2009. During this timeframe the City continually refined multiple SMP drafts based on citizen input, agency comment, planning commission discussion and community council input. Ecology provided three sets of comments on the draft SMP, generally dated July, September and December 2009. City staff produced a final draft in October 2009, which served as the Planning Commission/Staff recommendation to the City Council for local adoption. The City Council was joined in three separate staff session meetings with the Planning Commission, key City Staff, Ecology and the City's consultant. The Council generally endorsed the work done by the Planning Commission inserting a few minor changes into the City's local adoption.

On December 1, 2009, following timely and effective notice, the City of Kirkland Council held a public hearing on local adoption of the Shoreline Master Program Amendment through adoption of *Resolution #4786*.

With passage of *Resolution #4786* on December 17, 2010, the City authorized staff to forward the proposed amendments to Ecology for formal review of: "A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND APPROVING THE PROPOSED KIRKLAND SHORELINE MASTER PROGRAM UPDATE AND THE ACCOMPANYING GOALS AND POLICIES, ENVIRONMENT DESIGNATIONS, REGULATIONS, RESTORATION PLAN AND CUMULATIVE IMPACTS ANALYSIS"

Ecology verified the proposed SMP amendment as complete on January 6, 2010. Notice of the State (Ecology) comment period was distributed on January 20, 2010 to state task force members and interested parties identified by the City in compliance with the requirements of WAC 173-26 and as follows: The State Department of Ecology comment period began on February 1, 2010 and continued through March 5, 2010 including a public hearing held at Kirkland City Hall on the evening of February 9, 2010. Notice of the comment period and public hearing including: a description of the proposed amendment, a link to copies of the amendment and deadlines for public comment were provided in the January 18, 2010 edition of the *Seattle Times Newspaper*.

Consistency with Chapter 90.58 RCW: The proposed amendment has been reviewed for consistency with the policy of RCW 90.58.020 and the approval criteria of RCW 90.58.090(3), (4) and (5). The City has also provided evidence of its compliance with SMA procedural requirements for amending their SMP contained in RCW 90.58.090.

Consistency with "applicable guidelines" (Chapter 173-26 WAC, Part III): The proposed amendment has been reviewed for compliance with the requirements of the applicable Shoreline Master Program Guidelines (WAC 173-26-171 through 251 and -020 definitions). This includes review of a SMP Submittal Checklist. The checklist was originally completed by the City and submitted to Ecology with the City's initial draft SMP on June 22, 2009. Working with City Staff, Ecology reviewed three updated versions of both the SMP and Checklist including the final SMP checklist listing all previous changes to the draft SMP as completed as of June 2010.

Consistency with SEPA Requirements: The City submitted evidence of SEPA compliance as part of their final submittal to Ecology in December 2009. Ecology did not provide comments on the City's DNS threshold determination.

Other Studies or Analyses supporting the SMP update: Ecology reviewed the following reports, studies, map portfolios and data prepared by the City in support of the SMP amendment:

- *City of Kirkland Shoreline Inventory & Characterization (draft) October 2006, (final) December 2006;*
- *City of Kirkland Shoreline Environment Designations Summary (draft) June 2007, (final) June 2009;*
- *City of Kirkland Restoration Plan dated June 2009;*
- *City of Kirkland, SMP Update – Cumulative Impacts dated June 2009;*
- *Final SMP-checklist dated December 2009.*

Summary of issues raised during the Public Review Process:

Throughout Ecology's 33-day comment period (February 1 – March 5, 2010) and formal testimony provided during the February 9, 2010 public hearing a range of issues, questions and comments were provided to Ecology related to the City's SMP update. Below is a list of SMP topics referenced throughout the Ecology comment period:

- 3-testimon's focused on the following issues: **SMP Update Process** (Use of Science, Public Involvement), **SMP Protections** (Marina Use/Wildlife Protection, Shoreline Armoring, Vegetation Management, Setback/Buffer standards).
- 7-written comments submitted on the following issues: **SMP Update Process** (Public Involvement, Analysis: Use of Science, Effectiveness of Regulations, No-Net-Loss, Restoration), **SMP Protections** (Setback/Buffers, Vegetation Management Standards, Aquatic Invasive Species), **Shoreline Modifications** (Piers/Docks, Shoreline Armoring Boating Facilities, Dredging), **Shorelines of State-Wide-Significance**, **Shoreline Uses** (Priority-Water-Oriented, Transportation, Utility), **Non-Conforming Uses**, **Public Access** and **Shoreline Administration**.

Pursuant to SMP Guidelines, Ecology summarized all comments received during the public comment period and then provided the summary to the City for a response. The City provided a final response to Ecology on May 11, 2010, for which Ecology has provided a final conclusion in consideration of the original comment, the City's response and application of the SMP

Guidelines (WAC 172-26). The complete record of Ecology's comment summary, the City's response and Ecology's final conclusion are provided in **Attachment D**.

Summary of Issues Identified by Ecology as Relevant To Its Decision:

Based on on-going coordination throughout the SMP update with City Staff, Ecology comments on draft SMP deliverables and review, response and conclusion of public comments (**Attachment D**), the following provides a general summary of issues relevant to Ecology's final decision on the City of Kirkland's SMP:

Shoreline Update Process: The City spent more than 4-years working on this SMP update. During this time they provided significant local contributions necessary to supplement grant funding provided by the State. The extra time, staff resources and funding required of this update can largely be contributed to the City's commitment to actively involve interested parties in the City's SMP update, beyond the minimal Public Involvement requirements of the Guidelines. This extra effort has helped produce some innovative solutions as part of this SMP update. As stated in the City's response to a citizen comment related to public involvement, the City held 16-study sessions with their Planning Commission, 9-study sessions before the Houghton Community Council, 4-study sessions before the City Council, 2-open houses, 1-public forum, 1-property owner workshop, 1-shoreline tour, and a separate boat tour. All of these events were advertized and open to the general public. In addition, the City held numerous meetings with specific interest groups including neighborhood associations and other advocacy groups. Despite this dedicated effort by the City, comments critical of the City's outreach where still voiced throughout the City's SMP update process. It is important to note that the City did incorporate public input into the Shoreline Master Program as evidence by the many master program amendments between the initial draft SMP release in June 2009 through the final program adoption by the Council under Resolution #4786 in December of 2009.

Ecology also provided an additional public hearing and public comment period after local adoption of the updated SMP. As described within the *Findings/Conclusion* (Attachment B) at Ecology's Public Hearing 3-people provided public testimony followed by 7-written comments submitted throughout the 33-day Ecology public comment period. Pursuant to WAC 173-26-120, the City provided a response to these comments, which are included in Attachment D.

Shoreline Protections: The City faced a challenge at the onset of this update in creating shoreline **Setback/Buffer** and **Vegetation Management** standards that could satisfy no net loss and be administered equitably within the urbanized shoreline environment. Further complicating this task was the existing SMP's (standard) 15-foot building setback, which was not anticipated to provide neither adequate critical area protection nor satisfy the no net loss Guideline requirement related to future development. Existing development patterns generally established upland structures located at the minimum (15-foot) setback in the urban core of the City, contrasted by large variation throughout the City's residential shoreline segments, ranging from a median 43-foot setback in the low density residential segment to a 25-feet (median) setback in the medium/high residential shoreline segment.

With the exception of both the Juanita and Yarrow Bay wetland areas, past shoreline development resulted in characterization of a majority of the City's shoreline as moderate to highly impaired. However, within residential shoreline segments, future redevelopment potential was not consistent, indicating lot-by-lot variation, largely as a result of variation in lot depth or overall parcel size and the ability to accommodate future expansion. Therefore, the City proposed a variable shoreline **Setback/Buffer** of 30% of the lot depth within a range of a minimum of 30-feet and a maximum of 60-feet. As illustrated within the City's Cumulative Impact Analysis and based on the existing residential development pattern and variation in redevelopment potential the 30% (lot depth) setback was determined to be the minimum **Setback/Buffer** to satisfy no net loss[1] of shoreline habitat requirement for the variable residential shoreline parcels. By contrast, both the City's urban and natural shorelines exhibited more consistent development patterns, not showing significant opportunity for future physical expansion through redevelopment. Therefore, SMP standards related to these areas were more or less upgraded to ensure on-going consistency with the Guidelines.

Shoreline Modifications: SMP regulations related to both **Piers/Docks** and **Shoreline Armoring** modifications received a lot of attention during the City's update. Because of the urban/developed condition of a majority of the City's residential shoreline, many property owners voiced concerns related to maintaining existing **Piers/Docks** and bulkheads structures. The City proposed **Shoreline Armoring** regulations consistent with the standards provided in Guidelines, allowing for repairs of existing hard armoring structures, but limiting new and replacement hard armoring to those situations where a primary structure is shown to be in need or dependent on a hard armored bulkhead to protect the upland structure from erosion.

For **Pier/Dock** standards, the City's obligation under the update was to maintain or improve aquatic ecological functions by minimizing or reducing (overall) overwater structure. Again, because of the urban/developed nature of the City's shoreline, a majority of the existing residential lots are already developed with private **Pier/Docks**, for which property owners voiced concern related to maintenance and redevelopment potential of these structure. Further, most of the existing **Pier/Dock** structures were developed prior to current State or Federal standards specifying construction material and orientation/dimension of these overwater structures to minimize impacts to aquatic species. Through regional coordination with neighboring Lake Washington jurisdictions, the City incorporated impact minimizing residential **Pier/Dock** standards based on Regional General Permit standards developed by the Army Corps of Engineers (ACOE) with input from Washington Department of Fish and Wildlife (WDFW) and NOAA-Fisheries. These **Pier/Dock** standards are intended to address Endangered Species Act (ESA) fish habitat concerns, for which individual ESA

[1] In other words, a setback buffer based on a lower % of lot depth would increase overall redevelopment potential resulting in a larger net loss of shoreline habitat (upland buffer area), which would then have to be offset with some type of restoration. Alternatively, establishment of a **Setback/Buffer** based on a higher lot percentage would further restrict redevelopment to locations further away from the shoreline edge, increasing overall (potential) shoreline habitat area above existing conditions

consultation is waived for proposals that are consistent with these standards. By including the Regional General Permit standards into the City's SMP, property owners are provided with an incentive to upgrade their **Pier/Dock** structures to comply with these standards, thus avoiding expensive, unpredictable and time consuming individual ESA consultation.

Finally, the City spend a significant amount of time creating **Vegetation Management** standards that their residential property owners could accept while also satisfying their no net loss obligation under the Guidelines. The central issue was related to tree planting mitigation standards and concerns associated with view impacts. Along these same lines, the City also developed tree retention standards, defining significant tree characteristics and establishing replacement standards for both volunteer and involuntary removal.

Changes to the locally adopted SMP: Attachment C provides an itemized list of amendments to the December 1, 2009 (*Resolution #4786*) locally adopted SMP. These changes are required as part of Ecology's approval of the updated SMP pursuant to WAC 173-26-120. Specifically, the required changes will ensure that the updated SMP is consistent with WAC 173-26 (SMP Guidelines).

CONCLUSIONS OF LAW

After review by Ecology of the complete record submitted and all comments received, Ecology concludes that the City's SMP proposal, subject to and including Ecology's required changes (itemized in **Attachment C**), is consistent with the policy and standards of RCW 90.58.020 and RCW 90.58.090 and the applicable SMP guidelines (WAC 173-26-171 through 251 and .020 definitions). This includes a conclusion that the proposed SMP, subject to required changes, contains sufficient policies and regulations to assure that no net loss of shoreline ecological functions that is anticipated to result from implementation of the new master program amendments (WAC 173-26-201(2)(c).

Consistent with RCW 90.58.090(4), Ecology concludes that those SMP segments relating to critical areas within Shoreline Management Act jurisdiction provide a level of protection at least equal to that provided by the City's existing critical areas ordinance.

Ecology concludes that those SMP segments relating to shorelines of statewide significance provide for the optimum implementation of Shoreline Management Act policy (RCW 90.58.090(5).

Ecology concludes that the City has complied with the requirements of RCW 90.58.100 regarding the SMP amendment process and contents.

Ecology concludes that the City has complied with the requirements of RCW 90.58.130 and WAC 173-26-090 regarding public and agency involvement in the SMP amendment process.

Ecology concludes that the City has complied with the purpose and intent of the local amendment process requirements contained in WAC 173-26-100, including conducting open houses and public hearings, notice, consultation with parties of interest and solicitation of comments from tribes, government agencies and Ecology.

Ecology concludes that the City has complied with requirements of Chapter 43.21C RCW, the State Environmental Policy Act.

Ecology concludes that the City's SMP amendment was complete pursuant to the requirements of WAC 173-26-110 and WAC 173-26-201(3)(a) and (h) requiring a SMP Submittal Checklist.

Ecology concludes that it has complied with the procedural requirements for state review and approval of shoreline master program amendments as set forth in WAC 173-26-120.

Ecology concludes that the City has chosen not to exercise its option pursuant to RCW 90.58.030(2)(f)(ii) to increase shoreline jurisdiction to include buffer areas of all critical areas within shorelines of the state. Therefore, as required by RCW 36.70A.480(6), for those designated critical areas with buffers that extend beyond SMA jurisdiction, the critical area and its associated buffer shall continue to be regulated by the City's critical areas ordinance. In such cases, the updated SMP shall also continue to apply to the designated critical area, but not the portion of the buffer area that lies outside of SMA jurisdiction. All remaining designated critical areas (with buffers NOT extending beyond SMA jurisdiction) and their buffer areas shall be regulated solely by the SMP.

DECISION AND EFFECTIVE DATE

Based on the preceding, Ecology has determined the proposed amendments are consistent with the policy of the Shoreline Management Act, the applicable guidelines and implementing rules, once changes set forth in **Attachment C** are acknowledged by the City. Ecology approval of the proposed amendments with changes (**Attachment C**) will become effective on the date at which Ecology receives written notice that the City has agreed to all of the changes listed in **Attachment C**.

As provided in RCW 90.58.090(2)(e)(ii) the City may choose to submit an alternative to all or part of the changes required by Ecology. If Ecology determines that the alternative proposal is consistent with the purpose and intent of Ecology's original changes and with RCW 90.58, then the department shall approve the alternative proposal and that action shall be the final action on the amendment.

Attachment C: Amendments to Resolution 4786 – City of Kirkland Shoreline Master Program

NOTE: ~~**Strike out text**~~ indicates existing text/sections that need to be removed from the SMP. **Underlined text indicates text/sections that need to be inserted into the SMP.**

The following text consists of amendments to Resolution #4786 the locally adopted version of the City of Kirkland's Shoreline Master Program. These amendments have been determined by the Department of Ecology to be included as part of the final approval of the City's Shoreline Master Program as described in Attachment B (Findings/Conclusions).

Section 83.190 Lot Size or Density, Shoreline Setback, Lot Coverage and Height [*page 44-45 of 138, R-4786 – Attachment 6A*]

2. Shoreline Setback –

b. Measurement of Shoreline Setback –

1) The shoreline setback shall be measured landward from the OHWM on the horizontal plane and in the direction that results in the greatest dimension from the OHWM (see Plate ~~XX~~ **41**).

d. Structures and Improvements – The following improvements or structures may be located in the shoreline setback, except within the Natural shoreline environment, provided that they are constructed and maintained in a manner that meets KZC 83.360 for avoiding or at least minimizing adverse impacts to shoreline ecological functions:

1) For public pedestrian access required under KZC 83.420, walkways, benches, and similar features, as approved by the Planning Official.

2) For private pedestrian access to the shoreline, walkways within the shoreline setback are permitted, subject to the following standards:

a) The maximum width of the walkway corridor area shall be no more than 25 percent of the property's shoreline frontage, except in no case shall the corridor area required be less than 15 feet in width (see Plate ~~XX~~ **42**).

Section 83.270 Piers, Docks, Moorage Buoys and Piles, Boatlifts and Canopies Serving a Detached Dwelling Unit Use (Single-family) [*page 57-58 of 138, R-4786 – Attachment 6A*]

4. New Pier or Dock Dimensional Standards –

a. New piers or docks may be permitted, subject to the following regulations:

New Pier, Dock or Moorage Piles for Detached Dwelling Unit (single family)	**Dimensional and Design Standards**
Maximum Area: surface coverage, including all attached float decking, ramps, ells and fingers	480 sq. ft. for single property owner 700 sq. ft. for joint-use facility used by 2 residential property owners 1000 sq. ft. for joint-use facility used by 3 or more residential property owners These area limitations shall include platform lifts. Where a pier cannot reasonably be constructed under the area limitation above to obtain a moorage depth of 10 ft. measured

	~~above~~ below ordinary high water, an additional 4 sq. ft. of area may be added for each additional foot of pier length needed to reach 10 ft. of water depth at the landward end of the pier, provided that all other area dimensions, such as maximum width and length, have been minimized.
Pilings, Moorage Piles, and Buoys	Piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds. First set of ~~piles~~ pilings for piers or docks located no closer than 18 ft from OHWM. Moorage piles or buoys shall not be closer than 30 ft. from OHWM or any farther waterward than the end of the pier or dock. Maximum 2 moorage piles or buoys per detached dwelling unit, including existing piles Maximum 4 moorage piles or buoys for joint use piers or docks, including existing piles

83.280 Piers, Docks, Boat lifts and Canopies Serving Detached, Attached or Stacked Dwelling Units (Multi-family) [*page 65-66 of 138, R-4786 – Attachment 6A*]

5) New Pier or Dock Dimensional Standards –

b. Piers and docks shall be the minimum size necessary to meet the needs of the proposed water-dependent use and shall observe the following standards:

New Pier, Dock or Moorage Piles for Detached, Attached or Stacked Dwelling Units (multi-family)	**Dimensional and Design Standards**
Pilings and Moorage Piles	First set of ~~piles~~ pilings for piers or docks located no closer than 18 ft from OHWM. Moorage piles shall not be closer than 30 ft. from OHWM or any farther waterward than the end of the pier or dock. Piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds.

83.300: Submittal Requirements for New or Enlarged Structural Stabilization Measures [*page 77-78 of 138, R-4786 - Attachment 6A*]

3. Submittal Requirements for New or Enlarged Structural Stabilization Measures -

In addition to the requirements described in KZC 83.300.2 above, the following shall be submitted to the City for an existing primary structure more than 10 feet from the OHWM or for a new primary structure:

a. For a hard structural shoreline stabilization measure, a geotechnical report prepared by a qualified professional with an engineering degree. The report shall include the following:

1) An assessment of the necessity for hard structural stabilization by estimating time frames and rates of erosion and documenting the urgency associated with the specific situation.

2) An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM **including on-site drainage**.

b. An assessment prepared by a qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), containing the following:

1) For a hard structural shoreline stabilization measure, an evaluation of the feasibility of using **nonstructural or** soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. The evaluation shall address the feasibility of implementing options presented in Plate ~~XX~~ **43** based on an assessment of the subject property's characteristics.

5. Submittal Requirements for Major Repairs or Replacements of Hard Stabilization Measures -

The following shall be submitted to the City when the primary structure is located more than 10 feet landward of the OHWM or for a use with no primary structure:

a. Written narrative that provides a demonstration of need shall be submitted. A qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), but not necessarily a licensed geotechnical engineer shall prepare a written narrative. The written narrative shall consist of the following:

1) An assessment of the necessity for hard structural stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch, and location of the nearest structure. The evaluation shall address the feasibility of implementing options presented in Plate ~~XX~~ **43**, given an assessment of the subject property's characteristics.

83.550 Nonconformances [*page 134-135 of 138, R-4786 - Attachment 6A*]

(5.) Certain Nonconformances Specifically Regulated

(b.) Non-conforming structures –

5) Non-conforming structures that are expanded or enlarged within the shoreline setback must obtain a shoreline variance; provided that, a non-conforming detached dwelling unit use may be enlarged without a shoreline variance where the following provisions apply:

5) The enlargement shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate ~~XX~~ **44**).

6) A nonconforming detached dwelling unit that is located on a lot that has less than 3,000 square feet of building area lying landward of the required shoreline setback and upland of required wetland or stream buffers, may be rebuilt or otherwise replaced within the

shoreline setback and required wetland or stream buffer without a shoreline variance, provided the following standards are met:

2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate ~~XX~~ 44).~~.~~

7) A primary structure that does not conform to the required shoreline setback and is located on a lot that has less than 3,000 square feet of building area lying landward of the shoreline setback, not including the area located within the required side yard setbacks and up to 10 feet of a required front yard, may be rebuilt or otherwise replaced in its current location within the shoreline setback, provided the following standards are met:

2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate ~~XX~~ 43).~~.~~

Attachment Plates *[Attachment D – R-4786]*

The following new plates should be considered part of the approved SMP:

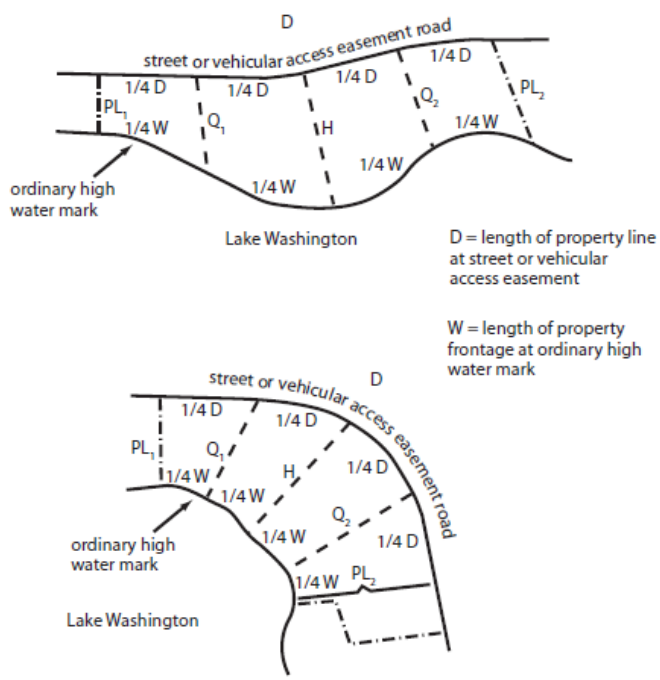
- **Plate 19 - Average Parcel Depth** referenced in 83.80.7 definition of average parcel depth.
- **Plate 41 - Measuring Shoreline Setback** referenced in 83.190.2.b in shoreline setback section.
- **Plate 42 - Maximum Shoreline Walkway Corridor** referenced in Section 83.190.2.d.2 in shoreline setback section.
- **Plate 43 - Options for Shoreline Stabilization Measures** referenced in Section 83.300.5 for submittal of major repair of hard stabilization measures.
- **Plate 44 - Addition to Nonconforming Detached Dwelling Unit** referenced in Section 83.550.5.b.5 in nonconformance section.

Plate 19 – Average Parcel Depth

Attachment 6_C

Plate XX
Calculating Average Parcel Depth

Average Parcel Depth = $\frac{PL_1 + Q_1 + H + Q_2 + PL_2}{5}$



NOTE: ~~**Strike out text**~~ indicates existing text/sections that need to be removed from the SMP. **Underlined text indicates text/sections that need to be inserted into the SMP.**

Plate 41 – Measuring Shoreline Setback

Attachment 6_C

Plate XX
Measuring Shoreline Setback

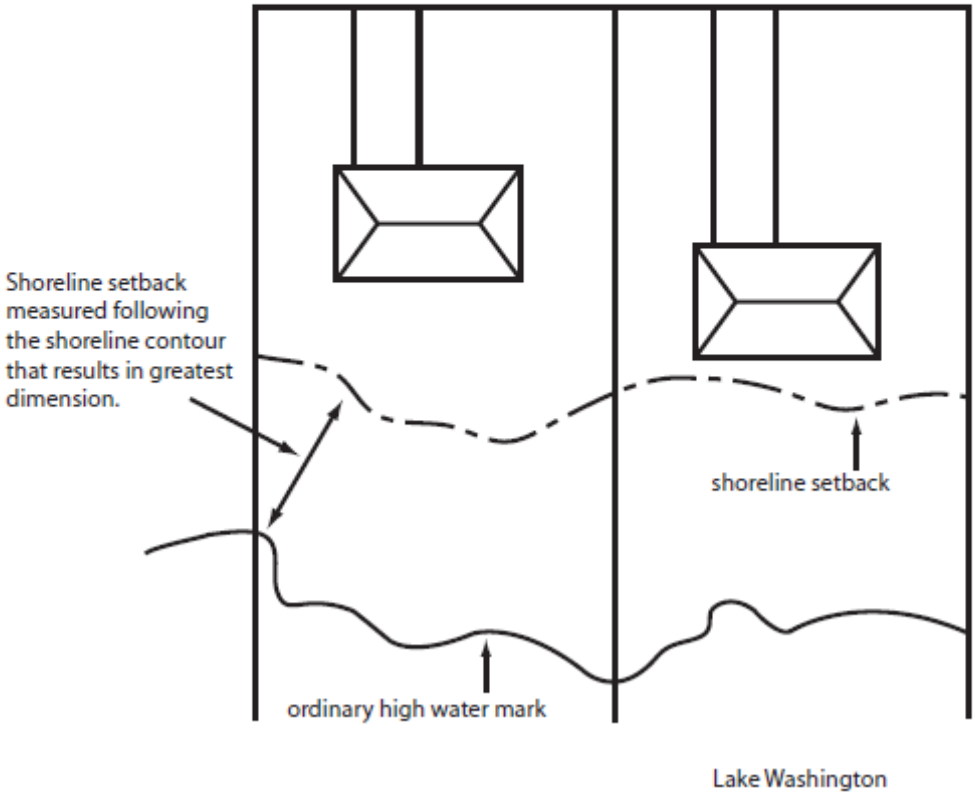


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Plate 42 – Maximum Shoreline Walkway Corridor

Attachment 6_C

Plate XX

Maximum Shoreline Walkway Corridor

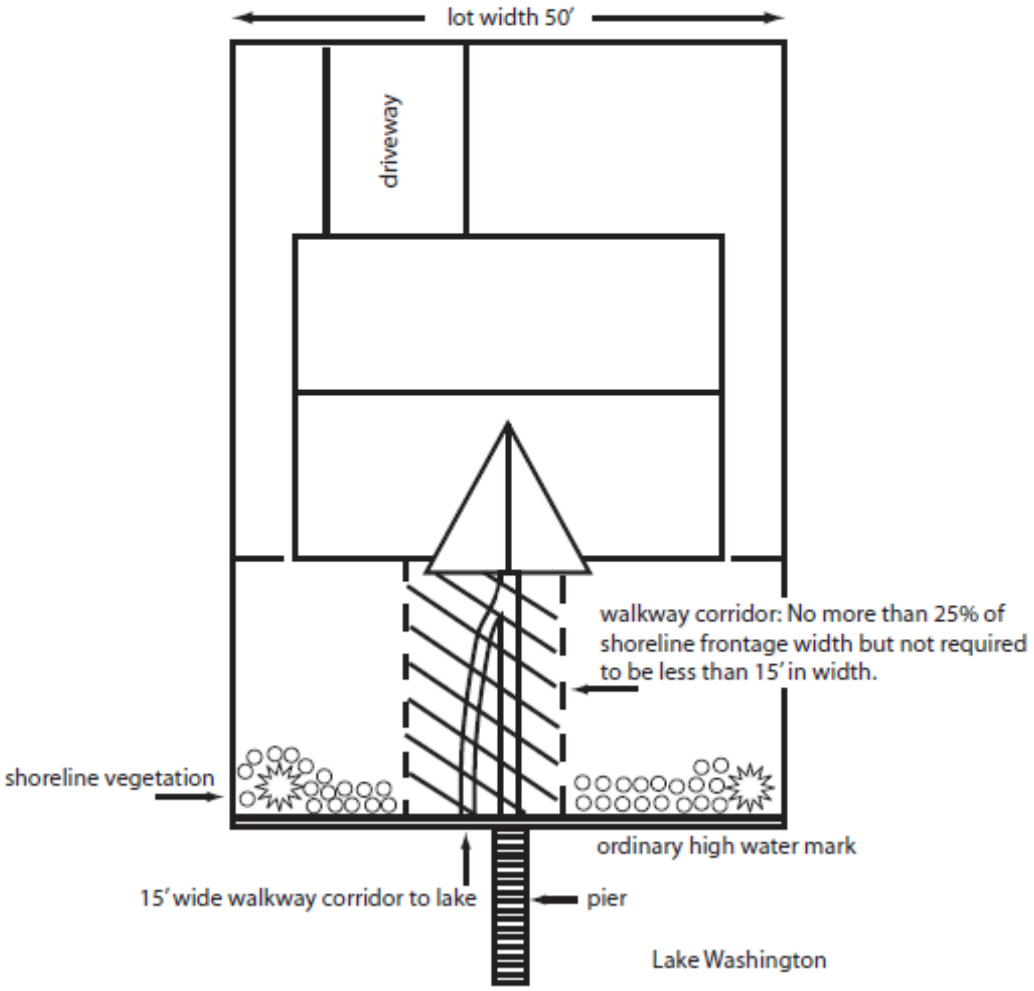

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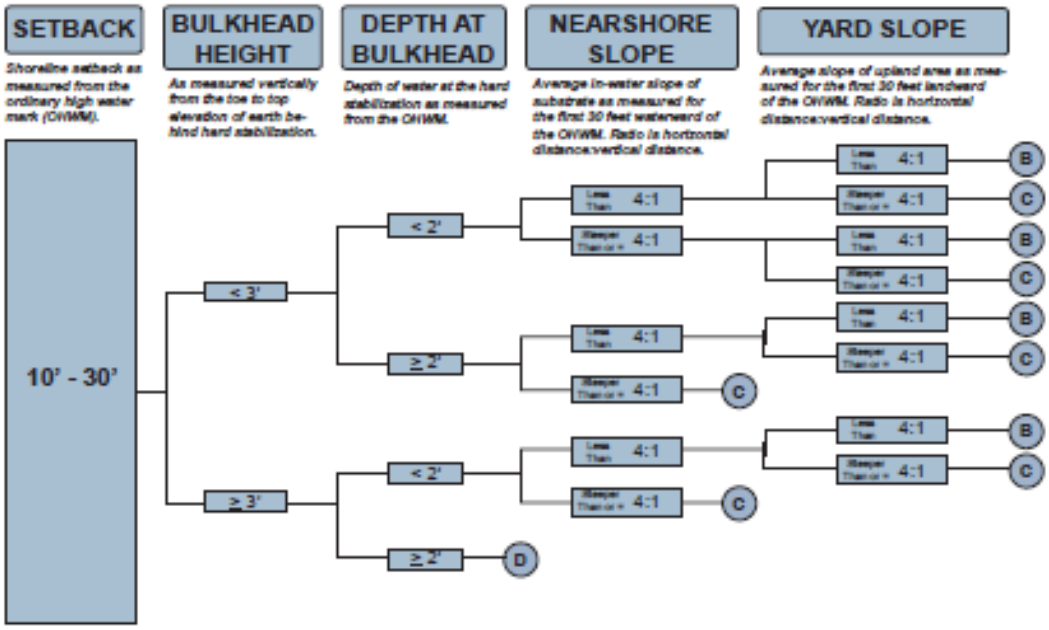
Plate 43 – Options for Shoreline Stabilization Measures (pages 1 of 2)

Plate XXA
Options for Shoreline Stabilization Measures
Building Setback 10' - 30'



Typical Options:

- (A) Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
- (B) Beach cove, pullback, bioengineering, enhancement, gradient improvement
- (C) Pullback, bioengineering, enhancement, gradient improvement
- (D) Bioengineering, enhancement, gradient improvement

Definitions: (In Order of Restoration Preference)

Full beach: hard stabilization removal and beach restoration

Beach cove: partial hard stabilization removal and pullback to create beach cove

Hard stabilization pullback: repositioning of hard stabilization landward of existing location to improve shoreline gradient and possibly form a beach

Slope bioengineering: shoreline stabilization using plant material and other biodegradable materials to hold upland soils in place

Hard stabilization enhancement: hard stabilization may stay in same general location, but modifications may include sloping back existing hard structure and/or modifying material type and layout to create potential beach cove areas

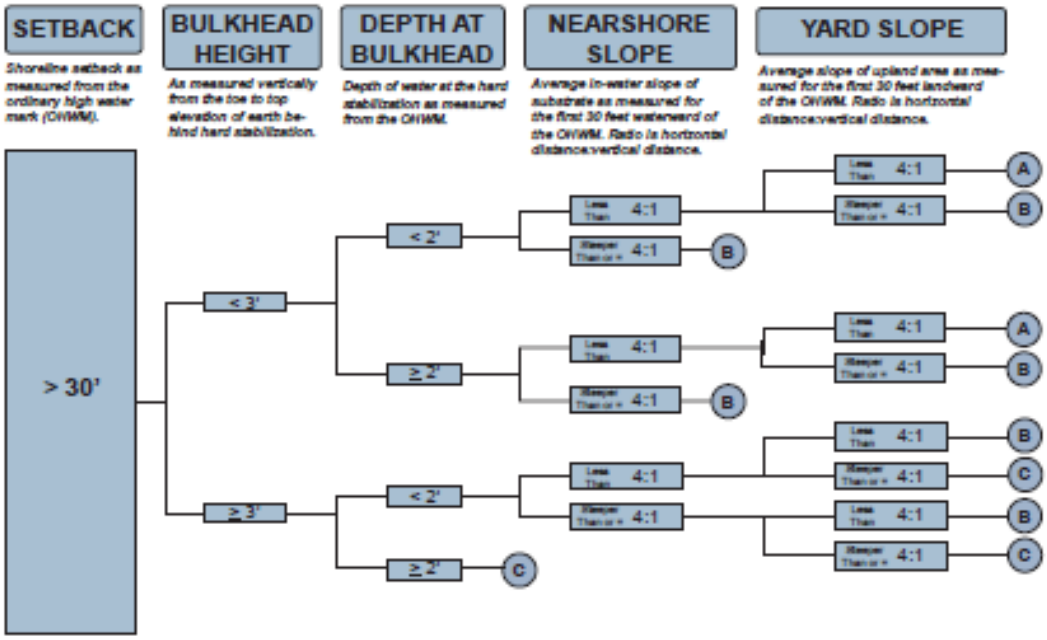
Nearshore gradient improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10' shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

NOTE: ~~**Strike out text**~~ indicates existing text/sections that need to be removed from the SMP. **Underlined text indicates text/sections that need to be inserted into the SMP.**

Plate 43 – Options for Shoreline Stabilization Measures (pages 2 of 2)

Plate XXB
Options for Shoreline Stabilization Measures
Building Setback > 30'



Typical Options:

- (A) Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
- (B) Beach cove, pullback, bioengineering, enhancement, gradient improvement
- (C) Pullback, bioengineering, enhancement, gradient improvement
- (D) Bioengineering, enhancement, gradient improvement

Definitions: (In Order of Restoration Preference)

Full beach: hard stabilization removal and beach restoration

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Slope bioengineering: shoreline stabilization using plant material and other biodegradable materials to hold upland soils in place

Hard stabilization enhancement: hard stabilization may stay in same general location, but modifications may include sloping back existing hard structure and/or modifying material type and layout to create potential beach cove areas

Nearshore gradient improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10' shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

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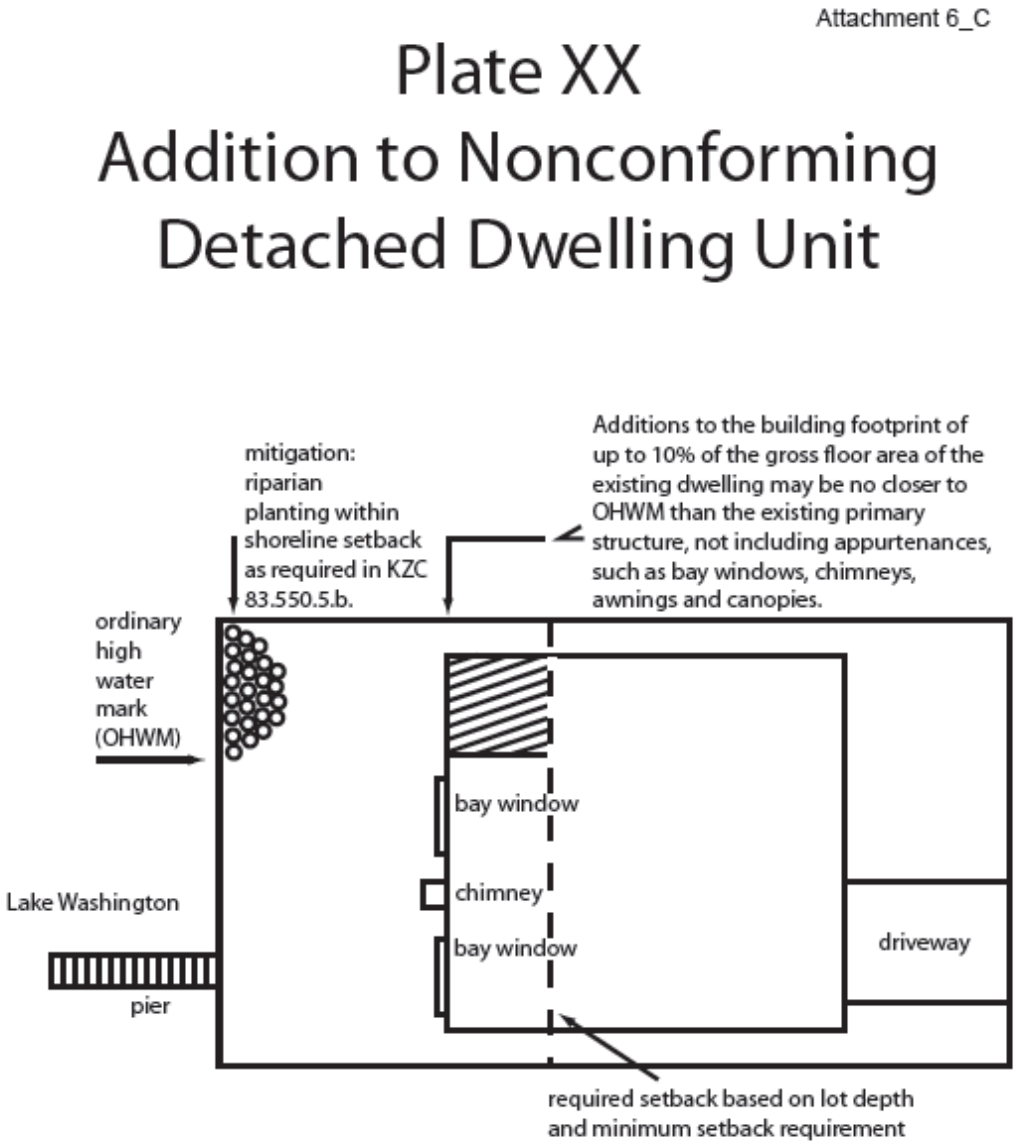
Plate 44 – Additions to Nonconforming Detached Dwelling Units

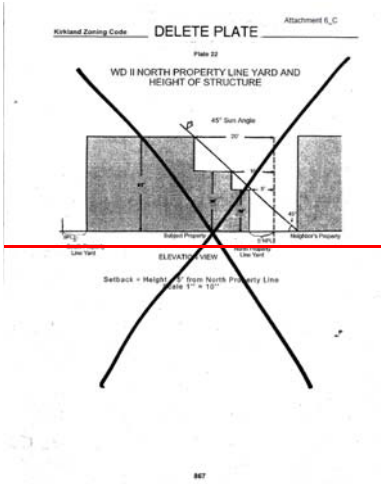


The following plates should not be considered part of the approved SMP:

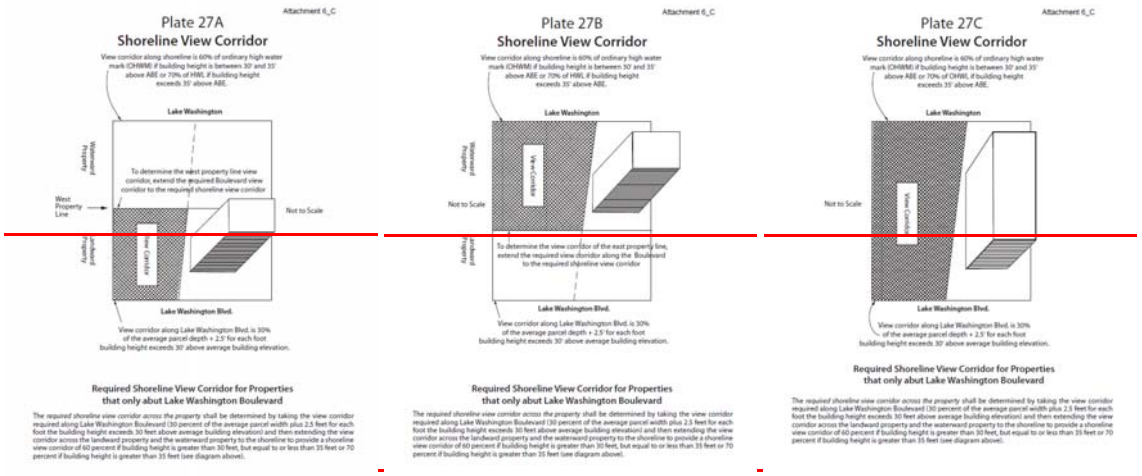
- **Plate 22 –** WD 11 North Property Line Yard and Height of Structure.
- **Plate 27A, 27B, 27C –** Shoreline View Corridor.
- **Plate 28 –** North Property Line – Waterfront District (WD) Zones.

NOTE: ~~Strike out text~~ indicates existing text/sections that need to be removed from the SMP. Underlined text indicates text/sections that need to be inserted into the SMP.

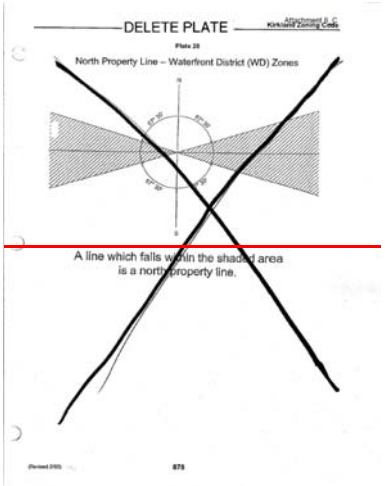
~~**Plate 22 – WD 11 North Property Line Yard and Height of Structure.**~~



~~**Plate 27A, 27B, 27C – Shoreline View Corridor.**~~



~~**Plate 28 – North Property Line – Waterfront District (WD) Zones.**~~



NOTE: ~~**Strike out text**~~ indicates existing text/sections that need to be removed from the SMP. **Underlined text indicates text/sections that need to be inserted into the SMP.**

141.40: Exemption from Permit Requirements [*page 1 of 6, R-4786 - Attachment 6B*]

2. Special Provisions – The following provides additional clarification on the application of the exemptions listed in WAC 173-27-040:

   b. Residential Appurtenances - ,

      1) Normal appurtenances to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)(g). For the purposes of interpreting this provision, normal appurtenances shall include those listed under WAC 173-14-040(2)(g) as well as tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence located landward of the OHWM and the perimeter of a wetland.

      2) Normal appurtenant structures to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)~~(b)~~ **(c) for structural and non structural shoreline stabilization measures.** For the purposes of interpreting this provision, normal appurtenant shall be limited to the following structures listed under WAC 173-14-040(2)(g): a garage; deck; driveway; and utilities.

141.70: Procedures [*page 3-5 of 6, R-4786 - Attachment 6B*]

1. Substantial development permits.

   d. Decision -

      1) At the time of a final decision, the Planning Official shall mail a copy of the decision, staff advisory report, transmittal sheet and shoreline checklist to the applicant, Department of Ecology, and the Washington State Attorney General's Office, pursuant to RCW 90.58.140 and WAC 173-27-130. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision ~~was filed~~ **is received by the permit applicant** as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of ~~filing~~ **receipt** as defined in RCW 90.58.140(5) and (6). "Date of ~~Filing~~ **Receipt**" is that date that the **permit applicant receives written notice from the** Department of Ecology ~~received a copy of the decision~~ **notifying the applicant of receipt of the decision**.

      2) An appeal of a shoreline substantial development permit shall be to the State Shorelines Hearings Board and shall be filed within twenty-one (21) days of the receipt of the ~~City's decision by~~ the Department of Ecology**'s permit action letter** as set forth in RCW 90.58.180.

   e. Effect of Decision – For shoreline substantial development permits, no final action or construction shall be taken until the termination of all review proceedings initiated within twenty-one (21) days after notice of the final action taken by the City is ~~filed~~ **received by the permit applicant from** the Department of Ecology.

2. Conditional use permits.

   e. Decision -

      1) Once the City has approved a conditional use permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.

2) ~~At the time of a final decision by the State Department of Ecology for a shoreline conditional use permit, the Planning Official shall, pursuant to RCW 90.58.140 and WAC 173-27-130, mail a copy of the decision, staff advisory report, transmittal sheet, and Shoreline Checklist to the applicant, Department of Ecology, and the State of Washington's Office of the Attorney General.~~ The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision ~~was filed~~ **is received** as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of ~~filing~~ **receipt** as defined in RCW 90.58.140(5) and (6). ~~"Date of Filing" is that date that the Department of Ecology received a copy of the decision.~~

3) Appeals of a shoreline conditional use permit or shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the ~~City's decision by~~ the Department of Ecology**'s permit action letter**, as set forth in RCW 90.58.180.

3. Variances.

e. Decision -

1) Approval by Department of Ecology. Once the City has approved a variance permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.

2) ~~At the time of a final decision for a shoreline variance permit, the Planning Official shall, pursuant to RCW 90.58.140 and WAC 173-27-130, mail a copy of the decision, staff advisory report, transmittal sheet, and Shoreline Checklist to the applicant, Department of Ecology, and the State of Washington's Office of the Attorney General.~~ The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision ~~was filed~~ **is received** as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of ~~filing~~ **receipt** as defined in RCW 90.58.140(5) and (6). ~~"Date of Filing" is that date that the Department of Ecology received a copy of the decision.~~

3) Appeals of a Shoreline Variance Permit shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the ~~City's decision by~~ the Department of Ecology**'s permit action letter**, as set forth in RCW 90.58.180.

Comments - City of Kirkland SMP Update - Attachment D

The Department of Ecology (Ecology) held an open comment period on Kirkland's Shoreline Master Program (SMP) update from February 1, 2010 through March 5, 2010. Testimony was provided by four parties at the public hearing (February 9, 2010) and seven written comment letters submitted during the comment period.

In a letter dated March 19, 2010, Ecology summarized the key issues from all the public comments received. The City then responded to the summarized comments including some additional comments in a letter dated May 11, 2010. This document is a compilation of both the Ecology comment summary, City Response and Ecology Conclusion.

City Note: references are made below to sections in Chapter 83 that contain Kirkland's new shoreline regulations and sections in Chapter 141 that contain Kirkland's new shoreline administration provisions. Both new chapters will be placed in the Kirkland Zoning Code.

1. Issue summary of testimony from **Lisa McConnell** at the public hearing (February 9, 2010)

Testimony -Marina Use/Wildlife concerns: Citing the close proximity of both the Carillon Point and Juanita Bay marinas to the Yarrow Point and Juanita Bay wetland complexes, Mrs. McConnell raises concerns associated with future float plane operations and the potential impact to waterfowl/wildlife that may utilize the adjacent wetland habitats. After submitting testimony, Mrs. McConnell provided Ecology with three citations as well an inquire to the Federal Aviation Administration (FAA) Environmental Impact Research Division requesting any other literature related to float plane affects to wildlife. Mrs. McConnell specifically requested that baseline activity of particular waterfowl be analyzed to ensure wildlife impacts can be avoided prior to allowance of float plane service to or from the Kirkland marinas.

***City Response**: Concerning potential impacts to **marina use/wildlife**, during public review of the SMP update potential impacts from commercial floatplane usage were discussed by the Planning Commission, Houghton Community Council and City Council. As part of the discussion, the City considered the three goals of the SMA (WAC 173-25) – encouraging water-dependant uses, protecting the shoreline natural resources and promoting public access. Since the use is water-dependant and provides public access to the water, the City concluded that the use meets two of the SMP goals and thus could potentially be allowed through a Conditional Use Permit (CUP). The use would be subject to the mitigation sequencing requirements in Section 83.260 in which impacts on nearby wildlife would be reviewed and addressed and subject to the WAC criteria for a CUP. As stated in Section 141.70.3, conditions and restrictions can be placed on the use. Ecology has review and final approval over CUPs. The City would support working with interested parties on a baseline study as suggested by Ms. McConnell.*

Ecology Conclusion: As summarized above, Mrs. McConnell provided testimony at the February 9, 2010 Public Hearing related to the potential **Marina Use** by commercial floatplanes and any anticipated effects to **Wildlife.** Ecology concurs with the City's response, acknowledging SMP preference for water-dependent uses and promotion of public access. As the City has stated floatplane service does not currently exist within the City. Therefore, if someone was to propose this service in the future, a detailed analysis of potential **Wildlife** impacts would be required. Within this analysis, natural resource impacts, including **Wildlife** impacts must be avoided, minimized or mitigated in order for the use to be allowed. Therefore, the results of project proposal study would dictate if the use could be established and would need to illustrate no long-term impacts to **Wildlife.** Alternatively, minimal anticipated **Wildlife** impacts could dictate a variety of permit outcomes potentially limiting the scale of the commercial floatplane operation to avoid significant **Wildlife** impacts.

2. Issue summary of testimony from **Peter Davidson** at the public hearing (February 9, 2010)

Testimony - Science related to fish migration: Mr. Davidson complimented the City Council on taking care of citizen's needs through the SMP update, but remains unsatisfied as to his previous questions related to the scientific evidence of fish migration, which he sees as the largest basis for the updated plan. Mr. Davidson would like to understand the "net effect" of the Kirkland shoreline based on how many fish enter Kirkland compared to how many fish leave. He feels that this information is essential in order to set a baseline and determine if there is improvement or not. He is glad to hear there will be some consistency between neighboring jurisdictions SMP's, but would also like to see a streamlined process to replace solid pier decking with flow through materials to encourage this improvement.

***City Response**: Concerning the issue of **adequate science on fish migration** and population for Lake Washington, the City reviewed and discussed relevant scientific information from a multitude of local agencies and from various publications and studies. During the SMP update process, the City provided this information on its web site as well as in staff memos and during presentations at many Planning Commission and Houghton community Council meetings, and other public forums. Staff memos to the Planning Commission that covered information on the science, included the memos dated January 14, 2009, March 5, 2009, April 9, 2009, April 15, 2009 and August 20, 2009. The issue of science can be debated, but it does not relieve the City of meeting the No Net Loss standard and other directives in the Guidelines. Furthermore, the Department of Ecology's Shoreline Master Program Guidelines (WAC 173-26) contain what is commonly termed the "precautionary principle" – namely, that when information about ecological resources is incomplete or unavailable, the regulations must be "more protective…to avoid unanticipated impacts…"*

***City Response**: Concerning the process time to approve **grated (flow through) decking**, in Section 141.40 the City proposes exemptions to Substantial Development Permits (SDP) for replacement of solid wood decking with grated (flow through) decking or similar material. Thus, the City's review process would be relatively quick. The City hopes to establish an expedited review process with Washington Department of Fish and Wildlife and US Army Corps of Engineers in the future.*

Ecology Conclusion: As summarized above, Mr. Davidson provided testimony at the February 9, 2010 Public Hearing with questions focused on the adequacy of **Science** used during the update to understand shoreline issues related to fish migration. Ecology concurs with the City's reference to the "Precautionary Principle" and the obligation to satisfy no net loss of shoreline ecological function. See further discussion on **Science** under the response to Dick Sandaas.

3. Issue summary of testimony from **Kevin Harrang on behalf of the Kirkland Lakeshore Association (KLA)** at the public hearing (February 9, 2010).

Testimony - SMP Update Process: Mr. Harrang began his comments by describing the KLA as a group who are interested in the well being of the lakeshore along Kirkland. The group describes themselves as active in the local update process including going to the expense of hiring expert legal council to help educate their group on the SMP update in an effort to more effectively contribute to the City's update. Unfortunately, KLA is not sure if their effort was worthwhile, but hopes it is appreciated. KLA reiterated multiple times that their intent was not to slow progress on the update, but rather to ensure that the SMP meets the State mandate, while minimizing impacts on residential uses, which they note is listed as a preferred use by the SMA. Finally, Mr. Harrang states that the public process may not be as welcoming as either Ecology or the City have hoped it to be, for which he points to the 3-min limit on comments at meetings as a opportunity to be heard, but not effective at making accommodations or changing the

agenda of the SMP update. Therefore, Mr. Harrang concludes by stating that KLA supports the main goal of the SMP update, but has a slightly dissenting view on some of the specific elements of the plan.

Testimony -SMP Protections: In addition to process issues, KLA perceived the update as an opportunity to place more restrictions on development instead of actually requiring improvements to the lake. Mr. Harrang provides an example of the 2 to 1 tree replacement ratio along the shoreline as a requirement that is not directly tied to no-net-loss.

***City Response**: Concerning the **SMP update process**, the public contributed effectively to the new shoreline policies and regulations and their efforts were very much appreciated. The public had the opportunity to participate in many forums, boat tours, workshops, open houses, formal public meeting and hearings and individual staff meeting as listed in the Public Outreach Log submitted to the Department of Ecology on December 17, 2009. These public outreach events included:*

- *16 study session before Planning Commission*
- *9 study sessions before the Houghton Community Council*
- *2 public hearings held before the Planning Commission and the Houghton Community Council and then continued for an additional month for more comment time*
- *3 study sessions and 1 final consideration meeting before the City Council*
- *2 open houses, 1 public forum and shoreline tour, 1 public forum and boat tours and 1 property owner workshops in which several Commissioners and Council members attended. There was no time limit on how long KLA members could provide comments to the City.*
- *1 focus group meeting with City staff and interested parties, including the KLA, to review the draft regulations*
- *1 meeting with the Planning Commission and invited stakeholders, including the KLA. The public and Planning Commissioners sat around a table and had an open and interactive dialogue. No time limit was set for public input during this discussion.*
- *2 meetings between the KLA, their legal representatives and staff to go over the KLA recommended changes to Chapters 83 and 141 page by page. Many of the requested changes were made to the draft SMP regulations. The Planning Commission also went through the requested KLA changes and reviewed the suggested changes from staff. Both staff and the Planning Commission were very appreciative of the time spent by the KLA reviewing and proposing edits to the new shoreline regulations. The City Council was provided a copy of the KLA requested changes and detailed information on what was changed and not changed in Chapters 83 and 141 and why.*
- *Numerous staff meetings with various KLA members both at City Hall and at their properties and via email correspondence*
- *Listserv notice and information to 250 participants*

***City Response**: Some of the requests from KLA could not be incorporated into the shoreline regulation, these requests were inconsistent with the State Guidelines or would result in Kirkland not meeting the No Net Loss standard. The requested changes were as follows:*

- *No replacement of trees removed in the shoreline setback;*
- *Hard shoreline stabilization allowed to protect land (not solely primary structures) with no needs assessment;*
- *Retaining existing shoreline setback standards;*

- *Allowing existing non-conforming structures to be reconstructed in the same location (within the shoreline setback); and*
- *A cap on mitigation costs.*

***City Response**: Concerning **SMP protection**, the requirements placed on development result in meeting the No Net Loss standard. Improvements to the lake may be an outcome of the regulations if they are needed to meet the Guidelines. The City was careful to craft shoreline regulations that did not go beyond the No Net Loss standard on private property and looked to the Restoration Plan as a means to improve the shoreline beyond the baseline conditions described in the 2006 Shoreline Inventory. The cited example of the 2 to 1 tree replacement ratio for removal of certain existing trees in the shoreline setback is needed to meet the NNL Standard. The replacement ratio is only required for large, mature trees of 24 inch in diameter or greater. These trees have high wildlife and ecological value that cannot be met with a replacement ratio of 1:1. The City's tree replacement standard is a three tiered approach and is based on the size, type and value of a tree. The objective of the replacement ratio is to meet the NNL standard and not to improve the shoreline.*

Ecology Conclusion: As summarized above, Mr. Harrang representing the Kirkland Lakeshore Association provided testimony at the February 9, 2010 Public Hearing related to the **SMP Update Process** and **SMP Protections.** The City has provided a comprehensive response to the **SMP Update Process** concerns which far exceed the minimum public outreach requirements of the Guidelines. Ecology have also concluded that the City has done all it can in balancing the need for new **SMP Protections** to satisfy the Guideline no net loss requirements, while also integrating new flexibility to accommodate future growth and preserve redevelopment opportunity for many of the existing residential sites within the City. Ecology believes that this critical balance is well described not only within the City's response to comments, but also within the final Cumulative Impact Analysis (The Watershed Company, 2009).

4. Issue summary of comments from **Harold Forsen** received by Ecology on February 3, 2010.

<u>Comment Summary - Aquatic Invasive Species:</u> Concern with *Eurasian Milfoil* citing beach litter and promotion of algae growth in Yarrow Bay, Mr. Forsen requests assurance that management of this invasive plant is considered within the SMP.

***City Response**: Concerning **aquatic invasive species**, the City recognizes the impacts of aquatic weeds in Lake Washington, particularly Eurasian watermilfoil. In particular, the nearshore areas surrounding both Juanita Bay and Yarrow Bay have large monocultures of this invasive aquatic plant. Additionally, many other areas along the City's waterfront have also been subject to extensive growth of Eurasian watermilfoil. Not only are aquatic weeds a problem for boats and swimmers, but they also tend to reduce dissolved oxygen to lethal levels for fish, hampering foraging opportunities. For these reasons, reduction of non-native invasive weeds has been identified as a priority in the City's adopted Restoration Plan. Once milfoil becomes well-established within a waterbody, as it is in Lake Washington, it is difficult to remove. The City mechanically controls milfoil within the swimming areas for patron safety. Expansion of milfoil removal beyond the swimming areas would be a significant budget cost not available at this time and may have environmental impacts. The City would unlikely pursue other methods to remove milfoil, including herbicide use, due to environmental concerns. It is also important to note that invasive removal along Kirkland's shoreline will very likely not eradicate the problem. Milfoil is able to reproduce very successfully and rapidly through the formation of plant fragments. These fragments will float to other areas, sink, and start new plants. A new plant can start from a tiny piece of a milfoil plant. Once established in its new home, water currents may carry milfoil fragments and start*

new colonies within the same waterbody. Because of this growth pattern, milfoil is a lake-wide problem, one that needs to be addressed on a regional basis. The SMP update is a regulatory program that does not restrict the ability to remove aquatic invasive species. The City's Restoration Plan notes this as an implementation priority. Long term control of aquatic non-native invasive plants in Lake Washington will be very difficult to achieve without the additional coordinated inter-jurisdictional collaboration, including involvement, funding, and leadership from the State of Washington.

Ecology Conclusion: As summarized above, Mr. Forsen submitted comments related to management of **Aquatic Invasive Species**. Ecology concurs with the City's response to Mr. Forsen's comments, highlighting the significant technical, budgetary and feasibility challenges to removal of *Eurasian watermilfoil* within Kirkland's nearshore areas. In summary, the City has prioritized within their Restoration Plan (The Watershed Company, 2009) a goal to reduce the presence of non-native invasive weeds such as *Eurasian milfoil*. However, as stated by the City, the regulatory component of the SMP applies to proposed projects and would not require the City to remove aquatic weeds, for which it is important to ensure that the regulations in the SMP do not constrain the City from appropriately managing *Eurasian milfoil*.

5. Issue summary of testimony and comments from **Dick Sandaas** at public hearing (February 9, 2010) and through written comments received by Ecology on February 9, 2010.

<u>Comment Summary/Testimony – Science:</u> Mr. Sandaas characterizes the lack of sound science in the SMP as the *"most significant issue that has not been responded to"*. As a basis for this comment, Mr. Sandaas reports that he has reviewed all the scientific studies referred to and relied upon during the SMP update process and suggests the following deficiencies:

- *The body of science and research is not complete.*
- *The studies and reports have not been vetted or subject to peer review.*
- *The studies and reports contain suppositions and hypothesis.*
- *The studies and reports contain contradictory conclusions.*
- *The science cannot be applied broadly to all shoreline locations on Lake Washington.*

Please note that most of Mr. Sandaas' questions related to *"sound science"* are directed at Ecology as the City has already provided a response.

<u>Comment Summary - Measurable Environmental Benefits/Costs/Unintended Consequences:</u> Mr. Sandaas asserts that environmental benefits from the updated SMP have only been partially addressed by the City and are based on *"hypothesis"*. Mr. Sandaas suggests that the City should perform a pilot project to test many of the shoreline restorations called for in the SMP on city owned shoreline to answer questions of feasibility and true restoration costs. Mr. Sandaas predicts that this test would take many years to learn the true benefits. Mr. Sandaas claims that the SMP update has never dealt with measurable results, cost impacts or cost effectiveness. Citing stormwater/water quality concerns, Mr. Sandaas questions the fairness and equity of private shoreline owners *"bearing extraordinary costs"* throughout the implementation of these regulations. Referencing the feasibility of landscaping to shade nearshore area, Mr. Sandaas questions the potential benefit/effectiveness of vegetation to shade nearshore areas along Kirkland's shoreline based on the western exposure, suggesting a lack of shade and further raising concern as to the feasibility to maintain vegetation along the shoreline considering the wind/wave action.

Comment Summary - Shoreline Stabilization: Mr. Sandaas provides multiple references to shoreline stabilization requirements in the SMP, highlighting general concerns with; increased risk to property/homes, unintended consequences, and questions related to the practicality or feasibility of bulkhead removal and/or shoreline landscaping. Mr. Sandaas states that bulkheads exist along the shoreline because they are necessary to contain property that was developed with the lowering of the lake. Further, he references storm exposure, potential impacts from boat wakes and a necessity to protect privately owned structures and public utilities.

Comment Summary – Flexibility: Mr. Sandaas suggests that the Kirkland residential and commercial shoreline are characterized by a *"wide variety of configurations and settings which makes a one size fits all approach impractical"*, for which he suggests that a lack of flexibility will constrain innovation and discourage redevelopment, ultimately *"resulting in deterioration of housing stock"*.

***City Response**: Concerning the question of the **science** used to develop the provisions in the State Guidelines, see the City's response in comment No. 2. During the SMP update process, the City provided links on its web site, information in staff memos and during presentations on various publications, studies and agencies information supporting the science.*

***City Response**: Similar to the question of science, the issue of **measurable environmental benefits/costs/untended consequences** is not a requirement of the Guidelines. The State Guidelines do not require a cost/benefit analysis and assumes the environmental benefits that will result from the new provisions are based on various studies and developed science. The City's SMP update is based on and consistent with the State Guidelines provisions, including the nearshore native vegetation requirements in Chapter 83.*

***City Response**: Concerning the **hard shoreline stabilization** regulations in Chapter 83, the regulations are consistent with and reflect the provisions of the State Guidelines. Concerning the **3-year timeline** required in the needs assessment to determine if shoreline erosion is occurring, this is a requirement in the State Guidelines (WAC 173-26-231(3)(a)) and not a timeline developed by the City.*

***City Response**: Concerning **flexibility**, the City has provided considerable flexibility in Chapter 83. The City's shoreline setback is based on an analysis of each lot's average parcel depth and takes into account the wide variety of configurations and settings. The shoreline setback is not a one size fits all regulation. The SMP update provides many flexible options, including administrative approval process for alternative pier and dock standards, setback reduction options, alternative vegetation planting and tree replacement options, less expensive mitigation options, and non-conformance provisions for expansion of existing non-nonconforming structures and redevelopment of encumbered lots. In addition, the City reduced the required front and side yard setbacks and increased the allowable height in the Residential Low shoreline environment to provide more flexibility in siting structures. Concerning the mailed **notice** that Mr. Sandass received, Ecology sent the notice. The City provided notice on eight public notice boards, on its SMP web site and to the web listserv participants.*

***City Response**: Concerning **storm water runoff**, the City has adopted the 2009 King County Surface Water Design Manual and Addendum earlier this year and the City's 2009 Stormwater Management Program for the entire watershed. For more information, see Attachment 4, Response to Public Comments, in the staff memo for the August 27, 2009 Planning Commission meeting. Concerning the **native vegetation requirements** in Chapter 83, these are consistent with and reflect the provisions of the State Guidelines.*

Ecology Conclusions: As summarized above, Mr. Sandaas submitted both testimony and written comments focused on the following SMP topics: **Environmental Effects**, **Shoreline Armoring**, and **Flexibility** associated with SMP Implementation. Generally, Ecology concurs with the City's response to Mr. Sandaas's comments as detailed under each topic below:

Ecology Conclusion - Environmental Effects: As the City has stated, the Guidelines do not require a formal Cost/Benefit Analysis to guide development of shoreline protection measures as part of the SMP update. However, Mr. Sandaas concern related to the effectiveness of SMP policy's/regulations serves as an appropriate question to be asked of this update process. Even though a formal Cost/Benefits analysis is not a SMP-update requirement, SMA policy and the Guidelines recognize the need to balance both *use* and *protection* of shoreline resources. Thus, SMPs must provide for preferred shoreline uses set forth in the SMA (RCW 90.58.020). These include water-dependent uses like port development, public access facilities, and owner occupied single-family residences. This balance is represented in several ways within a SMP update, including consistency with WAC 173-26-186(5) (Private Property Rights) while also satisfying the overall no net loss of ecological function goal of the update. It is important to recognize that the SMP is not retroactive and cannot require a private property owner to upgrade a structure to a new standard until the property owner decides to instigate shoreline development beyond the City's established maintenance threshold. Further, the SMP update requires a Cumulative Impact Assessment to analyze the effectiveness/necessity of SMP regulations for many of the reasons that Mr. Sandaas has suggested. The Cumulative Impact Assessment is intended to anticipate potential impacts from future development and ensure that sufficient protection measures exist within the SMP to allow the development in a form that will not further decline shoreline ecological conditions. Even though the City has prepared a comprehensive, well founded Cumulative Impact Assessment, the ultimate SMP effectiveness test will be a future program review to analyze the performance of the SMP in achieving the goals of the SMA. This future review will not just focus on ecological protection effectiveness, but will need to consider all aspects of the SMP including future development goals and policies found within Goal #5 (Private Property Rights), Policies 2.3 – 2.5, 6.0 – 6.4 (Residential Development), etc. Pursuant to RCW 90.58, once adopted, the City's SMP will need to be reviewed in 7-years, for which effectiveness measures will be reviewed and considered for adjustment similar to Mr. Sandaas comment.

Ecology Conclusion – Science: Mr. Sandaas has also directed specific questions to Ecology related to appropriate use of science within the SMP update. Ecology appreciates the significant effort that Mr. Sandaas has dedicated to reviewing technical documents that the City has referenced within their Inventory/Characterization Report (The Watershed Company, 2006). In reference to the City of Kirkland SMP update, Ecology has concluded that the City adequately reviewed, referenced and applied appropriate science based conclusions consistent with Guideline standards and requirements[1]. Specifically, Mr. Sandaas asserts that the science referenced in the City's update is insufficient based on misuse use of on-going research, lack of vetting or peer review, contains suppositions and hypothesis (not conclusions), contradictory conclusion (between multiple documents) and finally the broad scope of these reports should not be applied to all locations in Lake Washington. In response, as previously cited, WAC 173-26-201.2(a) describes the intended "Use of scientific and technical information", for which local governments are not obligated to take on new research to inform a SMP update. This same section of the Guidelines references dependence on both "scientific" and "technical" information as well as appropriate use of "experience" and "anecdotal evidence" to "identify and assemble the most current, accurate and complete scientific and technical information <u>available that is applicable to the</u>

[1] WAC 173-26-201.2(a): Use of scientific and technical information, within section titled "Comprehensive process to prepare or amend shoreline master program".

issues of concern" (WAC 173-26-201.2.a, emphasis added). In other words, SMP management decisions must have a basis, but can be based on a variety of sources, for which a jurisdiction is obligated to assemble the most relevant information, for which Ecology believes the City's Inventory/Characterization report is a sound product of this SMP requirement. In regards to gaps, uncertainty and ongoing research, local governments are required to implement a precautionary principle. WAC 173-26-201(3)(g) states; *"As a general rule, the less known about existing resources, the more protective shoreline master program provisions should be to avoid unanticipated impacts to shoreline resources"*. If there is a question about the extent or condition of an existing ecological resource, then the master program provisions shall be sufficient to reasonably assure that the resource is protected in a manner consistent with the policies of these guidelines. Again, Ecology believes that the City's SMP appropriately reflects this Guideline requirement as well.

Ecology Conclusion - Shoreline Armoring: As stated in the City's response, the Kirkland SMP provides Shoreline Armoring standards consistent with the Guidelines (WAC 173-26). As described within multiple public hearings by both the City and Ecology, the SMP Guidelines provide very specific shoreline stabilization standards, which will need to be implemented similarly within all jurisdictions that update their SMP in order to comply with the Guidelines. These standards exhibit a clear preference for use of non-structural armoring techniques, but fundamentally do not restrict property owners from adequately protecting primary structures on their property from erosion. As previously noted SMP standards are not retroactive, thus a property owner would only be required to consider/analyze the feasibility of alternative shoreline armoring, when a new or replacement development is proposed on-site. Further, the City's SMP provides criteria to be considered at a site specific level to determine the potential erosion/risk for the particular site, which serves as the primary guide in determining the appropriate type of shoreline armoring technique to be considered. The fundamental reason for this site specific analysis is to ensure on-going protection of an existing primary structure, which if site conditions warrant, non-structural or less ecologically damaging shoreline armoring treatments should be considered.

Ecology Conclusion - Flexibility - Shoreline Implementation: Ecology concurs with the City's response. Local jurisdictions are required to document existing ecological functions within a shoreline Inventory/Characterization (WAC 173-26-201). The Guidelines (WAC 173-26, Part III) require local governments to address cumulative impacts by considering commonly occurring shoreline development and foreseeable impacts caused or avoided by proposed SMP policies and regulations. Ultimately, SMP policy and regulations must ensure no net loss of ecological functions with reference to the baseline shoreline conditions described within the locally prepared Inventory/Characterization. Because of the no net loss of ecological function requirement of the Guidelines, predictable dimensional standards are necessary for some SMP elements to ensure consistency with this overall update requirement. Without specific standards, there would be no certainty in local projections of future (planned) shoreline conditions, and hence no justification that the no net loss standard can be achieved.

6. Issue summary of comments received from **Bob Style** through three emails forwarded from the City of Kirkland to Ecology on February 9, 2010.

Comment Summary - Shoreline Setbacks: Mr. Style has lived on the shoreline for 23-years, when the 15-foot setback was established and claims the City has not proven *"degradation of migration"*, therefore he believes the setback should not change. He also does not think a variance should be required in order for a property owner to use their property *"in a way equal to their neighbors"*, further stating that; *"The ordinance should acknowledge existing land-uses and should not require a variance to comply with pre-existing land uses"*.

Comment Summary - Shoreline Stabilization: Mr. Style submitted a video showing waves hitting a rock bulkhead during a storm (narrated 20-25 knots of wind). In addition to the video, Mr. Style has added a comment with reference to *"best available science"* and a lack of consideration of physics that he believes would limit fish migration during storm conditions. Further, Mr. Style comments that the State should pay for re-sloping the beach for which he believes this precedent has already been established by the City's financial support of private property improvements on Juanita Creek. Finally Mr. Style comments that: *"Until the state comes up with the money for environmental improvements, it should not expect property owners alone to pay for unfunded state mandates."*

***City Response**: Concerning **shoreline setback**, the shoreline setback regulations proposed in the SMP update are based on existing conditions rather than existing shoreline regulations. This approach is needed to assure that the No Net Loss of ecological function standard is met using the benchmark of the 2006 City Shoreline Inventory. For example, many existing structures are located further from the shoreline than is required under the current SMP. With redevelopment, these structures could be moved closer to the shoreline, thus resulting in not meeting the No Net Loss standard if other structures close to the shoreline remain. The SMP takes this into consideration and provides mitigation measures that were evaluated in the Cumulative Impact Analysis which shows that the SMP is meeting the No Net Loss standard. In addition, Ecology has provided the City with the guidance that a minimum shoreline setback of 25' should be required, possibly with the exception of very constrained areas. The current SMP regulations do not meet this minimum standard.*

***City Response**: Concerning **shoreline stabilization**, the softer stabilization measures can successfully withstand storms if designed for the site and surrounding conditions, and are installed correctly. The City and State recognize that not all sites will be appropriate for installation of a complete soft shoreline stabilization solution, and this is reflected in the proposed regulations. Specifically, geotechnical reports must be submitted documenting the need for hard shoreline stabilization at a specific site. The regulations also identify and enable a variety of mechanisms to improve function of existing and replacement hard structural shoreline stabilization, including installation of material waterward of the OHWM. Furthermore, the City has prepared a decision tree to assist property owners in evaluating the potential options at their site.*

Ecology Conclusion: As summarized above, Mr. Style provided written comments and a video raising questions related to the City's **Shoreline Setback** and **Shoreline Armoring** standards. Ecology concurs with the City's response to Mr. Style, providing a solid rational for both the **Shoreline Setback** and **Shoreline Armoring** standards as required by the SMP Guidelines. See further discussion on **Shoreline Armoring** under the response to Dick Sandaas.

7. Issue summary of comments received from **Futurewise** through two letters dated February 10, 2010 and March 5, 2010.

Comment Summary - Policy on Shorelines of Statewide Significance: Futurewise has previously commented to the City, stating that the specific policy statement related to *Shorelines of Statewide Significance* is not included within the SMP. City staff provided Futurewise with a response, which according to Futurewise still does not provide adequate emphasize of the importance of *Shorelines of Statewide Significance*.

Comment Summary - SMP Administration: Futurewise provides the City with a number of comments on SMP Administration specifically related to shoreline exemption and non-conforming regulations

identifying; thresholds/limits on maintenance/repair, use changes, wetland, stream and lake non-conformities and on-going degradation as summarized below:

- Exemptions-In reference to Section 141.40.4, Futurewise have previously commented and continues to be concerned that this section does not require sufficient submittal of materials and/or review to ensure that exempt actions are consistent with the SMP.
- Maintenance Thresholds/Time-limits (Non-Conforming)-Futurewise have previously commented stating that the 50% threshold to define *"major expansion"* is too high. Futurewise suggests that the threshold be reduced to 25-30% and should be calculated from the time that the original non-conformity first occurred, in order to limit multiple expansions over time.
- Changes of Shoreline Use (Non-Conforming)-Futurewise notes that improvements to properties can also involve a change in use, for which they do not believe the SMP adequately acknowledges. As a general comment, Futurewise suggests that if a use changes to a more intensive use, that conformance to the use standards should be required similar to the *"major improvement"* provisions applied to maintenance activities.
- Wetland, Stream and Lake Nonconformities-Futurewise has commented that the SMP's Non-Conforming section refers exclusively to *"buffer"* or *"setbacks"*, for which they are concerned leaves a *"gap"* in reference to wetlands, streams and lakes. They suggest using the term *"waterward of the buffer or setback"* to alleviate this concern.
- On-going Degradation of Bulkheads/Docks-Finally, Futurewise have suggested that on-going ecological impacts are associated with non-conforming docks and bulkheads and should be addressed when any use of the property is enlarged or changed. Specifically, they believe that bulkheads are missing from the City's non-conforming system and recommend that; *"-.550(5)(b & c) be supplemented to require that major expansion or use changes located on properties with shore armoring implement one of the Water Related Conditions or Actions in Table 83.380 (2)d."*

Comment Summary - SMP Use Table: Futurewise reiterated a previous concern related to unlisted uses and believe that a conditional use review would not require consistency with related use standards or regulations. Therefore, they have suggested that a *"catch-all"* standard be added to the SMP's use table stating that any use not specifically listed within the table is prohibited; thereby limiting the potential for unforeseen uses to negatively impact shoreline functions without appropriate development standards.

Comment Summary – Parking: Futurewise notes that underground parking would be allowed within a shoreline setback/buffer, for which they have raised concerns as to potential geo-hydraulic or groundwater interference between subsurface flow from uplands to the lake. Specifically, Futurewise references the potential impacts from excavation and construction of underground parking structures close to the high water mark within a shoreline setback or buffer?

Comment Summary - Transportation/Utilities: applicable to both Transportation and Utilities, Futurewise suggests that a regulation be added to ensure that off-site disposal of project materials are adequately disclosed and considered during shoreline permit review. Specific to Transportation uses, Futurewise have reiterated their concern related to *"linear facilities"* which they believe the SMP does not address all *"known or common impacts"*. Therefore, according to Futurewise these uses should only be considered when they are water-dependent. For "non-linear" facilities, Futurewise suggest that they be reviewed as other uses (i.e. commercial, industrial, etc.).

Comment Summary - Public Access: (See issue described below under Cumulative Impact Assessment) Boating Facilities/Pier Docks: Futurewise provided previous comments to the City distinguishing between single-family residential Pier/Docks and "Boating Facilities" serving multi-family or commercial

uses. They have summarized the City's response to this issue and remain unsatisfied in the SMP's lack of consistency with Guideline's "*Boating Facility"* standards to be applied to multi-family residential and commercial moorage facilities. Further, Futurewise has suggested the language in section 83.270.1.b.1 be revised from reference to *"waterfront access rights"* to *"water frontage".*

Comment Summary - Boating Facilities/Pier Docks: Futurewise provided previous comments to the City distinguishing between single-family residential Pier/Docks and "Boating Facilities" serving multi-family or commercial uses. They have summarized the City's response to this issue and remain unsatisfied in the SMP's lack of consistency with Guideline's "*Boating Facility"* standards to be applied to multi-family residential and commercial moorage facilities. Further, Futurewise has suggested the language in section 83.270.1.b.1 be revised from reference to *"waterfront access rights"* to *"water frontage".*

Comment Summary - Shoreline Setback Vegetation Management/Reduction: Futurewise have provided previous comments to the City related to shoreline setbacks/buffers. In general, they acknowledge the limits on establishment of large protective buffers within the City's urbanized setting with reference to their Urban Buffer Guidance2. However, they do continue to emphasize the need to establish wider buffers necessary to protect shoreline functions in areas such as the Natural environment where these protections can be accomplished. Further, Futurewise have provided follow-up comments to the City's initial response on the following shoreline buffer issues:

- Stream Buffers-Futurewise notes that the City's stream buffers are not based on *Best Available Science* and suggest the *"enhancement standards used for setbacks"* should be applied to stream buffers. Futurewise is concerned that the City's responses to their original comment on this issue were miss-understood. They reiterate to the City, that the *"enhancement standards"* are necessary not just for cases when the standard buffer is reduced, but for all future development adjacent to streams to properly mitigate development impacts.
- Water Enjoyment Uses-Futurewise has provided a follow-up suggestion to previous comments related to increasing setback/buffers for Water-Enjoyment Uses. Citing potentially unnecessary degradation, Futurewise does not believe that Water Enjoyment Uses are justified in receiving any closer setback/buffer than non-water-oriented uses, as a larger setback would still allow for views of the water to maintain the water-enjoyment function.
- Setback Buffer Incentives-Futurewise has stated a *"major concern"* with incentives intended to encourage enhancement, but potentially awarded for development that may not result in a net ecological improvement. As an example, Futurewise, cites a scenario where a setback/buffer reduction may be allowed when the *"Presence of natural shoreline conditions…"*on site would not require any enhancement, which they believe encourages extra development without a net improvement to ecological functions. Futurewise has reviewed the City response to their previous comments and believe the City misunderstood their concerns. Futurewise reiterates that they support incentives, but are concerned that the City's SMP will: *"(1) encourage non-water-oriented development close to the water, while doing nothing to improve shoreline conditions to mitigate the impacts, or (2) encourage non-water-oriented development to degrade the remaining functions to the threshold level without enhancement to offset the impacts of development close to the water."* In conclusion, Futurewise recommends that the language of the existing incentives be amended to require overall improved conditions or a net improvement in order to allow the incentive.

Comment Summary - Restoration Plan: Futurewise has stated that they are not concerned with the projects listed in the City's Restoration Plan, *"But rather that the Plan identified restoration goals and objectives, and the restoration projects not in the plan should be consistent with these goals and*

objectives". Finally, Futurewise suggests that the City provide a connection between the Restoration Plan and the many protection measures/standards in the SMP that will help to restore shoreline ecological functions.

Comment Summary - Cumulative Impact Assessment: Futurewise states that *"protection of ecological functions"* is one of the highest SMA policy preferences, for which they question (as an example) the SMP's public access standards, which is allowed to be located within setbacks/buffers, which they believe *"…will encourage intense development extremely close to the water, with associated impacts"*. Futurewise concludes stating that their comment letter points out similar instances which unless corrected [the SMP] *"…will not be able to prevent cumulative impacts".*

City Response: *Concerning* ***SMA policy text on shorelines of statewide significance,*** *the City does not call out specific policies in its Zoning Code as a general rule, but rather provides applicable references to the Comprehensive Plan. The City believes that the regulatory and policy documents should be kept separate. Section 83.40.3 references the Shoreline Chapter of the Comprehensive Plan and states the intent of the SMP of implementing the SMA and Guidelines. In the new Shoreline Chapter of the Comprehensive Plan, the City has listed the three goals of the SMA and references RCW 90.58. It is the City's position that the goals and policies in the Shoreline Chapter appropriately reflect the policy statement in RCW 90.58.020 and that the actual policy statement in RCW 90.58.020 should not be a specific goal or policy in the City's Comprehensive Plan.*

City Response*: Concerning* ***exemptions****, Section 141.40 does require a formal application for an exemption, including submittal requirements. City can approve, deny or approve with conditions the exemption. Furthermore, the section states that the exemption must meet the regulations in Chapter 83 and review of the regulations is part of the City's consideration of the exemption. The provisions do allow the City to waive the application for any proposal that does not require an Army Corps of Engineers Section 10 or Section 404 approval. This is consistent with the provisions of WAC 173-27-050, which requires a letter of exemption to be submitted to the Department of Ecology only when an Army Corps of Engineers Section 10 or Section 404 approval is required. The City acknowledges its requirement to document project review actions in shoreline areas. Even in cases where an application is waived, the Planning Official is still required to conduct review for compliance with the shoreline regulations contained in Chapter 83 KZC in conjunction with a related development permit, such as a building permit.*

City Response*: Concerning* ***maintenance threshold/time-limits (non-conforming)****, the Guidelines provide no standards or directives on thresholds for non-conforming structure so jurisdictions have discretion to set the threshold based on their own existing conditions and on the results of their Cumulative Impact Analysis. The threshold of 50% improvement of the value of the property or structure for bringing certain non-conformances up to code over a 12-month time period is the standard threshold in the City's Zoning Code. The City's believes that this same threshold should apply to the new shoreline regulations that will be placed in the Zoning Code. The City's position is that this is a reasonable threshold and time period given the extent of changes that would be required to bring a structure or site up the code. It is not unusual in the City that the 50% threshold is met or exceeded, such as adding a 2nd floor or enlarging the ground floor of a structure.*

City Response*: Concerning* ***changes of shoreline use (non-conforming),*** *the Guidelines provide no standards or directives on change in use so jurisdictions have discretion to set the standards. Approval of a change in use would require that the use be an allowed use in the shoreline environment and meet the standards for that new use. If the change in use is more intensive, then the new use must meet the stricter standards for that more intensive use. For example, a single-family home converted to a multifamily development would require compliance with the shoreline setback, public access, shoreline*

*vegetation and other requirements. Concerning the **expansion of a primary structure or a change in use**, this action does not always cause impacts to the shoreline functions. In the City's regulations, the required shoreline setback must be met for major expansions and existing shoreline setbacks must be maintained for minor expansions, except for a special provision in Section 83.550.5.b.5) where shoreline vegetation mitigation is required if a small expansion of the non-conforming structure goes into the shoreline setback. More intense uses, such as commercial uses, are only allowed in limited locations along the shoreline where other intense uses already exist and have specific regulations that must be met to mitigate impacts.*

***City Response**: Concerning **wetland, stream and lake nonconformities**, Section 83.550.5 contains a subsection D covering Nonconforming Wetland and Stream Buffer. This subsection regulates when nonconforming structures and improvements in a buffer must be brought into conformance.*

***City Response**: Concerning **on-going degradation of bulkheads/docks**, the Guidelines do not require removal of bulkheads with replacement of existing primary structures so jurisdictions have discretion to set the threshold for removal based on the result of their Cumulative Impact Analysis. The City considered the concept of requiring removal of bulkheads with redevelopment when the bulkhead would not be altered, but concluded that it would go beyond the No Net Loss standard. Ecology agreed with the City. Thus, the City does not treat existing bulkheads as non-conforming structures, but does have a threshold for when a needs assessment is required for major repair of a bulkhead.*

***City Response**: Concerning **SMP use table for unlisted uses,** the WAC provisions allow unlisted uses to be considered through a CUP process. WAC 173-27-160 criteria (3) addresses unlisted use by stating that:*

> (3) Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this section and the requirements for conditional uses contained in the master program.

The use would need to meet both the general review criteria under WAC 173-27-140 and the specific criteria for a CUP under WAC 173-27-160. It would have to receive Ecology approval as well. The City cannot foresee all potential appropriate shoreline uses that may be proposed in the future so the SMP update should allow unlisted uses to be considered through a CUP. The current SMP also treats unlisted uses the same way. A past example in Kirkland of an unlisted use that went through a CUP was a rowing club. Through the CUP, an applicant for an unlisted use would potentially have higher standards to meet than the development standards listed for uses in Chapter 83. An unlisted use must meet the mitigation sequencing under Section 83.360 to demonstrate that the No Net Loss standard would be met. Minimization of impacts and/or mitigation would be required that reflected the actual impacts of the use. The City would look to comparable uses in Chapter 83 for standards along with other standards recommended from the mitigation sequencing analysis. The approach is preferred over developing "best guess" standards for unlisted uses in advance. An unlisted use can be denied because the City may conclude that impacts could not be avoided, minimized or mitigated.

***City Response**: Concerning **subsurface parking,** Kirkland's current Urban Mix and Residential M/H shoreline environments is where subsurface parking structures could be located and are mostly composed of hard armoring, lawn, surface and subsurface parking and primary structures. The areas have low ecological function already due to the urban, intense conditions that exist. Thus, the No Net Loss standard would be met if a subsurface parking structure were constructed. In many instances, subsurface parking lots are the only option because there is no location for surface parking due to the shallow depth of many lots along Kirkland's shoreline or due to blockage of views to the lake in the required view corridor by vehicles parked on surface parking lots. In many ways, subsurface parking lots are preferred since they do not block views or public access to the lake. The City is not aware of any study that indicates that subsurface parking lots would interfere with the ground water eventually going*

into the lake or that groundwater is such a critical factor for cooling lake water. According to a study completed in 2003, the Cedar and Sammamish Rivers contribute 84% of the lake's water (TetraTech ISG, Inc. and Parametrix 2003). The large number of streams in the Lake Washington basin likely contributes the majority of the remaining water, with some unknown contribution from groundwater. Furthermore, the study notes that temperature of the lake is "determined largely by climatic factors" (TetraTech ISG, Inc. and Parametrix 2003). Source: http://your.kingcounty.gov/dnrp/library/2003/kcr1479.pdf

***City Response**: Concerning **transportation/utilities**, deposit of debris outside of the SMA jurisdiction is not an issue of the SMP, but would be addressed as part of the SEPA environmental review. For clear organization and a user-friendly format, the City prefers to address linear and non-linear transportation facilities in one section of the regulations. Mitigation sequencing will be used to determine if the facilities are appropriate for the proposed location and any needed mitigation. In addition, Section 83.230 contains five general standards and five construction and maintenance standards along with specific standards for a passenger only ferry terminal, water taxi, and roads and bridges. Concerning additional comments on **transportation/utility**, each SMP is tailored to reflect the jurisdictional characteristics. Kirkland does not contain floodplains or floodways, airports or freeways within the SMA jurisdiction so these facilities are not mentioned in the use listing in Section 83.160. Private driveways and utilities associated with a use along the shoreline would be regulated as part of the primary use and not as a transportation facility under Section 83.230 and Section 83.240.*

***City Response**: Concerning **public access**, the existing public access walkways in Kirkland are generally constructed next to the water's edge to give the public close proximity to the water and to provide separation for privacy to homeowners and businesses. Any improvement to this current condition would meet the No Net Loss standard. Section 83.420 requires that public walkways be set back an average of 10 feet but no closer than 5 feet from the OHWM. Riparian vegetation of at least 15' in width must be planted within the shoreline setback not including the area of the walkway. This new standard is an improvement over existing conditions. When developing the public access regulations, the City considered the two statements in the Guidelines on public access that read: "public access includes the ability of the general public to reach, touch, and enjoy the water's edge…and to view the water and the shoreline from adjacent locations" and "assure that public access improvements do not result in a net loss of shoreline ecological functions and the right to privacy for property owners." The City believes that its regulations on public access meet these standards while improving the shoreline condition.*

***City Response**: Concerning the **view corridors** requirement, they only apply to properties west of Lake Washington Blvd and Lake Street South and do not include public park use. The only property west of Lake Washington Blvd in the Natural shoreline environment is the Yarrow Bay Wetland Park. There is no Natural shoreline environment west of Lake Street South.*

***City Response**: Concerning **boating facilities/pier docks**, the boating facilities section of the WAC only excludes docks serving four or fewer single-family residences from the requirements of that section – it does not exclude docks serving other types of residential uses. These uses would fall under the broad definition of boating facilities, which as stated by Futurewise, should address marinas, as well as private community facilities for multiple users, public boat launch and moorage facilities. The City believes that the provisions established for boating facilities associated with multi-family developments adequately meet the requirements of WAC 173-26-241(3)(c). Section 83.280 establishes setback standards to ensure that development is adequately located. Restroom facilities are not required as the boat users and their guests are expected to use those facilities in their home on-site. However, other health, safety and welfare requirements are required. Visual concerns are addressed through a number of provisions. Requirements are also established to meet No Net Loss and mitigation sequencing. Provisions also address moorage on waters of the State. Section 83.80 defines "boating facilities" and clarifies that for*

Kirkland's SMP piers and docks include those for multi-family (detached, attached and stacked dwelling units) along with marinas (note: occupants of multi-family housing that own boats moored at a community pier are members of the boating public who utilize their boats on the lake for recreation as intended by the Boating Facilities section of the WAC). Since Kirkland has so many existing boating facilities for multi-family development, the City determined that it would be clearer if a chart was provided noting specific boating facilities associated with multifamily developments. The City also decided that the regulations for multifamily boating facilities should be more restrictive in certain design regulations than for marinas, such as pier width and minimum water depth, since they serve fewer people than marinas and are restricted to the residents and guests. However, many of the other general regulations are the same for all boating facilities. For example, multi-family boating facilities are required in general to be located and designed to address the No Net Loss standards, utilize mitigation sequencing, and meet some additional location standards as addressed in Section 83.280.1 and 2. They are also required to provide public access and at least two waste receptacles. The City assumes that it is meeting the intent of the SMA and Guidelines and believes that Ecology will allow jurisdictions some discretion in how the regulations are set up. Concerning ***upland lots and non-commercial (multi-family) boating facilities****, Section 83.280 only permits a new boating facility if there is an existing dwelling unit on the lot. Kirkland has a few upland lots and they all contain dwelling units. To our knowledge, Kirkland does not contain upland lots with legal rights to have a boating facility. If a subdivision results in an upland lot with access rights for a boat facility, then a shared facility would be required.*

Concerning ***upland lots and piers associated with single-family homes****, to our knowledge Kirkland has no upland single-family lot with legal rights to have a pier. Nonetheless, the Guidelines do not state that an upland single-family lot must share a pier with a waterfront lot. The Guidelines only require that a new development with two or more dwelling units or a subdivision have shared piers. Concerning* ***piers and docks for non-moorage water-dependant and non moorage non-water-dependant uses****, the City has already listed and addressed some foreseeable known uses, such as public piers and boardwalks, and fueling and boat repair. The City does not want to outright exclude some unforeseen, unlisted use from all of the environments as this may result in future prohibition of an appropriate use in a particular shoreline environment. As discussed above on page 11, for Kirkland a CUP process is the preferable approach for an unknown, unlisted use.*

City Response*: Concerning* ***shoreline setback vegetation management/reduction****, Ecology has provided the City with direction that the wetland and stream buffers and the shoreline setback address different requirements. Buffers typically provide protection for wetland and streams by prohibiting development or improvements i.e. retaining the buffer area in a natural state. The shoreline setback provides separation from the lake for riparian vegetation and to reduce impacts of light, noise and other impacts from the upland activities, but still allows for some improvements, access and water dependant uses. Thus, the required shoreline setbacks in the Natural shoreline environment are regulated as such and specifically not as an untouched buffer. In most areas, the shoreline setback will be contained within the required greater wetland setback and building buffer setback. Most of the Natural shoreline environment areas are covered by wetlands. For those few areas not covered by wetland or wetland buffer, only the shoreline setback would apply.*

City Response*: Concerning* ***stream buffer standards,*** *the City does not contain any streams that would be considered shorelines or shorelines of statewide significance. The City of Kirkland's non-shoreline streams are addressed under the Guidelines section on Critical Areas located within shoreline jurisdiction, namely critical freshwater habitats. The City believes that given existing conditions, the shoreline regulations do meet these standards. The City's non-shoreline streams are predominately located within large wetland complexes. The wetland buffer standards in Section 83.500 were based on Best Available*

Science and would provide protection of ecological functions of the streams within the wetland complex, consistent with the provisions established for critical freshwater habitats. Two streams are currently outside of the large wetland complexes. One is located in the Carillon Point Master Plan site that is fully developed. The existing buildings and parking structures are located next to the stream. It is highly unlikely that any redevelopment would occur in the master plan over the next 20 years and thus the stream buffers in Section 83.510 would be appropriate, given these existing conditions and no potential for site redevelopment. The other stream is in Juanita Beach Park. As part of the redevelopment of the park currently under way, a wetland mitigation project will create a wetland around Juanita Creek. Thus, this creek will have the additional protection of a wetland and its associated buffer surrounding the stream. Since all of the shoreline streams but one are or will be located within wetland complexes, a stream buffer enhancement requirement is not needed. The wetlands and their associated buffers will provide greater protection to the streams than the stream buffers. The City does not want intrusion into the wetland complexes to enhance the stream. For the one stream not surrounded by a wetland, it is highly unlikely that redevelopment (tear down and rebuild) will occur in the Carillon Point development master plan site. Even so, if redevelopment would occur at Carillion Point, the result of mitigation sequencing and conditions of approval for an amendment to the master plan can require further enhancement of the stream. Concerning ***stream bank protection****, it is the City's position that stream bank protection in Kirkland's non-shoreline streams does not explicitly fall under the Guideline section on shoreline stabilization, but under the Guidelines section on critical areas located within shoreline jurisdiction, namely critical freshwater habitats. This section suggests integration of the SMP provisions for shoreline stabilization, among other sections. The City's stream bank protection Section 83.510.10 accomplishes this by requiring similar standards for shoreline stabilization, such as using non-structural or soft structural steam bank protection, rather than hard stabilization; providing documentation prepared by a qualified professional that no adverse impact will occur to fish, wildlife and their habitat; and documenting that vegetation or other biological materials is not an option to control erosion. The City's shoreline stabilization Section 83.300 specifically addresses the lake environment with bulkheads not permitted within wetlands. The Washington Department of Fish and Wildlife's Integrated Stream Bank Protection Guidelines is a more appropriate, science-based tool for stream environments.*

City Response*: Concerning* ***water enjoyment, water-oriented uses****, these types of uses are a preferred use over a non-water enjoyment, non-water-oriented uses under the SMA in that they are opened to the public to provide public access and enjoyment of the shoreline. The City's shoreline setback standards are in "order of preference" based on the Guidelines: water dependant uses have no setback; water enjoyment uses have a 30' required setback; and non water-oriented uses having a setback of 50'. Water enjoyment uses have a less of a shoreline setback than non water-oriented uses so the public has enhanced access to the lake. The City's position is that the setback for water enjoyment use is appropriate and reasonable.*

City Response*: Concerning* ***setback reduction incentives****, the incentive options are designed to at least offset any impact from allowing a structure to be closer to the lake than required by the shoreline setback standard. As suggested in the comment letter, net improvement of ecological function letter on a site-by-site basis would go beyond the No Net Loss standard and thus is not required. Currently, Kirkland only has a few properties with a natural shoreline so the setback reduction option for an existing natural shoreline is only applicable in rare situations. The Cumulative Impact Analysis concluded that the No Net Loss standard would be met with the setback reduction incentive option.*

City Response*: Concerning the* ***Restoration Plan,*** *the City views its SMP update as having four components that are interrelated and interdependent: the Shoreline Chapter and other applicable chapters in the Comprehensive Plan, the shoreline regulations in Chapter 83 and 141 of the Zoning Code,*

the Restoration Plan and the Cumulative Impact Analysis. A restoration project not specifically listed in the Restoration Plan would be regulated under Chapter 83 by either specific regulations for shoreline modification, wetlands or streams or under Section 83.350 for Shoreline Habitat and Natural System Enhancement Projects. A Substantial Development Permit would be required. In the review and approval of the SDP, the restoration project would need to be consistent with the Shoreline goals and policies in the Comprehensive Plan, the regulations in Chapter 83 and the goals and objectives in the Restoration Plan. The Shoreline Chapter in the Comprehensive Plan has several goals and policies on restoration, including Goal SMP 2, Policy SMP 8.3, Goal SMP 13, Policy SMP 13.5 and Policy SMP 16.1. These goals and policies are consistent with the goals and objectives of the Restoration Plan. The Restoration Plan specifically addresses private restoration projects that may result from the protection measures and standards in the SMP regulations. These projects will help towards restoring shoreline ecological functions. Concerning an ***additional comment on the Restoration Plan****, WAC 173-26-186(8)c states that the master program elements and not just the Restoration Plan itself should consider any "restoration effects that may flow indirectly from shoreline development regulations and mitigation standards." The City's Cumulative Impact Analysis did consider both mitigation of site specific impacts and any possible restoration that results from the new shoreline regulations in determining if the combination of the new shoreline regulations and the Restoration Plan would result in No Net Loss of ecological function and restoration of the shoreline over the planning horizon.*

City Response*: Concerning the* ***Cumulative Impact Analysis,*** *major improvements are currently found along Kirkland's shoreline up to the edge of the OHWM, including required public access walkways, decks, patios, swimming pools, commercial outdoor seating areas and private walkways. These are permitted under the current SMP. Under the SMP, the public access walkways will no longer be allowed along the edge of the OHWM, patios and decks must be at least 25 feet from the OHWM (with the exception of the 19 single family lots just north of the downtown), swimming pools are no longer permitted in the shoreline setback and improved private walkways are limited in size. Commercial outdoor seating areas must be no closer than 16 feet and balconies no closer than 21 feet from the OHWM. All of these improvements must be made of pervious material. None of the encroachments are permitted in the Natural shoreline environment. Thus, under the new shoreline regulations these improvements will be further away from the shoreline than existing conditions while still allowing property owners and the public an opportunity to enjoy the shoreline. Given the existing conditions along the Kirkland, the No Net Loss standard will be met in Kirkland with the SMP update. Concerning the* ***heading for Section 141.30****, it does read "Review Required" as recommended in the comment letter and not "Permit Required" as stated in the comment letter.*

City Response*: Concerning* ***commercial uses****, the definition in Section 83.80 includes services. The catch-all listing is "Any Retail Establishment other than those specifically listed in this chart, selling goods and services including banking and relative services". This is the same terminology used throughout the Kirkland Zoning Code. The definition of "retail" is further defined in Section 5.795 of the Kirkland Zoning Code reflecting this general catch-all term. Chapter 83 uses the same breakdown in uses, basic format and definitions as the remainder of the Zoning Code. It is very important to the City that Chapter 83, a new chapter in the Zoning Code, is internally consistent with the rest of the Zoning Code. The City believes that the State Guidelines and SMP provide jurisdictions with the latitude on how they want to organize and categorize uses, provided that the intent of the SMA is met. Like other development regulations, jurisdictions take a variety of approaches on how they organize their Zoning Code and Comprehensive Plan. The City believes that the organization of uses provided in the Zoning Code is appropriate for the shoreline regulations and does not conflict with intent of the SMA or the Guidelines.*

***City Response**: Concerning **institutional uses**, again the City is very concerned about having internal consistency with all chapters of the Zoning Code and believes that the organization of uses in Chapter 83 does not conflict with the State Guidelines and the intent of the SMA. Institutional uses are called out separately in Chapter 83 from commercial uses as they are in the reminder of the Zoning Code. Institutional uses are defined in the Zoning Code to include schools, churches, day cares, government and community facilities (see Section 5.410). These uses are allowed in almost all zones of the City, including residential zones. This is not the case for commercial uses that are limited generally to commercial zones. Commercial and institutional uses have the same standards for height, setbacks and lot coverage. In the chart of Section 83.170, resource land use, residential uses, land division, institutional, utilities and shoreline modification are not divided by water-dependent, non water-dependant and water-related because the uses within each of these categories are of the same shoreline type.*

***City Response**: Concerning **hotels, motels, restaurants and taverns as water-enjoyment uses**, these uses are commonly located along the shores of Lake Washington, including Kirkland, and other shorelines in Washington providing the general public with the opportunity to enjoy the water and views beyond. They provide an "aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use" (WAC 173-26-020). The definition of water-enjoyment does not say "sole" characteristic. Their very nature is to be open to the public and to serve a substantial number of people. The City requires that hotels, motels, restaurants and taverns meet five design criteria in Section 83.390 to assure that they are designed and function as water enjoyment uses for the public. It is the City's position that these uses are appropriate water enjoyment uses if designed correctly and meet certain requirements.*

***City Response**: Concerning **recreational facilities**, Section 83.220 states that non water-oriented sports fields, skate parks and the like must be located outside of the shoreline jurisdiction as much as possible. This statement establishes that these types of facilities are not considered water-oriented recreation. A CUP is required for a recreational use in all environments, except the Urban Mix environment so the various CUP criteria must be satisfied met along with proving that the goals and intent of the SMP are met.*

***City Response**: Concerning the **aquatic environment** column in Section 83.160, this is a minor typographical error in the chart. The field containing the text "see adjacent upland environment" needs to be continued onto the next page.*

***City Response**: Concerning **lighting standards**, Section 83.460 contains applicable regulations for parking lots. The regulations are very specific as how to do avoiding adverse impact – lighting shall be directed downward and have "fully shielded cut off" fixtures. The height and location of lighting are restricted and timers and sensors must be used. Overwater structures have additional standards besides the standards in Section 83.460 due to the close proximity to the lake. The only exceptions to the regulations are emergency lighting for public safety, public rights-of-way, temporary community events at parks, seasonal decoration lighting and lighting for signage regulated under Section 83.460. These exceptions are reasonable and/or necessary.*

***City Response**: Concerning **fill**, similar to the discussion on transportation and utilities in this document, the City believes that the combination of meeting the specific standards for fill and the mitigation sequencing requirements in Section 83.340 provide adequate and appropriate review standards. Concerning **land surface modification** in the Natural shoreline environment, there are single-family homes and some vacant single family lots located in this environment. There may be a case where a land surface modification (such as grading or fill) activity is required for a soft shoreline or natural shoreline measure. A SDP or CUP is required depending on the activity.*

***City Response**: Concerning **utility production and processing facilities and utility transmission facilities**, Section 83.240 contains general standards, construction and maintenance standards and specific standards for these uses. Similar to the discussion above on transportation and general utilities, the City believes that the combination of meeting the specific standards for these uses and the mitigation sequencing requirements provide adequate and appropriate review standards.*

Ecology Conclusion: As summarized above, Futurewise submitted comprehensive comments focused on the following SMP topics: **Shorelines-of-Statewide-Significance**, **Shoreline Exemptions**, **Non-Conforming maintenance thresholds**, **Non-Conforming changes in use**, **On-going Ecological Degradation**, **Unlisted/Unanticipated Uses**, **Subsurface Parking**, **Transportation/Utilities**, **Public Access**, **Boating Facilities**, **Critical Areas Buffers**, **SMA-Priority Uses**, **Setback Incentives**, **Restoration Plan, Cumulative Impact Assessment**, and **Water Enjoyment Uses**. Generally, Ecology concurs with the City's response to the Futurewise comments through appropriate interpretation and application of the SMP Guideline provisions for each of the topics considered. Please see detailed conclusion for each topic listed below:

Ecology Conclusion - Shorelines-of-Statewide-Significance: Neither the comment by Futurewise nor the City's response suggests inconsistency with the "Shorelines-of-State-Wide-Significance" policy statement from RCW 90.58.020, but rather, questions if the City is required to repeat the policy statement within the updated SMP? WAC 173-26-176 provides a list of *"General Policy Goals of the act…"* which according to WAC 173-26-191.2.a.i (Master Program Contents – Master Program Policies) *"shall provide clear, consistent policies that translate broad statewide policy goals…into local directives."* Therefore, it appears that the City has met its obligation through reference and/or translation of statewide policy goals within the updated SMP.

Ecology Conclusion - Shoreline Exemptions: Ecology concurs with the City's response acknowledging the obligation to ensure SMP consistency of exempt actions, for which requirement of a formal Shoreline Exemption application is an option for jurisdictions to consider. Finally, Futurewise provides a valid comment acknowledged by the City related to identification of a method to account for future SMP authorizations as part of the future 7-year SMP review.

Ecology Conclusion - Non-Conforming Maintenance Thresholds: As stated by the City, jurisdictions have the authority to either create their own Non-Conforming standards or default to WAC 173-27-???. Under either option the jurisdictions is required to satisfy illustrate consistency with the no net loss of ecological functions SMP policy goal. As described within the City's Cumulative Impact Assessment (The Watershed Company, 2009) thresholds related to the scope and timing of repair/maintenance to existing non-conformities was necessary to appropriately distinguish when the new standards should be complied with as opposed to on-going maintenance of an existing structure/use. The City has considered the threshold within their Cumulative Impact Assessment and determined that the standard is in compliance with the No Net Loss Guideline requirement.

Ecology Conclusion - On-going Ecological Degradation Critical Areas Buffers/Setback Incentives: Ecology concurs with the City's response related to on-going ecological degradation from existing shoreline structures. The Guidelines do not provide any additional authority to retroactively require removal of existing structures. Therefore, the City is correct in focusing SMP regulations on removal of these structures through redevelopment and establishment of a threshold on repair. Related to critical area buffers, the City have updated wetland regulations to satisfy Best Available Science and Guidelines standards. As documented within the City's Inventory Characterization (The Watershed Company,

2006), there are not any shoreline jurisdictional streams[2] within the City's shoreline management area. However the City does have lower flow non shoreline jurisdictional streams for which the City have concluded these streams are either water courses as part of large wetland complexes (regulated by updated wetland standards) or within two other locations. The two isolated streams are located in fully developed area and a public park setting, both of which do not currently meet the City's 75-foot buffer requirement, for which any future development adjacent to these critical areas would result in ecological improvements consistent with these standards. As stated by the City's response, the SMP's setback incentives are considered within the Cumulative Impact Assessment (The Watershed Company, 2009), concludes that the standards are consistent with the no net loss guideline requirement. Further, based on the City's urban characteristics, redevelopment including incentives to encourage additional ecological improvement is the dominate driver to improving the existing degraded ecological baseline. Finally, the City has appropriately designated multiple "Natural" shorelines providing heightened protection of these more natural areas that are so unique within the predominately urban landscape.

Ecology Conclusion - Unlisted/Unanticipated Uses/SMA-Priority Uses/Water Enjoyment Uses: The City is not required to prohibit unanticipated future uses. As referenced by the City, Conditional Uses (WAC 173-27-160) are intended to be a tool for consideration of unanticipated uses. However, the City is obligated to actively consider all anticipated uses within the SMP update, for which anticipated uses should be defined and appropriately regulated within the SMP. The Futurewise comments appear to focus on "unanticipated uses" as opposed to suggesting that the City did not adequately include all anticipated uses. Therefore, Ecology concurs with the City's reference and authority to depend on a Conditional Use review when/if considering a unlisted future use. Ecology concurs with the City's response related to prioritization of water-oriented uses through administration of variation in setback standards to balance ecological protection with other public benefits such as public access. Ecology also concurs with the City's interpretation of Water Enjoyment Uses providing the public with an opportunity to "…enjoy the water's edge and view the shoreline from adjacent locations".

Ecology Conclusion - Subsurface Parking Transportation/Utilities/Public Access: At the request of Futurewise, the City has taken a closer review of any potential impacts resulting from subsurface parking. The City has concluded that subsurface parking would be limited in scope to two designations (Urban Mix, Residential M/H), would not impact groundwater movement within this geographic area and is perceived to enhance both visual and physical public access opportunities by placing this urban service (parking) underground providing additional public access opportunity on the above ground shoreline area. Ecology appreciates Futurewise's concern, but concur with the City's conclusion that subsurface parking appears appropriate for these urban shoreline sections.

Ecology Conclusion - Boating Facilities: The City has acknowledged comments from Futurewise suggesting that Marina standards should be applied for Boating Facilities. However, the City has pointed out that Boating Facilities will mainly be associated with multi-family housing, which are very common in Kirkland's shoreline area. The City also points out that because the Boating Facilities are associated with multifamily housing some of the Marina standards are not necessary, for which the City will not require bathroom facilities, but have created more restrictive dimensional standards based on visual and ecological goals of the SMP. Ecology, concurs with the City's conclusion that their Boating Facility standards are consistent with WAC 173-26-241(3)(c) and overall SMP Guideline requirements.

Ecology Conclusion - Restoration Plan/Cumulative Impact Assessment: Ecology concurs with the City's response to Futurewise concerns related to the Restoration Plan (The Watershed Company, 2009) and Cumulative Impact Assessment (The Watershed Company, 2009) by referencing the multi-component

[2] Shoreline Jurisdictional Stream defined as mean annual flow greater than 20 cubic feet per second.

aspects of the City's Shoreline Master Program. Citing Shoreline Goals as part of the City's Comprehensive Plan, SMP regulation and Restoration plan, projects not specifically listed within the Restoration Plan will still need to be reviewed for SMA consistency through multiple ordinances. There does not appear to be a clear gap or void for which a future proposal could be proposed without consistency verification through multiple SMP related reviews. Ecology finds the City's Cumulative Impact Assessment (The Watershed Company, 2009) to adequately satisfy Guideline requirements in its scope and level of detail of analysis of the City's shoreline program. The report adequately anticipates potential impacts of future actions allowed by the SMP, while also providing important conclusions related to necessary protection standards necessary to offset anticipated impacts of future development to maintain or improve shoreline ecological functions consistent with the Guidelines no net loss policy goal.

8. Issue summary of comments received by Ecology from **Jason Crutcher** dated February 15, 2010.

Comment Summary - Pier/Dock (Policy): Mr. Crutcher requests that Policy's SMP-11.2 and SMP-20.1 be amended to mention "laminated glass" in addition to "grated" materials as a preferred method to maintain light transmission under overwater structures.

***City Response**: The regulations for piers and boating facilities in Chapter 83 state that grating decks or similar materials that allow a minimum of 40% light transmittance of light through the materials are required. Thus, if **laminated glass** meets this performance standard, it could be allowed.*

Ecology Conclusion: As summarized above, Mr. Crutcher provided written comments related to **Pier/Dock** policies and regulations within the SMP. Ecology concurs with the City's response; the light transmission standard can apply to a multitude of materials that can be shown to satisfy the standard.

9. Issue summary of comments received by Ecology from **Robert Pantley** dated March 5, 2010.

Comment Summary - Shoreline Stabilization: Mr. Pantley is concerned that the current code is more *"penalty"* rather than *"supportive"* of soft shoreline projects. Mr. Pantley is supportive of soft shore conversions, but believes the current code language *"boxes the applicant, the City and Ecology*" from making a more meaningful effort to create more soft shore projects along the lake.

Comment Summary: Within his previous comments to the City, Mr. Pantley provides additional details related to his opinion that the current rules will discourage, not encourage soft shorelines. Mr. Pantley's specific comments have been summarized below:

- Flexible setbacks: allowing for only the *"minimum relief necessary",* discourages property owner consideration of soft-shore projects.
- Promote volunteer soft-shore: appropriate incentives and flexibility should be emphasized to encourage, not require soft-shore. Disincentives, such as lengthy permit review or conversion of too much upland property will not encourage people to consider a soft-shore project.
- Exemption for Landmark tree removal: protection of landmark trees should not be a barrier to potential soft-shore projects. The City should allow some flexibility in landmark tree protection when someone is considering a soft-shore project.
- Soft-shore projects should not affect neighbors: again new protections that might be triggered by a soft-shore project should not affect neighboring properties; otherwise this will serve as a disincentive for people to consider a soft-shore project.

- Encourage innovation in soft-shore creations: The City should find a way to give *"special support"* to *"above the code"* ideas to encourage ongoing innovation in design.
- Encourage neighbors to work together: The City should consider providing incentives to encourage neighbors to do *"master plan"* to implement soft-shore together.
- Priority processing of soft-shore permits: As previously mentioned, permitting of soft-shore projects should not be a barrier. Therefore, the City should prioritize processing of soft-shore projects.

City Response: *Concerning* ***shoreline stabilization****, the SMP regulations reflect the specific provisions of the State Guidelines. The City has provided as much flexibility in the regulations and threshold standards as reasonable for repair of hard shoreline stabilization measures while still meeting the No Net Loss standard. Additional comments related to discouraging soft shorelines are noted:*

City Response*: Concerning* ***flexible shoreline setback,*** *the shoreline setback can be reduced down to 25 feet depending on what setback reduction incentive options are incorporated into the site plan. The incentive option for soft shoreline measure has the highest reduction by reducing the setback in half, but no closer than 25 feet. Ecology has indicated to the City that a shoreline setback in developed urban areas should be no less than 25', except possibly in very constrained area, such as shallow lot depths or size. Thus, the shoreline setback in Chapter 83 is the minimum that will likely be approved by Ecology and setback averaging is not an option.*

City Response*: Concerning the* ***promotion of volunteer soft shore****, the SMP update reduces the required front and side yard setbacks to allow homes to be shifted to the east of Lake Washington and/or widened on the north and south sides so that more shoreline area would be available to create a soft shoreline without compromising the size of the home. The amount of land area that is needed to create a soft shoreline will depend on the water depth at the shoreline and site topography. The City has provided an exemption from an SDP for soft shoreline, thus shortening the process time for the projects.*

City Response*: Concerning* ***landmark tree removal,*** *a large, mature (landmark tree) is rare along the Kirkland waterfront and has significant ecological function for shoreline wildlife. Its value over the 20-year planning horizon of the shoreline is very high. According to the City's biological consultants who design soft shoreline measures, a landmark tree can be worked into the design of soft shoreline measures and are not necessarily obstacles to restoration. However, if the landmark tree is a hazardous or nuisance tree, it can be removed and replaced with two new trees.*

City Response*: Concerning* ***soft shoreline projects that may affect neighborhoods and relief of regulations,*** *in most cases a soft shoreline measure can be installed without altering the OHWM. In the event that the OHWM shifts, the possible change in lot coverage, shoreline setback and other standards only would affect the subject property and not the properties to the north or south. The neighboring property's OHWM would not change. It could affect a property to the east. However, in those cases where an OHWM shifts landward, the definition of shoreline jurisdiction contained in the SMA would require that the regulations be extended to the new area encompassed by this shift in location. In order to address this issue, the State Legislature passed House Bill 2199. The City must ensure that its regulations comply with new provisions established by House Bill 2199. These provisions allow Kirkland to grant relief from shoreline regulations (see Section 141.70.4) that apply if a shoreline restoration project causes or will cause a landward shift in the OHWM that results in:*

- *Land that had not been regulated under the SMA before construction of the restoration project being brought under shoreline jurisdiction;*

- *Additional regulatory requirements applying due to a landward shift in required shoreline buffers or other regulations of the applicable master program; and*
- *The application of the shoreline regulations preclude or interfere with use of the property in ways permitted by local development regulations, thus presenting a hardship to the project proponent.*

***City Response**: Under Bill 2199, relief may only be granted by a local government if specific requirements are met, including:*

- *The proposed relief is the minimum necessary to relieve the hardship;*
- *The restoration project for which the relief is proposed will result in a net environmental benefit; and*
- *The granting of proposed relief is consistent with the objectives of the shoreline restoration project and consistent with the master program.*

***City Response**: The Bill provisions also require the City to submit the application for relief to the Department of Ecology for approval or disapproval. In responding to this Bill, the City has established two provisions:*

1. *Shoreline setbacks and lot coverage requirements are permitted to be measured from the location of the OHWM that existed immediately prior to the action or enhancement project. However, if an expansion of the SMA jurisdiction were to occur and encompass additional property not previously regulated under the SMA, then the requirement in section 2 below must be met.*
2. *The City would notify the affected property owner in writing, and the City may propose to grant relief for the affected property owners from applicable shoreline regulations resulting in expansion of the shorelines jurisdiction. The proposal to grant relief must be submitted to the Department of Ecology with the shoreline permit under the procedures established in KZC 141.70.5. If approved, notice of the relief, in a form approved by the City Attorney, shall be recorded on the title of the affected property with the King County Bureau of Elections and Records.*

If the standards are met, the City would support relief and recommend approval to the Department of Ecology.

***City Response**: Concerning the **encouragement of innovation in soft-shore creations,** the City will provide as much support as possibly to "above the code" ideas to encourage ongoing innovation in design. The City will look into expedited building permit review, make information on potential regional funding opportunities available similar to those listed in Appendix E of the Restoration Plan and consider other ideas. Concerning **neighbors to work together**, the City has provided several incentives in the SMP update, including shoreline setback reductions, reduction in other setbacks, increase in allowable structures height and exemptions for soft shoreline measures. In addition, funding sources for improvement to the shoreline are listed in Attachment E of the city's Restoration Plan that may be available for private property owners who propose replacement of several bulkheads for soft shoreline over a large stretch of the shoreline. The new shoreline regulations do not prevent several neighbors from proposing multiple restoration plans. The City would encourage such a project and provide any support that it can.*

***City Response**: Concerning **priority processing of soft-shore permits**, as mentioned above the City will consider priority permit review as the City already offers for built green developments once the SMP update is approved. Concerning **flexibility**, the City has provided flexibility in the street or easement road*

setbacks to help offset the greater shoreline setbacks in some cases and to encourage soft shoreline measures by allowing homes to be located further eastward and way from the lake. Along public streets, homeowners can choose from a 10' setback or the average of the abutting setbacks. Along easement roads, the homeowner can choose from a 5' setback or the average of the abutting setbacks. The City also provides flexibility in side yard setbacks by removing the existing large north property line sun angle setback and replacing it with the standard minimum of 5' and the two side yards must equal 15' OR 5' for both side yards with the upper floors reduced by 15% of the first floor.

***City Response**: Concerning **hatcheries and their associated fish ladders,** these are considered aquaculture facilities and are prohibited in Kirkland under the SMP update. Staff believes that Mr. Pantley is considering construction of a fish-accessibly stream channel that would likely be considered a habitat enhancement project which is permitted under the SMP update.*

***City Response**: Concerning **shared docks and piers**, these facilities are required with subdivisions under the State Guidelines. Section 83.270 provides for larger piers and docks when a joint use facility is proposed. The City decided to not require shared piers for existing homeowners because it is difficult to get homeowners to agree to share a facility, but shared piers and docks are permitted on a voluntary basis.*

***City Response**: Concerning **exemptions from required permits**, Section 141.40 exempts replacement of a hard shoreline stabilization measure with a soft shoreline stabilization measure from an SDP. Should it be determined in advance that there was no way to avoid shifting the OHWM, the applicant could submit the preliminary design to the City and Ecology for their approval for relief of regulations while the building permit is under review by the City of Kirkland.*

Ecology Conclusion: As summarized above, Mr. Pantler provided written comments related to **Shoreline Armoring** (identification of potential disincentives, impacts to neighbors, stifling of innovation, etc.) and flexible **Shoreline Setback** standards within the SMP. Ecology concurs with the City's response concluding that the **Shoreline Armoring** standards reflect the requirements of the Guidelines for which the City has incorporated as much flexibility as possible. Related to **Shoreline Setbacks**, the City has incorporated as much flexibility as possible while satisfying the no net loss requirement of the Guidelines through use of a range of setbacks determined by overall lot depth. These setback standards have been extensively analyzed through the City's Cumulative Impact Assessment (The Watershed Company, 2009)) providing a basis for the standards and concluding no net loss consistent with Guideline requirements. Finally, many of Mr. Pantley's non-regulatory volunteer soft shore promotional suggestions including encouragement of innovative soft shore designs can continue to evolve and be implemented without regulatory changes to the SMP regulations.

10. Issue summary of comments received by Ecology from **William Wassmer** dated March 5, 2010.

<u>Comment Summary – Dredging:</u> Mr. Wassmer has been a resident on Lake Washington/Juanita Bay for 21-years, during which time he believes development within the City of Kirkland and unincorporated King County has allowed *"stormwater to wash 1,000's of tons of silt and mud into Yarrow and Juanita Bay"*, raising the bottom of the lake in these areas and allowing milfoil growth to take over the area. Mr. Wassmer suggests that the State of Washington should require King County and the City of Kirkland to pay to dredge these areas from the existing 2-3 foot depths to the historic 15 foot + depth, which he believes will alleviate the milfoil problem and increase flow in Yarrow and Juanita Creeks. Mr. Wassmer also believes that the Army Corps of Engineers lowering of the lake in the late summer creates hazards to navigation as boat go aground every July, August and September. Finally, Mr. Wassmer recommends that the dredging section of the SMP *"needs to be expanded and the dredging restrictions lifted…"*

City Response: *Concerning* ***dredging,*** *the City did identify dredging as an option to consider in the Juanita Beach Master planning process, but in subsequent discussions with various regulatory agency representatives they indicated that it would appear highly unlikely that such a project would be approved. If approved, the required mitigation measures would likely be so extensive as to make dredging financially unfeasible. Another important consideration is that silt continues to enter into Juanita Bay so dredging would not be a permanent solution to the problems in the bay.*

Ecology Conclusion: As summarized above, Mr. Wasmer has provided written comments related to **Dredging**, to alleviate continual silting (sediment accretion) adjacent to Juanita Beach. Ecology concurs with the City's response concluding that a large scale **Dredging** project as suggested by Mr. Wasmer, is not a feasible management solution when considering the multitude of potential impacts and other regulatory constraints beyond the SMP that such a project would need to satisfy. The Guidelines and the City's updated SMP both allow consideration of **Dredging** proposals, but as the City has stated, large scale **Dredging** of Juanita Bay may not be a realistic long-term management solution to this issue.

11. Issue summary of comments received by Ecology from the **Muckleshoot Tribe Fisheries Division (MITFD)** submitted by their representative, Karen Walter, in an email dated March 5, 2010.

Comment Summary – Policy: MITFD notes a potential typographical error, for which they would like to ensure that: "*scientific devises (Sic) located in the shoreline area are not precluded as a result of this policy*"?

Comment Summary - No Net Loss: Referencing previous comments related to shoreline setback/buffers, MITFD reiterates their concern that these standards will not result in a restored shoreline along Lake Washington. MITFD requests a technical basis to demonstrate that the 25-30 foot setback along with a 5-10 vegetated buffer, *"…will allow the protection and full restoration of riparian functions necessary to support salmon including juvenile Chinook salmon in Lake Washington"*? MITFD does not believe the Cumulative Impact Assessment adequately addresses this concern. Further, MITFD cites specific impervious surface estimates of future development compared with restored acreage for which impervious surface area is anticipated to exceed restoration area, prompting the question of how this future condition would affect shoreline ecological functions? MITFD further comment that; *"It is important to distinguish that some improvement of shoreline functions does not necessarily mean restoration of these functions, impaired functions, or no net loss of shoreline functions."*

Comment Summary – Redevelopment: MITFD requests to see how shoreline redevelopment *"involving decks, patios, balconies, outdoor seating and retaining walls"* affect the SMP no net loss standard as *"these structures would eliminate the existence of any existing shoreline functions and would eliminate future restoration opportunities"*.

Comment Summary – Piers: MITFD has commented that both new and reconstructed piers should be required as mitigation for the pier to provide native plants along the entire shoreline length of the parcel.

City Response*: Concerning* ***policy for scientific devices****, the City has already made this change. Concerning the* ***No Net Loss*** *standard, the requirement of the State Guidelines WAC 173 is to meet the No Net Loss of Shoreline Ecological Function (NNL) standard and not full restoration. Shoreline setbacks are not required to be developed or managed in the same way as critical area buffers. According to Ecology's handout dated April 24, 2008, mitigation is required for new development and re-development to maintain the existing conditions as of the date of the city's inventory, and overall shoreline restoration*

is to be implemented through the city's Restoration Plan. The Restoration Plan includes significant shoreline restoration at city shoreline parks over time and implementation of various programs and plans that will result in restoration. The vegetative buffer of 15' for multifamily and 10' for all other uses is based on what the City's biological consultant's recommended as an adequate area to offset projected impacts of new development and re-development in conjunction with new lighting standards and tree retention measures. The vegetation will accomplish some biofiltration, provide a source of organic debris, and buffer human activity. The origin of this number is the requirement of NOAA's and the Corps' vegetation conservation measure related to impacts of docks and bulkheads. Given that most of the shoreline is currently lawn or hard surfaces, a 10 to 15 foot wide vegetation area is a step towards restoration although its primary intent is to compensate for impacts of new and redevelopment.

***City Response**: Concerning **redevelopment**, improvements are currently found along Kirkland's shoreline up to the edge of the OHWM, including required public access walkways, decks, patios, swimming pools, commercial outdoor seating areas and private walkways. These are permitted under the current SMP. Under the SMP update, the public access walkways will no longer be allowed along the edge of the OHWM, patios and decks must be at least 25 feet from the OHWM (with the exception of the 19 single family lots just north of the downtown), swimming pools are no longer permitted in the shoreline setback and private walkways are limited in width. Commercial outdoor seating areas must be no closer than 16 feet and balconies at least 21 feet from the OHWM. All of these improvements must be made of pervious material. In some cases, property owners will set back the primary structures greater than required in order to have decks and/or patios. None the encroachments are permitted in the Natural shoreline environment. Thus, under the new shoreline regulations, these improvements will be further away from the shoreline than existing conditions while still allowing the public an opportunity to enjoy the shoreline. Given the existing conditions along the Kirkland shoreline, the No Net Loss standard will be met with the SMP update. Also, the Shoreline Management Act (SMA) includes policies for both the need to promote public access and to protect the shoreline natural resources (WAC 173-25). The City's proposed SMP update strives to balance and meet both of these goals by allowing limited encroachment into the shoreline setback with these outdoor improvements.*

***City Response**: Concerning **piers,** the replacement of a pier does not require mitigation with vegetation since the pier and its impact already exists. This approach meets the No Net Loss standard. However, the replacement pier will still need to meet the dimensional standards for a new pier and provide grated decking. New piers must provide vegetation as mitigation. Concerning **dredging in the Natural environment,** the activity requires an approved shoreline CUP and is only permitted for certain soft shoreline measures and habitat and natural enhancement measures. The City's position is that some dredging may be necessary for a soft shoreline measure, a measure preferred in the Guidelines over hard shoreline stabilization. Habitat and natural enhancement measures would be consistent with the Tribes' statement that dredging would be acceptable for "fisheries enhancement and restoration projects."*

***City Response**: Concerning the required **shoreline setback**, Ecology indicated that a setback in an urban area should not be less than 25', unless lot depth or other conditions are a constraint. The No Net Loss standard is based on existing conditions and mitigating any new impacts, and not the Best Available Science standard used for critical areas outside of the SMA jurisdiction. The City first determined the median setback of existing structures, the number of non-conformances resulting from several setback options, the anticipated new development and re-development over the 20-year horizon and the range of parcel depths in each environment to determine the appropriate setback for Kirkland. The City then considered several setback scenarios and shoreline setback reduction options that provide additional enhancement of the shoreline, new vegetation, tree retention and lighting standards, and the likelihood of redevelopment (past permit trends and the age of existing homes) to determine if the cumulative*

impact of new development or redevelopment would meet the No Net Loss standard. The one exception to the 25' urban setback standard proposed is for a unique area in Kirkland covering 19 single-family homes south of the Lake Ave West Street End Park. In this small geographic area, the City decided that the average of the existing setback of the homes abutting the home to be redeveloped, but no closer than 15' is appropriate. This area is very constrained with shallow lots and existing homes very close to the OHWM. A 25 ft setback would leave little to no developable area and most if not all existing homes would become significantly non-conforming. Redevelopment would not be an option if a 30' or 25' setback would be required and would result in no new shoreline vegetation, changes in lighting, removal of accessory structures located next to the shoreline edge and other shoreline improvements.

***City Response**: Concerning **lot coverage** (all imperious areas), the City did not change the existing regulations with the SMP update. Since Kirkland has very few vacant lots that would result in new paved area, the Cumulative Impact Analysis did not show a need to lower the lot coverage standards to meet No Net Loss. Pollution-generating impervious surfaces would be addressed through the City's stormwater management regulations. Accordingly, impervious coverage was not a strong indicator for shoreline function. Vegetation condition in the area immediately adjacent to the lake (the shoreline setback) was a stronger indicator, and the SMP contains a number of regulations limiting introduction of impervious surfaces and increasing introduction of native vegetation into this area.*

***City Response**: Concerning **new piers**, vegetation is required in the SMP update along 75% of the shoreline and emergent vegetation waterward of the OHWM is required. The remaining 25% provides for access to the shoreline, including an area to move a boat and other equipment in and out of the water. The City views the 75%/25% ratio a reasonable approach to meeting the goals of the SMA of promoting public access and protecting the shoreline natural resources.*

Ecology Conclusion: As summarized above, the Muckleshoot Tribal Fisheries Division (MTFD) provided written comments related to **No Net Loss, Redevelopment** and **Pier** standards within the SMP. Ecology concurs with the City's response concluding that the **No Net Loss** standard (WAC 173-26) does not require full restoration, but does require that jurisdictions provide adequate protection standards to avoid additional impairments from anticipated future development/redevelopment within shoreline management areas. Thus, the City has increased protections related to shoreline setbacks, **Pier** standards, etc. to ensure future shoreline development does not result in a net impact or further degraded shoreline ecological functions. Further, after adoption of the updated SMP, the City will need to account for future shoreline development and restoration activity to inform a scheduled 7-year review of the SMP intended to evaluate any trends (positive or negative) to baseline ecological functions.

References:

The Watershed Company. (2006). *Final Shoreline Analysis Report - Including Shoreline Inventory and Characterization for the city of Kirkland's Lake Washington Shoreline.* Shoreline Master Program Inventory & Characterization Report, Prepared for the City of Kirkland, Kirkland, WA.

The Watershed Company. (2009). *Shoreline Cumulative Impact Analysis for City of Kirkland Shoreline Master Program.* Shoreline Master Program Cumulative Impact Analysis, Prepared for the City of Kirkland, Kirkland, WA.

The Watershed Company. (2009). *Shoreline Restoration Plan Component of the Shoreline Master Program for the City of Kirkland.* Shoreline Master Program Restoration Plan, Prepared for the City of Kirkland, Kirkland, WA.

SHORELINE MASTER PROGRAM SUBMITTAL CHECKLIST – JUNE 2010

This checklist is for use by local governments to satisfy the requirements of WAC 173-26-201(3)(a), relating to submittal of Shoreline Master Programs (SMPs) for review by the Department of Ecology (Ecology) under Chapter 173-26 WAC. The checklist does not create new or additional requirements beyond the provisions of that chapter.

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INSTRUCTIONS

This checklist is intended to help in preparation and review of local shoreline master programs (SMPs). Local governments should include a checklist with all SMPs submitted for review by Ecology.

Information provided at the top of the checklist identifies what local jurisdiction and specific amendment (e.g. comprehensive update, environment re-designation or other topic) the checklist is submitted for, and who prepared it. Indicate in the location column where in the SMP (or other documents) the requirement is satisfied. If adopting other regulations by reference, identify what specific adopted version of a local ordinance is being used, and attach a copy of the relevant ordinance *(see example 1, below)*.

Draft submittals: For draft submittals, local governments may use the Comments column to note any questions or concerns about proposed language. Ecology may then use the Comment field to respond *(see example 2, below)*.

Final submittals: When submitting locally-approved SMPs for Ecology review, leave the comment field blank. Ecology will use the comment field to develop final comments on the SMP.

Ecology has attempted to make this checklist an accurate and concise summary of rule requirements, however the agency must rely solely on adopted state rules and law in approving or denying a master program. This document does not create new or additional requirements beyond the provisions of state laws and rules [WAC 173-26-201(3)(a)].

EXAMPLE 1: reference other documents if necessary

STATE RULE (WAC) REQUIREMENTS	*LOCATION*	*COMMENTS*
Inventory of existing data and materials. WAC 173-26-201(3)(c)(i) through (x).	Appendix A: Shoreline Inventory and Analysis, Section 2 (see Attachment 2)	
Wetland buffer requirements are adequate to ensure wetland functions are protected and maintained in the long-term, taking into account ecological functions of the wetland, characteristics of the buffer, and potential impacts associated with adjacent land uses. WAC 173-26-221(2)(c)(i)(B)	Section 83.500 (see Attachment 6)	

EXAMPLE 2: for draft submittals, use Comments column

STATE RULE (WAC) REQUIREMENTS	*LOCATION*	*COMMENTS*
High-intensity environment designation criteria: Areas within incorporated municipalities, "UGAs," and "rural areas of more intense development" *(see RCW 36.70A.070)* that currently support or are planned for high-intensity water-dependent uses. WAC 173-26-211(5)(d)(iii)	**Examples from Ecology:** Urban Industrial, p. 15 Urban Mixed, p. 18 Also see Appendix B, Use Analysis, Chapter 3, p. 12. **Local government:** SMP includes two urban designations that meet high-intensity criteria – Urban Industrial, and Urban Mixed. These alternative designations allow more specificity for public access, view and amenity requirements for the mixed use areas.	***Ecology:*** *Proposed alternative designations are consistent with the purposes and policies of the high-intensity criteria, as per WAC 173-26-211(4)(c).* ***Ecology comment format:*** ***Compliant [or] Non-Compliant:*** *Based on SMP -Guidelines.* ***Requirement/Suggestion:*** *(Optional) Additional comment distinguishing between a "Required" change that the City can expect Ecology to require as part of our final review, or a "suggested" change to improve readability or for further consideration by the City.*

SHORELINE MASTER PROGRAM SUBMITTAL CHECKLIST

Acronyms and abbreviations	For more information
comp plan: Comprehensive Plan CUP: Conditional Use Permit SMA: Shoreline Management Act, RCW 90.58 SMP: Shoreline Master Program SSWS: Shorelines of Statewide Significance WAC: Washington Administrative Code	www.ecy.wa.gov/programs/sea/SMA/index.html Ecology SMA Policy Lead: Peter Skowlund: (360) 407-6522

Prepared for: City of Kirkland (Jurisdiction Name) Name of Amendment: Comprehensive SMP Update Prepared by: Stacy Clauson, Contract Planner and Teresa Swan, City of Kirkland (Name) ***Ecology comments: Joe Burcar July & August 2009, Final June 2010.*** Date: December 17, 2009/ /		

Prepared for: City of Kirkland (Jurisdiction Name) Name of Amendment: Comprehensive SMP Update Prepared by: Stacy Clauson, Contract Planner and Teresa Swan, City of Kirkland (Name) ***Ecology comments: Joe Burcar July & August 2009, Final June 2010.*** Date: December 17, 2009/ /		
DOCUMENTATION OF SMP DEVELOPMENT PROCESS		
Public involvement, communication, and coordination		
Documentation of **public involvement** throughout SMP development process. WAC 173-26-201(3)(b)(i) and WAC 173-26-090 and 100. For SSWS, see WAC 173-26-251(3)(a)	Attachment 11 contains a log that tracked public participation efforts by the City, including public meetings with the Planning Commmission, Hougthon Community Council and City Council, Open Houses, and focus group meetings, as well as different approaches used to provide notice of the planning process, including an e-mail list serv, web page, public notice boards, direct mailings, cable channel notices, and newspaper articles and briefs. The City has consulted with representatives from state and federal agencies on a broad range of topics, including piers and shoreline stabilization. In addition, the City has consulted existing federal biological evaluations on these issues (RGP-1, 3, and the Programmatic Biological Consultation for Shoreline Stabilization). The City has also incorporated recommendations from the Chinook Salmon Conservation Plan developed by the WRIA 8 Forum as a source of potential site specific projects and land use and public outreach recommendations.	**City Comment**: The City began the SMP update in August 2006. The City held 23 public meetings and 2 open houses along with a boat tour, a shoreline tour, workshops with property owners and meetings with individuals and contractors. In July 2009, an open house and 2 public hearings were held. A SMP web site was maintained along with a list serve and public notice boards on city parks. The public hearings were held open for comment until the end of August 2009. Public comments were received and considered through City Council review. See summary of public involvement in Attachment 15 Attachment 11 contains a public involvement log of all meetings, public forums and hearings held, and forms of communications. Attachment 12 contains all public comments. Attachment 13 contains names and addresses of all participants (attended public meetings, spoke at meetings or hearings and/or submitted public comments). ***Ecology: Compliant:*** • *At this stage in the SMP update (prior to local adoption), the City have complied and/or exceeded the basic requirements of the Guidelines related to Public Involvement*

Documentation of **communication with state agencies and affected Indian tribes** throughout SMP development. WAC 173-26-201(3)(b)(ii) and (iii), WAC 173-26-100(3). For saltwater shorelines, see WAC 173-26-221(2)(c)(iii)(B). For SSWS, see WAC 173-26-251(3)(a).	See Public Involvement Log (Attachments 11), public comments (Attachment 12) and Letter to Tribe (Attachment 14)	**City Comment:**: The Muckleshoot Tribe and State Agencies have been sent notice of the planning process and invited to be a member of the City's e-mail list serve, which provides updates on public meetings and materials available for review. State agencies and the Muckleshoot Tribe have also been given opportunity to review the draft SMP in Summer, 2009. ***Ecology: Compliant:*** ***At this stage in the SMP update (prior to local adoption), the City have complied and/or exceeded the basic requirements of the Guidelines related to Public Involvement*** ***Suggestion:*** ***The City should submit documentation of past communication and are encouraged to continue to consult with the Tribe throughout the local adoption process.*** **City Response**: On July 15, 2009, the City sent a Notice of Availability of the draft SMP update to state agencies (Army Corps of Engineers, WDFW, CTED, Muckleshoot Tribe and many other agencies) with a web link to the draft SMP update. In addition, notice was sent to the jurisdictions of Redmond, Bellevue, Kenmore and King County. Staff consulted with the following agencies on numerous occasions over the course of the SMP update: • Joe Burcar, Peter Skowland, Geoff Talent and Richard Robohm at Ecology on a wide range of issues • Kurt Fresh at NOAA (scientific studies) • Roger Tabor at USFWS (scientific studies) • Alisa Bieber and Stewart Reinbold at WDFW (overwater condominiums, milfoil control methods and pier regulations) • Tom Sibley at NOAA (pier regulations, RGP-3 and shoreline stabilization), • Marcy Reed at Corps (shoreline stabilization and overwater condominiums) • Tom Sibley at NOAA (pier

		regulations, RGP-3 and shoreline stabilization) Comments were received from WDFW on July 23, 2009 (email) and from the Muckleshoot Tribe on August 17, 2009 (letter). The City has responded to these agencies on December 17, 2009 (see Attachment 14).
Demonstration that **critical areas regulations** for shorelines are based on the SMA and the guidelines, and are at least equal to the current level of protection provided by the currently adopted critical areas ordinance. WAC 173-26-221(2)(b)(ii),(iii) and (c).	Section 83.490 through 83.530 address critical area regulations (see Attachment 6).	**City Comments**: The draft regulations require use of the Washington State Wetland Rating System for Western Washington. The wetland requirements incorporate the buffer requirements that King County has adopted to regulate wetlands within their Urban Growth Area (UGA). The standards for compensatory mitigation utilize the mitigation ratios specified in the Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10 guidance as contained in Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance. Attachment 10 contains a map that shows the extent of wetland buffers based upon current wetland regulations as compared to that with the new buffers. This map demonstrates that the proposed buffers provide equivalent or more protection for wetlands within shoreline jurisdiction. The standards for geologically hazardous areas and flood hazard reduction have been included in Attachment 6. ***Ecology: (Generally) Compliant:*** *Reference previous comments to the City specific to wetlands. For Streams, Geologic Hazardous Areas and Flood areas see specific Ecology discussion under the Critical Areas section below.* ***Question/Discussion:*** • *All of the Critical Areas sections provide "Reasonable Use Exemptions", which is not consistent with the SMP Guidelines. Generally these proposals are reviewed under a*

		shoreline variance. **City Response***:* In Section 83.500 and 83.510 for critical area regulations, "Reasonable Use Exemptions" have been omitted. These proposals are now reviewed under a shoreline variance.
Documentation of process to assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private **property rights**. See *"State of Washington, Attorney General's Recommended Process for Evaluation of Proposed Regulatory or Administrative Actions to Avoid Unconstitutional Takings of Private Property."* WAC 173-26-186(5).	The regulations contain several provisions that have been intended to grant relief from specific SMP provisions, including (see Attachment 6): - The Variance provisions contained within Zoning Code Chapter 141. - The Nonconformance Standards contained within Section 83.550. - The Wetland Modification and Buffer Modification provisions contained in Section 83.500. - The Stream Buffer Modification provisions contained within Section 83.510 .	***Ecology: Compliant: (See City's response below)*** *As referenced above, the Critical Areas sections of the SMP all provide a "Reasonable Use Exemption" that is not consistent with the Guidelines.* *In reference to wetlands, Ecology has discussed this issue with the City and understands the application of the "Reasonable Use Exemption" to be limited to a small number of existing lots located within the Natural shoreline designation. Section 83.500.6 (Permit Process) provides administrative flexibility to vary buffer widths up to 25% before requiring a shoreline Variance. However, all Reasonable Use determinations are exempted from a variance, which is not consistent with the Guidelines. Section 83.500.10 suggests that Reasonable Use Exemptions are limited to "detached dwelling units in the Natural shoreline environment". It is not clear, if the Reasonable Use Exemption is limited to the Natural environment or available anywhere within the City's shoreline jurisdiction?* ***Discussion/Suggestion:*** *The City have a few options to consider in relation to the inconsistency between the Guideline requirement for a variance and preserving the Reasonable Use Exemption for constrained properties:* ***Option 1:*** *Require a shoreline variance for any departure from SMP dimensional standards, but also include the City's Reasonable Use standards/criteria as additional review criteria under which the variance is reviewed.* ***Option 2:*** *Provide more specific geographic distinction of potential areas where the Reasonable Use Exemption criteria would be considered. Therefore, limiting the scope of allowed deviation from SMP standards to a defined number of lots for which build-out potential then needs to be considered within*

		the Cumulative Impact Assessment and shown to maintain No Net Loss of Ecological Function. Note: under this option the City would either need to demonstrate that application of Reasonable Use consideration would be limited to specific lots based on SMP regulatory thresholds or identify geographic limits within the SMP for reasonable use criteria consideration. In other words, the City would essentially need to pre-authorize changes to critical area dimensional standards within a defined area (or defined lot configuration), as opposed to 'exempting' or not applying critical area or SMP standards to constrained lots. **City Response:** "Reasonable Use Exemptions" have been omitted In Sections 83.500.12 and 83.510.8 for the critical area regulations. These proposals are now reviewed under a shoreline variance.
Final submittal includes: evidence of local government approval (or a locally approved "statement of intent to adopt"); new and/or amendatory text, environment designation maps (with boundary descriptions and justification for changes based on existing development patterns, biophysical capabilities and limitations, and the goals and aspirations of the local citizenry); a summary of the proposal together with staff reports and supporting materials; evidence of SEPA compliance; copies of all comments received with names and addresses. WAC 173-26-110 Submittal must include clear identification and transmittal of all provisions that make up the SMP. *This checklist, if complete, meets this requirement.* WAC 173-26-210(3)(a) and (h).	For purposes of DOE review of the City's draft SMP, the SMP Package includes the following: ☐ Checklist and Attachments: ☐ Adopting Resolution of Intent to Adopt (Attachment 1) ☐ Inventory (Attachment 2) ☐ Use Analysis (Attachment 3) ☐ Goals and Policies (Attachment 4) ☐ Shoreline Environment Designation Map (Attachment 5) ☐ Zoning Code, Chapter 83 and Chapter 141, Regulations (Attachment 6) ☐ Restoration Plan (Attachment 7) ☐ Cumulative Impact Analysis (Attachment 8) ☐ Shoreline Environment Designation	***Ecology:*** *TBD after local adoption and formal submittal to Ecology.* ***City Response:*** *all documents have been provided with final submittal.*

	Report (Attachment 9) ☐ Wetland Buffer Comparison Map (Attachment 10) ☐ Public Involvement Documentation Log (see Attachment 11) ☐ Copies of all public comments submitted with a list of names and addresses in spreadsheet (see Attachments 12 and 13) ☐ Responses to Muckleshoot Tribe and WDFW comment letters (see Attachment 14) ☐ Summary of amendments, scope and intent of update and record of meetings (Attachment 15)	
Shoreline Inventory		
Inventory of existing data and materials. WAC 173-26-201(3)(c)(i) through (x). For jurisdictions with critical saltwater habitats, see WAC 173-26-221(2)(c)(iii)(A)&(B).	Final Shoreline Analysis Report Including Shoreline Inventory and Charaterizatio for the City of Kirkland's Lake Washington Shoreline, dated 1 December 2006 (see Attachment 2)	***Ecology: Compliant:*** *See previous comments from Ecology to the City dated October 4, 2006.*
Shoreline Analysis		
Characterization of shoreline ecosystems and their associated ecological functions that: identifies ecosystem-wide processes and ecological functions; assesses ecosystem-wide processes to determine their relationship to ecological functions; identifies specific measures necessary to protect and/or restore the ecological functions and ecosystem-wide processes. WAC 173-26-201(3)(d)(i)(A). Demonstration of how characterization was used to prepare master program policies and regulations that achieve no net loss of ecological functions necessary to support shoreline resources and to plan for restoration of impaired functions. WAC 173-26-201(3)(d)(i)(E). For vegetation, see WAC 173-26-221(5). For jurisdictions with critical saltwater habitats, see WAC 173-26-221(2)(c)(iii)(B). Description of data gaps, assumptions made and risks to ecological functions associated with SMP provisions. WAC 173-26-201(2)(a) Characterization includes maps of inventory information at appropriate scale. WAC 173-26-201(3)(c)	Final Shoreline Analysis Report Including Shoreline Inventory and Characterization for the city's Lake Washington Shoreline, dated 1 December 2006 (see Attachment 2) Section 5.0 of Final Shoreline Analysis Report contains an analysis of ecological functions and ecosystem-wide processes. Section 4.0 of the Final Shoreline Analysis Report identifies specific measures to protect and/or restore ecological functions and ecosystem-wide processes. In addition, Section 5.2 specifically addresses the effects of shoreline modifications on aquatic organisms and their habitats. This information was used as a basis for developing shoreline regulations for	**City Comment:** The characterization was used to document baseline conditions and set the stage for protecting and restoring ecological functions. Information from the characterization was used to determine appropriate shoreline environment designations (see Attachment 9). ***Ecology: Compliant:*** *See previous comments from Ecology to the City dated October 4, 2006.*

	shoreline modificaitons. The ecological functions and ecosystem-wide processes provided by vegetation are addressed throughout the Final Shoreline Analysis Report, including in Table 18. Attachment 9 contains a report demonstrating how the characterization was used to establish the shoreline environment designations. Inventory Maps are contained in Appendix E of the Final Shoreline Analysis Report.	
Use analysis estimating future demand for shoreline space and potential use conflicts based on characterization of current shoreline use patterns and projected trends. Evidence that SMP ensures adequate shoreline space for projected shoreline preferred uses. Public access needs and opportunities within the jurisdiction are identified. Projections of regional economic need guide the designation of "high-intensity" shoreline. WAC 173-26-201(3)(d)(ii) & (v); WAC 173-26-211(5)(d)(ii)(B) For SMPs that allow **mining**, demonstration that sitting of mines is consistent with requirements of WAC 173-26-241(3)(h)(i). For **SSWS**: evidence that SMP preserves adequate shorelands and submerged lands to accommodate current and projected demand for **economic resources of statewide importance** (e.g., commercial shellfish beds and navigable harbors) based on statewide or regional analyses, requirements for essential public facilities, and comment from related industry associations, affected Indian tribes, and state agencies. Evidence that **public access and recreation** requirements are based on demand projections that take into account activities of state agencies and interests of the citizens to visit public shorelines with special scenic qualities or cultural or recreational opportunities. WAC 173-26-251(3)(c)(ii) & (iii) **Optimum implementation** directives incorporated into comp plan and development regulations. WAC 173-26-251(2) & (3)(e) For **GMA** jurisdictions, SMP recreational provisions are consistent with growth projections and level-of-service standards contained in comp plan. WAC 173-26-241(3)(i)	Use Analysis Component of the Shoreline Master Program for the City of Kirkland, included as Attachment 3. Section 83.170 Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6).	***Compliant -*** *After a final review(June 2010), the analysis appears consistent with Guideline requirements.* **City Comment**: The Use Analysis appears to be consistent with the Guidelines.
Restoration plan that: identifies degraded areas, impaired ecological functions, and potential restoration sites; Establishes restoration goals and priorities, including SMP goals and policies that provide for restoration of impaired ecological functions; Identifies existing restoration projects and programs; Identifies additional projects and programs needed to achieve local restoration goals, and implementation strategies including identifying prospective funding sources sets timelines and benchmarks for implementing restoration	Shoreline Restoration Plan Component of the Shoreline Master Program for the City of Kirkland, included as Attachment .7	***Compliant -*** *After a final review(June 2010), the Restoration Plan appears generally consistent with Guideline requirements..* **City Comment**: The Restoration Plan appears to be consistent with the Guidelines.

projects and programs; provides mechanisms or strategies to ensure that restoration projects and programs will be implemented according to plans and to appropriately review the effectiveness of the projects and programs in meeting the overall restoration goals. WAC 173-26-186(8)(c); 201(2)(c)&(f) For critical freshwater habitats: incentives to restore water connections impeded by previous development. WAC 173-26-221(2)(c)(iv)(C)(III). For **SSWS**, identification of where natural resources of statewide importance are being diminished over time, and master programs provisions that contribute to the restoration of those resources. WAC 173-26-251(3)(b)		
Evidence that each **environment designation** is consistent with guidelines criteria *[WAC 173-26-211(5)],* as well as existing use pattern, the biological and physical character of the shoreline and the goals and aspirations of the community. WAC 173-26-211(2)(a). WAC 173-26-110(3) Lands designated as "forest lands of long-term significance" under RCW 36.70A.170 are designated either natural or rural conservancy shoreline environment designations. WAC 173-26-241(3)(e). For **SSWS**, demonstration that environment designation policies, boundaries, and use provisions implement SMA preferred use policies of RCW 90.58.020(1) through (7). WAC 173-26-251(3)(c)	Attachment 5 contains the Shoreline Environment Designation maps illustrating the six (6) shoreline environments Attachment 9 describes how the information gathered from the shoreline inventory was analyzed for consistency with the guidelines criteria, as well as existing use pattern and biological and physical character of the community. Section 83.30 of Attachment 6.	**City Comment**: Kirkland does not contain lands designated as "forest lands of long-term significance". The environment designations respond to the SMA preferred use policies by 1) preserving 58% of the shoreline area in the Natural environment, 2) preserving 14% of the shoreline frontage for public access in the Urban Conservancy shoreline environment, 3) permitting water-dependent recreational uses and water-related recreational uses in appropriate shoreline environments, depending on the intensity and potential impacts of the use, as well as the charactersitics of the shoreline environment. ***Ecology:*** *After a preliminary review, the Environment Designations appear generally appropriate and consistent with the Guidelines. Ecology needs to follow-up with a more detailed review of the document after discussion with the City on the geographic scope of allowed Reasonable Use Exemptions (see discussion under Critical Areas) and prior to the City Councils involvement with the SMP update.* **City Response:** See comment above under Critical Areas. The Reasonable Use Exemption provisions have been replaced with a shoreline variance review process. With removal of the Reasonable Use Exemption, it appears that the environmental designations are consistent with the Guidelines.
Assessment of how proposed policies and regulations cause, avoid, minimize and mitigate **cumulative impacts** to achieve no net loss policy. Include policies and regulations that address platting or subdividing of property, laying of utilities, and mapping of streets that establish a pattern for future development.	Shoreline Cumulative Impact Analysis for the City of Kirkland Shoreline Master Program (Attachment 8).	***Compliant -*** *After a final review(June 2010), the Cumulative Impact Analysis appears consistent with Guideline requirements.*

Evaluation addresses: (i) *current circumstances* affecting the shorelines and relevant natural processes; (ii) reasonably *foreseeable future development* and use of the shoreline (including impacts from unregulated activities, exempt development, and other incremental impacts); and (iii) *beneficial effects* of any established regulatory programs under other local, state, and federal laws. WAC 173-26-201(3)(d)(iii) and WAC 173-26-186(8)(d) For jurisdictions with critical saltwater habitats, identification of methods for monitoring conditions and adapting management practices to new information. WAC 173-26-221(2)(c)(iii)(B). For **SSWS**, evidence that standards ensuring protection of ecological resources of statewide importance consider cumulative impacts of permitted development. WAC 173-26-251(3)(d)(i)		**City Comment**: With removal of the Reasonable Use Exemption and other changes made to the SMP update as noted in this checklist, the results of the Cumulative Impact Analysis appear to be consistent with the Guidelines.
SMP CONTENTS		
Any **goals** adopted as part of the SMP are consistent with the SMA. *(Note: Goal statements are not required.)*	Goals are contained in a new Shoreline Chapter that will be added to the City of Kirkland's Comprehensive Plan (see Attachment 4).	***Ecology: Compliant:*** *Ecology has been monitoring the changes to shoreline management goals as they have evolved through the local update process. The goals identified in the draft SMP appear to generally reflect the framework of the SMA and appear based on public input received at SMP meetings/workshops.*
Policies (A) are consistent with guidelines and policies of the SMA; (B) address elements of RCW 90.58.100; and (C) include policies for environment designations, accompanied by a map or physical description of designation boundaries in sufficient detail to compare with comprehensive plan land use designations. (D) are consistent with constitutional and other legal limitations on regulation of private property. WAC 173-26-191(2)(a)(i) SMP implements **preferred use** policies of the SMA. WAC 173-26-201(2)(d)		***Ecology: Compliant:*** *The SMP Policies referenced by the City appear consistent with Guideline requirements.* ***Suggestion:*** • *Because the policies will be separated from the Regulations listed in Chapter 83 (different section of the SMP), it is suggested that the City provide a cross reference to ensure 'policy intent' is not lost through implementation of the SMP.* **City Response:** Both the City's Shoreline Chapter in the Comprehensive Plan containing the policies (see Introduction section) and Chapter 83 containing the regulations (see Section 83.40) provide a cross reference.

Regulations: (A) are sufficient in scope and detail to ensure the implementation of SMA, SMP guidelines, and SMP policies; (B) include environment designation regulations; (C) include general regulations, use regulations that address issues of concern in regard to specific uses, and shoreline modification regulations; and, (D) are consistent with constitutional and other legal limitations on the regulation of private property. WAC 173-26-191(2)(a)(ii)	Regulations are contained in the following provisions: Chapter 83 (see Attachment 6), which includes: Authority and Purpose Definitions Shoreline Environment Designations and Shorelines of Statewide Significance Uses and Activities in Shoreline Environment Use Specific Regulations Shoreline Modification Regulations General Regulations Administrative Provisions (Chpt 141 in Attachment 6)	***Ecology: Compliant: See City Response Below (June 2010)*** *Even though the use matrix provided in section 83.170 lists Agriculture, Aquaculture, Forest Practices and Mining as prohibited, all uses that are listed in WAC 173-26-241(**Agriculture, Aquaculture, Boating Facilities, Commercial, Forest Practice, Industry, In-Stream Structure, Recreation, Residential, Transportation, Utilities**), should be defined and either prohibited or listed as conditional or permitted uses with appropriate development standards identified to satisfy the no net loss policy goal of the SMP.* ***Suggestion:*** • *The City should consider either, provide an additional section to section 83 listing all the prohibited uses including definitions for each use, or insert each individual SMP use (based on WAC 173-26-241), for which each use should be defined (consistent w/Guidelines) and either listed as prohibited, conditional or permitted with appropriate development standards.* **City Response:** Definitions have been added to Section 83.80 for the following that were not previously defined: Boating facilities, Commercial, Forest Practice, Industrial Uses, In-Stream Structure, Recreational Use, and Residential Use. These uses are addressed in the use table and development standards.

ENVIRONMENT DESIGNATIONS		
Each environment designation includes: Purpose statements, classification criteria, management policies, and regulations (types of shoreline uses permitted, conditionally permitted, and prohibited; building or structure height and bulk limits, setbacks, maximum density or minimum frontage requirements, and site development standards). WAC 173-26-211(2)(4).	Management Policies are contained in Shoreline Goals and Policies (see Attachment 4). Purpose statement and designation criteria contained in Section 83.100-150 of Attachment 6. Section 83.170 contained the Shoreline Environments, Permitted Uses and Activities Chart outlining the types of shoreline uses permitted, conditionally permitted and prohibited Section 83.190 addresses shoreline development standards, including building height, lot coverage, shoreline setback, and density. Other miscelleneous provisions are contained in the General Regulations (see Sections 83.360-550)	***Ecology: Compliant:*** *The SMP Environment Designations appear generally consistent with Guideline requirements. See specific comments below for each specific Environment Designation.*
An up-to-date **map** accurately depicting environment designation boundaries on a map. If necessary, include common boundary descriptions. WAC 173-26-211(2)(b); WAC 173-26-110(3);	See Attachment 5.	**City Comments**: Provisions addressing interpretation of map are contained in Section 83.90 (see Attachment 6).
Statement that **undesignated shorelines** are automatically assigned a conservancy environment designation. WAC 173-26-211(2)(e).	Section 83.90 of Attachment 6 addresses undesginated properties	***Ecology: Compliant:*** *The referenced section appears consistent with this Guideline requirement.*
Natural environment. WAC 173-26-211(5)(a)		
Designation criteria: Shorelines that are ecologically intact and performing functions that could be damaged by human activity, of particular scientific or educational interest, or unable to support human development without posing a safety threat. WAC 173-26-211(5)(a)(iii)	Policy SMP-2.1 in Attachment 4 addresses this designation criteria. Section 83.100 of Attachment 6. Attachment 9 contains an analysis of how this designation criterion was implemented when assigning proposed shoreline designations.	***Ecology: Compliant:*** *The referenced attachment provides sufficient information illustrating appropriate designation of Natural shoreline areas.*

Prohibition on new: uses that would substantially degrade ecological functions or natural character of shoreline. WAC 173-26-211(5)(a)(ii)(A) Commercial uses; industrial uses; nonwater oriented recreation; roads, utility corridors, and parking areas. WAC 173-26-211(5)(a)(ii)(B) development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions. WAC 173-26-211(5)(a)(ii)(G) subdivision of property in a configuration that will require significant vegetation removal or shoreline modification that adversely impacts ecological functions. WAC 173-26-211(5)(a)(ii)(G)	Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6). Most of the Natural shoreline environment consists of streams and wetlands that have additional protection under Section 83.500 and SMP 83.510 (see Attachment 6). Section 83.490.3 addresses removal of significant trees within critical areas, including wetlands and streams (sere Attachment 6).	***Ecology: Compliant:*** ***Note:*** *See comments above (Regulations) pertaining to section 83.170 and prohibited uses (i.e. all SMA uses listed in WAC 173-26-241 need to be defined then prohibit within the SMP).* **City Response:** See earlier comments. All uses are now defined and listed in the SMP.
For **single family residential development**: limits on density and intensity to protect ecological functions, and requirement for CUP. WAC 173-26-211(5)(a)(ii)(C)	Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart identifies a Conditional Use process for single family development in the Natural Environment. Further, footnote 20 indicates that witihin the Natural shoreline environment, land divisions may not create any new lot that would be wholly contained within shoreland area in this shoreline environment.	***Ecology: Compliant:*** ***Note:*** *See comments under "Critical Areas" in reference to Reasonable Use Exemptions. Independent of the Reasonable Use issue to discuss with the City, the referenced SMP sections appear consistent with this Guideline requirement.* **City Response**: See City response in Critical Area section. Reasonable Use Exemption has been omitted and replaced with shoreline variance.
For **commercial forestry**: requirement for CUP, requirement to follow conditions of the State Forest Practices Act. WAC 173-26-211(5)(a)(ii)(D)	Forest Practices not permitted (see Section 83.170).	***Ecology: Compliant:*** ***Note:*** *See comments under "Forest Practices" below (i.e. define use then prohibit the use).* **City Response**: Forest Practices is now defined and listed in the SMP.
For **agriculture**: low intensity use allowed if subject to appropriate limits or conditions to assure that the use does not expand or practices don't conflict with purpose of the designation. WAC 173-26-211(5)(a)(ii)(E)	Agriculture not permitted (see Section 83.170).	***Ecology: Compliant:*** ***Note:*** *See comments under "Agriculture" in sections below.* **City Response**: Agriculture is now defined and listed in the SMP.
Low intensity public uses such as scientific, historical, cultural, educational research uses, and water-oriented recreational access allowed if ecological impacts are avoided. WAC 173-26-211(5)(a)(ii)(F)	Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart Most of the Natural environment consists of streams and wetlands, which have additional protections under Section 83.500.12 and SMP 83.510.	**City comment:** See use listings for boat launch (non-motorized), public access facility, etc. ***Ecology: Compliant:*** *The Guidelines allow for water-oriented recreational access. Therefore, launching of non-motorized boats seems appropriate.*

Rural conservancy. WAC 173-26-211(5)(b)		
Designation criteria: areas outside municipalities or UGAs with: (A) low-intensity, resource-based uses, (B) low-intensity residential uses, (C) environmental limitations such as steep banks or floodplains, (D) high recreational or cultural value, or (E) low-intensity water-dependent uses. WAC 173-26-211(5)(b)(iii)	Not applicable.	
Restrictions on **use and development that would degrade or permanently deplete resources**. Water-dependent and water-enjoyment recreation facilities are preferred uses. Low intensity, water-oriented commercial and industrial uses limited to areas where those uses have located in the past or at sites that possess conditions and services to support the development. WAC 173-26-211(5)(b)(ii)(A) and (B) For SMPs that allow mining, see WAC 173-26-241(3)(h).	Not applicable.	
Prohibition on **new structural shoreline stabilization and flood control works** except where there is documented need to protect an existing primary structure (provided mitigation is applied) or to protect ecological functions. WAC 173-26-211(5)(b)(ii)(C).	Not applicable.	
Development standards for **residential use** that preserve existing character of the shoreline. Density, lot coverage, vegetation conservation and other provisions that ensure no net loss of shoreline ecological functions. Density or lot coverage limited to a maximum of ten percent total impervious surface area within the lot or parcel, or alternative standard that maintains the existing hydrologic character of the shoreline. (May include provisions allowing greater lot coverage for lots legally created prior to the adoption of a master program prepared under these guidelines, if lot coverage is minimized and vegetation is conserved.) WAC 173-26-211(5)(b)(ii)(D).	Not applicable.	
Aquatic. WAC 173-26-211(5)(c)		
Designation criteria: Areas waterward of the ordinary high-water mark (OHWM). WAC 173-26-211(5)(c)(iii)	Policy SMP - 2.6 (see Attachment 4). Section 83.150 (see Attachment 6). Attachment 9 contains an analysis of how this designation criteria was implemented when assigning proposed shoreline designations.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*

New **over-water structures:** allowed only for water-dependent uses, public access, or ecological restoration. WAC 173-26-211(5)(c)(ii)(A) limited to the minimum necessary to support the structure's intended use. WAC 173-26-211(5)(c)(ii)(B)	See the following sections in Attachment 6: Section 83.170. Section 83.200.1 Sections 83.270, 280, 290 contain dimensional standards. Other miscellaneous standards, such as Section 83.200.1, 83.220(4), etc.	**City Comment:** Generally, new or expanded over water structures are prohibited, with the exception of water-dependent structures, such as piers and docks, public access boardwalks, etc. ***Ecology: Compliant:*** *The SMP sections referenced by the City appear consistent with these Guideline standards related to new overwater structures. See specific comments on regulations under "Piers/Docks" and "Boating Facilities".*
Multiple use of over-water facilities encouraged. WAC 173-26-211(5)(c)(ii)(C)	Policy SMP - 3.8 (see Attachment 4) Section 83.270.1.b (see Attachment 6) See provisions addressing tour boat facilities, water taxi, etc. in Section 83.170 of Attachment 6 thta require these uses to be co-located at marinas.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Location and design of all developments and uses required to: minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration. WAC 173-26-211(5)(c)(ii)(D) prevent water quality degradation and alteration of natural hydrographic conditions. WAC 173-26-211(5)(c)(ii)(F)	Policy SMP - 2.6 (see Attachment 4) See the following sections in Attachment 6: Sections 83.260 through 350. Section 83.430 addreses measures to be taken to minimize impacts from in-water construction activity. Section 83.410.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Uses that adversely impact ecological functions of critical saltwater and freshwater habitats limited (except where necessary for other SMA objectives, and then only when their impacts are mitigated). WAC 173-26-211(5)(c)(ii)(E)	See the following sections in Attachment 6: Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart Section 83.360	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*

High-intensity. WAC 173-26-211(5)(d)		
Designation criteria: Areas within incorporated municipalities, "UGAs," and "rural areas of more intense development" *(see RCW 36.70A.070)* that currently support or are planned for high-intensity water-dependent uses. WAC 173-26-211(5)(d)(iii)	Policy SMP - 2.5 of Attachment 4 Section 83.140 of Attachment 6. Attachment 12 contains an analysis of how this designation criteria was implemented when assigning proposed shoreline designations.	**City Comment**: Termed "Urban Mixed" in SMP documents. ***Ecology: Compliant:*** *The referenced sections appear consistent with these Guideline standards.*
Priority given first to water-dependent uses, then to water-related and water-enjoyment uses. New non-water oriented uses prohibited except as part of mixed use developments, or where they do not conflict with or limit opportunities for water oriented uses or where there is no direct access to the shoreline. WAC 173-26-211(5)(d)(ii)(A)	Policy SMP - 2.5 of Attachment 4. Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6)	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Full **use of existing urban areas required** before expansion of intensive development allowed. WAC 173-26-211(5)(d)(ii)(B)	Attachment 5 contains the Shoreline Environment Designation maps illustrating proposed shoreline environments	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
New development does not cause net loss of shoreline ecological functions. Environmental cleanup and restoration of the shoreline to comply with relevant state and federal laws assured. WAC 173-26-211(5)(d)(ii)(C)	See the following sections in Attachment 6: Section 83.360. Section 83.370. Section 83.480. Sections 83.210.1, 3, 4 and 83.490 include provisions addressing proper storage and cleanup of hazardous materials. Policy SMP - 15.3 (see Attachment 4)	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Visual and physical public access required where feasible. Sign control regulations, appropriate development sitting, screening and architectural standards, and maintenance of natural vegetative buffers to achieve aesthetic objectives. WAC 173-26-211(5)(d)(ii)(D) and (E)	See the following sections in Attachment 6: Section 83.30, 400, 410, 420, 440, 450, and 460.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*

Urban conservancy. WAC 173-26-211(5)(e)		
Designation criteria: Areas within incorporated municipalities, UGAs, and rural areas of more intense development that are not suitable for water-dependent uses and that are either suitable for water-related or water-enjoyment uses, are flood plains, have potential for ecological restoration, retain ecological functions, or have potential for development that incorporates ecological restoration. WAC 173-26-211(5)(e)(iii)	Policy SMP - 2.2 (see Attachment 4). Section 83.110 (see Attachment 6). Attachment 9 contains an analysis of how this designation criteria was implemented when assigning proposed shoreline designations.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Allowed uses are primarily those that preserve natural character of area, promote preservation of open space, floodplain or sensitive lands, or appropriate restoration. WAC 173-26-211(5)(e)(ii)(A) Priority given to water-oriented uses over non-water oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses given highest priority. WAC 173-26-211(5)(e)(ii)(D) For SMPs that allow mining, see WAC 173-26-241(3)(h).	Policy SMP - 2.2 (see Attachment 4) Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6).	***Ecology: Compliant:*** *The Management Policies appear consistent with the uses allowed within this shoreline environment.*
Standards for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications that ensure new development does not result in a net loss of shoreline ecological functions or degrade other shoreline values. WAC 173-26-211(5)(e)(ii)(B)	See the following sections in Attachment 6: Section 83.300, 400, 480, and 83.260-350.	***Ecology: Compliant:*** *Ecology has provided the City with detailed comments related to shoreline stabilization suggesting some clarifications to the draft SMP, which is generally compliant with these Guideline requirements.* **City Response**: The City has made the changes as recommended by Ecology.
Public access and recreation required where feasible and ecological impacts are mitigated. WAC 173-26-211(5)(e)(ii)(C)	See the following sections in Attachment 6: Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart (see use listings for public access boardwalk, public access facility, etc.) Section 83.420.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*

Shoreline residential. WAC 173-26-211(5)(f)		
Designation criteria: Areas within incorporated municipalities, Urban Growth Areas (UGAs), "rural areas of more intense development," and "master planned resorts" (see RCW 36.70A.360) that are predominantly residential development or planned and platted for residential development. WAC 173-26-211(5)(f)(iii)	Policy SMP - 2.3 and 2.4 (see Attachment 4). Section 83.120 and 130 (see Attachment 6). Attachment 12 contains an analysis of how this designation criteria was implemented when assigning proposed shoreline designations.	**City Comment:** Two residential designations provided: Residential - L and Residential - M/H ***Ecology: Compliant:*** *The City has the option to create sub-residential designations based on distinguishing characteristics between these two areas. Therefore the referenced sections of the SMP appear consistent with these Guideline standards.*
Standards for density or minimum frontage width, setbacks, buffers, shoreline stabilization, critical areas protection, and water quality protection assure no net loss of ecological function. WAC 173-26-211(5)(f)(ii)(A)	See the following sections in Attachment 6: Sections 83.180, 300, and 490-530. Section 83.360.	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Multifamily and multi-lot residential and recreational developments provide **public access** and joint use for community recreational facilities. WAC 173-26-211(5)(f)(ii) (B)	See the following sections in Attachment 6: Section 83.420. Section 83.280.	***Ecology: Compliant:*** *Ecology has provided the City with recommendations to revise this section to clarify the appropriate application of public access requirements to multi-family development.* **City Response**: Section 83.420 concerning public access has been revised to require public access for 5 or more lots in Residential- L. Multi-family uses already are required to provide public access.
Access, utilities, and public services required to be available and adequate to serve existing needs and/or planned future development. WAC 173-26-211(5)(f)(ii)(C)	Policy SMP - 2.3 2.4 (see Attachment 4).	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with these Guideline standards.*
Commercial development limited to water-oriented uses. WAC 173-26-211(5)(f)(ii)(D)	Section 83.170 - Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6).	**City Comment**: One exception: SMP allows retail use located on east side of Lake Washington Blvd, between NE 60th Street and 7th Ave S, where properties are only partially located within shoreline jurisdiction in order to ensure consistency with adopted zoning regulations for this area. ***Ecology: Compliant:***

GENERAL POLICIES AND REGULATIONS		
Archaeological and Historical Resources. WAC 173-26-221(1)		
Developers and property owners required to **stop work** and notify the local government, state office of archaeology and historic preservation and affected Indian tribes if archaeological resources are uncovered during excavation. WAC 173-26-221(1)(c)(i)	Historic, cultural, scientific, and education elements are addressed in Goal 27 and its related policies (see Attachment 4). Section 83.540 (see Attachment 6).	***Ecology: Compliant:*** *Section 83.540, standard 2(b) appears consistent with this Guideline requirement.*
Permits issued in areas documented to contain archaeological resources require **site inspection** or evaluation by a professional archaeologist in coordination with affected Indian tribes WAC 173-26-221(1)(c)(ii)	Section 83.540 (see Attachment 6).	***Ecology: Compliant:*** *Section 83.540, standard 2(a) appears consistent with this Guideline requirement.*
Critical areas. WAC 173-26-221(2)		
Policies and regulations for critical areas (designated under GMA) located within shorelines of the state: (i) are consistent with SMP guidelines, and (ii) provide a level of protection to critical areas within the shoreline area that is at least equal to that provided by the local government's existing critical area regulations adopted pursuant to the GMA for comparable areas other than shorelines. WAC 173-26-221(2)(a) and (c) **Planning objectives** are for protection *and restoration* of degraded ecological functions and ecosystem-wide processes. **Regulatory provisions** *protect* existing ecological functions and ecosystem-wide processes. WAC 173-26-221(2)(b)(iv) Critical area provisions **promote human uses and values**, such as public access and aesthetic values, provided they do not significantly adversely impact ecological functions. WAC 173-26-221(2)(b)(v)	Policies addressing critical areas are contained in Goal 13 and its related policies (see Attachment 4). See the following sections in Attachment 6: Sections 83.490 through 530. Section 83.500.12.	***Ecology: (Generally) Compliant:*** *Reference previous comments to the City specific to wetlands. For Streams, Geologic Hazardous Areas and Flood areas see specific Ecology discussion under individual Critical Areas.* *All of the Critical Areas sections provide "Reasonable Use Exemptions", which is not consistent with the SMP Guidelines. Generally these proposals are reviewed under a shoreline variance.* *Section 83.500.6 (Permit Process) provides administrative flexibility to vary buffer widths up to 25% before requiring a shoreline Variance. However, all Reasonable Use determinations are exempted from a variance, which is not consistent with the Guidelines.* ***Discussion/Suggestion:*** *The City has a few options to consider in relation to the inconsistency between the Guideline requirement for a variance and preserving the Reasonable Use Exemption for constrained properties:* • *Option 1: Require a shoreline variance for any departure from SMP dimensional standards, but also include the City's Reasonable Use standards as additional review criteria under a variance review* • *Option 2: Provide more specific geographic distinction of specific areas where the Reasonable Use Exemption*

		would apply. Therefore, limiting the scope of the exemption to a defined number of lots for which build-out potential then needs to be considered within the Cumulative Impact Assessment and shown to maintain No Net Loss of Ecological Function. **City Response***:* In Sections 83.500 and 83.510 for critical area regulations, "Reasonable Use Exemptions" have been omitted. These proposals are now reviewed under a shoreline variance. Concerning Geological Hazardous Areas and Flood Hazard Reduction, regulations have been provided in Chapter 83 consistent with the WAC Guidelines.
If SMP includes **optional expansion** of jurisdiction: Clear description of the inclusion of any land necessary for buffers of critical areas that occur within shorelines of the state, accurately depicting new SMP jurisdiction consistent with RCW 90.58.030(2)(f)(ii) and WAC 173-26-221(2)(a).	Not applicable.	**City Comment:** SMP does not include optional expansion of jurisdiction to critical area buffers. ***Ecology: Compliant:*** *The City has clearly stated within section 83.500.1 that they do <u>not</u> intend to expand shoreline jurisdiction to the upland extent of critical area buffers.*
Wetlands. WAC 173-26-221(2)(c)(i)		
Wetlands **definition**s are consistent with WAC 173-22.	Section 83.80.115 (see Attachment 6).	***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Provisions requiring wetlands **delineation** method are consistent with WAC 173-22-035.	Section 83.500.2 (see Attachment 6).	***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Regulations address all **uses and activities** listed in WAC 173-26-221(2)(c)(i)(A) to achieve no net loss of wetland area and functions including lost time when the wetland does not perform the function. [WAC 173-26-221(2)(c)(i)(A) + (C)]	See the following sections in Attachment 6: Section 83.500.4, 6, 7, 8, 9, 10, 11, and 12.	***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Wetlands **rating** or categorization system is based on rarity, irreplaceability, or sensitivity to disturbance of a wetland and the functions the wetland provides. Use Ecology Rating system or regionally specific, scientifically based method. WAC 173-26-221(2)(c)(i)(B)]	Section 83.500.3 (see Attachment 6).	***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Buffer requirements are adequate to ensure wetland functions are protected and maintained in the long-term, taking into account ecological functions of the wetland, characteristics of the buffer,	Section 83.500.4 (see Attachment 6).	**City Comment:** The wetland requirements in Section 83.500 incorporate the buffers

and potential impacts associated with adjacent land uses. WAC 173-26-221(2)(c)(i)(B)		requirements that King County has adopted to regulate wetlands within their Urban Growth Area (UGA). ***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Wetland **mitigation** requirements are consistent with WAC 173-26-201(2)(e) and which are based on the wetland rating. WAC 173-26-221(2)(c)(i)(E) and (F)	Section 83.500.8 (see Attachment 6).	***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Compensatory mitigation allowed only after mitigation sequencing is applied and higher priority means of mitigation are determined to be infeasible. Compensatory mitigation requirements include (I) replacement ratios; (II) Performance standards for evaluating success; (III) long-term monitoring and reporting procedures; and (IV) long-term protection and management of compensatory mitigation sites. WAC 173-26-221(2)(c)(i)(F) Compensatory mitigation requirements are consistent with preference for "in-kind and nearby" replacement, and include requirement for watershed plan if off-site mitigation is proposed. WAC 173-173-26-201(2)(e)(B)	See the following sections in Attachment 6: Section 83.360 Section 500.7 and 8.	**City Comment:** The standards for compensatory mitigation utilize the mitigation ratios specified in the Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10 guidance as contained in Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance. ***Ecology: Compliant*** *The referenced provision appears consistent with previous comments from Ecology to the City in letter dated July 8, 2008.*
Geologically Hazardous Areas. WAC 173-26-221(2)(c)(ii)		
Prohibition on **new development** (or creation of new lots) that would: cause foreseeable risk from geological conditions during the life of the development prohibited. WAC 173-26-221(2)(c)(ii)(B) require structural shoreline stabilization over the life of the development. (Exceptions allowed where stabilization needed to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result.) WAC 173-26-221(2)(c)(ii)(C)	Section 83.520 (see Attachment 6) Secton 83.300 (see Attachment 6).	***Ecology: Compliant:*** *The referenced SMP sections appear to satisfy this Guideline requirement.*
New stabilization structures for existing primary residential structures allowed only where no alternatives (including relocation or reconstruction of existing structures), are feasible, and less expensive than the proposed stabilization measure, and then only if no net loss of ecological functions will result. WAC 173-26-221(2)(c)(ii)(D)	See the following sections in Attachment 6: Section 83.300. Section 83.360.	***Ecology: Compliant:*** *Independent of suggested edits to ensure consistency in reference to "Hard Structural Shoreline Stabilization" and "Structural Stabilization" explained in the Shoreline Stabilization section below, the referenced sections appear consistent with Guideline requirements.*

Critical Saltwater Habitats. WAC 173-26-221(2)(c)(iii)		
Prohibition on **new docks, bulkheads, bridges, fill, floats, jetties, utility crossings** and other human-made structures that intrude into or over critical saltwater habitats, except where: public need is clearly demonstrated; avoidance of impacts is not feasible or would result in unreasonable cost; the project include appropriate mitigation; and the project is consistent with resource protection and species recovery. Private, non-commercial docks for individual residential or community use allowed if it is infeasible to avoid impacts by alternative alignment or location and the project results in no net loss of ecological functions. WAC 173-26-221(2)(c)(iii)(C)	Not applicable.	
Where inventory of critical saltwater habitat has not been done, all over water and near-shore developments in marine and estuarine waters require habitat assessment of site and adjacent beach sections. WAC 173-26-221(2)(c)(iii)(C)	Not applicable.	
Critical Freshwater Habitats. WAC 173-26-221(2)(c)(iv)		
Requirements that ensure **new development** within stream channel, channel migration zone, wetlands, floodplain, hyporheic zone, does not cause a net loss of ecological functions. WAC 173-26-221(2)(c)(iv)(C)(I) and WAC 173-26-221(2)(c)(iv)(B)(II)	Section 83.500 and 510 (see Attachment 6). Section 83.530 (see Attachment 6)	**City Comment:** Kirkland's floodplain is located within a shoreline associated wetlands and, as a result, flood hazard reduction is generally accomplished through implementation of wetland and stream protections. ***Ecology: Compliant: See City Response (June 2010).*** *See comment related to the Flood Hazard section with recommendations to narrow referenced ordinances or add additional SMP standards.* **City Response**: Section 83.530 has been revised to no longer reference ordinances. The section reflects the State Guidelines.
Authorization of appropriate **restoration projects** is facilitated. WAC 173-26-221(2)(c)(iv)(C)(III)	Section 83.510.12 and 83.500.11 (see Attachment 6)	***Ecology: Compliant:*** *The referenced SMP Standards appear to satisfy this Guideline requirement.*
Regulations **protect hydrologic connections** between water bodies, water courses, and associated wetlands. WAC 173-26-221(2)(c)(iv)(C)(IV)	Section 83.500 and 510 (see Attachment 6).	**City Comment:** Development generally required to locate outside of required buffers, unless specifically authorized under the specific provisions of these sections, which consider impacts to hydrology. ***Ecology: Compliant:*** *The referenced SMP Standards appear to satisfy this Guideline requirement.*

Flood Hazard Reduction. WAC 173-26-221(3)		
New **development within the channel migration zone or floodway** limited to uses and activities listed in WAC 173-26-221(3)(b) and (3)(c)(i)	Section 21.56.085 and 090 (see Attachment 8). Section 83.500 and 510 (see Attachment 6).	**City Comment:** Not applicable to the lake. The City does have floodplains associated with several stream systems that coincide with the wetland areas located in Yarrow Bay and Forbes Creek wetlands, and therefore are a part of the SMP as these wetlands systems area shoreline associated. As a result, flood hazard reduction for these areas is generally accomplished through implementation of wetland and stream protections (shoreline streams are within the wetlands). ***Ecology Compliant: See City Response (June 2010).*** *Within the draft SMP, section 83.530 formally references all of chapter 21.56 (Flood Damage Prevention). This essentially brings the Flood Damage ordinance into as part of the updated SMP.* ***Suggestion:*** • *Discuss with the City the possibility to limit this reference to only those sections of chapter 21.56 (Flood Damage) to only those sections that are relevant to SMP Guideline requirements. For example, limiting development to areas outside of channel migration zone or floodway as required by the Guidelines could be satisfied by either referencing a specific standard or section within the City's flood damage ordinance or just creating a new standard just for the SMP.* **City Response**: Section 83.530 has been revised to no longer reference other ordinances. The revised section reflects the State Guidelines.
New structural flood hazard reduction measures allowed only: where demonstrated to be necessary, and when non-structural methods are infeasible and mitigation is accomplished. landward of associated wetlands and buffer areas except where no alternative exists as documented in a geotechnical analysis. WAC 173-26-221(3)(c)(ii) & (iii)	Section 83.510.10, Section 83.500.7 and 9 (see Attachment 6). Section 83.530 (see Attachment 6).	***Ecology:*** *Same comment as above* ***Suggestion:*** • *As describe above, the City could limit reference to Chapter 21.56 (Flood Damage) by just referencing this specific section or repeating these standards within the SMP.* **City Response**: Section 83.530 has been revised to no longer reference

		other ordinances. The section reflects the Guidelines.
New **publicly funded dikes or levees** required to dedicate and improve public access (see exceptions). WAC 173-26-221(3)(c)(iv)	Section 83.420 (see Attachment 6)	***Ecology: Compliant:*** *The referenced SMP section appears consistent with this Guideline requirement.*
Removal of gravel for flood control allowed only if biological and geomorphological study demonstrates a long-term benefit to flood hazard reduction, no net loss of ecological functions, and extraction is part of a comprehensive flood management solution. WAC 173-26-221(3)(c)(v)	See the following sections in Attachment 6: Section 83.320, Section 83.510.9 and Section 83.500.7.	***Ecology: Compliant:*** *The referenced sections appear consistent with these Guideline requirements.*
Public Access. WAC 173-26-221(4)		
Policies and regulations protect and enhance both **physical and visual access**. WAC 173-26-221(4)(d)(i)	Goal 26 addresses visual and physical access. Other goals (e.g. Goal 7 and related policies) also address these issues (see Attachment 4). Section 83.410 and 420 (see Attachment 6).	***Ecology: Compliant:*** *The City has historically placed a strong emphasis on preserving shoreline public access. The draft SMP Goals/Policies & Regulations appear to continue to emphasize protection of both visual and physical access to shoreline areas consistent with SMP Guideline requirements.*
Public entities are required to incorporate public access measures as part of each development project, unless access is incompatible with safety, security, or environmental protection. WAC 173-26-221(4)(d)(ii)	Section 83.420 (see Attachment 6).	***Ecology: Compliant:*** *Within section 83.420(5), the only exceptions to providing Public Access are granted to residential (L-environment), the Natural environment and detached Dwelling units. Other modifications to Public Access requirements are reviewed on a case-by-case basis utilizing criteria provided in section 83.420(6), intended to balance appropriate access with safety, security and environmental protection consistent with the Guidelines.* **City Response**: Section 83.420(5) has been revised to require public access for 5 or more lots in the Residential –L (single family zones).
Non-water-dependent uses (including water-enjoyment, water-related uses) and subdivisions of land into more than four parcels include standards for dedication and improvement of public access. WAC 173-26-221(4)(d)(iii)	Section 83.420 (see Attachment 6).	***Ecology: Compliant:*** *The City appears to require Public Access for all shoreline development, except for uses listed under section 83.420(5) or modifications consistent with 83.420(6).*
Maximum height limits, setbacks, and view corridors minimize **impacts to existing views** from public property or substantial numbers of residences. WAC 173-26-221(4)(d)(iv); RCW 90.58.320	See the following sections in Attachment 6: Section 83.410. Section 83.180 and 83.190.4.	***Ecology: Compliant:*** *Section 83.410 provides specific view corridor standards, with exceptions listed in subsection 3a-c.* *Section 83.180 and 83.190.4 provide building height standards consistent with Guideline requirements and*

		appropriate to preserve existing shoreline views.
Vegetation Conservation (Clearing and Grading). WAC 173-26-221(5)		
Vegetation **standards** implement the principles in WAC 173-26-221(5)(b). Methods to do this may include setback or buffer requirements, clearing and grading standards, regulatory incentives, environment designation standards, or other master program provisions. WAC 173-26-221(5)(c)	See the following sections in Attachment 6: Sections 83.330, 400 and 490, 500, and 510, as well as incentives contained in Section 83.380.	***Ecology: Compliant:*** *Section 83.330 provides standards to protect existing habitat consistent with setback/buffer requirements provided in 83.380. In addition to standard vegetation enhancement requirements to be applied to new development, the City's setback/buffer standards also provide development incentives to further enhance or create shoreline habitat consistent with SMP-Guideline goals.*
Selective **pruning** of trees for safety and view protection is allowed and removal of noxious weeds is authorized. WAC 173-26-221(5)(c)	See the following sections in Attachment 6: Section 83.400.2 Section 83.350 and 480.	***Ecology: Compliant:*** *The referenced SMP-standard appears consistent with this Guideline requirement, requiring a professional evaluation to acknowledge safety concern trees. Additional site-by-site flexibility can be considered, subject to review and approval by the Planning Official.*
Water Quality. WAC 173-26-221(6)		
Provisions protect against **adverse impacts to water quality** and storm water quantity and ensure mutual consistency between SMP and other regulations addressing water quality. WAC 173-26-221(6)	Section 83.480 (see Attachment 6).	***Ecology: Compliant:*** *Section 83.480 appears consistent with this Guideline requirement. Subsections 1-3 provide a general goal to encourage appropriate water quality control and reduction of pollution risk. Development proposals are required to submit*
SHORELINE MODIFICATIONS		
SMP: (a) allows structural shoreline modifications only where demonstrated to be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage or are necessary for mitigation or enhancement; (b) limits shoreline modifications in number and extent; (c) allows only shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed; (d) gives preference to those types of shoreline modifications that have a lesser impact on ecological functions. Policies promote "soft" over "hard" shoreline modification measures (f) incorporates all feasible measures to protect ecological shoreline functions and ecosystem-wide processes as modifications occur; (g) requires mitigation sequencing. WAC 173-26-231(2); WAC 173-26-231(3)(a)(ii) and (iii);	GOAL SMP - 10 AND RELATED POLICIES (SEE ATTACHMENT 4) SECTION 83.170 (SEE ATTACHMENT 6) SECTIONS 83.260-350 (SEE ATTACHMENT 6) SECTION 83.360 (SEE ATTACHMENT 6)	***Ecology: Compliant:*** *Section 83.170 (use matrix) limits Shoreline Modifications through prohibiting both "hard" and "soft shoreline stabilization measures" within the Natural environment.* *83.260 – 83.350 provide specific development standards pertaining to the following modifications:* ***Piers/Docks*** *(83.260-.280),* ***Marinas*** *(83.290),* ***Shoreline Stabilization*** *(83.300),* ***Breakwaters/Jetties*** *(83.310),* ***Dredging*** *(83.320),* ***Land Surface Modification*** *(83.330), Landfill (83.340), and* ***Shoreline Habitat Enhancemen****t (83.350). All of these specific standards are further analyzed for Guideline compliance within proceeding sections of this checklist.*

		83.360 provide No Net Loss and Mitigation Sequencing standards also applicable to future Shoreline Modifications. **City Response:** Sections 83.170, and 83.260 through 83.350 limit size and location of shoreline modifications, provide specific dimensional standards for piers and docks and give preference to soft over hard stabilization.
Definition: structural and nonstructural methods to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, tides, wind, or wave action. WAC 173-26-231(3)(a)(i) Definition of new stabilization measures include enlargement of existing structures. WAC 173-26-231(3)(a)(iii)(C), last bullet; WAC 173-26-231(3)(a)(iii)(B)(I), 5th bullet)	See the following sections in Attachment 6: Section 83.80.44, 89, and 95. Section 83.300	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *(Compliant) As referenced by the City, section 83.300.4.b.1, provides specific thresholds to distinguish between: "enlargement", "repair" or "replacement". Consistent with the Guidelines, "replacement" proposals (not meeting the threshold of "minor repair") are required to be analyzed the same as new stabilization measures, requiring justification for "hard stabilization" to protect primary structures located further then 10' upland of OHWM.* *(Non-Compliant/Question) Further, within section 83.80, the City has provided specific definitions for: Shoreline Stabilization (89), Hard Structural Shoreline Stabilization (44), and Soft Shoreline Stabilization (95). A definition for "structural stabilization" does not appear within this section. However, section 83.300 consistently refers to "Structural Stabilization". <u>It is not clear if this reference is intended to only refer to "Hard Structural Stabilization", or if it is also intended to include "Soft Shoreline Stabilization"?</u>* **City Response:** A definition has been added in Section 83.80.121 for structural shoreline stabilization. ***Ecology*** *(Discuss) 83.300.9.K, requiring adjacent property owner consent when beach restoration results in a change in OHWM location thus changing shoreline jurisdiction. This standard could be perceived as a barrier to restoration project implementation – <u>suggest incorporating recent legislative (HB2199) options to provide added flexibility to upland property owners that come into shoreline jurisdiction as a result of a restoration project.</u>*

		City Response: Section 83.300.14 (formerly 83.300.9.k) has been revised to only provide notice to adjacent property owner. This section now reflects intent of HB2199. ***Ecology Requirement/Question:*** • *(Suggestion) The first sentence of standard 1 (General), c. should be rewritten by deleting the word, "prevent", to make the sentence easier to understand.* • *(Requirement) Clarify the definition of "Structural Stabilization" used throughout the SMP. Is this the same as "Hard Structural Shoreline Stabilization" as defined in 83.80, or different? If different, a definition will need to be added to distinguish the two meanings.* **City Response:** • New definition for structural stabilization has been added (Section 80.121) and internal use of terminology has been reviewed and corrected where needed to clarify whether provisions specifically address hard, soft, or both types of structural stabilization. • Provisions revised to incorporate HB 2199 (see Section 83.300.14 and Section 141.70.5).
Shoreline Stabilization. WAC 173-26-231(3)(a) Standards setting forth **circumstances under which shoreline alteration is permitted**, and for the design and type of protective measures and devices. WAC 173-26-231(3)(a)(ii)	Section 83.300 (see Attachment 6).	***Ecology: Complaint: See changes noted in the City's Response below (June 2010).*** *(Compliant) Within section 83.300,2, standards a. through c .describe when Shoreline Stabilization can be considered.* *(Compliant) Same comment as above use of both "Structural/Non-Structural" and "Hard Structural Shoreline Stabilization/Soft Shoreline Stabilization" is not consistent and could add confusion to the distinction between these definitions or requirements of the SMP.* **City Response**: See changes to Chapter 83 noted above for shoreline stabilization. ***Ecology*** *(Question) 83.300.2*

		standards c. 1-3 appears to isolate exception to limits on Structural Stabilization. Specifically, c.2. is confusing in the reference to "In support of non-water-dependent development, including detached dwelling units when all the conditions below apply". Is this reference intended to include all upland (non-water-dependent) development? Further, "detached dwelling units" are not defined in 83.80. <u>It is not understood, how broad this exemption could be applied?</u> Could some claim their swimming pool, grass lawn, or utility shed is a "non-water-dependent development" and attempt to justify stabilization for protection? **City Response**: • Section 83.200.2 has been revised to clarify single family exemption. • Section 83.80 has been revised to change definition of "appurtenance" to be consistent with the Guidelines and to provide a definition of "detached dwelling unit". ***Required Change/Question:*** • *(Non-Compliant) same comment as above, clarify definition of "Structural Stabilization" with existing definition of "Hard Shoreline Structural Stabilization". Also, a definition for "Non-structural Measures", should be clarified or distinguished from "Soft Shoreline Stabilization" as defined in 83.80.* • *(Non-Compliant/Question) The existing reference "non-water-dependent development including detached dwelling units" in 83.300.2.c.2, may not be acceptable or consistent with the Guidelines, depending on applicability to shoreline features.* **City Response:** • New definition for structural stabilization has been added (see Section 83.80.121) and internal use of terminology has been reviewed and corrected where needed to clarify whether provisions specifically

		address hard, soft, or both types of structural stabilization. • Provision has been re-worded to specifically address protection of primary structures.
New development *(including newly created parcels)* required to be designed and located to prevent the need for future shoreline stabilization, based upon geotechnical analysis. New development on steep slopes and bluffs required to be set back to prevent need for future shoreline stabilization during life of the project, based upon geotechnical analysis. New development that would require shoreline stabilization which causes significant impacts to adjacent or down-current properties and shoreline areas is prohibited. WAC 173-26-231(3)(a)(iii)(A)	Policy SMP - 10.8 (see Attachment 4) Section 83.250 and Section 83.300.1 (see Attachment 6)	***Ecology: Compliant:*** *83.250.1.b. and 83.300.1-11 are consistent with this Guideline requirement.*
New structural stabilization measures are not allowed except when necessity is demonstrated. Specific requirements for *how to demonstrate need* are established for: (I) existing primary structures; (II) new non-water-dependent development including Single Family Residences; (III) water-dependent development; and (IV) ecological restoration/toxic clean-up remediation projects. WAC 173-26-231(3)(a)(iii)(B)	Policy SMP - 10.6-10.9 (see Attachment 4) Section 83.300.2 (see Attachment 6)	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *(Same question as above) 83.300.2 standards c. 1-3 appears to isolate exception to limits on Structural Stabilization. Specifically, c.2. is confusing in the reference to "In support of non-water-dependent development, including detached dwelling units when all the conditions below apply". Is this reference intended to include all upland (non-water-dependent) development? Further, "detached dwelling units" are not defined in 83.80. <u>It is not understood, how broad this exemption could be applied?</u> Could some claim their swimming pool, grass lawn, or utility shed is a "non-water-dependent development" and attempt to justify stabilization for protection?* ***Required Change/Question:*** • *(Non-Compliant/Question) The existing reference "non-water-dependent development including detached dwelling units" in 83.300.2.c.2, may not be acceptable or consistent with the Guidelines, depending on applicability to shoreline features.* **City Response:** Section 83.300.2 has been re-worded to specifically address protection of primary structures for structural stabilization and definition of "appurtenance" in Section 83.80 has been revised to reflect State definition.

Replacement of existing stabilization structures is based on demonstrated need. Waterward encroachment of replacement structure only allowed for residences occupied prior to January 1, 1992, or for soft shoreline stabilization measures that provide restoration of ecological functions. WAC 173-26-231(3)(a)(iii)(C)	Section 83.300.4.b.3) (see Attachment 6)	***Ecology: Compliant:*** *The City has developed clear thresholds to distinguish "minor repair" from "replacement, while also providing criteria for determining "demonstrated need" for shoreline stabilization.*
Geotechnical reports prepared to demonstrate need include estimates of rate of erosion and urgency (damage within 3 years) and evaluate alternative solutions. WAC 173-26-231(3)(a)(iii)(D)	Section 83.300.2.a (see Attachment 6)	***Ecology: Compliant:*** *The City's Geotechnical report criteria and submittal requirements appear consistent with this Guideline requirement.*
Shoreline stabilization structures are limited to the **minimum size** necessary. WAC 173-26-231(3)(a)(iii)(E)	Section 83.300.9 (see Attachment 6)	***Ecology: Compliant:*** *The referenced Shoreline Stabilization standards appear consistent with this Guideline requirement.*
Public access required as part of publicly financed shoreline erosion control measures. WAC 173-26-231(3)(a)(iii)(E)	Section 83.420 (see Attachment 6).	***Ecology: Compliant:*** *The referenced Shoreline Stabilization standards appear consistent with this Guideline requirement.*
Impacts to sediment transport required to be avoided or minimized. WAC 173-26-231(3)(a)(iii)(E)	Section 83.300. (see Attachment 6).	***Ecology: Compliant:*** *The referenced Shoreline Stabilization standards appear consistent with this Guideline requirement.*
Piers and Docks. WAC 173-26-231(3)(b)		
New piers and docks: allowed only for water-dependent uses or public access restricted to the minimum size necessary to serve a proposed water-dependent use. permitted only when specific need is demonstrated (except for docks accessory to single-family residences). Note: Docks associated with single family residences are defined as water dependent uses provided they are designed and intended as a facility for access to watercraft. WAC 173-26-231(3)(b)	Section 83.270.1 (see Attachment 6) and Section 83.220.5 (for public access piers and boardwalks) (see Attachment 6).	**City Comment**: Standards addressing piers and docks under WAC 1732-26-231(3)(b) predominately addressed under Section 83.270. In contrast, standards addressing boating facilties are addressed in Section 83.280 (addressing piers serving multifamily uses) and Section 83.290 (addressing piers operated for commercial or public purposes) ***Ecology: Compliant:*** *Section 83.270 in reference to Pier/Docks associated with single-family residential uses, appears consistent with this Guideline requirement.* ***Note: Comment recommending "multi-family" Pier/Dock standards are part of the "Boating Facility" section of the SMP.*** **City Response:** New definition of boating facilities in Sections 83.80 and 83.270-290 now clarifies the multi-family standards.

When permitted, **new residential development** of more than two dwellings required to provide joint use or community docks, rather than individual docks. WAC 173-26-231(3)(b)	Section 83.270.1 (see Attachment 6)	***Ecology: Compliant:*** *Section 83.270.1.b (1-3) provides SMP standards that appear consistent with this Guideline Requirement.*
Design and construction of all piers and docks required to avoid, minimize and mitigate for impacts to ecological processes and functions and be constructed of approved materials. WAC 173-26-231(3)(b)	See the following sections in Attachment 6: Section 83.360 Section 83.270.4	***Ecology: Compliant:*** *The City has done a good job balancing Pier/Dock redevelopment needs with protection of ecological functions through creating Pier/Dock development standards for new structures, minor repair (defined threshold), and replacement. These standards have been analyzed within the City's Cumulative Impact Assessment and should support no net loss of ecological functions over time.* *The City's proposed thresholds appear appropriate and justified to meet the no net loss standard.*
Fill. WAC 173-26-231(3)(c)		
Definition of "fill" consistent with WAC 173-26-020(14)	Section 83.80.45 (see Attachment 6).	***Ecology: Compliant:*** *The definition within the SMP appears consistent with the Guideline definition.* ***Suggestion:*** • *Change section heading in table of contents for Section 83 from "Landfill" to "Fill".* **City Response**: Section heading has been corrected.
Location, design, and construction of all fills protect ecological processes and functions, including channel migration. WAC 173-26-231(3)(c)	See the following sections in Attachment 6: Section 83.340.	***Ecology: Compliant:*** *The referenced section appears consistent with this Guideline requirement.*
Fill **waterward of the OHWM** allowed only by shoreline conditional use permit, for: water-dependent use; public access; cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan; disposal of dredged material in accordance with DNR Dredged Material Management Program; expansion or alteration of transportation facilities of statewide significance currently located on the shoreline (if alternatives to fill are shown not feasible); mitigation action, environmental restoration, beach nourishment or enhancement project. WAC 173-26-231(3)(c)	See the following sections in Attachment 6: Section 83.170 and 83.340.3.	***Ecology: Compliant:*** *The referenced section appears consistent with this Guideline requirement. Allowing fill seaward of OHWM is an important restoration component necessary to support bulkhead removal and beach restoration.*
Breakwaters, Jetties, and Weirs. WAC 173-26-231(3)(d)		
Structures **waterward of the ordinary high-water mark** allowed only for water-dependent uses, public access, shoreline stabilization, or other specific public purpose. WAC 173-26-	Section 83.310.1 (see Attachment 6)	***Ecology: Compliant:*** *The City is proposing limited opportunity for Breakwaters/Jetties*

231(3)(d)		*or Weirs as Conditional Uses within the Residential-M/H and Mixed-Use designation and only when associated with one of the SMA preferred uses, consistent with the Guidelines.*
Shoreline **conditional use permit** required for all structures except protection/restoration projects. WAC 173-26-231(3)(d)	Section 83.170 (see Attachment 6)	***Ecology: Compliant:*** *Pursuant to the referenced section of the City's SMP, a Conditional Use Permit would be required for any Breakwaters/Jetties or Wiers within the Residential-M/H or Mixed-Use designation and only when associated with a SMA preferred use.*
Protection of critical areas and appropriate mitigation required. WAC 173-26-231(3)(d)	Section 83.310 (see Attachment 6)	**City Comment:** Prohibited in Natural and Urban Conservancy Environment ***Ecology: Compliant:*** *As referenced above and stated by the City, this use will be very limited by both designation and associated use outside of protected critical areas.*
Dunes Management. WAC 173-26-231(3)(e)		
Development setbacks from dunes prevent impacts to the natural, functional, ecological, and aesthetic qualities of the dunes. WAC 173-26-231(3)(e)	Not applicable	
Dune **modifications** allowed only when consistent with state and federal flood protection standards and result in no net loss of ecological processes and functions. WAC 173-26-231(3)(e)	Not applicable	
Dune modification to protect **views** of the water shall be allowed only on properties subdivided and developed prior to the adoption of the master program and where the view is completely obstructed for residences or water-enjoyment uses and where it can be demonstrated that the dunes did not obstruct views at the time of original occupancy. WAC 173-26-231(3)(e)	Not applicable	
Dredging and Dredge Material Disposal. WAC 173-26-231(3)(f)		
Dredging and dredge material disposal **avoids or minimizes** significant ecological impacts. Impacts which cannot be avoided are mitigated. WAC 173-26-231(3)(f)	See the following sections in Attachment 6: Section 83.320 Section 83.360	***Ecology: Compliant:*** *The referenced section appears generally compliant with this Guideline requirement.*
New development siting and design avoids the need for new and maintenance dredging. WAC 173-26-231(3)(f)	Section 83.320.1 (see Attachment 6)	***Ecology: Compliant:*** *Within section 83.320, standard 1 is consistent with this Guideline requirement.*
Dredging to **establish, expand, relocate or reconfigure navigation channels** allowed only where needed to accommodate existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided. WAC 173-26-231(3)(f)	Section 83.320.2. (see Attachment 6)	***Ecology: Compliant:*** *As referenced by the City, standard 2 is consistent with this Guideline requirement.*

Maintenance dredging of established navigation channels and basins restricted to maintaining previously dredged and/or existing authorized location, depth, and width. WAC 173-26-231(3)(f)	Section 83.320.2. (see Attachment 6)	***Ecology: Compliant:*** *As referenced by the City, standard 2 is consistent with this Guideline requirement.*
Dredging for fill materials prohibited except for projects associated with MTCA or CERCLA habitat restoration, or any other significant restoration effort approved by a shoreline CUP. Placement of fill must be *waterward* of OHWM. WAC 173-26-231(3)(f)	Section 83.170. and Section 83.320.2 and 3. (see Attachment 6)	***Ecology: Compliant:*** *As referenced by the City, standards 2 and 3 appear consistent with these Guideline requirements.*
Uses of dredge material that benefits shoreline resources are addressed. If applicable, addressed through implementation of regional interagency dredge material management plans or watershed plan. WAC 173-26-231(3)(f)	Section 83.320.2 (see Attachment 6)	***Ecology: Compliant:*** *Consistent with the Guidelines, the City will only allow dredge materials to be deposited seaward of OHWM when it is proven the quality of the material meets state and federal standards and in support of a beach restoration project.*
Disposal within river channel migration zones discouraged, and in limited instances when allowed, require CUP. (Note: not intended to address discharge of dredge material into the flowing current of the river or in deep water within the channel where it does not substantially affect the geo-hydrologic character of the channel migration zone). WAC 173-26-231(3)(f)	Not applicable)	
Shoreline Habitat and Natural Systems Enhancement Projects. WAC 173-26-231(3)(g)		
Provisions that **foster habitat and natural system enhancement projects**, provided the primary purpose is restoration of the natural character and functions of the shoreline, and only when consistent with implementation of the restoration plan developed pursuant to WAC 173-26-201(2)(f)	See the following sections in Attachment 6: Section 83.350. Section 83.500.11 and 83.510.12.	***Ecology: Compliant:*** *As referenced by the City, section 83.350 defines the potential types of enhancement projects that could be done within shoreline areas, section 83.500.11 refers to Wetland enhancements, and section 83.510.12 refers to Stream Rehabilitations.*
SPECIFIC SHORELINE USES		
Agriculture. WAC 173-26-241(3)(a)		
Use of agriculture related **terms** is consistent with the specific meanings provided in WAC 173-26-020. WAC 173-26-241(3)(a)(ii) and (iv)	Sections 83.80.2 and .83.170.	**City Comment:** Not permitted (see Section 83.170) ***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *Even though the use matrix provided in section 83.170 lists Agriculture, Aquaculture, Forest Practices and Mining as prohibited, all uses that are listed in WAC 173-26-241(**Agriculture, Aquaculture, Boating Facilities, Commercial, Forest Practice, Industry, In-Stream Structure, Recreation, Residential, Transportation, Utilities**), should be defined and either prohibited or listed as conditional or permitted uses with appropriate development standards identified to satisfy the no*

		net loss policy goal of the SMP. ***Suggestion:*** • *The City should consider either, provide an additional section to section 83 listing all the prohibited uses including definitions for each use, or insert each individual SMP use (based on WAC 173-26-241), for which each use should be defined (consistent w/Guidelines) and either listed as prohibited, conditional or permitted with appropriate development standards.* **City Response:** Agricultural use is now defined in 83.80 and listed in Section 83.170. However, the use is prohibited and not eligible for conditional use permit or variance.
Provisions address **new agricultural activities**, conversion of agricultural lands to other uses, and other development not meeting the definition of agricultural activities. Provisions assure that development in support of agricultural uses is: (A) consistent with the environment designation; and (B) located and designed to assure no net loss of ecological functions and not have a significant adverse impact on other shoreline resources and values. WAC 173-26-241(3)(a)(ii) & (v)	Not applicable.	**City Comment:** Not permitted (see Section 83.170) ***Ecology: See comments above.*** **City Response:** see City response above for agricultural activities.
Shoreline **substantial development permit** is required for all agricultural development not specifically exempted by the provisions of RCW 90.58.030(3)(e)(iv)	Not applicable.	**City Comment:** Not permitted (see Section 83.170) ***Ecology: See comments above.***
Conversion of agricultural land to non-agricultural uses is consistent with the environment designation, and regulations applicable to the proposed use do not result in a net loss of ecological functions. WAC 173-26-241(3)(a)(vi)	Not applicable.	**City Comment:** Not permitted (see Section 83.170) ***Ecology:*** *See comments above.* **City Response**: see City response above for agricultural activities.
Aquaculture. WAC 173-26-241(3)(b)		
Location and design requirements for aquaculture facilities avoid: loss of ecological functions, impacts to eelgrass and macroalgae, significant conflict with navigation and water-dependent uses, the spreading of disease, introduction of non-native species, or impacts to shoreline aesthetic qualities. Impacts to functions are mitigated. WAC 173-26-241(3)(b)	Not applicable.	**City Comment:** Not permitted (see Section 83.170) ***Ecology:*** *See comments above for other prohibited shoreline uses (i.e. Agriculture, Aquaculture, Forest Practices & Mining). All SMP Uses listed in WAC 173-26-241 should be defined within the SMP and then either prohibited or permitted with appropriate standards* **City Response:** Aquaculture use is now defined in 83.80 and listed in Section 83.170. However, the use is prohibited and not eligible for

		conditional use permit or variance.
Boating Facilities. WAC 173-26-241(3)(c)		
Definition: Boating facility standards do not apply to docks serving four or fewer SFRs. WAC 173-26-241(3)(c)	Section 83.270 specifically addresses piers and docks serving single family residences (see Attachment 6)	**City Comment:** Standards addressing boating facilties are addressed in Section 83.280 (addressing piers serving multifamily uses) and Section 83.290 (addressing piers operated for commercial or public purposes) ***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *The City should clarify if section 83.290 (Marinas & Moorage Facilities…) are "Boating Facilities"?* *All of the uses listed in WAC 173-26-241 must be addressed within the updates SMP. Therefore, the City needs to define "Boating Facilities" and either prohibit or permit with appropriate development standards.* ***Requirement/Suggestion:*** • *(Discuss) The City could define "Boating Facilities" as "Marinas & Moorage Facilities…" either within section 83.80 (Definitions) or 83.290.* • *Add "multi-family" Pier/Dock standards to this section.* **City Response:** New definition for boating facilities added (see Section 83.80.14) clarifying that it includes both marina and moorage facilities as well as piers and docks serving attached, stacked, and detached dwelling units.
Boating facilities **restricted to suitable locations**. WAC 173-26-241(3)(c)(i)	See the following sections in Attachment 6: Section 83.280.5 and Section 83.290.2.	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this Guideline standard.*
Provisions ensuring **health, safety, and welfare requirements** are met. WAC 173-26-241(3)(c)(ii)	See the following sections in Attachment 6: Section 83.280.4 and Section 83.290.4	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this Guideline standard.*
Provisions to avoid or mitigate **aesthetic impacts**. See WAC 173-26-241(3)(c)(iii)	See the following sections in Attachment 6: Section 83.280.4 and Section 83.290.4	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this Guideline standard.*
Public access required in new boating facilities. WAC 173-26-241(3)(c)(iv)	Section 83.420 (see Attachment 6).	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this*

		Guideline standard.
Impacts of **live-aboard vessels** are limited. WAC 173-26-241(3)(c)(v)	Section 83.200.1 (see Attachment 6).	***Ecology: Compliant:*** *The City clearly prohibits overwater residential use, including live-aboard vessels within the referenced SMP section.*
Provisions assuring no net loss of ecological functions as a result of development of boating facilities while providing public recreational opportunities. WAC 173-26-241(3)(c)(vi)	See the following sections in Attachment 6: Section 83.280 and 290 Section 83.360	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this Guideline standard.*
Navigation rights are protected. WAC 173-26-241(3)(c)(vii)	See the following sections in Attachment 6: Section 83.280.2 and 5 Section 83.290.2 and 5	***Ecology: Compliant:*** *These referenced SMP sections appear consistent with this Guideline standard.*
Extended moorage on waters of the state without a lease or permission is restricted, and mitigation of impacts to navigation and access is required. WAC 173-26-241(3)(c)(viii)	Section 83.370 (see Attachment 6).	***Ecology: Compliant:*** *The referenced SMP section appears consistent with this Guideline standard.*
Commercial Development. WAC 173-26-241(3)(d)		
Preference given first to water-dependent uses, then to water-oriented commercial uses. WAC 173-26-241(3)(d)	See the following sections in Attachment 6: Section 83.170 Section 83.30.5	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *Other than prohibiting most (not all) non-water oriented commercial uses, <u>it is not clear how preference has been given to water-dependent commercial uses within section 83.170</u>?* *<u>Section 83.210 (Commercial Uses) also does not provide a clear preference for water-dependent uses.</u>* ***Requirement/Suggestion:*** • *(Suggest) adding a "General" heading to section 83.210 (Commercial Uses) that provides a clear preference for protection and encouragement of water-dependent uses over non-water dependent uses.* • *Ecology can discuss with Staff other options.* **City Response**: A statement has been added under the Purpose and Intent subsection of Section 83.30 giving preference to water-dependant and water-related uses and is stated in the shoreline policies. In addition, setback and landscape standards are less restrictive for these uses. Non-

		water-oriented commercial uses are not permitted, except in the Urban Mixed area.
Water-enjoyment and water-related commercial uses required to provide public access and ecological restoration where feasible and avoid impacts to existing navigation, recreation, and public access. WAC 173-26-241(3)(d)	See the following sections in Attachment 6: Section 83.420 Section 83.400	***Ecology: Compliant:*** *These SMP referenced sections appear to satisfy this Guideline requirement.*
New **non-water-oriented commercial uses** prohibited unless they are part of a mixed-use project, navigation is severely limited, and the use provides a significant public benefit with respect to SMA objectives. WAC 173-26-241(3)(d)	Section 83.170 (see Attachment 6).	***Ecology: Compliant:*** ***Note:*** *Footnote applied to all Non-water oriented uses allowed in the Urban Mixed Environment that they must be part of a Mixed-Use development containing a water-oriented use as the primary use of the site (Section 83.170).*
Non-water-dependent commercial uses over water prohibited except in existing structures, and where necessary to support water-dependent uses. WAC 173-26-241(3)(d)	Section 83.170 (see Attachment 6).	***Ecology: Compliant:*** *The referenced section appears consistent with this Guideline standard.*
Forest Practices. WAC 173-26-241(3)(e)		
Forest practices not covered by the Forest Practices Act, especially Class IV-General forest practices involving **conversions** to non-forest use result in no net loss of ecological functions and avoid impacts to navigation, recreation and public access. WAC 173-26-241(3)(e)	Not applicable.	**City Comment**: Not permitted (see Section 83.170) ***Ecology:*** *See comments above for other prohibited shoreline uses (i.e. Agriculture, Aquaculture, Forest Practices & Mining). All SMP Uses listed in WAC 173-26-241 should be defined within the SMP and then either prohibited or permitted with appropriate standards.* **City Response:** Forest practice use is now defined in 83.80 and listed in Section 83.170. However, the use is prohibited and not eligible for conditional use permit or variance See earlier comments.
SMP limits removal of trees on **shorelines of statewide significance** (RCW 90.58.150). Exceptions to this standard require shorelines conditional use permit. WAC 173-26-241(3)(e)	Section 83.400 (see Attachment 6).	**City Comment**: Limits tree removal and requires replacement of trees at a 1:1 or 1:2 ratio depending on the size of the tree. Removal of larger trees also requires planting of riparian vegetation (shrubs and groundcover). ***Ecology:*** *See comments above.*
Industry. WAC 173-26-241(3)(f)		
Preference given first to water-dependent uses, then to water-oriented industrial uses. WAC 173-26-241(3)(f)	Not applicable.	**City Response:** Industrial use is now a defined in 83.80 and listed in Section 83.170. However, the use is prohibited and not eligible for conditional use permit or variance

Location, design, and construction of industrial uses and redevelopment required to assure no net loss of ecological functions. WAC 173-26-241(3)(f)	Not applicable.	Not permitted (see Section 83.170)
Industrial uses and redevelopment encouraged to locate where environmental **cleanup and restoration** can be accomplished. WAC 173-26-241(3)(f)	Not applicable.	Not permitted (see Section 83.170)
Public access required unless such a requirement would interfere with operations or create hazards to life or property. WAC 173-26-241(3)(f)	Not applicable.	Not permitted (see Section 83.170)
New **non-water-oriented industrial uses** prohibited unless they are part of a mixed-use project, navigation is severely limited, and the use provides a significant public benefit with respect to SMA objectives. WAC 173-26-241(3)(f)	Not applicable.	Not permitted (see Section 83.170)
In-Stream Structures. WAC 173-26-241(3)(g)		
Definition: structure is waterward of the ordinary high water mark and either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. WAC 173-26-241(3)(g)	Not applicable.	**City Comments**: In-stream structures are addressed through stream regulaitons contained in Section 83.510. The regulations limit improvements within streams or their associated buffers.
In-stream structures **protect and preserve** ecosystem-wide processes, ecological functions, and cultural resources, including, fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas. WAC 173-26-241(3)(g)	Not applicable.	See above.
Mining. WAC 173-26-241(3)(h)		
Policies and regulations for new mining projects: require **design and operation** to avoid and mitigate for adverse impacts during the course of mining and reclamation **achieve no net loss** of ecological functions based on required final reclamation give **preference** to proposals that create, restore or enhance habitat for priority species are coordinated with state **Surface Mining Reclamation** Act requirements. assure subsequent **use of reclaimed sites** is consistent with environment designation and SMP standards. See WAC 173-26-241(3)(h)(ii)(A) – (C)	Not applicable.	**City Comment**: Not permitted (see Section 83.170) ***Ecology:*** *See comments above for other prohibited shoreline uses (i.e. Agriculture, Aquaculture, Forest Practices & Mining). All SMP Uses listed in WAC 173-26-241 should be defined within the SMP and then either prohibited or permitted with appropriate standards.* **City Response:** Mining use is now defined in 83.80 and listed in Section 83.170. However, the use is prohibited and not eligible for conditional use permit or variance
Mining waterward of OHWM is prohibited unless: (I) Removal of specified quantities of materials in specified locations will not adversely impact natural gravel transport; (II) The mining will not significantly impact priority species and the ecological functions upon which they depend; and (III) these determinations are integrated with relevant SEPA requirements. WAC 173-26-241(3)(h)(ii)(D)	Not applicable.	**City Comment:** Not permitted (see Section 83.170) ***Ecology:*** *See comments above.* **City Response:** See response above concerning mining.
Renewal, extension, or reauthorization of in-stream and gravel bar mining activities require review for compliance with these new	Not applicable.	Not permitted (see Section 83.170) ***Ecology:*** *See comments above.*

guidelines requirements. WAC 173-26-241(3)(h)(ii)(D)(IV)		**City Response:** See response above concerning mining.
Mining within the Channel Migration Zone requires a shoreline conditional use permit. WAC 173-26-241(3)(h)(ii)(E)	Not applicable.	Not permitted (see Section 83.170) ***Ecology:*** *See comments above.* **City Response**: See response above concerning mining.
Recreational Development. WAC 173-26-241(3)(i)		
Definition includes both commercial and public recreation developments. WAC 173-26-241(3)(i)	Section 83.170 (see Attachment 6)	**City Comment**: The specific recreational uses listed include both commercial and recreational developments. ***Ecology: Compliant:*** *Section 83.220 (Recreational Use) provides multiple definitions related to both public and commercial recreational shoreline uses.*
Priority given to recreational development for access to and use of the water. WAC 173-26-241(3)(i)	Section 83.170 (see Attachment 6)	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *There does not appear to be an emphasis on water dependent recreational uses within either section 83.170 or 83.220?* ***Requirement/Suggestion:*** • *The City should clarify compliance with this Guideline requirement or provide a "General" standard to section 83.220 stating an emphasis on recreational development that provides access to the water.* **City Response**: A statement has been added under the Purpose and Intent subsection of Section 83.30 giving preference to water-dependant and water-related uses and is stated in the shoreline policies. In addition, setback and landscape standards are less strict for these uses.
Location, design and operation of facilities are consistent with purpose of environment designations in which they are allowed. WAC 173-26-241(3)(i)	Section 83.170 (see Attachment 6)	***Ecology: Compliant:*** *Both 83.170 (Use matrix by designation) and 83.220 provide appropriate location and design criteria consistent with this Guideline requirement.*
Recreational development achieves **no net loss** of ecological processes and functions. WAC 173-26-241(3)(i)	See the following sections in Attachment 6: Section 83.170, 180, and 220 Section 83.360.	***Ecology: Compliant:*** *Standard 9 within section 83.220, specifically references no net loss of ecological functions.*

Residential Development. WAC 173-26-241(3)(j)		
Definition includes single-family residences, multifamily development, and the creation of new residential lots through land division. WAC 173-26-241(3)(j)	Section 83.170 (see Attachment 6)	**City Comment:** Residential uses noted are specifically identified in the use listing under residential uses. ***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *Any Residential use allowed through the proposed SMP should be defined within the Master Program. Section 83.170 lists the following Residential Uses: Detached Dwelling Units, Accessory Dwelling Units, Detached, Attached or Stacked Dwelling Units, Houseboats, Assisted Living Facility, and Convalescent Center. With the exception of Houseboats, all of these Residential Uses are allowed in at least one SMP Designation, but are not defined within section 83.80 or 83.200. If allowed by the SMP, definitions will need to be added to ensure consistent evaluation of the variety of Residential Uses the City will be allowing.* *Section 83.80 defines "Appurtenance" as including those listed under WAC 173-14-040 as well as adding "tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence". WAC 173-27-040(2)(g) provides a more limited definition only referencing the following structures as "appurtenances":* "…garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark" ***Requirement/Suggestion:*** • *The City can choose to either define the specific Residential Uses in the SMP in either the Definitions (83.80) or Residential (83.200) section of the SMP.* • *The existing definition of "Appurtenances" appears too broad, for which Ecology may not support exempt protection of all of the additional structures listed in the draft SMP.*

		City Response: Added references to existing definitions of residential uses contained in the City's Zoning Code (see Section 83.80.34 thru 36). The definition of "appurtenances" in Section 83.80 has been revised to reflect WAC 173-27-040.
Single-family residences identified as a priority use only when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. WAC 173-26-241(3)(j)	See the following sections in Attachment 6: Sections 83.180 and 200, as well as general regulations, such as water quality (83.480) and vegetation (83.400).	***Ecology: Compliant:*** *As referenced by the City, the combination of multiple sections of the SMP are anticipated to provide adequate protection to shoreline ecological functions to off-set anticipated impacts to shoreline resources from future development at the scale allowed through the SMP.*
No net loss of ecological functions assured with specific **standards** for setback of structures sufficient to avoid future stabilization, buffers, density, shoreline stabilization, and on-site sewage disposal. WAC 173-26-241(3)(j)	See the following sections in Attachment 6: Sections 83.180 Section 83.400	***Ecology: Compliant:*** *As referenced by the City, dimensional development standards provided in section 83.180, combined with Vegetation Management standards listed in section 83.400 have been analyzed within the City's Cumulative Impact Assessment and shown to support no net loss of shoreline ecological functions through implementation of the Master Program.*
New **over-water residences and floating homes** prohibited. Appropriate accommodation for existing floating or over-water homes. WAC 173-26-241(3)(j)	Section 83.200.1 (see Attachment 6).	***Ecology: Compliant:*** *The referenced standard within section 83.200 appears to satisfy this Guideline requirement.*
New **multiunit residential development** (including subdivision of land for more than four parcels) required to provide community and/or public access in conformance to local public access plans. WAC 173-26-241(3)(j)	See the following sections in Attachment 6: Section 83.420 and 83.250.	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** ***Question:*** *It is not clear if the existing SMP would require Public Access for any land-division or only land-divisions creating four or more new parcels? See email from Joe Burcar to Stacy Clauson dated 8/19/2009.* **City Response:** Section 83.420.5 has been revised to state that development of 5 or more lots in the Residential – L shoreline environment requires public access. Public access would otherwise be required for land division in other shoreline environments under the provisions in Section 83.420.
New (subdivided) lots required to be designed, configured and developed to: (i) Prevent the loss of ecological functions at full build-out; (ii) Prevent the need for new shoreline stabilization or flood	Section 83.250 (see Attachment 6).	***Ecology: Compliant:*** *The referenced sections appear to be consistent with this Guideline requirement related to future land-*

hazard reduction measures; and (iii) Be consistent with applicable SMP environment designations and standards. WAC 173-26-241(3)(j)		*divisions.*
Transportation Facilities. WAC 173-26-241(3)(k)		
Proposed transportation and parking facilities required to **plan, locate, and design** where routes will have the least possible adverse effect on unique or fragile shoreline features, will not result in a net loss of shoreline ecological functions or adversely impact existing or planned water dependent uses. WAC 173-26-241(3)(k)	See the following sections in Attachment 6: Section 83.230 and 83.360	***Ecology: Compliant:*** *Both SMP sections referenced appear consistent with this Guideline requirement. 83.230 provide transportation specific standards encouraging consideration of location and design to minimize impacts to shoreline resources. 83.360 provides higher level no net loss of ecological function goals including mitigation sequencing framework to avoid, minimize and then mitigate potential impacts.*
Circulation system plans include systems for **pedestrian, bicycle, and public transportation** where appropriate. WAC 173-26-241(3)(k)	Section 83.230.5 (see Attachment 6)	***Ecology: Compliant:*** *The referenced section of the SMP appears consistent with this Guideline requirement through references to public access, pedestrian and bicycle opportunities associated with future transportation uses.*
Parking allowed only as necessary to support an authorized shoreline use and which minimize environmental and visual impacts of parking facilities. WAC 173-26-241(3)(k)	Section 83.440 (see Attachment 6)	***Ecology: Compliant:*** *As referenced the City has developed specific parking standards that have been incorporated into the SMP. Consistent with Guidelines; parking is prohibited within shoreline setback areas (except under standard 3.b.1.a), prohibited overwater and can only be allowed within shoreline jurisdiction (upland areas) if associated with an approved shoreline use.*
Utilities. WAC 173-26-241(3)(l)		
Design, location and maintenance of utilities required to assure no net loss of ecological functions. WAC 173-26-241(3)(l)	See the following sections in Attachment 6: Section 83.240 and 83.360.	***Ecology: Compliant:*** *The referenced sections of the City's SMP appear consistent with this Guideline requirement.*
Utilities required to be **located in existing rights-of-ways** whenever possible. WAC 173-26-241(3)(l)	Section 83.240.1 (see Attachment 6)	***Ecology: Compliant:*** *As referenced by the City, section 83.240.1 specifically requires co-location of utilities when possible.*
Utility production and processing facilities and transmission facilities required to be **located outside of SMA jurisdiction**, unless no other feasible option exists. WAC 173-26-241(3)(l)	See the following sections in Attachment 6: Section 83.170 and Section 83.240.1	***Ecology: Compliant:*** *The referenced sections of the City's SMP appear consistent with this Guideline requirement.*

SMP ADMINISTRATIVE PROVISIONS		
The statement: "All proposed uses and development occurring within shoreline jurisdiction must conform to chapter 90.58 RCW, the Shoreline Management Act and this master program" whether or not a permit is required. WAC 173-26-191(2)(a)(iii)(A)	Section 141.40.2 of SMP (see Attachment 6)	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with this Guideline standard.*
Administrative provisions ensure permit procedures and enforcement are conducted in a manner consistent with relevant **constitutional limitations** on regulation of private property. WAC 173-26-186(5) and WAC 191(2)(a)(iii)(A)	Section 141.70.3 - Variances (see Attachment 6)	***Ecology: Compliant:*** *The referenced sections of the SMP appear consistent with this Guideline standard.*
Identification of specific uses and development that require a shoreline **conditional use permit (CUP)**. Standards for reviewing CUPs and variances conform to WAC 173-27. WAC 191(2)(a)(iii)(B) and WAC 173-26-241(2)(b)	Section 83.170 Shoreline Environments, Permitted Uses and Activities Chart (see Attachment 6) Section 141.70.2 and 3 contain standards for reviewing CUPs and variances, referring to the provisions contained in WAC 173-27-160 and WAC 173-27-170, respectively (see Attachment 6)	***Ecology: Compliant:*** *The referenced sections of the City's SMP appear consistent with this Guideline requirement.*
Administrative, **enforcement**, and **permit review** procedures conform to the SMA and state rules *(see RCW 90.58.140, 143, 210 and 220 and WAC 173-27)*. WAC 191(2)(a)(iii)(C), WAC 173-26-201(3)(d)(vi)	Chapter 141 (see Attachment 6)	**City Comment:** Portions of WAC 173-27 adopted by reference ***Ecology: Compliant:*** *The referenced sections of the City's SMP appear consistent with this Guideline requirement.*

Mechanism for tracking, and periodically evaluating the **cumulative effects** of all project review actions in shoreline areas. WAC 173-26-191(2)(a)(iii)(D)	The City contains provisions to ensure that mitigation sequencing is used during individual project review under Section 83.360 (see Attachment 6). Mitigation sequencing prioritizes first avoiding impacts through project redesign of location, then minimization of impacts through utilization of Best Management Practices or conditioning of permit decisions. Finally, project mitigation can be developed to offset any unavoidable impacts from allowed or preferred shoreline uses.	**City Comment**: The Cumulative Impact Analysis prepared as part of the City's SMP update (see Attachment 8) indicates that anticipated cumulative impacts should not result in any net loss in shoreline ecological functions. ***Ecology: Compliant –*** *Ecology to review and provide the City with comment prior to Council Review of the SMP.* **City Response:** Tracking will occur once the SMP is in effect and when the next SMP update will occur. The City will add this tracking task to the Implementation Chapter of its Comprehensive Plan as part of the 2010 Plan update. Evaluation will occur with the next SMP update. Based on past development records, the City has had very few shoreline permits over the years and there are only a few vacant properties remaining. The City anticipates very few new proposals between now and the next SMP update.

SMP **definitions** are consistent with all definitions in WAC 173-26-020, and other relevant WACs.	Section 83.80 Definitions (see Attachment 6)	***Ecology: Compliant: See changes noted in the City's Response below (June 2010).*** *Section 83.80 defines "Appurtenance" as including those listed under WAC 173-14-040 as well as adding "tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence". WAC 173-27-040(2)(g) provides a more limited definition only referencing the following structures as "appurtenances":* "…garage; deck; driveway; utilities; fences; installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the ordinary high water mark" ***Requirement:*** • *The City's definition of "Appurtenances" appears too broad, for which Ecology would not support exempt protection (WAC 173-27-040(2)(c)) for all of the additional structures listed within this definition in the draft SMP.* **City Response**: The definition of "appurtenances" has been revised to reflect WAC 173-14-040.

ENCLOSURE 8

August 3, 2010

Ted Sturdevant, Director
State of Washington Department of Ecology
Headquarters Office
PO Box 47600
Olympia, WA 98504-7600

Dear Mr. Sturdevant:

RE: *City of Kirkland's Acceptance of Amendments to the Kirkland Shoreline Master Program update, File ZON06-00017*

Thank you for your letter of July 26, 2010. The Kirkland City Council is very pleased to receive your approval of our Shoreline Master Program update. On behalf of the City, we accept the amendments relating to Kirkland's Shoreline Master Program update. On August 3, 2010 the Kirkland City Council approved the ordinances finalizing the Shoreline Master Program and incorporating the changes required by the Department of Ecology.

The City spent five years on the SMP update working with Ecology, state, federal and local jurisdictions, affected tribes, environmental groups and shoreline property owners to prepare shoreline policies and regulations that meet the state Guidelines while addressing concerns of Kirkland shoreline property owners and reflecting the unique conditions that we have along our shoreline.

The hard work that we have put into the Shoreline Master Program update shows Kirkland's commitment to the Puget Sound Salmon Recovery Plan for WRIA 8, the new State Guidelines and Kirkland's Natural Resource Management Plan. We look forward to seeing improvements to our shoreline over the coming years as a result of our new shoreline policies and regulations, and our Shoreline Restoration Plan.

Sincerely,

Joan McBride
Mayor

cc: Joe Burcar, Shoreline Planner, Department of Ecology, NW Regional Office, 3160-160 Ave SE, Bellevue, WA 98008-5452
Geoff Tallent, NWRO SEA-Program Section Manager (same address)

MEMORANDUM

TO: GORDON WHITE. SEA-PROGRAM MANAGER

FROM: JOE BURCAR, SEA-PROGRAM SHORELINE PLANNER

SUBJECT: CITY OF KIRKLAND COMPREHENSIVE SHORELINE MASTER PROGRAM UPDATE

DATE: 7/27/2010

CC: GEOFF TALLENT, NWRO SEA-PROGRAM SECTION MANAGER

A. OVERVIEW:

Introduce the local setting and context (type and complexity of shoreline issues address, local impetus for the update, etc.) for the SMP update.

The City of Kirkland is proposing a comprehensive update of its Shoreline Master Program (SMP). The proposed amendment is necessary to update the SMP's environment designations, policies and regulations to comply with SMP Guidelines (WAC 173-26). The City's current SMP was originally adopted in 1974 and updated in 1986 (The Watershed Company, 2006). The City completed a Critical Areas Update in 2003 consistent with the Growth Management Act (GMA) Critical Areas requirements, but where not required through this GMA update to include habitat buffers on Lakes as a Fish & Wildlife Habitat Conservation Critical Area. Therefore, the updated SMP will serve as the primary local environmental ordinance regulating redevelopment adjacent to Lake Washington. Kirkland applied for and received grant funds from Ecology as an 'early adopter' agreeing to work on their SMP update during the 2006-7 biennium, prior to the December 1st, 2010 SMP update deadline as listed in RCW 90.58.100.

Shorelines of the State within the jurisdictional boundaries of the City of Kirkland consist of: 5.75-miles of Lake Washington shoreline. The City characterized shorelines outside of the existing City boundary including 6.96-miles of additional Lake Washington shoreline within King County jurisdiction, for which the City Council decided in 2009[1] to annex this area. However, the City will not formally manage land-uses within the annexation area until June 1, 2011. Therefore, the City decided not to "Pre-Designate" these shorelines as part of this SMP update. The City is planning to instigate a formal amendment to this SMP next winter to include the annexation area, which they hope to complete around the same time (June 2011) as they transition into administering regulatory authority over the annexation area

Similar to many of neighboring Lake Washington jurisdictions, Kirkland's existing shoreline is predominately urban, characterized by a limited number of non-conforming overwater condo's, upland multi-family residential and recreational based water dependent uses (marinas) within

[1] City of Kirkland: Resolution #4791 (notice of intent to accept annexation), Ordinance #4229 (formal acceptance of annexation).

the urban core of the City surrounded by single-family residential and public park land-uses. The City also prides themselves on the establishment of a continuous lineal public access trail parallel to the lake edge throughout the central core of the City.

According to the City of Kirkland SMP-Shoreline Inventory/Characterization (The Watershed Company, 2006), shoreline areas can be distinguished by the following four main segments:

1. **Segment A:** Future Annexation Area consisting 3.9-miles of Lake Washington shoreline with predominately residential existing land-uses.
2. **Segment B:** Juanita Bay and Yarrow Bay Park Wetlands consisting of 2.0-miles of Lake Washington Shoreline and 139.5-acres or upland jurisdictional area (including associated wetlands) with multifamily residential, park and residential land-uses.
3. **Segment C:** Residential consisting of 1.8-miles of Lake Washington shoreline dominated by existing residential uses.
4. **Segment D:** Urban consisting of 2.3-miles of Lake Washington shoreline characterized by urban commercial (water-oriented and non-water oriented) upland uses, parks, municipal marina, and private docks in aquatic areas.

In summary, the City's Cumulative Impact Analysis (The Watershed Company, 2009) characterize existing development patterns within Kirkland's shoreline areas as well established, anticipating future development in the form of re-construction of existing residential uses within segments A and C. The City does not anticipate significant expansion of existing uses in segments B or D. According to the City, additional development potential in segment B is constrained by critical areas regulations related to two large wetland complexes within this shoreline segment. Finally, the City anticipates on-going changes to uses within the Urban downtown (Segment D), but do not foresee significant physical expansion as a part of future redevelopment in this segment. Finally, the City foresees opportunity to incorporate meaningful ecological restoration into municipal shoreline park improvements mainly in the form of minimizing on-going impacts from existing shoreline modifications such as private bulkheads (conversion to soft armoring) and pier/docks (reduction overwater coverage).

Updated SMP regulations will provide additional protection for shoreline ecological functions and may result in some enhancement of existing shoreline riparian areas in exchange for future development/ redevelopment of upland shoreline areas.

Describe the level of local citizen/elected official involvement in the update process, and to what degree early drafts were revised in response to comment.

As stated in the City's response to a citizen comment related to public involvement, the City held 16-study sessions with their Planning Commission, 9-study sessions before the Houghton Community Council, 4-study sessions before the City Council, 2-open houses, 1-public forum, 1-property owner workshop, 1-shoreline tour, and a separate boat tour. All of these events were advertized and open to the general public. In addition, the City held numerous meetings with specific interest groups ranging from neighborhood associations to other advocacy groups. Despite this overwhelming effort by the City, comments critical of the City's outreach where still voiced throughout the City's SMP update process. It is important to note that the City did incorporate public input into the Shoreline Master Program as evidence by the many master

program amendments between the initial draft SMP release in June 2009 through the final program adoption by the Council under Resolution #4786 in December of 2009.

Ecology also provided an additional public hearing and public comment period after local adoption of the updated SMP. As described within the *Findings/Conclusion* (Attachment B) at Ecology's Public Hearing 3-people provided public testimony followed by 7-written comments submitted throughout the 33-day Ecology public comment period. Pursuant to WAC 173-26-120, the City provided a response to these comments, which are included in Attachment D.

Identify and remaining unresolved issues

All issues have been resolved; Ecology regional staff recommends that the Ecology Director approve the SMP subject to the required changes described within Attachment C.

B. Briefly describe what 'improvements' are contained in the new updated program when compared to the old SMP?

Generally speaking, the updated SMP is based on a jurisdiction specific analysis of existing shoreline ecological resource and built environment conditions. This comprehensive shoreline baseline provides an appropriate foundation serving as a basis for SMP policies, regulations as well as informing future restoration opportunities. The major improvements to the City's updated SMP can be attributed to single-family **Residential Vegetation Management,** shoreline **Setback/Buffer** standards and **Shoreline Modifications** (piers/dock, shoreline stabilization, dredging) regulations to be applied to redevelopment of segments A and C of the City's shoreline area.

The City's existing SMP required a uniform 15-foot shoreline setback from Ordinary High Water Mark (OHWM), which the City found to be inadequate to protect even impaired shoreline ecological functions in this urban environment (The Watershed Company, 2009). The updated SMP requires a range of setback/buffer widths depending on the lot depth and proposed shoreline use. With the exception of one isolate 15-lot section[2] of the City's residential shoreline segments, the updated SMP require a shoreline setback/buffer of 30% of lot depth at a minimum of 30-feet upland of OHWM to a maximum of 60-feet on larger lots. New structures within the Urban Conservancy designation are to be located outside (+200-feet upland) of shoreline jurisdiction, unless unfeasible for which structure cannot be located closer than 50-feet to the shoreline edge. A majority of existing lots within the Natural environment will be subject to the SMP's wetland standards with buffers ranging from 50 to 215-feet depending on wetland functions. The City's previous wetland standards (2003 GMA-update) did not reference Ecology's Wetland Rating System, nor were the buffers intended to protect all wetland functions. The City and Ecology worked together in identification of a gap in the City's existing wetland standards related to specific wetland functions and/or mitigation ratios necessary to adequately protect wetlands consistent with the SMP Guidelines. Based on this analysis the City

[2] The City has isolated a specific area described as "Lake Avenue West" located south of the Lake Avenue West Street end park. This area is characterized by existing developed residential lots physically constrained by existing road and topography limiting any opportunity for structural setback/buffer retreat. According to the City these lots have already reached development capacity, for which the SMP provides a unique structure averaging setback standard to no less than 15-feet upland of OHWM.

choose to integrate Ecology's Wetland Rating System and update wetland buffer requirements consistent with King County's Urban Growth Areas Best Available Science requirements. Therefore, the City will implement the new wetland standards as part of updated SMP, but will also continue to implement their existing wetland standards within their existing critical areas ordinance for areas outside of shoreline jurisdiction.

Consistent with SMP Guideline requirements related to **Shoreline Stabilization**, the City's updated SMP requires consideration of alternative (non-structural) stabilization options prior to authorization for replacement or construction of new shoreline (hard) stabilization treatments. The City have also specified **Pier/Dock** dimensional development standards, which are consistent with Federal Endangered Species Act (ESA) minimization standards and are intended to maintain no net loss of shoreline ecological functions throughout the City's shoreline areas into the future. The City's previous SMP did not specify **Pier/Dock** dimensional standards for which the size of overwater structures was only restricted by a subjective standard in reference to "minimum size necessary" to support the private moorage use of the structure.

C. Specifically, does the submittal provide any "good examples" that others can use as "models" such as:

The City of Kirkland is the first of many neighboring Lake Washington jurisdictions to locally adopt a comprehensive SMP. The City's SMP incorporates many innovative approaches to managing different elements of their shoreline area. Some of these innovative approaches are unique to Kirkland, however many of these approaches are a result of on-going regional coordination throughout the SMP update with Ecology and neighboring local jurisdictions. As Kirkland is the first jurisdiction to reach this final stage of completing their SMP-update, Ecology is hopeful that the other Lake Washington jurisdictions will 'follow-in-the-footsteps' of Kirkland in also incorporating similar innovative approaches to the following SMP elements:

- **Shoreline Setback/Buffers:** Based on a variety of existing structure setbacks, the City created new standards for residential redevelopment based on individual lot depth including additional flexibility incorporated for street-side setbacks and height limitations to soften the regulatory impact on property owners and encourage compliance with SMP requirements. The City's approach to shoreline **Setback/Buffers** results in increased protection of shoreline ecological functions through proportional **Setback/Buffers** based on lot size and the potential scale of future development, while also not increasing non-conforming setback status of existing shoreline structures. Finally, regulatory incentives are also incorporated into the SMP to encourage restoration on private shorelines such as volunteer removal of an existing bulkhead in exchange for an administrative setback reduction.

- **Shoreline Modifications:** As previously mentioned the City has incorporated specific **Pier/Dock** dimensional standards consistent with ACOE/NMFS Regional General Permit standards as a potential incentive through permit streamlining of impact minimizing dock standards. Consistency with these standards, allows the City to point applicants to a standard design that if acceptable to the applicant is essentially pre-approved by the ACOE and NMFS and will not require ESA consultation. Also related to **Pier/Dock** standards, the City has distinguished between "repair" and "replacement" through identification of

development thresholds that dictate when new SMP standards apply (replacement) vs. maintenance (repair) of an existing structure. The City have also clarified appropriate placement of **Fill** waterward of OHWM in support of regional restoration priorities consistent with local salmon recovery efforts. Finally in addition to inclusion of new **Shoreline Stabilization** standards consistent with the Guidelines, the City has also gone an extra step in producing a feasibility analysis of different shoreline stabilization alternatives to assist in implementation of their updated shoreline armoring requirements. This analysis is anticipated to serve as a valuable resource to both City staff (informing armoring alternative to be considered) as well as providing additional predictability to property owners as to the general expectations of the City in consideration of appropriate armoring treatment alternatives based on key physical site characteristics.

- **Vegetation Management:** The City has provided specific tree retention and mitigation standards with compliance triggered through either "development" or even "non-development" scenarios like removal of a hazard tree.

D. WHAT SIGNIFICANT CHALLENGES AND/OR SHORTCOMINGS IN SHORELINE MANAGEMENT EMERGED AND WERE RESOLVED IN THE LOCAL SMP UPDATE PROCESS?

Based on coordination throughout the SMP update with City Staff, Ecology comments on draft SMP deliverables and review, response and conclusion of public comments (**Attachment D**), the following provides a general summary of issues relevant to Ecology's final decision on the City of Kirkland's SMP:

Shoreline Update Process: See summary provided above (page 2) describing citizen, interest group and elected officials involvement in the SMP update.

Shoreline Protections: The City faced a challenge at the onset of this update in creating shoreline **Setback/Buffer** and **Vegetation Management** standards that could satisfy no net loss and be administered equitably within the urbanized shoreline environment. Further complicating this task was the existing SMP's (standard) 15-foot building setback, which was not anticipated to provide neither adequate critical area protection nor satisfy the no net loss Guideline requirement related to future development. Existing development patterns generally established upland structures located at the minimum (15-foot) setback in the urban core of the City, contrasted by large variation throughout the City's residential shoreline segments, ranging from a median 43-foot setback in the low density residential segment to a 25-feet (median) setback in the medium/high residential shoreline segment. With the exception of both the Juanita and Yarrow Bay wetland areas, past shoreline development resulted in characterization of a majority of the City's shoreline as moderate to highly impaired. However, within residential shoreline segments, future redevelopment potential was not consistent, indicating lot-by-lot variation, largely as a result of variation in lot depth or overall parcel size and the ability to accommodate future expansion. Therefore, the City proposed a variable shoreline **Setback/Buffer** of 30% of the lot depth within a range of a minimum of 30-feet and a maximum of 60-feet. As illustrated within the City's Cumulative Impact

Analysis and based on the existing residential development pattern and variation in redevelopment potential the 30% (lot depth) setback was determined to be the minimum **Setback/Buffer** to satisfy no net loss[3] of shoreline habitat requirement for the variable residential shoreline parcels. By contrast, both the City's urban and natural shorelines exhibited more consistent development patterns, not showing significant opportunity for future physical expansion through redevelopment. Therefore, SMP standards related to these areas were more or less upgraded to ensure on-going consistency with the Guidelines.

Shoreline Modifications: SMP regulations related to both **Piers/Docks** and **Shoreline Armoring** modifications received a lot of attention during the City's update. Because of the urban/developed condition of a majority of the City's residential shoreline, many property owners voiced concerns related to maintaining existing **Piers/Docks** and bulkheads structures. The City proposed **Shoreline Armoring** regulations consistent with the standards provided in Guidelines, allowing for repairs of existing hard armoring structures, but limiting new and replacement hard armoring to those situations where a primary structure is shown to be in need or dependent on a hard armored bulkhead to protect the upland structure from erosion.

For **Pier/Dock** standards, the City's obligation under the update was to maintain or improve aquatic ecological functions by minimizing or reducing (overall) overwater structure. Again, because of the urban/developed nature of the City's shoreline, a majority of the existing residential lots are already developed with private **Pier/Docks**, for which property owners voiced concern related to maintenance and redevelopment potential of these structure. Further, most of the existing **Pier/Dock** structures were developed prior to current State or Federal standards specifying construction material and orientation/dimension of these overwater structures to minimize impacts to aquatic species. Through regional coordination with neighboring Lake Washington jurisdictions, the City incorporated impact minimizing residential **Pier/Dock** standards based on Regional General Permit standards developed by the Army Corps of Engineers (ACOE) with input from Washington Department of Fish and Wildlife (WDFW) and NOAA-Fisheries. These **Pier/Dock** standards are intended to address Endangered Species Act (ESA) fish habitat concerns, for which individual ESA consultation is waived for proposals that are consistent with these standards. By including the Regional General Permit standards into the City's SMP, property owners are provided with an incentive to upgrade their **Pier/Dock** structures to comply with these standards, thus avoiding expensive, unpredictable and time consuming individual ESA consultation.

Finally, the City spend a significant amount of time creating **Vegetation Management** standards that their residential property owners could accept while also satisfying their no net loss obligation under the Guidelines. The central issue was related to tree planting mitigation standards and concerns associated with view impacts. Along these same lines, the City also developed tree retention standards, defining significant tree characteristics and establishing replacement standards for both volunteer and involuntary removal.

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[3] In other words, a setback buffer based on a lower % of lot depth would increase overall redevelopment potential resulting in a larger net loss of shoreline habitat (upland buffer area), which would then have to be offset with some type of restoration. Alternatively, establishment of a **Setback/Buffer** based on a higher lot percentage would further restrict redevelopment to locations further away from the shoreline edge, increasing overall (potential) shoreline habitat area above existing conditions

E. NEXT STEPS:

Review and discuss with lead Shoreline Planner. **Regional Staff Recommendation:** Recommend approval of the SMP as submitted with required changes listed in Attachment C. This recommendation is based on close collaboration with City staff for which all changes to multiple drafts of the SMP are well documented within the final copy of the attached SMP-checklist.

Please feel free to contact me with any specific questions on this SMP update.

Thank you,

Joe Burcar, SEA-Program Shoreline Planner, NWRO

SMP Update Review Router consisting of:

Attachment B – SMP Findings & Conclusions
Attachment C – SMP Required Changes
Attachment D – Response, Conclusion of Public Comments received
City of Kirkland Resolution R-4786 (Local SMP Adoption)
City of Kirkland SEPA determination
Final SMP Checklist dated June 2010
Ecology *Draft* Director's Approval letter
Interested Parties list

References:

The Watershed Company. (2006). *Final Shoreline Analysis Report - Including Shoreline Inventory and Characterization for the city of Kirkland's Lake Washington Shoreline.* Shoreline Master Program Inventory & Characterization Report, Prepared for the City of Kirkland, Kirkland, WA.

The Watershed Company. (2009). *Shoreline Cumulative Impact Analysis for City of Kirkland Shoreline Master Program.* Shoreline Master Program Cumulative Impact Analysis, Prepared for the City of Kirkland, Kirkland, WA.

The Watershed Company. (2009). *Shoreline Restoration Plan Component of the Shoreline Master Program for the City of Kirkland.* Shoreline Master Program Restoration Plan, Prepared for the City of Kirkland, Kirkland, WA.

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (1).

ORDINANCE NO. 4251

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KIRKLAND ADOPTING THE DEPARTMENT OF ECOLOGY APPROVED KIRKLAND SHORELINE MASTER PROGRAM UPDATE, INCLUDING THE NEW SHORELINE ENVIRONMENT DESIGNATIONS MAP, COMPREHENSIVE PLAN AMENDMENTS, ZONING CODE AMENDMENTS, AND THE NEW RESTORATION PLAN, AND REPEALING THE EXISTING SHORELINE MASTER PROGRAM, CHAPTERS 24.05 AND 24.06 OF THE KIRKLAND MUNICIPAL CODE. FILE ZON06-00017.

WHEREAS, the Washington Shoreline Management Act (RCW 90.58, referred to herein as "SMA") recognizes that shorelines are among the most valuable and fragile resources of the state, and that state and local government must establish a coordinated planning program to address the types and effects of development occurring along shorelines of state-wide significance; and

WHEREAS, the City of Kirkland ("City") is required to update its Shoreline Master Program ("SMP") pursuant to the SMA and WAC 173-26; and

WHEREAS, on July 16, 2009, the City's State Environmental Policy Act responsible official issued an Environmental Impact Statement Addendum to the 2004 Environmental Impact Statement for the 2004 City of Kirkland Comprehensive Plan 10-Year Update; and

WHEREAS, there was extensive public participation with respect to the SMP Update, including but not limited to the following: public meetings before the Houghton Community Council and the Kirkland Planning Commission, shoreline tours, public forums, open houses, meetings with property owners and neighborhood meetings; and

WHEREAS, the Kirkland Planning Commission, after numerous study sessions and public meetings and hearings, recommended approval of the SMP Update at its September 10, 2009 meeting; and

WHEREAS, the Kirkland City Council considered the SMP at study sessions dated October 22, 2009, November 2, 2009 and November 23, 2009; and

WHEREAS, the Kirkland City Council adopted Resolution R-4786, a Resolution of Intent to adopt the SMP Update at its December 1, 2009 meeting, and transmitted the SMP Update to the State Department of Ecology for review; and

WHEREAS, the State Department of Ecology approved the SMP Update on July 21, 2010, with certain modifications; and

WHEREAS, the Kirkland City Council would like to adopt the SMP Update, as approved by the State Department of Ecology.

NOW, THEREFORE, the City Council of the City of Kirkland do ordain as follows:

Section 1. The City Council hereby adopts the new Kirkland Shoreline Environment Designations Map, a copy of which is attached to this Ordinance as Attachment A and incorporated herein by this reference.

Section 2. Comprehensive Plan amended: The Kirkland Comprehensive Plan is hereby amended to read as follows:

As set forth in Attachment B attached to this Ordinance and incorporated herein by this reference.

Section 3. Zoning Ordinance amended: The text of Ordinance 3719 as amended, the Kirkland Zoning Ordinance, is hereby amended to read as follows:

As set forth in Attachment C attached to this Ordinance and incorporated herein by this reference.

Section 4. The City Council hereby adopts the new Kirkland Shoreline Restoration Plan, a copy of which is attached hereto as Attachment D and incorporated herein by this reference.

Section 5. Kirkland Municipal Code amended: The Kirkland Municipal Code is hereby amended to read as follows:

As set forth in Attachment E attached to this Ordinance and incorporated herein by this reference.

Section 6. If any section, subsection, sentence, clause, phrase, part or portion of this Ordinance, including those parts adopted by reference, is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 7. This Ordinance shall be in full force and effect on August 4, 2010 after its passage by the Kirkland City Council and shall be published pursuant to Kirkland Municipal Code 1.08.017, in the summary form attached to the original of this ordinance and by this reference approved by the City Council, as required by law.

Section 8. A complete copy of this ordinance shall be certified by the City Clerk, who shall then forward the certified copy to the King County Department of Assessments.

Passed by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 2010.

Signed in authentication thereof this _____ day of _____, 2010.

_____
Mayor

Attest:

_____
City Clerk

Approved as to Form:

_____
City Attorney

O-4251
Attachment A

R-L
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R-L
UC
R-L
A
UC
R-L
R-M/H
UM
0 250 500 Feet
NOTE: In the event of a mapping error or ambiguity, the common boundary descriptions and criteria contained in RCW 90.58.030 (2) and Chapter 173-22 WAC pertaining to determinations of shorelands, as amended, shall apply, superseding the incorrect or outdated map.
Kenmore
Bothell
Woodinville
Seattle
Redmond
Bellevue
Proposed Shoreline Environment Designations
Shoreline Master Program - City of Kirkland
A Aquatic
R-L Residential - Low
N Natural
UC Urban Conservancy
UM Urban Mixed
R-M/H Residential - Medium/High
Shoreline Management Area
Figure Xb

UC
R-L
R-M/H
A
NOTE: In the event of a mapping error or ambiguity, the common boundary descriptions and criteria contained in RCW 90.58.030 (2) and Chapter 173-22 WAC pertaining to determinations of shorelands, as amended, shall apply, superseding the incorrect or outdated map.
Proposed Shoreline Environment Designations
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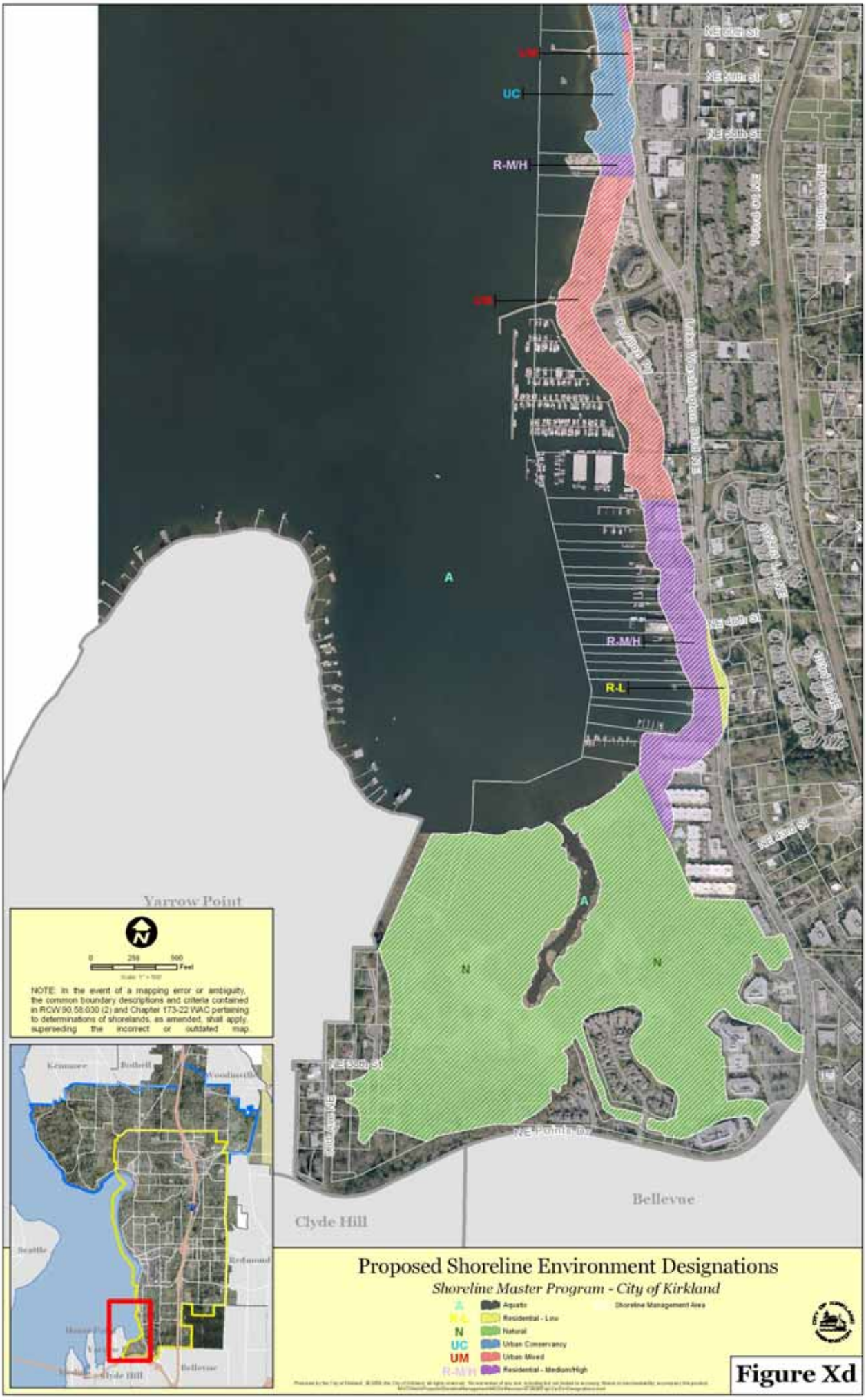
UM Urban Mixed
R-M/H Residential - Medium/High
Shoreline Management Area
Figure Xc


UM
UC
R-M/H
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NE 60th St
NE 58th St
NE 56th St
NE 54th St
NE 52nd St
NE 50th St
NE Points Dr
Lake Washington Blvd NE
Yarrow Point
Clyde Hill
Bellevue
0 250 500 Feet
NOTE: In the event of a mapping error or ambiguity, the common boundary descriptions and criteria contained in RCW 90.58.030 (2) and Chapter 173-22 WAC pertaining to determinations of shorelands, as amended, shall apply, superseding the incorrect or outdated map.
Kenmore
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Shoreline Master Program - City of Kirkland
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N Natural
UC Urban Conservancy
UM Urban Mixed
R-M/H Residential - Medium/High
Shoreline Management Area
Figure Xd

City of Kirkland
New Comprehensive Plan Chapter XVI- Shoreline Area
Shoreline Goals and Policies

A. Introduction

The City of Kirkland's Shoreline Master Program consists of shoreline goals and policies contained in this chapter, shoreline regulations contained in KZC Chapters 83 and 141 and the Kirkland Shoreline Restoration Plan. The Program is adopted under the authority of RCW Chapter 90.58 and WAC Chapter 173-26.

Statutory Framework

The City of Kirkland manages the shoreline environment through implementation of the Shoreline Master Program. The Washington State Shoreline Management Act (SMA) provides guidance and prescribes the requirements for locally adopted Shoreline Master Programs. The goal of the SMA, passed by the Legislature in 1971 and adopted by the public in a 1972 referendum, is to "prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines". The SMA establishes a broad policy giving preferences to uses that:

- Protect shoreline natural resources, including water quality, vegetation, and fish and wildlife habitat;
- Depend on the proximity to the shoreline (i.e. "water dependent uses");
- Preserve and enhance public access or increase recreational opportunities for the public along shorelines.

The SMA establishes a balance of authority between local and state government. Under the SMA, Kirkland adopts a shoreline master program that is based on state guidelines but tailored to the specific needs of the community. The program represents a comprehensive vision of how shoreline areas will be used and developed over time.

The Department of Ecology has issued State guidelines for Shoreline Master Programs in WAC 173-26. The guidelines are intended to assist local governments in developing master programs, which must be accepted and approved by the Department of Ecology as meeting the policy objectives of the SMA established under RCW 90.58.020 as well as the criteria for state review of local master programs under RCW 90.58.090.

Vision

The City of Kirkland's identity is strongly influenced and defined by its waterfront setting. Views of Lake Washington give Kirkland its sense of place and the City's integrated network of trails, parks, and open spaces along the shoreline provide abundant opportunities for public access to the shoreline. The City's waterfront parks provide places and host events where people can gather and interact. Kirkland's shoreline commercial districts also provide opportunities for residents and visitors to enjoy the City's unique natural setting along the shoreline. The waterfront provides many varied

recreational opportunities to meet the needs of Kirkland citizens and provides a gateway to the City. It also provides vital habitat for fish and wildlife and the natural systems within the shoreline serve many essential biological, hydrological and geological functions.

The shoreline zone is one of the most valuable and fragile of Kirkland's natural resources and, as a result, the utilization, protection, restoration, and preservation of the shoreline zone must be carefully considered.

The City developed its first Shoreline Master Program in 1974 as a component of the Comprehensive Plan. Key considerations within this plan and subsequent amendments included conservation, public access to the shoreline, and the guidance for water-oriented recreational uses to locate along the Kirkland shoreline. These initial policy objectives are reflected in today's protection of the City's significant natural areas as open space, as well as the extensive shoreline trail system and network of shoreline parks which have been established over time.

Over the significant time that has spanned since the original adoption of the City's first Shoreline Master Program, there have been substantial changes to the lakefront environment. Industrial uses, such as the shipyard previously located at Carillon Point, have left Kirkland's shoreline. The City has added significant publicly owned properties to our waterfront park system, most significantly the Yarrow Bay wetlands, Juanita Bay Park, Juanita Beach Park, and David E. Brink Park. Water quality within Lake Washington, once severely impacted by nutrient loading from sewage, has remarkably improved since regional wastewater treatment plants were constructed and the final plant discharging directly into the lake was closed in 1967.

The lake environment has also been impacted by new challenges. The shoreline character has continued to change over time, as additional docks and bulkheads have been built, contributing to a loss of woody debris and other complex habitat features along the shoreline. Impervious surfaces have increased both within the shoreline area and in adjacent watersheds and this, together with consequent reduction in soil infiltration, have been correlated with increased velocity, volume and frequency of surface water flows. These and other changes have impacted the habitat for salmonids. In 1999, Chinook salmon and bull trout were listed as Threatened under the Federal Endangered Species Act in 1999. The region's response to this listing has resulted in new scientific data and research that has improved our understanding of shoreline ecological functions and their value in terms of fish and wildlife, water quality, and human health.

To address these changes, comply with the mandates of the Shoreline Management Act, and enable the City to plan for emerging issues, in 2008 the City initiated an extensive update of its Shoreline Master Program. The new program responds to current conditions and the community's vision for the future.

In updating the program, the City's primary objectives were to:

- Enable current and future generations to enjoy an attractive, healthy and safe waterfront.
- Protect the quality of water and shoreline natural resources to preserve fish and wildlife and their habitats.
- Protect the City's investments as well as those of property owners along and near the shoreline.
- Have an updated Shoreline Master Program (SMP) that is supported by Kirkland's elected officials, citizens, property owners and businesses, the State of Washington, and other key groups with an interest in the shoreline.
- Efficiently achieve the SMP mandates of the State.

The City of Kirkland, through adoption of the Shoreline Master Program update, intends to implement the Washington State Shoreline Management Act (RCW 90.58) and its policies, including protecting the State's shorelines and their associated natural resources, planning for and fostering all reasonable and appropriate uses, and providing opportunities for the general public to have access to and enjoy shorelines.

The City of Kirkland's Shoreline Master Program represents the City's participation in a coordinated planning effort to protect the public interest associated with the shorelines of the State while, at the same time, recognizing and protecting private property rights consistent with the public interest. The Program preserves the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the State and protects the functions of shorelines so that, at a minimum, the City achieves a 'no net loss' of ecological functions, as evaluated under the *Final Shoreline Analysis Report* issued in December 2006. The Program also promotes restoration of ecological functions where such functions are found to have been impaired, enabling functions to improve over time.

The goals and policies of the SMA constitute one of the goals for growth management as set forth in RCW 36.70A.020 and, as a result, the goals and policies of this SMP serve as an element of Kirkland's Comprehensive Plan and should be consistent with other elements of the Comprehensive Plan. In addition, other portions of the SMP adopted under chapter 90.58 RCW, including use regulations, are considered a part of the city's development regulations.

Organization

The policies are grouped under seven sections:

- Shoreline Land Use and Activities
- Shoreline Environment
- Parks, Open Space and Recreation
- Shoreline Transportation
- Shoreline Utilities
- Shoreline Design
- Shoreline Archaeological, Historic and Cultural Resources
- Restoration Planning

The Land Use section works together with other policies contained in this Chapter of the Comprehensive Plan. The Land Use section addresses the general distribution and location of shoreline uses, the Shoreline Parks, Open Space and Recreation section more specifically addresses issues of public park operations and maintenance and standards for private shoreline recreation uses and modifications. The Environment section more specifically addresses shoreline critical areas, water quality, vegetation, and shoreline modifications such as filling and dredging. The Transportation section addresses both public access and circulation within the shoreline area. The Utilities section addresses utilities within the shoreline, while the Design section addresses public view corridors and designing for orientation to Lake Washington. The Archaeological, Historic and Cultural Resources addresses identifying important sites and preventing destruction of the sites, and having educational projects and programs to appreciate the important of the shoreline history. The Restoration section addresses the City's adopted Restoration Plan for restoring the shoreline areas to achieve net benefit in ecological conditions.

B. Shoreline Goals and Policies

1. Shoreline Land Use and Activities

Goal SA-1: Provide a high quality shoreline environment where
(1) Natural systems are preserved.
(2) Ecological functions of the shoreline are maintained and improved over time.
(3) The public enjoys access to and views of the lake.
(4) Recreational opportunities are abundant.

The Kirkland shoreline forms the western boundary of the City and encompasses 32,238 lineal feet (6.1 miles) of Lake Washington waterfront. A significant portion of the City's shoreline is area zoned or designated as park/open space. Approximately 57 percent of the area within the shoreline jurisdiction, or a total of 132.7 acres of the shoreline, are within areas designated as park or open space. Except for a few anomalies, the high-functioning portions of the shoreline have been appropriately designated and preserved within these areas. The City's extensive network of parks also provides the public with significant access opportunities throughout the City.

Much of the remaining shoreline is fully developed with single-family residential uses or areas of concentrated, compact development containing commercial, multifamily, or mixed-uses. In general, this pattern of land use is stable and only minimal changes are anticipated in the planning horizon. Redevelopment on some properties may result in single-family residences converting over time to multifamily or with new commercial or mixed-uses replacing existing commercial uses. Given the lack of existing vacant land (only 10 percent of the land within the shoreline is vacant, and much of that is encumbered by sensitive areas), additional housing or commercial square footage within the shoreline area will come over time as redevelopment and additions occur to existing developed properties.

Management of the shoreline area will need to carefully balance and achieve both shoreline utilization and protection of ecological functions. To protect valuable shoreline resources, the Shoreline Master Program limits the extent and character of a number of land uses and activities. Shoreline policies allow for a broad range of uses within the shoreline, while establishing limits to protect these shoreline resources and adjacent uses.

Shoreline policies aimed at protecting the natural environment address issues at both a broader scale, focusing on natural systems, as well as at the scale of ecological functions, which are the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem.

Issues that must be addressed by the Shoreline Use Element include:

- How to manage new growth and redevelopment to be sensitive to and not degrade habitat, ecological systems and other shoreline resources.

- How to foster those uses that are unique to or depend on the proximity to the shoreline or provide an opportunity for substantial numbers of the people to enjoy the shoreline.

- How to ensure that land uses and shoreline activities are designed and conducted to minimize damage to the ecology of the shorelines and/or interference with the public's use of the water

and, where consistent with public access planning, provide opportunities for the general public to have access to the shorelines.

- How to protect the public right of navigation and ensure that uses minimize any interference with the public's use of the water.

Policy SA-1.1: Allow for a diversity of appropriate uses within the shoreline area consistent with the varied character of the shorelines within the city.

The City's shoreline area is a collection of varied neighborhoods and business districts, each containing their own distinctive character as well as biological and physical condition along the shoreline. Kirkland's shorelines contain valuable natural amenities, providing critical habitat for fish and wildlife within the Juanita Bay and Yarrow Bay wetlands, two high-functioning natural areas. The shoreline also contains portions of several business districts, each with its own distinctive identity, including the Central Business District, Juanita Business District, and Carillon Point. Medium to high density residential and commercial uses are located to the south of the Central Business District. The shoreline in these more urban areas is heavily altered with shoreline armoring, overwater coverage, and impervious areas. Single-family residential uses are prevalent in the area north of the Central Business District. The City also contains a system of waterfront parks, which provide a broad range of passive and active recreational activities and environmental protection.

Policy SA-1.2: Preserve and enhance the natural and aesthetic quality of important shoreline areas while allowing for reasonable development to meet the needs of the city and its residents.

These different and unique shoreline areas each contain qualities that contribute to Kirkland's shoreline identity, including waterfront orientation, shoreline public views and access, numerous and diverse recreational opportunities, abundant open space, natural habitat, and waterfront access trails. The Shoreline Master Program should seek to support these and other features which significantly contribute to the City's desired character along the shoreline.

Policy SA-1.3: Maintain existing and foster new uses that are dependent upon, or have a more direct relationship with the shoreline and Lake Washington.

Certain shoreline uses are more dependent on, or have a more direct relationship with the shoreline than others. The Shoreline Management Act requires that shoreline master programs give priority to:

- Water-dependent uses. A water-dependent use is dependent on the water by reason of the intrinsic nature of its operations, and cannot exist in any other location. Examples include swimming beaches, boat launches, boat piers, and marinas. Industrial water-dependent uses, such as ship building facilities, are not currently found nor are planned along the City's waterfront. The Kirkland waterfront contains several facilities that would be considered water-dependent uses. The City contains one public marina and several private marinas. Large private commercial marinas include Carillon Point Marina, Yarrow Bay Marina and Kirkland Homeport Marina. The Yarrow Bay Marina contains a retail fuel service facility for boats, while the tour boat operators working out of the City's public marina provide shoreline tours. The City should encourage these water-dependent uses to remain.

- Water-related uses. A water-related use is dependant on a shoreline location because it has a functional requirement associated with a waterfront location, such as the transport of goods

by water, or uses that support water-dependant uses. Examples include boat sales and outfitters and manufacturers that transport goods by water. These uses are typically not located along Kirkland's shoreline, though the Yarrow Bay Marina contains a boat repair and service facility.

- Water-enjoyment uses. A water enjoyment use is a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use, or a use that draws substantial numbers of people to the shoreline and that provides opportunities, through its design, location or operation, for the public to enjoy the physical and aesthetic benefits of the shoreline. Examples include parks and trails, museums, restaurants, and aquariums. Water enjoyment uses such as restaurants, retail stores, and offices are the primary commercial use along Kirkland's shoreline.

- Single family residential uses. There is a single-family residential neighborhood in the shoreline area within the Market Neighborhood.

- Shoreline recreation. The shoreline contains an extensive network of open spaces and public parks along the shoreline, providing places for fishing, swimming, boating, wildlife viewing and other recreational and educational activities.

<u>Shoreline Environment Designations</u>

Goal SA-2: Provide a comprehensive shoreline environment designation system to categorize Kirkland's shorelines into similar shoreline areas to guide the use and management of these areas.

Environment designations are analogous to zoning designations for areas under SMP jurisdiction. See Figure SMP-1, Shoreline Environment Designations Map. Their intent is to encourage uses that will protect or enhance the current or desired character of a shoreline based on their physical, biological and development characteristics (see Figure SA-1).

Policy SA-2.1: Designate properties as Natural in order to protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions that are sensitive to potential impacts from human use.

This type of designation would be appropriate for associated wetlands in and adjacent to Juanita Bay Park, the Yarrow Bay wetlands complex, and the portion of Juanita Bay Park located within shoreline jurisdiction. The following management policies should guide development within these areas:

a. Any use or development activity that would potentially degrade the ecological functions or significantly alter the natural character of the shoreline area should be severely limited or prohibited, as follows:
    1) Residential uses should be prohibited, except limited single-family residential development may be allowed as a conditional use if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.
    2) Subdivision of the subject property as regulated under the provisions of Title 22 should be prohibited.
    3) Commercial and industrial uses should be prohibited.

4) Nonwater-oriented recreation should be prohibited.
5) Roads, utility corridors, and parking areas that can be located outside of Natural designated shorelines should be prohibited unless no other feasible alternative exists. Roads, bridges and utilities that must cross a Natural designated shoreline should be processed through a Shoreline Conditional Use.

b. Development activity in the natural environment should only be permitted when no suitable alternative site is available on the subject property outside of shoreline jurisdiction.
c. Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.
d. Development activity or land surface modification that would reduce the capability of vegetation to perform normal ecological functions should be prohibited.
e. Limited access may be permitted for scientific, historical, cultural, educational and low-intensity water-oriented recreational purposes, provided there are no significant adverse ecological impacts.

Policy SA-2.2: Designate properties as Urban Conservancy to protect and restore ecological functions of open space, flood plain and other sensitive lands, while allowing a variety of compatible uses.

This type of designation would be appropriate for many of the City's waterfront parks. The following management policies should guide development within these areas:

a. Allowed uses should be those that preserve the natural character of the area and/or promote preservation and restoration within critical areas and public open spaces either directly or over the long term.
b. Restoration of shoreline ecological functions should be a priority.
c. Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.
d. Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
e. Water-oriented uses should be given priority over nonwater-oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.
f. Commercial and industrial uses, other than limited commercial activities conducted accessory to a public park, should be prohibited.

Policy SA-2.3: Designate properties as Residential – Low (L) to accommodate low-density residential development.

This type of designation would be appropriate for single-family residential uses from one to nine dwelling units per acre for detached residential structures and one to seven dwelling units per acre for attached residential structures. The following management policies should guide development within these areas:

a. Standards for density, setbacks, lot coverage limitations, shoreline setbacks, shoreline stabilization, vegetation conservation, critical area protection, and water quality should

mitigate adverse impacts to maintain shoreline ecological functions, taking into account the following:
1) The environmental limitations and sensitivity of the shoreline area,
2) The level of infrastructure and services available, and
3) Other comprehensive plan considerations.

b. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
c. Industrial, commercial, multifamily and institutional uses, except for government facilities, should be prohibited.

Policy SA-2.4: Designate properties as Residential - Medium/High (M/L) to accommodate medium and high-density residential development.

This type of designation would be appropriate for detached, attached, or stacked residential uses of up to 15 or more dwelling units per acre. The following management policies should guide development within these areas:

a. Standards for density, setbacks, lot coverage limitations, shoreline setbacks, shoreline stabilization, vegetation conservation, critical area protection, and water quality should mitigate adverse impacts to maintain shoreline ecological functions, taking into account the following:
1) The environmental limitations and sensitivity of the shoreline area,
2) The level of infrastructure and services available, and
3) Other comprehensive plan considerations.

b. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
c. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced.
d. Industrial uses should be prohibited.
e. Water-dependent recreational uses should be permitted.
f. Limited water-oriented commercial uses which depend on or benefit from a shoreline location should also be permitted.
g. Non water-oriented commercial uses should be prohibited, except for small-scale retail and service uses that provide primarily convenience retail sales and service to the surrounding residential neighborhood should be permitted along portions of the east side of Lake Washington Blvd. NE/Lake Street S.
h. Institutional uses may be permitted in limited locations.

Policy SA-2.5: Designate properties as Urban Mixed to provide for high-intensity land uses, including residential, commercial, recreational, transportation and mixed-used developments.

This type of designation would be appropriate for areas which include or are planned for retail, office, and/or multifamily uses. The following management policies should guide development within these areas:

a. Manage development so that it enhances and maintains the shorelines for a variety of urban uses, with priority given to water-dependent, water-related and water-enjoyment uses. Nonwater-oriented uses should not be allowed except as part of mixed-use

developments, or in limited situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline.

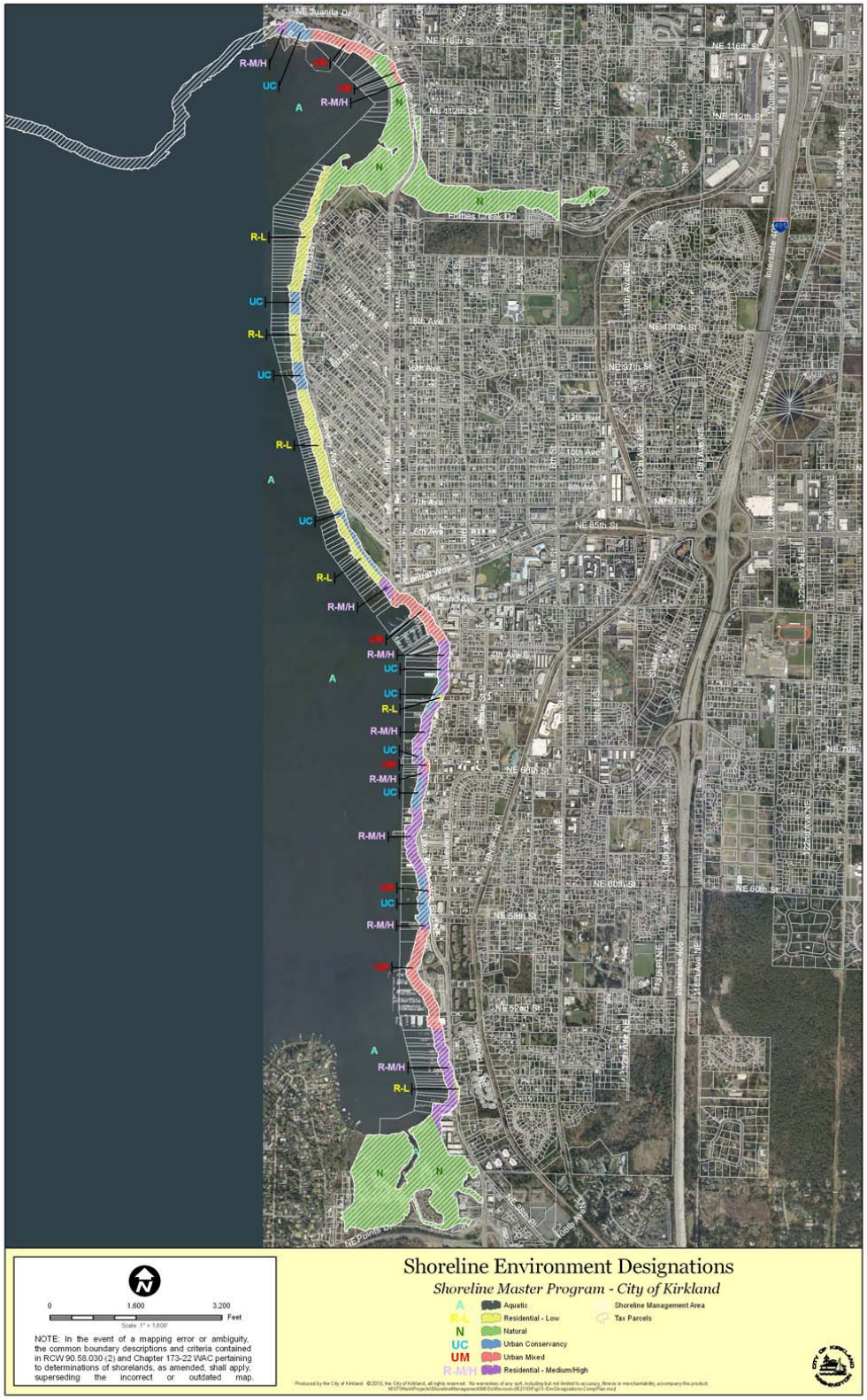
b. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced.
c. Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers.

Policy SA-2.6: Designate properties as Aquatic to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high water mark.

This type of designation would be appropriate for lands waterward of the ordinary high-water mark. The following management policies should guide development within these areas:

a. Provisions for the management of the Aquatic environment should be directed towards maintaining and restoring shoreline ecological functions.
b. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
c. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to minimize adverse visual impacts, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
d. New overwater structures for water-dependent uses and public access are permitted, provided they will not preclude attainment of ecological restoration.
e. Public recreational uses of the water should be protected against competing uses that would interfere with these activities.
f. Underwater pipelines and cables should not be permitted unless demonstrated that there is no feasible alternative location based on an analysis of technology and system efficiency, and that the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives.
g. Existing residential uses located over the water and in the Aquatic environment may continue, but should not be enlarged or expanded.

Figure SA-1: Shoreline Environment Designations Map



Managing Shoreline Land Uses

Goal SA-3: Locate, design and manage shoreline uses to prevent and, where possible, restore significant adverse impacts on water quality, fish and wildlife habitats, the environment and other uses.

It is important that shoreline development be regulated to control pollution and prevention of damage to the natural environment. Without proper management, shoreline uses can cause significant damage to the shoreline area through cumulative impacts from shoreline armoring, stormwater runoff, introduction of pollutants, and vegetation modification and removal.

Given existing conditions, there is very little capacity for future development within the shoreline. However, it is anticipated that expansion, redevelopment or alteration to existing development will occur over time. With remodeling or replacement, opportunities exist to improve the shoreline environment. In particular, improvements to nearshore vegetation cover and reductions in impervious surface coverage are two key opportunity areas on private property to restore ecological function along the shoreline. Reduction or modification of shoreline armoring and reduction of overwater cover and in-water structures provide other opportunities.

Policy SA-3.1: Establish development regulations that avoid, minimize and mitigate impacts to the ecological functions associated with the shoreline zone.

In deciding whether to allow uses and activities in shoreline areas, the potential adverse impacts associated with uses or activities should be considered and avoided, where possible. This can be done by carefully selecting allowed uses, providing policies and standards to prevent or minimize adverse impacts, and carefully reviewing development proposals to prevent or minimize adverse impacts.

Policy SA-3.2: Provide adequate setbacks and vegetative buffers from the water and ample open space and pervious areas to protect natural features and minimize use conflicts.

The purpose of a setback is to minimize potential impacts of adjacent land uses on a natural feature, such as Lake Washington, and maximize the long-term viability of the natural feature. Setbacks perform a number of significant functions including reducing water temperature; filtering sediments and other contaminants from stormwater; reducing nutrient loads to lakes; stabilizing stream banks with vegetation; providing riparian wildlife habitat; maintaining and protecting fish habitats; forming aquatic food webs; and providing a visually appealing greenbelt and recreational opportunities.

Establishing the width of a setback so it is effective depends on the type and sensitivity of the natural feature and the expected impacts of surrounding land uses. In determining appropriate setbacks in the shoreline jurisdiction, the City should consider shoreline ecological functions as well as aesthetic issues.

Policy SA-3.3: Require new development or redevelopment to include establishment or preservation of appropriate shoreline vegetation to contribute to the ecological functions of the shoreline area.

Shoreline vegetation plays an important role in maintaining temperature, removing excessive nutrients, attenuating wave energy, removing sediment and stabilizing banks, and providing woody debris and other organic matter along Lake Washington.

The *Final WRIA 8 Chinook Salmon Conservation Plan* notes the importance of providing a vegetated riparian/lakeshore buffer and overhanging riparian vegetation to improve the habitat for juvenile Chinook salmon[i]. As a result, when substantial new upland development occurs, the on-site landscaping should be designed to incorporate native plant buffers along the shoreline. Proper plant selection and design should be done to ensure that views are not diminished.

Policy SA-3.4: Incorporate low-impact development practices, where feasible, to reduce the amount of impervious surface area.

Low impact development strives to mimic nature by minimizing impervious surface, infiltrating surface water through biofiltration and bio-retention facilities, retaining contiguous forested areas and maintaining the character of the natural hydrologic cycle. Utilizing these practices can have many benefits, including improvement of water quality and reduction of stream and fish habitat impacts.

Policy SA-3.5: Limit parking within the shoreline area.

Facilities providing public parking are permitted within the shoreline area as needed to support adjoining water oriented uses. Private parking facilities should be allowed only as necessary to support an authorized use. All parking facilities, wherever possible, should be located out of the shoreline area.

Policy SA-3.6: Minimize the aesthetic impacts of parking facilities.

Parking areas should be placed, screened, and buffered to mitigate impacts through use of design techniques, such as location, lidding, landscaping of other similar design features to minimize the aesthetic impacts of parking facilities. Exterior parking areas should be located away the shoreline or attractively landscaped with vegetation that will not obstruct views of the lake from the public right-of-way.

Policy SA-3.7: Limit outdoor lighting levels in the shoreline to the minimum necessary for safe and effective use.

Artificial lighting can be used for many different purposes along the waterfront, including to aid in nighttime activities that would be impossible or unsafe under normal nighttime conditions, for security, or simply to make a property more attractive at night. At the same time, the shoreline area can be vulnerable to impacts of light and glare, potentially interrupting the opportunity to enjoy the night sky, impacting views and privacy and affecting the fish and wildlife habitat value of the shoreline area. To protect the scenic value, views, and fish and wildlife habitat value of shoreline areas, excessive lighting is discouraged. Shoreline development should use sensitive waterfront lighting to balance the ability to see at night with the desire to preserve the scenic and natural qualities of the shoreline. Parking lot lighting, lighting on structures or signs, and pier and walkway lighting should be designed to minimize excessive glare and light trespass onto neighboring properties and shorelines.

Policy SA-3.8: Encourage the development of joint-use overwater structures, such as joint use piers, to reduce impacts to the shoreline environment.

The presence of an extensive number of piers has altered the shoreline. The construction of piers can modify the aquatic ecosystem by blocking sunlight and creating large areas of overhead cover. Minimizing the number of new piers by using joint facilities is one technique that can be used to minimize the effect of piers on the shoreline environment.

Policy SA-3.9: Allow variations to development standards that are compatible with surrounding development to facilitate restoration opportunities along the shoreline.

The City should consider appropriate variations to development standards to maximize the opportunities to restore shoreline functions. For example, reductions in setbacks could be used to facilitate restoration in highly altered areas that currently provide limited function and value for such attributes as large woody debris recruitment, shading, or habitat.

Goal SA-4: Incorporate a variety of management tools, including improvement of City practices and programs, public acquisition, public involvement and education, incentives, and regulation and enforcement to achieve its goals for the shoreline area.

Because Kirkland's natural resources are located on both public and on private land, a variety of approaches is needed for effective management of the shoreline. Kirkland should ensure that it uses a mix of public education and involvement, acquisition, program funding, and improvement of City practices on City land, together with regulation and enforcement.

Goal SA-5: Ensure that private property rights are respected.

A significant portion of Kirkland's shoreline is located in private ownership. Aspects of the Shoreline Master Program, including development regulations, setback requirements, environmental regulations and other similar regulatory provisions may take the form of limitations on the use of private property. In establishing and implementing these types of land use controls, the City should be careful to consider the public and private interests as well as the long term costs and benefits.

Residential

Goal SA-6: Protect and enhance the character, quality and function of existing residential neighborhoods within the City's shoreline area.

Policy SA-6.1: Permit structures or other development accessory to residential uses.

Accessory uses such as garages, sheds, accessory dwelling units, and fences are common features normally applicable to residential uses. They should be permitted if located landward of the ordinary high water mark and outside of any critical area or critical area buffer.

Policy SA-6.2: New overwater residences are not a preferred use and shall not be permitted. Existing non-conforming overwater residential structures should not be enlarged or expanded.

The City contains a number of existing overwater residential structures that were constructed prior to the City's limitation on overwater structures to water dependent uses. These existing structures have created large areas of overhead cover, impacting the aquatic environment. Many of these structures

are likely to be remodeled and modernized in the future and these activities should be carefully reviewed to prevent additional adverse impacts and to improve existing conditions, where possible.

Policy SA-6.3: Manage new subdivisions of land within the shoreline to:

- ***Avoid the creation of new parcels with building sites that would impact wetlands, streams, slopes, frequently flooded areas and their associated buffers.***
- ***Ensure no net loss of ecological functions resulting from the division of land or build-out of the lots;***
- ***Prevent the need for new shoreline stabilization or flood risk measures that would cause significant impacts to other properties or public improvements or a net loss of shoreline ecological functions; and***
- ***Implement the provisions and policies for shoreline designations and the general policy goals of this Program.***
- ***Provide public access along the shoreline.***

Though there is not a great capacity to add new units to the shoreline area through subdivision, if properties are divided they should be designed to ensure no net loss, minimize impacts, and prevent the need for new shoreline stabilization structures.

Policy SA-6.4: Evaluate new single-family development within areas impacted by critical areas to protect ecological functions and ensure some reasonable economic use for all property within Kirkland's shoreline.

West of and contiguous with the Yarrow Bay wetlands adjacent to the City limits there are a number of properties that were previously platted for residential use but remain vacant, forested, and impacted by critical areas. In addition, a few properties along the Forbes Creek corridor and Juanita Bay may be similarly encumbered. When considering development proposals on these properties, the City should use a process designed to assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights.

Commercial

Goal SA-7: Plan for commercial development along the shoreline the will enhance and provide access to the waterfront.

Policy SA-7.1: Permit water-enjoyment uses within the shoreline area of the Central Business District.

Downtown Kirkland is an active urban waterfront which strongly benefits from its adjacency to Moss Bay. The Downtown area has a strong land use pattern that is defined by its restaurants, art galleries and specialty shops, which are connected within a pedestrian-oriented district. These uses draw substantial numbers of people to the Downtown and can provide opportunities, if appropriately designed and located, for the public to enjoy the physical and aesthetic benefits of the shoreline. For these reasons, water-enjoyment uses, such as restaurants, hotels, civic uses, and retail or other commercial uses should be encouraged within the Downtown provided they are designed to enhance the waterfront setting and pedestrian activity.

Policy SA-7.2: Manage development in the shoreline area of the Central Business District to enhance the waterfront orientation.

The Central Business District contains extensive public use and views of the waterfront provided by public parks, street ends, public and private marinas, public access piers and shoreline public access trails. Yet, development along the shoreline has historically "turned its back" to Lake Washington, with active areas located opposite the lake and separated from it by large surface parking lots, limiting the ability to fully capitalize on the Downtown waterfront setting. Future growth and redevelopment along the shoreline in the Downtown should continue to reflect the waterfront setting and ensure that development is oriented to the lake. One key opportunity is to develop a large public plaza over the Marina Park parking lot in order to better connect the Downtown to the lake and the park.

Policy SA-7.3: Maximize public access, use, and visual access to the lake within Carillon Point and the surrounding commercial area.

Carillon Point is a vibrant mixed use development that contains office space, restaurants, and retail space in addition to a hotel, day spa and marina facilities. The site has been designed to provide both visual and physical access to the shoreline, including expansive view corridors which provide a visual linkage from Lake Washington Blvd NE to the lake, as well as an internal pedestrian walkway system and outdoor plazas. The Central Plaza of Carillon Point is frequently used for public gatherings and events. The Plaza is encompassed by a promenade and Carillon Point's commercial uses. If new development or redevelopment occurs on this site, existing amenities related to public access, use and visual access to the lake should be preserved.

Immediately south of Carillon Point, the Yarrow Bay Marina and new office development provides opportunities for public use and enjoyment of the waterfront, including boat rental facilities, a public waterfront trail and waterfront access area with seating and interpretative signs. In addition, public views across the site have been preserved in an expansive view corridor.

If new development or redevelopment occurs in the commercial area, the strong public access to and along the water's edge, waterfront public use areas, water-dependent uses such as the marinas, and views from Lake Washington Blvd should be preserved to the greatest extent feasible.

Policy SA-7.4: Enhance the physical and visual linkages to Lake Washington in the Juanita Business District.

The shoreline area of the Juanita Business District presently contains a mix of retail, office and residential uses. Visual linkages to the lake in the Juanita Business District are limited, with existing development blocking most of the shoreline. Waterfront access trails are missing in several key locations, limiting access between Juanita Bay Park and Juanita Beach Park, which border the Business District on the north and south.

The ability to enhance physical and visual access to the Lake is challenging in this area. Several of the shoreline properties are developed with residential condominiums, which are unlikely to redevelop. Some of the commercial properties are significantly encumbered by wetlands that are associated with Lake Washington. Should properties redevelop in this area, public access should be required as a part of redevelopment proposals, where feasible.

Despite these challenges, future redevelopment along the shoreline in the Juanita Business District should emphasize Juanita Bay as a key aspect of the district's identity, highlighting recreational opportunities available at Juanita Beach Park and providing better visual and pedestrian connections to both Juanita Bay and Juanita Beach Park and Lake Washington.

Policy SA-7.5: Allow limited commercial uses in the area located between the Central Business District and Planned Area 15 if public access to and use of the shoreline is enhanced.

Commercial uses which are open to and will attract the general public to the shoreline, such as restaurants, are appropriate within the urban area located between Downtown Kirkland and Carillon Point. These uses will enhance the opportunity for public access to this segment of the shoreline, and will compliment neighboring shoreline parks and, as a result, should be encouraged. To assure that these uses enhance the opportunity for the public to take advantage of the shoreline, these uses should include amenities where the public can view and enjoy the shoreline. These uses should also be limited and designed to assure that they do not adversely impact the natural environment and interfere with nearby uses.

Policy SA-7.6: Allow limited commercial uses, such as a hotel/motel and limited marina use, within Planned Area 3B.

Planned Area 3B is fully developed with multifamily residential uses and contains a private marina facility. The site is also used for overnight lodging. The site has also been improved with a public trail along its entire perimeter, providing public access to Lake Washington and visual access to the Yarrow Bay wetlands.

Policy SA-7.7: Non-water oriented commercial development may be allowed if the site is physically separated from the shoreline by another property or right-of-way.

There are several commercial properties which do not have direct frontage on Lake Washington, either because they are separated by right-of-way (Lake Washington Blvd NE, Lake Street, and 98th Avenue NE) or by another property. These properties should be allowed a greater flexibility of uses, given the physical separation from the waterfront area.

Policy SA-7.8: Prohibit overwater commercial development other than piers and similar features that support water dependent uses.

Overwater structures can adversely impact the shoreline environment and should be avoided, except where necessary to support water dependent uses, and then only when appropriately mitigated.

Boating Facilities

Goal SA-8: Manage boating facilities to avoid or minimize adverse impacts.

Policy SA-8.1: Locate new boating facilities and allow expansion of existing facilities at sites with suitable environmental conditions, shoreline configuration, and access.

One public marina and several private marinas are located on the lake within Kirkland. The City's public dock is located downtown at Marina Park. Large private marinas include Carillon Point Marina, Yarrow Bay Marina and Kirkland Homeport Marina. Other private marinas providing moorage for multifamily developments are also located along the shoreline.

As new boating facilities are established or existing ones expanded, the facility should be designed to:

- Meet health, safety, and welfare requirements, including provisions for pump-out facilities;

- Mitigate aesthetic impacts;
- Minimize impacts to neighboring uses;
- Provide public access;
- Assure no net loss of shoreline ecological functions and prevent other significant adverse impacts; and
- Protect the rights of navigation and access to recreational areas.

Policy SA-8.2: Require restoration activities when substantial improvements or repair to existing boating facilities is planned.

The Kirkland waterfront has been extensively modified with piers and other overwater structures. These overwater structures impact the nearshore aquatic habitat, blocking sunlight and creating large areas of overhead cover. These impacts, where they exist, should be mitigated when substantial improvements or repair to existing boating facilities are planned.

Restoration activities could include reducing or eliminating the number of boathouses and solid moorage covers, minimizing widths of piers and floats, increasing light transmission through over-water structures, enhancing the shoreline with native vegetation, improving shallow-water habitat, reducing the overall number and size of pier piles, and improving the quality of stormwater runoff.

Goal SA-9: Promote use of best management practices to control pollutants from boat use, maintenance and repair, as well as proper sewage disposal for boats and potential invasive vegetation transfer.

Marinas and the operation, maintenance and cleaning of boats can be significant sources of pollutants in water and sediments, as well as in animal and plant tissues. Significant steps have been taken at all levels of government and in the private sector to reduce the impacts of marinas and boating on the aquatic environment. The federal Clean Water Act provides the federal government with the authority to regulate the discharge of boat sewage. In addition, the Department of Ecology has developed environmentally protective guidelines for the design and siting of marinas and sewage disposal facilities. The State Parks and Recreation Commission's boater education program provides technical assistance and signage and other materials to marinas. At the local level, governments and private businesses participate in boater programs as well, educating their moorage clients and provide them with the means to dispose of their wastes properly. The City should work cooperatively with state agencies, marina operators and boat owners to continue to minimize the impacts of boating on the aquatic environment.

<u>Managing Shoreline Modifications</u>

Goal SA-10: Manage shoreline modifications to avoid, minimize, or mitigate significant adverse impacts.

Significant adverse impacts caused from shoreline modifications should be avoided, minimized, or mitigated in the following sequential order of preference:

- Avoiding the impact altogether by not taking a certain action or part of an action.
- Minimizing the impact(s) by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

- Minimizing or eliminating the impact by restoring or stabilizing the area through engineered or other methods;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
- Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
- Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Policy SA-10.1: Assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions.

Shoreline modifications are man-made alterations to the natural lake edge and nearshore environment and primarily include a variety of armoring types (some associated with fill), piers, and other in-water structures. These modifications alter the function of the lake edge, change erosion and sediment movement patterns, affect the distribution of aquatic vegetation and are often accompanied by upland vegetation loss. Impacts from these shoreline modifications can be minimized by giving preference to those types of shoreline modifications that have a lesser impact on ecological functions and requiring mitigation of identified impacts resulting from shoreline modifications.

Fill

Policy SA-10.2: Limit fill waterward of the ordinary high water mark to support ecological restoration or to facilitate water-dependent or public access uses.

Fill allows for the creation of dry upland areas by the deposition of sand, silt, gravel or other materials onto areas waterward of the ordinary high water mark. Fill has traditionally been used in the shoreline area to level or expand residential yards and, in many cases, has been associated with armoring of the shoreline. This use of fill has resulted in an alteration of the natural functions of the lake edge and has often been accompanied by a loss of upland vegetation. As a result, this use of fill should be discouraged.

Alternatively, fill can also be used for ecological restoration, such as beach nourishment, when materials are placed on the lake bottom waterward of the ordinary high water mark. This type of fill activity should be encouraged, provided that it is designed, located and constructed to improve shoreline ecological functions.

Land Surface Modification

Policy SA-10.3: Limit Land Surface Modification activities in the shoreline area.

Land Surface Modification activities are typically associated with upland development. These activities have the potential to cause erosion, siltation, increase runoff and flood volumes, reduce flood storage capacity and damage habitat and therefore should be carefully considered to ensure that any potential adverse impacts are avoided or minimized. Impacts from Land Surface Modification activities can be avoided through proper site planning, construction timing practices, and use of erosion and drainage control methods. Generally, these activities should be limited to the

maximum extent necessary to accommodate the proposed use, and should be designed and located to protect shoreline ecological functions and ecosystem-wide processes.

Dredging

Policy SA-10.4: Design and locate new shoreline development to avoid the need for dredging.

Policy SA-10.5: Discourage dredging operations, including disposal of dredge materials.

Dredging is typically associated with a reconfiguration of the lake bed or stream channel to remove sediments, expand a channel, or relocate or reconfigure a channel. For instance, dredging can be used to excavate moorage slips that have been filled in with sediments or are located in shallow water. In other cases, dredging can be used to remove accumulated sediment that has disrupted water flow and, as a result, water quality, as is the case at Juanita Beach Park.

Dredging activities can have a number of adverse impacts, such as an increase in turbidity and disturbance to or loss of animal and plant species. Dredging activities can also release nutrients in sediments, and may temporarily result in increased growth of nuisance macrophytes such as milfoil after construction is completed. Dredging can also release toxic materials into the water column. As a result, dredging activities should be limited except when necessary for habitat or water quality restoration, or to restore access, and where impacts to habitat are minimized and mitigated.

Shoreline Stabilization

Policy SA-10.6: Limit use of hard structural stabilization measures to reduce shoreline damage.

Lake Washington is an important migration and rearing area for juvenile Chinook salmon. The juvenile Chinook salmon using the Lake depend on the following habitat characteristics:

- Shoreline areas with shallow depths (>1m)
- Gentle slope
- Fine substrates such as sand and gravel
- Overhanging vegetation/small woody debris
- Small creeks with a shallow, low-gradient at the creek mouth [ii]

Remaining areas with these characteristics should be protected and maintained, while developed areas along Kirkland's shoreline should be enhanced with these habitat features, where feasible.

Bulkheads and other forms of hard stabilization measures impact the suitability of the shoreline for juvenile Chinook salmon habitat, in particular the slope, depth and substrate materials of the shoreline. Shoreline protective structures such as bulkheads create deeper water with steeper gradient and a coarser bottom substrate. Waves no longer are able to dissipate energy over distance as they hit shallower bottom, rocks, or shoreline vegetation. Rather, the wave reflects off a vertical wall, causing scouring of sediment at the base of the wall. The finer sands are removed as the gravel is eroded away and the bottom substrate becomes coarser. The result is a much deeper and steeper nearshore environment, and often elimination of a beach.

Despite these potential ecological impacts, there are some areas along the City's shoreline, especially on shallow lots with steep banks, which may need some form of shoreline armoring in order to

protect existing structures and land uses. It is the intent of this policy to require that shoreline stabilization be accomplished through the use of nonstructural measures, such as building setbacks or on-site drainage improvements, or soft structural measures, such as bioengineering or beach enhancement unless these methods are determined to be infeasible, based on a scientific or geotechnical analysis. In those circumstances where alternatives are demonstrated to not be feasible, the shoreline stabilization measures used should be located, designed, and maintained in a manner that minimizes adverse effects on shoreline ecology.

Policy SA-10.7: Design, locate, size and construct new or replacement structural shoreline protection structures to minimize and mitigate the impact of these activities on the Lake Washington shoreline.

Shoreline protective structures should be allowed to protect a legally established structure or use that is in danger of loss or substantial damage. The potential for damage must be conclusively shown, as documented by a geotechnical analysis, to be caused by shoreline erosion associated with wave action.

Where allowed, shoreline protection structures should minimize impacts on shoreline hydrology, navigation, habitat, and public access. Shoreline protective structures should be designed for the minimum height, bulk and extent necessary to address an identified hazard to an existing structure. As noted above, vegetation and nonstructural solutions should be used rather than structural bank reinforcement, unless these methods are determined to be infeasible, as documented by a geotechnical analysis.

Policy SA-10.8: Locate and design new development to eliminate the need for new shoreline modification or stabilization.

New development should be located and designed so that new structural shoreline protection features are not needed.

Policy SA-10.9: Encourage salmon friendly shoreline design during new construction and redevelopment by offering incentives and regulatory flexibility to improve the design of shoreline protective structures and revegetate shorelines.

In recent years, many bioengineered techniques have been developed to provide alternative shoreline protection methods. These features may employ the use of gravel substrate material, terraces, large flat rocks, shallow pools, logs, and vegetation to prevent erosion and provide an attractive, usable shoreline. The aim of these designs is to reduce bank hardening, restore overhanging riparian vegetation, and replace bulkheads with sand beaches and gentle slopes. These techniques can provide many ecological benefits, including:

- Less turbulence.
- Shallower grade.
- Protection from predators.
- Finer sandy bottom.
- Increased food source.

The WRIA 8 Conservation Strategy notes the importance of reducing bank hardening, restoring overhanging riparian vegetation, replacing bulkheads and riprap with sandy beaches with gentle slopes to improve the habitat for juvenile Chinook salmon[iii]. In order to facilitate the use of

alternatives to shoreline stabilization composed of concrete, riprap, or other hard structural or engineered materials, the City should identify appropriate regulatory flexibility or offer incentives to shoreline property owners to voluntarily remove bulkheads and to re-vegetate the shoreline.

Policy SA-10.10: Expand outreach to lakeside property owners about shoreline landscape design, maintenance, and armoring alternatives.

The City should evaluate different outreach and education actions to foster stewardship of shoreline property owners and the general public, including, but not limited to the following:

- Distribute educational materials on a range of topics, including salmon habitat needs, household and landscape best management practices, the value of large woody debris, the value of tree cover, and stormwater issues.
- Establish a contact list of shoreline property owners to facilitate educational outreach.
- Offer shoreline property owners workshops on "salmon friendly" design
- Use restoration projects sites for demonstration purposes and provide interpretation at restoration sites, including signage, tours, and other methods.
- Provide information about opportunities for involvement in community stewardship projects
- Offer education to landscape designers/contractors on riparian design.
- Create local informational TV spots that could run on the City's television channel.
- Focus environmental/science curricula on local watershed issues.

Public outreach efforts should focus on the opportunity to improve existing habitat, but also to the potential benefits that alternative shoreline stabilization can offer, including:

- Easier access to beach and water, especially with a kayak or other human-powered craft.
- Shallow gradient shore and water can be safer, especially for small children.
- More usable shoreline with beach and cove.
- Reduced maintenance.
- Potential for increased property values.

In-stream Structures

Policy SA-10.11: Limit the use of in-stream structures.

"In-stream structure" means a structure placed by humans within a stream waterward of the ordinary high water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. Within Kirkland, these features typically include those for flood control, transportation, utility service transmission, and fish habitat enhancement.

In-stream structures should only be used in those circumstances where it is demonstrated to provide for the protection and preservation of ecosystem- wide processes, ecological functions, and cultural resources, including, but not limited to, fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas. The location and planning of in-stream structures should be determined with due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

Breakwaters and Similar Features

Policy SA-10.12: Limit the use of breakwaters and other similar structures.

A breakwater typically refers to an off-shore structure designed to absorb and/or reflect wave energy back into the water body. Breakwaters can be floating or fixed in location and may or may not be connected to the shore. These modifications are limited within the City, but can be found at Kirkland Homeport Marina as well as at Juanita Beach Park, where a breakwater has been installed around the overwater boardwalk to shelter the swimming area. Breakwaters have the potential to adversely impact the shoreline environment, including impacts to sediment transport, deflection of wave energy, a decrease in water flushing and water exchange, to name a few. As a result, the installation of new breakwaters should be limited to those circumstances when it is shown to be necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose. In these circumstances, the feature should be carefully designed to avoid, minimize, and then mitigate any adverse ecological impacts.

Piers

Goal SA-11: Minimize impacts to the natural environment and neighboring uses from new or renovated piers.

Policy SA-11.1: Design and locate private piers so that they do not interfere with shoreline recreational uses, navigation, or the public's safe use of the Lake and shoreline.

Private piers should be located and designed to provide adequate separation from public parks, other adjoining moorage facilities and adjacent properties in order to limit any adverse impacts to safe navigation or recreational uses.

Policy SA-11.2: Design and construct new or expanded piers and their accessory components, such as boatlifts and canopies, to minimize impacts on native fish and wildlife and their habitat.

The Kirkland waterfront has been extensively modified with piers and other overwater structures. These overwater structures impact the nearshore aquatic habitat, blocking sunlight and creating large areas of overhead cover. Piers and other overwater structures also shade the lake bottom and inhibit the growth of aquatic vegetation[iv]. These types of structural modifications to shorelines are now known to benefit non-native predators (like largemouth and smallmouth bass), while reducing the amount of complex aquatic habitat formerly available to salmonids rearing and migrating through Lake Washington[v]. This can impact juvenile salmonids, in particular, due to their affinity to nearshore, shallow-water habitats. Chemical treatments of pier components, such as creosote pilings, installed prior to today's standards, have also impacted water and sediment quality in the lake.

The combined effect of an overwater structure and a dramatic change in aquatic vegetation results in a behavior modification in juvenile salmonids, which will often change course to circumvent large piers or other overwater structures rather than swimming beneath them[vi]. These behavior modifications disrupt natural patterns of migration and can expose juvenile salmonids to increased levels of predation.

Minimizing overwater coverage and associated support structures can benefit salmon. Studies

related to shading effects from varying types of pier decking indicate that grated decking provides significantly more light to the water surface than traditional decking methods and may lead to improved migratory conditions for juvenile Chinook salmon[vii].

Impact minimization measures, which have been identified by state and federal agencies, include, but are not limited to:

- Shared use of piers;
- Reducing or eliminating the number of boathouses and solid moorage covers (e.g. use of clear, translucent materials proven to allow light transmission for new canopies);
- Minimizing the size and widths of piers and floats;
- Increasing light transmission through any over-water structures (e.g. use of grated decking);
- Maximizing the height of piers above the water surface;
- Enhancing the shoreline with native vegetation;
- Improving shallow-water habitat;
- Reducing the overall number and size of pier piles; and
- Improving the quality of stormwater runoff.

Policy SA-11.3: Minimize aesthetic impacts of piers and their accessory components.

To minimize aesthetic impacts, ensure that lighting does not spillover onto the lake water surface, and minimize glare, piers should make use of non-reflective materials, minimize lighting facilities to that necessary to find the pier at night and focus illumination downward and away from the lake.

<u>Shoreline Habitat and Natural Systems Enhancement Projects</u>

Goal SA-12: Restore shoreline areas that have been degraded or diminished in ecological value and function as a result of past activities.

Policy SA-12.1: Include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement, and low impact development techniques in projects located within the shoreline, where feasible.

Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines. Such projects may include shoreline modification actions such as modification of vegetation, removal of nonnative or invasive plants, shoreline stabilization, dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

The City's shoreline has been impacted by past actions and, as a result, there are many opportunities available for restoration activities that would improve ecological functions. For example, enhancement of riparian vegetation, reductions or modifications to shoreline hardening, and improvements to fish passage would improve the ecological function of the City's shoreline. Many of these restoration opportunities exist throughout the City on private property, as well as on City property, including parks, open spaces, and street-ends. Both public and private efforts are needed to restore habitat areas. Opportunities include public-private partnerships, partnerships with other agencies and affected tribes, capital improvement projects, and incentives for private development to restore and enhance fish and wildlife habitat.

2. Shoreline Environment

Goal SA-13: Preserve, protect, and restore the shoreline environment.

Kirkland is enriched with valued natural features within the shoreline area that enhance the quality of life for the community. Natural systems serve many essential functions that can provide significant benefits to fish and wildlife, public and private property, and enjoyment of the shoreline area.

Shoreline Critical Areas

Note: The Natural Environment Chapter of the Comprehensive Plan contains a set of policies relating to critical areas, including Goals NE –1, together with related Policies NE-1.1 through NE-1.6, Goal NE-2, together with related policies NE-2.1 through NE-2.7, and Goal NE–4.

Critical areas found within the shoreline area include geologically hazardous areas, frequently flooded areas, wetlands, and fish and wildlife habitat conservation areas. Floodplains, while not a designated critical area, are also addressed in this section due to the relationship with frequently flooded areas within the City. No critical aquifer recharge areas are mapped within the City.

Policy SA-13.1: Conserve and protect critical areas within the shoreline area from loss or degradation.

Environmentally critical areas within the shoreline area are important contributors to Kirkland's shoreline environment and high quality of life. Some natural features are critical to protect in order to preserve the important ecological functions they provide. The City also regulates and restricts development within critical areas because of the hazards they present to public health and safety. This policy is intended to ensure that the ecological functions and ecosystem-wide processes of these natural systems are maintained and improved.

Policy SA-13.2: Locate and design public access within and adjacent to critical areas to ensure that ecological functions are not impacted.

While public access for educational and public access purposes is an important objective, the location and design of public access must be carefully considered to avoid impacts to critical areas.

Geologically Hazardous Areas

Policy SA-13.3: Manage development to avoid risk and damage to property and loss of life from geological conditions.

Geologically hazardous areas include landslide hazard areas, erosion hazard areas and seismic hazard areas. These areas, as a result of their slope, hydrology, or underlying soils, are potentially susceptible to erosion, sliding, damage from earthquakes or other geological events. These areas can pose a threat to health and safety, if development is not appropriately managed and the area studied as a condition of permitting construction.

Wetlands

Policy SA-13.4: Protect and manage shoreline-associated wetlands.

Wetlands are areas that, under normal conditions, are inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation typically adapted for life in saturated soils conditions. The wetlands located within the shoreline area perform many ecological functions, including habitat for fish and wildlife, flood control, and groundwater recharge, as well as surface and groundwater transport, storage and filtration. Additionally, wetlands provide opportunities for research and scientific study, outdoor education, and passive recreation.

Kirkland's shoreline contains two extensive high-quality wetland systems: the wetlands located contiguous with the shoreline at Juanita Bay Park and extending up through the Forbes Valley (Forbes 1) and the Yarrow Bay wetlands (Yarrow 1). It is estimated that these wetlands combined are over 156 acres in size. The Forbes 1 wetland has several different vegetation classes, including forested, scrub-shrub, emergent, open water, and aquatic bed. The wetland contains a variety of plant species and types, including native red alder, willow, cottonwood, salmonberry, spiraea, red-osier dogwood, skunk cabbage, buttercup, small-fruited bulrush, lady fern, soft rush, horsetail, cattail, and non-native Himalayan blackberry, reed canarygrass and purple loosestrife. Within the *Final Kirkland Shoreline Analysis Report* (2006), this system has been rated "high quality" for several functions, including habitat, water and sediment storage, water quality improvement, wave energy attenuation and bank stabilization, and nutrient and toxic compound removal.

The Yarrow Bay wetland complex similarly contains a number of wetland classes, including forested, scrub-shrub, emergent, open water, and aquatic bed. The Yarrow Bay complex also contains a mixture of plant species and types, including native red alder, willow, cottonwood, salmonberry, spiraea, red-osier dogwood, and cattail and non-native Himalayan blackberry and reed canarygrass. The *Final Kirkland Shoreline Analysis Report* (2006) also rates this system "high quality" for numerous functions.

The Forbes 1 and Yarrow 1 wetlands are also mapped as priority wetlands by Washington Department of Fish and Wildlife (WDFW) (2006). Priority wetlands are those wetlands that have "[c]omparatively high fish and wildlife density, high fish and wildlife species diversity, important fish and wildlife breeding habitat, important fish and wildlife seasonal ranges, limited availability, [and] high vulnerability to habitat alteration."

This policy is intended to ensure that the City achieves no net loss of wetlands through retention of wetland area, functions and values. Mitigation sequencing is used to ensure impacts to wetlands are avoided, where possible, and mitigated, when necessary.

Wetlands are protected in part by buffers, which are upland areas adjacent to wetlands. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into wetlands.

<u>Fish and Wildlife Habitat Conservation Areas</u>

Policy SA-13.5: Protect and restore critical freshwater habitat.

Fish and wildlife habitat conservation areas provides food, protective cover, nesting, breeding, or movement for threatened, endangered, sensitive, monitor, or priority species of plants, fish, or wildlife. Within the City, there are several areas that fall within this classification.

Lake Washington is known to support a diversity of salmonids, including Chinook salmon, steelhead trout, bull trout (listed as threatened under the Endangered Species Act), Coho salmon, sockeye salmon, and kokanee salmon.

Several streams pass through the City of Kirkland, discharging into Lake Washington. Several of these streams are known to support fish use, including Chinook (juvenile use of the mouths of several streams), Coho, sockeye salmon, and steelhead and cutthroat trout. Some of the most prominent fish-bearing streams include Yarrow Creek, Forbes Creek, and Juanita Creek, which are protected within City parks at their outlet to Lake Washington. Salmonid and other fish species are also known to inhabit other Lake Washington tributaries such as Carillon Creek.

The Forbes Creek corridor is designated by WDFW as a priority "riparian zone" because it has been determined to meet these criteria: "[h]igh fish and wildlife density, high fish and wildlife species diversity, important fish and wildlife breeding habitat, important wildlife seasonal ranges, important fish and wildlife movement corridors, high vulnerability to habitat alteration, unique or dependent species."

Both the Yarrow Bay wetlands and Juanita Bay Park extending up the Forbes Creek corridor provide excellent habitat for birds (including songbirds, raptors, and waterfowl), amphibians, mammals and even reptiles. Bald eagles and ospreys regularly perch in trees adjacent to Juanita and Yarrow Bays, and forage in the Bays. Pileated woodpeckers (a State Candidate species) also reportedly nest in the Juanita Bay wetlands, and according to the East Lake Washington Audubon Society, purple martins (a State Candidate species) used nesting gourds installed in early 2006 around the Juanita Bay. Although a bald eagle nest is mapped in the Yarrow Bay wetlands, it was last active in 1999 and the nesting pair relocated to Hunts Point. However, the mapped great blue heron nesting colony is still active.

This policy is intended to ensure that the ecological functions and ecosystem-wide processes associated with critical freshwater habitats are protected to assure no net loss, and that improvements are made through restoration activities. The City has worked to protect these valuable habitat areas through acquisition and management of public areas, as well as development controls, including protection of streams and wetlands and their associated buffers and coordination with federal and state agencies on protection issues associated with listed species.

<u>Frequently Flooded Areas and Floodplains</u>

Goal SA-14: Limit new development in floodplains.

Policy SA-14.1: Regulate development within the 100-year floodplain to avoid risk and damage to property and loss of life.

Frequently flooded areas help to store and convey storm and flood water; recharge ground water; provide important riparian habitat for fish and wildlife; and serve as areas for recreation, education, and scientific study. Development within these areas can be hazardous to those inhabiting such development, and to those living upstream and downstream. Flooding also can cause substantial damage to public and private property that result in significant costs to the public as well as to private individuals.

The primary purpose of frequently flooded areas regulations is to regulate development in the 100-year floodplain to avoid substantial risk and damage to public and private property and loss of life. Lake Washington does not have a floodplain due to its lake elevation control by the Corps. However, floodplains are designated for both Yarrow Creek wetlands in association with Yarrow Creek and the low-gradient riparian area associated with Forbes Creek.

In both cases, the potential channel migration zone is protected as wetlands associated with Lake Washington. This protection limits development and modifications in those areas where the creeks have the potential to migrate. This protection limits the potential for migration to affect existing or future structures.

Water Quality and Quantity

Note: The Natural Environment Chapter of the Comprehensive Plan contains a set of policies relating to water systems and addressing water quality and quantity, including Goal NE-2, together with related policies NE-2.1 through NE-2.7. The Utilities Chapter also contains policies addressing storm water, including Goal U-4, together with related policies U-4.1 though U-4.11.

Goal SA-15: Manage activities that may adversely impact surface and ground water quality or quantity.

While most of the storm water entering streams and the lake do not come from the shoreline jurisdiction, surface water management is still a key component of the shoreline environment, due to the potential of activities in the larger watershed basin to contribute to water quantity and quality conditions in streams and the lake.

As part of the Kirkland's Surface Water Utility, Surface Water Master Plan, and implementation of the NPDES Phase II Municipal Stormwater permit requirements, the City is pursuing activities and programs within the larger watershed basin to address flood protection, water quality improvement, and habitat protection and restoration.

Within the shoreline jurisdiction, the City can regulate development and provide education and incentives to minimize impacts to water quality and limit the amount of surface water runoff entering the lake.

Policy SA-15.1: Manage storm water quantity to ensure protection of natural hydrology patterns and avoid or minimize impacts to streams.

Native forest communities with healthy soil structure and organic contact help to manage the amount and timing of runoff water that reaches streams and lakes by intercepting, storing, and slowly conveying precipitation. As these systems are impacted and forests are replaced by impervious surfaces like roads, parking areas, and rooftops, larger quantities of water leave the developed watershed more quickly. Impervious surfaces affect the amount of water that seeps into the ground and washes into streams; they also affect how quickly the water gets there. When land is covered with pavement or buildings, the area available for rainwater and snowmelt to seep into the ground and replenish the groundwater is drastically reduced; in many urban areas it is virtually eliminated. The natural movement of water through the ground to usual discharge points such as springs and streams is altered. Instead, the natural flow is replaced by storm sewers or by more concentrated entrance points of water into the ground and surface drainages[viii].

Changing the timing and amount of water run-off can lead to too much water going directly into streams in the rainy months of winter instead of soaking into the ground. Consequently, there is not enough water in the ground to slowly release into streams in the dry months of summer. Too much water in the winter causes unnaturally swift currents that can erode stream banks and scour and simplify the stream channels, damaging fragile fish habitat. In contrast, not enough water in streams in the summer leads to water temperatures too high to support fish and isolation of fish in small pools. These fundamental changes to hydrology alter watersheds in several ways, including the following:

- The size, shape, and layout of stream channels change to accommodate the new flow regime, thus changing physical habitat conditions for aquatic species.

- Erosion increases suspended solid concentrations and turbidity in receiving properties which can impair survival of aquatic species, including salmon.

- Opportunities for soils and vegetation to filter pollutants from stormwater are reduced, leading to water quality degradation. Stormwater can also carry heavy metals, household wastes, excess nutrients, and other pollutants to the shoreline area.

- Reduced streamside vegetation can lead to increased water temperatures that reduce survival of aquatic species, including salmon. Fine sediment smothers fish eggs, impacting future populations.

Discharges into the tributary streams, such as Forbes Creek, can have a significant impact on in-stream habitat complexity, peak flow magnitude and duration, bank stability, substrate composition, and a number of other parameters.

Policy SA-15.2: Prevent impacts to water quality.

This policy is intended to prevent impacts that would result in a net loss of shoreline ecological functions, or a significant impact to aesthetic qualities or recreational opportunities.

Water is essential to human life and to the health of the environment. Water quality is commonly defined by its physical, chemical, biological and aesthetic (appearance and smell) characteristics. A healthy environment is one in which the water quality supports a rich and varied community of organisms and protects public health. Water quality influences the way in which Kirkland uses water for activities such as recreation and scientific study and education, and it also impacts our ability to protect aquatic ecosystems and wildlife habitats.

The degradation of water quality adversely impacts wildlife habitat and public health. This is particularly relevant to the shoreline, since all of the regulated surface waters, both natural and piped, are discharged ultimately to Lake Washington. The water quality impact of stormwater inputs is also significant. Stormwater runoff carries pesticides, herbicides and fertilizers applied to lawns and sports fields; hydrocarbons and metals from vehicles; and sediments from construction sites, among other things. All of these things can harm fish and wildlife, their habitats, and humans.

Presently, Lake Washington is considered at risk for chemical contamination from hydrocarbon input from the urbanized watershed. The lake has also exhibited problems with levels of fecal coliform, ammonia, and PCBs present (Final Kirkland Shoreline Analysis Report, 2006).

The City has various programs to control stormwater pollution through maintenance of public facilities, inspection of private facilities, water quality treatment requirements for new development, source control work with businesses and residents, and spill control and response. These programs are managed under the Surface Water Utility, whose goals are:

- Flood protection
- Water quality improvement, and
- Habitat protection and restoration.

Kirkland has also adopted a *Surface Water Master Plan* (2005) that sets goals and recommends actions for flood reduction, water quality improvement, and aquatic habitat restoration. This plan contains plans and programs to address water quality and high flow impacts from creeks and shoreline development through a number of mechanisms, including the following:

- Participation in WRIA 8 activities.
- Adoption of regulations and best management practices consistent with the NPDES Phase II permit requirements.
- Increased public education and outreach.
- Construction of projects that address existing flooding problems.
- Increased inspection and rehabilitation of the existing stormwater system.
- Identifying pollution "hot spots" for possible water quality treatment.
- Examining City practices and facilities to identify where water quality improvements can be made.
- Combining flow controls with in-stream habitat improvement projects in Juanita and Forbes creek watersheds.

Policy SA-15.3: Require environmental cleanup of previously contaminated shorelines.

Some of Kirkland's shorelines previously supported industrial or commercial practices that may have resulted in environmental contamination. If not addressed, environmental contamination can continue to impact the environmental quality of Kirkland's shorelines. The potential liability associated with contamination can complicate business development, property transactions or expansion on the property as well. Sites which are suspected of having past activities that may have resulted in environmental contamination should be evaluated and developers should comply with state and federal regulations and programs addressing environmental contamination, including the Model Toxics Control Act, as well as the The Department of Ecology's Voluntary Cleanup Program.

Policy SA-15.4: Support public education efforts to protect and improve water quality.

Many residential yards within the shoreline area are dominated by lawn and landscaping, which can contribute water quality contaminates such as fertilizers, herbicides, and pesticides. Fertilizers and herbicides can affect the aquatic vegetation community, stimulating overgrowth of some species which can have a multitude of deleterious effects and suppress growth of other species. Pesticides also directly affect fish. Fish use their olfactory sense to find their way home. Garden chemicals that get into our lakes and streams may mask the smell fish use for homing. Scientists have found that pesticides also interfere with the ability of salmon to reproduce and avoid predators. Other effects include impaired reproduction, skeletal deformities, decreased swimming ability, and toxicity to salmon food sources.

Presently, nutrient levels in Lake Washington do not represent a problem for salmonids (Final Kirkland Shoreline Analysis Report, 2006). Encouraging natural yard care practices and salmon-friendly landscape design can help to reduce the contaminant load into Lake Washington. Should nutrient levels continue to increase and represent a more significant problem, regulations limiting the use of pesticides, fertilizers and herbicides in the shoreline environment may become necessary.

Boat maintenance can also impact the aquatic environment with hydrocarbons, oils and other chemicals, and solvents. Providing information on boating practices, including operation and maintenance practices that can help prevent harmful substances from entering the water such as gasoline, two-stroke engine fuel, paint, and wood conditioner and other boat related substances, can also improve water quality. The City should also assist property owners by providing information on environmentally friendly methods of maintaining piers and decks.

Finally, the City should continue its efforts to increase the public's awareness of potential impacts of certain practices on water bodies and water quality, including improper disposal of hazardous materials.

Vegetation Management

Note: The Natural Environment Chapter of the Comprehensive Plan contains policies relating to vegetation, including Goal NE-3, together with related policies NE-3.1 through NE-3.3. The Natural Resources Management Plan also addresses issues relating to vegetation management in Section C, Land and Vegetation.

Goal SA-16: Protect, conserve and establish vegetation along the shoreline edge.

Policy SA-16.1: Plan and design new development or substantial reconstruction to retain or provide shoreline vegetation.

Vegetation within the shoreline environment is essential for fish and wildlife habitat, providing habitat complexity and, in the case of riparian vegetation, supporting the insects that provide an important food source for salmon[ix]. Shoreline vegetation is also important in helping to camouflage young salmon as they hide amidst root wads, beneath overhanging vegetation, or within branches that have fallen into the water[x]. Vegetation also helps to support soil stability, reduce erosion, moderate temperature, produce oxygen, and absorb significant amounts of water, thereby reducing runoff and flooding.

Presently, shoreline vegetation and riparian structure are not properly functioning within Lake Washington (Final Kirkland Shoreline Analysis Report, 2006). The intent of this policy is to protect existing shoreline vegetation, in particular existing trees, and establish new vegetation, including native trees, shrubs and groundcover, along the shoreline edge to improve shoreline vegetation and riparian structure and the ecological functions that these shoreline conditions affect.

Policy SA-16.2: Minimize tree clearing and thinning activities along the shoreline and require mitigation for trees that are removed.

As a result of the functions that shoreline vegetation provides, it is important that vegetation conservation measures be implemented along the shoreline. New trees or other appropriate restoration should be installed to replace functions of trees that are removed, either through

development or as part of on-going management of property. Tree removal or topping for the purposes of creating views should be prohibited. Limited thinning of trees to enhance views or for maintenance for health and vigor of the tree may be appropriate in certain circumstances, provided that this activity does not adversely impact tree health, ecological functions, and/or slope stability.

Applicants are encouraged to make trees that are removed available for City shoreline restoration projects.

Policy SA-16.3: Provide outreach and education materials to lakeside property owners about the importance and role of shoreline vegetation.

The City should offer shoreline property owners workshops or other materials to address the value of riparian vegetation, invasive species, erosion control, the value of large woody debris for salmon habitat, and natural yard care practices.

Public outreach efforts should focus on the opportunity to improve existing habitat and on the ability to use shoreline vegetation to:

- Create an attractive landscape that offers variety and seasonal color;
- Reduce maintenance;
- Provide privacy without sacrificing views;
- Increase property values,
- Improved water quality; and
- Reduce use by geese and other waterfowl.

Goal SA-17: Design aquatic vegetation management efforts to use a mix of various control methods with emphasis on the most environmentally sensitive methods.

Noxious weeds of Washington State are non-native, invasive plants defined by law as a plant that when established is highly destructive, competitive or difficult to control by cultural or chemical practices. These plants have been introduced intentionally and unintentionally by human actions. Most of these species have no natural enemies, such as insects or diseases, to help keep their population in check. As a result, these plants can often multiply rapidly. The two most common invasive species that are impacting Lake Washington's and Kirkland's marinas, residential waterfront owners and wildlife are Eurasian watermilfoil and white water lily. Eurasian watermilfoil, an aquatic plant found in lakes and slow-moving streams, can lower dissolved oxygen and increase pH, displace native aquatic plants, and increase water temperature.

Some aquatic weeds are controlled because they interfere with human needs such as boating and swimming in the lakes. Others pose a threat to the environment. The introduction of any non-native species has an effect on native species and habitats, although it is often difficult to predict those effects. However, there is a growing number of non-native aquatic plant and animal species whose current or potential impacts on native species and habitats are known to be significant. Potential threats may be evidenced by the degree of negative impact these species have upon the environment, human health, industry and the economy (WDFW 2001). Potential negative impacts relevant to the Lake Washington environment include:

- loss of biodiversity;
- threaten ESA-listed species such as salmon;

- alterations in nutrient cycling pathways;
- decreased habitat value of infested waters;
- decreased water quality;
- decreased recreational opportunities;
- increased safety concerns for swimmers; and
- decreased in property values.

Non-native species can be controlled through a variety of mechanisms, including mechanical and physical means (hand pulling, hand tools, bottom barrier, weed roller, mechanical cutters, and harvesters) biological controls and herbicides.

In response to the problem of invasive, non-native species entering Washington waters, laws have now been enacted requiring that all boats leaving a Washington boat launch be free of aquatic weeds and other debris, or otherwise risk being ticketed.

Aquatic vegetation management will likely take coordination on a larger-scale to be effective. As a result, the City should work with landowners and neighboring jurisdictions to develop aquatic vegetation management plans on a large-scale basis.

3. Shoreline Parks, Recreation, and Open Space

Public Parks

Note: The Comprehensive Park, Open Space and Recreation Plan provides policies and planning for parks, open space and recreating within the City of Kirkland, including waterfront parks.

Goal SA-18: Provide substantial recreational opportunities for the public in the shoreline area.

With miles of shoreline, the City has preserved significant portions of its waterfront in public ownership as parks. Kirkland's waterfront parks are the heart and soul of the City's park system. They bring identity and character to the park system and contribute significantly to Kirkland's charm and quality of life. The 13 waterfront parks stretch from the Yarrow Bay wetlands to the south to Juanita Bay and Juanita Beach Parks to the north, providing Kirkland residents year-round waterfront access. Kirkland's waterfront parks are unique because they provide citizens a diversity of waterfront experiences for different tastes and preferences. Park activities and facilities include public docks and fishing access, boat moorage, boat launches, swimming, interpretative trails, and picnicking. Citizens can enjoy the passive and natural surroundings of Juanita Bay and Kiwanis Parks and the more active swimming and sunbathing areas of Houghton and Waverly Beach Parks.

Policy SA-18.1: Acquire, develop, and renovate shoreline parks, recreational facilities, and open spaces that are attractive, safe, functional, and respect or enhance the integrity and character of the shoreline.

While Kirkland is blessed with many extraordinary waterfront parks, we should never lose sight of capturing opportunities when additional waterfront property on Lake Washington becomes available. If privately held lakefront parcels adjacent to existing beach parks or at other appropriate locations become available, effort should be made to acquire these pieces. As new shoreline parks are acquired and developed, the ecological functions of the shoreline should be protected and enhanced.

Policy SA-18.2: Encourage water-oriented activities and programs within shoreline parks.

Kirkland's recreational programs provide opportunities for small craft programs such as canoeing/kayaking, sailing, rowing, and sail-boating. Programs oriented around non-motorized boating activities provide excellent opportunities to teach recreation skills emphasizing water and boating safety and should be expanded, where appropriate.

In addition, the City awards contracts to parties interested in occupying dock space in the Kirkland Marina and Second Avenue South Dock for commercial use. The City may also expand concession facilities within its parks. These types of commercial recreational uses, which expand opportunities for the public to enjoy the shoreline, should be encouraged within the City's shoreline parks.

Policy SA-18.3: Continue use of opened waterfront street ends for public access.

Street ends are also wonderful opportunities to expand the public's access to the waterfront. The City has developed four street ends for the public's use and enjoyment. They are located along Lake Washington Boulevard at Street End Park, Settler's Landing, 5th Avenue South and Second Street West. The City has also plans in place for development of the Lake Avenue West Street End Park.

Policy SA-18.4: Explore opportunities for use and enjoyment of unopened street ends.

Presently, two waterfront street ends, 4th Street West and 5th Street West, remain unopened for public use. The ability to use these street ends for public use is presently impacted by a lack of public access from the land to the street end. If the City decides to open the street end for public use, it should work with the community and neighboring residents to prepare and adopt a development and use plan.

Policy SA-18.5: Ensure that development of recreation uses do not adversely impact shoreline ecological functions.

The development of recreational facilities has the potential to adversely impact shoreline ecological functions, for instance by increasing the amount of physical access and activity as well as overwater coverage and motorized watercraft access. As a result, recreational uses shall be appropriately sited and planned to minimize any resultant impacts.

Goal SA-19: Protect and restore publicly owned natural resource areas located within the shoreline area.

Policy SA-19.1: Manage natural areas within the shoreline parks to protect and restore ecological functions, values and features.

Kirkland is fortunate to have two of Lake Washington's largest and most important wetland and wildlife resources in its public park system: Juanita Bay Park and the Yarrow Bay wetlands, both of which have been mapped as priority wetlands by the Washington Department of Fish and Wildlife (WDFW). Both the Yarrow Bay wetlands and Juanita Bay Park extending up Forbes Creek corridor provide excellent habitat for birds, amphibians, mammals and reptiles. The outlets for three of the most prominent streams within the City, Juanita Creek, Forbes Creek and Yarrow Creek, are also located within the City's shoreline parks. These streams are known to support salmonids. In

addition, the Forbes Creek corridor has been designated by WDFW as a priority "riparian zone" due to its high fish and wildlife density, species diversity, important fish and wildlife breeding habitat, important wildlife seasonal ranges, high vulnerability to habitat alteration, and presence of unique or dependent species.

Preserving wildlife habitat, water quality, and forested areas is an important aspect of good park resource management. The existence of these natural areas also offers a variety of opportunities for aesthetic enjoyment, and passive and low-impact recreational and educational activities.

In order to protect wildlife habitat within Juanita and Yarrow Bay, it may be necessary to manage watercraft access, such as establishing restricted areas or limiting vessel speeds or other operations.

Policy SA-19.2: Promote habitat and natural resource conservation through acquisition, preservation, and rehabilitation of important natural areas, and continuing development of interpretive education programs.

The City parks also present an opportunity to implement restoration activities to improve degraded wetlands and habitat, control the spread of noxious plants, and improve the water quality of streams. As noted in the Final Kirkland Shoreline Analysis Report (December 2006), the City has initiated several studies to address restoration opportunities within Juanita Beach Park and Juanita Bay Park. In addition, the City has adopted a 20-Year Forest Restoration Plan to restore Kirkland's urban forests by removal of invasive plants and planting native species for the sustainability of the forest and its habitat. The City has acquired properties within the shoreline area near the Yarrow Bay wetlands impacted by critical areas and will continue to explore similar acquisition opportunities. The Parks Department has also established an interpretative program in Juanita Bay Park and will evaluate appropriate opportunities to expand this type of educational resource within natural areas.

Goal SA-20: Use a system of best management practices and best available technologies in the construction, maintenance and renovation of recreational facilities located in the shoreline environment.

The high visibility and use of Kirkland's waterfront parks require high levels of maintenance, periodic renovation, and security. Swimming beaches, docks, recreational moorage facilities, boat ramps, and shoreline walkways must be kept safe and in good condition for the public's enjoyment and use. Maintenance of these recreational facilities should be done in a way that minimizes any adverse effects to aquatic organisms and their habitats. Renovation of these areas also provides an opportunity to restore areas impacted by historical shoreline modifications such as alteration of shoreline vegetation, construction of bulkheads, and piers and docks.

Policy SA-20.1: Incorporate salmon friendly dock design for new or renovated docks and environmentally friendly methods of maintaining docks in its shoreline parks.

Overwater coverage and in-water structures can adversely impact ecological functions and ecosystem-wide processes. As the City renovates or constructs new overwater structures, it should incorporate impact minimization measures, such as minimizing widths of piers and floats, increasing light transmission through any over-water structures, enhancing the shoreline with native vegetation, improving shallow-water habitat, and reducing the overall number and size of pier piles, in order to minimize the impacts of these structures. Opportunities exist to reduce overwater coverage and in-water structures in a number of shoreline parks, including Juanita Beach Park, Waverly Beach Park,

the Lake Avenue West Street End Park, Marina Park, David E. Brink Park, Marsh Park, and Houghton Beach Park.

Kirkland contains a number of docks and piers within its shoreline parks, including at Houghton Beach Park, Marsh Park, David E. Brink Park, Marina Park, Waverly Beach Park, Juanita Beach Park, Juanita Bay Park, Settler's Landing, and the Second Avenue Right-of-Way in the Downtown. To maintain these docks and piers, replacement of the decking is needed on a routine basis. The City has obtained a Hydraulic Project Approval from the Washington Department of Fish and Wildlife to cover this maintenance activity and, as part of this permit, grating will be installed in lieu of existing solid boards when the boards are replaced, allowing for greater light transmission through these overwater structures.

Policy SA-20.2: Minimize impacts to the natural environment and neighboring uses from boat launch facilities to the greatest extent feasible.

Kirkland's public boat launch at Marina Park contains a one-lane facility for trailerable boats. This facility provides important access to Lake Washington, but has experienced several problems including poor traffic circulation and congestion. The City employs use regulations for this facility in order to minimize impact; these regulations are monitored under the Dock Masters program. Recently, the trailer parking was improved in Waverly Park. Continued management of the facility should be maintained in order to minimize these impacts to the greatest extent feasible.

If, in the future, the boat launch at Marina Park were to relocate, the City should cooperate with other jurisdictions to assure that this regional need is addressed with regional participation and resources.

Policy SA-20.3: Incorporate salmon-friendly landscape design practices in shoreline parks.

The City's parks and natural areas are a reflection of the values of the Kirkland community. The Parks Department strives to ensure that the public landscape remains attractive, while meeting the expectations of our users and preserving our parks and natural spaces for generations to come.

Opportunities exist to improve nearshore native vegetation in a number of shoreline parks, including Juanita Beach Park, Waverly Beach Park, the Lake Avenue West street end park, Marina Park, David E. Brink Park, Settler's Landing, Marsh Park, and Houghton Beach Park. Restoration activities could include such practices as native plant buffers at the shoreline edge, control of noxious and invasive species, implementation of sound horticultural practices, use of Integrated Pest Management (IPM) techniques, organic fertilizers, and natural lawn care practices.

Since 1998, the Kirkland Parks Department has been following an Integrated Pest Management (IPM) program. IPM is a sustainable approach to managing pests by combining cultural, mechanical, biological and chemical methods in a way that provides effective and efficient maintenance of the City's park system.

The objectives of the IPM policy are:

- Protect the health, safety and welfare of the environment and community.
- Provide efficient, cost effective maintenance of the City's park system using non-chemical controls whenever possible.

- Design new and renovate existing landscape areas that suit site conditions with sustainable maintenance practices.
- Restore, create and protect environmentally valuable areas such as wetlands, riparian areas, forests, meadows, and wildlife habitat.

The IPM decision making process brings into play multiple strategies that are utilized as tools to help implement the program, including (but not limited to):

- The use of sound horticultural practices to optimize plant health and suppress insects, disease and weed growth
- Site appropriate design with the use of disease and drought tolerant native plants.
- The use of natural control agents that act as predators or parasites of pest species.
- The use of beneficial organisms that improve plant health by enhancing the soil quality.
- The use of a variety of tools, equipment and, most importantly, people to assist with pest control.

The long-range goal of this program is for the parks and open spaces to be pesticide-free.

The Kirkland Parks Department is undertaking efforts to control invasive vegetation, including eradication and replanting with native vegetation, within Juanita Bay Park, under the recommendations contained within the *Juanita Bay Park Vegetation Management Plan* prepared in 2004 by Sheldon & Associates Inc. It divides the park into 10 management areas by habitat type that are distributed among three landscape zones based on location and historic use. Goals and objectives were established for each landscape zone, and then treatments were suggested for each management area within the landscape zones. The primary objective for the less developed landscape zones is removal of invasive species and replacement with native species, as well as supplementation of existing native vegetation to increase species and habitat diversity.

The Kirkland Parks Department has also initiated a program to install water intakes in Lake Washington for use as irrigation of Kirkland Parks. The water withdrawn from Lake Washington by Parks would be used to irrigate eight parks, which are currently provided with irrigation water from the City's potable water system. In conjunction with this project, the Parks Department plans to install vegetation along the shoreline edge.

Policy SA-20.4: ***Minimize impacts from publicly initiated aquatic vegetation management efforts.***

The Kirkland Parks Department undertakes mechanical aquatic vegetation management efforts at both Houghton and Waverly Beach Parks to control milfoil. After attempts to use biological and mechanical means to control aquatic invasive species at Juanita Bay Park, the Kirkland Parks Department has initiated an herbicide application. Aquatic vegetation management efforts can have potential negative impacts relevant to the Lake Washington environment and therefore control efforts should be designed to use a mix of various methods with emphasis on the most environmentally sensitive methods.

Policy SA-20.5: Control non-native species which impact Kirkland's shoreline.

The City Parks Department periodically undertakes programs to control non-native species along the shoreline. For instance, the Parks Department has planned improvements within Juanita Beach Park to reduce waterfowl impacts at this park. Programs aimed at controlling impacts associated with non-

native species use of the waterfront should continue. Any programs initiated should be designed to minimize any potential impacts to native species.

Policy SA-20.6: Implement Low Impact Development techniques, where feasible, in development of or renovations to recreational facilities along City shorelines.

Low impact development strives to mimic nature by minimizing impervious surface, infiltrating surface water through biofiltration and bio-retention facilities, retaining contiguous forested areas, and maintaining the character of the natural hydrologic cycle. Utilizing these practices can have many benefits, including improvement of water quality and reduction of stream and fish habitat impacts. The Parks Department has successfully incorporated low-impact development techniques with park development efforts, such as Waverly Park and Watershed Park. These techniques should also be considered for any improvements within shoreline parks.

Opportunities exist to reduce impervious surface coverage in a number of shoreline parks, including, Waverly Beach Park, Street End Park, and Marsh Park and LID should be explored as a means to reduce this coverage.

Policy SA-20.7: Reduce or modify existing shoreline armoring within Kirkland's shoreline parks to improve and restore the aquatic environment.

Bulkheads or other types of shoreline armoring can adversely impact ecological functions and ecosystem-wide processes. Kirkland contains a number of structural shoreline stabilization measures, such as concrete or rip-rap bulkheads, within its shoreline parks. Opportunities exist to reduce shoreline armoring in a number of shoreline parks, including Waverly Beach Park, Marina Park, David E. Brink Park, Settler's Landing, Marsh Park, and Houghton Beach Park. If repair or replacement is needed to these existing structures, the Parks Department should explore the use of nonstructural measures. Further, new development within the City's parks should be located and designed to eliminate the need for new shoreline modification or stabilization.

Goal SA-21: Undertake restoration opportunities to improve shoreline ecological functions and ecosystem-wide processes where feasible.

The City's shoreline parks present opportunities for restoration that would improve ecological functions, including reduction of shoreline armoring, reduction of over-water cover and in-water structures, improvement of nearshore native vegetation cover, reduction of impervious surface coverage, control of invasive vegetation, and improvement of fish passage where possible.

In addition, many projects planned under the Surface Water Management Utility would provide wetland enhancement, fish passage improvement, bioengineered streambank erosion, restoration of armored streambanks, flood abatement, and water quality improvement. While many of these projects are planned 'upstream' of shoreline jurisdiction, they can still have positive effects on the shoreline environment.

4. Shoreline Transportation

Note: The Transportation Chapter of the Comprehensive Plan contains a set of goals policies relating to vehicular, bicycle and pedestrian circulation.

Streets

Goal SA-22: Provide for safe and efficient movement of vehicles, bicycles and pedestrians within the shoreline area, while recognizing and enhancing the unique, fragile and scenic character of the shoreline area.

Policy SA-22.1: Maintain a roadway network which will efficiently and safely provide for vehicular circulation within the shoreline area.

The existing vehicular circulation system in Kirkland's shoreline area is largely complete, with several major roadways located within the shoreline jurisdiction, including portions of Lake Washington Boulevard NE/Lake Street South and Market Street/98th Avenue NE, as well as neighborhood access streets and driveways. The City should undertake improvements, as necessary, to address needed safety, capacity or efficiency improvements within the shoreline area.

Policy SA-22.2: Enhance Lake Washington Blvd NE and Lake Street S to improve their function for scenic views, and recreational activities, as well as for local access and as a commute route.

Lake Washington Boulevard is designated as a major arterial and provides the major north-south route through Kirkland south of the Central Business District and west of I-405. The Boulevard also provides local access for a substantial number of residential developments and businesses. The Boulevard functions as a major pedestrian and bicycle corridor, serving waterfront park users, joggers, strollers, and downtown shoppers. The City should continue to manage this network to meet the needs of the broad variety of users, while maintaining the scenic quality of this roadway network.

Traffic along Lake Washington Boulevard and Lake Street S has increased over time, restricting local access to and from these streets and creating noise, safety problems, and conflicts for pedestrians, bicyclists, and adjacent residents. Solutions to these problems should be sought which recognize that these streets have a scenic and recreational function which is as important as its function as a commute route. Improvements to these streets should help accommodate their broader amenity function in such a manner that the safety of all the diverse users is enhanced. Accordingly, the following improvements would be desirable:

- Widening of sidewalks or development of landscape strips or landscaped median islands to separate traffic and provide pedestrian safety.
- Installation of pedestrian crossings at intersections and adjacent to waterfront parks where safety considerations allow such installation.
- Continuation and widening of bicycle lanes.
- Limitations on the number of new curb cuts and consolidation of driveways, where possible.
- Restrictions on turning movements by installation of c-curbs or other techniques, where needed.

Policy SA-22.3: Design transportation improvement projects within the shoreline to avoid, minimize and mitigate environmental impacts.

Transportation facilities should be designed to have the least possible effect on shoreline features. When planning transportation facilities, both public and private, the environmental impacts of the

facility need to be evaluated and minimized, and appropriate mitigation included. Environmental impacts of transportation facilities and services can include wetland and stream encroachment, vegetation removal, air quality deterioration, noise pollution, and landform changes.

Policy SA-22.4: Design transportation improvement projects to maximize opportunities to improve existing shoreline ecological functions.

Transportation improvement projects located within the shoreline should include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement, and low impact development techniques, where practicable and feasible.

Policy SA-22.5: Design transportation improvement projects to enhance scenic amenities and reflect neighborhood character.

Roadways should be designed to maximize views of the lake, where feasible. Shoreline roadways should also be designed with pedestrian improvements, such as widened sidewalks, and amenities such as benches or view stations and public sign systems that identify significant features along the shoreline such as historic or scenic features, parks and public access easements. In addition, appropriate landscaping and street tree selection should be used for rights-of-way with public views to maintain the views as the vegetation matures.

Policy SA-22.6: Incorporate best management practices into road and utility maintenance activities.

Road maintenance activities are necessary to clean out sediment and debris from drainage systems, which provides benefits to salmon habitat by preventing pollutants and sediments entrapped in stormwater facilities from entering surface or groundwater. The activities can also have adverse water quality impacts, directly effecting aquatic species. In order to minimize any potential adverse impacts, the City road maintenance crews should continue to use best management practices, such as those incorporated into the Regional Road Maintenance ESA Program Guidelines, to guide their maintenance activities. The Regional Road Maintenance ESA Program Guidelines (Regional Program) describes physical, structural, and managerial best management practices designed so that when they are used, singularly or in combination, they reduce road maintenance activities' impacts on water and habitat.

<u>Pedestrian/Bicycle Circulation</u>

Goal 23: Provide the maximum reasonable opportunity for the public to view and enjoy the amenities of the shoreline area.

Policy SA-23.1: Provide a public access system that is both physical and visual, utilizing both private and public lands, consistent with the natural character, private rights and public safety.

Public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. Public access is a key component of the Shoreline Management Act and is one of the preferred uses in the shoreline area and should be encouraged, both in private and public developments and public acquisition.

Developing public access to the shoreline area has long been a priority of the City. Except for single-family residential areas or environmentally sensitive areas, the City has sought development to provide public access to the water's edge and along the shoreline as much as possible. Based on this approach, the City has made significant progress towards establishing continuous pedestrian access along the water's edge along portions of the shoreline.

In addition to these public access easements, the City has, over time, acquired many shoreline properties and designated these properties for park/open space and developed access trails.

Policy SA-23.2: Enhance and maintain pedestrian and bicycle infrastructure within the shoreline area.

Pedestrian and bicycle movement on and off roadways in the shoreline area should be encouraged wherever feasible. Access points to and along the shoreline as well as shoreline recreational facilities should be linked by pedestrian and bicycle pathways developed as close to the water's edge as reasonable.

The City should work to infill key gaps in existing shoreline access by connect existing pathways and linking existing access points to and along the shoreline, where feasible. In addition, the City should work to complete bicycle improvements by infilling gaps in existing routes and making any necessary safety improvements.

The following identifies some of the key opportunities available to improve public access. Some of the sites are located within the shoreline area, while others located outside the shoreline jurisdiction are represented since they provide an important connection to the shoreline. These connections should be sought, either through a required condition of development, or, where appropriate, through use of public funds to acquire and develop public pedestrian walkways:

- Connecting Juanita Bay Park and Juanita Beach Park. The city should seek to complete a public pedestrian walkway along the shoreline from Juanita Bay Park to Juanita Beach Park. Because of the presence of wetlands, the walkway should be designed so as to cause the least impact. The City should also pursue improvements to connect the existing bicycle lanes along Market Street to those on Juanita Drive.

- Juanita Bay Park - provide an additional connection from the causeway to the lake if protection of the natural features can be reasonably ensured.

- Forbes Valley Pedestrian Facility – provide a sidewalk adjacent to Forbes Creek Drive to connect Crestwoods Park and Juanita Bay Park.

- 9th Street West – between Market Street and 20th Street across Juanita Bay Park should be improved for both pedestrians and bicycles.

- 10th Street West - connecting Kiwanis Park and Juanita Bay Park.

- Waverly Way – should be improved with sidewalk on the west side of the street. View stations at the unopened street ends at 4th Street West and 5th Street West along Waverly Way should also be considered.

- Lake Avenue West Street End Park – complete a pedestrian pathway across Heritage Park from

Waverly Way to the Street End Park.

- In downtown south of Marina Park. In this area, buildings and parking lots interrupt the shoreline trail system that has been established on adjoining properties. Whenever possible, this shoreline trail system should be completed, in order to build upon this community amenity and open space.

- Lake Washington Blvd NE – gaps in the existing public waterfront trail with connections to the Boulevard should be a required element of all shoreline developments other than single-family homes. Public use areas also should be encouraged adjacent to the westerly margin of Lake Washington Boulevard. The Boulevard is now a popular path for pedestrians, joggers, and bicyclists, and the continued improvement of this corridor as a promenade with wide sidewalks and public use areas, such as benches or view stations, pedestrian scale lighting, and public sign systems, would be a significant public asset.

The City of Kirkland Nonmotorized Transportation Plan (NTP), together with any additional routes identified in Neighborhood Plans, maps most of the bicycle and pedestrian facilities planned for future development. The Capital Improvement budget process prioritizes when routes will receive funding for improvements.

Policy SA-23.3: Require public access to and along the water's edge and waterfront public use areas with new development or substantial redevelopment, except in limited circumstances.

In general, new development or substantial redevelopment should be required to install a public trail along the entire length of the waterfront with connections to Lake Washington Boulevard at or near each end. Areas which are available for other public waterfront activities also should be strongly encouraged. A public trail should not be required associated with the construction of an individual new single-family residence or where it is demonstrated to be infeasible due to impact to the shoreline environment or due to constitutional limitations.

Policy SA-23.4: Minimize impacts on adjacent uses and the natural environment through the appropriate design of public access. Public access should also be designed to provide for public safety.

Developments required to provide public pedestrian access should be designed to minimize the impacts of the public access to adjoining properties, where possible, such as visually or physically separating the public pedestrian access from adjacent private spaces, or by placing an intervening structural or landscape buffer. The city may permit the establishment of reasonable limitations on the time, extent, and nature of public access in order to protect the natural environment and the rights of others.

In addition, public access trails should be located and designed to assure that users are visible and that pathways are well illuminated, if open in hours of darkness.

Public access through sensitive areas should be designed to avoid or minimize impacts to sensitive areas such as wetlands or streams or their protective buffers.

Policy SA-23.5: Cooperate on interagency and public-private partnerships to preserve and enhance water trails along Kirkland's shoreline where feasible.

The Lakes-To-Locks Water Trail is a day use trail with over 100 public places in a series of lake and rivers extending from Issaquah to Elliot Bay to launch and land small non-motorized boats. The Lakes-to-Locks Water Trail contains nearly a dozen launch, landing and rest sites along Kirkland's Shoreline. The City should continue to participate in this type of partnership to increase access and use of the City's shoreline.

Air and Water Access

Goal SA 24: Provide opportunities for transportation alternatives, such as access by land or water.

Policy SA-24.1: Explore opportunities to establish passenger-only ferry service along Kirkland's shorelines.

As the roads and highways in the region have increasingly reached full capacity, there has been renewed interest in re-establishing waterborne transportation in Lake Washington, particularly passenger-only ferries. King County has established a county-wide Ferry District, which plans to consider the delivery of passenger-only ferry services serving destinations in King County, including a route between Kirkland and Seattle. The City should participate in this effort and ensure that issues affecting the businesses and residents of Kirkland, such as location, traffic and parking, and the shoreline environment, are adequately addressed.

Policy SA-24.2: Allow limited floatplane moorage in commercial shoreline areas.

Floatplanes can be used for both commercial and recreational purposes. Commercial operations can include a variety of activities including air charter and scheduled air operations. These activities are water-dependent and should be permitted within high intensity shoreline commercial districts in limited circumstances, if evaluated through a public review process and where it has been determined that the facility or operation has been designed to minimize impacts, including impacts on native fish and wildlife and their habitat, as well as impacts to shoreline views and community character. Further, the operation of these facilities should ensure protection of adjacent development and uses as well as human safety, including limiting noise and other impacts on residential uses. Floatplane facilities should be located so they do not interfere with public swimming beaches or boating corridors. The floatplane operations should comply with state and federal requirements.

Policy SA-24.3: Limit helicopter landing facilities in the shoreline area.

Helicopter operations are not water-dependent and can include significant environmental issues such as noise pollution. As a result, helicopter landing facilities should not be permitted in the shoreline area, except as needed for emergency medical airlift.

5. Shoreline Utilities

Goal SA-25: Manage the provision of public and private utilities within the shoreline area to provide for safe and healthy water and sanitary sewer service, while protecting and enhancing the water quality and habitat value of the shoreline.

Policy SA-25.1: Locate new utilities and related appurtenances outside of the shoreline area, unless this location is reasonably necessary for the efficient operation of the utility.

Utilities are services that produce and carry electric power, gas, sewage, water, communications and oil. The provision of these services and the appurtenances associated with them can create substantial impacts on the landscape and the functioning of the natural ecosystem. To minimize potential impacts, these facilities should be located outside of the shoreline area, and in particular, outside of the aquatic environment, where feasible. If necessary within the shoreline, utility facilities should be located and designed in a manner that preserves the natural landscape and shoreline ecology, and minimizes conflicts with present and planned land uses.

Alternative energy use such as solar- and wind-based energy systems should be encouraged within the shoreline environment, provided that any potential adverse impacts are minimized.

Policy SA-25.2: Minimize impacts from the location, design, and maintenance of utility facilities located within the shoreline.

Careful planning and design is required to address impacts such as soil disturbance and intrusion on the visual setting. Potential adverse impacts should be minimized through the location, design and construction techniques used. For instance, where utility systems cross shoreline areas, clearing for installation or maintenance should be kept to a minimum width necessary to minimize impacts to trees and vegetation. Utilities should also be properly installed and maintained to protect the shoreline environment and water from contamination. The City should require location of utility lines prior to construction to avoid damaging the lines, incurring biological impacts, during construction.

Upon completion of utility installation or maintenance projects on shorelines, the shoreline area should be restored to pre-project configuration, replanted with native species and provided with maintenance care until the newly planted vegetation is established.

Even with revegetation, planting restrictions may limit the species that are replanted. As a result, existing functions may not be able to be fully restored. For this reason, utility corridors should be located outside of the shoreline jurisdiction, where possible.

Policy SA-25.3: Encourage consolidation of utilities within existing rights-of-way or corridors.

In order to minimize the extent of shoreline modified by improvements, utility facilities should utilize existing transportation and utility sites, rights-of-way and corridors whenever practicable, rather than creating new corridors in the shoreline environment. Joint use of rights-of-way and corridors in shoreline areas should be encouraged.

Policy SA-25.4: Locate utility facilities and corridors to protect scenic views and prevent impacts to the aesthetic qualities of the shoreline.

Utility lines and facilities, when they must be placed in a shoreline area, should be located so that they do not obstruct or destroy scenic views. Whenever feasible, these facilities should be placed underground, or designed to do minimal damage to the aesthetic qualities of the shoreline area.

6. Shoreline Design

Goal SA-26: Maintain and enhance Kirkland's orientation to and linkages with Lake Washington.

Policy SA-26.1: Preserve public view corridors along the City's street networks and public parks.

The street and waterfront park system provides a large number of local and regional views. The view corridors that lie within the public domain are valuable for the beauty, sense of orientation, and identity that they provide to Kirkland. The views also maintain the visual connection and perception of public accessibility to the lake. As a result, these views should be kept free of obstruction.

Policy SA-26.2: Locate and design new development to provide view corridors of Lake Washington from Lake Washington Boulevard and Lake Street South south of the Central Business District.

Kirkland's history, identity and character are strongly associated with its proximity and orientation to Lake Washington. Lake Washington Boulevard and Lake Street are the streets from which most residents and visitors view the lake, providing a lasting visual impression and helping to establish the visual identity of the City. As a result, visual access to Lake Washington from Lake Washington Boulevard and Lake Street should be an integral element in the design of development along the west side of these streets. Both public and private development in these areas should be designed to include an open area that provides an unobstructed view of the water beyond. View corridors should be situated on the property to provide the widest view of the lake. Existing structures in some areas block views of the Lake. With renovation of existing structures, opening up of views should be encouraged.

The Central Business District (CBD) is a community activity area focused around its historic waterfront with extensive public use and views of the waterfront provided by public parks, street ends, public and private marinas, public access piers and shoreline public access trails. Because of this configuration and the desire to provide continuous pedestrian-oriented retail activity at the street, view corridors across private properties in the CBD should not be required.

Policy SA-26.3: Explore opportunities to provide visual and pedestrian access from Central Way and Lake Street with redevelopment efforts.

The City should explore opportunities to participate in a public/private partnership to redevelop the commercial block between Kirkland Avenue and Central Way with visual and pedestrian access from a series of at-grade pedestrian connections from Central Way and Lake Street which would open to a large public plaza constructed west of the buildings to enhance the Downtown's lake front setting

Policy SA-26.4: Design water-enjoyment uses to provide significant opportunities for public enjoyment of the aesthetic, natural and recreational amenities of the shoreline.

Water-enjoyment uses, such as restaurants, hotels or other mixed-use commercial projects, bring substantial numbers of people to the shoreline and provide opportunities for the public to enjoy shoreline amenities. These uses are encouraged in urban mixed areas, such as Kirkland's downtown area, and should be designed to respond to their shoreline location through a variety of measures, including the following:

- Architectural or site design elements that connect visually or physically to the lake.
- Orientation of views and windows to the lake
- Orientation of entries, sight lines, buildings, pathways and other design elements to the shoreline.
- Incorporating interpretative signs,
- Locating service areas away from the shoreline.
- Incorporating substantial landscaping and open space.
- Providing outdoor seating or gathering places along the shoreline.
- Designing signs to be compatible with the aesthetic quality of the shoreline.

Enhancement of views should not take precedence over vegetation conservation and, as such, removal of vegetation necessary for shoreline function should not be allowed in cases where views are partially impaired by existing vegetation. New landscaping should be appropriately designed to preserve designated view corridors.

7. Shoreline Archaeological, Historic and Cultural Resources

Goal SA-27: Identify, protect, preserve, and restore important archeological, historical, and cultural sites located in the shoreline area.

Kirkland's shoreline area has a long history, dating back to use of Juanita Bay by Native Americans and use of Lake Washington for fish harvest by the Muckleshoot Tribe. The shoreline area also contains many historic structures, including residential structures and vessels moored along the City's shoreline.

Policy SA-27.1: Prevent destruction or damage to historic, cultural, scientific or educational resources located along the shoreline.

Steps should be taken to identify, recover and preserve any artifacts or other resources that may exist along the City's shoreline. The City should work with property owners and tribal, state, and federal governments as appropriate to assess sites and make arrangements to preserve historical, cultural and archaeological values in advance of planned development. Proposed development should be designed and operated to be compatible with continued protection of the historic, cultural or archaeological resource. If development occurs in areas documented to contain archaeological resources, a site inspection or evaluation by a professional archaeologist in coordination with affected tribes should be required prior to issuance of permits. If archaeological resources are uncovered during excavation, work on the site should immediately stop and notification to the City, the state Office of Archaeology and Historic Preservation, and affected tribes should be made to determine the appropriate course of action.

Policy SA-27.2: Encourage educational projects and programs that foster an appreciation of the importance of shoreline history.

Site development plans should incorporate measures for historic, cultural and archaeological resource preservation, restoration and education with open space or recreation areas whenever possible. Wherever feasible, shoreline development should recognize the former use of much of the city's shoreline area for such uses as boat yards, ferry landings and industrial sites.

8. Restoration Planning

Goal SA-28: Implement the projects, programs and plans established within the Restoration Plan as funding and staffing resources permit.

Restoration planning is an important component of the environmental protection policy of the Shoreline Management Act. Continued improvement of shoreline ecological functions requires a comprehensive watershed approach that combines upland and shoreline projects and programs. The City of Kirkland has adopted a Restoration Plan for the City's shorelines that provides the framework for the community's efforts to restore degraded portions of the City's shorelines.

The Restoration Plan provides multiple programmatic and site-specific opportunities for restoring the City's shoreline areas that outline opportunities to achieve a net benefit in ecological conditions. Ecological benefits that would be realized by implementing this plan include: increased use of soft approaches for shoreline stability and corresponding reductions in low-functioning hard shorelines; increased organic inputs, habitat, and filtration from shoreline riparian vegetation; improved wildlife corridor connectivity; improved habitat for salmon; displacement of noxious vegetation; and eventual introduction of woody debris.

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City of Kirkland – Zoning Code

NEW CHAPTER

Chapter 83 – SHORELINE MANAGEMENT

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Authority and Purpose

83.10 Authority

1. This Chapter is adopted as part of the shoreline master program for the city. It is adopted under the authority of RCW Chapter 90.58 and WAC Chapter 173-26.

83.20 Applicability

1. The requirements of this Chapter apply to uses, activities and development within shorelines jurisdiction.
2. Designation – The waters of Lake Washington and shorelands associated with Lake Washington are designated as shorelines of statewide significance.
3. Shorelines jurisdiction
   a. The provisions of this Chapter shall apply to all shorelines of the state, all shorelines of statewide significance, and shorelands.
   b. Lake Washington, its underlying land, associated wetlands, and those lands extending landward 200 feet from its OHWM are within shorelines jurisdiction.
   c. Shorelines jurisdiction does not include buffer areas for wetlands or streams that occur within shorelines jurisdiction, except those buffers contained within lands extending landward 200 feet from the OHWM of Lake Washington.

83.30 Purpose and Intent - It is the intent of the Kirkland Shoreline Master Program (SMP) to manage the use and development of the shorelines of Kirkland, giving preference to water-dependent and water-related uses, and encouraging shoreline development and uses to avoid, minimize and mitigate impacts. In addition, the SMP, consisting of this Chapter, the Shoreline chapter of the Comprehensive Plan and the Restoration Plan, has the following purposes**:**

1. Enable current and future generations to enjoy an attractive, healthy and safe waterfront.
2. Protect the quality of water and shoreline natural resources to preserve fish and wildlife and their habitats.
3. Protect the City's investments as well as those of property owners along and near the shoreline.
4. Efficiently achieve the SMP mandates of the State.
5. In interpreting the provisions of this Chapter, preference shall be given in the following order to uses that:
   a. Recognize and protect the statewide interest over local interest;
   b. Preserve existing natural areas along the shoreline;
   c. Result in long term over short term benefit;
   d. Protect the resources and ecology of the shoreline;
   e. Increase public access to publicly owned areas of the shorelines;
   f. Increase recreational opportunities for the public in the shoreline; and
   g. Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

83.40 Relationship to other Codes and Ordinances

1. The shoreline regulations contained in this Chapter shall apply as an overlay and in addition to zoning, land use regulations, development regulations, and other regulations established by the City.

2. In the event of any conflict between these regulations and any other regulations of the City, the regulations that provide greater protection of the shoreline natural environment and aquatic habitat shall prevail.
3. Shoreline Master Program policies, found in the Shoreline Chapter of the City's Comprehensive Plan, establish intent for the shoreline regulations.

83.50 Interpretation

1. General – The Planning Director may issue interpretations of any provisions of this Chapter as necessary to administer the shoreline master program policies and regulations. The Director shall base his/her interpretations on:
   a. The defined or common meaning of the words of the provision; and
   b. The general purpose of the provision as expressed in the provision; and
   c. The logical or likely meaning of the provision viewed in relation to the Washington State Shoreline Management Act (the Act), including the purpose and intent as expressed in Chapter 90.58 RCW and the applicable guidelines as contained in WAC 173-26, and the Shoreline chapter of the Comprehensive Plan.

   Any formal written interpretations of shoreline policies or regulations shall be submitted to the Department of Ecology for review.
2. Effect – An interpretation of this Chapter will be enforced as if it is part of this code.
3. Availability – All interpretations of this Chapter, filed sequentially, are available for public inspection and copying in the Planning Department during regular business hours. The Planning Official shall also make appropriate references in this code to these interpretations.

83.60 Liberal Construction

1. As provided for in RCW 90.58.900, the Shoreline Management Act is exempted from the rule of strict construction; the Act and this Chapter shall therefore be liberally construed to give full effect to the purposes, goals, objectives, and policies for which the Act and this Chapter were enacted and adopted, respectively.

83.70 Severability

1. The standards, procedures, and requirements of this Chapter are the minimum necessary to promote the health, safety, and welfare of the residents of Kirkland. The City is free to adopt more rigorous or different standards, procedures, and requirements whenever this becomes necessary.
2. The Act and this Chapter adopted pursuant thereto comprise the basic state and City law regulating use of shorelines. In the event provisions of this Chapter conflict with other applicable City policies or regulations, the more restrictive shall prevail. Should any section or provision of this Chapter be declared invalid, such decision shall not affect the validity of this Chapter as a whole.

Definitions

83.80 Definitions

For the purposes of this Chapter the following terms shall have the meaning ascribed to them below. Terms not defined in this section shall be defined as set forth in Chapter 5 KZC.

1. Act: The Washington State Shoreline Management Act, Chapter 90.58 RCW.

2. Agriculture: Agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation.

3. Aquaculture: The cultivation of fish, shellfish, and/or other aquatic animals or plants, including the incidental preparation of these products for human use.

4. Aquatic: Those areas waterward of the OHWM.

5. Appurtenance: For the purpose of an exemption of a single family residence, also referred to as a detached dwelling unit on one lot, and its associated appurtenances from a substantial development permit, an appurtenance includes those listed under WAC 173-27-040 and tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence located landward of the OHWM and the perimeter of a wetland.

6. Accessory Dwelling Unit: See Chapter 5 KZC.

7. Average Parcel Depth: The average of the distance from the OHWM to edge of the public right-of-way or vehicular access easement, whichever provides direct access to the existing or proposed primary structure on the subject property, as measured along the side property lines or the extension of those lines where the water frontage of the subject property ends, the center of the OHWM of the subject property and the quarter points of the OHWM of the subject property. See Plate 19. For those circumstances where a parcel or a portion of a parcel does not abut a public right-of-way or easement road, the average parcel depth shall be measured from the OHWM to the edge of the west property line using the same method as described above. At the northern terminus of the 5th Ave West access easement, the average parcel depth shall be measured from the OHWM to the west side of the public pedestrian access easement providing access to Waverly Beach Park.

8. Average Parcel Width: The average of the distance from the north to the south property lines as measured along the OHWM and the front property line, or along the east and west property lines of the parcel does not abut Lake Washington.

9. Bioengineering: Project designs or construction methods that use live woody vegetation or a combination of live woody vegetation and specially developed natural or synthetic materials to establish a complex root grid within the existing bank that is resistant to erosion, provides bank stability, and maintains a healthy riparian environment with habitat features important to fish life. Use of wood structures or limited use of clean angular rock may be allowable to provide stability for establishment of the vegetation.

10. Boat: Any contrivance used or capable or being used as a means of transportation on water, except for cribs or piles, shinglebolts, booms or logs, rafts of logs, and rafts of lumber.

11. Boat House: An overwater structure designed for the storage of boats, but not including boatlift canopies.

12. Boat Launch: Graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.

13. Boat Lift: Lifts for motorized boats, kayaks, canoes and jet skis. Includes floating lifts that are designed to not contact the substrate of the Lake; ground-based lifts that are designed to be in contact with or supported by the substrate of the Lake; and suspended lifts that are designed to be affixed to the existing overwater structure with no parts contacting the substrate.

14. Boating Facilities: Facilities providing boat moorage space, fuel, or other commercial services. As used in this Chapter, boating facilities refer to the following use listings: piers, docks, moorage buoys, boatlifts and canopies serving attached, stacked and detached dwelling units and marinas and moorage facilities associated with commercial uses.

15. Breakwater: Protective structures that are normally built offshore to provide protection from wave action.

16. Buffer: The area immediately adjacent to wetlands and streams that protects these sensitive areas and provides essential habitat elements for fish and/or wildlife.

17. Buffer Setback: A setback distance of 10 feet from a designated or modified wetland or stream buffer within which no buildings or other structures may be constructed, except as provided in KZC 83.500.3 and 83.510.3. The buffer setback serves to protect the wetland or stream buffer during development activities, use, and routine maintenance occurring adjacent to these resources.

18. Bulkhead: A vertical or nearly vertical erosion protection structure placed parallel to the shoreline consisting of concrete, timber, steel, rock, or other permanent material not readily subject to erosion.

19. Canopy: A cover installed as a component of a boatlift.

20. Channel Migration Zone: The area along a river or other watercourse within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river or other watercourse and its surroundings.

21. Class A Streams: Streams that are used by salmonids. Class A streams generally correlate with Type F streams as defined in WAC 222-16-030.

22. Class B Streams: Perennial streams (during years of normal precipitation) that are not used by salmonids. Class B streams generally correlate with Type F streams (if used by non-salmonids or they contain fish habitat) or Type Np streams (if they are perennial and do not contain fish habitat) as defined in WAC 222-16-030.

23. Class C Streams: Seasonal or ephemeral streams (during years of normal precipitation) not used by salmonids. Class C streams generally correlate with Type F streams (if used by non-salmonid fish or they contain fish habitat) or Type Ns streams (if they are seasonal and do not contain fish habitat) as defined in WAC 222-16-030.

24. Commercial Use: Includes retail, office services, entertainment, recreation and/or light industrial uses, depending on the location. Retail uses are those that provide goods and/or services directly to the consumer, including service uses not usually allowed within an office use.

25. Concession Stand: A permanent or semi-permanent structure for the sale and consumption of food and beverages, and water-related products, such as sunscreen, sunglasses, and other similar products. A concession stand may include outdoor seating areas. Indoor seating and associated circulation areas shall not exceed more than 10 percent of the gross floor area of the use, and it must be demonstrated to the City that the floor plan is designed to preclude the seating area from being expanded.

26. Conditional Uses: A use, development, or substantial development that is classified as a conditional use in KZC 83.170 or that is not classified within this Chapter. Those activities identified as conditional uses or not classified in this Chapter must be treated according to the review criteria established in WAC 173-27-160.

27. Convalescent Center: See Chapter 5 KZC.

28. Critical Areas: Critical areas include the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas (streams); (d) frequently flooded areas; and (e) geologically hazardous areas. Kirkland does not contain any critical aquifer recharge areas. Critical areas may also be referred to as sensitive areas.

29. Development: A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature that interferes with the normal public use of the surface of the waters overlying lands subject to RCW 90.58 at any state of water level.

30. Dock: A structure that floats on the surface of the water, without piling supports, but that is attached to land. Typically used for boat moorage, swimming, public access, and other activities that require access to deep water.

31. Drainage Basin: A specific area of land drained by a particular Kirkland watercourse and its tributaries.

32. Dredging: The removal, displacement, or disposal of unconsolidated earth material such as sand, silt, gravel, or other submerged materials, from the bottom of water bodies, ditches, or natural wetlands; maintenance dredging and/or support activities are included in this definition.

33. Dry Land Boat Storage: A commercial service providing storage of boats and other boats on the upland portion of a property.

34. Dwelling Unit, Attached: See Chapter 5 KZC.

35. Dwelling Unit, Detached: See Chapter 5 KZC.

36. Dwelling Unit, Stacked: See Chapter 5 KZC.

37. Ecological Functions: The work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments constituting the shoreline's natural ecosystem.

38. Ecological Restoration: See Restore.

39. Ecologically Intact Shoreline: Those shoreline areas that retain the majority of their natural shoreline functions, as evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, ecologically intact shorelines are free of structural shoreline modifications, structures, and intensive human uses.

40. Ecosystem-wide Processes: The suite of naturally occurring physical and geological processes of erosion, transport, and deposition, and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat that are present and the associated ecological functions.

41. Ell: A terminal pier section oriented perpendicular to the pier walkway.

42. Feasible: An action, such as a development project, mitigation, or preservation requirement that meets all of the following conditions:

a. Can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests that have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;

b. Provides a reasonable likelihood of achieving its intended purpose; and

c. Does not physically preclude achieving the project's primary intended legal use.

The burden of proving infeasibility is on the applicant in cases where these guidelines require certain actions. In determining an action's infeasibility, the City may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

43. Ferry Terminal, Passenger-only: A docking facility used in the transport of passengers across a body of water. A ferry terminal may include accessory parking facilities, ticketing booths, and other accessory uses or structures necessary for its operation. A passenger-only ferry terminal does not include provisions for the ferrying of vehicles.

44. Fill: The addition of soil, sand, rock, gravel, sediment, earth-retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the ground elevation or creates dry land.

45. Finger pier: A narrow pier section projecting from the pier walkway, typically perpendicular to the walkway and located landward of an ell in order to form the nearshore side of a boatslip.

46 Float: A structure that floats on the surface of the water that is not attached to the shore, but that may be anchored to submerged land. Floats are typically used for swimming, diving and similar recreational activities.

47. Float Plane Landing and Moorage Facility: A place where commercially operated water-based passenger aircraft arrive and depart. May include accessory facilities, such as waiting rooms, ticketing booths and similar facilities. May be used for private or public purposes.

48. Floodplain: Synonymous with the one hundred year floodplain and means the land susceptible to inundation with a one (1) percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulations maps or a reasonable method that meets the objectives of the Shoreline Management Act.

49. Forest Practices: Any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber.

50. Frequently Flooded Areas: All areas shown on the Kirkland Sensitive Areas Maps as being within a 100-year floodplain and all areas regulated by Chapter 21.56 KMC.

51. Gabions: Structures composed of masses of rocks or rubble held tightly together by wire mesh (typically) so as to form upright blocks or walls. Often constructed as a series of overlapping blocks or walls. Used primarily in retaining earth, steep slopes or embankments, to retard erosion or wave action, or as foundations for breakwaters or jetties.

52. Geologically Hazardous Areas: Landslide, erosion and seismic hazardous areas as defined in KZC 85.13 and in WAC 365-190-080(4).

53. Geotechnical Analysis: See Geotechnical Report.

54. Geotechnical Report: A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts on the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers (or geologists) who have professional expertise about the regional and local shoreline geology and processes.

55. Grading: The movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

56. Hard Structural Shoreline Stabilization: Shore erosion control practices using hardened structures that armor and stabilize the shoreline from further erosion. Hard structural shoreline stabilization typically uses concrete, boulders, dimensional lumber or other materials to construct linear, vertical or near-vertical

faces that are located at or waterward of ordinary high water, as well those structures located on average within five (5) feet landward of OHWM. These include bulkheads, rip-rap, groins, retaining walls and similar structures.

57. Helipad: A takeoff and landing area for helicopters.

58. Houseboat: A structure designed and operated substantially as a permanently based overwater residence. Houseboats are not vessels and lack adequate self-propulsion and steering equipment to operate as a vessel. They are typically served by permanent utilities and semi-permanent anchorage/moorage facilities.

59. Impervious Surface: A hard surface water that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development; and/or a hard surface area that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam, or other surfaces that similarly impede the natural infiltration of surface and storm water runoff. Open, uncovered flow control or water quality treatment facilities shall not be considered impervious surfaces. Impervious surfaces do not include pervious surfaces as defined in this Chapter.

60. Industrial Uses: Uses such as manufacturing, assembly, processing, wholesaling, warehousing, distribution of products and high technology.

61. In-Stream Structure: A structure placed by humans within a stream or river waterward of the OHWM that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

62. Joint-use: Piers and floats that are constructed by more than one contiguous waterfront property owner or by a homeowner's association or similar group.

63. Land Division: The division or redivision of land into lots, tracts, parcels, sites or divisions for the purpose of sale, lease, or transfer of ownership.

64. Land Surface Modification: The clearing or removal of shrubs, groundcover and other vegetation, excluding trees, and all grading, excavation and filling of materials.

65. Large Woody Debris: Trunks or branches of trees that have fallen in or been placed in a water body and serve the purposes of stabilization or habitat for fish and aquatic insects.

66. Low Impact Development: Low Impact Development (LID) is a set of techniques that mimic natural watershed hydrology by slowing, evaporating/transpiring, and filtering water that allows water to soak into the ground closer to its source. The development shall meet one or more of the following objectives:

- Preservation of natural hydrology.
- Reduction of impervious surfaces.
- Treatment of stormwater in numerous small, decentralized structures.
- Use of natural topography for drainage ways and storage areas.
- Preservation of portions of the site in undisturbed, natural conditions.
- Reduction of the use of piped systems. Whenever feasible, site design should use multifunctional open drainage systems such as vegetated swales or filter strips that also help to fulfill vegetation and open space requirements.
- Use of environmentally sensitive site design and green building construction that reduces runoff from structures, such as green roofs.

67. Marina: A private or public facility providing the purchase and or lease of a slip for storing, berthing and securing motorized boats or watercraft, including both long-term and transient moorage. Marinas may include accessory facilities for providing incidental services to users of the marina, such as waste collection, boat sales or rental activities, and retail establishments providing fuel service, repair or service of boats.

68. May: Means the action is acceptable, provided it conforms to the provisions of the Shoreline Management Act, with the decision-maker having or using the ability to act or decide according to their own discretion or judgment.

69. Minor Improvements: Walkways, pedestrian bridges, benches, and similar features, as determined by the Planning Official, pursuant to KZC 83.500.3 and 83.510.3.

70. Moorage Buoy: A floating object, sometimes carrying a signal or signals, anchored to provide a mooring place away from the shore.

71. Moorage Pile: A piling to which a boat is tied up to prevent it from swinging with changes of wind or other similar functions.

72. Must: means a mandate; the action is required.

73. Neighborhood-oriented Retail Establishment: Small scale retail and service uses that provide primarily convenience retail sales and service to the surrounding residential neighborhood. The following is a nonexclusive list of neighborhood-oriented retail uses: small grocery store, drug store, hair salon, coffee shop, dry cleaner or similar retail or service uses.

74. Nonconforming Use or Development: A shoreline use or development that was lawfully constructed or established prior to the effective date of The Act or the applicable master program, or amendments thereto, but that does not conform to present regulations or policies of the program.

75. Non-Structural Flood Hazard Reduction Measures: Improvements, actions or provisions that reduce flood hazard by non structural means, such as setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures and surface water management programs.

76. Non-Water-Oriented Use: Uses that are not water-dependent, water-related, or water-enjoyment.

77. Ordinary High Water (OHW) Line: The OHW line is at an elevation of 21.8 feet for Lake Washington.

78. Ordinary High Water Mark (OHWM): The mark that will be found on all lakes and streams by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation, as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department; provided, that in any area where the OHWM cannot be found, the OHWM adjoining fresh water shall be the line of mean high water, or as amended by the State. For Lake Washington, the OHWM corresponds with a lake elevation of 21.8 feet, based on the NGVD 29 datum.

79. Outfall: A structure used for the discharge of a stormwater or sewer system into a receiving water.

80. Pervious: As opposed to impervious surfaces, these are surfaces that allow water to pass through at rates similar to pre-developed conditions. Pervious surfaces, include, but are not limited to: pervious asphalt, pervious concrete, pervious gravel, grass or pervious pavers.

81. Permitted Uses: Uses that are allowed within the applicable shoreline environment, provided that they must meet the policies, use requirements, and regulations of this Chapter and any other applicable regulations of the City or state.

82. Pier: A structure that projects over, and is raised above the water but is attached to land, and that is used for boat moorage, swimming, fishing, public access, float plane moorage, or similar activities requiring access to deep water.

83. Piling: The structural supports for piers, usually below the pier decking and anchored in the water.

84. Preserve: The protection of existing ecological shoreline processes or functions.

85. Primary Basins: The primary basins shown on the Kirkland Sensitive Areas Map.

86. Primary Structure: A structure housing the main or principal use of the lot on which the structure is situated, including a detached garage associated with the primary structure. This term shall not include accessory uses, structures or activities as defined in Chapter 5 KZC.

87. Priority Habitat: A habitat type with unique or significant value to one or more species as defined in WAC173-26-020.

88. Priority Species: Species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels based on the criteria in WAC 173-26-020.

89. Public Access: The ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline.

90. Public Access Facility: A water-oriented structure, such as a trail, pier, pedestrian bridge, boat launch, viewing platform, or fishing pier that provides access for the public to or along the shoreline.

91. Public Access Pier or Boardwalk: An elevated structure that is constructed waterward of the OHWM and intended for public use.

92. Public Pedestrian Walkway: A portion of private property subject to an easement giving the public the right to stand on or traverse this portion of the property.

93. Public Use Area: A portion of private property that is dedicated to public use and that contains one or more of the following elements: benches, tables, lawns, gardens, piers, exercise or play equipment or similar improvements or features. These elements are to provide the public with recreational opportunities in addition to the right to traverse or stand in this area.

94. Qualified Professional: An individual with relevant education and training, as determined by the Planning Official, and with at least 3 years experience in biological fields such as botany, fisheries, wildlife, soils, ecology, and similar areas of specialization, and including a professional wetland scientist.

95. Rain Garden: Rain gardens and bioretention areas are vegetation features adapted to provide on-site infiltration and treatment of stormwater runoff using soils and vegetation. They are commonly located within small pockets of residential land where surface runoff is directed into shallow, landscaped depressions; or in landscaped areas around buildings; or, in more urbanized settings, to parking lot islands and green street applications.

96. Recreational Use: Commercial and public facilities designed and used to provide recreational opportunities to the public.

97. Residential Use: Developments in which people sleep and prepare food, other than developments used for transient occupancy. As used in the Chapter, residential development includes single-family development (known as detached dwelling unit) and multifamily development (known as detached, attached or stacked dwelling units) and the creation of new residential lots through land division.

98. Restore: The reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including but not limited to revegetation, removal of intrusive shoreline structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

99. Restoration: See Restore.

100. Revetment: A shoreline protective structure constructed on a slope, and used to prevent erosion.

101. Riparian area: A transition area between the aquatic ecosystem and the adjacent upland area that supports a number of shoreline ecological functions and processes, including bank stability, the recruitment of woody debris, leaf litter fall, nutrients, sediment filtering, shade, habitat and other riparian features that are important to both riparian forest and aquatic system conditions.

102. Salmonid: A member of the fish family salmonidae, including chinook, coho, chum, sockeye, and pink salmon; rainbow, steelhead, and cutthroat trout; brown trout; brook and dolly varden char, kokanee, and white fish.

103. Secondary Basins: The secondary basins depicted on the Kirkland Sensitive Areas Map.

104. Shall: Means a mandate; the action must be taken.

105. Shorelands: Those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the OHWM; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters that are subject to the provisions of the Shoreline Management Act; the same to be designated as to location by the Department of Ecology.

106. Shoreland Areas: See Shorelands.

107. Shoreline Functions: See Ecological Functions.

108. Shoreline Habitat and Natural Systems Enhancement Projects: Activities conducted for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines. The following is a nonexclusive list of shoreline habitat and natural systems enhancement projects: modification of vegetation, removal of non-native or invasive plants, shoreline stabilization, dredging and filling - provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

109. Shoreline Modification: Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element, such as a dike, breakwater, pier, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

110. Shoreline Setback: The distance measured in feet that a structure or improvement must be located from the OHWM.

111. Shoreline Stabilization: Means for protecting shoreline upland areas and shoreline uses from the effects of shoreline wave action, flooding or erosion. Shoreline stabilization includes structural and non-structural methods, riprap, bulkheads, gabions, jetties, dikes and levees, flood control weirs, and bioengineered walls or embankments.

112. Shorelines: All of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them: except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

113. Shorelines of Statewide Significance: Those lakes, whether natural, artificial, or a combination thereof, with a surface acreage of one thousand acres or more measured at the OHWM and those natural rivers or segments thereof where the mean annual flow is measured at one thousand cubic feet per second or more. Definition is limited to freshwater areas in Western Washington.

114. Should: Means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and the Shoreline Rules, against taking the action.

115. Sign, Interpretive: A permanent sign without commercial message, located on a publicly-accessible site, that provides public educational and interpretive information related to the site on which the sign is located, such as information on natural processes, habitat restoration programs, or cultural history, or that is associated with an adopt-a-stream, adopt-a-park or similar agency-sponsored program.

116. Significant Tree: See Chapter 5 KZC.

117. Significant Vegetation Removal: The removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not

constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

118. Skirting: Vertical boards along the edge of a pier extending downward.

119. Soft Structural Shoreline Stabilization Measures: Shore erosion control and restoration practices that contribute to restoration, protection or enhancement of shoreline ecological functions. Soft shoreline stabilization typically includes a mix of gravels, cobbles, boulders, logs and native vegetation placed to provide shore stability in a non-linear, sloping arrangement.

120. Streams: Areas where surface waters produce a defined channel or bed that demonstrates clear evidence of the passage of water, including but not limited to bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. Streams do not include irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses, unless they are used by salmonids or convey a naturally occurring stream that has been diverted into the artificial channel.

121. Structural Flood Hazard Reduction Measures: Improvements or activities that reduce flood hazard by structural means, such as dikes, levees, revetments, floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program.

122. Structural Shoreline Stabilization: Means for protecting shoreline upland areas and shoreline uses from the effects of shoreline wave action, flooding or erosion that incorporate structural methods, including both hard structural shoreline stabilization methods and soft structural shoreline stabilization measures.

123. Substantial Development: As defined in the Washington State Shoreline Management Act (SMA) found in 90.58 RCW, and WAC 173-27-030 and 173-27-040.

124. Transportation Facilities: Facilities that include street pavement, curb and cutter, sidewalk and landscape strip as regulated under Chapter 110 KZC.

125. Tour Boat Facility: A moorage pier designed for commercial tour boat usage.

126. Tree: A woody plant with one main trunk at a minimum height of 12 feet measured from the existing ground at maturity, having a distinct head in most cases. The City's Urban Forester shall have the authority to determine whether any specific woody plant shall be considered a tree or a shrub.

127. Upland: Generally described as the dry land area above and landward of the OHWM, but not including wetlands.

128. Utilities: Services, facilities and infrastructure that produce, transmit, carry, store, process or dispose of electric power, gas, water, sewage, communications, oil, storm water, and similar services and facilities.

129. Utility Production and Processing Facilities: Facilities for the making or treatment of a utility, such as power plants and sewage treatment plants or parts of those facilities.

130. Utility Transmission Facilities: Infrastructure and facilities for the conveyance of services, such as power lines, cables, and pipelines.

131. View Corridor: An open area of the subject property that provides views unobstructed by structures an across the subject property from the adjacent right-of-way to Lake Washington.

132. Water-Dependent Use: A use or portion of a use that cannot exist in a location that is not adjacent to the water and that is dependent on the water by reason of the intrinsic nature of its operation.

133. Water-Enjoyment Use: A recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and that through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public

and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that foster shoreline enjoyment.

134. Water-Oriented Use: A use that is water-dependent, water-related, or water-enjoyment or a combination of such uses.

135. Water Quality: The physical characteristics of water within shorelines jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this Chapter, the term "water quantity" refers only to development and uses regulated under this Chapter and affecting water quantity, such as impermeable surfaces and storm water handling practices. Water quantity, for purposes of this Chapter, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

136. Water-Related Use: A use or portion of a use that is not intrinsically dependent on a waterfront location, but whose economic viability is dependent upon a waterfront location because:

a. The use has a functional requirement for a waterfront location, such as the arrival or shipment of materials by water or the need for large quantities of water; or

b. The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes it services less expensive and/or more convenient.

137. Watershed: A region or area bounded on the periphery by a parting of water and draining to a particular watercourse or body of water.

138. Watershed Restoration Plan: A plan, developed or sponsored by the State Department of Fish and Wildlife, the State Department of Ecology, the State Department of Natural Resources, the State Department of Transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment, drainage area, or watershed for which agency and public review has been conducted pursuant to Chapter 43.21C RCW, the State Environmental Policy Act.

139. Watershed Restoration Project: A public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or a part of the plan and consists of one or more of the following activities:

a. A project that involves less than ten (10) miles of streamreach, in which less than twenty-five (25) cubic yards of sand, gravel, or soil is removed, imported, disturbed or discharged, and in which no existing vegetation is removed except as minimally necessary to facilitate additional plantings;

b. A project for the restoration of an eroded or unstable stream bank that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or

c. A project primarily designed to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the state, provided that any structure, other than a bridge or culvert or instream habitat enhancement structure associated with the project, is less than two hundred (200) square feet in floor area and is located above the OHWM of the stream.

140. Water Taxi: A boat used to provide public transport for passengers, with service scheduled with multiple stops or on demand to many locations. A water taxi does not include accessory facilities, such as ticketing booths, and does not include the transport of vehicles.

141. Wetlands: Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soils conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, retention and/or detention facilities, wastewater treatment facilities, farm ponds, and landscape

amenities, or those wetlands created after July 1, 1990 (adoption date of GMA), that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands do include those artificial wetlands intentionally created from non-wetland sites as mitigation for the conversion of wetlands.

142. Wetland Rating: Wetlands shall be rated according to the *Washington State Wetland Rating System for Western Washington* (Department of Ecology 2004, or as revised). This document contains the definitions, methods and a rating form for determining the categorization of wetlands below:

a. Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. Category I wetlands include Natural Heritage wetlands, bogs, mature and old growth forested wetlands, and wetlands that score at least 70 points on the rating form.

b. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands score between 51 and 69 points on the rating form.

c. Category III wetlands have a moderate level of function, scoring between 30 and 50 points on the rating form.

d. Category IV wetlands have the lowest levels of functions (scores less than 30 points on the rating form) and are often heavily disturbed. These are wetlands that can often be replaced, and in some cases improved. However, replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.

Shoreline Environment Designations and Statewide Significance

83.90 Shorelines Jurisdiction and Official Shoreline Map

1. Shoreline Map -

   a. The adopted Shoreline Environment Designations Map is the graphic representation of the City's shorelines that are regulated by this Chapter. The map, or set of maps, entitled City of Kirkland Shoreline Environment Designation Map and adopted by ordinance is hereby adopted as part of this code. See Chapter 141 KZC for information regarding amending this map.

   b. The adopted shoreline map identifies shoreline environment designations and the extent of shorelines jurisdiction.

      1) Extent of Shorelines jurisdiction - The shorelines jurisdiction as depicted on the adopted Shoreline Environment Designations Map is intended to depict the *approximate* location and extent of known shorelands. In determining the exact location of shorelines jurisdiction, the criteria contained in RCW 90.58.030(2) shall be used. For Lake Washington, the OHWM corresponds with a lake elevation of 21.8 feet. The extent of shorelines jurisdiction on any individual lot, parcel or tract is to be determined by a field investigation and a survey and is the sole responsibility of the applicant. The location of the OHWM shall be included in shoreline permit application submittals to determine the extent of shorelines jurisdiction for review and approval by the Planning Official.

      2) Interpretation of Shoreline Environment Designations - The following shall be used to interpret the boundary of shoreline environment designations:

         a) Following Property Lines – Where a shoreline environment designation boundary is indicated as approximately following a property line, the property line is the shoreline environment designation boundary.

         b) Following Streets – Where a shoreline environment designation boundary is indicated as following a street, the midpoint of the street right-of-way is the shoreline environment designation boundary, except as follows:

            i) The portion of the public right-of-way known as 98th Avenue NE located within 200 feet of the OHWM is designated wholly as Urban Mixed.

            ii) Waterfront street ends, where the public right-of-way is designated wholly under one shoreline environment.

         c) Wetlands – Where an associated wetland boundary extends beyond the area depicted on the Shoreline Environment Designation Map, the additional wetland area shall be designated the same shoreline environment as the adjoining wetland area located on the shoreline map.

         d) Lakes – The Aquatic environment designation boundary extends into Lake Washington to the full limit and territorial extent of the police power, jurisdiction and control of the City of Kirkland.

         e) Other Cases – Where a shoreline environment designation boundary is not indicated to follow a property line or street, the boundary line is as follows:

            i) The transition of the shoreline environment designation from Urban Conservancy to Urban Mixed at Juanita Beach Park occurs at a point measured 75 feet east of the OHWM of Juanita Creek.

            ii) The transition of the shoreline environment designation from Urban Conservancy to Urban Residential west of Juanita Beach Park occurs at a point measured 75 feet west of the OHWM of Juanita Creek.

f) Classification of Vacated Rights-of-Way – Where a right-of-way is vacated, the area comprising the vacated right-of-way will acquire the classification of the property to which it reverts.

g) Undesignated Properties - Any shoreline areas not mapped and/or designated shall be assigned an Urban Conservancy designation, except wetlands as noted in KZC 83.90 2)c) above.

2. Shoreline Environment Designations -

a. Sections 83.100 through 83.150 establish the six (6) shoreline environment designations used in the City of Kirkland and their respective purposes, designation criteria, and management policies. Sections 83.180 through 83.550 then establish the different regulations that apply in these different environmental designations.

b. The management policies contained in the Shoreline chapter of the Comprehensive Plan shall be used to assist in the interpretation of these regulations.

83.100 Natural

1. Purpose - To protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. The Natural shoreline environment also protects shoreline areas possessing natural characteristics with scientific and educational interest. These systems require restrictions on the intensities and types of land uses permitted in order to maintain the integrity of the ecological functions and ecosystem-wide processes of the shoreline environment.

2. Designation Criteria – A Natural shoreline environment designation should be assigned to shoreline areas if any of the following characteristics apply:

a. The shoreline is ecologically intact and, therefore, currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;

b. The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or

c. The shoreline is unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.

83.110 Urban Conservancy

1. Purpose - To protect and restore ecological functions of open space, flood plain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

2. Designation Criteria - An Urban Conservancy shoreline environment designation should be assigned to shoreline areas appropriate and planned for development that is compatible with maintaining or restoring the ecological functions of the area, that are not generally suitable for water-dependent uses and that lie in incorporated municipalities or urban growth areas if any of the following characteristics apply:

a. They are suitable for water-related or water-enjoyment uses;

b. They are open space, flood plain or other sensitive areas that should not be more intensively developed;

c. They have potential for ecological restoration;

d. They retain important ecological functions, even though partially developed; or

e. They have the potential for development that is compatible with ecological restoration.

83.120 Residential - L

1. Purpose - To accommodate low-density residential development and appurtenant structures that are consistent with this Chapter.
2. Designation Criteria - A Residential - L shoreline environment designation should be assigned to shoreline areas inside urban growth areas, as defined in RCW 36.70A.110, and incorporated municipalities if they are predominantly single-family residential development or are planned and platted for low-density residential development, unless these areas meet the designation criteria for the Natural shoreline environment designation.

83.130 Residential - M/H

1. Purpose - To accommodate medium and high-density residential development and appurtenant structures that are consistent with this Chapter. An additional purpose is to provide appropriate public access and recreational uses, as well as limited water-oriented commercial uses that depend on or benefit from a shoreline location.
2. Designation Criteria - A Residential - M/H shoreline environment designation should be assigned to shoreline areas inside urban growth areas, as defined in RCW 36.70A.110, and incorporated municipalities if they are predominantly multifamily residential development or are planned and platted for medium or high-density residential development, unless these properties meet the designation criteria for the Natural or Urban Conservancy shoreline environment designation.

83.140 Urban Mixed

1. Purpose - To provide for high-intensity land uses, including residential, commercial, recreational, transportation and mixed-used developments. The purpose of this environment is to ensure active use of shoreline areas that are presently urbanized or planned for intense urbanization, while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.
2. Designation Criteria - An Urban Mixed shoreline environment designation should be assigned to shoreline areas within incorporated municipalities and urban growth areas if they currently support high-intensity uses related to commerce, transportation or navigation; or are suitable and planned for high-intensity water-oriented uses.

83.150 Aquatic

1. Purpose - To protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.
2. Designation Criteria - An Aquatic shoreline environment designation should be assigned to lands waterward of the OHWM.

Uses and Activities in the Shoreline Environment

83.160 User Guide

1. Explanation of Uses Table

   The table contained in KZC 83.170 identifies uses and activities and defines whether those uses are prohibited, permitted by application for Exemption or Shoreline Substantial Development Permit, or permitted by a Shoreline Conditional Use Permit. If a use is not specifically listed, then it may be considered through a Shoreline Conditional Use Permit (see Chapter 141 KZC). The following symbols apply:

   a. "X" means that the use or activity is prohibited in the identified Shoreline Environment. Shoreline uses, activities, or conditions listed as prohibited shall not be authorized through a variance, conditional use permit, or any other permit or approval.

   b. "SD" means that the use or activity may be permitted by approval of the Planning Official through a Letter of Shoreline Exemption (see KZC Chapter 141) or through a Shoreline Substantial Development Permit (see Chapter 141 KZC).

   c. "CU" means that the use or activity may be permitted by approval of the Planning Official and Department of Ecology through a Shoreline Conditional Use Permit (see Chapter 141 KZC). Uses that are not specifically prohibited under KZC 83.170 may be authorized through a Shoreline Conditional Use Permit.

      Shoreline Variances (see Chapter 141 KZC) are intended only to grant relief from specific bulk, dimensional or performance standards in this Chapter, NOT to authorize shoreline uses and activities. They are therefore not included in KZC 83.170.

2. See KZC 83.370 for federal and state approval.

3. If a use is permitted under KZC 83.170, but is not permitted under Chapters 5-60 KZC for those zones within the shorelines jurisdiction, then the more restrictive use standard shall apply.

83.170 Shoreline Environments, Permitted and Prohibited Uses and Activities Chart

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
SHORELINE USE						
Resource Land Uses						
Agriculture	X	X	X	X	X	X
Aquaculture	X	X	X	X	X	X
Forest practices	X	X	X	X	X	X
Mining	X	X	X	X	X	X
Commercial Uses						
Water-dependent uses						
Float plane landing and mooring facilities[2]	X	X	X	X	CU	See adjacent upland environments
Any water-dependent Retail Establishment other than those specifically listed in this chart, selling goods or providing services.	X	SD[3]	X	X	SD	See adjacent upland environments
Water-related, water-enjoyment commercial uses						

[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemptions. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and Chapter 83 KZC.
[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[2] Limited to water-based aircraft facilities for air charter operations.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Any water-oriented Retail Establishment other than those specifically listed in this chart, selling goods or providing services.	X	SD[3]	X	X	SD	X

[3] Permitted as an accessory use to a Public Park.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	Natural	Urban Conservancy	Residential - L	Residential – M/H	Urban Mixed	Aquatic
Retail Establishment providing new or used Boat Sales or Rental	X	SD[3]	X	CU[4,6]	SD[5]	See adjacent upland environments
Retail establishment providing gas and oil sale for boats	X	X	X	CU[4,6]	CU[6]	See adjacent upland environments
Retail establishment providing boat and motor repair and service	X	X	X	CU[4,6]	CU[6]	X
Restaurant or Tavern[7]	X	X	X	CU[4]	SD	X
Concession Stand	X	SD[3]	X	X	SD[3]	X
Entertainment or cultural facility	X	CU[8]	X	X	SD	X
Hotel or Motel	X	X	X	CU[9]/X	SD	X

[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[3] Permitted as an accessory use to a Public Park.
[4] Permitted if located on the west side of Lake Washington Lake Blvd NE/Lake St S south of Lake Avenue West and north of NE 52nd Street.
[5] Permitted in the Juanita Business District or as an accessory use to a marina.
[6] Accessory to a marina only.
[7] Drive-in or drive-through facilities are prohibited.
[8] Use must be open to the general public.
[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[9] Permitted in Planned Area 3B if allowed through the Lakeview Neighborhood Plan.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Nonwater-oriented uses						
Any Retail Establishment other than those specifically listed in this chart, selling goods, or providing services including banking and related services	X	X	X	X	SD[10]	X
Office Uses	X	X	X	X	SD[10]	X
Neighborhood-oriented Retail Establishment	X	X	X	CU[11]	SD[10]	X
Private Lodge or Club	X	X	X	X	SD[10]	X
Vehicle Service Station	X	X	X	X	X	X
Automotive Service Center	X	X	X	X	X	X
Dry land boat storage	X	X	X	X	X	X

[10] Permitted as part of mixed-use development containing water-dependent uses, where there is intervening development between the shoreline and the use, or if located on the east side of Lake Washington Blvd NE/Lake St S or the east side of 98th Avenue NE.
[11] Permitted if located on the east side of Lake Washington Blvd NE between NE 60th Street and 7th Ave S.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Industrial Uses						
Water-dependent uses	X	X	X	X	X	X
Water-related uses	X	X	X	X	X	X
Nonwater-oriented uses	X	X	X	X	X	X
Recreational Uses						
Water-dependent uses						
Marina[12]	X	CU	X	SD	SD	See adjacent upland environments
Piers, docks, boat lifts and canopies serving Detached Dwelling Unit[12]	X	X	SD	SD	SD[13]	
Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units[12]	X	X	X	SD	SD	
Float	X	SD[3]	X	X	SD[3]	
Tour Boat Facility	X	X	X	X	SD[14]	
Moorage buoy[12]	X	SD	SD	SD	SD	

[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this chapter.
[12] No boat shall be used as a place of habitation.
[13] Permitted if located south of NE 60th Street only.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Public Access Pier or Boardwalk	CU	SD	SD	SD	SD	
Boat launch (for motorized boats)	X	X	X	X	CU	
Boat launch (for non-motorized boats)	SD	SD	SD	SD	SD	
Boat houses or other covered moorage not specifically listed	X	X	X	X	X	
Swimming beach and other public recreational use	CU	SD	SD	SD	SD	
Any water-dependent recreational development other than those specifically listed in this chart	CU	SD	SD	SD	SD	
Water-related, water-enjoyment uses						
Any water-oriented recreational development other than those specifically listed in this chart	X	CU	CU	CU	SD	X

[12] No boat shall be used as a place of habitation.
[3] Permitted as an accessory use to a Public Park.
[13] Permitted if located south of NE 60th Street only.
[14] Permitted as an accessory use to a Marina or Public Park only.
[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Other Public Park Improvements[15]	CU	SD	SD	SD	SD	X
Public Access Facility	SD[16]	SD	SD	SD	SD	See adjacent upland environ ments
Nonwater-oriented uses						
Nonwater-oriented recreational development.	X	X	X	X	SD[10]	X
Residential Uses						
Detached dwelling unit	CU	CU	SD	SD	SD[13]	X
Accessory dwelling unit[17]	X	X	SD	SD	SD[13]	X
Detached, Attached or Stacked Dwelling Units (multi-family units on one lot)	X	X	X	SD	SD	X

[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[15] This use does not include other public recreational uses or facilities specifically listed in this chart.
[16] Limited to trails, viewpoints, interpretative signage and similar passive and low-impact facilities.
[10] Permitted as part of mixed-use development containing water-dependent uses, where there is intervening development between the shoreline and the use, or if located on the east side of Lake Washington Blvd NE/Lake St S or the east side of 98th Avenue NE.
[13] Permitted if located south of NE 60th Street only.
[17] One accessory dwelling unit (ADU) is permitted subordinate to a detached dwelling unit.
[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[10] Permitted as part of mixed-use development containing water-dependent uses, where there is intervening development between the shoreline and the use, or if located on the east side of Lake Washington Blvd NE/Lake St S or the east side of 98th Avenue NE.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Houseboats	X	X	X	X	X	X
Assisted Living Facility[18]	X	X	X	CU	SD	X
Convalescent Center or Nursing Home	X	X	X	CU[19]	SD[20]	X
Land division	SD[21]	SD[21]	SD	SD	SD	X
Institutional Uses						
Government Facility	X	SD	SD	SD	SD	X
Community Facility	X	X	X	X	SD	X
Church	X	X	X	CU[19]	SD[20]	X
School or Day-Care Center	X	X	X	CU[19]	SD[10]	X
Mini-School or Mini-Day-Care Center	X	X	X	SD[19]	SD[10]	X
Transportation						
Water-dependent						
Bridges	CU	CU	SD	SD	SD	See adjacent upland environments
Passenger-only Ferry terminal	X	X	X	X	CU	
Water Taxi	X	SD[22]	SD[22]	SD[22]	SD[22]	

[18] A nursing home use may be permitted as part of an assisted living facility use.
[19] Permitted if located on the east side of Lake Washington Blvd NE/Lake St S, or the east side of 98th Avenue NE.
[20] Not permitted in the Central Business District. Otherwise, permitted if located on the east side of Lake Washington Blvd NE/Lake St S, the east side of 98th Avenue NE or on the south side of NE Juanita Drive.
[21] May not create any new lot that would be wholly contained within shoreland area in this shoreline environment.
[22] Permitted as an accessory use to a marina or a public park.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Nonwater-oriented						
Arterials, Collectors, and neighborhood access streets	CU	SD[23]/CU	SD	SD	SD	X
Helipad	X	X	X	X	X	X
Utilities						
Utility production and processing facilities	X	CU[24]	CU[24]	CU[24]	CU[24]	X
Utility transmission facilities	CU[24]	SD[24]	SD[24]	SD[24]	SD[24]	CU[24]
Personal Wireless Service Facilities[25]	X	SD	SD	SD	SD	X
Radio Towers	X	X	X	X	X	X
SHORELINE MODIFICATIONS						
Breakwaters/jetties/rock weirs/groins	X	X	X	SD[26]/CU	SD[26]/CU	See adjacent upland environments
Dredging and dredge materials disposal	SD[26]/CU	SD[26]/CU	SD[26]/CU	SD[26]/CU	SD[26]/CU	
Fill waterward of the OHWM	SD[26]/CU	SD[26]/CU	SD[26]/CU	SD[26]/CU	SD[26]/CU	

[23] Construction of pedestrian and bicycle facilities only.

[24] This use may be allowed provided there is no other feasible route or location. Must be underground unless not feasible.
[25] Wireless towers are not permitted.
[1] A development activity may also be exempt from the requirement to obtain a substantial development permit. See Chapter 141 KZC addressing exemption. If a development activity is determined to be exempt, it must otherwise comply with applicable provisions of the Act and this Chapter.
[26] Permitted under a substantial development permit when associated with certain shoreline stabilization measures, and habitat and natural system enhancement projects. See KZC 83.300.10 and KZC 83.350.

The chart is coded according to the following legend. SD = Substantial Development[1] CU = Conditional Use X = Prohibited; the use is not eligible for a Variance or Conditional Use Permit	**Natural**	**Urban Conservancy**	**Residential - L**	**Residential – M/H**	**Urban Mixed**	**Aquatic**
Land surface modification	SD[26]/CU	SD	SD	SD	SD	
Shoreline habitat and natural systems enhancement projects	SD	SD	SD	SD	SD	
Hard Structural Shoreline Stabilization	X	CU	SD	SD	SD	
Soft Structural Shoreline Stabilization Measures	X	SD	SD	SD	SD	

Use Specific Regulations

83.180 Shoreline Development Standards

1. General –
   a. See KZC 83.40 for relationship to other code and ordinances.
   b. Development standards specified in this Chapter shall not extend beyond the geographic limit of the shorelines jurisdiction, except as noted in the provisions contained below.
2. Development Standards Chart –
   a. The following chart establishes the minimum required dimensional requirements for development. At the end of the chart are footnotes pertaining to certain uses and activities.
   b. KZC 83.170 contains an overview of the activities permitted under each of the use classifications contained in the development standards chart.
   c. KZC 83.180 through KZC 83.550 contains additional standards for the uses and activities, including provisions for no net loss and mitigation sequencing in KZC 83.360 and federal and state approval in KZC 83.370.

SHORELINE DEVELOPMENT STANDARDS

83.180. 3

DEVELOPMENT STANDARDS	**SHORELINE ENVIRONMENT**					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Residential Uses						
Detached Dwelling Units and Accessory Dwelling Units						
Minimum Lot Size	n/a	12,500 sq. ft.	12,500 sq. ft.	12,500 sq. ft. except for the following: • 5,000 sq. ft. if located on east side of Lake St S, at 7th Ave S; and • 7,200 sq. ft. if subject to the Historic Preservation provisions of KMC 22.28.048	3,600 sq. ft.	3,600 sq. ft.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Shoreline Setback[1]	n/a	Thirty (30) % of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet, except as otherwise specificall y allowed through this Chapter.	Outside of shorelines jurisdictional area, if feasible, otherwise 50'.	30% of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet, except as otherwise specifically allowed through this Chapter. For those properties located along Lake Ave W south of the Lake Ave W Street End Park, the following standard shall apply: If dwelling units exist immediately adjacent to both the north and south	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25' or b.15% of the average parcel depth.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
				property lines of the subject property, then the shoreline setback of the primary structure on the subject property is the average of the shoreline setback of these adjacent dwelling units, but at a minimum width of 15 feet. If a dwelling unit is not adjacent to the subject property, then the setback of the property without a dwelling unit for the purposes of determining an average setback shall be based upon 30% of the average parcel depth. Also see KZC 83.190.2.		
Maximum Lot Coverage	n/a	50%	50%	50%	80%	80%, except in CBD zone 100% less area for shoreline vegetation if required.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Maximum Height of Structure[2]	n/a	25' above ABE[3]	35' above ABE	30' above ABE	35' above ABE	35' above ABE
Other Residential Uses (Attached, Stacked, and Detached Dwelling Units/multifamily; Assisted Living Facility; Convalescent Center or Nursing Home)						
Maximum Density[4]	n/a	n/a	n/a	n/a	3,600 sq. ft./unit, except 1,800 sq. ft./unit for up to 2 dwelling units if the public access provisions of KZC 83.420 are met	No minimum lot size in the CBD zones; otherwise 1,800 sq. ft./unit
Shoreline Setback[1]	n/a	n/a	n/a	n/a	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25' or b.15% of the average parcel depth. In the PLA 15A zone located south of NE 52nd Street, a mixed-use development approved under a master plan shall comply with the Master Plan provisions.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.
[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4.
[3] Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC83.190.4.c.1
[4] For density purposes 2 assisted living units shall be constitute one dwelling unit.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Maximum Lot Coverage	n/a	n/a	n/a	n/a	80%	80%, except in CBD zone 100% less area for shoreline vegetation if required.
Maximum Height of Structure[2]	n/a	n/a	n/a	n/a	30' above ABE[5]	41' above ABE, except for the following: • In the CBD zones, if located on the east side of Lake Street South, 55' above the abutting right-of-way measured at the midpoint of the frontage of the subject property. • In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a master plan shall comply with the master plan provisions.[6]

[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4
[5] Structure height may be increased to 35' above ABE. See KZC 83.190.4
[6] See KZC 83.190.4 for height in Master Plan.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Commercial Uses						
Minimum Lot Size	n/a	n/a	n/a	n/a	n/a	n/a
Shoreline Setback[1]	n/a	n/a	Water-dependent uses: 0', Water-related use: 25', Water-enjoyment use: 30', Other uses: Outside of shorelines jurisdictional area, if feasible, otherwise 50'.	n/a	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25'or b.15% of the average parcel depth. In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a master plan shall comply with the master plan provisions.
Maximum Lot Coverage	n/a	n/a	50%	n/a	80%	80%, except in the CBD. In CBD, 100% less area for shoreline vegetation if required.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
Maximum Height of Structure[2]	n/a	n/a	If adjoining the Residential-L shoreline environment, then 25' above ABE. Otherwise, 30' above ABE.[3]	n/a	30' above ABE[5]	41' above ABE, except for: • In the CBD zones, if located on the east side of Lake St S, 55' above the abutting right-of-way measured at the midpoint of the frontage of the subject property. • In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a master plan shall comply with the master plan provisions. [6]
Recreational Uses						
Minimum Lot Size	n/a	n/a	n/a	n/a	n/a	n/a
Shoreline Setback[1]	n/a	Water-dependent	Water-dependent uses: 0', Water-	30% of the average parcel depth,	The greater of:	The greater of:

[6] See KZC 83.190.4 for height in the Master Plan.
[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.
[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4
[3] Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC83.190.4.
[5] Structure height may be increased to 35' above ABE. See KZC 83.190.4

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
		uses: 0', Water-related use: 25', Water-enjoyment use: 30', Other uses: Outside of shoreline area, if feasible, otherwise 50'.	related use: 25', Water-enjoyment use: 30', Other uses: Outside of shorelines jurisdictional area, if feasible, otherwise 50'.	except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet, except as otherwise specifically allowed through this Chapter.	a. 25' or b.15% of the average parcel depth.	a. 25' or b.15% of the average parcel depth. In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a Master Plan shall comply with the Master Plan provisions.
Maximum Lot Coverage	n/a	10%	30%	30%	80%	80%, except in CBD zone 100% less area for shoreline vegetation if required.
Maximum Height of Structure[2]	n/a	25' above ABE	If adjoining the Residential-L shoreline environment, then 25' above ABE. Otherwise, 30' above ABE[3]	25' above ABE	30' above ABE[4]	41' above ABE, except for the following: • In the CBD zones, if located on the east side of Lake St S, 55' above the abutting right-of-way measured at the midpoint of the frontage

[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4

[3] Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC 83.190.4.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
						of the subject property. • In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a Master Plan shall comply with the Master Plan provisions.
Institutional Uses						
Minimum Lot Size	n/a	n/a	n/a	n/a	n/a	n/a
Shoreline Setback[1]	n/a	n/a	Outside of shorelines jurisdictional area, if feasible, otherwise 50'.	Outside of the shorelines jurisdiction al area, if feasible, otherwise 30% of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 ft. or required to be greater than 60 ft., except as otherwise	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25' or b.15% of the average parcel depth.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
				specifically allowed through this Chapter.		
Maximum Lot Coverage	n/a	n/a	50%	50%	80%	80%, except in CBD zone 100% less area for shoreline vegetation if required.
Maximum Height of Structure[2]	n/a	n/a	If adjoining the Residential-L shoreline environment, then 25' above ABE. Otherwise, 30' above ABE[3]	25' above ABE	30' above ABE[5]	41' above ABE, except In the CBD zones, if located on the east side of Lake St S, 55' above the abutting right-of-way measured at the midpoint of the frontage of the subject property.
Transportation Facilities						
Minimum Lot Size	n/a	n/a	n/a	n/a	n/a	n/a
Shoreline Setback[1]	n/a	n/a	Outside of shorelines jurisdictional, if feasible, otherwise 50'.	30% of the average parcel depth, except in no case is the shoreline setback permitted to be	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25' or b.15% of the average parcel depth.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.
[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4
[3] Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC 83.190.4.
[5] Structure height may be increased to 35' above ABE. See KZC 83.190.4

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
				less than 30 feet or required to be greater than 60 feet, except as otherwise specifically allowed through this Chapter.		
Maximum Lot Coverage	n/a	n/a	n/a	n/a	n/a	n/a
Maximum Height of Structure[2]	n/a	n/a	n/a	n/a	n/a	n/a
Utilities						
Minimum Lot Size	n/a	n/a	n/a	n/a	n/a	n/a
Shoreline Setback[1]	n/a	Outside of shoreline area, if feasible, otherwise 50'.	Outside of shoreline jurisdictional, if feasible, otherwise 50'.	30% of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet, except as	The greater of: a. 25' or b.15% of the average parcel depth.	The greater of: a. 25' or b.15% of the average parcel depth.

[1] Critical area buffer and buffer setback requirements may impose a larger setback requirement. Please see KZC 83.500 and 83.510.
[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	**Natural**	**Urban Conservancy**	**Residential – L**	**Residential – M/H**	**Urban Mixed**
				otherwise specifically allowed through this Chapter.		
Maximum Lot Coverage	n/a	5%	30%	50%	80%	80%, except in CBD zone 100% less area for shoreline vegetation if required.
Maximum Height of Structure[2]	n/a	25' above ABE	If adjoining the Residential-L shoreline environment, then 25' above ABE. Otherwise, 30' above ABE[3]	25' above ABE	30' above ABE[5]	41' above ABE, except: • In the CBD zones if located on the east side of Lake St South, 55' above the abutting right-of-way measured at the midpoint of the frontage of the subject property. • In the PLA 15A zone located south of NE 52nd Street, mixed-use developments approved under a Master Plan

[2] The height limit applies to that portion of the building physically located within the shoreline jurisdiction. Permitted increases in building height are addressed in KZC 83.190.4
[3] Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC83.190.4.
[5] Structure height may be increased to 35' above ABE. See KZC 83.190.4

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	Natural	Urban Conservancy	Residential – L	Residential – M/H	Urban Mixed
						shall comply with the Master Plan provisions.[5]

[5] Structure height may be increased to 35' above ABE. See KZC 83.190.4

83.190 Lot Size or Density, Shoreline Setback, Lot Coverage and Height

1. Calculation of Minimum Lot Size or Maximum Density –

   a. Development shall not use lands waterward of the OHWM to determine minimum lot size or to calculate allowable maximum density.

   b. For properties that are only partially located within the shorelines jurisdiction, the allowed density within the shorelines jurisdiction shall be based upon the land area located within the shorelines jurisdiction only. If dwelling units will be partially located within the shorelines jurisdiction, the City may approve an increase in the actual number of units in the shorelines jurisdiction, provided that the total square footage of the units within the shorelines jurisdiction does not exceed the allowed density multiplied by the average unit size in the proposed development on the subject property.

   c. If a maximum density standard is used, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least 0.50.

   d. For detached dwelling units, the provisions addressing lot size, lot size averaging, and historic preservation contained in Chapter 22.28 KMC shall apply within the shorelines jurisdiction.

2. Shoreline Setback –

   a. General – This section establishes what structures, improvements, and activities may be in or take place in the shoreline setback established for each use in each shoreline environment.

   b. Measurement of Shoreline Setback –

      1) The shoreline setback shall be measured landward from the OHWM on the horizontal plane and in the direction that results in the greatest dimension from the OHWM (see Plate 41).

      2) In those instances where the OHWM moved further upland pursuant to any action required by this Chapter, or in accordance with permits involving a shoreline habitat and natural systems enhancement project approved by the City, a state or federal agency, the shoreline setback shall be measured from the location of the OHWM that existed immediately prior to the action or enhancement project.

      3) For those properties located along Lake Ave West south of the Lake Ave W Street End Park in the Residential – L environment, in instances where the shoreline setback of adjacent dwelling units has been reduced through a shoreline reduction authorized under KZC 83.380, the shoreline setback of these adjacent dwelling units, for the purpose of calculating a setback average, shall be based upon the required setback that existed prior to the authorized reduction.

      4) In those instances where there is an intervening property that is 60 feet in depth between the OHWM and an upland property, a shoreline setback shall be provided on the upland property based on the average parcel depth of the upland property. The setback on the upland property shall be measured from the OHWM across the intervening property and the upland property.

   c. Exceptions and Limitations in Some Zones – KZC 83.190 through 83.250 contain specific regulations regarding what may be in or take place in the shoreline setback. Where applicable, those specific regulations supersede the provisions of this subsection.

   d. Structures and Improvements – The following improvements or structures may be located in the shoreline setback, except within the Natural shoreline environment, provided that they are constructed and maintained in a manner that meets KZC 83.360 for avoiding or at least minimizing adverse impacts to shoreline ecological functions:

1) For public pedestrian access required under KZC 83.420, walkways, benches, and similar features, as approved by the Planning Official.

2) For private pedestrian access to the shoreline, walkways within the shoreline setback are permitted, subject to the following standards:

   a) The maximum width of the walkway corridor area shall be no more than 25 percent of the property's shoreline frontage, except in no case shall the corridor area required be less than 15 feet in width (see Plate 42).

   b) The walkway corridor area shall be located outside of areas of higher ecological and habitat value.

   c) The walkway in the corridor area shall be no more than 8 feet wide, and be constructed of a pervious walking surface, such as unit pavers, grid systems, pervious concrete, or, equivalent material approved by the Planning Official.

   d) The walkway corridor area may contain minor improvements, such as garden sculptures, light fixtures, trellises and similar decorative structures that are associated with the walkway, provided that these improvements comply with the dimensional limitations required for the walkway corridor area and any view corridor requirements under KZC 83.410. Light fixtures approved under this subsection shall comply with the provisions contained in KZC 83.470.

3) Those portions of a water-dependent development that require improvements adjacent to the water's edge, such as fueling stations for retail establishments providing gas sales, haul-out areas for retail establishments providing boat and motor repair and service, boat ramps for boat launches or other similar activities.

4) Public access facilities or other similar public water-enjoyment recreational uses, including swimming beaches.

5) Underground utilities accessory to a shoreline use approved by the Planning Official, provided there is no other feasible route or location.

6) Bioretention swales, rain gardens, or other similar bioretention systems that allow for filtration of water through planted grasses or other native vegetation.

7) Infiltration systems provided that installation occurs as far as feasible from the OHWM.

8) Bay windows, greenhouse windows, eaves, cornices, awnings, and canopies may extend up to 18 inches into the shoreline setback, subject to the following limitations:

   a) Eaves on bay windows may extend an additional 18 inches beyond the bay window.

   b) Chimneys that are designed to cantilever or otherwise overhang are permitted.

   c) The total horizontal dimension of these elements that extend into the shoreline setback, excluding eaves and cornices, shall not exceed 25 percent of the length of the facade of the structure.

9) Decks, patios and similar improvements may extend up to 10 feet into the shoreline setback but shall not be closer than 25 feet to the OHWM, except no closer than 15 feet to the OHWM within the Residential – L environment south of the Lake Ave West Street End Park, subject to the following standards:

   a) The improvement shall be constructed of a pervious surface, such as wood with gaps between boards and a pervious surface below, unit pavers, grid systems, pervious concrete, or, alternatively, equivalent material approved by the Planning Official.

   b) The total horizontal dimension of the improvement that extends into the shoreline setback shall not exceed 50 percent of the length of the facade of the residence structure.

c) The improvement shall be located on the ground floor of the building and shall not be elevated more than necessary to allow for grade transition from the structure to the deck or to follow the existing topography.

10) In the Urban Mixed environment, balconies at least 15 feet above finished grade may extend up to 4 feet into the required shoreline setback, but no closer than 21 feet to the OHWM.

11) Outdoor seating areas for restaurants, hotels and other water enjoyment commercial uses may extend up to 10 feet into the shoreline setback, but shall be no closer than 16 feet to the OHWM, subject to the following standards:

a) The improvement shall be constructed of a permeable surface, such as wood with gaps between boards and a pervious surface below, unit pavers, grid systems, porous concrete, or equivalent material approved by the Planning Official.

b) The total horizontal dimension of the improvement that extends into the shoreline setback shall not exceed 50 percent of the length of the facade of the primary structure.

c) The improvement shall be located on the ground floor of the building and shall not be elevated more than necessary to allow for grade transition from the structure to the seating area or to follow the existing topography.

d) All outdoor lighting is required to meet the lighting standards of KZC 83.470.

e) The seating area is required to be fenced off from the shoreline by rope stanchions, portable planters, or similar device approved by the City, with openings through the fencing for customer entry. The floor plan of the seating area shall be designed to preclude the seating area from being expanded.

f) The applicant is required to provide one (1) or more approved trash receptacles and one (1) or more ashtrays.

g) The area of the seating shall be considered new gross floor area for the purposes of determining whether vegetation is required under the provisions of KZC 83.400.

12) Retaining walls and similar structures that are no more than four (4) feet in height above finished grade; provided the following standards are met:

a) The structure shall be designed so that it does not interfere with the shoreline vegetation required to be installed under the provisions of KZC 83.400;

b) The structure shall not be installed to provide the function of a hard shoreline stabilization measure unless approved under the provisions of KZC 83.300 and shall be located, on average, five (5) feet landward or greater of the OHWM, and

c) The structure shall meet the view corridor provisions of KZC 83.410.

13) Public bridges and other essential public facilities that must cross the shoreline.

14) Parking as authorized by the Planning Official under the provisions of KZC 83.440.

15) Shoreline stabilization measures approved under the provisions of KZC 83.300.

16) Fences, swimming pools, tool sheds, greenhouses and other accessory structures and improvements are not permitted within the shoreline setback, except those specifically listed above in KZC 83.190 2.d.

3. Maximum Lot Coverage –

a. General –

1) KZC 83.180.3, Development Standards Chart, establishes the maximum lot coverage by use and shoreline environment.

2) In calculating lot coverage, lands waterward of the OHWM shall not be included in the calculation.

3) The area of all structures and pavement and any other impervious surface on the subject property will be calculated under either of the following, at the discretion of the applicant:

   1) A percentage of the total lot area of the subject property, or

   2) A percentage of the area of the subject property located within the shorelines jurisdiction.

4) If the subject property contains more than one use, the maximum lot coverage requirements for the predominant use will apply.

5) In those instances where the OHWM moved further upland pursuant to any action required by this Chapter, or in accordance with permits involving a shoreline habitat and natural systems enhancement project approved by the City, a state or federal agency, the lot area for purposes of calculating lot coverage shall be measured from the location of the OHWM that existed immediately prior to the enhancement project.

b. Exceptions – The exceptions contained in Chapter 115 KZC shall apply within the shorelines jurisdiction.

4. Height Regulations –

a. General –

1) KZC 83.180.3, Development Standards Chart, establishes the maximum allowed building height for all primary and accessory structures. In the event that the maximum allowable building height in KZC 83.180.3 is greater than the maximum allowable height in Chapters 15-60 KZC for those zones within the shorelines jurisdiction, the lower of the two (2) height provisions shall apply.

2) Maximum building height shall be measured from an average building elevation (ABE), calculated under the methods described in Chapter 115 KZC and depicted in Plates 17A and 17B. The calculation of ABE shall be based on all wall segments of the structure, whether or not the segments are located within the shorelines jurisdiction.

3) In the CBD zones, maximum building height shall be measured from the midpoint of the abutting right-of-way, not including alleys.

4) Pursuant to RCW 90.58.320, no permit shall be issued for any new or expanded building or structure more than 35 feet above average grade level that will obstruct the view to the lake of a substantial number of residences on or adjoining the shoreline, except where this Chapter does not prohibit a height of more than 35 feet and only when overriding considerations of the public interest will be served. The applicant shall be responsible for providing sufficient information to the City to determine whether such development will obstruct the view to the lake for a substantial number of residences on or adjoining such shorelines. For the purposes of this provision, average grade level is equivalent to and shall be calculated under the method for calculating average building elevation established in Option 2 as described in Chapter 115 KZC for calculating average building elevation and depicted in Plate 17B.

b. Exceptions –

Element or feature of a structure, other than the appurtenances listed below, shall not exceed the applicable height limitation established for each use in each shoreline environment. The following appurtenances shall be located and designed so that views from adjacent properties to the lake will not be significantly blocked.

1) Antennas, chimneys, and similar appurtenances, but not including personal wireless service facilities that are subject to the provisions of Chapter 117 KZC.

2) Rooftop appurtenances and their screens as regulated in Chapter 115 KZC.

3) Decorative parapets or peaked roofs approved through design review pursuant to Chapter 142 KZC.

4) Rooftop solar panels or other similar energy devices provided that the equipment is mounted as flush to the roof as feasible.

c. Permitted Increases in Height – The following permitted increases in building height shall be reviewed by the City as part of the shoreline permit required for the proposed development activity.

1) In the Natural shoreline environment, the structure height of a detached dwelling unit may exceed the standard height limit by a maximum of 5 feet above average building elevation if a reduction in the footprint of the building is sufficient to lessen the impact on a sensitive area and sensitive area buffer. The City shall include in the written decision any conditions and restrictions that it determines are necessary to eliminate or minimize any undesirable effects of approving the exception.

2) In the Residential – M/H and Urban Conservancy shoreline environments located south of Market Street, the structure height of a commercial, recreational, institutional, utility or residential use, other than a detached dwelling unit, may be increased to 35 feet above average building elevation if:

a) Obstruction of views from existing development lying east of Lake St South or Lake Washington Boulevard is minimized. The applicant shall be responsible for providing sufficient information to the City to evaluate potential impacts to views; and

b) The increase is offset by an enhanced view corridor beyond what is required in KZC 83.410.

3) Properties in the PLA 15A zone in the UM Shoreline Environment that contain mixed-use development where building heights have been previously established under an approved Master Plan shall comply with the building height requirements as approved. Modifications to the approved building heights shall be considered under the standards established in the Master and in consideration of the compatibility with adjacent uses and the degree to which public access, use and views are provided.

4) In all shoreline environments, the maximum height may be increased up to 35 feet if the City approves a Planned Unit Development under the provisions of Chapter 125 KZC.

83.200 Residential Uses

1. General – Residential uses shall not occur over water, including houseboats, live-aboards, or other single- or multi-family dwelling units.

2. Detached Dwelling Units in the Residential-L environment- Not more than one (1) dwelling unit shall be on each lot, regardless of the size of each lot, except an accessory dwelling unit.

3. Accessory Structures or Uses - Accessory uses and structures shall be located landward of the principal residence, unless the structure is or supports a water-dependent use. This provision does not apply if the principal residence is located on the east side of Lake Washington Blvd/Lake Street S or 98th Avenue NE.

83.210 Commercial Uses

1. Float Plane Landing and Mooring Facilities –

a. Use of piers or docks for commercial float plane service shall be allowed only in public or private marinas and shall be subject to a conditional use permit.

b. Any shoreline conditional use permit for float plane use shall specify:

1) Taxiing patterns to be used by float planes that will minimize noise impacts on area residents and wildlife and minimize interference with navigation and moorage;

2) Float plane facilities and services shall conform to all applicable City codes and Federal Aviation Administration standards and requirements for fuel, oil spills, safety and firefighting equipment, noise, and pedestrian and swimming area separation; and

3) Hours of operation may be limited to minimize impacts on nearby residents.

2. Retail establishment providing new or used Boat Sales or Rental – Outdoor boat parking and storage areas must be buffered as required for a parking area under the provisions of KZC 83.440.

3. Retail Establishment Providing Gas and Oil Sale for Boats –

   a. The location and design of fueling facilities must meet applicable state and federal regulations.

   b. Storage of petroleum products shall not be located over water.

   c. Storage tanks shall be located underground and shall comply with state and federal standards for Underground Storage Tanks.

   d. Fueling stations shall be located and designed to allow for ease of containment and spill cleanup.

   e. New fueling facilities shall incorporate the use of automatic shutoffs on fuel lines and at hose nozzles to reduce fuel loss.

   f. Facilities, equipment and established procedures for the containment, recovery and mitigation of spilled petroleum products shall be provided.

   g. See KZC 83.360 for avoiding and minimizing impacts when locating, designing, constructing and operating the use.

4. Retail Establishment Providing Boat and Motor Repair and Service –

   a. Storage of parts shall be conducted entirely within an enclosed structure.

   b. If hull scraping, boat painting, or boat cleaning services is provided, boats shall be removed from the water and debris shall be captured and disposed in a proper manner.

   c. Repair and service activities shall be conducted on dry land and either totally within a building or totally sight screened from adjoining property and the right-of-way.

   d. All dry land motor testing shall be conducted within a building.

   e. An appropriate storage, transfer, containment, and disposal facility for liquid material, such as oil, harmful solvents, antifreeze, and paints shall be provided and maintained.

   f. Facilities, equipment and established procedures for the containment, recovery and mitigation of spilled petroleum or hazardous products shall be provided.

5. Restaurant or Tavern –

   a. The building design must be oriented for the view to the waterfront.

   b. Drive-in or drive-through facilities are prohibited.

83.220 Recreational Uses

1. Motorized Boats – See Chapter 14.24 KMC, Operation of Watercraft, for prohibition of use within restricted shoreline areas and established speed limits.

2. Floats/swim platforms – Only public floats/swim platforms are permitted.

3. Marina, Piers, Moorage Buoy or Pilings, Boat Facility and Boat Canopies – See standards contained in KZC 83.270 through 290.

4. Tour Boat Facility – Tour Boat Facilities shall be designed to meet the following standards:
   a. Size – The City will determine the maximum capacity of the tour boat facility based on the following factors:
      1) The suitability of the environmental conditions, such as, but not limited to, a consideration of the following conditions: the presence of submerged aquatic vegetation, proximity to shoreline associated wetlands, critical nesting and spawning areas, water depth, water circulation, sediment inputs and accumulation, and wave action.
      2) The ability of the land landward of the high waterline to accommodate the necessary support facilities.
   b. Moorage structures supporting a tour boat facility shall comply with the moorage structure location standards and design standards for marinas in KZC 83.290.
   c. The City will make the determination if any parking and/or a passenger loading area will be required.
   d. Associated buildings and structures, other than moorage structure for the tour boat facility, shall not be permitted over water.
   e. Tour boat facilities shall comply with applicable state and/or federal laws, including but not limited to those for registration, licensing of crew and safety regulations.
   f. Tour boat facilities operated accessory to public parks shall comply with the standards in Chapter 14.36 KMC.
   g. See KZC 83.360 for avoiding and minimizing impacts when locating, designing, constructing and operating the use.
5. Public Access Pier, Dock or Boardwalk –
   a. See KZC 83.360 for avoiding and minimizing impacts when locating, designing and constructing the use minimizing impacts.
   b. No accessory uses, buildings, or activities are permitted as part of this use.
   c. See KZC 83.370 for federal and state approvals prior to submittal of a building permit for this use.
   d. Must provide at least one (1) covered and secured waste receptacle upland of the OHWM.
   e. All utility and service lines located waterward of the OHWM must be below the pier deck. All utility and service lines located upland of the OHWM shall be underground, where feasible.
   f. Piers or docks shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.
   g. Structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high and visible from the lake.
   h. Public access structures shall not be within 10 feet of a side property line, except that setbacks between moorage structures and north and south property lines may be decreased for over-water public use facilities that connect with waterfront public access on adjacent property.
   i. Public access structures shall be separated from the outlet of a stream, including piped streams, by the maximum extent feasible, while meeting other required setback standards established under this section.
   j. Pier structures shall comply with the moorage structure design standards for marinas in KZC 83.290, except primary walkways and floats shall be no wider than 8 feet.
6. Boat Launch (for non-motorized boats) –

a. Location Standards – Boat launches for non-motorized boats shall be sited so that they do not significantly damage fish and wildlife habitats and shall not occur in areas with native emergent vegetation. Removal of native upland vegetation shall be minimized to the greatest extent feasible.

b. Size - The applicant shall demonstrate that the proposed size of the boat launch is the minimum necessary to safely launch the intended craft.

c. Design Standards – Boat launches for non-motorized boats shall be constructed of gravel or other similar natural material.

7. Boat Launch (for motorized boats) -

a. Location Standards –

1) Boat launches shall not be approved in cases when it can be reasonably foreseen that the development or use would require maintenance dredging during the life of the development or use.

2) Boat launches shall be designed and located according to the following criteria:

a) Separated from existing designated swimming areas by a minimum of 25 feet.

b) Meet KZC 83.360 for avoiding impacts to fish and wildlife habitats.

c) Located only at sites with suitable transportation access. The applicant must demonstrate that the streets serving the boat launch can safely handle traffic generated by such a facility.

d) Not be located within 25 feet of a moorage structure not on the subject property; or within 50’ of the outlet of a stream, including piped streams.

b. Size - The applicant shall demonstrate that the proposed length of the ramp is the minimum necessary to safely launch the intended craft. In no case shall the ramp extend beyond the point where the water depth is 6 feet below the OHWM, unless the City determines that a greater depth is needed for a public boat launch facility.

c. Design Standards –

1) Preferred ramp designs, in order of priority, are:

a) Open grid designs with minimum coverage of lake substrate.

b) Seasonal ramps that can be removed and stored upland.

c) Structures with segmented pads and flexible connections that leave space for natural beach substrate and can adapt to changes in shoreline profile.

2) The design shall comply with all regulations as stipulated by state and federal agencies, affected tribes, or other agencies with jurisdiction.

d. Boat launches shall provide trailer spaces, at least 10 feet by 40 feet, commensurate with projected demand.

8. Public Park - Recreation facilities that support non-water related, high-intensity activities, such as basketball and tennis courts, baseball and soccer fields and skate parks, shall be located outside of shorelines jurisdiction to the extent feasible.

9. Public Access Facility -

a. Fragile and unique shoreline areas with valuable ecological functions, such as wetlands and wildlife habitats, shall be used only for non-intensive recreation activities, such as trails, viewpoints, interpretative signage and similar passive and low-impact facilities.

b. Physical public access shall be located, designed and constructed to meet KZC 83.360 for net loss of shoreline ecological functions.

83.230 Transportation Facilities

1. General -
   a. See KZC 83.360 for avoiding and minimizing impacts when locating, designing, constructing and operating the use.
   b. Transportation facilities shall utilize existing transportation corridors whenever feasible, provided that facility additions and modifications that will not adversely impact shoreline resources and otherwise be consistent with this Chapter are allowed. If expansion of the existing corridor will result in significant adverse impacts, then a less disruptive alternative shall be utilized.
   c. When permitted within shoreline areas, transportation facilities must be placed and designed to minimize negative aesthetic impacts upon shoreline areas and to avoid and minimize impacts to existing land uses, public shoreline views, public access, and the natural environment.
   d. Transportation and utility facilities shall be required to make joint use of rights-of-way, and to consolidate crossings of water bodies to minimize adverse impacts to the shoreline.
   e. Transportation facilities located in shoreline areas must be designed and maintained to prevent erosion and to permit the natural movement of surface water.
2. Construction and Maintenance –
   a. All debris and other waste materials from roadway construction and maintenance shall be disposed of in such a way as to prevent their entry into any water body.
   b. All shoreline areas disturbed by facility construction and maintenance shall be replanted and stabilized with approved riparian vegetation by seeding, mulching, or other effective means immediately upon completion of the construction or maintenance activity. The vegetation shall be maintained until established.
   c. Clearing of vegetation within transportation corridors shall be the minimum necessary for infrastructure maintenance and public safety. The City shall give preference to mechanical means rather than the use of herbicides for roadside brush control on city roads in shorelines jurisdiction.
   d. Construct facilities that cross streams to allow passage of fish inhabiting the stream or that may inhabit the stream in the future are allowed.
   e. Construct facilities within the 100-year floodplain to allow for water pass-through is allowed.
3. Passenger-only Ferry Terminal –
   a. See KZC 83.360 for minimizing impacts when locating, designing, constructing and operating the use.
   b. Associated buildings and structures, other than the moorage structure for the ferry terminal, shall not be permitted over water.
   c. Equipment storage shall be conducted entirely within an enclosed structure.
   d. Facilities, equipment and established procedures for the containment, recovery and mitigation of spilled petroleum or hazardous products shall be provided.
   e. The City will make the determination if any parking and/or a passenger loading area will be required.
4. Water Taxi –
   a. See KZC 83.360 for avoiding and minimizing impacts when locating, designing, constructing and operating the use.
   b. Equipment storage shall be conducted entirely within an enclosed structure.

c. Facilities, equipment and established procedures for the containment, recovery and mitigation of spilled petroleum or hazardous products shall be provided.

5. Arterials, Collectors, and Neighborhood Access Streets and Bridges –

a. New street and bridge construction in shorelines jurisdiction shall be minimized and allowed only when related to and necessary for the support of permitted shoreline activities.

b. Streets other than those providing access to approved shoreline uses shall be located away from the shoreline, except when no reasonable alternate location exists.

c. Any street expansion affecting streams and waterways shall be designed to allow fish passage and minimize impact to habitat.

d. Drainage and surface runoff from streets and street construction or maintenance areas shall be controlled so that pollutants will not be carried into water bodies.

e. Streets within shorelines jurisdiction shall be designed with the minimum pavement area feasible.

f. Streets shall be designed to provide frequent safe crossings for pedestrians and bicycles seeking access to public portions of the shoreline.

g. Low impact development techniques shall be used where feasible for roadway or pathway and related drainage system construction.

h. Street alignments shall be designed to fit the topography so that alterations to the natural site conditions will be minimized.

i. New and expanded streets or bridges shall be designed to include pedestrian amenities, such as benches or viewing area and public sign systems, if an area is available for the improvement(s) and if there is a view or public access to the water from the area.

j. Vegetation and street trees shall be selected and located so that they do not impair public views of the lake from public rights of way to the maximum extent feasible.

k. Shoreline street ends may be used for public access or recreational purposes.

l. Shoreline street ends shall not be vacated, except in compliance with RCW 35.79.035 or its successor, as well as KMC 19.16.090.

83.240 Utilities

1. General –

a. See KZC 83.360 for avoiding and minimizing impacts when locating, designing, constructing and operating the use

b. Whenever feasible, utility facilities shall be located outside the shorelines jurisdiction. Whenever these facilities must be placed in a shoreline area, the location shall be chosen so as not to adversely impact shoreline ecological functions or obstruct scenic views.

c. Utilities shall be located in existing rights-of-way and utility corridors wherever feasible.

d. New utilities shall not be located waterward of the OHWM or in the Natural shoreline environment unless it is demonstrated that no feasible alternative exists.

e. Utility lines, pipes, conduits, cables, meters, vaults, and similar infrastructure and appurtenances shall be placed underground consistent with the standards of the serving utility to the maximum extent feasible.

f. Proposals for new utilities or new utility corridors in the shorelines jurisdiction must fully substantiate the infeasibility of existing routes or alternative locations outside of the shorelines jurisdiction.

g. Utilities that are accessory and incidental to a shoreline use shall be reviewed under the provisions of the use to which they are accessory.

h. Utilities shall provide screening of facilities from the lake and adjacent properties in a manner that is compatible with the surrounding environment. The City will determine the type of screening on a case-by-case basis.

i. Utility development shall, through coordination with local government agencies, provide for compatible, multiple uses of sites and rights-of-way. Such uses include shoreline access points, trail systems and other forms of recreation and transportation, providing such uses will not unduly interfere with utility operations, or endanger public health and safety.

2. Construction and Maintenance –

a. All shoreline areas disturbed by utility construction and maintenance shall be replanted and stabilized with approved vegetation by seeding, mulching, or other effective means immediately upon completion of the construction or maintenance activity. Such vegetation shall be maintained until established.

b. Clearing of vegetation within utility corridors shall be the minimum necessary for installation, infrastructure maintenance and public safety.

c. Construction of pipelines placed under aquatic areas shall be placed in a sleeve in order to avoid the need for excavation in the event of a failure in the future.

d. Construction located near wetlands and streams shall use native soil plugs, collars or other techniques to prevent potential dewatering impacts.

e. See KZC 83.480 for conducting maintenance activities that minimize impacts.

3. Utility production and processing facilities - Utility production and processing facilities not dependent on a shoreline location shall be located outside of the shorelines jurisdiction, unless it is demonstrated that no feasible alternative location exists.

4. Utility Transmission Facilities –

a. Transmission facilities shall be located outside shorelines jurisdiction where feasible, and when necessarily located within shoreline areas, shall assure no net loss of shoreline ecological functions.

b. Pipelines transporting hazardous substances or other substances harmful to aquatic life or water quality are prohibited, unless it is demonstrated that no feasible alternative exists.

c. Sanitary sewers shall be separated from storm sewers.

5. Personal Wireless Service Facilities – Personal Wireless Service Facilities shall use concealment strategies to minimize the appearance of antennas and other equipment from the lake and public pedestrian walkways or public use areas.

83.250 Land Division

1. New lots created through land division in shorelines jurisdiction shall only be permitted when the following standards are met:

a. The lots created will not require structural flood hazard reduction measures, such as dikes, levees, or stream channel realignment, during the life of the development or use.

b. The lots created will not require hard structural shoreline stabilization measures in order for reasonable development to occur, as documented in a geotechnical analysis of the site and shoreline characteristics.

c. In the Natural and Urban Conservancy shoreline environments, the lots created shall contain buildable land area located outside of the shoreland area.

2. Land division, except those for lot line adjustment and lot consolidation purposes, shall provide public access as required in KZC 83.420, unless otherwise excepted or modified under the provisions of KZC 83.420.
3. Land divisions shall establish a prohibition on new private piers and docks on the face of the plat. An area for joint use moorage may be approved if it meets all requirements for shared moorage in KZC 83.270.
4. The required view corridor and public access shall be established prior to recording of the land division consistent with KZC 83.410 and 83.420 and shall be depicted on the face of the recorded document.

Shoreline Modification Regulations

83.260 General

1. See KZC 83.360 for no net loss standard and mitigation sequencing.
2. See KZC 83.370 for federal and state approval required prior to submittal of a building permit.
3. See KZC 83.430 for in water construction.
4. Structures must be designed to preclude moorage in locations that would have insufficient water depth to avoid boats resting on the substrate at any time of year.

83.270 Piers, Docks, Moorage Buoys and Piles, Boatlifts and Boat Canopies Serving a Detached Dwelling Unit Use (Single-family)

1. General –
   a. Piers, docks, moorage buoys and piles, boatlifts and canopies may only be developed and used accessory to existing dwelling units on waterfront lots or upland lots with waterfront access rights. Use of these structures is limited to the residents and guests of the waterfront lots to which the moorage is accessory. Moorage space shall not be leased, rented, or sold unless otherwise approved as a marina under the provisions of KZC 83.290.
   b. In the following circumstances, a joint use pier shall be required:
      1) On lots subdivided to create one or more additional lots with waterfront access rights.
      2) New residential development of two or more dwelling units with waterfront access rights.
   c. Piers, docks, boatlifts and moorage piles shall be designed and located to meet KZC 83.360 for no net loss standard and mitigation sequencing.
   d. For proposed extension of structures proposed waterward of the inner harbor line, see KZC 83.370.
2. Setbacks
   a. All piers, docks, boatlifts and moorage piles for detached dwelling unit use shall comply with the following location standards:

New Pier, Dock, Boatlift and Moorage Pile for Detached Dwelling Unit (single-family)	Minimum Setback Standards
Side property lines	5 ft for moorage pile; otherwise 10 ft.
Another moorage structure not on the subject property, excluding adjacent moorage structure that does not comply with required side property line setback	25 ft., except that this standard shall not apply to moorage piles
Outlet of a stream regulated under KZC 90, including piped streams	Maximum distance feasible while meeting other required setback standards established under this section
Public park	25 ft., except that this standard shall not apply within the Urban Mixed shoreline environment.

   b. Joint-use structures may abut property lines provided the property owners sharing the moorage facility have mutually agreed to the structure location. To insure that a pier is shared, each property owner must sign a statement in a form acceptable to the City Attorney,

stating that the pier or dock is used by the other property. The applicant must file this statement with the King County Bureau of Elections and Records to run with the properties.

3. General Standards –

   a. Proposed piers and docks that do not comply with the dimensional standards contained in this section or cannot be permitted through the Administrative Approval for Alternative Design process in this section may only be approved if they obtain a shoreline variance under the provisions of Chapter 141 KZC.

   b. All piers and docks and other developments regulated by this section shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe structures shall be removed or repaired promptly by the owner.

   c. Temporary moorages shall be permitted for vessels used in the construction of shoreline facilities. The design and construction of temporary moorages shall be such that upon termination of the project, the aquatic habitat in the affected area can be returned to its original (pre-construction) condition.

   d. The following structures and improvements are not permitted:

      a) Covered moorage, boathouses, or other walled covered moorage, except boat canopies that comply with the standards in this subsection.

      b) Skirting on any structure

      c) Aircraft moorage

   e. See KZC 83.470 concerning lighting standards for required lighting.

   f. Piers and docks must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least 4 inches high.

   g. Piers and docks shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night. Exterior finish of all structures and windows shall be generally non-reflective.

   h. Must provide at least one (1) covered and secured waste receptacle.

   i. All utility and service lines located waterward of the OHWM must be below the pier deck.

   j. All utility and service lines located upland of the OHWM shall be underground, where feasible. A mooring buoy may be used to provide moorage space in lieu of a pier. No more than one (1) mooring buoy is permitted per detached dwelling unit.

   k. Moorage buoys shall be in water depths of 9 feet or greater based on ordinary high water, unless the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved an alternate proposal.

4. New Pier or Dock Dimensional Standards –

   a. New piers or docks may be permitted, subject to the following regulations:

New Pier, Dock or Moorage Piles for Detached Dwelling Unit (single-family)	**Dimensional and Design Standards**
Maximum Area: surface coverage, including all attached float decking, ramps, ells and fingers	480 sq. ft. for single property owner 700 sq. ft. for joint-use facility used by 2 residential property owners 1000 sq. ft. for joint-use facility used by 3 or more residential property

	owners These area limitations shall include platform lifts. Where a pier cannot reasonably be constructed under the area limitation above to obtain a moorage depth of 10 ft. measured below ordinary high water, an additional 4 sq. ft. of area may be added for each additional foot of pier length needed to reach 10 ft. of water depth at the landward end of the pier, provided that all other area dimensions, such as maximum width and length, have been minimized.
Maximum Length for piers, docks, ells, fingers and attached floats	150 ft, but piers or docks extending further waterward than adjacent piers or docks must demonstrate that they will not have an adverse impact on navigation 26 ft. for ells 20 ft. for fingers and float decking attached to a pier
Maximum Width	4 ft. for pier or dock walkway or ramp 6 ft. for ells 2 ft. for fingers 6 ft. for float decking attached to a pier, must contain a minimum of 2 ft. of grating down the center of the entire float For piers or docks with no ells or fingers, the most waterward 26 ft. section of the walkway may be 6 ft. wide
Height of piers and diving boards	Minimum of 1.5 ft. above ordinary high water to bottom of pier stringers, except the floating section of a dock and float decking attached to a pier Maximum of 3 ft. above deck surface for diving boards or similar features Maximum of 3 ft. above deck for safety railing, which shall be an open framework
Minimum Water Depth for ells and float decking attached to a pier	Must be in water with depths of 9 ft. or greater at the landward end of the ell or finger Must be in water with depths of 10 ft. or greater at the landward end of the float
Decking for piers, docks walkways, platform lifts, ells and fingers	Piers, docks, and platform lifts must be fully grated or contain other materials that allow a minimum of 40% light transmittance through the material If float tubs for docks preclude use of fully grated decking material, then a minimum of 2 ft. of grating down the center of the entire float shall be provided
Location of ells, fingers and deck platforms	No closer than 30 ft. waterward of the OHWM, measured perpendicular to the OHWM Within 30 ft. of the OHWM, only the pier walkway or ramp is allowed
Pilings and Moorage Piles	Pilings or moorage piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds. First set of pilings for a pier or dock shall be located no closer than 18 ft from OHWM.

	Moorage piles shall be located no closer than 30 ft. from the OHWM or any farther waterward than the end of the pier or dock. Moorage buoys are not permitted. Maximum 2 moorage piles per detached dwelling unit, including existing piles Maximum 4 moorage piles for joint use piers or docks, including existing piles
Mitigation	Plantings or other mitigation as described below in KZC 83.270.5

b. The City shall approve the following modifications to a new pier proposal that deviates from the dimensional standards of KZC 83.270.4, subject to both U.S Army Corps of Engineers and Washington Department of Fish and Wildlife approval to an alternate project design. In addition, the following requirements and all other applicable provisions in this Chapter shall be met.

Administrative Approval for Alternative Design of New Pier or Dock for Detached Dwelling Unit (single-family)	**Requirements**
State and Federal Agency Approval	U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved proposal
Maximum Area	No larger than authorized through state and federal approval
Maximum Width	4 ft. for portion of pier or dock located within 30 ft. of the OHWM; otherwise, 6 ft. for walkways Otherwise, the pier and all components shall meet the standards noted in KZC 83.270.4.a
Minimum Water Depth	No shallower than authorized through state and federal approval

With submittal of a building permit, the applicant shall provide documentation that the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved the alternative proposal design.

5. Mitigation. All proposals involving new piers or docks are subject to the following mitigation requirements:

   1) Any existing in-water and overwater structures shall be removed if they are associated with either a moorage structure or other recreational use that is located within 30 feet of the OHWM.

   2) Emergent vegetation shall be planted waterward of the OHWM, unless the City determines that it is not appropriate or feasible.

   3) Native riparian vegetation shall be planted in at least 75 percent of the nearshore riparian area located along the water's edge. The vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area. Joint-

use piers required under the provisions of this Chapter shall require a vegetative riparian zone along all properties sharing the pier. Other joint-use piers shall be required to provide the same mitigation as required for one property, which can be slit evenly between the subject properties.

4) Mitigation plantings shall be subject to the following requirements:

   a) Restoration of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least three (3) trees per 100 linear feet of shoreline and 60% shrubs must be included in the plan. Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester. Plant density and spacing shall be appropriate for the site and commensurate with spacing recommended for each individual species proposed. An alternative planting plan or mitigation measure in lieu of meeting these requirements shall be allowed if approved by other state and federal agencies.

      In addition, the City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this section, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation.

   b) Vegetation placement – See the provisions contained in KZC 83.400, including the vegetation placement and alternative compliance provisions.

5) In addition to a native planting plan, a 5-year vegetation maintenance and monitoring plan shall be submitted to the City for approval. The monitoring plan shall include the following performance standards:

   a) Preparation of as-built drawings after installation of the mitigation plantings;

   b) Annual monitoring reports for 5 years that include written and photographic documentation on tree and shrub mortality, subject to the following success criteria:

      i. One-hundred (100) percent survival of all planted native trees and shrubs during the first two (2) years after planting; and

      ii. One hundred (100) percent survival of trees and eighty (80) percent survival of remaining native plants in years three (3) through five (5).

   Copies of reports that are submitted to state or federal agencies in compliance with permit approvals may be submitted in lieu of a separate report to the City, provided that the reports address a 5-year maintenance and monitoring plan.

6) Woody debris existing on-site or contributed to the site as part of the mitigation efforts shall not be removed.

6. <u>Replacement of Existing Pier or Dock</u> –

   a. A replacement of an existing pier or dock shall meet the following requirements:

Replacement of Existing Pier or Dock for Detached Dwelling Unit (single-family)	**Requirements**
Replacement of entire existing pier or dock, including piles OR more than 50 percent of the pier-support piles and more than 50 percent of the decking or decking substructure (e.g. stringers)	Must meet the dimensional decking and design standards for new piers as described in KZC 83.270.4.a, except the City may administratively approve an alternative design described in subsection b. below.

Mitigation	Existing skirting shall be removed and may not be replaced. Existing in-water and overwater structures located within 30 feet of the OHWM, except for existing or authorized shoreline stabilization measures, shall be removed.

b. Alternative Design - The City shall approve the following modifications to a pier replacement proposal that deviates from the dimensional standards of KZC 83.270.4.a, subject to both U.S Army Corps of Engineers and Washington Department of Fish and Wildlife approval to an alternate project design. In addition, the following requirements and all other applicable provisions in this Chapter shall be met.

Administrative Approval for Alternative Design of Replacement Pier or Dock for Detached Dwelling Unit (single-family)	**Requirements**
State and Federal Agency Approval	U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife have approved proposal
Maximum Area	No larger than existing pier or that allowed under KZC 83.270.4.a, whichever is greater
Maximum Length	26 ft. for fingers and float decking attached to a pier Otherwise, the pier and all components shall meet the standards noted in KZC 83.270.4.a
Maximum Width	4 ft. for walkway or ramp located within 30 ft. of the OHWM; otherwise, 6 ft. for walkways 8 ft. for ells and float decking attached to a pier For piers with no ells or fingers, the most waterward 26 ft. section of the walkway may be 8 ft. wide Otherwise, the pier and all components shall meet the standards noted in KZC 83.270.4.a
Minimum Water Depth	No shallower than authorized through state and federal approval

With submittal of a building permit, the applicant shall provide documentation that the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved the alternative proposal design.

7. Additions to Pier or Dock –

Proposals involving the addition to or enlargement of existing piers or docks must comply with the requirements below. These provisions shall not be used in combination with the provisions for new or replacement piers contained in KZC 83.270.4 and 6.

Addition to Existing Pier or Dock for Detached Dwelling Unit (single-family)	Requirements
Addition or enlargement	Must demonstrate that there is a need for the enlargement of an existing pier or dock Examples of need include, but are not limited to safety concerns or inadequate depth of water
Dimensional standards	Enlarged portions must comply with the new pier or dock standards for length and width, height, water depth, location, decking and pilings and for materials as described in KZC 83.270.4.a
Decking for piers, docks walkways, ells and fingers	Must convert an area of decking within 30 ft. of the OHWM to grated decking equivalent in size to the additional surface coverage. Grated or other materials must allow a minimum of 40% light transmittance through the material
Mitigation	Planting and other mitigation as described in KZC 83.270.5 Existing skirting shall be removed and may not be replaced Existing in-water and overwater structures located within 30 ft. of the OHWM, except for existing or authorized shoreline stabilization measures or pier or dock walkways or piers, shall be removed at a 1:1 ratio to the area of the addition

8. Repair of Existing Pier or Dock–

a. Repair proposals that replace only decking or decking substructure and less than 50 percent of the existing pier-support piles must comply with the following regulations:

Minor Repair of Existing Pier or Dock for Detached Dwelling Unit (single-family)	Requirements
Replacement pilings or moorage piles	Must use materials as described under KZC 83.270.5 Must minimize the size of pilings or moorage

	piles and maximize the spacing between pilings to the extent allowed by site-specific engineering or design considerations
Replacement of 50 percent or more of the decking or 50 percent or more of decking substructure	Must replace any solid decking surface of the pier or dock located within 30 ft. of the OHWM with a grated surface material that allows a minimum of 40% light transmittance through the material

b. Other repairs to existing legally established moorage facilities where the nature of the repair is not described in the above subsections shall be considered minor repairs and are permitted, consistent with all other applicable codes and regulations. If cumulative repairs of an existing pier or dock would make a proposed repair exceeds the threshold for a replacement pier established in KZC 83.270.5 above, the repair proposal shall be reviewed under KZC 83.270.4 for a new pier or dock, except as described in KZC 83.270.5.b for administrative approval of alternative design.

9. Boatlifts and Boatlift Canopies –

Boatlifts and boatlift canopies may be permitted as an accessory to piers and docks, subject to the following regulations:

Boatlift and Boat Canopy for Detached Dwelling Unit (single-family)	**Requirements**
Location	Boat lifts shall be placed as far waterward of the OHWM as feasible and safe, within the limits of the dimensional standards for piers established in KZC 83.270.4 Bottom of a boatlift canopy shall be elevated above the boatlift to the maximum extent feasible, the lowest edge of the canopy must be a least 4 ft. above the ordinary high water, and the top of the canopy must not extend more than 7 ft. above an associated pier
Maximum Number	1 free-standing or deck-mounted boatlift per detached dwelling unit 2 jet ski lifts or 1 fully grated platform lift per detached dwelling unit use 1 boatlift canopy per detached dwelling unit, including joint use piers
Canopy Materials	Must be made of translucent fabric materials. Must not be constructed of permanent structural material.
Fill for Boatlift	Maximum of 2 cubic yards of fill are permitted to

	anchor a boatlift, subject to the following requirements: • May only be used if the substrate prevents the use of anchoring devices that can be embedded into the substrate • Must be clean • Must consist of rock or pre-cast concrete blocks • Must only be used to anchor the boatlift • Minimum amount of fill is utilized to anchor the boatlift

83.280 Piers, Docks, Moorage Buoys, Boat lifts and Canopies Serving Detached, Attached or Stacked Dwelling Units (Multi-family)

1. General –

   a. Piers, docks, moorage buoy and piles, boatlifts and canopies may only be developed and used accessory to existing dwelling units on waterfront lots or upland lots with waterfront access rights. Use of these structures is limited to the residents and guests of the waterfront lots to which the moorage is accessory. Moorage space shall not be leased, rented, or sold unless otherwise approved as a Marina under the provisions of KZC 83.290.

   b. Piers, docks, boatlifts and moorage piles shall be designed and located to meet KZC 83.360 Mitigation Sequencing.

   c. See KZC 83.370 for structures to be extended waterward of the Inner Harbor Line.

2. Setbacks –

   All piers, docks, boatlifts and moorage piles serving detached, attached or stacked dwelling units shall comply with the following setback standards:

New Pier, Dock, Boatlift and Moorage Pile for Detached, Attached or Stacked Dwelling Units (multi-family)	Minimum Setback Standards
From side property lines	5 ft for moorage pile; otherwise 10 ft.
From lot containing a detached dwelling unit	The area defined by a line that starts where the OHWM of the lot (containing a detached dwelling unit) intersects the side property line of the lot (containing the side property line) closest to the moorage structure and runs waterward toward the moorage structure and extends at a 30° angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not extend beyond any intervening overwater structure. This standard shall not apply within the Urban Mixed shoreline environment.
From another moorage structure not on the subject property, excluding adjacent moorage	25 ft., except that this provision shall not apply to moorage piles

structure that does not comply with required north and south property line setback	
From outlet of a stream regulated under KZC 90, including piped streams	Maximum distance feasible while meeting other required setback standards established under this section
From public park	100 feet; or The area defined by a line that starts where the OHWM of the park intersects with the side property line of the park closest to the moorage structure and extends at a 45° angle from the side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening over water structure. This standard shall not apply within the Urban Mixed shoreline environment.

3. Number of Moorage Spaces – The City will limit the total number of moorages to one per each dwelling unit on the subject property. In addition, each unit shall be allowed to moor jet skis or kayaks or similar watercraft on the property.

4. General Standards -

   a. Must provide at least two (2) covered and secured waste receptacles upland of the OHWM.

   b. All utility and service lines located waterward of the OHWM must be below the pier deck. All utility and service lines located upland of the OHWM shall be underground, where feasible.

   c. Moorage facilities shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.

   d. Exterior finish shall be generally non-reflective.

   e. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four (4) inches high.

   f. See KZC 83.470 Lighting Standards for required lighting.

   g. See KZC 83.420 Public Access for required public access.

   h. A mooring buoy may be used to provide moorage space in lieu of a pier. No more than 2 mooring buoys or equal to 10% of the dwelling units on the subject property, whichever is greater. Mooring buoys shall be in water depths of 9 feet or greater based on ordinary high water, unless the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved an alternate proposal.

   i. The following structures and improvements are not permitted:

      a) Covered moorage, boathouses, or other walled covered moorage, except boat canopies that comply with the standards in this subsection

      b) Skirting on any structure

      c) Aircraft moorage

5. New Pier or Dock Dimensional Standards -

a. Moorage structures shall not be larger than is necessary to provide safe and reasonable moorage for the boats to be moored. The City will specifically review the size and configuration of each proposed moorage structure to help ensure that:

   1) The moorage structure does not extend waterward beyond the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line;

   2) The moorage structure is not larger than is necessary to moor the specified number of boats;

   3) The moorage structure will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and

   4) The moorage structure will not have a significant long-term adverse effect on ecological functions.

b. Piers and docks shall be the minimum size necessary to meet the needs of the proposed water-dependent use and shall observe the following standards:

New Pier, Dock or Moorage Piles for Detached, Attached or Stacked Dwelling Units (multi-family)	**Dimensional and Design Standards**
Maximum Width	4 ft. within 30 ft of the OHWM for pier, dock walkway, ramp or floating deck 6 ft. for pier or dock walkway more than 30 ft. waterward of the OHWM 8 ft. for ells 4 ft. for fingers, and shall be reduced to 2 ft. in those instances where the projection provides secure boat moorage but is not necessary for boat-user access 6 ft. for float decking attached to a pier An alternative design in lieu of meeting these requirements shall be allowed if approved by other state and federal agencies
Height of piers and diving boards	Minimum of 1.5 ft above ordinary high water to bottom of pier stringers, except the floating section of a dock and float decking attached to a pier Maximum of 3 ft. above deck for diving boards or similar features above the deck surface Maximum of 3 ft. above deck for safety railing, which shall be an open framework
Minimum Water Depth for ells and float decking attached to a pier	Must be in water with depths of 9 ft. or greater at the landward end of the ell or finger Must be in water with depths of 10 ft. or more at the landward end of the float An alternative design in lieu of meeting these requirements shall be allowed if approved by the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife
Decking for piers, docks walkways, platform lifts, ells	Must be fully grated or contain other materials that allow a minimum of 40% light transmittance through the material

and fingers	If float tubs for docks preclude use of fully grated decking material, then a minimum of 2 ft. of grating down the center of the entire float shall be provided
Location of ells, fingers and deck platforms	No closer than 30 ft. waterward of the OHWM, measured perpendicular to the OHWM Within 30 ft. of the OHWM, only access walkway or ramp portion of pier or dock is allowed
Pilings and Moorage Piles	Pilings or moorage piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds First set of pilings for a pier or dock shall be located no closer than 18 ft from OHWM. Moorage piles shall be located no closer than 30 ft. from the OHWM or any farther waterward than the end of the pier or dock.
Mitigation	Plantings and other mitigation as described in KZC 83.280.6 below

6. Mitigation –

All proposals involving new piers or docks are subject to the following mitigation requirements:

a. Any existing in-water and overwater structures shall be removed if they are associated with either a moorage structure or other recreational use that is located within 30 feet of the OHWM.

b. Emergent vegetation shall be planted waterward of the OHWM, unless the City determines that it is not appropriate or feasible.

c. Native riparian vegetation shall be planted in at least 75 percent of the nearshore riparian area located along the water's edge. The vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area. Joint-use piers will require a vegetative riparian zone along all properties sharing the pier.

d. Mitigation plantings shall be subject to the following requirements:

1) Restoration of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least three (3) trees per 100 linear feet of shoreline and 60% shrubs must be included in the plan. Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester. Plant density and spacing shall be appropriate for the site and commensurate with spacing recommended for each individual species proposed.

2) An alternative planting plan or mitigation measure in lieu of meeting these requirements shall be allowed if approved by other state and federal agencies. In addition, the City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this section, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation.

3) Vegetation placement – See the provisions contained in KZC 83.400.

4) In addition to a native planting plan, a 5-year vegetation maintenance and monitoring plan shall be submitted to the City for approval. The monitoring plan shall include the following performance standards:

a) Preparation of as-built drawings after installation of the mitigation plantings;

b) Annual monitoring reports for five (5) years, that include written and photographic documentation on tree and shrub mortality, subject to the following success criteria:

i) One hundred (100) percent survival of all planted native trees and shrubs during the first two years after planting; and

ii) One hundred (100) percent survival of trees and eighty (80) percent survival of remaining native plants in years three through five.

Copies of reports that are submitted to state or federal agencies in compliance with permit approvals may be submitted in lieu of a separate report to the City, provided that the reports address a 5-year maintenance and monitoring plan.

c) Woody debris existing on-site or contributed to the site as part of the mitigation efforts shall not be removed.

7. Replacement, Additions and Repairs -

a. Replacement - Replacement of piers and docks serving detached, attached or stacked Dwelling Units shall be considered under the provisions for new piers and docks serving detached, attached or stacked dwelling units established in KZC 83.280.5 when the entire existing pier or dock is replaced, including piles or when more than 50 percent of the pier-support piles and more than 50 percent of the decking or decking substructure is replaced (e.g. stringers). However, the mitigation requirement for additions to piers and docks in KZC 83.280.7.b below shall be met and not the mitigation requirements for new piers or docks in KZC 83.280.6.

b. Additions – Proposals involving the addition to or enlargement of existing piers or docks must comply with the following measures:

Additions to Pier, Dock or Moorage Piles for Detached, Attached or Stacked Dwelling Units (multi-family)	**Requirements**
Addition or enlargement	Must demonstrate that there is a need for the enlargement of an existing pier or dock
Dimensional standards	Enlarged portions must comply with the new pier or dock dimensional standards for length, width, height, water depth, location, decking material and pilings and for materials as described in KZC 83.280.5
Decking for piers, docks walkways, ells and fingers	Must convert an area of existing decking within 30 ft. of the OHWM with grated decking equivalent in size to the additional surface coverage. Grated or other materials must allow a minimum of 40% light transmittance through the material
Mitigation	Plantings and other mitigation as described in KZC 83.280.6 above

	Existing skirting shall be removed and may not be replaced Existing in-water and overwater structures located within 30 ft. of the OHWM, except for existing or authorized shoreline stabilization measures or pier or dock walkways or ramps, shall be removed at a 1:1 ratio to the area of the addition

c. Repair– Repair proposals that replace only decking or decking substructure and less than 50 percent of the existing pier-support piles must comply with the following:

Minor Repair to Pier, Dock or Moorage Piles for Detached, Attached or Stacked Dwelling Units (Multi-family)	**Requirements**
Replacement pilings or moorage piles	Must use materials as described under KZC 83.280.5 Must minimize the size of pilings or moorage piles and maximize the spacing between pilings to the extent allowed by site-specific engineering or design considerations
Replacement of 50 percent or more of the decking or 50 percent or more of decking substructure	Must replace any solid decking surface of the pier or dock located within 30 ft of the OHWM with a grated surface material that allows a minimum of 40% light transmittance through the material

Other repairs to existing legally established moorage facilities where the nature of the repair is not described in the above subsections shall be considered minor repairs and are permitted, consistent with all other applicable codes and regulations. If cumulative repairs of an existing pier or dock would make a proposed repair exceeds the threshold established in KZC 83.280.7.c, above, the repair proposal shall be reviewed under KZC 83.280 for a new pier or dock.

8. Boatlifts and Boatlift Canopies for serving Detached, Attached or Stacked Dwelling Units –

Boatlifts and boatlift canopies may be permitted as an accessory to piers and docks, subject to the following regulations:

Boatlift and Boat Canopy for Detached, Attached or Stacked Dwelling Units (Multi-family)	**Regulations**

Location	Boat lifts shall be placed as far waterward of the OHWM as feasible and safe, within the limits of the dimensional standards for piers and docks established in KZC 83.280.5 Bottom of a boatlift canopy shall be elevated above the boatlift to the maximum extent feasible, the lowest edge of the canopy must be at least 4 ft above the ordinary high water and the top of the canopy must not extend more than 7 ft. above an associated pier.
Maximum Number	1 freestanding or deck-mounted boatlift is allowed per dwelling unit on the subject property 2 jet ski lifts or 1 fully grated platform lift is permitted per dwelling unit on the subject property 2 boatlift canopies or equal to 10% of the dwelling units on the subject property, whichever is greater
Canopy Materials	Must be made of translucent fabric materials Must not be constructed of permanent structural material.
Fill for Boatlift	Maximum of 2 cubic yards of fill are permitted to anchor a boatlift, subject to the following requirements: • May only be used if the substrate prevents the use of anchoring devices that can be embedded into the substrate • Must be clean • Must consist of rock or pre-cast concrete blocks • Must only be used to anchor the boatlift • Minimum amount of fill is utilized to anchor the boatlift

9. Submittal Requirements - In addition to submitting an application to construct a new, enlarged or replacement pier or dock, the applicant shall submit an assessment of the impacts and measures taken to avoid, minimize, and mitigate impacts. See KZC 83.360 for requirements on mitigation sequencing.

83.290 Marinas and Moorage Facilities Associated with Commercial Uses

1. General –

   a. Marinas shall not be approved in cases where it is reasonably foreseeable that the development or use would require maintenance dredging and/or installation of a breakwater during the life of the development or use.

   b. See KZC 83.370 for structures to be extended waterward of the inner harbor line.

   c. Marinas shall be designed and located according to the following criteria:

      1) Shall not interfere with the public use and enjoyment of the water or create a hazard to navigation;

2) Shall meet KZC 83.360 for mitigation sequencing; and
3) Shall be located only at sites with sufficient water depth, adequate navigational and vehicular access, and not adjacent to an outlet of a stream.

2. Setback –

Marinas and moorage facilities shall comply with the following location standards:

Marinas and Moorage Facilities Associated with Commercial Uses	Minimum Setback Standards
From side property lines	10 ft.
From lot containing a detached dwelling unit	The area defined by a line that starts where the OHWM of the lot (containing a detached dwelling unit) intersects the side property line of the lot (containing a detached dwelling unit) closest to the moorage structure and runs waterward toward the moorage structure and extends at a 30° angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not extend beyond any intervening overwater structure. This standard shall not apply within the Urban Mixed shoreline environment.
From another moorage structure not on the subject property, excluding adjacent moorage structure that does not comply with required north and south property line setback	25 ft
From outlet of a stream regulated under KZC 90, including piped streams	Maximum distance feasible while meeting other required setback standards established under this section
From public park	100 feet; or The area defined by a line that starts where the OHWM of the park intersects with the side property line of the park closest to the moorage structure and extends at a 45° angle from the side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening over water structure. This standard shall not apply within the Urban Mixed shoreline environment.

3. Number of Moorage Slips –

The City will determine the maximum allowable number of moorages based on the following factors:

a) The suitability of the environmental conditions, such as, but not limited to: the presence of submerged aquatic vegetation, proximity to shoreline associated wetlands, critical nesting and spawning areas, water depth, water circulation, sediment inputs and accumulation, and wave action.

b) The ability of the land upland of the OHWM to accommodate the necessary support facilities.

c) The demand analysis submitted by the applicant to demonstrate anticipated need for the requested number of moorages.

4. General Standards -

a. See KZC 83.370 for required state and federal approval.

b. Structures, other than each moorage structure or public access pier, shall not be waterward of the OHWM. For regulations regarding public access piers, see KZC 83.220.

c. At least two (2) covered and secured waste receptacles shall be provided upland of the OHWM.

d. Utility and service lines located waterward of the OHWM must be below the pier deck. Utility and service lines located upland of the OHWM shall be underground, where feasible.

e. Public restrooms shall be provided upland of the OHWM.

f. At least one (1) pump-out facility for use by the general public shall be provided. This facility must be easily accessible to the general public and clearly marked for public use.

g. Transient moorage may be required as part of a marina if the site is in an area near commercial facilities generating commercial transient moorage demand.

h. Moorage facilities shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.

i. Exterior finish shall be generally non-reflective.

j. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four (4) inches high.

k. See KZC 83.470 concerning lighting standards for required lighting.

l. See KZC 83.420 concerning for Public Access for required public access.

m. Covered moorage, including boatlift canopies, is not permitted.

n. Aircraft moorage is not permitted, except as associated with an approved float plane landing and mooring facility.

o. Marinas and other moorage facilities associated with commercial uses shall be designed and operated consistent with federal and state water quality laws and established best management practices (BMPs) for marina operators, including BMPs for bilge water discharge, hazardous waste, waste oil and spills, sewer management, and spill prevention and response. Rules for spill prevention and response, including reporting requirements, shall be posted on site.

p. Boats moored within marinas shall comply with the mooring restrictions contained in Chapter 14.16 KMC.

5. New Pier or Dock Dimensional Standards –

a. Moorage structures shall not be larger than is necessary to provide safe and reasonable moorage for the boats to be moored. The City will specifically review the size and configuration of each proposed moorage structure to help ensure that:

1) The moorage structure does not extend waterward beyond the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line;
2) The moorage structure is not larger than is necessary to moor the specified number of boats; and
3) Must be designed to preclude moorage in locations that would have insufficient water depth to avoid boats resting at any time of year to on the substrate of the lake.

b. For public access piers, docks or boardwalks associated with public parks and other public facilities see KZC 83.220.5 for allowed width of the structure.

c. Piers and docks shall be the minimum size necessary to meet the needs of the proposed water-dependent use and shall meet the following dimensional and design standards:

New Marinas and Moorage Facilities Associated with Commercial Uses	**Dimensional and Design Standards**
Maximum Width	6 ft. for access walkway or ramp portion of pier or dock and primary walkways 8 ft. for ells 4 ft. for fingers, and shall be reduced to 2 ft. in those instances where the projection provides secure boat moorage but is not necessary for boat-user access 6 ft. for float decking attached to a pier An alternative design in lieu of meeting these requirements may be allowed if approved by other state and federal agencies
Height of piers, diving boards and railings	Minimum of 1.5 ft above ordinary high water to bottom of pier stringer, except the floating section of a dock and float decking attached to a pier Maximum of 3 ft. above deck for diving boards or similar features above the deck surface Maximum of 3 ft. above deck for safety railing, which shall be an open framework
Decking for piers, docks walkways, ells and fingers	Fully grated or contain other materials that allow a minimum of 40% light transmittance through the material If float tubs for docks preclude use of fully grated decking material, then a minimum of 2 ft. of grating down the center of the entire float shall be provided
Location of ells, fingers and deck platforms	No closer than 50 ft. waterward of the OHWM, measured perpendicular to the OHWM Within 50 ft. of the OHWM, only access walkway or ramp portion of pier or dock is allowed An alternative design in lieu of meeting these requirements may be allowed if approved by the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved an alternate proposal.
Pilings	First set of pilings for the moorage facility located no closer than 18 ft

	from OHWM Pilings or piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds
Mitigation	As required through mitigation sequencing in KZC 83.360

6. Replacement, Additions and Repairs –

a. Replacement - Replacement of marinas or portions thereof shall be considered under the provisions for new marinas established in KZC 83.290.5. However, the mitigation requirement for additions to marinas facilities associated with commercial uses in KZC 83.290.6.b. below shall be met and not mitigation requirements for new marinas and moorage facilities associated with commercial uses in KZC 83.290.5.above.

b. Additions – Proposals involving the modification and/or enlargement of marinas must comply with the following measures:

Additions to Marinas and Moorage Facilities Associated with Commercial Uses	Requirements
Addition or enlargement	Must demonstrate that there is a need for the enlargement of an existing pier or dock
Dimensional standards	Enlarged portions must comply with the new pier dimensional standards for pier or dock length and width, height, water depth, location, decking and pilings and for materials
Decking for piers, docks walkways, ells and fingers	Must convert an area of existing decking within 30 ft. of the OHWM to grated decking equivalent in size to the additional surface coverage that allows a minimum of 40% light transmittance through the material
Mitigation	As determined through mitigation sequencing in KZC 83.360 Existing skirting shall be removed and may not be replaced Existing in-water and overwater structures located within 50 ft. of the OHWM, except for existing or authorized shoreline stabilization measures or pier or dock walkways or ramps, shall be removed at a 1:1 ratio to the area of the addition

c. Repair– Repair proposals that replace only decking or decking substructure and are less than 50 percent of the existing pier-support piles must comply with the following:

Minor Repair to Marinas and Moorage Facilities Associated with Commercial Uses	Requirements
Replacement pilings or moorage piles	Must use materials as described under KZC 83.290.5 Must minimize the size of pilings or moorage piles and maximize the spacing between pilings to the extent allowed by site-specific engineering or design considerations
Replacement of 10 percent or more of the decking or decking substructure	Must replace any solid decking surface of the pier or dock located within 30 ft. of the OHWM with a grated surface material
Repair of the roof structure of existing boathouses or other similar covered moorage	Must use translucent materials

Other repairs to existing legally established marinas where the nature of the repair is not described in the above subsections shall be considered minor repairs and are permitted, consistent with all other applicable codes and regulations. If cumulative repairs of an existing marina would make a proposed repair exceed the threshold established in KZC 83.290.6.c above, the repair proposal shall be reviewed under KZC 83.290 for a new marina.

7. Submittal Requirements - In addition to submitting an application, the applicant shall submit the following as part of a request to construct a new, enlarged, or replacement marina or its associated facilities:

   a. An assessment of the anticipated need for the requested number of moorages and ability of the site to accommodate the proposal, considering such factors as environmental conditions, shoreline configuration, access, and neighboring uses.

   b. An assessment of the impacts and measures taken to avoid, minimize, and mitigate impacts. See KZC 83.360 for mitigation sequencing.

83.300 Shoreline Stabilization

1. General -

   a. The standards in this section apply to all developments and uses in shorelines jurisdiction.

   b. New development or redevelopment shall be located and designed to avoid the need for new or future soft or hard structural shoreline stabilization to the extent feasible.

   c. If structural stabilization is necessary to protect the primary structure, then the feasibility of soft structural measures shall be evaluated prior to consideration of hard structural measures. Soft structural stabilization measures must be used unless the City determines that it is not feasible based on information required in this section and provided by the applicant.

   d. Soft shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

e. Plate 43 provides guidance on different shoreline stabilization measures that may be considered, based upon the unique characteristics of the subject property and shoreline.

f. During construction or repair work on a shoreline stabilization measure, areas of temporary disturbance within the shoreline setback shall be restored as quickly as feasible to their pre-disturbance condition or better to avoid impacts to the ecological function of the shoreline. Also see KZC 83.430 for in-water construction activity.

g. The following is a summary of the key requirements found in KZC 83.300.2 through KZC 83.300.7:

Shoreline Stabilization Measures	Requirements
Structural and Nonstructural Methods	Nonstructural methods preferred, but if there is a demonstrated need for a structural stabilization measure to protect primary structure, then soft structural stabilization must be considered prior to hard structural stabilization.
New or Enlargement of Hard Shoreline Structural Measures (enlargement includes additions and increases in size, such as height, width, length, or depth, to existing shoreline stabilization measures)	Allowed when existing primary structure is 10 ft. or less from OHWM When existing primary structure is greater than 10 ft. from OHWM, requires geotechnical report to show need, an evaluation of the feasibility of soft rather than hard structural shoreline stabilization measures and design recommendations for minimizing structural shoreline measures. Requires mitigation plantings
Major Repair or Replacement of Hard Shoreline Structural Measures	A major repair is a collapsed or eroded structure or a demonstrated loss of structural integrity, or repair of toe rock or footings of more than 50% in continuous linear length; or A major repair is repair to more than 75% of the linear length of structure that involves replacement of top or middle course rocks or other similar repair Allowed when existing primary structure is 10 ft. or less from OHWM When existing primary structure is more than 10 ft. from the OHWM, requires a written narrative that provides a demonstration of need
Minor Repair of Hard Shoreline Stabilization Measure	Does not meet threshold of new, enlarged, major repair or replacement measurement. No geotechnical report or needs assessment required.
New, Enlarged, Repair or Replacement of Soft Shoreline Stabilization Measure	Allowed when existing primary structure is 10 ft. or less from OHWM or for repair or

	replacement. For primary structure greater than 10 ft. from the OHWM, new or enlarged requires a written narrative that provides a demonstration of need

2. New or Enlarged Structural Shoreline Stabilization –

a. For the purposes of this section, enlargement of an existing structural stabilization shall include additions to or increases in size (such as height, width, length, or depth). Primary structure includes appurtenances listed under WAC 173-14-040, but not tool sheds, greenhouses, swimming pools, spas and other ancillary residential improvements listed in KZC 83.80.5.

b. When allowed:

The City may only approve a new or enlarged hard or soft structural stabilization measure in the following circumstances:

1) To protect an existing primary structure, including a detached dwelling unit, in either of the following circumstances:

a) The existing primary structure is located ten (10) feet or less from the OHWM. For the purposes of the provision, the distance shall be measured to the most waterward location of the primary structure. No geotechnical analysis or needs assessment is required, or

b) The existing primary structure is located more than ten (10) feet from the OHWM.

In order to be approved, the applicant must demonstrate the following:

i. For new or enlarged hard structural stabilization, conclusive evidence, documented by a geotechnical analysis that the primary structure is in danger from shoreline erosion caused by waves. The analysis must show that there is a significant possibility that an existing structure will be damaged within three (3) years as a result of shoreline erosion in the absence of hard structural stabilization measures, or where waiting until the need is immediate results in the loss of opportunity to use measures that would avoid impacts on ecological functions. Where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three (3) years, the report may still be used to justify more immediate authorization to protect against erosion using soft structural stabilization measures.

ii. For new soft structural stabilization measures, demonstrate need for structural stabilization to protect the new primary structure.

iii. For hard and soft stabilization measures, any on-site drainage issues have been directed away from the shoreline edge prior to considering structural stabilization.

iv. For hard and soft shoreline stabilization measures, nonstructural measures, such as planting vegetation, or installing on-site drainage improvements are shown not to be feasible or sufficient to protect the primary structure.

2) To protect a new primary structure, including a detached dwelling unit, when all of the conditions below apply:

a) For new non water-dependant uses, placing the new primary structure farther upland from the OHWM is not feasible or not sufficient to prevent damage to the primary structure;

b) Upland conditions, such as drainage problems and the loss of vegetation, are not causing the erosion;

c) Nonstructural measures, planting vegetation, or installing on-site drainage improvements are shown not to be feasible or sufficient to prevent damage to the primary structure; and

d) The need to protect the new primary structures from potential damage is due to erosion from wave action. For hard structural stabilization measures, a geotechnical report must be submitted demonstrating need. For soft structural stabilization measures, an assessment by a qualified professional must be submitted demonstrating need.

3) To protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

3. Submittal Requirements for New or Enlarged Structural Stabilization Measures -

In addition to the requirements described in KZC 83.300.2 above, the following shall be submitted to the City for an existing primary structure more than 10 feet from the OHWM or for a new primary structure:

a. For a hard structural shoreline stabilization measure, a geotechnical report prepared by a qualified professional with an engineering degree. The report shall include the following:

1) An assessment of the necessity for hard structural stabilization by estimating time frames and rates of erosion and documenting the urgency associated with the specific situation.

2) An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM and on-site drainage.

b. An assessment prepared by a qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), containing the following:

1) For a hard structural shoreline stabilization measure, an evaluation of the feasibility of using nonstructural or soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. The evaluation shall address the feasibility of implementing options presented in Plate 43 based on an assessment of the subject property's characteristics.

2) For a soft structural stabilization measure, an assessment of:

a) The erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the soft structural stabilization.

b) The feasibility of using nonstructural measures in lieu of soft structural shoreline stabilization measures.

3) For both hard and soft structural shoreline stabilization measures, design recommendations for minimizing the sizing of shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.

4) See additional submittal requirements below in subsections 8, 9 and 10 for general submittal requirements, maintenance agreement and general design standards.

4. Replacement or Major Repair of Hard Structural Shoreline Stabilization -

a. For the purposes of this section, major repair or replacement of a hard shoreline stabilization measure shall include the following activities:

1) A repair needed to a portion of an existing stabilization structure that has collapsed, eroded away or otherwise demonstrated a loss of structural integrity, or in which the repair work involves modification of the toe rock or footings, and the repair is 50 percent or greater than the linear length of the shoreline stabilization measure; or

2) A repair to more than 75 percent of the linear length of the existing hard structural shoreline stabilization measure in which the repair work involves replacement of top or middle course rocks or other similar repair activities.

b. When allowed -

The City may only approve a major repair or replacement of an existing hard structural stabilization measure with a hard structural shoreline stabilization measure to protect existing primary structures or principal uses, including detached dwelling units, in either of the following circumstances:

1) The primary structure is located 10 feet or less from the OHWM. For the purposes of the provision, the distance shall be measured to the most waterward location of the primary structure; or

2) For a primary structure located more than 10 feet from the OHWM or a use, conclusive evidence is provided to the City that the primary structure or use is in danger from shoreline erosion caused by waves as required in KZC 83.300.5 below.

5. Submittal Requirements for Major Repairs or Replacements of Hard Stabilization Measures -

The following shall be submitted to the City when the primary structure is located more than 10 feet landward of the OHWM or for a use with no primary structure:

a. Written narrative that provides a demonstration of need shall be submitted. A qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), but not necessarily a licensed geotechnical engineer shall prepare a written narrative. The written narrative shall consist of the following:

1) An assessment of the necessity for hard structural stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch, and location of the nearest structure. The evaluation shall address the feasibility of implementing options presented in Plate 43, given an assessment of the subject property's characteristics.

2) An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization.

3) An assessment of the feasibility of using soft structural stabilization measures in lieu of hard structural shoreline stabilization measures. Soft stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

b. Design recommendations for minimizing impacts and ensuring that the replacement or repaired stabilization measure is designed, located, sized, and constructed to assure no net loss of ecological functions.

c. See additional submittal requirements below in subsections 8, 9 and 10 for general submittal requirements, maintenance agreement and general design standards.

6. Minor Repairs of Hard Shoreline Stabilization –

Minor repairs of hard shoreline stabilization include those maintenance and repair activities not otherwise addressed in the subsection above. The City shall allow minor repair activities to existing hard structural shoreline stabilization measures.

7. Repair or Replacement of Soft Shoreline Stabilization and Submittal Requirements –

   a. The City shall allow repair or replacement of soft shoreline stabilization.

   b. The applicant shall submit to the City design recommendations for minimizing impacts and ensuring that the replacement or repaired stabilization measure is designed, located, sized, and constructed to assure no net loss of ecological functions.

   c. See additional submittal requirements below in subsections 8, 9 and 10 for general submittal requirements, maintenance agreement and general design standards.

8. General Submittal Requirements for New, Enlarged, Replacement and Major Repair Measures –-

   Detailed construction plans shall be submitted to the City, including the following:

   a. Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWM.

   b. Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation. The sizing and placement of all materials shall be selected to accomplish the following objectives:

      1) Protect the property and structures from erosion and other damage over the long term, and accommodate the normal amount of alteration from wind- and boat-driven waves;

      2) Allow safe passage and migration of fish and wildlife; and

      3) Minimize or eliminate juvenile salmon predator habitat.

   c. For hard structural stabilization measures when shoreline vegetation is required as part of mitigation, a detailed 5-year vegetation maintenance and monitoring program to include the following:

      1) Goals and objectives of the shoreline stabilization plan;

      2) Success criteria by which the implemented plan will be assessed;

      3) A 5-year maintenance and monitoring plan, consisting of one (1) site visit per year by a qualified professional, with annual progress reports submitted to the Planning Official and all other agencies with jurisdiction;

      4) A contingency plan in case of failure; and

      5) Proof of a written contract with a qualified professional who will perform the monitoring.

   d. Fee for a consultant selected by the City to review the shoreline stabilization plan, the monitoring and maintenance program, the narrative justification of demonstrated need, and drawings. In addition, the Planning Official may require a fee for a consultant to review the geotechnical report and recommendations. In the case of use of a consultant, the applicant shall sign the City's standard 3-party contract.

9. Maintenance Agreement for Hard and Soft Structural Stabilization -

   The applicant shall complete and submit a 5-year period maintenance agreement, using the City's standard form, for recording to ensure maintenance of any structural shoreline stabilization measure.

10. General Design Standards - The following design standards shall be incorporated into the stabilization design:

    a. Soft structural shoreline stabilization measures shall be used to the maximum extent feasible, limiting hard structural shoreline stabilization measures to the portion or portions of the site where necessary to connect to existing hard shoreline stabilization measures on adjacent properties. The length of hard structural shoreline stabilization connections to adjacent properties shall be minimized to the maximum extent feasible, and extend into the subject property from adjacent properties no more than needed.

b. For enlarged, major repair or replacement of hard structural shoreline stabilization measures, excavation and fill activities associated with the structural stabilization shall be landward of the existing OHWM, except when not feasible due to existing site constraints or to mitigate impacts of hard structural stabilization by increasing shallow water habitat with gravel, rocks and logs.

c. For short-term construction activities, hard and soft structural stabilization measures must minimize and mitigate any adverse impacts to ecological functions by compliance with appropriate timing restrictions, use of best management practices to prevent water quality impacts related to upland or in-water work, and stabilization of exposed soils following construction.

d. For long-term impacts, new, enlarged or major repair or replacement of hard structural shoreline stabilization shall incorporate the following measures into the design wherever feasible.

    1) Limiting the size of hard structural shoreline stabilization measures to the minimum necessary, including height, depth, and mass.

    2) Shifting hard stabilization structure landward and/or sloping the structure landward to provide some dissipation of wave energy and increase the quality or quantity of nearshore shallow-water habitat.

e. For new and enlarged hard shoreline stabilization, the following additional measures shall be incorporated into the design:

    1) To increase shallow-water habitat, install gravel/cobble beach fill waterward of the OHWM, grading slope to a maximum of 1 vertical (v): 4 horizontal (h). The material shall be sized and placed to remain stable and accommodate alteration from wind- and boat-driven waves.

    2) Plant native riparian vegetation as follows:

        a) At least 75 percent of the nearshore riparian area located along the edge of the OHWM shall be planted.

        b) The vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of 5 feet wide to allow for variation in landscape bed shape and plant placement provided that the total square footage of the area planted equals ten (10) feet along the water's edge.

        c) Restoration of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least 3 trees per 100 linear feet of shoreline and 60% shrubs must be included in the plan.

        d) Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

        e) An alternative planting plan or mitigation measure in lieu of meeting this section shall be allowed if approved by other state and federal agencies. In addition, the City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this section, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation.

        f) Standards for vegetation placement are provided in KZC 83.400.

f. Hard and soft shoreline stabilization measures shall be designed to not significantly interfere with normal surface and/or subsurface drainage into Lake Washington, constitute a hazard to navigation or extend waterward more than the minimum amount necessary to achieve effective stabilization.

g. Hard and soft stabilization measures are allowed to have gravel, logs and rocks waterward of the OHWM, as approved by the City and federal and state agencies, to provide enhancement of shoreline ecological functions through creation of nearshore shallow-water habitat.

h. Stairs or other water access measures may be incorporated into the shoreline stabilization, but shall not extend waterward of the shoreline stabilization measure.

i. The shoreline stabilization measures shall be designed to ensure that the measures do not restrict public access or make access unsafe to the shoreline, except where such access is modified under the provisions of KZC 83.420 for public access. Access measures shall not extend farther waterward than the face of the shoreline stabilization structure.

j. See KZC 83.300.11 and 12 below concerning additional design standards for hard structural stabilization and KZC 83.300.13 for soft structural stabilization.

11. Specific Design Standards for New or Enlarged Hard Structural Stabilization –

In addition to the general design standards in KZC 83.300.10 above, the following design standards shall be incorporated:

a. Where hard stabilization measures are not located on adjacent properties, the construction of a hard stabilization measure on the site shall tie in with the existing contours of the adjoining properties, as feasible, such that the proposed stabilization will not cause erosion of the adjoining properties.

b. Where hard stabilization measures are located on adjacent properties, the proposed hard stabilization measure may tie in flush with existing hard stabilization measures on adjoining properties, but by no more than as reasonably required. The new hard stabilization measure shall not extend waterward of OHWM, except as necessary to make the connection to the adjoining hard stabilization measures. No net intrusion into the lake and no net creation of upland shall occur with the connection to adjacent stabilization measures.

c. Fill behind hard shoreline stabilization measures shall be limited to an average of one (1) cubic yard per running foot of bulkhead. Any filling in excess of this amount shall be considered a regulated activity subject to the regulations in this Chapter pertaining to fill activities and the requirement for obtaining a shoreline substantial development permit.

12. Specific Design Standards for Replacement of Hard Structural Stabilization –

Replacement hard structural stabilization measures shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the primary structure was constructed prior to January 1, 1992 (RCW 90.58.100.6 and WAC 173.26.241 and WAC 173.26.231.3.j), and there is overriding safety or environmental concerns if the stabilization measure is moved landward of the OHWM. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. All other replacement structures shall be located at or landward of the existing shoreline stabilization structure.

13. Specific Design Standards for Soft Structural Stabilization –

In addition to the general design standards in KZC 83.300.10, the following design standards shall be incorporated:

a. Provide sufficient protection of adjacent properties by tying in with the existing contours of the adjoining properties to prevent erosion at the property line. Proposals that include necessary use of hard structural stabilization measures only at the property lines to tie in with adjacent properties shall be permitted as soft structural shoreline stabilization measures. The length of hard structural stabilization connections to adjacent properties shall be the minimum needed and extend into the subject property from adjacent properties as reasonably required.

b. Size and arrange any gravels, cobbles, logs, and boulders so that the improvement remains stable in the long-term and dissipate wave energy, without presenting extended linear faces to oncoming waves.

14. Expansion of SMA Jurisdiction from Shift in OHWM -

    If a shoreline stabilization measure from any action required by this Chapter or intended to improve ecological functions results in shifting the OHWM landward of the pre-modification location that expands the shorelines jurisdiction onto any property other than the subject property, then as part of the shoreline permit process found in Chapter 141 KZC:

    a. The City shall notify the affected property owner in writing, and

    b. The City may propose to grant relief for the affected property owners from applicable shoreline regulations resulting in expansion of the shorelines jurisdiction. The proposal to grant relief must be submitted to the Department of Ecology with the shoreline permit under the procedures established in KZC 141.70. If approved, notice of the relief, in a form approved by the City Attorney, shall be recorded on the title of the affected property with the King County Bureau of Elections and Records.

83.310 Breakwaters, Jetties, Groins

1. Breakwaters, jetties, and groins are not permitted in the Natural, Urban Conservancy, or Residential – L shoreline environments. Breakwaters, jetties, and groins may only be permitted in other shoreline environments where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

2. The City will permit the construction and use of a breakwater, jetty or groin only if:

    a. The structure is essential to the safe operation of a moorage facility or the maintenance of other public water-dependent uses, such as swimming beaches;

    b. The City determines that the location, size, design, and accessory components of the moorage facility or other public water-dependent uses to be protected by the breakwater are distinctly desirable and within the public interest; and

    c. The benefits to the public provided by the moorage facility or other public water-dependent uses protected by the breakwater outweigh any undesirable effects or adverse impacts on the environment or nearby waterfront properties.

3. Design Standards

    a. All breakwaters, jetties or groins must be designed and constructed under the supervision of a civil engineer or a similarly qualified professional. As part of the application, the engineer or the other professional designing the breakwater, jetty or groin must certify that it is the smallest feasible structure to meet the requirements of this Chapter and accomplish its purpose and that the design will result in the minimum feasible adverse impacts upon the environment, nearby waterfront properties and navigation.

    b. Breakwaters may only use floating or open-pile designs.

83.320 Dredging and Dredge Material Disposal

1. New development shall be sited and designed to avoid or, if that is not feasible, to minimize the need for new and maintenance dredging.

2. Dredging waterward of the OHWM may be allowed for only the following purposes:

    a. To establish, expand, relocate or reconfigure navigation channels and basins where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided. Maintenance dredging of established navigation channels and basins must be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

    b. To maintain the use of existing private or public boat moorage, water-dependent use, or other public access use. Maintenance dredging is restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

c. To restore ecological functions, provided the applicant can demonstrate a clear connection between the proposed dredging and the expected environmental benefits to water quality and/or fish and wildlife habitat.

d. To obtain fill or construction material when necessary for the restoration of ecological functions. Dredging waterward of the OHWM for the primary purpose of obtaining fill or construction materials is not permitted under other circumstances. When allowed, the site where the fill is to be placed must be located waterward of the OHWM. The project must be associated with a significant habitat enhancement project.

3. Depositing dredge materials waterward of the OHWM shall only be allowed in approved sites, only when the material meets or exceeds state pollutant standards, and only for the purposes of fish or wildlife habitat improvement or permitted beach enhancement.

4. Dredging Design Standards –

a. All permitted dredging must be the minimum area and volume necessary to accommodate the existing or proposed use, and must be implemented using practices that do not exceed state water quality standards.

b. Dredging projects shall be designed and carried out to prevent direct and indirect impacts on adjacent properties.

5. Submittal Requirements -

The following information shall be required for all dredging applications:

a. A description of the purpose of the proposed dredging.

b. A detailed description of the existing physical character, shoreline geomorphology and biological resources provided by the area proposed to be dredged, including:

1) A site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry depths based on the OHWM and have data points at a minimum of 2-foot depth increments.

2) A habitat survey identifying aquatic vegetation, potential native fish spawning areas, or other physical or biological habitat parameters.

3) Information on the stability of lakebed adjacent to proposed dredging area.

4) Information on the composition of the material to be removed.

c. A description of:

1) Dredging procedure, including length of time it will take to complete dredging, method of dredging, and amount of material removed.

2) Where the materials will be placed to allow for sediment to settle, by what means the materials will be transported away from the dredge site, and specific approved land or open-water disposal site.

3) Plan for anticipated future maintenance dredging and disposal, including frequency and quantity, for at least a 20-year period.

d. Copies of state and federal approvals.

83.330 Land Surface Modification

1. General – The following standards must be met for any approved land surface modification:

a. Land surface modification within required shoreline setback shall only be permitted upon approval of a land surface modification permit, under the provisions established in KMC Title 29.

b. The land surface modification shall be consistent with the provisions of this Chapter,

including, but not limited to, the regulations regarding streams, wetlands and their buffers, geologically hazardous areas, shoreline vegetation, and trees.

c. The land surface modification is consistent with the provisions of the most current edition of the Public Works Department's Pre-Approved Plans and Policies.

d. All excess material resulting from land surface modification shall be disposed of in a manner that prevents the material entering into a waterbody through erosion or runoff. Where large quantities of plants are removed by vegetation control activities authorized under this section, plant debris shall be collected and disposed of in an appropriate location located outside of the shoreline setback.

e. Areas disturbed by permitted land surface modification in the shoreline setback shall be stabilized with approved vegetation.

f. All materials used as fill shall be non-dissolving and non-decomposing. Fill material shall not contain organic or inorganic material that would be detrimental to water quality or existing habitat, or create any other significant adverse impacts to the environment.

g. The land surface modification must be the minimum necessary to accomplish the underlying reason for the land surface modification.

h. Except as is necessary during construction, dirt, rocks and similar materials shall not be stockpiled on the subject property. If stockpiling is necessary during construction, it must be located as far as feasible from the lake and strictly contained to prevent erosion and runoff.

2. Permitted Activities -

a. Land surface modification is prohibited within the shoreline setback, except for the following:

1) For the purpose of shoreline habitat and natural systems enhancement projects, setting back shoreline stabilization measures or portions of shoreline stabilization measures from the OHWM, or soft structural shoreline stabilization measures under a plan approved by the City.

2) As authorized by a valid shoreline permit or approval issued by the City.

3) Associated with the installation of improvements located within the shoreline setback or waterward of the OHWM, as permitted under KZC 83.190.2.

4) Removal of prohibited vegetation.

5) As performed in the normal course of maintaining existing vegetation on a lot associated with existing buildings, provided such work:

a) Does not modify any drainage course.

b) Does not involve the importation of fill material, except as needed for mulch or soil amendment.

c) Does not involve removal of native vegetation or vegetation installed as part of an approved restoration or enhancement plan, unless approved by the Planning Official.

d) Does not result in erosion of the shoreline or undermine stability of neighboring properties.

e) Does not result in the compaction of existing soils in a manner that significantly decreases the ability of the soil to absorb rainfall.

f) Is the minimum extent necessary to reasonably accomplish the maintenance activity.

6) Correction of storm drainage improvements when supervised by the Department of Public Works.

7) As necessary to maintain or upgrade the structural safety of a legally established structure.

8) For exploratory excavations under the direction of a professional engineer licensed in the state of Washington, as long as the extent of the land surface modification does not exceed the minimum necessary to obtain the desired information.

b. Land surface modification outside of the shoreline setback is regulated as land surface modifications throughout the City. See KMC Title 29 for those regulations.

83.340 Fill

1. Fill shall be permitted only where it is demonstrated that the proposed action will not:
   a. Result in significant damage to water quality, fish, aquatic habitat, and/or wildlife habitat; or
   b. Adversely alter natural drainage and circulation patterns, currents, or stream flows, or significantly reduce floodwater-holding capabilities.
2. Fills landward and waterward of the OHWM shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area.
3. Fills waterward of the OHWM shall be permitted only:
   a. In conjunction with an approved water-dependent use or public access use, including maintenance of beaches or
   b. As part of an approved mitigation or restoration project.
4. Any placement of materials landward of the OHWM shall comply with the provisions in KZC 83.330 for land surface modification.
5. No refuse disposal sites, solid waste disposal sites, or sanitary fills shall be permitted.

83.350 Shoreline Habitat and Natural Systems Enhancement Projects

1. Purpose - Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.
2. Covered Activities – The following actions are allowed under this section, provided they first meet the purpose stated in KZC 83.850.1 above:
   a. Establishment or enhancement of native vegetation.
   b. Removal of non-native or invasive plants upland of the OHWM, including only those identified as noxious weeds on King County's published Noxious Weed List, unless otherwise authorized by the City.
   c. Conversion of hard structural shoreline stabilization to soft shoreline stabilization, including associated clearing, dredging and filling necessary to implement the conversion, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.
   d. Implementation of any project or activity identified in the City's Restoration Plan.
   e. Implementation of any project or activity identified in the *Final WRIA 8 Chinook Salmon Conservation Plan and related documents.*

General Regulations

83.360 No Net Loss Standard and Mitigation Sequencing

1. General –
   a. If specific standards, such as setbacks, pier dimensions and tree planting requirements, are provided in this Chapter, then the City shall not require additional mitigation sequencing analysis under these provisions.
   b. In the following circumstances, the applicant shall provide an analysis of measures taken to mitigate environmental impacts:
      1) Where specific regulations for a proposed use or activity are not provided in this Chapter;
      2) Where either a conditional use or variance application are proposed;
      3) Where the standards contained in this Chapter require an analysis of the feasibility of or need for an action or require analysis to determine whether the design has been minimized in size; and
      4) Where the standards provide for alternative compliance or mitigation measures.
   c. Under WAC Chapter 173-26, uses and shoreline modifications along Kirkland's shoreline shall be designed, located, sized, constructed and/or maintained to achieve no net loss of shoreline ecological functions.
   d. Maintenance activities shall be conducted in a manner that minimizes impacts to fish, wildlife, and their associated habitat and utilizes best management practices, unless specific standards in this Chapter are already provided for maintenance activities.
   e. Where evaluating the feasibility of a proposed action, the City shall consider whether the cost of avoiding disturbance is substantially disproportionate as compared to the environmental impact of the proposed disturbance, including any continued impacts on functions and values over time.
   f. Where mitigation is required, the City shall consider alternative mitigation measures that are proposed by the applicant that may be less costly than those prescribed in this Chapter, provided that the alternatives are as effective in meeting the requirements of no net loss.
2. Mitigation Analysis - In order to assure that development activities contribute to meeting the no net loss provisions by avoiding, minimizing, and mitigating for adverse impacts to ecological functions or ecosystem-wide processes, an applicant required to complete a mitigation analysis pursuant to KZC 83.360.1 above, shall utilize the following mitigation sequencing guidelines that appear in order of preference, during the design, construction and operation of the proposal:
   a. Avoiding the impact altogether by not taking a certain action or parts of an action;
   b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
   c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
   d. Reducing or eliminating the impact over time by preservation and maintenance operations;
   e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
   f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

   Failure to demonstrate that the mitigation sequencing standards have been met may result in permit denial. The City may request necessary studies by qualified professionals to determine compliance with this standard and mitigation sequencing.

83.370 Federal and State Approval

1. All work at or waterward of the OHWM requires permits or approvals from one or more of the following state and federal agencies: U.S. Army Corps of Engineers, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, or Washington Department of Ecology.
2. Documentation verifying necessary state and federal agency approvals must be submitted to the City prior to issuance of a building permit, including shoreline exemption. All activities within shorelines jurisdiction must comply with all other applicable laws and regulations.
3. If structures are proposed to extend waterward of the inner harbor line, the applicant must obtain an aquatic use authorization from the Washington State Department of Natural Resources and submit proof of authorization with submittal of a Building Permit.

83.380 Shoreline Setback Reduction

1. Improvements permitted within the Shoreline Setback - See standards contained in KZC 83.190.2.
2. Shoreline Setback Reductions –
   a. In the Residential – L shoreline environment, the shoreline setback may be reduced by two (2) feet if subject to the Historic Preservation provisions of KMC 22.28.048, but in no case closer than 25 feet with the exception in the Residential L - shoreline environment south of the Lake Ave West Street End Park where the minimum shoreline setback is 15 feet.
   b. The required shoreline setback may be reduced to a minimum of 25 feet when setback reduction impacts are mitigated using a combination of the mitigation options provided in the chart below to achieve an equal or greater protection of lake ecological functions. In the portion of the Residential-L environment located south of the Lake Ave W Street End Park, the required shoreline setback may be reduced to a minimum of 15 feet. The following standards shall apply to any reduced setback:
      1) The minimum setback that may be approved through this reduction provision is 25 feet in width, except that properties in the Residential L – shoreline environment south of the Lake Ave West Street End Park may reduce to a minimum setback of 15 feet. Any further setback reduction below 25 feet or 15 feet, respectively, in width shall require approval of a shoreline variance application.
      2) The City shall accept previous actions that meet the provisions established in the setback reduction option chart in KZC 83.380.d. below as satisfying the requirements of this section, provided that all other provisions are completed, including but not limited to, the agreement noted in Section 83.380.2.b.4 below. The reduction allowance for previously completed reduction actions may only be applied once on the subject property.
      3) Prior to issuance of a certificate of occupancy or final inspection, the applicant shall provide a final as-built plan of any completed improvements authorized or required under this subsection.
      4) Applicants who obtain approval for a reduction in the setback must record the final approved setback and corresponding conditions, including maintenance of the conditions throughout the life of the development, unless otherwise approved by the City, in a form acceptable to the City Attorney, and recorded with the King County Bureau of Elections and Records. The applicant shall provide land survey information for this purpose in a format approved by the Planning Official.
      5) The shoreline setback reduction mechanisms shall not apply within the Natural shoreline environment.
   c. The reduction allowance shall be applied to the required shoreline setback. For instance, if a reduction is proposed in the Residential – L environment, where the shoreline setback requirement is 30% of the average parcel depth, the shoreline setback could be reduced to

20% of the average parcel depth, but in no case less than 25 feet, if reduction option 1 in the chart below is used.

d. The chart below describes the setback reduction options:

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	**Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)**
Water Related Conditions or Actions			
1	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 75 percent of the linear lake frontage of the subject property. This can include the removal of an existing hard structural shoreline stabilization measure and subsequent restoration of the shoreline to a natural or semi-natural state, including restoration of topography, and beach/substrate composition. This option cannot be used in conjunction with Option 2 below	Reduce required setback by 15 percentage points, or in cases where the required setback is 60' reduce setback by 30 ft.	Reduce required setback by 15 ft.
2	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 15 linear feet of the lake frontage of the subject property. This may include the removal of an existing hard structural shoreline stabilization measure and subsequent restoration of the shoreline to a natural or semi-natural state, including creation or enhancement of nearshore shallow-water habitat, beach/substrate composition. This option cannot be used in conjunction with Option 1 above;	Reduce required setback by 5 percentage points, or in cases where the required setback is 60' reduce setback by 10 ft.	Reduce required setback by 5 ft.
3	Opening of previously piped on-site watercourse to allow potential rearing opportunities for anadromous fish for a minimum of 25 feet in length. Opened watercourses must be provided with a native planted buffer at least 5 feet wide on both side of the stream, and must not encumber adjacent properties with a 5 foot wide buffer without express written permission of the adjacent property owner. A qualified professional must design opened watercourses. The opened watercourse shall be exempt from the buffer provisions of KZC 83.490. The opened watercourse is exempt from the buffer requirements and standards of KZC 83.510.	Reduce required setback by 5 percentage points, or in cases where the required setback is 60' reduce setback by 4 ft.	Reduce required setback by 5 ft.
4	Hard structural shoreline stabilization measures are setback from the OHWM between 2 ft. to 4 ft based on feasibility and existing conditions and/are sloped at a maximum 3 vertical (v):	Reduce required setback by 5	Reduce required

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	**Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)**
	1 horizontal (h) angle to provide dissipation of wave energy and increase the quality or quantity of nearshore shallow-water habitat.	percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	setback by 5 ft.
5	Soft structural shoreline stabilization measures are installed waterward of the OHWM. They may include the use of gravels, cobbles, boulders, and logs, as well as vegetation. The material shall be of a size and placed to remain stable and accommodate alteration from wind- and boat-driven waves and shall be graded to a maximum slope of 1 vertical (v): 4 horizontal (h).	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
Upland Related Conditions or Actions			
6	Installation of biofiltration/infiltration mechanisms in lieu of piped discharge to the lake, such as mechanisms that infiltrate or disperse surface water on the surface of the subject property, These mechanisms shall be sized to store a minimum of 70% of the annual volume of runoff water from the subject property, for sites with poor soils, or 99% of the annual volume of runoff water from the subject property, for sites with well-draining soils. This mechanism shall apply to sites where the total new or replaced impervious surface is less than or equal to 5,000 square feet. The mechanisms shall be designed to meet the requirements in the City's current surface water design manual.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
7	Increasing the width of the required landscape strip within the reduced shoreline setback a minimum of five (5) additional feet in width.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4	Reduce required setback by 2 ft.

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	**Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)**
		ft.	
8	Installation of pervious material for all pollution generating surfaces such as driveways, parking or private roads that allows water to pass through at rates similar to pre-developed conditions. Excluded from this provision are the vehicular easement roads, such as 5th Ave West or Lake Ave West in the Residential – L shoreline environment.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
9	Limiting the lawn area within the shoreline setback to no more than 50 percent of the reduced setback area.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
10	Preserving or restoring at least 20 percent of the total lot area outside of the reduced setback and any critical areas and their associated buffers as native vegetation.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60' reduce setback by 4 ft.	Reduce required setback by 2 ft.

83.390 Site and Building Design Standards

1. Water-enjoyment and non-water oriented commercial and recreational uses shall contain the following design features to provide for the ability to enjoy the physical and aesthetic qualities of the shoreline:

   a. Buildings are designed with windows that orient toward the shoreline.

b. Buildings are designed to incorporate outdoor areas such as decks, patios, or viewing platforms that orient toward the shoreline.

c. Buildings are designed with entrances along the waterfront façade and with connections between the building and required public pedestrian walkways.

d. Service areas are located away from the shoreline.

e. Site planning includes public use areas along waterfront public pedestrian walkways, if required under the provisions established in KZC 83.420, that will encourage pedestrian activity, including but not limited to:

1) Permanent seating areas;

2) Vegetation, including trees to provide shade cover; and

3) Trash receptacles.

2. Exemptions – The following are exempt from the requirements of KZC 83.390.1 above:

a. Non-water oriented commercial and recreational uses that are located on the east side of Lake Washington Blvd. NE/Lake Street or on the east side of 98th Avenue NE.

b. Non-water oriented commercial and recreational uses where there is an intervening development between the shoreline and the subject property.

3. Buildings shall not incorporate materials that are reflective or mirrored.

83.400 Tree Management and Vegetation in Shoreline Setback

1. Tree Retention - The following provisions shall apply to significant trees located within the shorelines jurisdiction, in addition to the provisions contained in Chapter 95 KZC. Provisions contained in Chapter 95 KZC that are not addressed in this section continue to apply.

To maintain the ecological functions that trees provide to the shoreline environment, significant trees shall be retained or, if removed, the loss of shoreline ecological functions shall be mitigated for, subject to the following standards:

a. No Development Activity –

For tree removal in the shoreline setback when no development activity is proposed or in progress, the following tree replacement standards and requirements shall apply:

1) Healthy, diseased or nuisance trees that are removed or fallen trees in the shoreline setback shall be replaced as follows:

Removed Tree Type	**Replacement Requirement**
1 conifer tree less than 24 inches in diameter as measured at breast height	For removal of conifer tree up to 12 inches in diameter, replace with 1 native conifer tree at least 6 ft. in height measured from existing grade. For removal of conifer tree greater than 12 inches in diameter but less than 24 inches in diameter, same replacement requirements as for conifer tree 12 inches in diameter or less, but also a riparian vegetation area at least 80 square feet at the time of planting. Riparian area shall contain at least 60% shrubs and be a minimum of 3 ft. wide in all dimensions at the time of planting.
1 deciduous tree less than 24 inches in	For removal of deciduous tree up to 12

diameter as measured at breast height	inches in diameter replace with 1 deciduous tree at least 2 inches in caliper measured 6 inches above existing grade or 1 native conifer tree at least 6 feet in height measured from existing grade.. For removal of deciduous tree greater than 12 inches in diameter but less than 24 inches in diameter, same replacement requirements as for deciduous tree 12 inches in diameter or less, but also a riparian vegetation area of at least 80 square feet at the time of planting. Riparian area shall contain at least 60% shrubs and be a minimum of 3 feet wide in all dimensions at the time of planting.
1 conifer or deciduous tree 24 inches in diameter or greater as measured at breast height	Only trees meeting the criteria found in Chapter 95 KZC for a nuisance or hazard tree may be removed. A report, prepared by a qualified professional certified arborist, must be submitted showing how tree meets the criteria. The City arborist shall make the final determination if tree meets the criteria and may be removed. If the City arborist approved removal of the tree, tree replacement shall be: For removal of 1 conifer tree, replace with 2 native confer trees at least 6 ft. in height at the time of planting. For removal of 1 deciduous tree, replace with 2 trees of either type. Native conifer tree shall be at least 6 ft. in height and deciduous tree shall be at least 2 inches in caliper measured 6 inches above existing grade at the time of planting.
A significant tree that has fallen as a result of natural causes, such as a fire, flood, earthquake or storm	If the subject property complies with the minimum tree density requirement established in Chapter 95 KZC, no replacement is required. Otherwise, replace with 1 tree. Native conifer tree shall be at least 6 ft. in height and deciduous tree shall be at least 2 inches in caliper measured 6 inches above existing grade at the time of planting.

2) A tree removal request shall be submitted in writing to the City prior to any tree removal within the shoreline setback. The request shall include the location, number, type and size of tree(s) being removed and the proposed replacement tree(s) and riparian vegetation planting plan meeting the standards required in KZC 83.400.1.a) above. The City shall inspect the tree replacement once installation is complete.

3) An alternative replacement option shall be approved if an applicant can demonstrate that:

a) It is not feasible to plant all of the required mitigation trees in the shoreline setback of the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, and minimum spacing requirements for the trees to be planted, or

b) The required tree replacement will obstruct existing views to the lake, at the time of planting or upon future growth that cannot otherwise be mitigated through tree placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the tree replacement will obstruct existing views to the lake.

The alternate replacement option must be equal or superior to the provisions of this section in accomplishing the purpose and intent of maintaining shoreline ecological functions and processes. This may include, but shall not be limited to, a riparian restoration plan consisting of at least 60% shrubs and some groundcovers selected from the Kirkland Native Plant List that shall equal at a minimum 80 square feet for each tree to be replanted. The applicant shall submit a planting plan to be reviewed by the Planning Official or Urban Forester, who may approve, approve with conditions, or deny the request.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official or Urban Forester shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

4) In circumstances where the proposed tree removal includes a tree that was required to be planted as a replacement tree under the provisions of this subsection or as part of the required vegetation in the shoreline setback established in KZC 83.400.3 below, the required tree replacement shall be addressed under the provision below that requires only a 1:1 replacement.

5) For required replacement trees, a planting plan showing the location, size and species of the new trees is required to be submitted and approved to by the Planning Official. All replacement trees in the shoreline setback must be selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

b. Development Activity –

For tree removal in the shoreline setback when development activity is proposed or in progress.

1) Submittal Requirements in the Shoreline Setback –

a) A site plan showing the approximate location of significant trees, their size (DBH) and their species, along with the location of existing structures, driveways, access ways and easements and the proposed improvements.

b) An arborist report stating the size (DBH), species, and assessment of health of all significant trees located within the shoreline setback. This requirement may be waived by the Planning Official if it is determined that proposed development activity will not potentially impact significant trees within the shoreline setback.

2) Tree Retention Standards in the Shoreline Setback - Within the shoreline setback, existing significant trees shall be retained, provided that the trees are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained consistent with the proposed development activity. The Planning Official is authorized to require site plan alterations to retain significant trees in the shoreline setback. Such alterations include minor adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways,

easements or utilities. The applicant shall be encouraged to retain viable trees in other areas on-site.

3) Replanting Requirements in the Shoreline Setback –

a) If the Planning Official approves removal of a significant tree in the shoreline setback area, then the tree replacement requirements of KZC 83.400.1.a above shall be met. See alternative mitigation option in KZC 83.400.1.b.3) c) below that may be proposed.

b) For required replacement trees, a planting plan showing location, size and species of the new trees is required. All replacement trees in the shoreline setback must be selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

c) An alternative mitigation option may be approved if an applicant can demonstrates that:

i. It is not feasible to plant all of the required mitigation trees on the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, and minimum spacing requirements for the trees to be planted, or

ii. The required tree replacement will obstruct existing views to the lake, at the time of planting or upon future growth that cannot otherwise be mitigated through tree placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the tree replacement will obstruct existing views to the lake.

The alternate mitigation must be equal or superior to the provisions of this subsection in accomplishing the purpose and intent of maintaining shoreline ecological functions and processes. This may include, but shall not be limited to, a riparian restoration plan consisting of at least 60% shrubs, perennials and groundcovers selected from the Kirkland Native Plant List that shall equal at minimum 80 square feet for each tree to be replanted. The applicants shall submit a planting plan to be reviewed by the Planning Official or Urban Forester, who may approve, approve with conditions, or deny the request.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official or Urban Forester shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

2. Tree Pruning - Non-destructive thinning of lateral branches to enhance views or trimming, shaping, thinning or pruning of a tree necessary to its health and growth is allowed, consistent with the following standards:

a. In no circumstance shall removal of more than one-fourth (1/4) of the original crown be permitted;

b. Pruning shall not include topping, stripping of branches or creation of an imbalanced canopy;

c. Pruning shall retain branches that overhang the water to the maximum extent feasible.

3. Required Vegetation in Shoreline Setback – Riparian vegetation contributes to shoreline ecological functions in a number of different ways, including maintaining temperature, removing excessive nutrients and toxic compounds, attenuating wave energy, removing and stabilizing sediment and providing woody debris and other organic matter. In order to minimize potential impacts to shoreline ecological functions from development activities, the following shoreline vegetation standards are required:

a. For properties that do not comply with the shoreline vegetation standards contained in this subsection, refer to KZC 83.550 to determine when compliance is required.

b. Minimum Vegetation Standard Compliance –

1) Location –

a) Water-dependent Uses or Activities - The applicant shall plant native vegetation, as necessary, in at least 75 percent of the nearshore riparian area located along or near the water's edge, except for the following areas, where the vegetation standards shall not apply: those portions of water-dependent development that require improvements adjacent to the water's edge, such as fuel stations for retail establishments providing gas sales, haul-out areas for retail establishments providing boat and motor repair and service, boat ramps for boat launches, swimming beaches or other similar activities shall plant native vegetation on portions of the nearshore riparian area located along the water's edge that are not otherwise being used for the water-dependent activity.

b) All Other Uses - The applicant shall plant native vegetation, as necessary, in at least 75 percent of the nearshore riparian area located along or near the water's edge.

c) In the instance where there is an intervening property between the shoreline and an upland property and the portion of the intervening property abutting the upland property has an average parcel depth of less than 25 feet, shoreline vegetation along the west property line area of the upland property shall be provided within the shoreline setback pursuant to KZC 83.400, unless:

i. The required shoreline vegetation already exists on the intervening lot;

ii. The intervening property owner agrees to installing the shoreline vegetation on their property; or

iii. A proposal for alternative compliance is approved under the provisions established in KZC 83.400.3.f.

2) Planting Requirements –

a) For uses other than those list below in KZC 83.400.2) for Detached, Attached and Stacking Dwelling units, the vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area.

b) For detached, attached or stacked dwelling units within the Residential – M/H shoreline environment, the vegetated portion of the nearshore riparian area shall average 15 feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement.. Total square feet of landscaped area shall be equal to a continuous 15-foot wide area.

c) The public access walkway required under KZC 83.420 may extend into the required landscape strip as necessary to meet the public pedestrian access requirements, provided that the overall width of the landscape strip is maintained.

d) Installation of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least 3 trees per 100 linear feet of shoreline must be included in the plan, with portions of a tree rounded up to the next required tree. At least 60% of the landscape bed shall consist of shrubs.

e) Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

c. Use of Existing Vegetation - The City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this subsection, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation. The City may require the applicant to plant trees, shrubs, and groundcover according to the requirements of this subsection to supplement the existing vegetation in order to provide a buffer at least as effective as the required buffer.

d. Landscape Plan Required - The applicant shall submit a landscape plan that depicts the quantity, location, species, and size of plant materials proposed to comply with the requirements of this subsection, and shall address the plant installation and maintenance requirements set forth in 95 KZC. Plant materials shall be identified with both their scientific and common names. Any required irrigation system must also be shown.

e. Vegetation Placement – When required either by this subsection or as a mitigation measure, such as for a new pier or dock or structural shoreline stabilization measure, vegetation selection and placement shall comply with the following standards:

1) Vegetation shall be selected and positioned on the property so as not to obscure the public view within designated view corridors from the public right-of-way to the lake and to the shoreline on the opposite side of the lake at the time of planting or upon future growth.

2) Vegetation may be selected and positioned to maintain private views to the water by clustering vegetation in a selected area, provided that the minimum landscape standard is met, unless alternative compliance is approved.

f. Alternative Compliance - Vegetation required by this subsection shall be installed unless the applicant demonstrates one of the following:

1) The vegetation will not provide shoreline ecological function due to existing conditions, such as the presence of extensive shoreline stabilization measures that extend landward from the OHWM; or

2) It is not feasible to plant all of the required vegetation on the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, or minimum spacing requirements for the vegetation to be planted; or

3) The vegetation will substantially interfere with the use and enjoyment of the portion of the property located between the primary structure and OHWM, such as the existing structure is located in very close proximity to the OHWM; the area in between the primary structure and the OHWM is encumbered by a sanitary sewer, public pedestrian access easement, public access walkway or other constraining factors; or

4) The required vegetation placement will obstruct existing views to the lake, at the time of planting or upon future growth, which cannot otherwise be mitigated through placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the vegetation placement will obstruct existing views to the lake.

The alternate measures must be equal or superior to the provisions of this subsection in accomplishing the purpose and intent of maintaining and improving shoreline ecological functions and processes.

Requests to use alternative measures shall be reviewed by the Planning Official who may approve, approve with conditions, or deny the request. Cost of producing and implementing the alternative plan, and the fee to review the plan by City staff or the City's consultant shall be borne by the applicant.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the

applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

4. Other Standards -

   a. For other general requirements, see Chapter 95 KZC, Tree Management and Landscaping Requirements.

   b. The applicant is encouraged to make significant trees removed under these provisions available for City restoration projects, as needed.

5. Responsibility for Regular Maintenance -

   a. The applicant, landowner, or successors in interest shall be responsible for the regular maintenance of vegetation required under this section. Plants that die must be replaced in kind or with similar plants contained on the Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

   b. All required vegetation must be maintained throughout the life of the development. Prior to issuance of a certificate of occupancy or final inspection, the proponent shall provide a final as-built landscape plan and a recorded agreement, in a form approved by the City Attorney, to maintain and replace all vegetation that is required by the City. The agreement shall be recorded with the King County Bureau of Elections and Records.

83.410 View Corridors

1. General - Development within the shoreline areas located west of Lake Washington Boulevard and Lake Street South shall include public view corridors that provide the public with an unobstructed view of the water. The intent of the corridor is to provide an unobstructed view from the adjacent public right-of-way to the lake and to the shoreline on the opposite side of the lake.

2. Standards -

   a. For properties lying waterward of Lake Washington Boulevard and Lake Street South, a minimum view corridor of thirty (30) percent of the average parcel width must be maintained. A view of the shoreline edge of the subject property shall be provided if existing topography, vegetation, and other factors allow for this view to be retained.

   b. The view corridors approved for properties located in the Urban Mixed shoreline environment established under a zoning master plan or zoning permit approved under the provisions of Chapter 152 KZC shall continue to comply with those requirements. Modifications to the proposed view corridor shall be considered under the standards established in this Chapter and the zoning master plan.

3. Exceptions - The requirement for a view corridor does not apply to the following:

   a. The following water-dependent uses:

      1) Piers and docks associated with a marina or moorage facility for a commercial use;

      2) Piers, docks, moorage buoys, boatlifts and canopies associated with detached, attached and stacked Unit uses; and

      3) Tour boat facility, ferry terminal or water taxi, including permanent structures up to 200 square feet in size housing commercial uses ancillary to the facility.

      4) Public access pier or boardwalk

      5) Boat launch

   b. Public parks

   c. Properties located in the Urban Mixed shoreline environment within the Central Business District zone.

4. View corridor location - The location of the view corridor shall be designed to meet the following location standards and must be approved by the Planning Official.
   a. If the subject property does not directly abut the shoreline, the view corridor shall be designed to coincide with the view corridor of the properties to the west.
   b. The view corridor must be adjacent to either the north or south property line of the subject property, whichever will result in the widest view corridor, considering the following, in order of priority:
      1) Locations of existing view corridors.
      2) Existing development or potential development on adjacent properties, given the topography, access and likely location of future improvements.
      3) The availability of actual views of the water and the potential of the lot for providing those views from the abutting street.
      4) Location of existing sight-obscuring structures, parking areas or vegetation that is likely to remain in place in the foreseeable future.
   c. The view corridor must be in one continuous piece.
   d. For land divisions, the view corridor shall be established as part of the land division and shall be located to create the largest view corridor on the subject property.
5. Permitted encroachments -
   a. The following shall be permitted within a view corridor:
      1) Areas provided for public access, such as public pedestrian walkways, public use areas, or viewing platforms.
      2) Parking lots and subsurface parking structures, provided that the parking does not obstruct the view from the public right-of-way to the waters of the lake and the shoreline on the opposite side of the lake.
      3) Structures if the slope of the subject property permits full, unobstructed views of the lake and the shoreline on the opposite side of the lake over the structures from the public right-of-way.
      4) Shoreline restoration plantings and existing specimen trees and native shoreline vegetation.
      5) Vegetation, including required vegetation screening around parking and driving areas and land use buffers, provided it is designed and of a size that will not obscure the view from the public right-of-way to the water and the shoreline on the opposite side of the lake at the time of planting or upon future growth. In the event of a conflict between required site screening and view preservation. View preservation shall take precedents over buffering requirements found in KZC 95.
      6) Open fencing that is designed not to obscure the view from the public right-of-way to the lake and the shoreline on the opposite side of the lake.
6. Dedication -The applicant shall execute a covenant or similar legal agreement, in a form acceptable to the City Attorney, and record the agreement with the King County Bureau of Elections and Records, to protect the view corridor. Land survey information shall be provided by the applicant for this purpose in a format approved by the Planning Official.

83.420 Public Access

1. General – Promoting a waterfront pedestrian corridor is an important goal within the City. Providing pedestrian access along Lake Washington enables the public to view and enjoy the scenic beauty, natural resources, and recreational activities that are found along the shoreline. This pedestrian corridor provides opportunities for physical recreation and leisure and serves as a

movement corridor. Connections between the shoreline public pedestrian walkway and the public right-of-way serve to link the walkway with the larger city-wide pedestrian network.

The applicant shall comply with the following pedestrian access requirements with new development for all uses and land divisions under KMC Chapter 22, pursuant to the standards of this section:

a. Pedestrian Access Along the Water's Edge – Provide public pedestrian walkways along or near the water's edge.

b. Pedestrian Access From Water's Edge to Right-of-Way – Provide public pedestrian walkways designed to connect the shoreline public pedestrian walkway to the abutting right-of-way.

2. Public Pedestrian Walkway Location – The applicant shall locate public pedestrian walkways pursuant to the following standards:

a. The walkways shall be designed and sited to minimize the amount of native vegetation removal, impact to existing significant trees, soil disturbance, and disruption to existing habitat corridor structures and functions.

b. The walkways shall be located along or near the water's edge between the development and the shoreline at an average of ten (10) feet but no closer than five (5) feet landward of the OHWM so that the walkway may meander and not be a straight line. In cases where the walkway on the adjoining property has been installed closer to the shoreline than allowed under this provision, the walkway extend within five (5) feet of the OHWM in order to connect to the existing walkway.

c. Locating the walkways adjacent to other public areas including street-ends, waterways, parks, and other public access and connecting walkways, shall maximize the public nature of the access.

d. The walkways shall be situated so as to minimize significant grade changes and the need for stairways.

e. The walkways shall minimize intrusions of privacy for occupants and residents of the site by avoiding locations directly adjacent to residential windows and outdoor private open spaces, or by screening or other separation techniques.

f. The walkways shall be located so as to avoid undue interference with the use of the site by water-dependent businesses.

g. The Planning Official shall determine the appropriate location of the walkway on the subject property when planning for the connection of a future waterfront walkway on an adjoining property.

h. In the instance where there is an intervening property between the shoreline and an upland property and the intervening property abutting the shoreline has an average parcel depth of less than 25 feet, the required public pedestrian walkway shall be provided within the required shoreline setback of the upland property pursuant to KZC 83.420, unless:

1) The required public pedestrian walkway already exists on the intervening lot that abuts the shoreline; or

2) The intervening property owner agrees to installing the public pedestrian walkway improvement and submitting a public access easement to the City for recording with King County Bureau of Elections and Records at the time of the building permit for the upland property , or

3) A modification to the public access requirement is granted to the upland property under the provisions established in KZC 83.420.6.

3. Development Standards Required for Pedestrian Improvements - The applicant shall install pedestrian walkways pursuant to the following standards:

a. The walkways shall be at least 6 feet wide, but no more than 8 feet wide, and contain a permeable paved walking surface, such as unit pavers, grid systems, porous concrete, or equivalent material approved by the Planning Official.

b. The walkways shall be distinguishable from traffic lanes by pavement material, texture, or change in elevation.

c. The walkways shall not be included with other impervious surfaces for lot coverage calculations.

d. Permanent barriers that limit future extension of pedestrian access between the subject property and adjacent properties are not permitted.

e. Regulated public access shall be indicated by signs installed at the entrance of the public pedestrian walkway on the abutting right-of-way and along the public pedestrian pathway. The signs shall be located for maximum public visibility. Design, materials and location of the signage shall meet City specifications.

f. All public pedestrian walkways shall be provided through a minimum 6-foot wide easement or similar legal agreement, in a form acceptable to the City Attorney, and recorded with the King County Department of Records and Elections. Land survey information shall be provided by the applicant for this purpose in a format approved by the Planning Official.

4. Operation and Maintenance Requirements for Pedestrian Improvements – The following operation and maintenance requirements apply to all public pedestrian walkways required under this section:

a. Hours of operation and limitations on accessibility – Unless otherwise required by the City, all required pedestrian walkways shall be open to the public between the hours of 10 am to dusk from March 21st to September 21st, and the remainder of the year between the hours of 10 am to 5 pm.

b. The applicant is permitted to secure the subject property outside of the hours of operation noted in subsection 4.a above by a security gate, subject to the following provisions:

1) The gate shall remain in an open position during hours of permitted public access; and

2) Signage shall be included noting the hours of permitted public access.

c. The Planning Official is authorized to approve a temporary closure when hazardous conditions are present that would affect public safety.

d. Performance and maintenance.

1) No certificate of occupancy or final inspection shall be issued until all required public access improvements are completed, except under special circumstances approved by the Planning Official and after submittal of an approved performance security.

2) The owner, its successor or assigns, shall be responsible for the completion and maintenance of all required waterfront public access areas and signage on the subject property.

5. Exceptions

a. The requirement for the dedication and improvement of public access does not apply to:

1) Development located within the Residential - L shoreline environment, except the following uses and developments that are required to comply with the public access provisions:

(a) Public entities, such as government facilities and public parks; or

(b) Divisions of land containing five (5) or more new lots located within the shorelines jurisdiction.

2) Development located within the Natural shoreline environment.

3) Detached Dwelling unit on one lot and normal appurtenances associated with this use that is not part of a land division. For development involving land division, public pedestrian access is required, unless otherwise excepted under this subsection.

6. Modifications

a. The Planning Official may require or grant a modification to the nature or extent of any required improvement for any of the following reasons:

1) If the presence of critical areas, such as wetlands, streams, or geologically hazardous areas, preclude the construction of the improvements as required.

2) To avoid interference with the operations of water-dependant uses, such as marinas.

3) If the property contains unusual site constraints, such as size, configuration, topography, or location.

4) If the access would create unavoidable health or safety hazards to the public.

b. If a modification is granted, the Planning Official may require that an alternate method of providing public access, such as a public use area or viewing platform, be provided.

c. Access from the right-of-way to the shoreline public access walkway may be waived by the Planning Official if all of following criteria are met:

1) If public access along the shoreline of the subject property can be reached from an adjacent property,

2) If the adjacent property providing access to the shoreline contains an existing public access walkway connecting with the public right-of-way and the maximum separation between public access entry points along the public right-of-way is 300 feet or less; and

3) If the subject property does not contain a public use area required as a condition of development by the Planning Official under the provisions of this Chapter.

83.430 In-Water Construction

1. Standards – The following standards shall apply to in-water work, including, but not limited to, installation of new structures, repair of existing structures, restoration projects, and aquatic vegetation removal:

a. In-water structures and activities shall be sited and designed to avoid the need for future shoreline stabilization activities and dredging, giving due consideration to watershed functions and processes, with special emphasis on protecting and restoring priority habitat and species.

b. In-water structures and activities are not subject to the shoreline setbacks established in KZC 83.180.

c. See KZC 83.370 for federal and state approval and timing restrictions.

d. Removal of existing structures shall be accomplished so the structure and associated material does not re-enter the lake.

e. Waste material and unauthorized fill, such as construction debris, silt or excess dirt resulting from in-water structure installation, concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, paper and any other similar material upland of or below the OHWM shall be removed.

f. Measurements shall be taken in advance and during construction to ensure that no petroleum products, hydraulic fluid, cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the lake during in-water

activities. Appropriate spill clean-up materials must be on-site at all times, and any spills must be contained and cleaned immediately after discovery.

g. In-water work shall be conducted in a manner that causes little or no siltation to adjacent areas. A sediment control curtain shall be used in those instances where siltation is expected. The curtain shall be maintained in a functional manner that contains suspended sediments during project installation.

h. Any trenches, depressions, or holes created below the OHWM shall be backfilled prior to inundation by high water or wave action.

i. Fresh concrete or concrete by-products shall not be allowed to enter the lake at any time during in-water installation. All forms used for concrete shall be completely sealed to prevent the possibility of fresh concrete from entering the lake.

j. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to perform the in-water work. All disturbed areas shall be protected from erosion using vegetation or other means.

k. If at any time, as a result of in-water work, water quality problems develop, immediate notification shall be made to the Washington State Department of Ecology.

83.440 Parking

1. General -

   a. Only parking associated with a permitted or conditional shoreline use shall be allowed, except that within the Urban Mixed shoreline environment, surface or structured parking facilities may accommodate parking for surrounding uses and commercial parking uses.

   b. Parking as a primary use on a subject property is prohibited.

2. Number of Parking Spaces -

   Uses must provide sufficient off-street parking spaces. The required number of parking stalls established in Chapter 105 KZC, KZC 50.60 and with the applicable parking standards for each use shall be met.

3. Parking Location -

   a. Intent – To reduce the negative impacts of parking and circulation facilities on public spaces within the shoreline, such as shoreline public pedestrian walkways, public use areas, and view corridors along public rights-of-way.

   b. Standards - The applicant shall locate parking areas on the subject property according to the following requirements:

      1) Parking is prohibited in the shoreline setback established in KZC 83.180, except as follows:

         a) Subsurface parking is allowed, provided that:

            i. The structure is designed to avoid the need for future shoreline stabilization as documented in a geotechnical report, prepared by a qualified geotechnical engineer or engineering geologist.

            ii. The structure is designed to comply with shoreline vegetation standards established in KZC 83.400. As part of any proposal to install subsurface parking within the shoreline setback, the applicant shall submit site-specific documentation prepared by a qualified expert to establish that the design will adequately support the long-term viability of the required vegetation.

            iii. The structure is designed to not impact public access and views to the lake from the public right-of-way.

iv. Public access over subsurface parking structures shall be designed to minimize significant changes in grade.

b) The parking is designed as a short-term loading area to support a water-dependent use.

2) Parking is prohibited on structures located over water.

3) Parking, loading, and service areas for a permitted use activity shall not extend closer to the shoreline than a permitted structure unless:

a) The parking is incorporated within a structure, subject to the following standards:

i. The parking is subsurface, or

ii. The design of any above-grade structured parking incorporates vegetation and/or building surface treatment to provide an appearance comparable to the remainder of the building not used for parking.

b) The parking is accessory to a public park.

c) The parking is designed as a short-term loading area to support a water-dependent use.

4. Design of Parking Areas -

a. Pedestrian Connections

1) Parking areas shall be designed to contain pedestrian connections to public pedestrian walkways and building entrances. Pedestrian connections shall either be a raised sidewalk or composed of a different material than the parking lot material.

2) Pedestrian connections must be at least 5 feet wide, excluding vehicular overhang.

b. Design of Surface Parking Lots – In addition to the perimeter buffering and internal parking lot landscaping provisions established in Chapter 95 KZC, the applicant shall buffer all parking areas and driveways visible from required public pedestrian walkways or public use areas with appropriate landscaping screening that is consistent with the landscaping and buffering standards for driving and parking areas contained in KZC Chapter 95.

c. Design of Structured Parking Facilities - Each facade of a garage or a building containing above-grade structured parking visible from a required view corridor, or is facing a public pedestrian walkway, public use area, or public park must incorporate vegetation and/or building surface treatment to mitigate the visual impacts of the structured parking.

83.450 Screening of Storage and Service Areas, Mechanical Equipment and Garage Receptacles

1. Outdoor Use, Activity and Storage. Outdoor Use, Activity and Storage areas must comply with the following:

a. Comply with the shoreline setback established for the use with which they are associated.

b. Be located to minimize visibility from any street, Lake Washington, required public pedestrian walkway, public use area or public park.

c. Be screened from view from the street, adjacent properties, Lake Washington, required public pedestrian walkways, and other public use areas by a solid screening enclosure or within a building.

d. Outdoor dining areas and temporary storage for boats undergoing service or repair that are accessory to a marina are exempt from the placement and screening requirements of KZC 83.450. 1 above.

2. Mechanical and similar equipment or appurtenances.

a. At-grade mechanical and similar equipment or appurtenances are not permitted within the shoreline setback.

b. Rooftop appurtenances and at or below grade appurtenances shall be screened with vegetation or a solid screening enclosure or located in such a manner as to not be visible from Lake Washington, required public pedestrian walkways, or public use areas.

3. Garbage and trash receptacles. Garbage and recycling receptacles must comply with the following:

a. Comply with the shoreline setback established for the use with which they are associated.

b. Be located to minimize visibility from any street, Lake Washington, required public pedestrian walkway, public use area or public parks.

c. Be screened from view from Lake Washington, required public pedestrian walkways, and other public use areas by a solid screening enclosure, such as a wooden fence without gaps, or within a building.

d. Exemptions – Garbage receptacles for detached dwelling units, duplexes, moorage facilities, parks, and construction sites, but not including dumpsters or other containers larger than a typical individual trash receptacle, are exempt from the placement and screening requirements of this subsection.

83.460 Signage

1. Standards – The following standards shall apply to signs within the shorelines jurisdiction :

a. Signage shall not interfere or block designated view corridors within the shorelines jurisdiction.

b. Signs shall comply with the shoreline setback standards contained in KZC 83.180.

c. Signage shall not be permitted to be constructed over water, except as follows:

1) For retail establishments providing gas and oil sales for boats, where the facility is accessible from the water:

a) One sign, not exceeding 20 square feet per sign face, is permitted. The sign area for the water-oriented sign shall be counted towards the maximum sign area permitted in KZC Chapter 100.

b) Internally-illuminated signs are not permitted. Low-wattage external light sources that are not directed towards neighboring properties or Lake Washington are permitted, subject to approval by the Planning Official.

c) Signs shall be affixed to a pier or wall-mounted. The maximum permitted height of a freestanding sign is 5 feet above the surface of the pier. A wall-mounted sign shall not project above the roofline of the building to which it is attached.

2) Boat traffic signs, directional signs, and signs displaying a public service message.

3) Interpretative signs in coordination with public access and recreation amenities.

4) Building addresses mounted flush to the end of a pier, with letters and numbers at least 4 inches high.

83.470 Lighting

1. General - Exterior lighting shall be controlled using limits on height, light levels of fixtures, lights shields, time restrictions and other mechanisms in order to:

a. Prevent light pollution or other adverse effects that could infringe upon public enjoyment of the shoreline;

b. Protect residential uses from adverse impacts that can be associated with light trespass from higher-intensity uses; and

c. Prevent adverse effects on fish and wildlife species and their habitats.

2. Exceptions –

a. The following development activities are exempt from the submittal and lighting standards established in this section:

1) Emergency lighting required for public safety;

2) Lighting for public rights-of-way;

3) Outdoor lighting for temporary or periodic events (e.g. community events at public parks);

4) Seasonal decoration lighting; and

5) Sign lighting governed by KZC 83.460.

b. The following development activities are exempt from the submittal standards established in KZC 83.470.3 below, but are still subject to the lighting standards contained in KZC 83.470.4 below:

1) Development of a detached dwelling unit or associated appurtenances;

2) Piers and docks;

3) Public access pier or boardwalk; and

4) Moorage buoy.

3. Submittal Requirements - All development proposing exterior lighting within the shorelines jurisdiction , except as otherwise indicated in subsection 2) above, shall submit a lighting plan and photometric site plan for approval by the Planning Official. The plan shall contain the following:

a. A brief written narrative, with accompanying plan or sketch that demonstrates the objectives of the lighting.

b. The location, fixture type, mounting height, and wattage of all outdoor lighting and building security lighting, including exterior lighting mounted on piers or illuminating piers.

c. A detailed description of the fixtures, lamps, supports, reflectors, and other devices. The description shall include manufacturer's catalog specifications and drawings, including sections when requested.

d. If building elevations are proposed for illumination, drawings shall be provided for all relevant building elevations showing the fixtures, the portions of the elevations to be illuminated, and the illuminate levels of the elevations.

e. Photometric data, such as that furnished by manufacturers, showing the angle of light emissions.

f. Computer generated photometric grid showing footcandle readings every 20 feet within the property or site, and 15 feet beyond the property lines, including Lake Washington, if applicable. Iso-footcandle contour line style plans are also acceptable.

4. Standards –

a. Direction and Shielding –

1) All exterior building-mounted and ground-mounted light fixtures shall be directed downward and have "fully shielded cut off" fixtures as defined by the Illuminating Engineering Society of North America (IESNA), or other appropriate measure to conceal the light source from adjoining uses, to direct the light towards the ground and away from the shoreline, and to prevent lighting from spilling on to the lake water. For detached

dwelling unit or associated appurtenances, this requirement shall apply to any light fixtures that are directed towards or face Lake Washington.

2) Exterior lighting mounted on piers, docks or other water-dependent uses located at the shoreline edge shall be at ground or dock level, be directed away from adjacent properties and the water, and designed and located to prevent lighting from spilling onto the lake water.

3) For properties located within the Natural shoreline environment, exterior lighting installations shall incorporate motion-sensitive lighting and lighting shall be limited to those areas where it is needed for safety, security, and operational purposes.

b. Lighting Levels –

1) Exterior lighting installations shall be designed to avoid harsh contrasts in lighting levels.

2) For properties located adjacent to a Natural shoreline environment, exterior lighting fixtures shall produce a maximum initial luminance value of 0.1 foot-candles (as measured at three feet above grade) at the site or environment boundary.

3) For properties in the Urban Mixed shoreline environment located adjacent to residential uses in another shoreline environment or for commercial uses located adjacent to residential uses in the Urban Residential shoreline environment, exterior lighting fixtures shall produce a maximum initial luminance value of 0.6 horizontal and vertical foot-candles (as measured at three feet above grade) at the site boundary, and drop to 0.1 foot-candles onto the abutting property as measured within 15 feet of the property line.

4) Exterior lighting shall not exceed a strength of 1 foot-candle at the water surface of Lake Washington, as measured waterward of the OHWM.

c. Height of Light Fixtures - The maximum mounting height of ground-mounted light fixtures shall be 12 feet. Height of light fixtures shall be measured from the finished floor or the finished grade of the parking surface, to the bottom of the light bulb fixture.

d. Other –

1) Illumination of a building façade to enhance architectural features is not permitted.

2) Where feasible, exterior lighting installations shall include timers, dimmers, sensors, or photocell controllers that turn the lights off during daylight hours or hours when lighting is not needed, to reduce overall energy consumption and eliminate unneeded lighting.

83.480 Water Quality, Stormwater, and Nonpoint Pollution

1. General - Shoreline development and use shall incorporate all known, available, and reasonable methods of prevention, control, and treatment to protect and maintain surface and/or ground water quantity and quality in accordance with KMC 15.52 and other applicable laws.

2. Submittal Requirements - All proposals for development activity or land surface modification located within the shorelines jurisdiction shall submit for approval a storm water plan with their application and/or request, unless exempted by the Public Works Official. The storm water plan shall include the following:

a. Provisions for temporary erosion control measures; and

b. Provisions for storm water detention, water quality treatment and storm water conveyance facilities, in accordance with the City's adopted surface water design manual in effect at the time of permit application.

3. Standards -

a. Shoreline development shall comply with the standards established in the City's adopted surface water design manual in effect at the time of permit application.

b. Shoreline uses and activities shall apply Best Management Practices (BMPs) to minimize any increase in surface runoff and to control, treat and release surface water runoff so that receiving properties, wetlands or streams, and Lake Washington are not adversely affected, consistent with the City's adopted surface water design manual. All types of BMPs require regular maintenance to continue to function as intended.

   Low Impact Development techniques shall be considered and implemented to the greatest extent practicable, consistent with the City's adopted surface water design manual.

c. New outfalls or discharge pipes to Lake Washington shall be avoided, where feasible. If a new outfall or discharge pipe is demonstrated to be necessary, it shall be designed so that the outfall and energy dissipation pad is installed above the OHWM.

d. In addition to providing storm water quality treatment facilities as required in this section and the City's Surface Water Master Plan, the developer and/or property owner shall provide source control BMPs designed to treat or prevent storm water pollution arising from specific activities expected to occur on the site. Examples of such specific activities include, but are not limited to, carwashing at detached, attached stacked (multifamily) residential sites and oil storage at marinas providing service and repair.

e. No release of oils, hydraulic fluids, fuels, paints, solvents or other hazardous materials shall be permitted into Lake Washington. If water quality problems occur, including equipment leaks or spills, work operations shall cease immediately and the Public Works Department and other agencies with jurisdiction shall be contacted immediately to coordinate spill containment and cleanup plans.

   It shall be the responsibility of property owners to fund and implement the approved spill containment and cleanup plans and to complete the work by the deadline established in the plans.

f. All materials that come into contact with water shall be constructed of untreated wood, cured concrete, steel or other approved non-toxic materials. Materials used for over-water decking or other structural components that may come into contact with water shall comply with regulations of responsible agencies (i.e. Washington State Department of Fish and Wildlife or Department of Ecology) to avoid discharge of pollutants.

g. The application of pesticides, herbicides, or fertilizers shall comply with the following standards:

   1) The application of pesticides, herbicides or fertilizers within shoreline setbacks shall utilize Best Management Practices (BMPs) outlined in the BMPs for Landscaping and Lawn/Vegetation Management Section of the 2005 Stormwater Management Manual for Western Washington, to prevent contamination of surface and ground water and/or soils, and adverse effects on shoreline ecological functions and values.

   2) Pesticides, herbicides, or fertilizers shall be applied in a manner that minimizes their transmittal to adjacent water bodies. The direct runoff of chemical-laden waters into adjacent water bodies is prohibited. Spray application of pesticides shall not occur within 100 feet of open waters including wetlands, ponds, and streams, sloughs and any drainage ditch or channel that leads to open water except when approved by the City.

   3) The use of pesticides, herbicides or fertilizers within the shorelines jurisdiction, including applications of herbicides to control noxious aquatic vegetation, shall comply with regulations of responsible federal and state agencies.

   4) A copy of the applicant's National Pollutant Discharge Elimination System (NPDES) permit, issued from Washington State Department of Ecology, authorizing aquatic pesticide (including herbicides) to Lake Washington must be submitted to the Planning Department prior to the application.

83.490 Critical Areas – General Standards

1. The provisions of this Chapter do not extend beyond the shorelines jurisdiction limits specified in this Chapter and the Act. For regulations addressing critical area buffers that are outside of the shorelines jurisdiction, see Chapter 85 and 90 KZC.

2. Avoiding impacts to critical areas.

   a. An applicant for a land surface modification or development permit within a critical area or its associated buffer shall utilize the following mitigation sequencing guidelines, that appear in order of preference, during design of the proposed project:

      1) Avoiding the impact or hazard by not taking a certain action, or redesigning the proposal to eliminate the impact. The applicant shall consider reasonable, affirmative steps and make best efforts to avoid critical area impacts. If impacts cannot be avoided through redesign, or because of site conditions or project requirements, the applicant shall then proceed with the following sequence of steps below in subsection (2)(a)(2) through (7) of this subsection.

      2) Minimizing the impact or hazard by limiting the degree or magnitude of the action or impact with appropriate technology or by changing the timing of the action.

      3) Restoring the impacted critical areas by repairing, rehabilitating or restoring the affected critical area or its buffer.

      4) Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through plantings, engineering or other methods.

      5) Reducing or eliminating the impact or hazard over time by preservation or maintenance operations during the life of the development proposal, activity or alteration.

      6) Compensating for the adverse impact by enhancing critical areas and their buffers or creating substitute critical areas and their buffers as required in the KZC 83.500 and 510.

      7) Monitoring the impact, hazard or success of required mitigation and taking remedial action based upon findings over time.

      In the required critical areas study, the applicant shall include a discussion of how the proposed project will utilize mitigation sequencing to avoid, minimize, and mitigate impacts to critical areas and associated buffers. The applicant shall seek to avoid, minimize and mitigate overall impacts based on the functions and values of all relevant critical areas.

   b. In addition to the above steps, the specific development standards, permitted alteration requirements, and mitigation requirements of this Chapter and elsewhere in this code apply.

   c. In determining the extent to which the proposal shall be further redesigned to avoid and minimize the impact, the City may consider the purpose, effectiveness, engineering feasibility, commercial availability of technology, best management practices, safety and cost of the proposal and identified modifications to the proposal. The City may also consider the extent to which the avoidance of one type or location of a critical area could require or lead to impacts to other types or locations of nearby or adjacent critical areas. The City shall document the decision-making process used under this subsection as a part of the critical areas review conducted pursuant to KZC 83. 500 and 83.510.

3. Trees in Critical Areas or Critical Area Buffers

   a. General - The intent of preserving vegetation in and near streams and wetlands and in geologically hazardous areas is to support the functions of healthy sensitive areas and sensitive area buffers and/or avoid disturbance of geologically hazardous areas.

   b. Submittal Requirements – When proposing to trim or remove any tree located within critical areas or critical area buffers, the property owner must submit a report to the City containing the following:

1) A site plan showing the approximate location of significant trees, their size (DBH) and their species, along with the location of structures, driveways, access ways and easements.

2) An arborist report explaining how the tree(s) fit the criteria for a nuisance or hazard tree. This requirement may be waived by the Planning Official if it is determined that the nuisance or hazard condition is obvious.

3) A proposal detailing how the trees will be made into a snag or wildlife tree, including access and equipment, snag height, and placement of woody debris.

4) For required replacement trees, a planting plan showing location, size and species of the new trees.

c. Tree Removal Standards

1) If a tree meets the criteria of a nuisance or hazard in a critical area or its buffer as described below, then a "snag" or wildlife tree shall be created. If creation of a snag is not feasible, then the felled tree shall be left in place unless the Planning Official permits its removal in writing.

a) Hazard Tree Criteria. A hazard tree must meet the following criteria:

i. The tree must have a combination of structural defects and/or disease that makes it subject to a high probability of failure and is in proximity to moderate-high frequency of persons or property; and

ii. The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices.

b) Nuisance Tree Criteria. A nuisance tree must meet the following criteria:

i. The tree is causing obvious, physical damage to private or public structures, including but not limited to: sidewalk, curb, road, driveway, parking lot, building foundation, and roof;

ii. The tree has been damaged by past maintenance practices that cannot be corrected with proper arboricultural practices; or

iii. The problems associated with the tree must be such that they cannot be corrected by any other reasonable practice including, but not limited to, the following:

- Pruning of the crown or roots of the tree and/or small modifications to the site improvements, including but not limited to a driveway, parking lot, patio or sidewalk, to alleviate the problem.
- Pruning, bracing, or cabling to reconstruct a healthy crown.

2) The removal of any tree will require the planting of a native tree of a minimum of 6 feet in height in close proximity to where the removed tree was located. The Planning Official shall approve the selection of native species and timing of installation.

4. Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers.

a. Plants intended to mitigate for the loss of natural resource values are subject to the following requirements.

1) Plant Source. Plant materials must be native and selected from the Kirkland Plant List or otherwise approved by the City's Urban Forester. Seed source must be as local as feasible, and plants must be nursery propagated unless transplanted from on-site areas approved for disturbance. These requirements must be included in the Mitigation Plan specifications.

2) Installation. Plant materials must be supported only when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires, or other

measures must be removed as soon as the plant can support itself, usually after the first growing season. All fertilizer applications to turf or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.

3) Fertilizer Applications. Fertilizers shall be applied in such a manner as to prevent their entry into waterways and wetlands and minimize entry into storm drains. No applications shall be made within 50 feet of a waterway or wetland, or a required buffer, whichever is greater, unless specifically authorized in an approved mitigation plan or otherwise authorized in writing by the Planning Official.

83.500 Wetlands

1. Applicability – The following provisions shall apply to wetlands and wetland buffers located within the shorelines jurisdiction, in place of provisions contained in Chapter 90 KZC. Provisions contained in Chapter 90 KZC that are not addressed in this section continue to apply, such as bond or performance security, dedication and liability, but the following subsections shall not apply within the shorelines jurisdiction:

   a. KZC 90.20 – General Exceptions

   b. KZC 90.30 – Definitions

   c. KZC 90.75 – Minor Lakes

   d. KZC 90.140 – Reasonable Use Exception

   e. KZC 90.160 – Appeals

   f. KZC 90.170 – Planning/Public Works Official Decisions – Lapse of Approval

2. Wetland Determinations, Delineations, Regulations, Criteria, and Procedures - All determinations and delineations of wetlands shall be made using the criteria and procedures contained in the *Washington State Wetlands Identification and Delineation Manual* (Washington Department of Ecology, 1997 or as amended). All determinations, delineations, and regulations of wetlands shall be based on the entire extent of the wetland, irrespective of property lines, ownership patterns, or other factors.

3. Wetland Determinations - Either prior to or during review of a development application, the Planning Official shall determine whether a wetland or its buffer is present on the subject property using the following provisions:

   a. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether any portion of the subject property or surrounding area (that shall be the area within 250 feet of the subject property) meets the definition of a wetland. If this initial site inspection does not indicate the presence of a wetland on the subject property or surrounding area, no additional wetland studies will be required at that time.

      However, if the initial site inspection or information subsequently obtained indicates the presence of a wetland on the subject property or surrounding area, then the applicant shall follow the procedure in KZC 83.500.3.b below.

   b. If the initial site inspection or information subsequently obtained indicates that a wetland may exist on or near the subject property or surrounding area, the applicant shall either (a) fund a study and report prepared by the City's consultant; or (b) submit a report prepared by a qualified professional approved by the City, and fund a review of this report by the City's wetland consultant.

   c. If a wetland study and report are required, at a minimum the report shall include the following:

      1) A summary of the methodology used to conduct the study;

2) A professional survey that is based on the KCAS or plat-bearing system and tied to a known monument, depicting the wetland boundary on a map of the surrounding area which shows the wetland and its buffer;

3) A description of the wetland habitat(s) found throughout the entire wetland (not just on the subject property) using the U.S. Fish & Wildlife Service classification system (Classification of Wetlands and Deepwater Habitats in the U.S., Cowardin et al., 1979);

4) A description of nesting, denning, and breeding areas found in the wetland or its surrounding area;

5) A description of the surrounding area, including any drainage systems entering and leaving the wetland, and a list of observed or documented plant and wildlife species;

6) A description of historical, hydrologic, vegetative, topographic, and soil modifications, if any;

7) A proposed classification of the wetland as Category I, II, III, or IV wetland; and

8) A completed rating form using the *Washington State Wetland Rating System for Western Washington – Revised* (Washington State Department of Ecology Publication # 04-06-025, or latest version). [Note: When a wetland buffer outside of shorelines jurisdiction is proposed to be modified, the wetland in shorelines jurisdiction must be rated using the methodology required by KZC 90 to determine the appropriate buffer width. Ecology's rating system and the corresponding buffers only apply to those wetlands and buffers located in shorelines jurisdiction.]

d. Formal determination of whether a wetland exists on the subject property, as well as its boundaries and rating, shall be made by the Planning Official after preparation and review of the delineation report, if applicable, by the City's consultant. The Planning Official's decision under this section shall be used for review of any development permit or activity proposed on the subject property for which an application is received within five (5) years of the delineation report; provided, that the Planning Official may modify any decision whenever physical circumstances have markedly and demonstrably changed on the subject property or the surrounding area as a result of natural processes or human activity.

4. <u>Wetland Buffers and Setbacks</u>

a. No land surface modification shall occur and no improvement may be located in a wetland or its buffer, except as provided in KZC 83.500.4 through 83.500.10. See also KZC 83.490,3 Trees in Critical Areas or Critical Area Buffers and KZC 83.490,4 Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers. Required or standard, buffers for wetlands are as follows and are measured from the outer edge of the wetland boundary:

Wetland Buffers

WETLAND CATEGORY AND CHARACTERISTICS	BUFFER
Category I	
Natural Heritage Wetlands	215 feet
Bog	215 feet
Habitat score[1] from 29 to 36 points	225 feet
Habitat score from 20 to 28 points	150 feet
Other Category I wetlands	125 feet
Category II	
Habitat score from 29 to 36 points	200 feet

Habitat score from 20 to 28 points	125 feet
Other Category II wetlands	100 feet
Category III	
Habitat score from 20 to 28 points	125 feet
Other Category III wetlands	75 feet
Category IV	50 feet

[1] Habitat score is one of three elements of the rating form.

Note: Buffer widths were developed by King County for its urban growth areas using the best available science information presented in *Chapter 9: Wetlands* of *Best Available Science – Volume 1: A Review of Scientific Literature*

Modification to Buffer for Divided Wetland Buffer - Where a legally established, improved public right-of-way, improved easement road or existing structure divides a wetland buffer, the Planning Official may approve a modification of the required buffer in that portion of the buffer isolated from the wetland by the road or structure, provided the isolated portion of the buffer:

1) Does not provide additional protection of the wetland from the proposed development; and

2) Provides insignificant biological, geological or hydrological buffer functions relating to the portion of the buffer adjacent to the wetland.

b. Buffer Setback – Structures shall be set back at least ten (10) feet from the designated or modified wetland buffer. The City may allow minor improvements within this setback that would clearly have no adverse effect during their construction, installation, use, or maintenance, on fish, wildlife, or their habitat or any vegetation in the buffer or adjacent wetland.

c. Storm Water Discharge– Necessary surface discharges of storm water through wetland buffers and buffer setbacks may be allowed on the surface, but piped system discharges are prohibited unless approved pursuant to this section.

Storm water outfalls (piped systems) may be located within the buffer setback specified in subsection (b) of this section and within the buffers specified in subsection (a) of this section only when the City determines, based on a report prepared by a qualified professional under contract to the City and paid for by the applicant, that:

1) Surface discharge of storm water through the buffer would clearly pose a threat to slope stability, and

2) The storm water outfall will not:

a) Adversely affect water quality;

b) Adversely affect fish, wildlife, or their habitat;

c) Adversely affect drainage or storm water detention capabilities;

d) Lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and

e) Be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

Storm water outfalls shall minimize potential impacts to the wetland or wetland buffer by meeting the following design standards:

1) Catch basins must be installed as far as feasible from the buffer boundary.

2) Outfalls must be designed to reduce the chance of adverse impacts as a result of concentrated discharges from pipe systems. This may include:

   a) Installation of the discharge end as far as feasible from the sensitive area; and

   b) Use of appropriate energy dissipation at the discharge end.

d. Water Quality Facilities –Water quality facilities, as determined by the City, may be located within the required wetland buffers of KZC 83.500.4. The City may only approve a proposal to install a water quality facility within the outer one-half (1/2) of a wetland buffer if a feasible location outside of the buffer is not available and only if:

1) It will not adversely affect water quality;

2) It will not adversely affect fish, wildlife, or their habitat;

3) It will not adversely affect drainage or storm water detention capabilities;

4) It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;

5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas;

6) The existing buffer is already degraded as determined by a qualified professional;

7) Installation would be followed immediately by enhancement of an area equal in size and immediately adjacent to the affected portion of the buffer; and

8) Once installed, it would not require any further disturbance or intrusion into the buffer.

The City may only approve a proposal by a public agency to install a water quality facility elsewhere in a wetland buffer if criteria d. 9 – 11 (below) is met in addition to d. 1 – 8 (above):

9) The project includes enhancement of the entire buffer;

10) The project would provide an exceptional ecological benefit off-site; and

11) There is no feasible alternative proposal that results in less impact to the buffer.

e. Utilities and Rights-of-Way –The following work may only be allowed in critical areas and their buffers subject to City review after appropriate mitigation sequencing in KZC 83.490.2 has been considered and implemented, provided that activities will not increase the impervious area or reduce flood storage capacity:

1) All utility work in improved City rights-of-way;

2) All normal and routine maintenance, operation and reconstruction of existing roads, streets, and associated rights-of-way and structures; and

3) Construction of sewer or water lines that connect to existing lines in a sensitive area or buffer where no feasible alternative location exists based on an analysis of technology and system efficiency.

All affected critical areas and buffers shall be expeditiously restored to their pre-project condition or better. For purposes of this subsection only, “improved City rights-of-way” include those rights-of-way that have improvements only underground, as well as those with surface improvements.

f. Minor Improvements – Minor improvements may be located within the sensitive area buffers specified in subsection (a) of this section. These minor improvements shall only be located within the outer one-half (1/2) of the sensitive area buffer, except where approved stream crossings are made.

The City may only approve a proposal to construct a minor improvement within an environmentally sensitive area buffer if:

1) It will not adversely affect water quality;
2) It will not adversely affect fish, wildlife, or their habitat;
3) It will not adversely affect drainage or storm water detention capabilities;
4) It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;
5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas; and
6) It supports public or private shoreline access.

The City may require the applicant to submit a report prepared by a qualified professional that describes how the proposal will or will not comply with the criteria for approving a minor improvement.

5. Wetland Buffer Fence or Barrier - Prior to beginning development activities, the applicant shall install a six (6) foot high construction-phase chain link fence or equivalent fence with silt screen fabric, as approved by the Planning Official and consistent with City standards, along the upland boundary of the entire wetland buffer. The construction-phase fence shall remain upright in the approved location for the duration of development activities.

   Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either (1) a permanent three (3) to four (4) foot-tall split rail fence; or (2) equivalent barrier, as approved by the Planning Official. Installation of the permanent fence or equivalent barrier must be done by hand where necessary to prevent machinery from entering the wetland or its buffer.

6. Permit Process -

   The City shall consolidate and integrate the review and processing of the critical areas aspects of the proposal with the shoreline permit required for the proposed development activity, except as follows:

Development Proposal	Permit Process
Wetland Modifications, or Wetland Buffer Modifications affecting greater than 25% of the standard buffer	Shoreline Variance pursuant to Process IIA, described in Chapter 141 KZC
Wetland Buffer Modifications affecting 25% or less of the standard buffer	Underlying development permit or development activity
Wetland Restoration Plans	Underlying development permit or development activity

7. Modification of Wetlands –

   a. No land surface modification shall occur and no improvement shall be located in a wetland, except as provided in this subsection. Furthermore, all modifications of a wetland shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

   b. Submittal Requirements - The applicant shall submit a report prepared by a qualified professional and fund a review of this report by the City's consultant. The report shall include the following:

1) A determination and delineation of the sensitive area and sensitive area buffer containing all the information specified in KZC 83.500.3 for a wetland;
2) A description of the area of the site that is within the sensitive area or within the setbacks or buffers required by this Chapter;
3) An analysis of the impact that the amount of development proposed would have on the sensitive area and the sensitive area buffer;
4) An analysis of the mitigation sequencing as outlined in KZC 83.490.2;
5) An assessment of the habitat, water quality, storm water detention, ground water recharge, shoreline protection, and erosion protection functions of the wetland and its buffer. The report shall also assess the effects of the proposed modification on those functions;
6) Sensitive site design and construction staging of the proposal so that the development away from the sensitive area and/or sensitive area buffer and will minimizes net loss of sensitive area and/or sensitive area buffer functions to the greatest extent feasible;
7) A description of protective measures that will be undertaken, such as siltation curtains, hay bales and other siltation prevention measures, and scheduling the construction activity to avoid interference with wildlife and fisheries rearing, nesting or spawning activities;
8) Information specified in KZC 83.500 8);
9) An evaluation of the project's consistency with the shoreline variance criteria contained in WAC 173-27-170; and
10) Such other information or studies as the Planning Official may reasonably require.

c. Decisional Criteria - The City may only approve an improvement or land surface modification in a wetland if:

1) The project demonstrates consideration and implementation of appropriate mitigation sequencing as outlined in KZC 83.490.2;
2) It will not adversely affect water quality;
3) It will not adversely affect fish, wildlife, or their habitat;
4) It will not have an adverse effect on drainage and/or storm water detention capabilities;
5) It will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;
6) It will not be materially detrimental to any other property or the City as a whole;
7) Compensatory mitigation is provided in accordance with the table in KZC 83.500.8 below;
8) Fill material does not contain organic or inorganic material that would be detrimental to water quality or fish and wildlife habitat;
9) All exposed areas are stabilized with vegetation normally associated with native wetlands and/or buffers, as appropriate; and
10) There is no feasible alternative development proposal that results in less impact to the wetland and its buffer.

8. Compensatory Mitigation –All approved impacts to regulated wetlands require compensatory mitigation so that the goal of no net loss of wetland function, value, and acreage is achieved. A mitigation proposal must utilize the mitigation ratios specified below as excerpted from: Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10. March 2006. *Wetland Mitigation in*

Washington State – Part 1: Agency Policies and Guidance (Version 1). Washington State Department of Ecology Publication #06-06-011a. Olympia, WA.

Compensatory Mitigation

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only[1]	Re-establishment or Creation (R/C) and Rehabilitation (RH)[1]	Re-establishment or Creation (R/C) and Enhancement (E)[1]	Enhancement Only[1]
All Category IV	1.5:1	3:1	1:1 R/C and 1:1RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I Forested	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	24:1
Category I - based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I Natural Heritage site	Not allowed	6:1 Rehabilitation of a Natural Heritage site	Not allowed	Not allowed	Case-by-case
Category I Bog	Not allowed	6:1 Rehabilitation of a bog	Not allowed	Not allowed	Case-by-case

9. Wetland Buffer Modification

   a. Departures from the standard buffer requirements shall be approved only after the applicant has demonstrated consideration and implementation of appropriate mitigation sequencing as outlined in KZC 83.490.2.

[1] These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.

b. Approved departures from the standard buffer requirements of KZC 83.500.4 allow applicants to modify the physical and biological conditions of portions of the standard buffer for the duration of the approved project. These approved departures from the standard buffer requirements do not permanently establish a new regulatory buffer edge. Future development activities on the subject property may be required to reestablish the physical and biological conditions of the standard buffer.

c. Modification of Wetland Buffers When Wetland Is Also To Be Modified – Wetland buffer impact is assumed to occur when wetland fill or modification is proposed. Any proposal for wetland fill/modification shall include provisions for establishing a new wetland buffer to be located around the compensatory mitigation sites and to be equal in width to its standard buffer specified in KZC 83.500.4 a) or a buffer reduced in accordance with this section by no more than twenty-five percent (25%) of the standard buffer width in all cases, regardless of wetland category or basin type.

d. Modification of Wetland Buffers When Wetland Is Not To Be Modified – No land surface modification may occur and no improvement may be located in a wetland buffer, except as provided for in this subsection.

1) Types of Buffer Modifications – Buffers may be reduced through one of two means, either (a) buffer averaging, or (b) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used:

a) Buffer averaging requires that the area of the buffer resulting from the buffer averaging is equal in size and quality to the buffer area calculated by the standards specified in KZC 83.500.4. Buffers may not be reduced at any point by more than twenty-five (25%) percent of the standards specified in KZC 83.500.4, unless approved through a shoreline variance. Buffer averaging calculations shall only consider the subject property.

b) Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features, such as downed logs or snags, or other means), the reduced buffer will function at a higher level than the existing standard buffer.

The reduced on-site buffer area must be planted and maintained as needed to yield over time a reduced buffer that is equivalent to undisturbed Puget Lowland forests in density and species composition. At a minimum, a buffer enhancement plan shall provide the following: (a) a map locating the specific area of enhancement; (b) a planting plan that uses native species, including groundcover, shrubs, and trees; and (c) a monitoring and maintenance program prepared by a qualified professional consistent with the standards specified in KZC 83.500.10.

Buffers may not be reduced at any point by more than 25% of the standards in KZC 83.500.3(a). Buffer reductions of more than 25% approved through a shoreline variance will be assumed to have direct wetland impacts that must be compensated for as described above under KZC 83.500.8.

2) Decisional Criteria – An improvement or land surface modification may only be approved in a wetland buffer only if:

a) The development activity or buffer modification demonstrates consideration and implementation of appropriate mitigation sequencing as outlined in KZC 83.490.2.

b) It is consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998);

c) It will not adversely affect water quality;

d) It will not adversely affect fish, wildlife, or their habitat;

e) It will not have an adverse effect on drainage and/or storm water detention capabilities, ground water recharge or shoreline protection ;

f) It will not lead to unstable earth conditions or create an erosion hazard;

g) It will not be materially detrimental to any other property or the City as a whole;

h) Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife, or their habitat;

i) All exposed areas are stabilized with vegetation normally associated with native wetland buffers, as appropriate; and

j) There is no feasible alternative development proposal that results in less impact to the buffer.

As part of the modification request, the applicant shall submit a report prepared by a qualified professional and fund a review of this report by the City's consultant. The report shall assess the water quality, habitat, drainage or storm water detention, ground water recharge, shoreline protection, and erosion protection functions of the buffer; assess the effects of the proposed modification on those functions; and address the ten (10) criteria listed in KZC 83.500.9d)(2) above.

10. On-Site versus Off-Site Mitigation

On-site mitigation for a wetland or its buffer is preferable to off-site mitigation. Given on-site constraints, the City may approve a plan to implement all or a portion of the required mitigation off-site, if the off-site mitigation is within the same drainage basin as the property that will be impacted by the project. The applicant shall demonstrate that the off-site mitigation will result in higher wetland functions, values, and/or acreage than on-site mitigation. Required compensatory mitigation ratios shall be the same for on-site or off-site mitigation, or a combination of both.

If the proposed on-site or off-site mitigation plan will result in the creation or expansion of a wetland or its buffer on any property other than the subject property, the plan shall not be approved until the applicant submits to the City a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Bureau of Elections and Records, consenting to the wetland and/or buffer creation or increase on such property and to the required maintenance and monitoring that may follow the creation or expansion of a wetland or its buffer.

11. Mitigation Plan and Monitoring and Maintenance Program

Applicants proposing to alter wetlands or their buffers shall submit a mitigation plan prepared by a qualified professional. The mitigation plan shall consist of a description of the existing functions and values of the wetlands and buffers affected by the proposed project, the nature and extent of impacts to those areas, and the mitigation measures to offset those impacts. The mitigation plan shall also contain a drawing that illustrates the compensatory mitigation elements. The plan and/or drawing shall list plant materials and other habitat features to be installed.

To ensure success of the mitigation plan, the applicant shall submit a monitoring and maintenance program prepared by a qualified professional. At a minimum, the monitoring and maintenance plan shall include the following:

1) The goals and objectives for the mitigation plan;

2) Success criteria by which the mitigation will be assessed;

3) Plans for a five (5) year monitoring and maintenance program;

4) A contingency plan in case of failure; and

5) Proof of a written contract with a qualified professional who will perform the monitoring program.

The monitoring program shall consist of at least two site visits per year by a qualified professional, with annual progress reports submitted to the City and all other agencies with jurisdiction.

The cost of producing and implementing the mitigation plan, the monitoring and maintenance program, reports, and drawing, as well as the review of each component by the City's wetland consultant, shall be borne by the applicant.

12. Shoreline Variance for Wetland Modification or Wetland Buffer Modification - An applicant who is unable to comply with the specific standards of KZC 83.500 must obtain a shoreline variance, pursuant to KZC 141.70.3 and meet the criteria set forth in WAC 183-27-170. In additional, the following City submittal requirements and criteria must also be met:

    a. Submittal Requirements – As part of the shoreline variance request, the applicant shall submit a report prepared by a qualified professional and fund a review of this report by the City's qualified professional. The report shall include the following:

        1) A determination and delineation of the sensitive area and sensitive area buffer containing all the information specified in KZC 83.500 3) for a wetland;

        2) An analysis of whether any other proposed development with less impact on the sensitive area and sensitive area buffer is feasible;

        3) Sensitive site design and construction staging of the proposal so that the development will have the least feasible impact on the sensitive area and sensitive area buffer;

        4) A description of the area of the site that is within the sensitive area or within the setbacks or buffers required by this Chapter;

        5) A description of protective measures that will be undertaken, such as siltation curtains, hay bales and other siltation prevention measures, and scheduling the construction activity to avoid interference with wildlife and fisheries rearing, nesting or spawning activities;

        6) An analysis of the impact that the proposed development would have on the sensitive area and the sensitive area buffer;

        7) How the proposal minimizes net loss of sensitive area and/or sensitive area buffer functions to the greatest extent feasible;

        8) Whether the improvement is located away from the sensitive area and the sensitive area buffer to the greatest extent feasible;

        9) Information specified in KZC 83.500.8 for Compensatory Mitigation;

        10) Such other information or studies as the Planning Official may reasonably require.

    b. Decisional Criteria – The City may grant approval of a shoreline variance only if all of the following criteria are met:

        1) No other permitted type of land use for the property with less impact on the sensitive area and associated buffer is feasible;

        2) The proposal has the minimum area of disturbance;

        3) The proposal maximizes the amount of existing tree canopy that is retained;

        4) The proposal utilizes to the maximum extent feasible innovative construction, design, and development techniques, including pervious surfaces, that minimize to the greatest extent feasible net loss of sensitive area functions and values;

        5) The proposed development does not pose an unacceptable threat to the public health, safety, or welfare on or off the property;

        6) The proposal meets the mitigation, maintenance, and monitoring requirements of this Chapter;

7) The granting of the shoreline variance will not confer on the applicant any special privilege that is denied by this Chapter to other lands, buildings, or structures under similar circumstances.

13. Wetland Restoration - City approval is required prior to wetland restoration. The City may permit or require the applicant or property owner to restore and maintain a wetland and/or its buffer by removing material detrimental to the area, such as debris, sediment, or vegetation. The City may also permit or require the applicant to restore a wetland or its buffer through the addition of native plants and other habitat features. See also KZC 83.490.3, Trees in Critical Areas or Critical Area Buffers; and KZC 83.490.4, Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers. Restoration may be required whenever a condition detrimental to water quality or habitat exists. When the City requires wetland restoration, the requirements of KZC 83.500.8, Compensatory Mitigation, shall apply.

14. Wetland Access - The City may develop access through a wetland and its buffer in conjunction with a public park, provided the purpose supports education or passive recreation, and is designed to minimize environmental impacts during construction and operation.

83.510 Streams

1. Applicability – The following provisions shall apply to streams and stream buffers located within the shorelines jurisdiction, in place of provisions contained in Chapter 90 KZC. Provisions contained in Chapter 90 KZC that are not addressed in this section continue to apply, such as bond or performance security, dedication and liability, but the following subsections shall not apply within the shorelines jurisdiction:

   a. KZC 90.20 – General Exceptions

   b. KZC 90.30 – Definitions

   c. KZC 90.75 – Minor Lakes

   d. KZC 90.140 – Reasonable Use Exception

   e. KZC 90.160 – Appeals

   f. KZC 90.170 – Planning/Public Works Official Decisions – Lapse of Approval

2. Activities in or Near Streams – No Land surface modification shall occur and no improvements shall be located in a stream or its buffer except as provided in KZC 83.510.3 through 83.510.11.

3. Stream Determinations - The Planning Official shall determine whether a stream or stream buffer is present on the subject property using the following provisions. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether a stream exists on any portion of the subject property or surrounding area (which shall be the area within approximately 100 feet of the subject property).

   If the initial site inspection indicates the presence of a stream, the Planning Official shall determine, based on the definitions contained in this Chapter and after a review of all information available to the City, the classification of the stream.

   If this initial site inspection does not indicate the presence of a stream on or near the subject property, no additional stream study will be required.

   If an applicant disagrees with the Planning Official's determination that a stream exists on or near the subject property or the Planning Official's classification of a stream, the applicant shall submit a report prepared by a qualified professional approved by the Planning Official that independently evaluates the presence of a stream or the classification of the stream, based on the definitions contained in this Chapter.

   The Planning Official shall make final determinations regarding the existence of a stream and the proper classification of that stream. The Planning Official's decision under this section shall be used for review of any development activity proposed on the subject property for which an

application is received within five (5) years of the decision; provided, that the Planning Official may modify any decision whenever physical circumstances have markedly and demonstrably changed on the subject property or the surrounding area as a result of natural processes or human activity.

4. Stream Buffers and Setbacks

a. Stream Buffers – No land surface modification shall occur and no improvement shall be located in a stream or its buffer, except as provided in this section. See also KZC 83.490.3, Trees in Critical Areas or Critical Area Buffers; and KZC 83.490.4, Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers.

Required or standard buffers for streams are as follows:

Stream Buffers

Stream Class	Primary Basins	Secondary Basins
A	75 feet	N/A
B	60 feet	50 feet
C	35 feet	25 feet

Stream buffers shall be measured from each side of the OHWM of the stream, except that where streams enter or exit pipes, the buffer shall be measured in all directions from the pipe opening. Essential improvements to accommodate required vehicular, pedestrian, or utility access to the subject property may be located within those portions of stream buffers that are measured toward culverts from culvert openings.

Where a legally established, improved road right-of-way or structure divides a stream buffer, the Planning Official may approve a modification of the required buffer in that portion of the buffer isolated from the stream by the road or structure, provided the isolated portion of the buffer:

1) Does not provide additional protection of the stream from the proposed development; and

2) Provides insignificant biological, geological or hydrological buffer functions relating to the portion of the buffer adjacent to the stream.

b. Buffer Setback – Structures shall be set back at least 10 feet from the designated or modified stream buffer. The City may allow within this setback minor improvements that would have no potential adverse effect during their construction, installation, use, or maintenance to fish, wildlife, or their habitat or to any vegetation in the buffer or adjacent stream.

c. Storm Water Discharge – Necessary discharge of storm water through stream buffers and buffer setbacks may be allowed on the surface, but a piped system discharge is prohibited unless approved pursuant to this section. Storm water outfalls (piped systems) may be located within the buffer setback specified in subsection (b) of this section and within the buffers specified in subsection (a) of this section only when the City determines, based on a report prepared by a qualified professional under contract to the City and paid for by the applicant, that surface discharge of storm water through the buffer would clearly pose a threat to slope stability; and if the storm water outfall will not:

1) Adversely affect water quality;

2) Adversely affect fish, wildlife, or their habitat;

3) Adversely affect drainage or storm water detention capabilities;

4) Lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and

5) Be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

Storm water facilities shall minimize potential impacts to the stream or stream buffer by meeting the following design standards:

1) Catch basins must be installed as far as feasible from the buffer boundary.

2) Outfalls must be designed to reduce the chance of adverse impacts as a result of concentrated discharges from pipe systems. This may include:

   a) Installation of the discharge end as far as feasible from the sensitive area, and

   b) Use of appropriate energy dissipation at the discharge end.

d. Water Quality Facilities –The City may only approve a proposal to install a water quality facility within the outer one-half (1/2) of a stream buffer if a suitable location outside of the buffer is not available and only if:

1) It will not adversely affect water quality;

2) It will not adversely affect fish, wildlife, or their habitat;

3) It will not adversely affect drainage or storm water detention capabilities;

4) It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;

5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas;

6) The existing buffer is already degraded as determined by a qualified professional;

7) The installation of the water quality facility would be followed immediately by enhancement of an area equal in size and immediately adjacent to the affected portion of the buffer; and

8) Once installed, it would not require any further disturbance or intrusion into the buffer.

The City may only approve a proposal by a public agency to install a water quality facility elsewhere in a stream buffer if Criteria 9 – 11 (below) are met in addition to 1 – 8 (above):

9) The project includes enhancement of the entire on-site buffer;

10) The project would provide an exceptional ecological benefit off-site; and

11) There is no feasible alternative proposal that results in less impact to the buffer.

e. Utilities and Rights-of-Way – Provided that activities will not increase the impervious surface area or reduce flood storage capacity, the following work shall be allowed in critical areas and their buffers subject to City review after appropriate mitigation sequencing per KZC 83.490.2 has been considered and implemented:

1) All utility work in improved City rights-of-way;

2) All normal and routine maintenance, operation and reconstruction of existing roads, streets, and associated rights-of-way and structures; and

3) Construction of sewer or water lines that connect to existing lines in a sensitive area or buffer where no feasible alternative location exists based on an analysis of technology and system efficiency.

All affected critical areas and buffers shall be expeditiously restored to their pre-project condition or better. For purposes of this subsection only, “improved City rights-of-way” include those rights-of-way that have improvements only underground, as well as those with surface improvements.

f. Minor Improvements – Minor improvements may be located within the sensitive area buffers specified in subsection 83.510.4. These minor improvements shall be located within the outer one-half (1/2) of the sensitive area buffer, except where approved stream crossings are made. The City may only approve a proposal to construct a minor improvement within a sensitive area buffer if:

1) It will not adversely affect water quality;

2) It will not adversely affect fish, wildlife, or their habitat;

3) It will not adversely affect drainage or storm water detention capabilities;

4) It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;

5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas; and

6) It supports public or private shoreline access.

The City may require the applicant to submit a report prepared by a qualified professional that describes how the proposal will or will not comply with the criteria for approving a minor improvement.

5. Stream Buffer Fence or Barrier - Prior to beginning development activities, the applicant shall install a 6-foot-high construction-phase chain link fence or equivalent fence, as approved by the Planning Official and consistent with City standards, along the upland boundary of the entire stream buffer with silt screen fabric. The construction-phase fence shall remain upright in the approved location for the duration of development activities.

Upon project completion, the applicant shall install between the upland boundary of all stream buffers and the developed portion of the site, either (1) a permanent three- to four-foot-tall split rail fence; or (2) equivalent barrier, as approved by the Planning Official. Installation of the permanent fence or equivalent barrier must be done by hand where necessary to prevent machinery from entering the stream or its buffer.

6. Permit Process

The City shall consolidate and integrate the review and processing of the critical areas aspects of the proposal with the shoreline permit required for the proposed development activity, except as follows:

Development Proposal	**Permit Process**
Stream Relocations or Modifications, or Stream Buffer Modifications affecting more than one-third (1/3) of the standard buffer	Shoreline Variance pursuant to Process IIA, described in Chapter 141 KZC
Stream Buffer Modifications affecting less than one-third (1/3) of the standard buffer	Underlying development permit or development activity
Bulkheads or other hard stabilization measures in Stream, Stream Crossings or Stream Rehabilitation	Underlying development permit or development activity

7. Stream Buffer Modification

a. Departures from the standard buffer requirements shall be approved only after the applicant has demonstrated consideration and implementation of appropriate mitigation sequencing as outlined in KZC 83.490.2.

b. Approved departures from the standard buffer requirements of KZC 83.510.4.a) allow applicants to modify the physical and biological conditions of portions of the standard buffer for the duration of the approved project. These approved departures from the standard buffer requirements do not permanently establish a new regulatory buffer edge. Future development activity on the subject property may be required to reestablish the physical and biological conditions of the standard buffer.

c. Types of Buffer Modification – Buffers may be reduced through one of two means, either (1) buffer averaging; or (2) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used.

1) Buffer averaging requires that the area of the buffer resulting from the buffer averaging be equal in size and quality to the buffer area calculated by the standards specified in KZC 83.510.4(a). Buffers may not be reduced at any point by more than one-third (1/3) of the standards in KZC 83.510.4(a). Buffer averaging calculations shall only consider the subject property.

2) Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features such as downed logs or snags, or other means) the reduced buffer will function at a higher level than the standard existing buffer. The reduced on-site buffer area must be planted and maintained as needed to yield over time a reduced buffer that is equivalent to an undisturbed Puget Lowland forests in density and species composition.

A buffer enhancement plan shall at a minimum provide the following: (1) a map locating the specific area of enhancement; (2) a planting plan that uses native species, including groundcover, shrubs, and trees; and (3) a monitoring and maintenance program prepared by a qualified professional consistent with the standards specified in KZC 83.500.8.

Buffers may not be reduced at any point by more than one-third (1/3) of the standards in KZC 83.510.4.a).

d. Decisional Criteria – An improvement or land surface modification may only be approved in a stream buffer only if:

1) The project demonstrates consideration and implementation of appropriate mitigation sequencing as outlined in KZC 83.490.2.

2) It is consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998);

3) It will not adversely affect water quality;

4) It will not adversely affect fish, wildlife, or their habitat;

5) It will not have an adverse effect on drainage and/or storm water detention capabilities;

6) It will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;

7) It will not be materially detrimental to any other property or the City as a whole;

8) Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife, or their habitat;

9) All exposed areas are stabilized with vegetation normally associated with native stream buffers, as appropriate; and

10) There is no practicable or feasible alternative development proposal that results in less impact to the buffer.

As part of the modification request, the applicant shall submit a report prepared by a qualified professional and fund a review of this report by the City's consultant. The report shall assess the habitat, water quality, storm water detention, ground water recharge, and erosion protection functions of the buffer; assess the effects of the proposed modification on those functions; and address the 10 criteria listed in this subsection above.

8. Shoreline Variance for Stream Relocation or Modification or Stream Buffer Modification An applicant who is unable to comply with the specific standards of KZC 83.510 must obtain a shoreline variance, pursuant to KZC 141.70.3 and meet the criteria set forth in WAC 183-27-170. In addition, the following City submittal requirements and criteria must also be met:

a. Submittal Requirements – As part of the shoreline variance request, the applicant shall submit a report prepared by a qualified professional and fund a review of this report by the City's qualified professional. The report shall include the following:

1) A determination of the stream and the stream buffer based on the definitions contained in KZC 83.80;

2) An analysis of whether any other proposed development with less impact on the sensitive area and sensitive area buffer is feasible;

3) Sensitive site design and construction staging of the proposal so that the development will have the least feasible impact on the sensitive area and sensitive area buffer;

4) A description of the area of the site that is within the sensitive area or within the setbacks or buffers required by this Chapter;

5) A description of protective measures that will be undertaken, such as siltation curtains, hay bales and other siltation prevention measures, and scheduling the construction activity to avoid interference with wildlife and fisheries rearing, nesting or spawning activities;

6) An analysis of the impact that the proposed development would have on the sensitive area and the sensitive area buffer;

7) How the proposal minimizes net loss of sensitive area and/or sensitive area buffer functions to the greatest extent feasible;

8) Whether the improvement is located away from the sensitive area and the sensitive area buffer to the greatest extent feasible;

9) Information specified in KZC 83.500.8 for Compensatory Mitigation; and

10) Such other information or studies as the Planning Official may reasonably require.

b. Decisional Criteria – The City may grant approval of a shoreline variance only if all of the following criteria are met:

1) No other permitted type of land use for the property with less impact on the sensitive area and associated buffer is feasible;

2) The proposal has the minimum area of disturbance;

3) The proposal maximizes the amount of existing tree canopy that is retained;

4) The proposal utilizes to the maximum extent feasible innovative construction, design, and development techniques, including pervious surfaces that minimize to the greatest extent feasible net loss of sensitive area functions and values;

5) The proposed development does not pose an unacceptable threat to the public health, safety, or welfare on or off the property;

6) The proposal meets the mitigation, maintenance, and monitoring requirements of this Chapter; and

7) The granting of the shoreline variance will not confer on the applicant any special privilege that is denied by this Chapter to other lands, buildings, or structures under similar circumstances.

9. Stream Relocation or Modification - The City may only permit a stream to be relocated or modified if water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream will be significantly improved by the relocation or modification. Convenience to the applicant in order to facilitate general site design shall not be considered.

A proposal to relocate or modify a Class A stream may only be approved if the Washington Department of Fish and Wildlife issues a Hydraulic Project Approval for the project. Furthermore, all modifications shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

If the proposed stream activity will result in the creation or expansion of a stream or its buffer on any property other than the subject property, the City shall not approve the plan until the applicant submits to the City a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Bureau of Elections and Records, consenting to the sensitive area and/or buffer creation or increase on such property.

Prior to the City's decision to authorize approval of a stream relocation or modification, the applicant shall submit a stream relocation/modification plan prepared by a qualified professional approved by the City. The cost of producing, implementing, and monitoring the stream relocation/modification plan, and the cost of review of that plan by the City's stream consultant shall be borne by the applicant. This plan shall contain or demonstrate the following:

a. A topographic survey showing existing and proposed topography and improvements;

b. The filling and revegetation of the existing stream channel;

c. A proposed phasing plan specifying time of year for all project phases;

d. The ability of the new stream channel to accommodate flow and velocity of 100-year storm events; and

e. The design and implementation features and techniques listed below, unless clearly and demonstrably inappropriate for the proposed relocation or modification:

1) The creation of natural meander patterns;

2) The formation of gentle and stable side slopes, no steeper than two feet horizontal to one-foot vertical, and the installation of both temporary and permanent erosion-control features (the use of native vegetation on stream banks shall be emphasized);

3) The creation of a narrow sub-channel (thalweg) against the south or west stream bank;

4) The utilization of native materials;

5) The installation of vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife;

6) The creation of spawning areas, as appropriate;

7) The re-establishment of fish population, as appropriate;

8) The restoration of water flow characteristics compatible with fish habitat areas;

9) Demonstration that the flow and velocity of the stream after relocation or modification shall not be increased or decreased at the points where the stream enters and leaves the subject property, unless the change has been approved by the City to improve fish and wildlife habitat or to improve storm water management;

10) A written description of how the proposed relocation or modification of the stream will significantly improve water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream; and

11) A monitoring and maintenance plan consistent with KZC 83.500.11 for wetlands.

Prior to diverting water into a new stream channel, a qualified professional approved by the City shall inspect the completed new channel and issue a written report to the City stating that the new stream channel complies with the requirements of this section. The cost for this inspection and report shall be borne by the applicant.

10. Stream Bank Protection

a. General –

1) Stream bank protection measures shall be selected to address site- and reach-based conditions and to avoid habitat impacts.

2) The selection of the streambank protection technique shall be based upon an evaluation of site conditions, reach conditions and habitat impacts.

3) Nonstructural or soft structural streambank protection measures shall be implemented unless demonstrated to not be feasible.

b. Submittal Requirements for Streambank Protection Measures – The following shall be submitted to the City:

An assessment prepared by a qualified professional containing the following:

1) An evaluation of the specific mechanism(s) of streambank failure as well as the site and reach-based causes of erosion.

2) An evaluation of the considerations used in identifying the preferred streambank solution technique. The evaluation shall address the provisions established in the Washington Department of Fish and Wildlife's *Integrated Streambank Protection Guidelines* (2003, or as revised).

c. Bulkheads or other erosion control practices using hardened structures that armor and stabilize the streambank from further erosion are not permitted along a stream, except as provided in this subsection. The City shall allow a bulkhead to be constructed only if:

1) It is not located within a wetland or between a wetland and a stream;

2) It is needed to prevent significant erosion;

3) The use of vegetation and/or other biological materials would not sufficiently stabilize the stream bank to prevent significant erosion;

4) The applicant submits a plan prepared by a qualified professional approved by the City that shows a bulkhead and implementation techniques that meet the following criteria:

a) There will be no adverse impact to water quality;

b) There will be no adverse impact to fish, wildlife, and their habitat;

c) There will be no increase in the velocity of stream flow, unless approved by the City to improve fish habitat;

d) There will be no decrease in flood storage volumes;

e) The installation, existence, nor operation of the bulkhead will lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and

f) The installation, existence nor operation of the bulkhead or other hard stabilization measures will be detrimental to any other property or the City as a whole.

5) The Washington Department of Fish and Wildlife issues a Hydraulic Project Approval for the project.

d. The stream bank protection shall be designed consistent with Washington Department of Fish and Wildlife's *Integrated Streambank Protection Guidelines* (2003, or as revised). The stabilization measure shall be designed and constructed to minimize the transmittal of water current and energy to other properties. Changes in the horizontal or vertical configuration of the land shall be kept to a minimum. Fill material used in construction of a bulkhead shall be non-dissolving and non-decomposing. The applicant shall also stabilize all exposed soils by planting native riparian vegetation with high food and cover value for fish and wildlife.

11. Stream Crossings - Stream crossings are not permitted, except as specified in this section. The City shall review and decide upon an application to cross a stream with an access drive, driveway, or street. A stream crossing shall be allowed only if:

a. The stream crossing is necessary to provide required vehicular, pedestrian, or utility access to the subject property. Convenience to the applicant in order to facilitate general site design shall not be considered;

b. The Washington Department of Fish and Wildlife issues a Hydraulic Project Approval for the project; and

c. The applicant submits a plan prepared by a qualified professional approved by the City that shows the crossing and implementation techniques that meet the following criteria:

1) There will be no adverse impact to water quality;

2) There will be no adverse impact to fish, wildlife, and their habitat;

3) There will be no increase in the velocity of stream flow, unless approved by the City to improve fish habitat;

4) There will be no decrease in flood storage volumes;

5) The installation, existence, nor operation of the stream crossing will lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and

6) The installation, existence nor operation of the stream crossing will be detrimental to any other property or to the City as a whole.

d. The stream crossing shall be designed and constructed to allow passage of fish inhabiting the stream or that may inhabit the stream in the future. The stream crossing shall be designed to accommodate a 100-year storm event. The applicant shall at all times maintain the crossing so that debris and sediment do not interfere with free passage of water, wood and fish. The City shall require a security or perpetual maintenance agreement under 90 KZC for continued maintenance of the stream crossing.

e. A bridge is the preferred stream crossing method. If a bridge is not economically or technologically feasible, or would result in greater environmental impacts than a culvert, a proposal for a culvert may be approved if the culvert complies with the criteria in this subsection must be designed consistent with Washington Department of Fish and Wildlife's *Design of Road Culverts for Fish Passage* (2003, or as revised).

f. If a proposed project requires approval through a shoreline conditional use, the City may require that any stream in a culvert on the subject property be opened, relocated, and restored consistent with the provisions of this subsection.

12. Stream Rehabilitation - City approval is required prior to stream rehabilitation. The City may permit or require the applicant or property owner to restore and maintain a stream and/or its buffer by removing material detrimental to the stream and its surrounding area such as debris, sediment, or vegetation. The City may also permit or require the applicant to restore a stream or its buffer through the addition of native plants and other habitat features. See also KZC 83.490.3,

Trees in Critical Areas or Critical Area Buffers; and KZC 83.490.4, Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers. Restoration may be required at any time that a condition detrimental to water quality or habitat exists. When the City requires stream rehabilitation, the mitigation plan and monitoring requirements of KZC 83.500.11 shall apply.

83.520 Geologically Hazardous Areas

1. General - Uses, developments, activities and shoreline modifications within geologically hazardous areas must be limited to prevent significant adverse impacts to property or public improvements and/or result in a net loss of ecological functions and ecosystem-wide processes.

2. Standards –

   a. New use, development or activities or creation of new lots that would cause foreseeable risk to people or improvement from geological conditions during the life of the use, development or activities shall not be allowed.

   b. New use, development or activities that would require structural shoreline stabilization over the life of the development shall not be allowed, except for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available.

   c. For protection of existing primary structures, stabilization structures or measures may be allowed when no alternatives, including relocation or reconstruction of existing structures, are found to be feasible.

   d. Stabilization structures or measures must be consistent with KZC 83.300 for shoreline stabilization and with KZC 83.380 for no net loss of ecological function.

   e. Uses, developments, activities and shoreline modifications within geologically hazardous areas must be consistent with Chapter 85 KZC.

   f. In addition to the required information contained in 85 KZC, any required geotechnical report shall also contain any additional information specified under the definition of Geotechnical Report contained in KZC 83.80.

83.530 Flood Hazard Reduction

1. General - Uses, developments, activities and shoreline modifications within the channel migration zone must be limited to prevent interference with the process of channel migration that may cause significant adverse impacts to property or public improvements and/or result in a net loss of ecological functions associated with critical areas.

2. Standards

   a. New uses, development or activities or expansions shall not be allowed when it would be reasonable foreseeable that the use, development or activities would require structural flood hazard reduction measures within the channel migration or floodway.

   b. The uses and activities specifically identified in WAC 173-26-221(3) (c) (I) may be allowed within the channel migration zone if the City determines that they are appropriate and/or necessary.

   c. Flood hazard measures shall not result in a net loss of ecological functions associated with critical areas. See KZC 83.360.

   d. Flood hazard reduction measures shall only be allowed if it is determined that no other alternative is feasible to reduce flood hazard to existing development. Where feasible, non structural flood hazard reduction measures shall be utilized over structural measures.

   e. When evaluating alternative flood control measures, structures in flood-prone areas shall be removed or relocated where feasible.

   f. New structural flood hazard reduction measures may be allowed only when it can be demonstrated by scientific and engineering analysis that:

1) They are necessary to protect existing development;
2) Non structural measures are not feasible;
3) Impacts to ecological functions and priority species and habitats can be successfully mitigated to assure no net loss; and
4) Vegetation retention is provided consistent with KZC 83.400, KZC 83.500 and KZC 83.510 as applicable.

g. New structural flood hazard reduction measures shall be placed landward of wetlands and associated buffers areas, except for actions that increase ecological functions, such as wetland restoration.

h. For new structural flood hazard reduction measures, such as dikes and levees, improved public access walkways shall be provided, unless public access improvements would cause unavoidable health and safety hazards to the public, inherent or unavoidable security problems, or ecological impacts that are significant and cannot be mitigated.

i. Removal of gravel for flood management is not permitted, unless a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a new loss of ecological functions and is part of a comprehensive flood management solution.

j. Where feasible, stream corridors shall be returned to more natural hydrological conditions, recognizing that seasonal flooding is an essential natural process. This includes removal of artificial restrictions to natural channel migration, restoration of off channel hydrological connections and returning stream processes to a more natural state were appropriate and feasible.

k. Associated wetland restorations must be consistent with KZC 83.490, KZC 83.500 and KZC 83.510. Stream restoration or relocations must be consistent with Chapter 90 KZC.

l. The requirements of Chapter 21.56 KMC - Flood Damage Prevention, Chapter 15.52 KMC - Surface Water Management and the National Flood Insurance Program must be met.

83.540 Archaeological and Historic Resources

1. General - Uses, developments and activities on sites of historic or archeological significance or sites containing items of historic or archeological significance must not unreasonably disrupt or destroy the historic or archeological resource.

2 Standards -

a. Permits submitted for land surface modification or development activity in areas documented by the Washington State Office of Archaeology and Historic Preservation to contain archaeological resources shall include a site inspection and a draft written report prepared by a qualified professional archaeologist, approved by the City, prior to the issuance of a permit. In addition, the archaeologist will provide copies of the draft report to the affected tribe(s) and the State Office of Archaeology and Historic Preservation.

After consultation with these agencies, the archaeologist shall provide a final report that includes any recommendations from the affected tribe(s) and the State Office of Archaeology and Historic Preservation on avoidance or mitigation of the proposed project's impacts. The Planning Official shall condition project approval, based on the final report from the archaeologist, to ensure that impacts to the site are avoided or minimized consistent with federal and state law.

b. Shoreline permits shall contain provisions that require developers to immediately stop work and notify the City if any potential archaeological resources are uncovered during land surface modification or development activity. In such cases, the developer shall be required to provide for a site inspection and evaluation by a qualified professional archaeologist, approved by the City, to ensure that all feasible valuable archaeological data is properly handled. The City shall subsequently notify the affected tribe and the State Office of

Archaeology and Historic Preservation. Failure to comply with this requirement shall be considered a violation of the shoreline permit.

C If identified historical or archaeological resources are present, site planning and access to such areas shall be designed and managed to give maximum protection to the resource and surrounding environment.

d. Interpretative signs, historical markers and other similar exhibits providing information about historical and archaeological features and natural areas shall be provided when appropriate.

e. In the event that unforeseen factors constituting an emergency as defined in RCW 90.58.030 that necessitate rapid action to retrieve or preserve artifacts or data identified above, the project may be exempted from the permit requirement of these regulations. The City shall notify the State Department of Ecology, the State Attorney General's Office and the State Historic Preservation Office of such a waiver in a timely manner.

f. Archaeological sites are subject to RCW 27.44 (Indian Graves and Records) and RCW 27.53 (Archaeological Sites and Records) and shall comply with WAC 25-48 or its successor as well as the provisions of this Chapter.

g. Proposed changes to historical properties that are registered on the State or National Historic Register are subject to review under the National and State Registers' review process.

83.550 Nonconformances

1. General - This section establishes when and under what circumstances nonconforming aspects of a use or development must be brought into conformance with this Chapter. The applicant needs to consult the provisions of this section if there is some aspect of the use or development on the subject property that is not permitted under this Chapter.

2. When Conformance is Required - If an aspect, element or activity of or on the subject property conformed to the applicable shoreline regulations in effect at the time the aspect, element or activity was constructed or initiated, that aspect, element or activity may continue and need not be brought into conformance with this Chapter unless a provision of KZC 83.550 requires conformance. Further, nonconforming structures may be maintained, altered, remodeled, repaired and continued; provided that nonconforming structures shall not be enlarged, intensified, increased or altered in any way that increases the extent of the nonconformity, except as specifically permitted under KZC 83.550.

3. Abatement of Nonconformance That Was Illegal When Initiated - Any nonconformance that was illegal when initiated must immediately be brought into conformance with this Chapter. The City may, using the provisions of WAC 173-27, abate any nonconformance that was illegal when initiated.

4. Special Provision for Damaged Improvements - Non-conforming structures that are damaged or destroyed by fire, explosion, flood, earthquake, storm or other casualty may be restored or replaced in kind, provided that, the following are met:

   a. The permit process is commenced within twenty-four (24) months of the date of such damage; and

   b. The reconstruction does not expand, enlarge, or otherwise increase the non-conformity, except as provided for KZC 83.550; and

   c. The reconstruction locates the structure in the same place where it was, or alternatively if moved, then the least environmentally damaging location relative to the shoreline and any critical areas; and

   d. For existing residential structures built over the water, appropriate measures are taken to mitigate adverse impacts to the maximum extent feasible while still retaining the existing residential density, including but not limited to:

1) Reducing the overwater footprint;
2) Reducing the number or size of pilings to the extent allowed by site-specific engineering or design considerations;
3) Softening existing hard shoreline stabilization measures to the extent allowed by site-specific characteristics;
4) Raising the height of the structure off the water, provided that the height of the existing building is not increased; and
5) Incorporating grating into the re-built structure where feasible.

e. For piers and docks, appropriate measures are taken to mitigate adverse impacts to the maximum extent feasible while still retaining the existing area and dimensions, if desired, including, but not limited to:

1) Meeting the standards for height of piers and diving boards, minimum water depth, location of ells, fingers and deck platforms and pilings and moorage piles in KZC 83.270 through 83.290; and
2) Installing decking materials that allow a minimum of 40% light transmittance through the material.

f. For hard shoreline stabilization measures, the applicant shall consult the provisions for emergency actions contained in KZC 83.560. If the work needed does not qualify as an emergency action under these provisions, then the applicant shall comply with the provisions for shoreline stabilization contained within KZC 83.300.

5. Certain Nonconformances Specifically Regulated

a. General -

1) The provisions of this section specify when and under what circumstances certain nonconformances must be corrected. If a nonconformance must be corrected under KZC 83.550, the applicant must submit all information necessary for the City to review the correction as part of the application for any development permit. In addition, the City will not permit occupancy until the correction is made.
2) If KZC 83.550.4 above of KZC 83.550 applies to a specific nonconformance, then the provisions of this section do not apply to that same nonconformance.

b. Non-Conforming Structure –

1) A nonconforming structure that is moved any distance must be brought into conformance.
2) Any structural alteration of a roof or exterior wall that does not comply with height, shoreline setback, or view corridor standards shall be required to be brought into conformance for the nonconforming height, setback or view corridor, except as provided otherwise in this Chapter. Excepted from this subsection is the repair or maintenance of structural members, the alteration to existing windows and/or doors and the addition of new windows and/or doors or other similar features, provided that there is no increase in floor area or that the location of the exterior wall is not modified in a manner that increases the degree of nonconformance.
3) Increases in structure footprint outside of the shoreline setback or wetland or stream buffer shall be allowed, even if all or a portion of the previously approved footprint is within the shoreline setback, wetland or stream buffer.
4) If accessory structures are located within the shoreline setback, these existing nonconforming structures must be brought into conformance if the applicant is making an alteration to the primary structure, the cost of which exceeds 50 percent of the replacement cost of the structure.

5) Non-conforming structures that are expanded or enlarged within the shoreline setback must obtain a shoreline variance; provided that, a non-conforming detached dwelling unit use may be enlarged without a shoreline variance where the following provisions apply:

   a) The non-conforming structure must have been constructed prior to December 1, 2006, the date of the City's *Final Shoreline Analysis Report.*

   b) Before implementing this provision, the applicant shall determine whether the provisions of KZC 83.380 would allow for a reduced setback, based upon existing conditions on the subject property.

   c) The structure must be located landward of the OHWM.

   d) Any enlargement of the building footprint within the shoreline setback shall not exceed 10 percent of the gross floor area of the existing dwelling unit prior to the expansion. Other enlargements, such as upper floor additions, may be permitted if the addition is consistent with other provisions contained in this subsection.

   e) The enlargement shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.190, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate 44).

   f) The applicant must restore a portion of the shoreline setback area with riparian vegetation to offset the impact, such that the shoreline setback area will function at an equivalent or higher level than the existing conditions. The restoration plan shall be prepared by a qualified professional and shall be reviewed by the Planning Official and/or a consultant who may approve, approve with conditions, or deny the request.

      If the proposal is consistent with the standards provided in this subsection, the Planning Official shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the proposal is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and resubmittal. The cost of producing and implementing the restoration plan and the review by City staff and/or a consultant shall be borne by the applicant. Examples include, but are not limited to:

      i. Installation of additional native vegetation within the shoreline setback that would otherwise not be required under this Chapter. At a minimum, the area of shoreline setback restoration and/or enhancement shall be equivalent to the area impacted by the improvement.

      ii. Removal of an existing hard shoreline stabilization structure covering at least 15 linear feet of the lake frontage that is located at, below, or within 5 feet landward of the OHWM and subsequent restoration of the shoreline to a natural or semi-natural state, including creation or enhancement of nearshore shallow-water habitat.

      iii. Setting back hard shoreline stabilization structures or portions of hard shoreline stabilization structures from the OHWM and subsequent restoration of the shoreline to a natural or semi-natural state, including restoration of topography and beach/substrate composition.

      iv. Other shoreline restoration projects that are demonstrated to result in an improvement to existing shoreline ecological functions and processes.

   g) The applicant must comply with the best management practices contained in KZC 83.480 addressing the use of fertilizer, herbicides and pesticides as needed to protect lake water quality.

h) The applicant shall use “fully shielded cut off” light fixtures as defined by the Illuminating Engineering Society of North America (IESNA), or other appropriate measure to conceal the light source from adjoining uses and the lake, and direct the light toward the ground for any exterior light sources located on the west façade of the residence or other façades with exterior light sources that are directed towards the lake.

i) The remodel or expansion will not cause adverse impacts to shoreline ecological functions and/or processes as described on KZC 83.360.

j) The provision contained in KZC 83.550.5.b.5 shall only be used once within any 5-year period.

6) A nonconforming detached dwelling unit that is located on a lot that has less than 3,000 square feet of building area lying landward of the required shoreline setback and upland of required wetland or stream buffers, may be rebuilt or otherwise replaced within the shoreline setback and required wetland or stream buffer without a shoreline variance, provided the following standards are met:

a) The structure must be located landward of the OHWM.

b) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.190, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate 44)..

c) The reconstruction does not expand, enlarge, or otherwise increase the non-conformity.

d) The reconstruction locates the structure in the least environmentally damaging location relative to the shoreline and the critical areas.

e) The structure must comply with any requirements of this Chapter, zoning, building, or fire codes in effect when the structure is built, other than allowed in the subsection.

7) A primary structure that does not conform to the required shoreline setback and is located on a lot that has less than 3,000 square feet of building area lying landward of the shoreline setback, not including the area located within the required side yard setbacks and up to 10 feet of a required front yard, may be rebuilt or otherwise replaced in its current location within the shoreline setback, provided the following standards are met:

a) The structure must be located landward of the OHWM.

b) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.190, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate 44)..

c) The reconstruction does not expand, enlarge, or otherwise increase the non-conformity.

d) The structure must comply with any requirements of this Chapter, zoning, building, or fire codes in effect when the structure is built, other than allowed in this subsection.

c. <u>Nonconforming Use</u> –

1) A nonconforming use may be continued by successive owners or tenants.

2) Any nonconforming use, except for a detached dwelling, unit must be brought into conformance or discontinued if:

a) The applicant is making an alteration that increases the extent of the non-conformity, such as increasing the gross floor area of any structure that houses or supports the nonconforming use; or

b) The nonconforming use has ceased for 90 or more consecutive days. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire; or

c) The nonconforming use is replaced by another use. The City may allow a change from one nonconforming use to another such use if, through a shoreline conditional use process, the City determines that the proposed new use will comply with the following standards:

i. The proposed use will be consistent with the policies and provisions of the Act and this Chapter and is compatible with the uses in the area as the preexisting use;

ii. The use or activity is not enlarged, intensified, increased or altered in a manner that increases the extent of the non-conformity;

iii. The structure(s) associated with the non-conforming use shall not be expanded in a manner that increases the extent of the non-conformity, including encroachment into areas, such as setbacks, and any wetlands, streams and/or associated buffers established by this Chapter, where new structures, development or use would not be allowed;

iv. The change in use will not create adverse impacts to shoreline ecological functions and/or processes as described in KZC 83.360; and

v. Uses that are specifically prohibited or that would thwart the intent of the Act or this Chapter shall not be authorized.

d. Nonconforming Wetland or Stream Buffer –

1) If existing structures or other improvements are located within the wetland, stream or associated buffers, these structures and improvements must be brought into conformance if the applicant is making an alteration, change or any other work on the subject property in a consecutive 12-month period and the cost of the alteration, change or work exceeds 50 percent of the replacement cost of all existing structure and improvements on the subject property.

2) If the cost threshold of subsection d above is not exceeded, the alterations or changes may occur provided that the alterations or changes comply with this code and no exterior alterations or changes are made to the nonconforming portion of the structure or improvement, unless otherwise authorized by this Chapter.

e. Nonconforming Lot Size - An undeveloped lot, tract, parcel, site or division which was created or segregated pursuant to all applicable laws, ordinances and regulations in effect at the time, but that is nonconforming as to the present lot size or density standards may be developed so long as such development conforms to other requirements of this Chapter and the Act.

f. Nonconforming Public Pedestrian Walkway -

1) If a previously installed public shoreline access walkway is subsequently found not installed to the property line, the walkway shall be extended to the property line consistent with conditions established in the original permit. The City can require the walkway to be extended with or without a building permit proposal.

2) If a previously installed shoreline access walkway was subsequently found to have vegetation, fencing, other improvements or accessory structures installed that block connection to an adjacent shoreline access walkway, the blockage shall be removed. The City can require the block connection removed with or without a building permit proposal.

3) Nonconforming shoreline pedestrian access walkways that were legally created shall not be required to comply with the dimensional standards or setback standards of this Chapter.

4) The shoreline public access walkway requirements established in this Chapter must be brought into conformance as much as is feasible, based on available land area if the applicant completes an alteration to all primary habitable structure(s) in shorelines jurisdiction, the cost of which exceeds 50 percent of the replacement cost of all structures and improvements on the subject property.

g. Nonconforming Shoreline Setback Vegetation- The vegetation requirements of this Chapter must conform as much as is feasible, based on available land area, in either of the following situations:

1) An increase of at least 10 percent in gross floor area of any structure located in shorelines jurisdiction, excluding detached dwelling unit and public park uses; or

2) An alteration to any structure(s) in shorelines jurisdiction, the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.

h. Nonconforming Lighting - Exterior lighting must be brought into compliance with the requirements of this Chapter under the following circumstances:

1) The shielding requirements of KZC 83.470 shall be met when any nonconforming light fixture is replaced or moved.

2) All other requirements of KZC 83.470 shall be met when there is an increase in gross floor area of more than 50 percent of the primary structures on the subject property.

i. Prior Approval of Shoreline Variance - A structure for which a shoreline variance has been issued shall be considered a legal nonconforming structure and the requirements of this section shall apply as they apply to preexisting nonconformities.

j. Prior Approval of Shoreline Conditional Use - A use that is listed in this Chapter as a conditional use, but existed prior to adoption of this Chapter or any relevant amendment and for which a conditional use permit has not been obtained shall be considered a nonconforming use.

k. Any Other Nonconformance -

If any nonconformance exists on the subject property, other than as specifically listed in the prior subsections of this section, these must be brought into conformance if:

a)The applicant is making any alteration or change or doing any other work in a consecutive 12-month period to an improvement that is nonconforming or houses, supports or is supported by the nonconformance, and the cost of the alteration, change or other work exceeds 50 percent of the replacement cost of that improvement; or

b) The use on the subject property is changed and this Chapter establishes more stringent or different standards or requirements for the nonconforming aspect of the new use than this code establishes for the former use.

Replacement costs shall not include costs relating to non-structural interior elements, such as but not limited to appliances, heating and cooling systems, electrical systems, and interior finishes.

83.560 Emergency Actions

1. When Allowed –

Emergency actions are those that pose an unanticipated and imminent threat to public health, safety, or the environment and that require immediate action or within a time too short to allow full compliance with the provisions of this Chapter.

2. Standards –
   a. Emergency actions shall meet the following standards:
      1) Use reasonable methods to address the emergency;
      2) Be designed to have the least possible impacts on shoreline ecological functions and processes; and
      3) Be designed to comply with the provisions of this Chapter, to the extent feasible.
   b. Notice –
      1) The party undertaking the emergency action shall notify the Planning Department of the existence of the emergency and emergency action(s) within two (2) working days following commencement of the emergency action.
      2) Within seven (7) days following completion of emergency activity, the party shall provide the Planning Department a written description of the work undertaken, site plan, description of pre-emergency conditions and other information requested by the City to determine whether the action was permitted within the scope of an emergency action.
   c. Decision –
      1) The Planning Official shall evaluate the action for consistency with the provisions contained in WAC 173-27-040(2) (d).
      2) The Planning Official shall determine whether the action taken, or any part of the action taken, was within the scope of the emergency actions allowed in this section. The Planning Official may require mitigation for impacts to shoreline ecological functions.
      3) If the Planning Official determines that the emergency action was not warranted, he or she may require that the party obtain a permit and/or require remediation of or mitigation for the actions taken.

NEW CHAPTER

Zoning Code
Chapter 141 – SHORELINE ADMINISTRATION

141.10 User Guide

This Chapter contains the provisions regarding the City's administration and enforcement of the Shoreline Management Act and Chapter 83 KZC, as well as the permit system applicable to the Shoreline Management Act and shoreline master program of the city.

141.20 Administrative Responsibilities in General

Except as otherwise specifically established in this Chapter or Chapter 83 KZC, the Department of Planning and Community Development of the City is responsible for the administration of the Shoreline Management Act and the shoreline master program of the city.

141.30 Review Required.

1. Within the shoreline jurisdiction, as described in KZC 83.90, development shall be allowed only as authorized in a shoreline substantial development permit, shoreline conditional use permit or shoreline variance permit, unless specifically exempted from obtaining such a permit under KZC 141.40.
2. Chapter 83 KZC specifies which permit is required. Enforcement action by the City or Department of Ecology may be taken whenever a person has violated any provision of the

Shoreline Management Act or any City of Kirkland shoreline master program provision, or other regulation promulgated under the Shoreline Management Act. Procedures for enforcement action and penalties shall be as specified in WAC 173-27-240 through 173-27-310, which are hereby adopted by this reference.

3. Where a proposed development activity encompasses shoreline and non-shoreline areas, a shoreline substantial development permit or other required permit must be obtained before any part of the development, even the portion of the development activity that is entirely confined to the upland areas, can proceed.

141.40 Exemption from Permit Requirements

1. General - Proposals identified under WAC 173-27-040 are exempt from obtaining a shoreline substantial development permit; however, a shoreline variance or shoreline conditional use may still be required. Proposals that are not permitted under the provisions of Chapter 83 KZC shall not be allowed under an exemption. Applicants shall have the burden to demonstrate that the proposal complies with the requirements for the exemption sought as described under WAC 173-27-040. A proposal that does not qualify as an exemption may still apply for a shoreline substantial development permit.
2. Special Provisions – The following provides additional clarification on the application of the exemptions listed in WAC 173-27-040:
   a. Residential Appurtenances - ,
      1) Normal appurtenances to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)(g). For the purposes of interpreting this provision, normal appurtenances shall include those listed under WAC 173-14-040(2)(g) as well as tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence located landward of the OHWM and the perimeter of a wetland.
      2) Normal appurtenant structures to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)(c) for structural and non structural shoreline stabilization measures. For the purposes of interpreting this provision, normal appurtenant shall be limited to the structures listed under WAC 173-14-040(2)(g).
   b. Normal maintenance or repair of existing structures or developments - Normal maintenance or repair of existing structures or developments, including some replacement of existing structures, is included in the permit exemption provided in WAC 173-27-040(2)(b). For the purposes of interpreting this provision, the following replacement activities shall not be considered a substantial development:
      1) Replacement of an existing hard structural shoreline stabilization measure with a soft shoreline stabilization measure consistent with the provisions contained in KZC 83.300.
      2) Replacement of pier or dock materials consistent with the provisions contained in KZC 83.270 through 83.290.
3. Authority - The Planning Official shall review the proposed development activity for compliance with the shoreline regulations contained in Chapter 83 KZC. All proposed uses and development occurring within shoreline jurisdiction must conform to Chapter 90.58 RCW, the Shoreline Management Act, and the provisions of Chapter 83 KZC, whether or not a permit is required.
4. Application –
   a. As part of any request for a determination of exemption, the applicant shall show compliance with the regulations in Chapter 83 KZC by submitting an application on a form provided by the Planning Department. The application shall include all documents and exhibits listed on the application form. Alternatively, the applicant may use the joint aquatic resources permit application form and any other application forms deemed appropriate by the Planning Official. Applications may be deemed complete when required forms and attachments are provided consistent with a shoreline exemption development application checklist.
   b. The applicant shall identify whether the proposal requires an Army Corps of Engineers Section 10 or Section 404 approval. The Planning Official may waive the application for any

proposal that does not require an Army Corps of Engineers Section 10 or Section 404 approval. In these circumstances, the Planning Official shall conduct a review for compliance with the shoreline regulations contained in Chapter 83 KZC in conjunction with a related development permit.

5. Decision - The Planning Official may grant, deny, or conditionally approve the shoreline exemption request. The approval or conditional approval will become conditions of approval for any related development permit, and no development permit will be issued unless it is consistent with the shoreline exemption approval or conditional approval. A copy of the City's letter of exemption shall be filed with the Department of Ecology.
6. Appeal - Any person aggrieved by the Planning Official's determination on a shoreline exemption request may be appealed using, except as stated below, the applicable appeal provisions of Chapter 145 KZC. If a proposed development activity also requires approval through Process IIA, IIB, or III (as described in Chapters 150, 152, and 155 KZC, respectively), any appeal of a shoreline exemption request will be heard as part of that other process.
7. Lapse of Approval – The lapse of approval for the shoreline exemption approval shall be the same as the expiration date of the development permit and all conditions of the approval shall be included in the conditions of approval granted for that development permit.
8. Revisions to WAC 173-27-040 - With subsequent revisions to WAC 173-27-040, the Planning Director shall determine administratively whether a letter of exemption is required and, if so, issue the decision as an administrative interpretation under KZC 83.50.

141.50 Pre-Submittal

1. General – Before applying for a permit or approval under this Chapter, the applicant shall attend a pre-submittal meeting with the Planning Official consistent with the provisions of this section.
2. Scheduling – The Planning Department will arrange a time for the pre-submittal meeting as soon as is reasonably practicable after the meeting is requested by the applicant.
3. Purpose – The purpose of the pre-submittal meeting is for the Planning Official to provide information to the applicant regarding what information needs to be submitted for a complete application.
4. Time Limits – The City will not process an application under this Chapter unless the applicant attended a pre-submittal meeting under this section, regarding the proposal for which application is made, within the six (6) months immediately prior to the date the application is submitted.

141.60 Applications

1. Who May Apply – Any person may, personally or through an agent, apply for a decision regarding property he/she owns.
2. How To Apply – The applicant shall file the following information with the Planning Department:
   a. A complete application, with supporting affidavits, on forms provided by the Planning Department. Alternatively, the applicant may use the joint aquatic resources permit Application form;
   b. Any information or material that is specified in the provisions of Chapter 83 KZC; and
   c. Any additional information or material that the Planning Official specifies at the pre-submittal meeting.
3. Fee – The applicant shall submit the fee established by ordinance with the application.

141.70 Procedures

1. **Substantial Development Permits**
   a. General –
      1) Applications for a shoreline substantial development permit shall follow the procedures for a Process I Permit review pursuant to Chapter 145 KZC, except as otherwise provided in this Section.
      2) If the proposal that requires a substantial development permit is part of a proposal that requires additional approval through Process IIA or Process IIB under Chapter 150 KZC

or Chapter 152 KZC, respectively, the entire proposal will be decided upon using that other process.

3) If the proposal that requires a substantial development permit is part of a proposal that requires additional approval through the Design Review Board (DRB) under Chapter 142 KZC, the design review proceedings before the DRB shall be conducted in accordance with Chapter 142 KZC.

b. Notice of Application and Comment Period –
   1) In addition to the notice of application content established in Chapter 145 KZC, notice of applications for shoreline substantial development Permits must also contain the information required under WAC 173-27-110.
   2) The minimum notice of application comment period for shoreline substantial development permits shall be no fewer than thirty (30) days. However, the minimum comment period for applications for shoreline substantial development permits for limited utility extensions and bulkheads, as described by WAC 173-27-120, shall be twenty (20) days.

c. Burden of Proof –
   1) WAC 173-27-140 establishes general review criteria that must be met.
   2) WAC 173-27-150 establishes that a substantial development permit may only be granted when the proposed development is consistent with all of the following:
      a) The policies and procedures of the Shoreline Management Act;
      b) The provisions of Chapter 173-27 WAC;
      c) Chapter 83 KZC.

d. Decision -
   1) At the time of a final decision, the Planning Official shall mail a copy of the decision, staff advisory report, transmittal sheet and shoreline checklist to the applicant, Department of Ecology, and the Washington State Attorney General's Office, pursuant to RCW 90.58.140 and WAC 173-27-130. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision is received by the permit applicant as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one (21) days from the date of receipt as defined in RCW 90.58.140(5) and (6). "Date of Receipt" is that date that the permit applicant receives written notice from the Department of Ecology notifying the applicant of receipt of the decision.
   2) An appeal of a shoreline substantial development permit shall be to the State Shorelines Hearings Board and shall be filed within twenty-one (21) days of the receipt of the Department of Ecology's permit action letter as set forth in RCW 90.58.180.

e. Effect of Decision – For shoreline substantial development permits, no final action or construction shall be taken until the termination of all review proceedings initiated within twenty-one (21) days after notice of the final action taken by the City is received by the permit applicant from the Department of Ecology.

f. Complete Compliance Required –
   1) General – Except as specified in subsection (2) of this section, the applicant must comply with all aspects, including conditions and restrictions, of an approval granted under this Chapter authorized by that approval.
   2) Exception – Subsequent Modification – WAC 173-27-100 establishes the procedure and criteria under which the City may approve a revision to a permit issued under the Shoreline Management Act and the shoreline master program.

g. Time Limits – Construction and activities authorized by a shoreline substantial development permit are subject to the time limitations of WAC 173-27-090.

2. Conditional Use Permits

a. General - Applications for a shoreline conditional use permit shall follow the procedures for a Process IIA Permit review pursuant to Chapter 150 KZC, except as otherwise provided in this section. If the proposal that requires a conditional use permit is part of a proposal that requires additional approval through a Process IIB, the entire proposal will be decided upon using that process.

b. Notice of Application and Comment Period –

1) In addition to the notice of application content established in Chapter 150 KZC, notice of applications for shoreline conditional use permits must also contain the information required under WAC 173-27-110.
2) The minimum notice of application comment period for shoreline conditional use permits shall be no fewer than thirty (30) days.

c. Notice of Hearing – The Planning Official shall distribute notice of the public hearing at least fifteen (15) calendar days before the public hearing.

d. Burden of Proof –
1) WAC 173-27-140 establishes general review criteria that must be met.
2) WAC 173-27-160 establishes criteria that must be met for a conditional use permit to be granted.
3) In addition, the City will not issue a conditional use permit for a use which is not listed as allowable in the shoreline master program unless the applicant can demonstrate that the proposed use has impacts on nearby uses and the environment essentially the same as the impacts that would result from a use allowed by the shoreline master program in that shoreline environment.

e. Decision -
1) Once the City has approved a conditional use permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.
2) The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision is received as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one (21) days from the date of receipt as defined in RCW 90.58.140(5) and (6).
3) Appeals of a shoreline conditional use permit or shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the Department of Ecology's permit action letter, as set forth in RCW 90.58.180.

f. Effect of Decision – For shoreline conditional use permits, no final action or construction shall be taken until the termination of all review proceedings initiated within twenty-one (21) days from the date Department of Ecology transmits its decision on the shoreline conditional use permit.

g. Complete Compliance Required –
1) General – Except as specified in subsection 2) below of this section, the applicant must comply with all aspects, including conditions and restrictions, of an approval granted under this Chapter in order to do everything authorized by that approval.
2) Exception – Subsequent Modification – WAC 173-27-100 establishes the procedure and criteria under which the City may approve a revision to a permit issued under the Shoreline Management Act and this Chapter.

h. Time Limits – Construction and activities authorized by a shoreline conditional use permit are subject to the time limitations under WAC 173-27-090.

3. Variances

a. General - Applications for a shoreline variance permit shall follow the procedures for a Process IIA Permit review pursuant to Chapter 150 KZC, except as otherwise provided in this section. If the proposal that requires a shoreline variance is part of a proposal that requires additional approval through a Process IIB, the entire proposal will be decided upon using that other process.

b. Notice of Application and Comment Period –
1) In addition to the notice of application content established in Chapter 150 KZC, notice of applications for shoreline variance permits must also contain the information required under WAC 173-27-110.
2) The minimum notice of application comment period for shoreline variance permits shall be no fewer than thirty (30) days.

c. Notice of Hearing – The Planning Official shall distribute notice of the public hearing at least fifteen (15) calendar days before the public hearing.

d. Burden of Proof –
   1) WAC 173-27-140 establishes general review criteria that must be met.
   2) WAC 173-27-170 establishes criteria that must be met for a variance permit to be granted.
e. Decision -
   1) Approval by Department of Ecology. Once the City has approved a variance permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.
   2) The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision is received as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one (21) days from the date of receipt as defined in RCW 90.58.140(5) and (6).
   3) Appeals of a Shoreline Variance Permit shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the Department of Ecology's permit action letter, as set forth in RCW 90.58.180.
f. Effect of Decision – For shoreline variance permits, no final action or construction shall be taken until the termination of all review proceedings initiated within twenty-one (21) days from the date DOE transmits its decision on the shoreline variance permit.
g. Complete Compliance Required –
   1) General – Except as specified in subsection (2) of this section, the applicant must comply with all aspects, including conditions and restrictions, of an approval granted under this Chapter as authorized by that approval.
   2) Exception – Subsequent Modification – WAC 173-27-100 establishes the procedure and criteria under which the City may approve a revision to a permit issued under the Shoreline Management Act and the shoreline master program.
h. Time Limits – Construction and activities authorized by a shoreline variance permit are subject to the time limitations under WAC 173-27-090.

4. **Request for Relief from Standards**
   a. General - When shoreline stabilization measures intended to improve ecological functions result in shifting the OHWM landward of the pre-modification location, the City may propose to grant relief from additional or more restrictive standards and use regulations resulting from the shift in OHWM, such as but not limited to an increase in shoreline jurisdiction, shoreline setbacks, or lot coverage.
   b. Burden of Proof – Relief may be granted when:
      1) The proposed relief is the minimum necessary to relieve the hardship;
      2) The restoration project will result in a net environmental benefit; and
      3) The proposed relief is consistent with the objectives of the City's restoration plan and shoreline master program.
   c. Decision - Approval by Department of Ecology. Once the City has approved a permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval. The application review must occur during the Department of Ecology's normal review of a shoreline substantial development permit, conditional use permit, or variance. If a permit is not required for the restoration project, the City shall submit separate application and necessary supporting information to the Department of Ecology.

141.80 Enforcement Authority

WAC Chapter 173-27 contains enforcement regulations, including authority for the City to issue regulatory orders to enforce the Shoreline Management Act and the shoreline master program. In addition, the City shall have any and all other powers and authority granted to or devolving upon municipal corporations to enforce ordinances, resolutions, regulations, and other laws within its territorial limits.

141.90 Annexation

The City may adopt shoreline environment pre-designations for shorelines located outside of city limits but within the urban growth area. In the event of annexation of a shoreline not pre-designated in the shoreline master program, the City shall develop or amend shoreline policies and regulations to include the annexed area. The policies and regulations for annexed areas shall be consistent with RCW 90.58 and WAC 173-26 and shall be submitted to the Department of Ecology for approval.

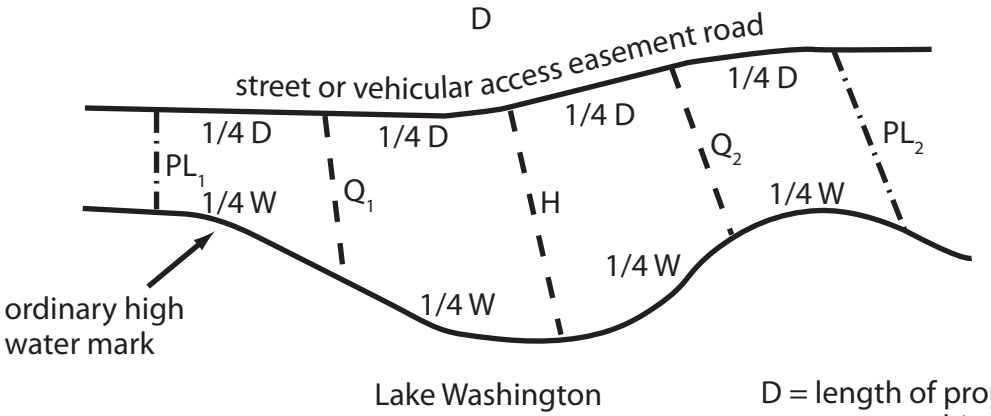
KZC

CHAPTER 180 – PLATES

Revised Plate 19:	**Calculating Average Parcel Depth**
New Plate 41:	**Measuring Shoreline Setback**
New Plate 42:	**Maximum Shoreline Walkway Corridor**
New Plate 43	**Options for Shoreline Stabilization Measures**
New Plate 44:	**Addition to Nonconforming Detached Dwelling Unit**

Plate 19
Calculating Average Parcel Depth

$$\text{Average Parcel Depth} = \frac{PL_1 + Q_1 + H + Q_2 + PL_2}{5}$$



D = length of property line at street or vehicular access easement

W = length of property frontage at ordinary high water mark

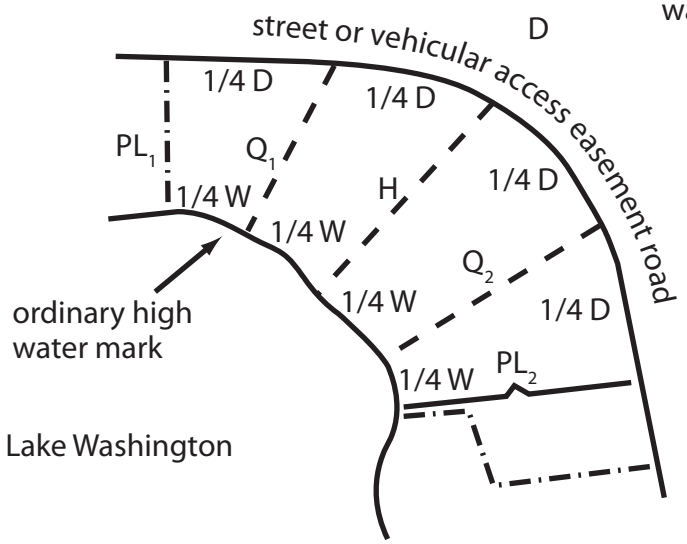


Plate 41
Measuring Shoreline Setback

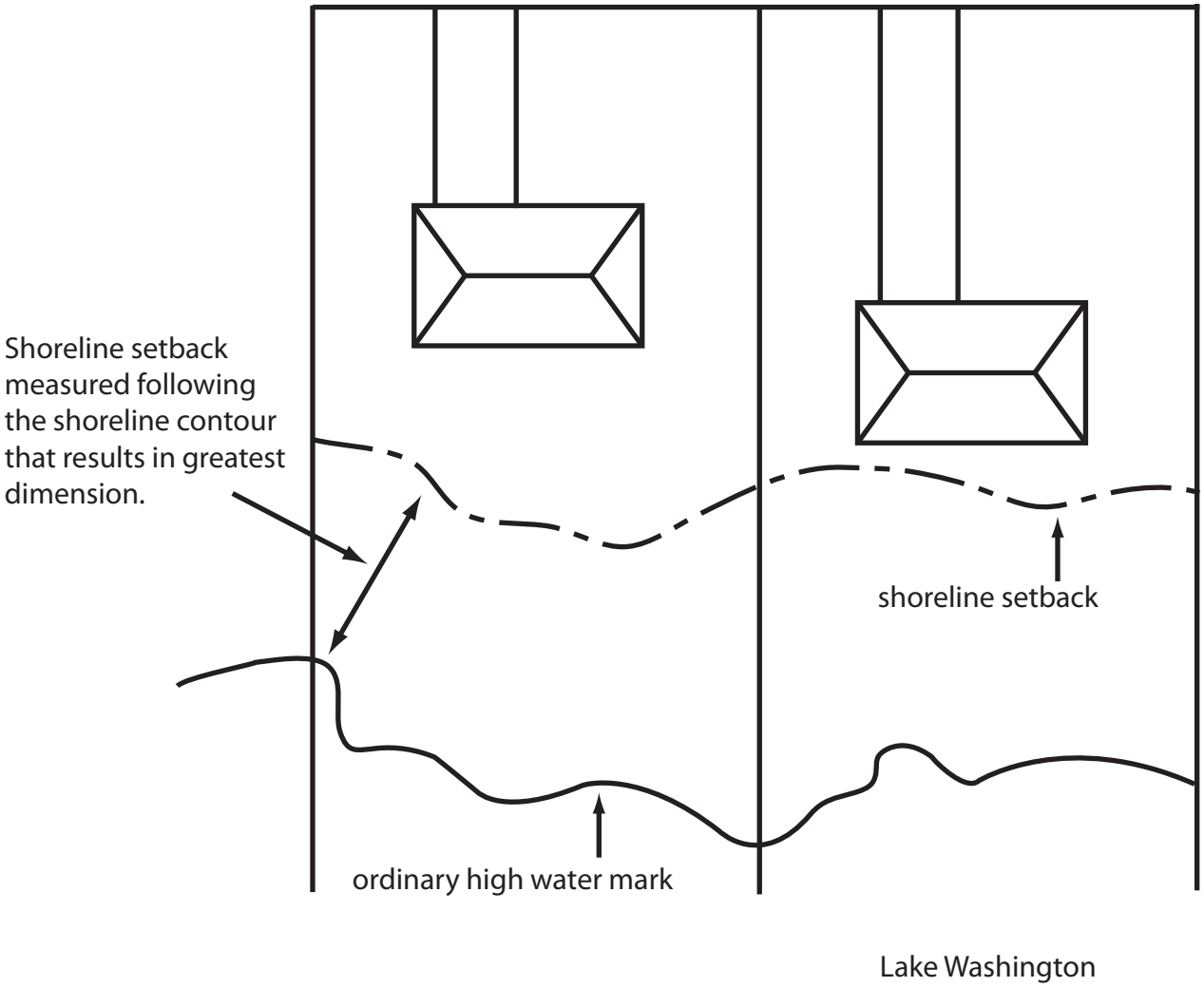


Plate 42
Maximum Shoreline Walkway Corridor

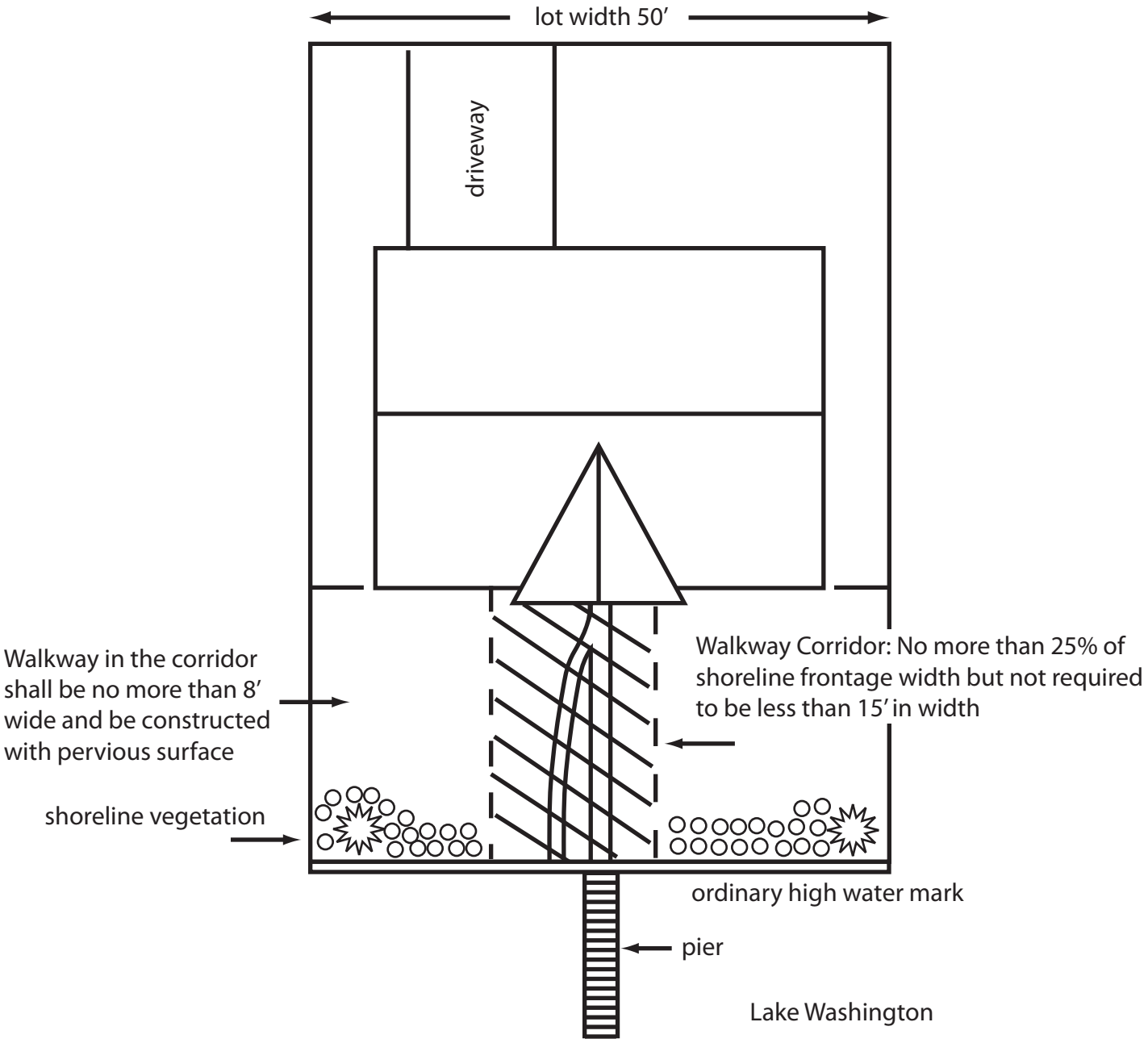
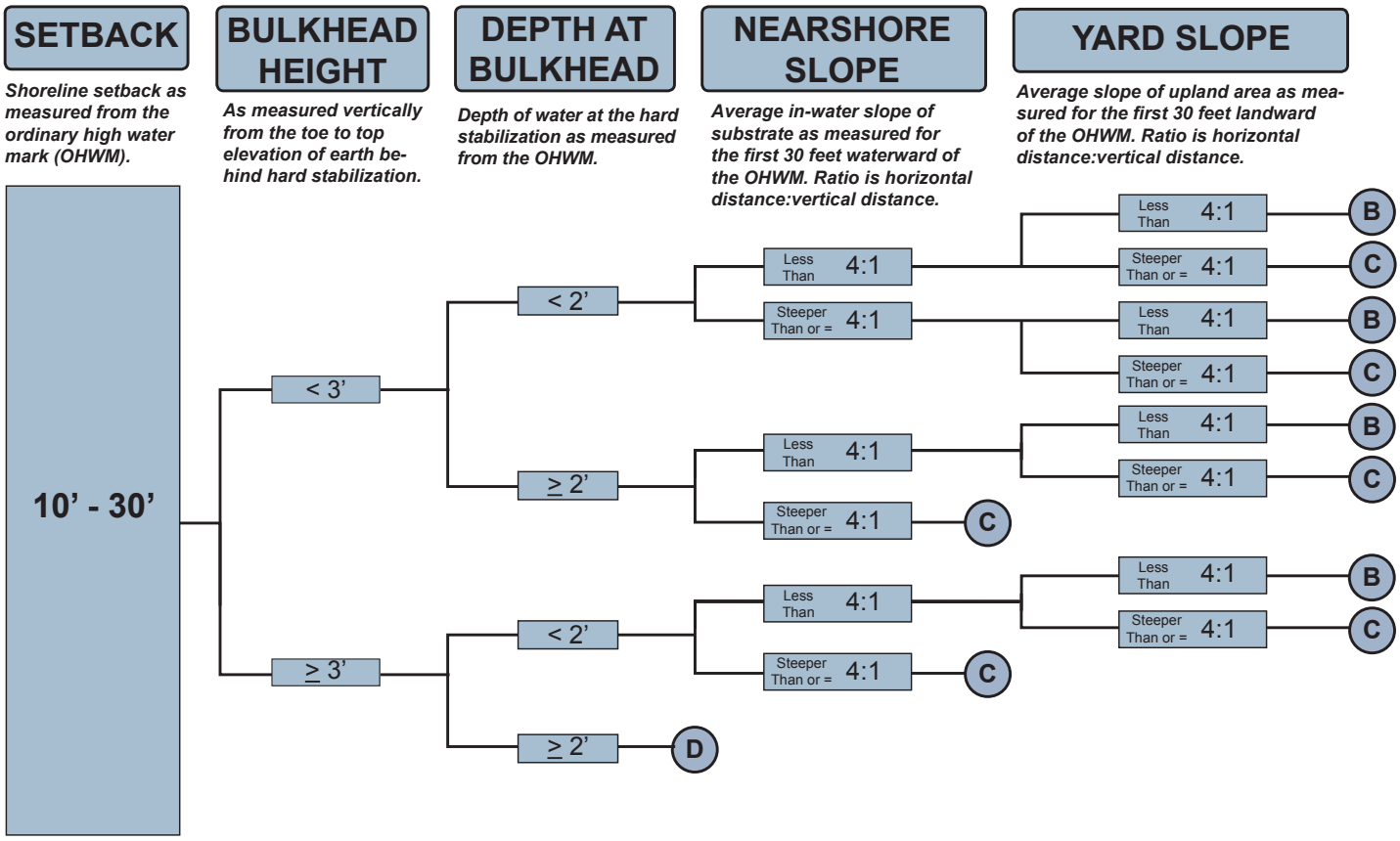


Plate 43A
Options for Shoreline Stabilization Measures
Building Setback 10' - 30'



Typical Options:

- (A) Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
- (B) Beach cove, pullback, bioengineering, enhancement, gradient improvement
- (C) Pullback, bioengineering, enhancement, gradient improvement
- (D) Bioengineering, enhancement, gradient improvement

Definitions: (In Order of Restoration Preference)

Full beach: hard stabilization removal and beach restoration

Beach cove: partial hard stabilization removal and pullback to create beach cove

Hard stabilization pullback: repositioning of hard stabilization landward of existing location to improve shoreline gradient and possibly form a beach

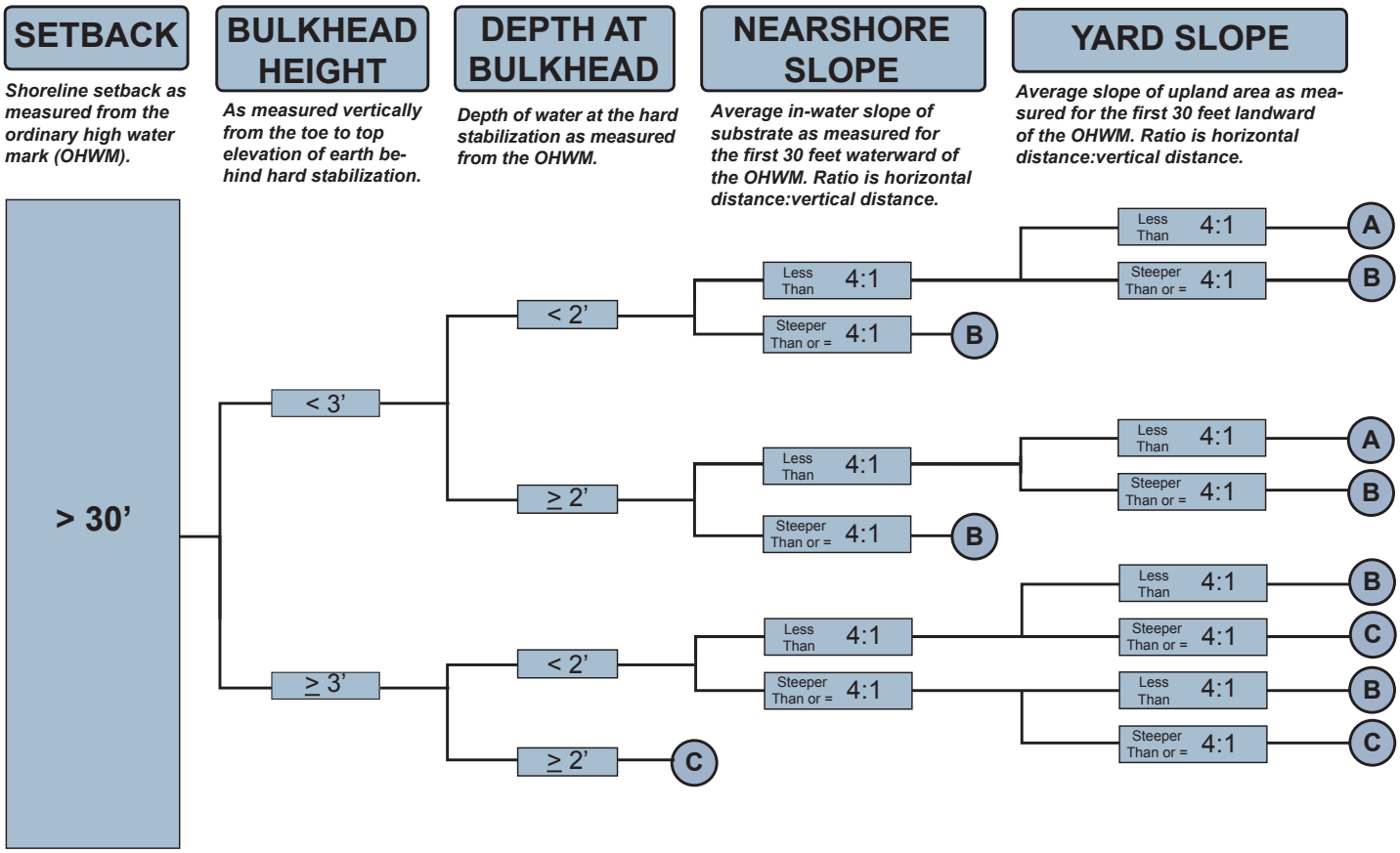
Slope bioengineering: shoreline stabilization using plant material and other biodegradable materials to hold upland soils in place

Hard stabilization enhancement: hard stabilization may stay in same general location, but modifications may include sloping back existing hard structure and/or modifying material type and layout to create potential beach cove areas

Nearshore gradient improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10' shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

Plate 43B
Options for Shoreline Stabilization Measures
Building Setback > 30'



Typical Options:

- (A) Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
- (B) Beach cove, pullback, bioengineering, enhancement, gradient improvement
- (C) Pullback, bioengineering, enhancement, gradient improvement
- (D) Bioengineering, enhancement, gradient improvement

Definitions: (In Order of Restoration Preference)

Full beach: hard stabilization removal and beach restoration

Beach cove: partial hard stabilization removal and pullback to create beach cove

Hard stabilization pullback: repositioning of hard stabilization landward of existing location to improve shoreline gradient and possibly form a beach

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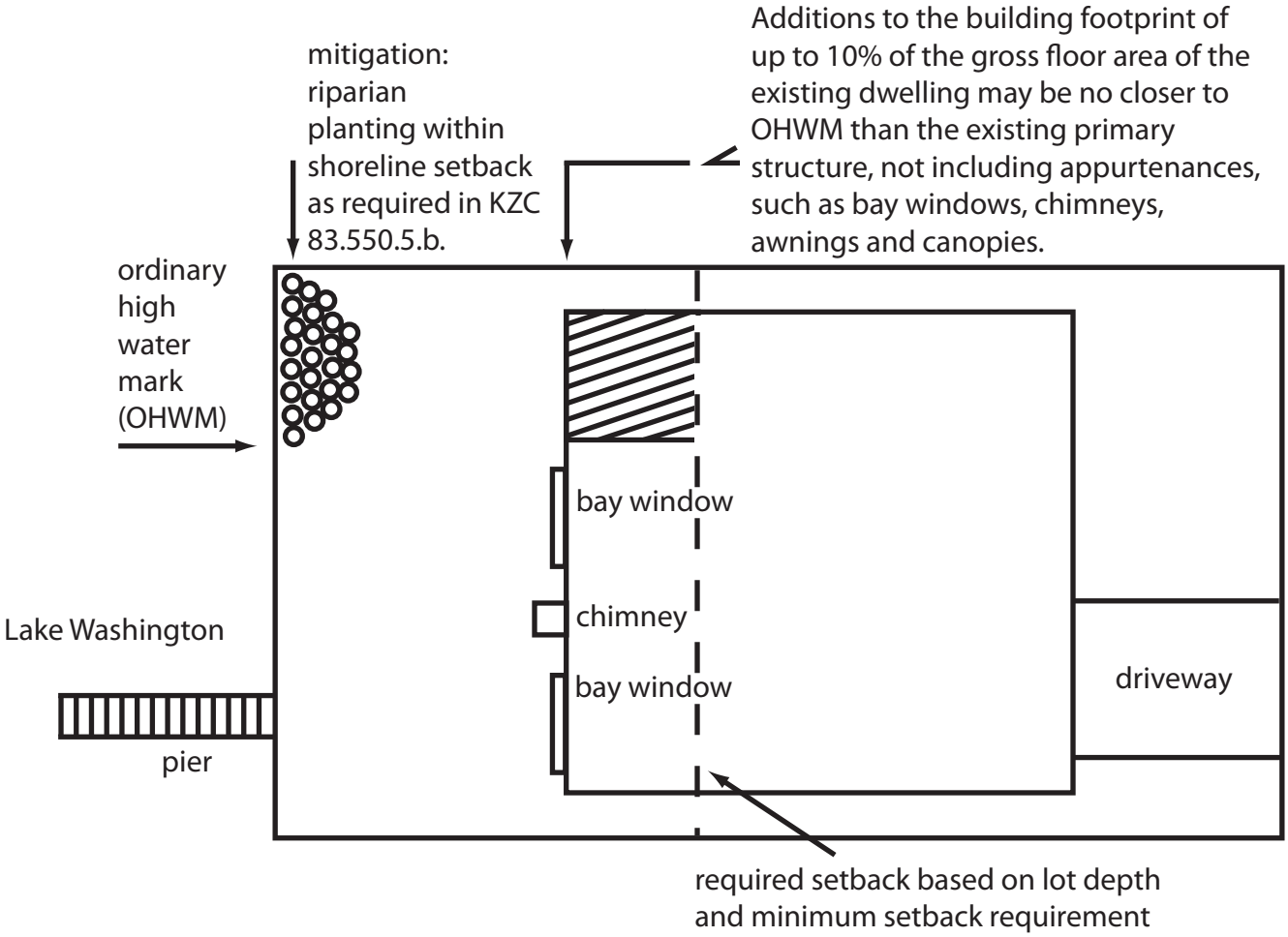
Nearshore gradient improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10' shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

Plate 44

Addition to Nonconforming Detached Dwelling Unit



City of Kirkland
Grant No. G0600236

DRAFT

Shoreline Restoration Plan Component of the Shoreline Master Program for the City of Kirkland

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June 2009

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SHORELINE MASTER PROGRAM UPDATE
SHORELINE RESTORATION PLAN

1. INTRODUCTION

Shorelines are a major feature in the City of Kirkland, providing both a valuable setting for land use and recreation and performing important ecological functions. Development along the shoreline is addressed through the City's Shoreline Master Program, the local goals and policies adopted under the guidance and provisions of the Shoreline Management Act (SMA) of 1971. Under the SMA, each city and county with "shorelines of the state" must adopt a Shoreline Master Program (SMP) that is based on state laws and rules but tailored to the specific geographic, economic and environmental needs of the community. The goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." To implement this goal, the SMA and its implementing guidelines, provide guidance and requirements to local governments addressing how shorelines should be developed, protected, and restored. The SMA has three broad policies:

1) encourage water-dependent uses,
2) protect shoreline natural resources, and
3) promote public access.

The City's SMP was developed in 1974 to help regulate shoreline development in an ecologically sensitive manner with special attention given to public access. These policy objectives are reflected in today's protection of significant natural areas within the City's shoreline area as open space, as well as the extensive shoreline trail system and network of shoreline parks which have been established over time.

Over the time that has spanned since the original adoption of the City's SMP, there have been substantial changes to the lakefront environment. Industrial uses, such as the shipyard previously located at Carillon Point, have left Kirkland's environment. The City has added publicly owned properties to its waterfront park system, most significantly the Yarrow Bay Wetlands, Juanita Bay Park, Juanita Beach Park, and David E. Brink Park. Water quality within Lake Washington, once severely impacted by nutrient loading from sewage, has remarkably improved since regional wastewater treatment plants were constructed and the final plant discharging from the lake was closed.

The lake environment has also been impacted by new challenges. The shoreline character has continued to change over time, as additional docks and bulkheads have been built, contributing to a loss of woody debris, riparian vegetation, and other complex habitat features along the shoreline. Impervious surfaces have increased both within the shoreline area and in adjacent watersheds, and this, together with the consequent reduction in soil infiltration, have been correlated with increased velocity, volume, and frequency of surface water flows into the lake. These and other changes have impacted the habitat for salmonids. In 1999, chinook salmon and bull trout were listed as Threatened species under the Federal Endangered Species Act. The region's response to this listing has resulted in new scientific data and research that has improved our understanding of shoreline ecological functions and their value in terms of fish and wildlife, water quality and human health.

Kirkland's SMP is being updated to comply with the SMA requirements (RCW 90.58), and new SMP Guidelines (Washington Administrative Code [WAC] 173-26, Part III), which went into effect in 2003. One of the key objectives that the SMP must address is "no net loss of ecological shoreline functions necessary to sustain shoreline natural resources" (Ecology 2004). The no net loss goal, if carried out successfully, would maintain the existing ecological condition of shorelines within the City of Kirkland. However, SMP updates seek not only to maintain conditions, but to improve them:

> "…[shoreline master programs] include planning elements that when implemented, serve to improve the overall condition of habitat and resources within the shoreline area of each city and county (WAC 173-26-201(c))."

The SMP Guidelines require that local governments develop SMP goals that promote restoration of impaired shoreline ecological functions and a "real and meaningful" strategy to implement restoration objectives. Local governments are also encouraged to contribute to restoration by planning for and supporting restoration of shoreline functions through the SMP and other regulatory and non-regulatory programs.

Restoration planning is an important component of the environmental protection policy of the Act. The City of Kirkland's SMP includes shoreline protection and restoration elements achieved through planning, regulation, preservation of high quality shoreline areas, and the provisions established in this Restoration Plan, which provides the framework for the community's efforts to restore degraded portions of the City's shorelines.

The City's Shoreline Inventory and Characterization (The Watershed Company, December 2006) describes how natural shoreline processes have been modified and identifies the restoration potential and opportunities within each shoreline reach. This Shoreline Restoration Plan builds on that analysis to further identify overall goals and priorities for restoration, as well as projects and programs that are designed to contribute to local restoration goals, and mechanisms or strategies to ensure that restoration projects and programs will be implemented.

This document represents the Restoration Plan that, done in conjunction with mitigation resulting from implementation of the new regulations and policies, will result in improvements to the shoreline ecology along the Kirkland shoreline. This plan represents a long-term vision for restoration that will be implemented over time, resulting in incremental improvement over the existing conditions.

2. PURPOSE OF RESTORATION PLAN

A jurisdiction's Shoreline Master Program applies to uses and activities in the jurisdiction's shoreline zone. To assure no net loss of shoreline ecological functions, master programs are required to include provisions that require proposed individual uses and developments to analyze environmental impacts of the proposal and include measures to mitigate environmental impacts not otherwise avoided or mitigated by compliance with the master program and other applicable regulations. Despite these efforts, it is recognized that the impacts from all reasonably anticipated activities and uses cannot be fully mitigated under the SMP regulations. For instance, some allowed uses and developments, such as a new pier, cannot always be mitigated fully, resulting in incremental and unavoidable degradation of the baseline condition.

How then can the shoreline be improved over time in areas where the baseline condition is severely, or even marginally, degraded?

Section 173-26-201(2)(f) of the State Guidelines says:

> "master programs shall include goals and policies that provide for restoration of such impaired ecological functions. These master program provisions shall identify existing policies and programs that contribute to planned restoration goals and identify any additional policies and programs that local government will implement to achieve its goals. These master program elements regarding restoration should make real and meaningful use of established or funded nonregulatory policies and programs that contribute to restoration of ecological functions, and should appropriately consider the direct or indirect effects of other regulatory or nonregulatory programs under other local, state, and federal laws, as well as any restoration effects that may flow indirectly from shoreline development regulations and mitigation standards."

However, degraded shorelines are not just a result of pre-Shoreline Master Program activities or allowed uses or activities that cannot be fully mitigated, but also of unregulated activities and exempt development. The new Guidelines also require that "[l]ocal master programs shall include regulations ensuring that exempt development in the aggregate will not cause a net loss of ecological functions of the shoreline." While some actions within shoreline jurisdiction are exempt from a permit, the Shoreline Master Program should clearly state that those uses and actions are not exempt from compliance with the Shoreline Management Act or the local Shoreline Master Program. Because the shoreline environment is also affected by uses and activities taking place outside of a specific local master program's jurisdiction (e.g., outside of city limits and outside of the shoreline zone within the city), review of actions, programs and policies that affect the greater area outside of the shoreline jurisdiction is essential for understanding how the City overall fits into the larger watershed context. The latter is critical when establishing realistic goals and objectives for improving the dynamic and highly inter-connected environments.

As directed by the State Guidelines, the following Restoration Plan provides a summary of baseline shoreline conditions, lists restoration goals and objectives, discusses existing or potential programs and projects that positively impact the shoreline environment, and provide a ranking analysis of designated projects based on both ecological benefit and overall feasibility. Finally, funding options and a monitoring plan of these various comprehensive restoration projects and programs are provided. In total, implementation of the Shoreline Master Program (with mitigation of project-related impacts) in combination with this Restoration Plan (for restoration of lost ecological functions that occurred either prior to a specific project or as part of a project that cannot fully mitigate its own impacts) should result in a net improvement in the City of Kirkland's shoreline environment in the long term.

In addition to meeting the requirements of the Guidelines, this Restoration Plan is also intended to support the City's or other non-governmental organizations' applications for grant funding, and to provide the interested public with contact information for the various entities working within the City to enhance the environment.

3. SHORELINE INVENTORY SUMMARY

3.1 Introduction

The City conducted a comprehensive inventory of its Lake Washington shoreline in 2006. The purpose of the shoreline inventory was to facilitate the City of Kirkland's compliance with the SMA and updated SMP Guidelines. The inventory describes existing physical and biological conditions in the Lake Washington shoreline zone within City limits, including recommendations for restoration of ecological functions where they are degraded. The *Final Shoreline Analysis Report* is summarized below.

3.2 Shoreline Boundary

As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the state plus their associated "shorelands." Shorelands are defined as:

> "those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter…Any county or city may determine that portion of a one-hundred-year-floodplain[1] to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom (RCW 90.58.030)"

Shorelands in the City of Kirkland include only areas within 200 feet of the ordinary high water mark, as established by the U.S. Army Corps of Engineers for Lake Washington, and any associated wetlands within shoreline jurisdiction. Lake Washington does not have a floodway or floodplain. As part of the shoreline jurisdiction assessment, Forbes Creek, Juanita Creek, and Yarrow Creek were reviewed. All features were found to have mean annual flows of less than 20 cubic feet per second and thus are not subject to regulation under the Shoreline Management Act. Two areas of known associated wetlands were identified, one contained within Juanita Bay and extending up the lower Forbes Creek riparian corridor, and the second within the lower Yarrow Bay wetlands. The shoreline jurisdiction extends up to the wetland boundary in these two areas and up to 200 feet from the Lake Washington ordinary high water mark in all other areas.

3.3 Shoreline Inventory

The shoreline inventory is divided into five main sections: Introduction, Current Regulatory Framework Summary, Shoreline Inventory, Conditions by Inventory Segment, and Analysis of Ecological Functions and Ecosystem-wide Processes. Four segments were established (A through D), and have been delineated based on existing land use and current location within either the City or the Potential Annexation Area (PAA). For the purposes of this Restoration

[1] According to RCW 173-220-030, 100-year floodplain is "that land area susceptible to being inundated by stream derived waters with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the act;"

Plan, the City has not included the PAA (Segment A), which has been separately addressed by King County.

3.3.1 Land Use and Physical Conditions

1. Existing Land Use: The City of Kirkland shoreline area is fully developed, with existing land uses largely consistent with planned land uses as illustrated in the Comprehensive Plan. Areas not occupied by residential or commercial/office developments are either formal and informal City parks and open spaces, or large wetland areas. The City's shoreline contains a total of 336 lots. Of these, only 32 undeveloped lots remain within shoreline jurisdiction. The majority of these undeveloped lots are located within Segment B (24); two are located in Segment C and six in Segment D. In Segment B, the relatively large number of undeveloped lots is due to a number of lots along the southwest corner of the Yarrow Bay wetlands. These figures indicate that only 10 percent of all properties within the shoreline area are vacant. This also illustrates that if future development occurs, it will likely be in the form of redevelopment consistent with adopted plans and regulations. Except for a few properties held in private ownership, the high-functioning portions of the shoreline have been appropriately designated and preserved as park/open space. The privately held properties have been protected through critical areas provisions, including buffers. Land uses along the shoreline are only expected to change minimally, if at all, although re-builds, substantial remodels, and some redevelopment of one type of commercial into another type of commercial, multi-family or mixed-use are anticipated.

2. Parks and Open Space/Public Access: Developing public shoreline access is a priority of the City, as evidenced by the goals and policies included in the Public Access element of the City's SMP, prepared in the early 1970s and last amended in 1989. Except for single-family residential areas or environmentally sensitive areas, the prior SMP required that all development provide public access to the water's edge and along the shoreline as much as possible. As a result of this requirement, the City has made significant progress towards establishing continuous pedestrian access along the water's edge in Segment D as many of the multi-family and commercial properties have redeveloped. Overall, the City has approximately 6.8 miles of trails within shoreline jurisdiction. The trails and parks combined provide 2.5 miles of public waterfront access. The SMP continues these provisions in order to allow for any gaps in this system to be infilled as redevelopment occurs.

   The City contains twelve designated parks or street-ends, some with extended areas of open space, such as the Forbes Creek riparian corridor. Juanita Beach Park is one of the City's largest multi-use parks located on the Lake Washington waterfront. The City commissioned the *Juanita Beach Park Draft Master Plan Report* (J.A. Brennan Associates, PLLC 2005) after assuming ownership from King County in 2002. The *Master Plan Report* includes goals for a number of areas, including environmental stewardship and recreation. The plan addresses potential day boat moorage, swimming beach improvements (to address water and sediment quality and excessive sediment deposition), a new non-motorized boat rental facility, hand-carried boat launch, and restoration of Juanita Creek, its buffer, and wetlands.

3. Shoreline Modifications: A combination of recent aerial photographs and a field inventory conducted by boat in March 2006 were used to collect information about shoreline

modifications in the City. The Kirkland shoreline is heavily modified with approximately 60 percent of the overall shoreline armored at or near the ordinary high water mark and an overall pier density of approximately 26 piers per mile. However, these numbers include the undeveloped shorelines in Segment B. Considering just Segments C and D, these numbers would rise to 86 percent armoring and 39 piers per mile. Comparatively, an evaluation of the entire Lake Washington shoreline found 71 percent of the shoreline armored and with approximately 36 piers per mile (Toft 2001). Thus, for Kirkland overall, both pier density and shoreline armoring are slightly lower than the lake-wide figures. However, when evaluating the developed shorelines of Segments C and D, these figures exceed the lake-wide average. Many of the piers have one or more boatlifts, and approximately one-quarter of the boatlifts have canopies.

As expected, the urban segment (Segment D) has the most altered shoreline, with 90 percent armored with either vertical or boulder bulkheads, and Juanita and Yarrow Bays (Segment B) have the least altered shorelines, with only 7 percent armoring. The residential segments (Segments A and C) are 76 and 83 percent armored, respectively. It is not uncommon around Lake Washington for some historic fills to be associated with the original bulkhead construction, usually to create a more level or larger yard. Most of these shoreline fills occurred at the time that the lake elevation was lowered during construction of the Hiram Chittenden Locks.

Also as expected, the highest amount of overwater cover per lineal foot of shoreline can be found in Segment D, which is nearly triple the amount of cover found in the residential segment (C). This can be attributed to the presence of several marinas, large park-associated piers, multiple large piers that serve condominiums, and a couple of over-water condominiums. However, the total number of individual pier/dock structures in the urban segment is about half of that in the residential segments, due to the abundance of single-family residential pier structures. Segment B had the lowest area of overwater cover and the lowest number of overwater structures.

The full shoreline inventory includes a more in-depth of discussion of the above topics, as well as information about transportation, stormwater and wastewater utilities, impervious surfaces, and historical/archaeological sites, among others.

3.3.2 Biological Resources and Critical Areas

With the exception of the Yarrow Bay wetlands and the Forbes Creek/Juanita Bay wetlands, the shoreline zone itself within the City of Kirkland is generally deficient in high-quality biological resources and critical areas, primarily because of the extensive residential and commercial development and their associated shoreline modifications. There are numerous City parks, but these are mostly well manicured and include extensive shoreline armoring and large pier and dock structures. There are few forested areas along the lakeshore, as most forested areas are surrounded by development and are not generally contiguous with Lake Washington. Landslide hazard areas are located within the shoreline zone along Segment C, between the south end of Rose Point Lane and Heritage Park. Wetlands mapped within shoreline jurisdiction include both the Yarrow Bay wetlands and the Forbes Creek/Juanita Bay wetlands. Additional unmapped areas of wetland fringe may also exist. Important fish-bearing streams in the shoreline zone include Juanita Creek, Forbes Creek, and Yarrow Creek. These streams are used by salmon, but have been impacted extensively by basin development, resulting in increased peak flows,

unstable and eroding banks, loss of riparian vegetation, and fish and debris passage barriers. These changes have altered their contributions of sediment, organic debris, and invertebrates into Lake Washington. Each of these systems continues to be targeted for restoration by one or more local or regional restoration groups. There are also other mapped smaller streams in the shoreline zone, including Carillon Creek and Cochran Springs.

WDFW mapping of Priority Habitat and Species (WDFW 2006) also indicates the presence of other Fish and Wildlife Habitat Conservation Areas and Priority Habitats within and adjacent to the shoreline zone. These include pileated woodpecker breeding areas, historic and current bald eagle nest locations, great blue heron nest colony, wetlands, urban natural open space, and riparian zones.

4. RESTORATION GOALS AND OBJECTIVES

4.1 Introduction

The City of Kirkland is located within the Lake Washington/Cedar/Sammamish Watershed. The Lake Washington/Cedar/Sammamish Watershed is home to three populations of Chinook salmon: Cedar River, North Lake Washington, and Issaquah. Studies indicate that Chinook salmon in this watershed are in trouble; they are far less abundant now than they were even in recent decades, and all three populations are at high risk of extinction. In March 1999, the federal government listed Puget Sound Chinook salmon as threatened under the Endangered Species Act (ESA).

The salmon's decline is an indicator of the overall health of the watershed. Concerned about the need to protect and restore habitat for Chinook salmon for future generations, 27 local governments in the watershed, including Kirkland, signed an interlocal agreement in 2001 to jointly fund the development of a conservation plan to protect and restore salmon habitat. The Final Chinook Salmon Conservation Plan is the result of this collaborative effort and is the conservation strategies and implementation efforts are referenced herein as a result of the City's commitment to this conservation strategy.

According to the *Lake Washington/Cedar/Sammamish Watershed (WRIA) Near-Term Action Agenda For Salmon Habitat Conservation*, Lake Washington suffers from "Altered trophic interactions (predation, competition), degradation of riparian shoreline conditions, altered hydrology, invasive exotic plants, poor water quality (phosphorus, alkalinity, pH), [and] poor sediment quality" (WRIA 8 Steering Committee 2002). Kirkland's *Final Shoreline Analysis Report* (The Watershed Company 2006) provides supporting information that validates these claims specifically in the City's shoreline jurisdiction. The *WRIA 8 Action Agenda* established four "ecosystem objectives," which are intended to guide development and prioritization of restoration actions and strategies. The objectives are as follows:

- "Maintain, restore, or enhance watershed processes that create habitat characteristics favorable to salmon.
- Maintain or enhance habitat required by salmon during all life stages and maintain functional corridors linking these habitats.

- Maintain a well-dispersed network of high-quality refuge habitats to serve as centers of population expansion.

- Maintain connectivity between high-quality habitats to allow for population expansion into recovered habitat as degraded systems recover."

The WRIA 8 restoration objectives, in combination with the results of the City's *Final Shoreline Analysis Report*, the direction of Ecology's *Shoreline Master Program Guidelines*, and the City's commitment (Appendix A) to support the *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan*, are the foundation for the following goals and objectives of the City of Kirkland's restoration strategy. Although the *WRIA 8 Action Agenda* and the *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* are salmon-centered, pursuit of ecosystem-wide processes and ecological functions performance that favors salmon generally captures those processes and functions that benefit all fish and wildlife. Therefore, the results of these efforts are appropriate tools for Kirkland, and are consistent with the intent of the Shoreline Management Act

4.2 Goals and Objectives

The Goals and Objectives of the Restoration Plan are as follows:

Goal 1 – Maintain, restore or enhance watershed processes, including sediment, water, wood, light and nutrient delivery, movement and loss.

Goal 2 – Maintain or enhance fish and wildlife habitat during all life stages and maintain functional corridors linking these habitats.

Goal 3 – Contribute to conservation and recovery of chinook salmon and other anadromous fish, focusing on preserving, protecting and restoring habitat with the intent to recover listed species, including sustainable, genetically diverse, harvestable populations of naturally spawning chinook salmon.

4.2.1 System-wide Restoration Objectives

- Continue to work collaboratively with other jurisdictions and stakeholders in WRIA 8 to implement the Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan.

- Use the scientific foundation and the conservation strategy as the basis for local actions recommended in the Chinook Salmon Conservation Plan and as one source of best available science for future projects, ordinances, and other appropriate local government activities.

- Use the comprehensive list of actions, and other actions consistent with the Chinook Salmon Conservation Plan, as a source of potential site-specific projects and land use and public outreach recommendations.

- Use the start-list to guide priorities for regional funding in the first ten years of Chinook Salmon Conservation Plan implementation, and implementing start-list actions through local capital improvement projects, ordinances, and other activities.

- Continue to work to implement the goals and recommended actions for flood reduction, water quality improvement and aquatic habitat restoration contained within the City of Kirkland Surface Water Master Plan.

- Seek funding for various restoration actions and programs from local sources and by working with other WRIA 8 jurisdictions and stakeholders to seek federal, state, grant and other funding opportunities.

- Continue the City's efforts to develop and implement a public education plan to inform private property owners in the shoreline zone and in the remainder of the City about the effects of land management practices and other unregulated activities (such as vegetation removal, pesticide/herbicide use, car washing) on fish and wildlife habitats.

4.2.2 Lake Washington Restoration Objectives

- Improve Lake Washington and Lake Washington tributary stream health by managing the quality and quantity of stormwater runoff, consistent at a minimum with the latest Washington Department of Ecology *Stormwater Management Manual for Western Washington*. Make any additional efforts to meet and maintain state and county water quality standards in Lake Washington tributary streams.

- Improve Lake Washington tributary stream health by eliminating man-made barriers to anadromous fish passage, preventing the creation of new barriers, and providing for transport of water, sediment and organic matter at all stream crossings.

- Improve Lake Washington and Lake Washington tributary stream health by identifying hardened and eroding lakeshores and streambanks, and correcting to the extent feasible with bioengineered stabilization solutions.

- Improve Lake Washington and Lake Washington tributary stream health by increasing large woody debris recruitment potential through plantings of trees in the riparian corridors, particularly conifers. Where feasible, install large woody debris to meet short-term needs.

- Increase quality, width and diversity of native vegetation in protected corridors adjacent to stream and lake habitats to provide safe migration pathways for fish and wildlife, food, nest sites, shade, perches, and organic debris. Strive to control non-indigenous plants or weeds that are proven harmful to native vegetation or habitats.

- Reconnect and enhance small creek mouths as juvenile rearing areas.

- Habitat in small Lake Washington tributaries, such as those in the City of Kirkland, should be restored for coho so that production of cutthroat trout, which prey on juvenile chinook salmon in Lake Washington, is reduced.

- Decrease the amount and impact of overwater and in-water structures through minimization of structure size and use of innovative materials such as grated decking.

- Participate in lake-wide efforts to reduce populations of non-native aquatic vegetation.

4.2.3 Restoration Objectives for Properties owned by City of Kirkland

The following projects (Table 1) are developed from a list of opportunity areas that are described in more detail as part of Section 6.2 of this report. These programs are currently or have previously been listed as funded or unfunded projects in the Parks Capital Improvement Program.

- By 2016, initiate and, where possible, complete the following restoration activities on properties managed by the City of Kirkland:

Table 1. List of potential shoreline restoration projects on City property

Site Number	Park	Restoration Type	Description
1	Juanita Beach Park	Redesign breakwater	Remove or redesign the breakwater in order to improve migratory conditions for juvenile salmonids and water circulation.
2	Juanita Beach Park	In-stream habitat improvement	Potential in-stream habitat improvements to Juanita Creek, including large woody debris installation and improvements to native vegetative cover.
3	Forbes Creek - Juanita Bay Park	Remove invasive vegetation	Invasive vegetation, primarily reed canarygrass, purple and garden loosestrife, and Himalayan blackberry in the terrestrial zones.
9	Waverly Beach Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
10	Waverly Beach Park	Enhance shoreline vegetation	Supplementation of nearshore native vegetation to improve habitat conditions for juvenile salmonids.
11	Waverly Beach Park	Reduce stormwater runoff	The impact of existing impervious surfaces (paved parking areas) could be reduced through the use of pervious materials, relocation, or minimization.
17	David Brink Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
Various	Various	Reduce overwater cover	Reducing overwater cover through the installation of deck grating on the existing piers and removing pier skirting

Site Number	Park	Restoration Type	Description
			as feasible.
Various	Various	Enhance shoreline vegetation	Improving nearshore native vegetation.

As these projects are completed, the City will look for opportunities to promote the value of the improvements in benefitting shoreline conditions, as well as demonstrate potential techniques for reducing bank hardening, restoring overhanging riparian vegetation, and for incorporating deck grating into pier surfaces.

5. LIST OF EXISTING AND ONGOING PROJECTS AND PROGRAMS

The following series of existing projects and programs are generally organized from the larger watershed scale to the City-scale, including City projects and programs and finally non-profit organizations that are also active in the Kirkland area.

5.1 Water Resource Inventory Area (WRIA) 8 Participation

The City was one of 27 members of the WRIA 8 Forum, which participated in financing and developing the *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan*. The *Chinook Salmon Conservation Plan* includes the City of Kirkland's implementation commitment in the form of City Council Resolution R-4510, approved 21 June 2005 (Appendix A).

The City's preparation of the *Shoreline Analysis Report Including Shoreline Inventory and Characterization of the City of Kirkland's Lake Washington Shoreline* (The Watershed Company 2006) and this *Shoreline Restoration Plan* are important steps toward furthering the goals and objectives of the WRIA 8 *Chinook Salmon Conservation Plan*. In its Resolution, the City committed to, among other things, "using the scientific foundation and the conservation strategy as the basis for local actions recommended in the plan and as one source of best available science for future projects, ordinances, and other appropriate local government activities." The City's Resolution also states that the City will use the "comprehensive list of actions, and other actions consistent with the *Chinook Salmon Conservation Plan*, as a source of potential site specific projects and land use and public outreach recommendations." The City's Shoreline Master Program update products rely heavily on the science included in the WRIA 8 products, and incorporate recommended projects and actions from the WRIA 8 products (Table 2).

Table 2. WRIA 8 Action Start-List for Lake Washington and Status of Implementation in Kirkland

Action Item	Kirkland Implementation
Reduce predation to outmigrating juvenile Chinook by: reducing bank hardening, restoring overhanging riparian vegetation, replacing bulkhead and rip-rap with sandy beaches with gentle slopes, and use of mesh dock surfaces and/or community docks.	
• Encourage salmon friendly shoreline design during new construction or redevelopment by offering incentives and regulatory flexibility to improve bulkhead and dock design and revegetate shorelines.	The SMP includes incentives for homeowners to improve nearshore ecological functions.
• Increase enforcement and address nonconforming structures over long run by requiring that major redevelopment projects meet current standards.	Code enforcement is responsible for enforcing regulations which address public health and safety issues, including regulations related to rubbish, garbage, specific nuisances, removal of vegetation, zoning, housing, dangerous buildings, and inoperable and unlicensed vehicles on private property. Enforcement actions are taken both proactively and in response to requests for action received from citizens.
• Discourage construction of new bulkheads; offer incentives (e.g., provide expertise, expedite permitting) for voluntary removal of bulkheads, beach improvement, riparian revegetation.	The SMP includes limitations on construction of new bulkheads and promotes voluntary improvements to nearshore ecological functions.
• Support joint effort by NOAA Fisheries and other agencies to develop dock/pier specifications to streamline federal/state/local permitting; encourage similar effort for bulkhead specifications.	The SMP includes dimensional and material standards which are intended to be in-line with state and federal permitting guidelines.
• Promote value of light-permeable docks, smaller piling sizes, and community docks to both salmon and landowners through direct mailings to lakeshore landowners or registered boat owners sent with property tax notice or boat registration tab renewal.	Kirkland has implemented this Action Item through development of its updated Shoreline Master Program, both in public outreach conducted during the update process and in the pier regulations.
• Offer financial incentives for community docks in terms of reduced permit fees, loan fees/percentage rates, taxes, and permitting time, in addition to construction cost savings.	Currently, incentives are not a tool used by the City to encourage community docks.
• Develop workshop series specifically for lakeshore property owners on lakeside living: natural yard care, alternatives to vertical wall bulkheads, fish friendly dock design, best management practices for aquatic weed control, porous paving, and environmentally friendly methods of maintaining boats, docks, and decks.	King County has led this effort Kirkland has also implemented training as part of the shoreline tour conducted as part of the SMP update process.
Protect and restore water quality in tributaries and along shoreline. Restore coho runs in smaller tributaries as control mechanism to reduce the cutthroat population. Reconnect and enhance small creek mouths as juvenile rearing areas.	

Action Item	Kirkland Implementation
• Address water quality and high flow impacts from creeks and shoreline development through NPDES Phase 1 and Phase 2 permit updates, consistent with Washington Department of Ecology's 2001 Stormwater Management Manual, including low impact development techniques, on-site stormwater detention for new and redeveloped projects, and control of point sources that discharge directly into the lakes.	The City implements Ecology's 2005 *Stormwater Management Manual for Western Washington* through its NPDES Phase II permit. The NPDES Phase II permit is required to cover the City's stormwater discharges into regulated lakes and streams. Under the conditions of the permit, the City must protect and improve water quality through public education and outreach, detection and elimination of illicit non-stormwater discharges (e.g., spills, illegal dumping, wastewater), management and regulation of construction site runoff, management and regulation of runoff from new development and redevelopment, and pollution prevention and maintenance for municipal operations.
• Encourage low impact development through regulations, incentives, education/training, and demonstration projects.	The Comprehensive Plan and the SMP contain provisions which promote LID. Implementation of the 2005 *Stormwater Management Manual for Western Washington* also places greater emphasis on LID strategies. The City has incorporating LID techniques in a number of demonstration projects and has completed education/training for both homeowners and developers. The City's Planning Department coordinates the implementation of the *Natural Resource Management Plan,* which recognizes the complexity of the interaction of its water, land and air systems and identifies action items intended protect Kirkland's environmentally sensitive areas.
• Protect and restore water quality and other ecological functions in tributaries to reduce effects of urbanization and reduce conditions which encourage cutthroat. Protect and restore forest cover, riparian buffers, wetlands, and creek mouths by revising and enforcing critical areas ordinances and Shoreline Master Programs, incentives, and flexible development tools.	The City updated the Critical Areas Ordinance in 2003, and revised it further as part of the SMP update process for application in shoreline jurisdiction. Management of the City's critical areas using these regulations should help insure that ecological functions and values are not degraded, and impacts to critical areas are mitigated.

Action Item	Kirkland Implementation
	The City will also update its Critical Areas Ordinance, as needed. The next current update is scheduled to be completed by December, 2011.
• Promote through design competitions and media coverage the use of "rain gardens" and other low impact development practices that mimic natural hydrology.	The City's *Currently Kirkland* cable program airs a show of local residents installing a rain garden at the Forbes House located at Juanita Beach Park. The City offers educational seminars and events on LID practices as part of its Green Building Program and Developer's Forum series. The City has also prepared a brochure highlighting different LID techniques as well as a map of different installations that are available for viewing.

5.2 Comprehensive Plan Policies

In 1995 and again in 2004, the City completed major updates of the Kirkland Comprehensive Plan pursuant to Growth Management Act requirements. Additional amendments have been made to the Comprehensive Plan since 2004, most recently in 2008 which included amendments to the *Natural Environment Element*. The updated Comprehensive Plan contains a number of general and specific goals and policies that direct the City to permit and condition development in such a way that the natural environment is preserved and enhanced. The specific goals in the *Natural Environment Element* include:

Goal NE-1: Protect natural systems and features from the potentially negative impacts of human activities, including, but not limited to, land development.

Goal NE-2: Manage the natural and built environments to achieve no net loss of the functions and values of each drainage basin; and, where possible, to enhance and restore functions, values, and features. Retain lakes, ponds, wetlands, and streams and their corridors substantially in their natural condition.

Goal NE-3: Manage the natural and built environments to protect and, where possible, to enhance and restore vegetation.

Goal NE-4: Manage the natural and built environment to maintain or improve soils/geologic resources and to minimize risk to life and property.

Goal NE-5: Improve air quality and reduce Kirkland's contribution to climate change.

Techniques suggested by the various policies to protect the natural environment include requiring setbacks from sensitive areas, preserving habitats for sensitive species, preventing adverse alterations to water quality and quantity, promoting low impact development,

preserving existing native vegetation, educating the public, and mitigating necessary sensitive area impacts, among others.

5.3 Natural Resources Management Plan

In 2003, the City adopted its Natural Resource Management Plan that calls for strategies intended to comprehensively manage Kirkland's natural resources. The Plan identifies three compelling reasons for managing natural resources in Kirkland: (1) the community's vision could not be attained without it, (2) the law requires it, and (3) without it, community assets become liabilities. The Plan recognizes the complexity of the interaction of its water, land and air systems and identifies action items intended protect Kirkland's environmentally sensitive areas.

The Natural Resources Management Plan contains a number of general and specific goals and policies that address the shoreline, such as:

Look for opportunities to enhance the ecological functions of the Lake Washington shoreline wherever feasible. Actions that would aid recovery of the salmonids in Lake Washington include:

- Identify areas where it will be feasible to protect and restore natural lake shorelines and shallow water habitat and to remove bank armoring and docks.
- Identify, protect, and restore tributary mouths entering the lake. Studies show that juvenile chinook salmon hold and feed near the mouths of tributaries, even very small streams and drainages, during rearing and migration.
- Construct demonstration projects on public lands at key locations, such as at the mouth of Juanita Creek in Juanita Beach Park or where street ends meet the shoreline. Remove bulkheads, regrade shorelines, improve substrate, and plant overhanging vegetation in order to enhance rearing and refuge habitat for juvenile Chinook. Monitor to evaluate stability, sedimentation rates, and juvenile/adult use and predation. Consideration of containment issues in site selections is important.
- Identify opportunities to preserve, enhance, or restore lakeshore wetlands.
- Identify opportunities to treat stormwater entering Lake Washington through biofiltration or other water quality techniques. Consider experimental projects.
- Explore alternative dock design/migration packages that use bank softening to replace docks and bank armoring.
- Identify critical areas of juvenile and adult Chinook salmon migration for aquatic weeds management; control invasive aquatic weeds in those parts of the lake.

The Plan also addresses the need to integrate local, state and federal regulations for lakes, shorelines, streams, wetlands and aquifer recharge areas.

5.4 Critical Areas Regulations

The City of Kirkland critical areas regulations are found in Kirkland Zoning Code Chapter 90. In the early 1990s, Kirkland adopted regulations to designate and protect critical areas pursuant to the Washington State Growth Management Act (GMA) (RCW 36.70A). In response to later GMA amendments, the City adopted in 2002 a revised Critical Areas Ordinance (CAO) contained in the KZC consistent with best available science and all other requirements of the GMA. All activities which require a substantial development permit, conditional use or variance under the SMP or are exempt from a permit under the SMP are reviewed under the City's CAO for consistency. As stated above, if there is a conflict between the CAO and SMP, the regulations that offer the greatest environmental protection apply.

The regulations categorize streams based on salmonid use and duration of flow, with standard buffers ranging from 25 feet to 75 feet. Wetlands are classified into three categories based on size, presence of habitat for listed species or the species themselves, relationship to Lake Washington, general habitat function and value, and soils. Buffers range from 25 to 100 feet; all wetlands contiguous with Lake Washington have a 100-foot buffer.

As part of the SMP update, the critical areas regulations that apply in shoreline jurisdiction were updated to include Ecology's wetland rating system, increased wetland buffers and mitigation ratios, and other changes consistent with the latest scientific information.

Management of the City's critical areas both inside and outside of shoreline jurisdiction using these regulations should help insure that ecological functions and values are not degraded, and impacts to critical areas are mitigated. These critical areas regulations are one important tool that will help the City meet its restoration goals.

5.5 Stormwater Management and Planning

Although much of the City of Kirkland's Surface Water Utility's jurisdiction is outside of the shoreline zone, all of the regulated surface waters, both natural and piped, are discharged ultimately into Lake Washington and thus affect shoreline conditions. There are more than 70 outfalls directly into the shoreline area, and many more that discharge just outside of shoreline jurisdiction, but subsequently flow into the shoreline area (The Watershed Company 2006). The City's 2005 *Surface Water Master Plan* contains the following goals:

> Flood Reduction – minimize existing flooding and prevent increase in future flooding through construction of projects that address existing problems, increased inspection and rehabilitation of the existing system, and increased public education.
>
> Water Quality Improvement - increase efforts to maintain and improve water quality by increasing public education (source control), identifying pollution "hot spots" for possible water quality treatment and by examining City practices and facilities to identify where water quality improvements could be achieved.
>
> Aquatic Habitat – increase efforts to slow the decline of aquatic habitat and create improved conditions that will sustain existing fish populations. Combine hydrological controls, such as regional detention, with in-stream habitat improvement projects in Juanita and Forbes creeks watersheds that currently support fish populations.

Since preparation of the first *Surface Water Master Plan* in 1994, the Utility has accomplished a number of actions that further achieve its goals (excerpted from the 2005 *Surface Water Master Plan*).

Flood Reduction

- Eliminated most major flooding problems.
- Mapped surface water infrastructure.
- Implemented a program to inspect and clear flooding "hot spots" during storm events

Water Quality

- Adopted an ordinance to prohibit illicit discharges (spills and dumping), require use of pollution prevention practices, require maintenance of private drainage facilities, and require pre- and post-development control of stormwater runoff.
- Established a water quality monitoring program.
- Implemented a volunteer program to conduct water quality monitoring, planting of native vegetation, and other activities.
- Increased frequency of system cleaning, resulting in removal of an average of 200 cubic yards of sediment per year
- Conducted regional water quality related outreach programs in Kirkland, including "Natural Yard Care" and "Horses for Clean Water."
- Distributed educational brochures regarding pollution prevention, car washing practices, and leaf blower use.
- Conducted storm drain stenciling with community groups.

The City applied for coverage under the Western Washington permit which was issued by Ecology and became effective on February 16, 2007. The NPDES Phase II permit is required to cover the City's stormwater discharges into regulated lakes and streams. Under the conditions of the permit, the City must protect and improve water quality through public education and outreach, detection and elimination of illicit non-stormwater discharges (e.g., spills, illegal dumping, wastewater), management and regulation of construction site runoff, management and regulation of runoff from new development and redevelopment, and pollution prevention and maintenance for municipal operations.

The City subsequently released a Stormwater Management Program (SWMP) in February 2008 (City of Kirkland 2008-a) which details implementation of the NPDES Phase II permit. The SWMP identifies programs to reduce pollutants in stormwater to the "maximum extent possible" by conducting programs and activities in the following program areas:

- Public Education and Outreach

- Public Involvement
- Illicit Discharge Detection and Elimination
- Construction and Post-construction runoff controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

In 2007, the Department of Ecology published information about toxics levels in fish, including fish sampled in Lake Washington (Department of Ecology 2007). Lake Washington ranked second only to the Wenatchee River near Leavenworth for a site contaminant score. Although this report does not identify specific point sources, it represents a clear need to better understand contaminant sources and control.

5.6 Kirkland's Green Building Program

Kirkland's Green Building pilot program offers a priority permit processing incentive designed to encourage sustainable building in the construction of new single family residential development. Additionally, the program offers educational resources, such as this website, and hosts seminars on green building topics to help educate builders and the public about the benefits of sustainable building.

The goal of the Green Building Program, through certain design and construction techniques, is to reduce the environmental impact of buildings by:

- Protecting environmentally sensitive lands and plant species
- Minimizing the size of the building footprint
- Incorporating energy efficiency in the design and construction
- Using environmentally-friendly building materials that will create a healthy indoor and outdoor environment
- Providing for efficient water use
- Reducing the generation of solid waste

5.7 Comprehensive Park, Open Space and Recreation Plan 2001

The 2001 Comprehensive Park, Open Space and Recreation Plan provides policies and planning for parks, open space and recreating within the City of Kirkland, including waterfront parks.

The three primary goals of the Parks and Community Services Department are to:

- acquire, develop, and renovate a system of parks, recreational facilities, and open spaces that is attractive, safe, functional, and available to all segments of the population,

- enhance the quality of life in the community by providing services and programs that offer positive opportunities for building healthy productive lives, and
- protect and preserve publicly-owned natural resource areas.

The Plan contains policies and goals that address waterfront access and waterfront parks, including the following:

> Policy 1.4 (KCP Policy 2.2): Small craft water-oriented activities/programs should be encouraged along the shoreline where appropriate and consistent with public interest and needs.
>
> Policy 1.11 (KCP Policy 3.1): The City should work cooperatively with numerous resource management agencies and citizens to care for streams, enhance degraded forests and wetlands, improve wildlife habitat, and provide limited public access.
>
> Policy 1.12 (KCP Policy 3.2): The City should preserve opportunities for people to observe and enjoy wildlife and wildlife habitats.

5.8 Green Kirkland Partnership

The Green Kirkland Partnership is an alliance between the City, the Cascade Land Conservancy, and the local community focused on restoring natural areas within the City, including many City parks located along Lake Washington. This partnership aims to remove invasive plants in City parks and replant with native species, while enhancing community stewardship by coordinating volunteer efforts to restore natural open spaces.

This partnership includes a 20-year Forest Restoration Plan (City of Kirkland 2008b), which focuses on protecting Kirkland's forests for a sustainable future. Implementation of this plan includes coordination of volunteers to remove ivy and other invasive plants and replant with native plants. In 2008, the Green Kirkland Partnership had 36 volunteer restoration events held in the following City parks: Carillon Woods, Everest, Heritage, Juanita Bay, Kiwanis, McAuliffe, North Rose Hill Woodlands, South Rose Hill and Watershed parks. This work included Kiwanis and Juanita Bay Parks, which are located within the shoreline jurisdiction, but also other upland parks which contain streams and wetlands that drain into Lake Washington.

As part of the Green Kirkland Partnership, the City is also embarking on a multi-year habitat restoration project focusing on improving wildlife habitat in the extensive wetland and forest complex at Juanita Bay Park. Invasive and noxious species such as Himalayan blackberry are a large problem within the park. A Restoration Action Plan has been developed by the Seattle Urban Nature (SUN) that identified restoration priorities and a menu of specific tasks along with planting plans and maintenance schedules necessary to implement these tasks. This action plan is available on their website at: http://www.seattleurbannature.org/Resources/publications.html. In Spring 2009, the City of Kirkland hired EarthCorps to organize volunteer events in conjunction with trained crews to implement the projects identified in the Action Plan. This project will remove Himalayan blackberry, English ivy, and Scot's broom (which are all classified as noxious weeds in King County) and replace these with native plants to improved habitat to native and migrating birds and wildlife. Implementation of the plan also relies on the work of five Stewards trained by the Washington Native Plant Society who will lead volunteer

events and involve the community to clear Himalayan blackberry from the trail and wetland buffer.

5.9 Other Parks & Community Services Department Activities

5.9.1 Parks & Community Services Department Planning and Management

The City commissioned the *Juanita Beach Park Master Plan Report* (J.A. Brennan Associates, PLLC 2005) after assuming ownership from King County in 2002. The *Master Plan Report* includes goals for a number of areas, including environmental stewardship and recreation. The plan's Environmental Stewardship goals include:

- Enhance Juanita Creek to create a healthy stream environment. (This could include the reach within the park and up-stream reaches)
- Create a salmon and wildlife friendly shoreline
- Enhance and restore wetlands
- Educate the visitors about habitat values

Since 1998, the Kirkland Parks Department has been following an Integrated Pest Management (IPM) program. IPM is a sustainable approach to managing pests by combining cultural, mechanical, biological and chemical methods in a way that provides efficient maintenance of the City's park system.

The Kirkland Parks Department has also initiated a program to install water intakes in Lake Washington for use as irrigation of Kirkland Parks. The water withdrawn from Lake Washington by Parks would be used to irrigate eight parks, which are currently being provided with irrigation water from the City's potable water system. In conjunction with this project, the Parks Department plans to install vegetation along the shoreline edge.

The Kirkland Parks Department undertakes aquatic vegetation efforts at Houghton and Waverly Beach Parks, as well as Juanita Bay Park.

The City's Parks and Community Services Department has several other programs that could be leveraged to enact additional restoration projects to benefit shoreline conditions, including Juanita Bay Park Rangers, Eagle Scout/Capstone Projects, and the Youth Tree Education Program. All of these programs enable volunteers to donate time and energy to improving the park system.

Contact Information: City of Kirkland Parks & Community Services, (425) 587-3300

5.9.2 Juanita Bay Park Rangers

Juanita Bay Park Rangers provide educational and interpretative services at Juanita Bay Park. Rangers greet visitors, answer questions, monitor park usage, record wildlife activity, perform minor maintenance, and lead park tours.

5.9.3 Eagle Scouts

Eagle Scouts, the highest advancement rank in Scouting, have provided many services to the City's parks system. The Parks and Community Services Department provides project ideas that Eagle Scout candidates may choose from. Potential projects include the installation of park benches, fencing, boardwalks, trail improvements, and landscaping improvements.

5.10 Public Education

The City of Kirkland's Comprehensive Plan, *Natural Environment Element*, identifies the following policy statement based on the goal of protecting natural systems from human impacts (excerpted below). This helps guide City staff and local citizen groups in developing mechanisms to educate the public and broaden the interest in protecting and enhancing local environmental resources.

> Goal NE-1: Protect natural systems and features from the potentially negative impacts of human activities, including, but not limited to, land development.
>
> Policy NE-1.5: Provide to all stakeholders information concerning natural systems and associated programs and regulations. Work toward creating a culture of stewardship by fostering programs that support sound practices, such as low impact development and sustainable building techniques. Model good stewardship techniques in managing trees, streams, wetlands, shorelines and other natural features and systems in the public realm.

As part of the City of Kirkland's efforts to abide by this goal and policy, the City supports several volunteer efforts, such as the Green Kirkland Partnership and Eastside Audubon (see description below). Additional specific education efforts are described in other sections of Chapter 5.

5.11 Public Works Programs

The Public Works Department periodically produces educational materials for local citizens, including the quarterly "Reuse – Recycle - Conserve" publication, which is produced in both single-family and multi-family focused issues, and brochures, such as the "Low Impact Development Elements for Residential Stormwater Management." The Department also administers the Adopt a Storm Drain program based on volunteer involvement to reduce flooding by keeping storm drain covers clear of leaves and debris.

Contact Information: City of Kirkland Public Works, (425) 587-3800

5.12 Capital Improvement Program (CIP)

5.12.1 Surface Water Management Utility

The Public Works Department funds a number of Surface Water Management Utility projects through the Capital Improvement Program, including improvements to the City's storm drain system and streambed mitigation on public and private property. The CIP contains both funded and unfunded projects that range in size and scope from maintenance and replacement of aging infrastructure or damaged improvements, planting of riparian understory vegetation along

stream edges to provide shading, as well as maintenance to prevent flooding and property damage, and installation of regional detention in the Forbes and Juanita Creek Basins.

The CIP contains several funded and unfunded projects addressing Juanita Creek to provide flood relief and habitat improvement.

The CIP also funds the annual streambank stabilization program. Goals of the streambank stabilization program are to provide the public benefits of improved water quality and decreased flooding by stabilizing and restoring stream channels which may in many cases be located on private property. Most common stabilization methods funded through this program will be upstream detention and in-stream stabilization/restoration using bioengineering techniques.

Contact Information: City of Kirkland Public Works, (425) 587-3800

5.12.2 Parks

The City of Kirkland Parks & Community Services completes park renovation projects through the Capital Improvement Program. The CIP contains both funded and unfunded projects that range in size and scope from dock renovations, to park renovation, and park and open space acquisition.

The CIP helps to fund the Open Space and Park Land Acquisition Grant Match Program, which assists with or provides funding for acquisition of key sites as they become available. Acquiring more sites would fill gaps in the City's park system, provide open space contiguous to existing parks or provide important linkages. This project also allows the City to remain eligible for State-funded grant programs.

Shoreline Park renovation projects provide an opportunity to complete shoreline or stream restoration, new landscaping, and to implement Low Impact Development (LID) practices within the shoreline parks.

Dock renovations funded through the CIP offer the opportunity to replace dock decking material and conform to environmental regulations pertaining to decking material and construction.

The City of Kirkland Parks & Community Services plans to incorporate the recommended projects provided in Section 6.2 of this report into the CIP as either funded or unfunded projects, in order to assure that these projects are considered for funding as the CIP program is updated in the future.

Contact Information: City of Kirkland Parks & Community Services, (425) 587-3300

5.13 Cascade Land Conservancy

The Cascade Land Conservancy (CLC) has been actively working with the City of Kirkland, partnering with CLC on implementing the Cascade Agenda Vision – a 100-year vision focused on sustaining the local community, natural environment, and economy through the future growth of Puget Sound. The CLC also works with the City through the Green Kirkland Partnership (described above).

Contact Information: http://www.cascadeland.org/

5.14 Eastside Audubon

The Eastside Audubon (formerly the East Lake Washington Audubon Society) was formed in 1980 dedicated to the appreciation, study and conservation of birds and their habitats, primarily along the east side of Lake Washington. Volunteers have been instrumental in preserving many areas for birds, including Juanita Bay Park in Kirkland, Lake Hills Greenbelt in Bellevue, and Hazel Wolf Wetlands in King County. Recently, Eastside Audubon has been working with the Green Kirkland Partnership with invasive plant removal at Kirkland's Watershed Park.

Contact Information: http://www.eastsideaudubon.org/

5.15 Moss Bay Diving Club

The Moss Bay Diving Club, located in Kirkland, periodically performs in-water SCUBA cleanup events to remove submerged debris from Lake Washington.

Contact Information: http://www.mossbaydiveclub.org/

6. LIST OF FUTURE PROJECTS AND PROGRAMS TO ACHIEVE LOCAL RESTORATION GOALS

The following are potential projects and programs that would contribute to achieving the local restoration goals. The potential projects and programs are generally organized from the larger watershed scale to the City-scale, including City projects and programs and WRIA 8 Public Education/Outreach programs.

6.1 Unfunded WRIA 8 Projects

The *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* (WRIA 8 Steering Committee 2005) includes potential restoration of the mouth of Juanita Creek through the removal of bank armoring and returning the mouth to a more natural outlet as Project C296 on the "Lake Washington - Tier I - Initial Habitat Project List." It is identified as a low-priority project, however, because of its limited benefit to chinook salmon and perceived low feasibility.

6.2 Recommended Projects - Public

The following list of recommended projects (Table 3) is developed from a list of opportunity areas identified within the *Final Shoreline Analysis Report* (The Watershed Company 2006) and is intended to contribute to improvement of impaired functions on public property. The list of potential projects was created after assessing field conditions during the shoreline inventory and characterization phase and later evaluated on a project specific basis during the development of this Restoration Plan. The projects are listed in order from North to South.

Table 3. List of Recommended Projects - Public.

Site Number	Park	Restoration Type	Description
1	Juanita	Reduce	The large overwater boardwalk with skirting, which forms

Site Number	Park	Restoration Type	Description
	Beach Park	overwater cover	the designated swimming area, has the potential for impact reduction by installing deck grating in the pier decking and potentially removing or redesigning the breakwater in order to improve migratory conditions for juvenile salmonids and water circulation.
2	Juanita Beach Park	In-stream habitat improvement	Potential in-stream habitat improvements exist at the mouth of Juanita Creek (delta), including large woody debris installation and improvements to native vegetative cover. The *WRIA 8 Chinook Salmon Conservation Plan* includes potential restoration of the mouth of Juanita Creek through the removal of bank armoring and returning the mouth to a more natural outlet.
3	Forbes Creek - Juanita Bay Park	Remove invasive vegetation	Invasive vegetation, primarily reed canarygrass, purple and garden loosestrife, and Himalayan blackberry in the terrestrial zones and white water lily in the aquatic zone, is currently growing throughout the Forbes Creek riparian corridor and Juanita Bay Park. The primary objective for the less developed landscape zones is removal of invasive species and replacement with native species, as well as supplementation of existing native vegetation to increase species and habitat diversity.
4	Forbes Creek - Juanita Bay Park	Reduce overwater cover	The pedestrian trail/trestle across Juanita Bay to the west of 98th Street covers the mouth of Forbes Creek, potentially inhibiting salmon migration. The surface of the walkway could be re-decked with a grated material to reduce shading impacts to the aquatic environment.
5	Forbes Creek - Juanita Bay Park	Reduce in-water structures	Many remnant pier piles located within Juanita Bay could be removed.
6	Lake Ave W Street End Park	Remove invasive vegetation	This small street-end park consists of primarily lawn area with a moderate amount of shoreline vegetation (trees and shrubs). An abundance of invasive vegetation (ivy/reed canarygrass) could be removed and replaced with additional native vegetation to improve shoreline conditions for juvenile salmonids.
7	Lake Ave W Street End Park	Reduce in-water structures	An old remnant moorage slip located near the south property line that is not connected to shore could be removed to reduce in- and overwater structures.
8	Waverly Beach Park	Reduce overwater cover	Reduction of overwater cover by the existing pier through the installation of deck grating and removing pier skirting as feasible.
9	Waverly Beach Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
10	Waverly Beach Park	Enhance shoreline vegetation	Supplementation of nearshore native vegetation to improve habitat conditions for juvenile salmonids.
11	Waverly	Reduce stormwater	The impact of existing impervious surfaces (paved parking areas) could be reduced through the use of pervious

Site Number	Park	Restoration Type	Description
	Beach Park	runoff	materials, relocation, or minimization.
12	Marina Park	Reduce overwater cover	Reducing overwater cover through the installation of deck grating on the existing piers.
13	Marina Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
14	Marina Park	Enhance shoreline vegetation	Improving nearshore native vegetation.
15	Street-End Park	Reduce stormwater runoff	This small street-end park consists of an adjacent parking area located within the shoreline jurisdiction that likely drains surface runoff directly to Lake Washington. Future use of pervious material should be explored any time repairs are proposed.
16	David Brink Park	Reduce overwater cover	Reducing overwater cover through the installation of deck grating on the existing piers.
17	David Brink Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
18	David Brink Park	Reduce in-water structures	Removing unused remnant pier piles.
19	David Brink Park	Enhance shoreline vegetation	Improving nearshore native vegetation.
20	Settler's Landing	Enhance shoreline vegetation	This small street-end park contains the opportunity to improve shoreline habitat by improving native vegetative cover.
21	Settler's Landing	Reduce overwater cover	The existing shared use pier (public and private) could potentially be re-decked with grated materials to reduce shading impacts.
22	Marsh Park	Reduce overwater cover	Reduction of overwater cover by the existing pier through the installation of deck grating.
23	Marsh Park	Reduce shoreline armoring	Removal or minimization of shoreline armoring.
24	Marsh Park	Enhance shoreline vegetation	Improvement of nearshore native vegetation.
25	Marsh Park	Reduce stormwater runoff	The impact of existing impervious surfaces (paved parking areas) could be reduced through the use of pervious materials, relocation, or minimization.
26	Houghton Beach Park	Reduce overwater cover	Reducing overwater cover through the installation of deck grating on the existing piers and removing pier skirting as feasible.
27	Houghton Beach Park	Reduce shoreline armoring	Removing or minimizing the impacts of shoreline armoring.
28	Houghton Beach Park	Enhance shoreline vegetation	Improving nearshore native vegetation.
29	Yarrow Bay	Remove invasive	The biological need for control of aquatic invasive species

Site Number	Park	Restoration Type	Description
		vegetation	in Yarrow Bay should be assessed. Both Yarrow Shores Condominiums and the Carillon Point Marina and condominiums have permits from Ecology to use chemical controls on milfoil and white water lily, which have become a nuisance to boaters and swimmers.

After identifying and describing these projects, each proposed action was ranked using evaluation criteria developed for this study and compiled on a questionnaire form. Evaluation criteria were grouped into two sections: (A) ecological considerations and (B) feasibility/public benefit considerations. Scoring was based on assumptions and project understanding within the context of conceptual-level project elements, needs, and requirements. A weighting factor was included, where appropriate, to give certain criteria more or less emphasis than others.

A sample ranking form (Appendix B) is included to show the varying levels of consideration and their respective weighting factors. Notes were developed (Appendix B) to assist with completing the form and ensuring consistency between sites. The ecological considerations were completed with the aid of GIS mapping and best professional judgment. Feasibility/public benefit considerations were completed based on experience with shoreline design and construction projects, familiarity with permit processes, and public input over time. The individual ranking forms with tallied scores for each project are included in Appendix C of this report.

Numerical results from the project ranking are summarized in Table 4 from highest to lowest total score. Based on these results, projects with in-water habitat improvement, reduction of shoreline armoring, and large-scale invasive vegetation removal generally ranked highest in total score. However, it should be noted that the ranking of potential projects is intended to serve as a guide to developing restoration priorities and implementation targets, and does not necessarily require completion in the order presented. Some projects, due to their simplicity, rank high in terms of feasibility, and subsequently may be easier to implement than larger projects which may have high scores for ecological benefit. In general, ecological considerations have been given more weight than feasibility/public benefit considerations and, as a result, larger, more complex projects tend to have higher total scores.

Table 4. Project Ranking Results.

Site Number	Park	Restoration Type	Ecological Score	Feasibility Score	Total Score
2	Juanita Beach Park	In-stream habitat improvement	34.5	6.0	**40.5**
1	Juanita Beach Park	Reduce overwater cover	23.0	8.0	**31.0**
27	Houghton Beach Park	Reduce shoreline armoring	22.3	7.5	**29.8**
29	Yarrow Bay	Remove invasive vegetation	20.0	9.5	**29.5**
3	Forbes Creek -	Remove invasive	20.0	9.0	**29.0**

Site Number	Park	Restoration Type	Ecological Score	Feasibility Score	Total Score
	Juanita Bay Park	vegetation			
17	David Brink Park	Reduce shoreline armoring	20.0	7.5	**27.5**
23	Marsh Park	Reduce shoreline armoring	20.0	7.5	**27.5**
9	Waverly Beach Park	Reduce shoreline armoring	19.0	8.0	**27.0**
13	Marina Park	Reduce shoreline armoring	19.0	7.0	**26.0**
5	Forbes Creek - Juanita Bay Park	Reduce in-water structures	17.5	6.5	**24.0**
28	Houghton Beach Park	Enhance shoreline vegetation	12.3	11.5	**23.8**
4	Forbes Creek - Juanita Bay Park	Reduce overwater cover	14.0	9.5	**23.5**
10	Waverly Beach Park	Enhance shoreline vegetation	10.0	11.5	**21.5**
19	David Brink Park	Enhance shoreline vegetation	10.0	11.5	**21.5**
24	Marsh Park	Enhance shoreline vegetation	10.0	11.5	**21.5**
12	Marina Park	Reduce overwater cover	13.5	7.5	**21.0**
6	Lake Ave W Street End Park	Remove invasive vegetation	8.8	11.0	**19.8**
14	Marina Park	Enhance shoreline vegetation	6.5	11.5	**18.0**
26	Houghton Beach Park	Reduce overwater cover	8.3	8.5	**16.8**
8	Waverly Beach Park	Reduce overwater cover	7.0	7.5	**14.5**
16	David Brink Park	Reduce overwater cover	5.0	9.0	**14.0**
22	Marsh Park	Reduce overwater cover	5.0	8.5	**13.5**
21	Settler's Landing	Reduce overwater cover	4.8	8.5	**13.3**
20	Settler's Landing	Enhance shoreline vegetation	2.8	10.0	**12.8**
7	Lake Ave W Street End Park	Reduce in-water structures	3.0	9.5	**12.5**
25	Marsh Park	Reduce stormwater runoff	3.0	9.0	**12.0**
18	David Brink Park	Reduce in-water structures	2.6	9.0	**11.6**
11	Waverly Beach	Reduce stormwater	3.0	8.5	**11.5**

Site Number	Park	Restoration Type	Ecological Score	Feasibility Score	Total Score
	Park	runoff			
15	Street-End Park	Reduce stormwater runoff	2.0	6.0	**8.0**

6.3 Recommended Projects - Private

General: Many shoreline properties have the potential for improvement of ecological functions through: 1) reduction or modification of shoreline armoring, 2) reduction of overwater cover and in-water structures (grated pier decking, pier size reduction, pile size and quantity reduction, moorage cover removal), 3) improvements to nearshore native vegetative cover, and/or 4) reductions in impervious surface coverage. Similar opportunities would also apply to undeveloped lots which may be used as community lots for upland properties or local street-ends and utility corridors. Other opportunities may exist to improve either fish habitat or fish passage for those properties which have streams discharging to Lake Washington.

An example of how shoreline armoring might be reduced on some lots along the City's residential areas is depicted in Figure 1 below. This example displays before and after images of a typical lot in which the existing bulkhead is partially pulled back to create a shallow cove beach combined with natural materials. This example combines the effort to improve habitat conditions with improved access and aesthetics.

The SMP includes incentives for removing bulkheads and similar hard shoreline structures. The incentives allow property owners to reduced buffer widths when they agree to use alternative (soft-shore) armoring. The City could also explore additional development incentives for restoration, such as waiving some or all permit fees when shoreline restoration is included in a project. Further, the City could develop resource materials for property owners that want to be involved in restoration that would provide guidance with permitting and design issues. Examples could include the development of pre-approved plans.

Another potential incentive to encourage property owners to protect habitat and retain forest on their property is the Public Benefit Rating Program (PBRS), a current-use taxation program that reduces property taxes in exchange for property owners protecting habitat beyond what is required by regulations.

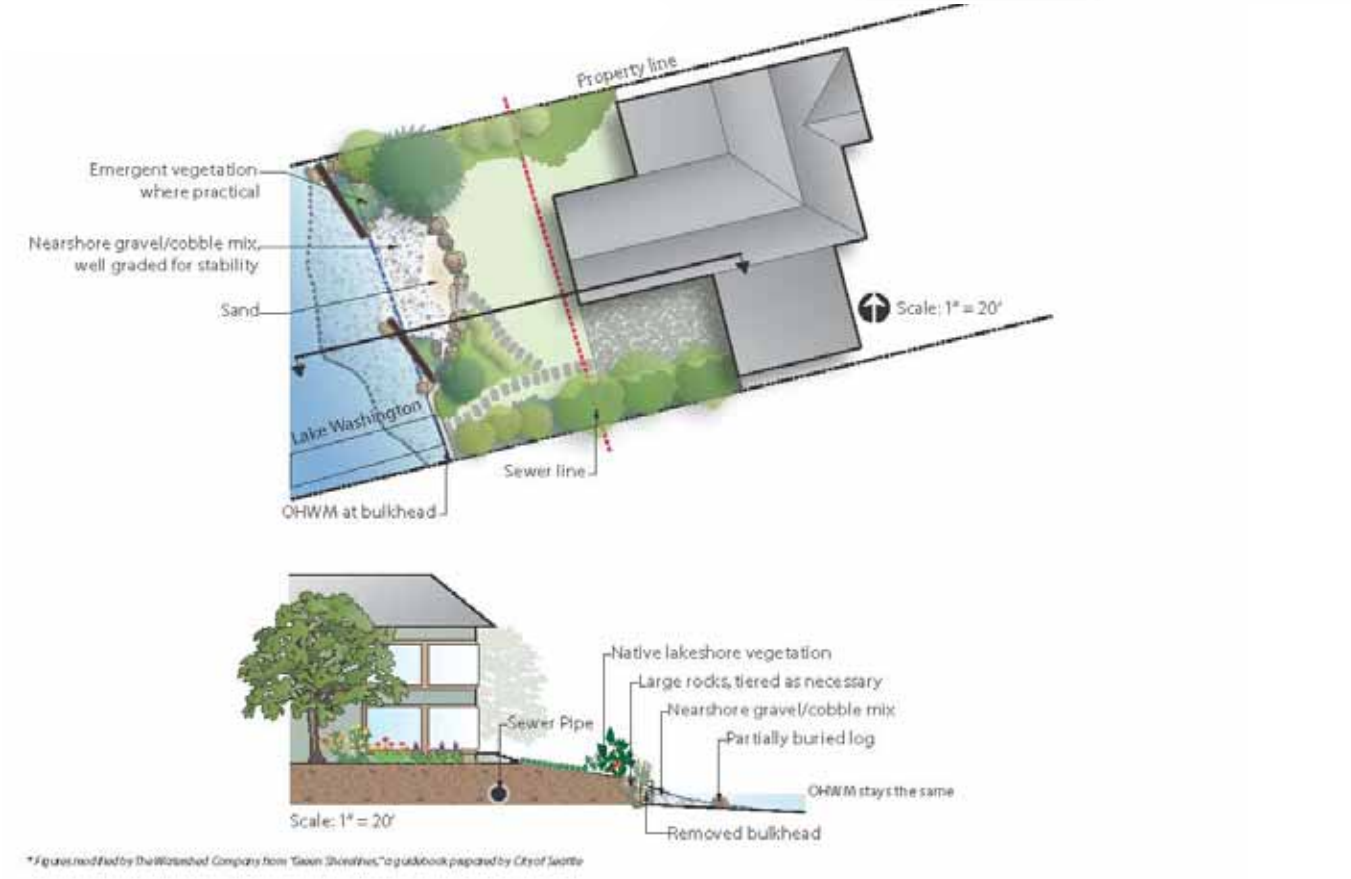
Expanded use of incentives programs to achieve restoration on privately owned shorelines should be considered whenever feasible and beneficial.

Restoration of Multiple Contiguous Properties: Through grant funding sources, restoration opportunities may be available to multiple contiguous shoreline properties, including residential lots that are interested in improving shoreline function. Restoring shoreline properties that are connected to one another would provide significantly more benefits than a more piecemeal approach. Therefore, priority should be given to restoration projects which involve multiple lots (such as accelerated permit processes).

Figure 1

Before

After



*Figures modified by The Watershed Company from "Green Shorelines," a guidebook prepared by City of Seattle

6.4 Public Education/Outreach

The *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* includes a table outlining 53 "Outreach and Education Actions" with target audiences for each action ranging from the general public, to shoreline property owners in general, to lakeshore property owners specifically, to businesses, to youth, and others. The complete list of WRIA 8 "Outreach and Education Actions" is included as Appendix D.

The City could also work with other local jurisdictions and the County to establish a Shore Stewards program within King County. Shore Stewards is a program operating in several counties throughout the State and provides a forum for waterfront and stream-side property owners to share ideas, information and resources and sets up guidelines for shoreline residents to preserve and enhance the shoreline environment.

7. PROPOSED IMPLEMENTATION TARGETS AND MONITORING METHODS

As previously noted, the City's shoreline area is occupied by multi- and single-family residences, commercial, and public recreation/open space areas. Therefore, efforts should be made to improve shoreline ecological function through the promotion of restoration and healthy practices at all levels, from large-scale marina users to single-family property owners. The City of Kirkland already has a very active environmental community with a restoration and education focus. Continued improvement of shoreline ecological functions on the shoreline requires a more comprehensive watershed approach, which combines upland and shoreline projects and programs.

7.1 Implementation Targets

The following table (Table 5) outlines a possible schedule and funding sources for implementation of a variety of efforts that could improve shoreline ecological function, and are described in previous sections of this report.

Table 5. Implementation Schedule and Funding for Restoration Projects, Programs and Plans.

Restoration Project/Program	Schedule	Funding Source or Commitment
5.1 WRIA 8 Participation	Ongoing	The City is an active member of the WRIA 8 Forum and has membership on the Salmon Recovery Council. Membership at this time entails a commitment of staff and Council member time. In addition, the City contributes funding to support watershed salmon habitat recovery.
5.2 Comprehensive Plan Policies	Ongoing	The City makes a substantial commitment of staff time in the course of project and program reviews to determine consistency and compliance with the recently updated Comprehensive Plan. The next full GMA update to the Comprehensive Plan will occur in 2011, but other amendments will be made on an annual basis.

Restoration Project/Program	Schedule	Funding Source or Commitment
5.3 Natural Resources Management Plan	Ongoing	As an implementation measure for this plan, the City has established an interdepartmental team to focus on natural resource issues, requiring a commitment of staff time.
5.4 Critical Areas Regulations	Ongoing with update in 2011	The City makes a substantial commitment of staff time in the course of project and program reviews to determine consistency and compliance with their Critical Areas Regulations. In addition, the City is scheduled to update its Critical Area Regulations in 2011.
5.5 Stormwater Planning	Ongoing	Currently, the City commits to staff time, materials, and projects in its CIP. The City currently follows its *2008 Stormwater Management Program* which implements the City's Phase II NPDES permit and reports annually to Ecology. The City is also involved in the implementation of the 2005 *Surface Water Master Plan*, which goals includes flood reduction, water quality improvements and aquatic habitat improvements.
5.6 Green Building Program	Ongoing	Currently, staff time and materials support these programs. A Green Shoreline component may be added to the program to encourage shoreline mitigation beyond what the shoreline regulations could require for building permits. The City is also working with the Master Builders Association to determine whether shoreline restoration strategies could be added to the BuiltGreen certification program.
5.7 Comprehensive Park, Open Space and Recreation Plan 2001	Ongoing, with update underway	Currently, the City commits to staff time, materials, and projects in its CIP.
5.8 Green Kirkland Partnership	Ongoing	Currently, the City commits staff time, materials, and funding through the CIP to support these programs.
5.9 Other Kirkland Parks and Community Services Department Activities	Ongoing, with demonstration projects as funds and opportunity allow	Currently, staff time, materials and funding support these programs. The public parks along the shoreline provide a unique opportunity to create a restoration strategy demonstration area, which can serve as a valuable education tool, providing property owners with information to restore their own property. As the City considers implementation of CIP projects in shoreline parks, it should consider restoration strategies as well as interpretative signage and materials.

Restoration Project/Program	Schedule	Funding Source or Commitment
5.10 Public Education	Ongoing	Currently, staff time and materials are provided in developing public education and outreach efforts, which are highlighted in the Comprehensive Plan policy statement based on the goal of natural resource protection. These items help guide City staff and local citizen groups in developing mechanisms to educate the public and broaden the interest in protecting and enhancing local environmental resources.
5.11 Public Works Programs	Ongoing	Currently, staff time, materials and an unspecified amount of funding support these programs.
5.12 Capital Improvement Program	Ongoing	The City funds a number of projects through its Capital Improvement Program that will minimize impacts to and enhance the shoreline environment, including work within the larger drainage basin to improve water quality as well as park renovation and acquisitions to protect and restore shoreline functions.
5.13 Cascade Land Conservancy	As funds and opportunity allow	These private organizations are either a source of grant funds for restoration projects, an advocate for specific restoration projects, independently obtains grants for restoration projects, or a partner in implementing restoration or education projects.
5.14 Eastside Audubon		
5.15 Moss Bay Diving Club	As volunteer opportunity allow	This organization periodically performs volunteer cleanup services in Lake Washington.
6.1 Unfunded WRIA 8 Projects	As funds and opportunity allow	The City Council passed a resolution in 2005 expressing its approval and support for the *Chinook Salmon Conservation Plan* (Steering Committee 2005). Projects will be funded by the City, partnering agencies and non-profit organizations, and grants as projects and funding opportunities arise. The City continues to identify funds for the implementation of the WRIA 8 projects in the City of Kirkland
6.2 Recommended Projects - Public	As funds and opportunity allow	Projects identified in this section would likely be implemented either when grant funds are obtained, when partnerships are formed between the City and other agencies or non-profit groups, or as may be required by the critical areas regulations and the Shoreline Master Program during project-level reviews by the City.
6.3 Recommended Projects - Private		
6.4 Public Education/ Outreach	As funds and opportunity allow	On-going and future education efforts should be coordinated with the City and partnering agencies, including funding sources (grant funding, monetary donations, volunteer hours)

7.2 Potential Additional Funding Sources

Potential funding opportunities for restoration projects could include both federal and state grants and legislative funds administered by state agencies, private non-governmental grant

funding, as well as funding through participation in the WRIA 8 Steering Committee, and/or strategic partnering with King County agencies. A list of potential funding sources is included in Appendix E. While this list does not contain an exhaustive review of potential funding opportunities, it is a resource that can continually be maintained and updated.

7.3 Monitoring

In the context of the SMP update, restoration planning is a long-term effort. The SMP guidelines include the general goal that local master programs "include planning elements that, when implemented, serve to improve the overall condition of habitat and resources within the shoreline area" (WAC 173-26-201(c)).

The legislature has provided an overall timeframe for future amendments to the SMP. In 2003, Substitute Senate Bill 6012 amended the Shoreline Management Act (RCW 90.58.080) to establish an amendment schedule for all jurisdictions in the state. Once the City of Kirkland amends its SMP (on or before December 1, 2009), the City is required to review, and amend if necessary, its SMP once every seven years (RCW 90.58.080(4)). During this review period, the City should document progress toward achieving shoreline restoration goals. The review could include:

- Re-evaluating adopted restoration goals, objectives, and policies;
- Summarizing both planning efforts (including application for and securing grant funds) and on-the-ground actions undertaken in the interim to meet those goals, including action on the specific projects identified in Section 4.2.3; and
- Revising the SMP restoration planning element to reflect changes in priorities or objectives.

In preparation and as part of its Shoreline Master Program updates, the City will review project monitoring information and shoreline conditions, and reevaluate restoration goals, priorities and opportunities.

In order to accomplish this task, City planning staff will track all land use and development activity, including exemptions, within shoreline jurisdiction, and shoreline actions and programs of the Parks and Public Works departments as well development activity on private property. A tracking system will be established that provides basic project information, including location, permit type issued, project description, impacts, mitigation (if any), and monitoring outcomes as appropriate. Examples of data categories might include square feet of non-native vegetation removed, square feet of native vegetation planted or maintained, reductions in chemical usage to maintain turf in City parks, linear feet of eroding bank stabilized through plantings, linear feet of shoreline armoring removed, square feet of overwater cover reduced or converted to grating, or number of fish passage barriers corrected.

A staff report will be prepared, on a seven (7) year cycle of adoption of the SMP, that summarizes the information from the tracking system, updates Tables 2 and 5 above, and outlines implementation of various programs and restoration actions (by the City or other groups) that relate to watershed health. The staff report will be used, in light of the goals and objectives of the Shoreline Master Program, to determine whether implementation of the SMP is

meeting the basic goal of no net loss of ecological functions relative to the baseline condition established in the *Shoreline Analysis Report* (The Watershed Company 2006). In the long term, the City should be able to demonstrate a net improvement in the City of Kirkland's shoreline environment.

Based on the results of the assessment in the staff report, the City may make recommendations for changes to the SMP.

8. RESTORATION PRIORITIES

The process of prioritizing actions that are geared toward restoration of Kirkland's shoreline areas involves balancing ecological goals with a variety of site-specific constraints. Briefly restated, the City's environmental protection and restoration goals include: 1) protecting watershed processes, 2) protecting fish and wildlife habitat, and 3) contributing to chinook conservation efforts. Constraints that are specific to Kirkland include a highly developed residential shoreline along Lake Washington with large percentage of public open space/access. While some areas may already offer fairly good ecological functions (Juanita Bay/Forbes Creek wetland and Yarrow Bay wetland), they tend to include some additional opportunities to further enhance ecological functions. These goals and constraints were used to develop a hierarchy of restoration actions to rank different types of projects or programs associated with shoreline restoration.

Programmatic actions, like continuing WRIA 8 involvement and conducting outreach programs to local residents, tend to receive relatively high priority opposed to restoration actions involving private landowners. Other factors that influenced the hierarchy are based on scientific recommendations specific to WRIA 8, potential funding sources, and the projected level of public benefit. Restoration projects on public property, such as those identified in Section 6.2, have received a high priority ranking due to their availability to be funded by a variety of sources, such as CIP program, Parks Department, grants, and non-profit groups.

Although restoration project/program scheduling is summarized in the previous section (Table 5), the actual order of implementation may not always correspond with the priority level assigned to that project/program. This results from the balancing of various interests that must occur with limited funds and staff time. Some projects, such as those associated with riparian planting, are *relatively* inexpensive and easy to permit and should be implemented over the short and intermediate term despite the perception of lower priority than projects involving extensive shoreline restoration or large-scale capital improvement projects. Straightforward projects with available funding should be initiated immediately for the worthwhile benefits they provide and to preserve a sense of momentum while permitting, design, site access authorization, and funding for the larger, more complicated, and more expensive projects are under way.

8.1 Priority 1 – Continue Water Resource Inventory Area (WRIA) 8 Participation

Of basic importance is the continuation of ongoing, programmatic, basin-wide programs and initiatives such as the WRIA 8 Forum. Continue to work collaboratively with other jurisdictions and stakeholders in WRIA 8 to implement the *Final Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan*. This process provides an opportunity

for the City to keep in touch with its role on a basin-wide scale and to influence habitat conditions beyond its borders, which, in turn, come back to influence water quality and quantity and habitat issues within the City.

8.2 Priority 2 – Public Education and Involvement

Public education and involvement has a high priority in the City of Kirkland due to the predominance of residential development along the shoreline. Recent outreach efforts by other jurisdictions, such as the handbook *Green Shorelines: Bulkhead Alternatives for a Healthier Lake Washington* (City of Seattle 2008), have begun to change the perception of shoreline aesthetics, use, and ecological health. This and other outreach efforts (i.e. workshops, websites, example projects) are clear motivating and contributing factors for restoration activities on private property.

While many opportunities for shoreline restoration exist within City parks (see Section 6.2), multiple other opportunities also exist along community-owned properties and commercial development. Whether the focus is on single-family residential, community-owned, or commercial properties, providing education opportunities and involving the public is key to success, and would possibly entail coordinating the development of a long-term Public Education and Outreach Plan (Section 6.2). This could also include focusing on gaining public support for restoration along City parks.

Specific projects from the Action Start List include developing a workshop series and website that is tailored to lakeshore property owners, and that promotes natural yard care, alternatives to vertical bulkheads, fish-friendly dock design, best management practices for aquatic weed control, porous paving, and environmentally friendly methods of maintaining boats, docks, and decks. Collaborative efforts with other jurisdictions (i.e City of Seattle and Bellevue) could be completed to meet the Action Start List goals. Additionally, design competitions and media coverage could be used to promote the use of "rain gardens" and other low impact development practices that mimic natural hydrology. A home/garden tour or "Street of Dreams" type event might serve to showcase these landscape/engineering treatments.

8.3 Priority 3 – Reduce Shoreline Armoring along Lake Washington, Create or Enhance Natural Shoreline Conditions

The preponderance of shoreline armoring and its association with impaired habitat conditions, specifically for juvenile chinook salmon, has been identified as one of the key limiting factors along Lake Washington (Kerwin 2001). Nearly 86 percent of the developed shoreline within the City of Kirkland (not including Juanita Bay and Yarrow Creek Wetland) is armored at or below the ordinary high water mark (The Watershed Company 2006). While there are no specifically identified projects in the *Final Lake Washington/ Cedar/ Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* that are located within Kirkland, there are many opportunities listed in this Restoration Plan which focus on the potential reduction in shoreline armoring and subsequent restoration and enhancement of shoreline ecological functions. Examples of opportunities to reduce shoreline armoring on public property, in order of priority rank, include (see Section 6.2 and Appendix C):

Site Number	Location
27	Houghton Beach Park

17	David Brink Park
23	Marsh Park
9	Waverly Park
13	Marina Park

However, emphasis should also be given to future project proposals that involve or have the potential to restore privately-owned shoreline areas to more natural conditions. The City should explore ways in which to assist local property owners, whether through technical or financial assistance, permit expediting, or guidance, to team together with restoration of multiple contiguous lots.

Recommendations from the Action Start List reflect this focus and encourage salmon friendly shoreline design during new construction or redevelopment by offering incentives and regulatory flexibility to improve bulkhead and dock design and revegetate shorelines. Other recommendations from the List that support this priority include: 1) increasing enforcement that addresses nonconforming structures over the long run by requiring that major redevelopment projects meet current standards; 2) discouraging construction of new bulkheads and offer incentives (e.g., provide expertise, expedite permitting) for voluntary removal of bulkheads, beach improvement, riparian revegetation; 3) utilizing interpretive signage where possible to explain restoration efforts.

8.4 Priority 4 – Reduction of In-water and Over-water Structures

Similar to Priority 3 listed above, in-water and over-water structures, particularly piers, docks, and covered moorages, have been identified as one of the key limiting factors in Lake Washington (Kerwin 2001). Pier density along the City's developed shoreline is 39 piers per mile – very similar to a lake-wide average of 36 piers per mile. The density of residential development along the City's lakeshore is the main reason for the slightly higher-than-average pier density. While the pier density along residential shorelines is much higher than what is typically found along City-owned park property, the overall footprint of each public pier is generally much greater than is found along single-family residential sites. Opportunities exist for reduction in pier size and overall shading impacts through pier modifications on public sites. Examples, in order of priority rank, include (see Section 6.2 and Appendix C):

Site Number	Location
1	Juanita Beach Park
4	Forbes Creek/Juanita Bay Park
13	Marina Park
27	Houghton Beach Park
9	Waverly Park
17	David Brink Park
23	Marsh Park
21	Settler's Landing

Although no specific privately-owned project sites to reduce in-water and over-water structures within residential areas are identified here, future project proposals involving reductions in the size and/or quantity of such structures should be emphasized. Such future projects may involve joint-use pier proposals or pier reconstruction and may be allowed an expedited permit process.

Action Start List Recommendations in support of Priority 4 above include: 1) supporting the joint effort by NOAA Fisheries and other agencies to develop consistent and standardized dock/pier specifications that streamline federal/state/local permitting; 2) promoting the value of light-permeable docks, smaller piling sizes, and community docks to both salmon and landowners through direct mailings to lakeshore landowners or registered boat owners sent with property tax notice or boat registration tab renewal; and 3) offering financial incentives for community docks in terms of reduced permit fees and permitting time, in addition to construction cost savings. Similarly, the *WRIA 8 Conservation Plan* identified a future project (C302) to explore opportunities to reduce the number of docks by working with private property owners.

8.5 Priority 5 – Restore Mouths of Tributary Streams, Reduce Sediment and Pollutant Delivery to Lake Washington

Although most of the streams and their basins located within the City are outside of shoreline jurisdiction, except the lower sections of Yarrow Creek and Forbes Creek which are both within the boundaries of shoreline associated wetlands, their impacts to shoreline areas should not be discounted. Many of these streams have the potential to provide fish and wildlife habitat. Specific projects in this category include the unfunded WRIA 8 project (C296) listed in Section 5.1 to restore the downstream section and mouth of Juanita Creek which feeds into Lake Washington. This would include working closely with the City's Park Department to provide revegetation, installation of habitat features, and other habitat modifications.

For juvenile chinook, once they enter Lake Washington, they often congregate near the mouths of tributary streams, and prefer low gradient, shallow-water habitats with small substrates (Tabor and Piaskowski 2002; Tabor et al. 2004b; Tabor et al. 2006). Chinook fry entering Lake Washington early in the emigration period (February and March) are still relatively small, typically do not disperse far from the mouth of their natal stream, and are largely dependent upon shallow-water habitats in the littoral zone with overhanging vegetation and complex cover (Tabor and Piaskowski 2002; Tabor et al 2004b). The mouths of creeks entering Lake Washington (whether they support salmon spawning or not), as well as undeveloped lakeshore riparian habitats associated with these confluence areas, attract juvenile chinook salmon and provide important rearing habitat during this critical life stage (Tabor et al. 2004b; Tabor et al. 2006).

Later in the emigration period (May and June), most chinook juveniles have grown to fingerling size and begin utilizing limnetic areas of the Lake more heavily (Koehler et al. 2006). As the juvenile chinook salmon mature to fingerlings and move offshore, their distribution extends throughout Lake Washington. Although early emigrating chinook fry from the Cedar River and North Lake Washington tributaries (primary production areas) initially do not disperse to shoreline areas in Kirkland, any salmon fry from smaller tributaries such as Juanita Creek, Forbes Creek, or Yarrow Creek, would depend on nearshore habitats of the Kirkland waterfront. Later in the spring (May and June), however, juvenile chinook are known to be well distributed throughout both limnetic and littoral areas of Lake Washington, and certainly utilize shoreline habitats in Kirkland.

Action Start List Recommendations in support of Priority 5 above include: 1) addressing water quality and high flow impacts from creeks and shoreline development through NPDES Phase 1 and Phase 2 permit updates, consistent with Washington Department of Ecology's 2005

Stormwater Management Manual, including low impact development techniques, on-site stormwater detention for new and redeveloped projects, and control of point sources that discharge directly into the lakes; and 2) Protecting and restoring water quality and other ecological functions in tributaries to reduce effects of urbanization. This involves protecting and restoring forest cover, riparian buffers, wetlands, and creek mouths by revising and enforcing critical areas ordinances and Shoreline Master Programs, incentives, and flexible development tools.

Priority 6 – Improve Riparian Vegetation, Reduce Impervious Coverage

Similar to the priorities listed above, improved riparian vegetation and reduction in impervious surfaces are emphasized in the *WRIA 8 Conservation Plan*. Nearly all of the specific project sites listed in Tables 3 and 4 include some form of protecting and improving riparian vegetation and several include reduction in impervious surface coverage. Examples of opportunities on public property, in order of priority rank, include (see Section 6.2 and Appendix C):

Site Number	Location
27	Houghton Beach Park (vegetation)
9	Waverly Park (vegetation)
17	David Brink Park (vegetation)
23	Marsh Park (vegetation)
13	Marina Park (vegetation)
21	Settler's Landing (vegetation)
23	Marsh Park (impervious surfaces)
11	Waverly Park (impervious surfaces)
15	Street-end Park (impervious surfaces)

8.6 Priority 7 – Reduce Aquatic Non-Native Invasive Weeds

While not specifically listed in the *WRIA 8 Conservation Plan*, reduction of aquatic invasive weeds from Lake Washington, particularly Eurasian watermilfoil and white water lily, is emphasized in Section 6.2. In particular, the nearshore areas surrounding both Juanita Bay and Yarrow Bay have large monocultures of these invasive aquatic plants. Growth of white water lily is particularly troublesome near the mouth of Forbes Creek, extending south along the shoreline of Juanita Bay Park.

Additionally, many other areas along the City's waterfront have also been subject to extensive growth of Eurasian watermilfoil. Not only are aquatic weeds a problem for boats and swimmers, but they also tend to reduce dissolved oxygen to lethal levels for fish, hampering foraging opportunities. As noted previously, nuisance-motivated control of invasive vegetation using herbicides has been approved by Ecology for the Yarrow Shores Condominiums, and the Carillon Point Marina and condominiums through 2011 (The Watershed Company 2006). Long-term control of aquatic non-native invasive plants in Lake Washington will be very difficult to achieve without coordinated inter-jurisdictional collaboration, including involvement and leadership from Washington State..

8.7 Priority 8 –Improve Water Quality and Reduce Sediment and Pollutant Delivery

Although most of the streams and their basins located within the City are outside of shoreline jurisdiction, except the lower sections of Yarrow Creek and Forbes Creek which are both within the boundaries of shoreline associated wetlands, their impacts to shoreline areas should not be discounted. Many of these streams have the potential to provide fish and wildlife habitat. They are also a common receiving body for non-point source pollution, which in turn delivers those contaminants to shoreline waterbodies.

Several actions focused on addressing water quality and stormwater controls include (derived from WRIA 8 watershed-wide actions list).

- Expand/Improve Incentives Programs
- Improve Enforcement of Existing Land Use and Other Regulations
- Increase Use of Low Impact Development and Porous Concrete
- Provide Incentives for Developers to Follow Built Green™ Checklist Sections Benefiting Salmon

These recommendations emphasize the use of low impact development techniques, on-site stormwater detention for new and redeveloped projects, and control of point sources that discharge directly into surface waters. They involve protecting and restoring forest cover, riparian buffers, wetlands, and creek mouths by revising and enforcing critical areas ordinances and Shoreline Master Programs, incentives, and flexible development tools.

8.9 Priority 9 – Acquisition of Shoreline Property for Preservation, Restoration, or Enhancement Purposes

The City should explore opportunities to protect natural areas or other areas with high ecological value or restoration potential via property acquisition. Mechanisms to purchase property would likely include collaboration with other stakeholder groups including representatives from local government, businesses and the general public in order to develop a prioritized list of actions. Many of the undeveloped properties located along the western edge of the Yarrow Bay wetland, which are highly encumbered by the presence of this high quality wetland, may be available for acquisition geared at preserving their overall function. Other properties throughout the more developed shoreline areas within the City may be available for acquisition both for preservation but also to act as a showcase for restoration potential.

8.10 Priority 10 – City Zoning, Regulatory, and Planning Policies

City Zoning, Regulatory, and Planning Policies are listed as being of lower priority in this case simply because they have been the subject of a thorough review and have recently been updated accordingly. Notably, the City's Critical Areas Ordinance was updated (April 2003) consistent with the Best Available Science for critical areas, including those within the shoreline area. For the time being, it is considered more important to capitalize on this Restoration Plan by focusing on implementing projects consistent with the updated SMP policies.

Unimplemented or unused policies, by themselves, will not improve habitat. As time goes by, further review and potential updating of these policies may increase in priority. Policy-related items in this category as listed in previous sections include Comprehensive Plan Policies (Section 5.2), Critical Areas Regulations (Section 4.3), and Stormwater Planning (Section 5.4).

The City received its final NPDES Phase II permit in February 2007 from Ecology. The NPDES Phase II permit is required to cover the City's stormwater discharges into regulated lakes and streams. Under the conditions of the permit, the City must protect and improve water quality through public education and outreach, detection and elimination of illicit non-stormwater discharges (e.g., spills, illegal dumping, wastewater), management and regulation of construction site runoff, management and regulation of runoff from new development and redevelopment, and pollution prevention and maintenance for municipal operations.

The City conducts all of the above at some level already, but significant additional effort may be needed to document activities and to alter or upgrade programs. The City has various programs to control stormwater pollution through maintenance of public facilities, inspection of private facilities, water quality treatment requirements for new development, source control work with businesses and residents, and spill control and response. Monitoring may be required as part of an illicit discharge detection and elimination program, for certain construction sites, or in waterbodies with a Total Maximum Daily Load (TMDL) Plan for particular pollutants. General water quality monitoring concerns include: a) stormwater quality; b) effectiveness of best management practices; and c) effectiveness of the stormwater management program.

9. CONCLUSIONS

This plan provides multiple programmatic and site-specific opportunities for restoring the City's shoreline areas that outline opportunities to achieve a net benefit in ecological conditions. The *Final Shoreline Analysis Report* has documented the following as key ecological impairments within the Kirkland shoreline areas: Lack of riparian vegetation and large woody debris, extensive shoreline armoring, extensive overwater coverage, nutrient and toxic inputs from runoff, and invasive aquatic vegetation. Ecological benefits that would be realized by implementing this plan include: increased use of soft approaches for shoreline stability and corresponding reductions in low-functioning hard shorelines; increased organic inputs, habitat, and filtration from shoreline riparian vegetation; improved wildlife corridor connectivity; improved habitat for salmon; displacement of noxious vegetation; and eventual introduction of woody debris.

Restoration planning is a new element of the SMP. As such, implementation of this plan will require additional City efforts and resources to implement the policies of this plan.

10. REFERENCES

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APPENDIX A

CITY OF KIRKLAND RESOLUTION R-4510
RATIFYING THE WRIA 8 CHINOOK SALMON CONSERVATION PLAN

RESOLUTION NO. R-4510

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND RATIFYING THE WATER RESOURCE INVENTORY AREA (WRIA) 8 CHINOOK SALMON CONSERVATION PLAN

WHEREAS, in March 1999, the National Oceanic and Atmospheric Administration (NOAA) Fisheries listed the Puget Sound Chinook salmon evolutionary significant unit as a threatened species under the Endangered Species Act (ESA); and

WHEREAS, in November 1999, the United States Fish and Wildlife Service (USFWS) listed the Puget Sound bull trout distinct population segment as a threatened species under the ESA; and

WHEREAS, under the ESA, it is illegal to take a listed species, and the ESA defines the term "take" to include actions that could harm listed species or their habitat; and

WHEREAS, actions that are directly or indirectly authorized by local governments could potentially expose local governments to civil or criminal penalties under the ESA; and

WHEREAS, under the ESA, Section 4(f), NOAA Fisheries (for Chinook salmon) and USFWS (for bull trout) are required to develop and implement recovery plans to address the recovery of the species; and

WHEREAS, an essential ingredient for the development and implementation of an effective recovery program is coordination and cooperation among federal, state, and local agencies, tribes, businesses, researchers, non-governmental organizations, landowners, citizens, and other stakeholders as required; and

WHEREAS, Shared Strategy for Puget Sound, a regional non-profit organization, has assumed a lead role in the Puget Sound response to developing a recovery plan for submittal to NOAA Fisheries and the USFWS; and

WHEREAS, Shared Strategy intends that its recovery plan will include commitments from participating jurisdictions and stakeholders; and

WHEREAS, local jurisdictions have authority over some habitat-based aspects of Chinook survival through land use and other policies and programs; and the state and tribes, who are the legal co-managers of the fishery resource, are responsible for addressing harvest and hatchery management in WRIA 8; and

WHEREAS, in WRIA 8, habitat actions to significantly increase Chinook productivity trends are necessary, in conjunction with other recovery efforts, to

avoid extinction in the near term and restore WRIA 8 Chinook to viability in the long term; and

WHEREAS, the City values ecosystem health; water quality improvement; flood hazard reduction; open space protection; and maintaining a legacy for future generations, including commercial, tribal, and sport fishing, quality of life, and cultural heritage; and

WHEREAS, the City supports cooperation at the WRIA level to set common priorities for actions among partners, efficient use of resources and investments, and distribution of responsibility for actions and expenditures;

WHEREAS, 27 local governments in WRIA 8 jointly funded development of *The WRIA 8 Steering Committee Proposed Lake Washington/Cedar/Sammamish Watershed Chinook Salmon Conservation Plan* (the Plan), published February 25, 2005, following public input and review; and

WHEREAS, while the Plan recognizes that salmon recovery is a long-term effort, it focuses on the next ten years and includes a scientific framework, a start-list of priority actions and comprehensive action lists, an adaptive management approach, and a funding strategy; and

WHEREAS, the City has consistently implemented habitat restoration and protection projects, and addressed salmon habitat through its land use and public outreach policies and programs over the past five years; and

WHEREAS, it is important to provide jurisdictions, the private sector and the public with certainty and predictability regarding the course of salmon recovery actions that the region will be taking in the Lake Washington/Cedar/Sammamish Watershed, including the Puget Sound nearshore; and

WHEREAS, if insufficient action is taken at the local and regional level, it is possible that the federal government could list Puget Sound Chinook salmon as an endangered species, thereby decreasing local flexibility.

BE IT RESOLVED by the City Council of the City of Kirkland as follows:

Section A: The City hereby ratifies *The WRIA 8 Steering Committee Proposed Lake Washington/Cedar/Sammamish Watershed Chinook Salmon Conservation Plan,* dated February 25, 2005 (the Plan). Ratification is intended to convey the City's approval and support for the following:

1. The following goals for the Plan:
    a) The Plan mission statement to conserve and recover Chinook salmon and other anadromous fish, focusing on preserving, protecting and restoring habitat with the intent to recover listed species, including sustainable, genetically diverse, harvestable populations of naturally spawning Chinook salmon.

b) The multiple benefits to people and fish of Plan implementation including water quality improvement; flood hazard reduction; open space protection; and maintaining a legacy for future generations, including commercial, tribal and sport fishing, quality of life, and cultural heritage.

2. Continuing to work collaboratively with other jurisdictions and stakeholders in the Lake Washington/Cedar/Sammamish Watershed (WRIA 8) to implement the Plan.

3. Using the scientific foundation and the conservation strategy as the basis for local actions recommended in the plan and as one source of best available science for future projects, ordinances, and other appropriate local government activities.

4. Adopting an adaptive management approach to Plan implementation and funding to address uncertainties and ensure cost-effectiveness by tracking actions, assessing action effectiveness, learning from results of actions, reviewing assumptions and strategies, making corrections where needed, and communicating progress. Developing and implementing a cost-effective regional monitoring program as part of the adaptive management approach.

5. Using the comprehensive list of actions, and other actions consistent with the Plan, as a source of potential site specific projects and land use and public outreach recommendations. Jurisdictions, agencies, and stakeholders can implement these actions at any time.

6. Using the start-list to guide priorities for regional funding in the first ten years of Plan implementation, and implementing start-list actions through local capital improvement projects, ordinances, and other activities. The start-list will be revised over time, as new opportunities arise and as more is learned through adaptive management.

7. Using an adaptive approach to funding the Plan through both local sources and by working together (within WRIA 8 and Puget Sound) to seek federal, state, grant, and other funding opportunities. The long-term ultimate goal is to fund the Plan through a variety of sources at the current 2004 level plus 50 percent, recognizing that this resolution cannot obligate future councils to financial commitment and that the funding assumptions, strategies, and options will be revisited periodically.

8. Forwarding the Plan to appropriate federal and state agencies through Shared Strategy for Puget Sound, to be included in the Puget Sound Chinook salmon recovery plan.

Section B: The City recognizes that negotiation of commitments and assurances/conditions with appropriate federal and state agencies will be an iterative process. Full implementation of this Plan is dependent on the following:

1. NOAA Fisheries will adopt the Plan, as an operative element of its ESA Section 4(f) recovery plan for Puget Sound Chinook salmon.

2. NOAA Fisheries and USFWS will:
   a) take no direct enforcement actions against the City under the ESA for implementation of actions recommended in or consistent with the Plan,
   b) endorse the Plan and its actions, and defend the City against legal challenges by third parties, and
   c) reduce the regulatory burden for City activities recommended in or consistent with the Plan that require an ESA Section 7 consultation.

3. Federal and state governments will:
   a) provide funding and other monetary incentives to support Plan actions and monitoring activities,
   b) streamline permitting for projects implemented primarily to restore salmonid habitat or where the actions are mitigation that further Plan implementation,
   c) offer programmatic permitting for local jurisdiction actions that are consistent with the Plan,
   d) accept the science that is the foundation of the Plan and support the monitoring and evaluation framework,
   e) incorporate actions and guidance from the Plan in future federal and state transportation and infrastructure planning and improvement projects, and
   f) direct mitigation resources toward Plan priorities.

Section C: This resolution does not obligate the City Council to future appropriations beyond current authority.

Passed by majority vote of the Kirkland City Council in open meeting this 21st day of June, 2005.

Mary Alice Burleigh
Mayor

ATTEST:

Victoria L. Davies
Acting City Clerk

APPENDIX B

BLANK RESTORATION PROJECT RANKING FORM

Ranking Form

Number
Site
Activity

Description

Section A: Ecological Considerations		**Area or Distance**	**Rating**	**Weighting Factor**	**Total**
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)			1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)			1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)			2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)			1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).			0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)			1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)			0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).			0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).			0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)			1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)			1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)			1	0.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).			1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter			1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)			0.5	0
	Section A Subtotal				0.0
Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)			0.5	0
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)			0.5	0
B3	Cost of the project (high cost = 0, low cost = 5)			0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)			0.5	0
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)			0.5	0
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)			0.5	0
	Section B Subtotal				0
	Grand Total				0.0

	Notes
A1	Enter the square footage of riparian buffer area that will be enhanced with native vegetation. If the enhancement area is greater than 4,000 square feet, enter 4,000.
A2	Enter the linear footage of shoreline where gradient will be restored. If the project restores gradient over a distance greater than 100 feet, enter 100 feet)
A3	Enter the linear footage of shoreline where armoring will be removed. If the project removes armoring over a distance greater than 100 feet, enter 100 feet)
A4	Enter the square footage of overwater cover that will be removed near the shoreline (0 to 30 feet from the OHWM). If more than 200 square feet of overwater cover will be removed, enter 200.
A5	Enter the square footage of overwater cover that will be removed more than 30 feet from shore. If more than 300 square feet of overwater cover will be removed, enter 300.
A6	Enter the number of piles that will be removed near the shoreline (0 to 30 feet from the OHWM). If more than 20 , enter 20.
A7	Enter the number of piles that will be removed more than 30 feet from shore. If more than 30, enter 30.
A8	If the project increases light transmission through an existing nearshore structure (pier) without reducing its overwater footprint (i.e. by replacing wooden decking with grating), enter the square footage of overwater cover that will be daylighted (0 to 30 feet from the OHWM). If more than 200 square feet of nearshore overwater cover will be daylighted, enter 200.
A9	If the project increases light transmission through an existing off-shore structure (pier) without reducing its overwater footprint (i.e. by replacing wooden decking with grating), enter the square footage of overwater cover that will be daylighted (More than 30 feet from the OHWM). If more than 300 square feet of off-shore overwater cover will be daylighted, enter
A10	Enter the straight-line distance (in feet) to the nearest tributary. If the project is more than 1/4 mile (1,320 feet) from the nearest tributary, enter "0" in the rating column.
A11	Enter the distance, measured along the shoreline in feet, to the edge of the nearest high-quality shoreline habitat. If the project is more than 1/4 mile (1,320 feet) from the nearest high-quality shoreline habitat, enter "0" in the rating column.
A12	Enter 5 if the project has a high liklihood of improving ecological functions in the local area, 3 if the project may improve local ecological functions but there is some uncertainty of success, and 0 if there is little chance of improvement or there is a great deal of uncertainty associated with the success of the project.
A13	Enter "1" if there is some active environmental problem that will be addressed by the project, such as shoreline erosion or flooding.
A14	Enter the number of the shoreline segment where the project is located. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; if it is in Segment C, enter 2; if it is in Segment D, enter 1.

APPENDIX C

PROJECT RANKING FORMS

Number 1
Site Juanita Beach Park
Activity Install deck grating
Description The large overwater boardwalk with skirting, which forms the designated swimming area, has the potential for impact reduction by installing deck grating in the pier decking and potentially removing or redesigning the breakwater in order to improve migratory conditions for juvenile salmonids and water circulation.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	20	1	1	5.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)	30	1	0.5	2.5
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	300	1	1	3.9
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	100	1	1	4.6
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	4	1	4.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				23.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	4	0.5	2
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	2	0.5	1
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8
	Grand Total				31.0

Number 2
Site Juanita Beach Park
Activity In-stream habitat improvement
Description Potential in-stream habitat improvements exist at the mouth of Juanita Creek (delta), including large woody debris installation and improvements to native vegetative cover. The WRIA 8 Chinook Salmon Conservation Plan includes potential restoration of the mouth of Juanita Creek through the removal of bank armoring and returning the mouth to a more natural outlet.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	0	1	1	5.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	0	1	1	5.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	5	1	5.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	5	0.5	2.5
	Section A Subtotal				34.5

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	2	0.5	1
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	1	0.5	0.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	3	0.5	1.5
	Section B Subtotal				6
	Grand Total				40.5

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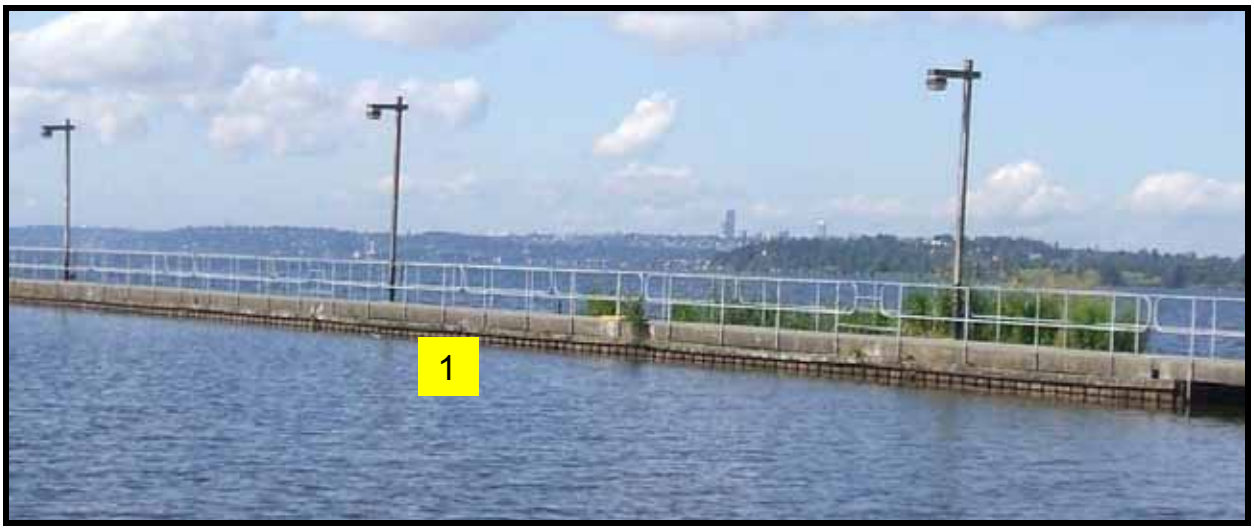
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Number 3
Site Forbes Creek - Juanita Bay Park
Activity Remove invasive vegetation
Description Invasive vegetation, primarily reed canarygrass, purple and garden loosestrife, and Himalayan blackberry in the terrestrial zones and white water lily in the aquatic zone, is currently growing throughout the Forbes Creek riparian corridor and Juanita Bay Park. The primary objective for the less developed landscape zones is removal of invasive species and replacement with native species, as well as supplementation of existing native vegetation to increase species and habitat diversity.

Section A: Ecological Considerations		**Area or Distance**	**Rating**	**Weighting Factor**	**Total**
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	1	1	1	5.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	0	1	1	5.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				20.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	2	0.5	1
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	2	0.5	1
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	3	0.5	1.5
	Section B Subtotal				9
	Grand Total				29.0

Number 4
Site Forbes Creek - Juanita Bay Park
Activity Improve fish passage and habitat
Description The pedestrian trail/trestle across Juanita Bay to the west of 98th Street covers the mouth of Forbes Creek, potentially inhibiting salmon migration. The surface of the walkway could be re-decked with a grated material to reduce shading impacts to the aquatic environment.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	0	1	1	5.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	0	1	1	5.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	2	1	2.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				14.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	4	0.5	2
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				9.5
	Grand Total				23.5

Number 5
Site Forbes Creek - Juanita Bay Park
Activity Old pier pile removal

Description Many remnant pier piles located within Juanita Bay could be removed.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	20	1	1	5.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)	30	1	0.5	2.5
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	800	1	1	2.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	0	1	1	5.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				17.5

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	0	0.5	0
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				6.5
	Grand Total				24.0

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Number 6
Site Lake Ave W Street End Park
Activity Remove invasive vegetation
Description This small street-end park consists of primarily lawn area with a moderate amount of shoreline vegetation (trees and shrubs). An abundance of invasive vegetation (ivy/reed canarygrass) could be removed and replaced with additional native vegetation to improve shoreline conditions for juvenile salmonids.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	1000	1	1.4	1.8
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)			0	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A	4	1	4.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				8.8

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				11
	Grand Total				19.8

Number 7
Site Lake Ave W Street End Park
Activity Reduce in-water structures

Description An old remnant moorage slip located near the south property line that is not connected to shore could be removed to reduce in- and overwater structures.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	30	1	1	0.8
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	56	1	0.5	0.5
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	2	1	1	0.5
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)	3	1	0.5	0.3
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	1	1	1.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				3.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				9.5
	Grand Total				12.5

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WELCOME TO KIRKLAND
LAKE AVENUE WEST PARK
CLOSED FROM 10:00 PM - DAWN

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Number 8
Site Waverly Beach Park
Activity Reduce overwater cover

Description Reduction of overwater cover by the existing pier through the installation of deck grating and removing pier skirting as feasible.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	4	1	4.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				7.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	2	0.5	1
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7.5
	Grand Total				14.5

Number 9
Site Waverly Beach Park
Activity Reduce shoreline armoring

Description Removing or minimizing the impacts of shoreline armoring.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)	100	1	1	5.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	4	1	4.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				19.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	4	0.5	2
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8
	Grand Total				27.0

Number 10
Site Waverly Beach Park
Activity Enhance shoreline vegetation

Description Supplementation of nearshore native vegetation to improve habitat conditions for juvenile salmonids.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				10.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	2	0.5	1
	Section B Subtotal				11.5
	Grand Total				21.5

Number 11
Site Waverly Beach Park
Activity Reduce stormwater runoff

Description The impact of existing impervious surfaces (paved parking areas) could be reduced through the use of pervious materials, relocation, or minimization.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				3.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8.5
	Grand Total				11.5

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Number 12
Site Marina Park
Activity Reduce overwater cover

Description Reducing overwater cover through the installation of deck grating on the existing piers.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	200	1	1	5.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.5	2.5
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				13.5

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	2	0.5	1
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7.5
	Grand Total				21.0

Number 13
Site Marina Park
Activity Reduce shoreline armoring

Description Removing or minimizing the impacts of shoreline armoring.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)	100	1	1	5.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	4	1	4.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				19.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	2	0.5	1
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7
	Grand Total				26.0

Number 14
Site Marina Park
Activity Enhance shoreline vegetation

Description Improving nearshore native vegetation.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	2000	1	1.4	3.5
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				6.5

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	2	0.5	1
	Section B Subtotal				11.5
	Grand Total				18.0

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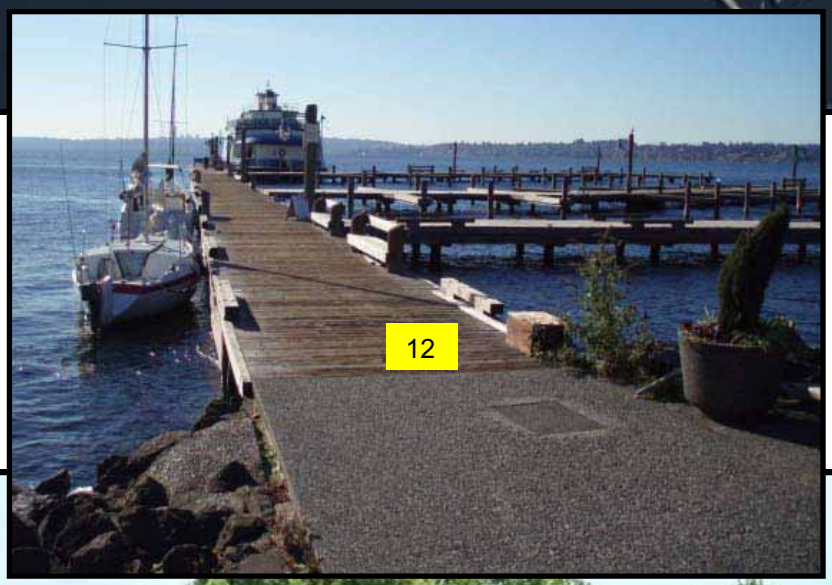
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Number 15
Site Street-End Park
Activity Reduce stormwater runoff

Description This small street-end park consists of an adjacent parking area located within the shoreline jurisdiction that likely drains surface runoff directly to Lake Washington. Future use of pervious material should be explored any time repairs are proposed.

Section A: Ecological Considerations		**Area or Distance**	**Rating**	**Weighting Factor**	**Total**
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	2	1	2.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				2.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	1	0.5	0.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				6
	Grand Total				8.0

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Number 16
Site David Brink Park
Activity Install deck grating

Description Reducing overwater cover through the installation of deck grating on the existing piers.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	2	1	2.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				5.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	4	0.5	2
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				9
	Grand Total				14.0

Number 17
Site David Brink Park
Activity Reduce shoreline armoring

Description Removing or minimizing the impacts of shoreline armoring.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)	100	1	1	5.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	5	1	5.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				20.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7.5
	Grand Total				27.5

Number 18
Site David Brink Park
Activity Reduce in-water structures

Description Removing unused remnant pier piles.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)	5	1	1	1.3
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)	4	1	0.5	0.3
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	1	1	1.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A	0	1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				2.6

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	2	0.5	1
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				9
	Grand Total				11.6

Number 19
Site David Brink Park
Activity Enhance shoreline vegetation

Description Improving nearshore native vegetation.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				10.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	2	0.5	1
	Section B Subtotal				11.5
	Grand Total				21.5

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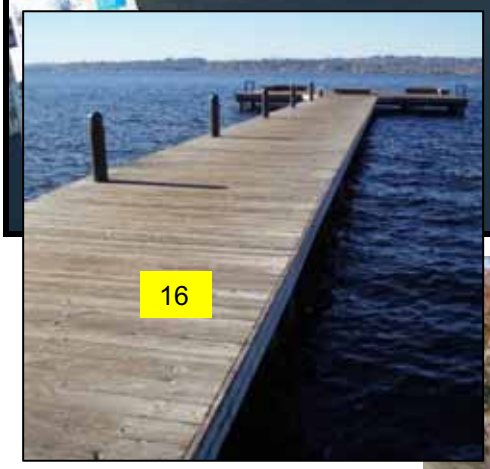
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Number 20
Site Settler's Landing
Activity Enhance shoreline vegetation

Description This small street-end park contains the opportunity to improve shoreline habitat by improving native vegetative cover.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	1000	1	1.4	1.8
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	1	1	1.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				2.8

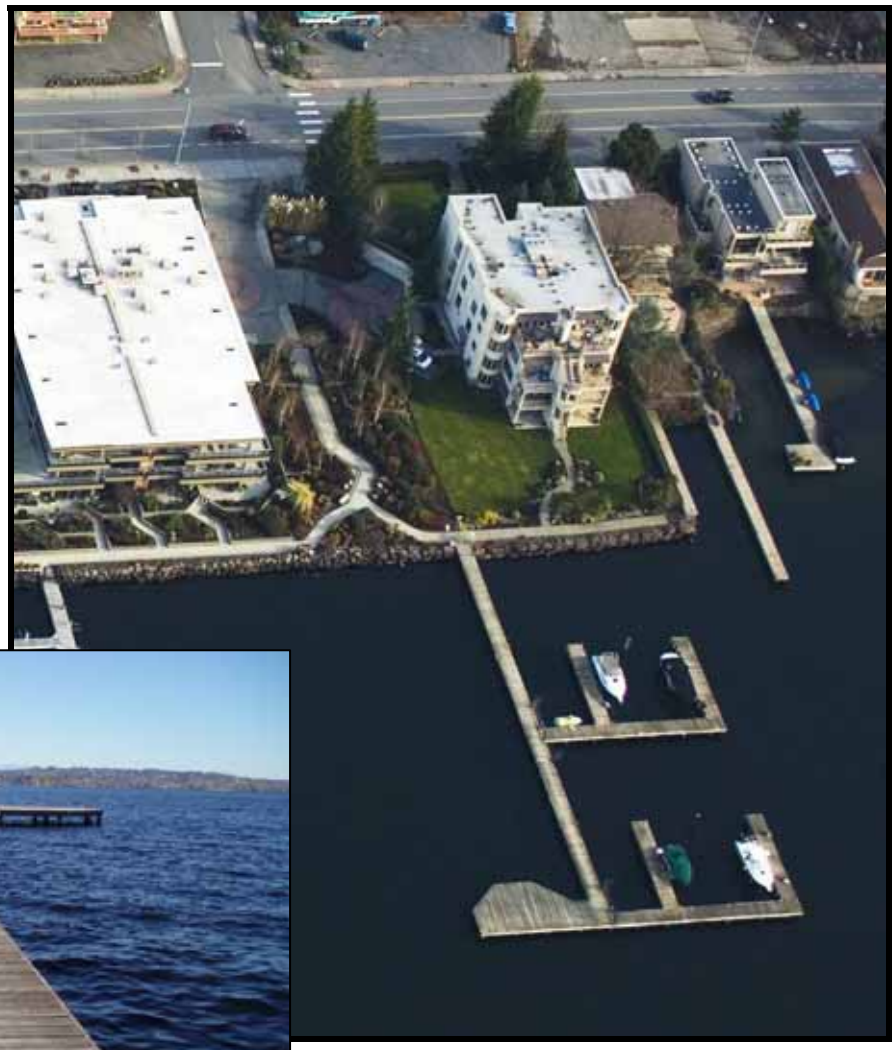
Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	2	0.5	1
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				10
	Grand Total				12.8

Number 21
Site Settler's Landing
Activity Install deck grating

Description The existing shared use pier (public and private) could potentially be re-decked with grated materials to reduce shading impacts.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	180	1	0.4	1.8
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	2	1	2.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				4.8

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8.5
	Grand Total				13.3



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Number 22
Site Marsh Park
Activity Install deck grating

Description Reduction of overwater cover by the existing pier through the installation of deck grating.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	2	1	2.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				5.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8.5
	Grand Total				13.5

Number 23
Site Marsh Park
Activity Reduce shoreline armoring

Description Removal or minimization of shoreline armoring.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)	100	1	1	5.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	5	1	5.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				20.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7.5
	Grand Total				27.5

Number 24
Site Marsh Park
Activity Enhance shoreline vegetation

Description Improvement of nearshore native vegetation.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				10.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	2	0.5	1
	Section B Subtotal				11.5
	Grand Total				21.5

Number 25
Site Marsh Park
Activity Reduce stormwater runoff

Description The impact of existing impervious surfaces (paved parking areas) could be reduced through the use of pervious materials, relocation, or minimization.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)		0	1	0.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				3.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				9
	Grand Total				12.0

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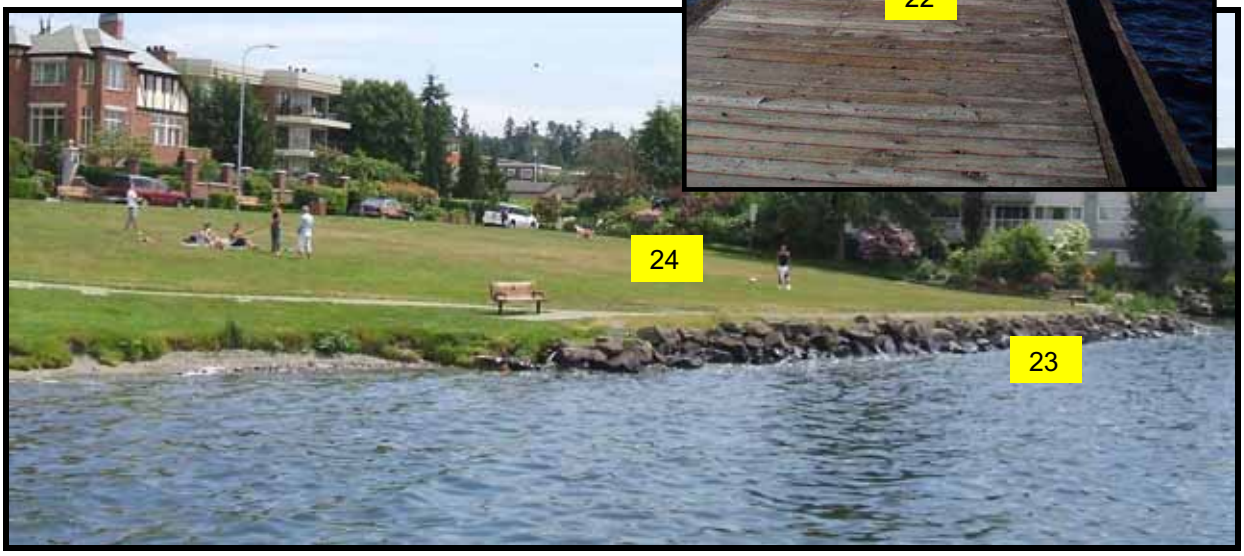
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Number 26
Site Houghton Beach Park
Activity Install deck grating

Description Reducing overwater cover through the installation of deck grating on the existing piers and removing pier skirting as feasible.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).	200	1	0.4	2.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).	300	1	0.2	1.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	700	1	1	2.3
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				8.3

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	4	0.5	2
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				8.5
	Grand Total				16.8

Number 27
Site Houghton Beach Park
Activity Reduce shoreline armoring

Description Removing or minimizing the impacts of shoreline armoring.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)		0	1.4	0.0
A2	Project restores shoreline gradient (yes=1, no=0)	100	1	1	5.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)	100	1	2	10.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	700	1	1	2.3
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	5	1	5.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				22.3

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	3	0.5	1.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	3	0.5	1.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	0	0.5	0
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	5	0.5	2.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	4	0.5	2
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	0	0.5	0
	Section B Subtotal				7.5
	Grand Total				29.8

Number 28
Site Houghton Beach Park
Activity Enhance shoreline vegetation

Description Improving nearshore native vegetation.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	700	1	1	2.3
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)		0	1	0.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				12.3

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	5	0.5	2.5
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	5	0.5	2.5
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	5	0.5	2.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	3	0.5	1.5
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	3	0.5	1.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	2	0.5	1
	Section B Subtotal				11.5
	Grand Total				23.8

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Number 29
Site Yarrow Bay
Activity Remove invasive vegetation
Description The biological need for control of aquatic invasive species in Yarrow Bay should be assessed. Both Yarrow Shores Condominiums and the Carillon Point Marina and condominiums have permits from Ecology to use chemical controls on milfoil and white water lily, which have become a nuisance to boaters and swimmers.

Section A: Ecological Considerations		Area or Distance	Rating	Weighting Factor	Total
A1	Project enhances native riparian vegetation, either nearshore emergent or upland plants within the buffer zone (yes=1, no=0)	4000	1	1.4	7.0
A2	Project restores shoreline gradient (yes=1, no=0)		0	1	0.0
A3	Project reduces artificial shoreline armoring (yes=1, no=0)		0	2	0.0
A4	Project reduces artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A5	Project reduces artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.5	0.0
A6	Project removes in-water structure (i.e. pier piles) from the nearshore (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0)		0	1	0.0
A7	Project removes in-water structure (i.e. pier piles) from off-shore areas (Anywhere beyond 30 feet waterward of OHW; yes=1, no=0)		0	0.5	0.0
A8	Project increases light transmission through an existing artificial overwater cover near the shoreline (Anywhere from 0 to 30 feet waterward of OHW; yes=1, no=0).		0	0.4	0.0
A9	Project increases light transmission through an existing artificial overwater cover in off-shore areas (Areas more than 30 feet from OHW; yes=1, no=0).		0	0.2	0.0
A10	Project is within 1/4 mile of the mouth of a tributary (yes=1, no=0)	0	1	1	5.0
A11	Project is within 1/4 mile of other high-quality shoreline habitats (yes=1, no=0)	0	1	1	5.0
A12	Likelihood of improving local ecological functions (high=5, medium=3, low=0)	N/A	3	1	3.0
A13	Is there some ecological risk associated with not conducting restoration at the site (yes=1, no=0).	N/A	0	1	0.0
A14	Urbanization within overall shoreline segment. If the project is in Segment A, enter 4; if it is in Segment B, enter 5; in Segment C, enter 2; in Segment D, enter	N/A		1	0.0
A15	Project identified in, or is consistent with, adopted watershed restoration plans & policies (regional WRIA 8 high priority = 5, local high priority = 3, low priority =1, no previous reference = 0)	N/A	0	0.5	0
	Section A Subtotal				20.0

Section B: Feasibility Considerations					
B1	Access and/or constructability (easy = 5, difficult = 0)	N/A	2	0.5	1
B2	Regulatory requirements (simple permitting = 5, difficult permitting = 0)	N/A	4	0.5	2
B3	Cost of the project (high cost = 0, low cost = 5)	N/A	3	0.5	1.5
B4	Maintenance/repair costs (low = 5, high = 0)	N/A	2	0.5	1
B5	Project will be consistent with or enhance existing public access, recreation & aesthetic values (high = 5, low = 0)	N/A	5	0.5	2.5
B6	Possibility of cost sharing w/ other funding sources (grants/mitigation) (high = 5, low = 0)	N/A	3	0.5	1.5
	Section B Subtotal				9.5
	Grand Total				29.5

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APPENDIX D

PROPOSED OUTREACH AND EDUCATION ACTIONS

Draft Proposed Outreach & Education Actions for the Cedar Population (Tier 1 and 2 Subareas) (by WRIA 8 Public Outreach Committee)

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
C701	Riparian vegetation displaced by lawn, invasives, or exotics; water quality compromised by garden chemicals, metals, sediment.; higher water use at times when flows lowest.	Protect & restore riparian vegetation to provide sources of large woody debris/pools/riffles; protect& restore water quality, maintain instream flows	Shoreline property owners and general public	Update and distribute streamside living materials such as *Streamside Savvy*, *Salmon Friendly Gardening Practices, or Going Native*. Distribute to all shoreline property owners and make available at City Hall, libraries, and retail establishments such as home & garden centers.	High	Ongoing or have been distributed in past.	Low-Medium
C702	Riparian vegetation displaced by lawn, invasives, or exotics; water quality compromised by landscape practices; higher water use at times when flows lowest.	Protect & restore riparian vegetation to provide sources of large woody debris/pools; protect& restore water quality, maintain instream flows	Shoreline property owners	Offer shoreline property owners a workshop in streamside living. Include tips on landscape design/maintenance appropriate for riverside properties and shoreline stabilization (alternatives to vertical wall bulkhead design). Feature designers and contractors who have both experience and recognition in salmon friendly design.	High	Seattle Public Utilities and Snohomish County Streamside Stewardship Courses, Issaquah's Creekside Living workshops	Low
C703	Smaller parcels lost to development or possible habitat degradation without financial incentives to conserve that are offered to owners of larger parcels	Protect good salmon habitat that could provide source of shelter, pools, riffles, food	Shoreline property owners	Expand use tax credit incentives to encourage protection of smaller properties not currently eligible for existing programs.	High	Public Benefits Rating System, Open Space Current Use Tax (CUT)	Variable (Low budget
C704	Channel confinement from bulkheads, levees, and armoring; loss of riparian vegetation	Soften shorelines, restore floodplain connectivity and channel complexity	Shoreline property owners	Reduce permit fees for shoreline stabilization if design is salmon friendly (employing alternatives to dikes, levees, revetments, and vertical wall bulkheads). Also reduce permit fees (where applicable) for streamside restoration and removal & replacement of non-native vegetation.	High		Low

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
C705	Riparian vegetation displaced by lawn, invasives, or exotics; water quality compromised by garden chemicals, metals, sediment. Higher water use at times when flows lowest.	Protect & restore riparian vegetation; protect& restore water quality, maintain instream flows, stabilize slopes with native riparian vegetation. Increase likelihood of achieving these goals by bringing on board industry with a large influence over the landscapes within watershed.	Landscape Contractors	Offer educational opportunities to landscape designers/contractors on riparian design/naturescaping, local plant sourcing, proper installation techniques, invasive species, efficient watering techniques and use of compost to build healthy soils, control erosion and reduce need for supplemental irrigation. Augment training to accommodate English as Second Language participants.	High	Washington Assoc. of Landscape Professionals (WALP) trainings	Low - Medium (industry supported)
C706	Reduced forest cover; increased impervious areas/lack of infiltration/ground water recharge	Protect forest cover, reduce impervious surface area, increase infiltration back into soil and ground water recharge, decrease water use.	Design & Building Profession-als	Provide education to architects, landscape architects, engineers, and developers on sustainable building/design practices. Work with professional associations to highlight building practices that maintain watershed health. Include Low Impact Development, importance of maintaining canopy cover and limiting impervious surfaces.	High	City of Seattle Business & Industry Venture, King County Green Building, LEEDS, Construction Works and other Solid Waste Division outreach programs	Low – Medium
C707	Reduced forest cover; increased impervious areas/lack of infiltration/ground water recharge	Control stormwater runoff to more closely mimic natural hydrology, reduce paving and impervious areas, increase infiltration, protect forest cover	Design & Building Profession-als	Use recognition as a means to encourage more salmon sustainable designs and construction. In addition to professional association awards, expand recognition to include merit awards celebrated by popular magazines read by a broader sector of the general public. Promote through design competitions and media coverage the use of “rain gardens” and other low impact development practices that mimic natural hydrology. Combine a home/garden tour or “Street of Dreams” type event featuring these landscape	High	AIA, ASLA, Sunset Magazine, and Seattle Times Home and Garden awards, King County EnviroStars	

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
				/engineering treatments			
C708	Insufficient flow	Maintain instream flows	High-end water users, general public	Extend availability of water conservation incentive programs (such as rebates for efficient toilets, appliances, free indoor conservation kits, or free landscape irrigation audits) to decrease household and commercial water consumption.	High	Smart & Healthy Landscapes, Water Cents	Low
C709	Water quality compromised by garden chemicals, metals, sediment. Higher water use at times when flows lowest.	Protect water quality from degradation by pesticides and soil erosion, maintain instream flows by reducing water used for irrigation, increase organic content in soils to increase water holding capacity	General public	Target Natural Yardcare Neighborhoods Program to include more communities in the Cedar sub-basin. Expand curricula to offer more landscaping guidelines specific to shoreline residences.	High	Ongoing program	Medium - High
C710	Water quality degraded by cleaners, oils, grit, and paint; stream flows reduced by excessive water use	Protect and restore water quality and maintain flows	General Public	Coordinate with local business community to encourage the use of commercial car washes. (Water quality and salmon conservation could provide a new marketing angle; car dealerships could offer car wash coupons as bonus with car purchase.). Require that car kits be used for all parking lot fund raiser car washes, or offer carwash coupons or as more eco-friendly alternative funding source.	High	Puget Sound CarWash Association Coupon Program.	Variable - Low
C711	All conditions listed above Water quality degraded by toxics and garden chemicals; channel confinement; loss of riparian buffer; use of large woody debris, pools, riffles, reduced channel complexity; riparian vegetation displaced by lawn; high water use when flows lowest.	Increase public watershed literacy awareness of effects on water quality and habitat conditions.	General Public, but in particular, residents of Cedar sub-basin who may not be aware of existence of salmon right within urban area	Support and encourage efforts of Cedar River Naturalist Program to promote voluntary stewardship by focusing on education, monitoring, and maintenance of restoration sites (e.g. Cavanaugh Pond). Continue and expand messaging about how everyday personal actions affect salmon, the Cedar River, and entire watershed.	High	Ongoing program with successful track record since l998	Low-Medium

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
C712	Water quality degraded by toxics	Keep toxics out of water by providing safer alternative	General Public	Increase outreach about availability and locations of Hazardous Waste Collection sites and special collection events.	High	King County Local Hazardous Waste Management Program	Low (cheaper than dealing with illegal dumping)
C713	Water quality degraded by toxics, pesticides, metals, increased nutrient loads, sediments, loss of riparian buffer	Protect and restore water quality	General Public	Publicize emergency call numbers for public to report water quality and quantity problems, non-permitted vegetation clearing, non-permitted in-stream grading, and wood removal incidents.	High	Seattle Public Utilities Surface Water Pollution Prevention Hotline and website	Low
C714	Riparian vegetation displaced by lawn, invasives, and exotics, providing little food value, no source of LWD, or soil stability (sedimentation of gravel beds). Increased water use when flows lowest; increased use of pesticides on less resistant exotics	Restore native riparian vegetation to provide cover and terrestrial food source, reduce soil erosion and sedimentation in gravel beds, protect and restore water quality, maintain instream flows	Shoreline Property Owners and Community	Increase number of native plant salvages. Integrate these salvage opportunities into naturscaping classes; class participants can take home native plants for immediate use both within and surrounding sensitive areas.	High	King and Snohomish County Native Plant Salvage Programs, WSU Cooperative Extension Native Plant Salvage Project partnership with Puget Sound Action Team, Thruston & Mason Counties.	Low
C715	Channel confinement and loss of channel complexity from bulkheads, levees, and armoring; loss of riparian vegetation	Reduce channel confinement, restore riparian vegetation, and floodplain connectivity and channel complexity	Shoreline property owners, general Public	Demonstration Project. Locate property owner in publicly accessible (or viewable) area willing to remove bulkhead, levee, or stream bank armoring and replace it with more ecologically friendly design. Publicize efforts through various means. Demonstration project should contain elements that can be done by average shoreline property owner. Provide information on costs and advantages of alternate treatments.	High – Medium-		Variable
C716	Lack of large woody debris	Overcome public fear and resistance to providing and	Shoreline property owners,	Increase public awareness about the value of large woody debris and native vegetation for flood protection, salmon habitat, and healthy streams. Convey through	High-Medium	Existing King County and US Forest	Low

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
		maintaining woody debris along shorelines and subsequent source of cover, pools, riffles	general public	media (local newspapers, community newsletters); signage along publicly accessible "model" shoreline; and brochures such as King *County's Large Woody Debris and River Safety* and US Forest *Service Large Woody Material: The Backbone of a Stream*. Distribute to all shoreline property owners and to more of general public, especially recreational boaters. Brochures on LWD and boater safety could be made available at appropriate locations such as: the Renton Community Center (where some tubers put in or pull out), the Henry Moses Pool and Water Park, the Renton Public Library (also on the river), and retail locations where inner-tubes, canoes, and kayaks are sold or rented. *Where there is right-of-way or permission from private owners, consider installing kid-friendly signage which addresses the potential dangers that LWD can pose to boaters – along with the value it provides to salmon and the health of the river.. Where possible, locate signs at popular "put-in" and " take-out" spots along the river.*		Service brochures	
C717	All conditions listed above.	Reduce channel confinement, restore riparian vegetation, and floodplain connectivity and channel complexity	Shoreline property owners	Explore possibility of adding a disclosure to Real Estate Sales Agreement describing shorelines as sensitive areas, subject to rules and regulations of City and County. Look to model set by King County.	High – Medium	King County Dept. of Development and Environmental Services	Medium
C718	Water quality compromised by toxics, pesticides, metal fines, and nutrient overloads	Protect and restore water quality.	General Public	Work with auto parts retailers and gas stations to increase potential for collection of used motor oil/transmission fluids. Distribute Water Quality poster series which depicts impacts of everyday practices: washing car, driving car without maintenance, leaving pet wastes unattended, and improperly using lawn chemicals. Promote	High-Medium	Yes, King County Local Hazardous Waste Management *EnviroStars* program	Medium

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
				stormwater best management practices related to parking lot cleaning, storm drain maintenance, and road cleaning. Make printed material available in other languages.		Water Quality Consortium, Businesses for Clean Water	
C719	Channel confinement reduced channel complexity, loss of riparian vegetation	Increase public watershed literacy awareness of effects on water quality and habitat conditions,	Community	Increase citizen involvement in voluntary stewardship programs, focusing on restoration projects to meet the needs of the conservation plan through restoration, education, monitoring and restoration site maintenance	High – Medium	Various: Cedar River Naturalists, Sammamish ReLeaf, Stream Team; Water Tenders	Medium
C720	Water quality degraded by sediment, diminished ground water recharge, flashiness of floods and resultant bed scour	Protect and restore forest cover, increase infiltration, decrease intensity of flood conditions, protect water quality from sediment	General public	Increase outreach efforts about the benefits of trees and basin-wide forest coverage to protect water quality. Clarify issues about hazard trees. Offer seedlings (perhaps provided by a timber company) to replant after potentially hazardous trees are removed. Enlist the help of nurseries/home & garden centers on this education campaign. (Potential new Fathers' Day gift idea: Buy and plant a tree each year for a dad who loves salmon).	High in rural areas; Medium in urban/suburban areas.	Yes, Sammamish ReLeaf; Mountains-to-Sound Greenway; City tree ordinances.	Variable - Medium
C721	All conditions listed.	Protect forest cover, wetlands, headwaters, critical salmon habitat; increase public support for land acquisition and restoration projects, as well as landuse policies.	Shoreline property owners, general public	Identify and encourage shoreline neighborhood and community stewardship associations to foster the ethic of voluntary stewardship. Use these groups to build a bridge between property owners, agencies, and locals governments. Promote watershed health through grassroots messaging. Increased potential for media coverage when efforts initiated at community level.	Medium	Friends of Rock Creek Valley, Friends of Cedar River Watershed, Cedar River Council, Lake Forest Park Stewardship Foundation,	Low
C722	Loss of forest cover, organic content in soils, increase in impervious areas and increased run-off, degraded water quality flashiness during flood conditions.	Protect forest cover, reduce impervious area and runoff, increase infiltration, protect and restore water quality, maintain instream flows	Design/ Build Industry	Create a campaign that tracks demand among community residents for purchasing green homes and remodeling with green building strategies.	Medium	Green Car Program	Low
C723	Degraded water	Cultivate ethic of	Youth	Link education and community service stewardship	Medium	Environmental	Low

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
	quality, instream flows, habitat quality	environmental stewardship; increase watershed awareness and links between manmade habitat and environmental health.		projects. Expand to community outreach to community/technical colleges & universities.		Portal Seattle, Mercer Slough Interns, N. Shore Utility Tour, Water Tenders.	
C724	Riparian vegetation displaced by lawn, invasives, or exotics, providing little food value, source of large woody debris, or soil stability. Water quality compromised by garden chemicals, metals, sediment. Higher water use at times when flows lowest.	Replace lawn and other lower ecological value plantings with riparian buffers and native plants	General public	Encourage neighborhood garden tours of salmon friendly gardens. Help residents visualize alternatives to traditional (and often less eco-friendly) landscape treatments. Offer neighbors assistance with publicity, signage, and volunteer docents. Coordinate with neighborhood garden clubs.	Medium	Existing neighborhood garden tours. Volunteer docents by King County Master Recycler Composters and WSU Master Gardeners.	Low
C725	All conditions discussed above.	Increase awareness about effects of habitat on salmon and watershed health; increase support for land acquisition and restoration efforts as well as landuse policies; inspire shoreline property owners to make changes on their own property.	General public, but in particular Shoreline property owners	Create local informational TV spots that could run on the government cable channels. Focus on those habitat conditions threatening salmon that are affected by our daily personal practices, landscape design and management practices. Showcase good designs to provide models to emulate.	Medium – Low	Salmon Information TV, C-TV,	Variable
C726	All conditions discussed above.	Encourage Design/Build industry professionals to offer more salmon friendly/eco-friendly	Design & Building Profession-als	Use recognition as a means to encourage more salmon sustainable designs and construction. Coordinate with professional association awards in addition to popular magazine merit awards. Continue to recognize businesses that carry out procedures or use products	Medium – Low	American Institute of Architects, American Society of	Low

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
		design solutions.		that protect watershed health.		Landscape Architects, Sunset Magazine, and Seattle Times Home and Garden awards, King County Enviro. Stars.	
C727	All conditions discussed above	Increase watershed literacy and understanding of effects of habitat on salmon	Business Community and General Public	Coordinate with businesses along Cedar that can help with outreach goals. For example, Ivar's Seafoods could promote key messages about salmon conservation on their menus or though game cards. This seafood chain also has other restaurants located within WRIA 8 so it could be cost effective for them to do such a promotion.	Medium	Yes	Low
C728	Water quality degraded by toxics and metal fines.	Reinforce to students and the community the relationship between what goes down storm drain and watershed health via an affordable and easily implemented program.	General Public	Expand storm-drain stenciling program locally and basin-wide. Track locations and dates in a Cedar Basin database.	Medium - Low	Yes	Low
C729	Channel confinement, loss of riparian buffer: sources of large woody debris, pools, riffles; reduced channel complexity,	Inspire shoreline property owners to make changes on their own property by providing good examples; increase public support for land acquisition and restoration efforts as well as landuse policies.	Shoreline property owners and general public	Use government cable channels to follow progress of the site specific restoration projects. Use of video to document projects before, during, and after restoration. Distribute resulting programs to libraries, schools, and communities groups.	Low	Salmon Information TV	Variable
C730	All conditions discussed above.	Improve watershed awareness and	Youth	Focus environmental/science curricula on local watershed issues, with particular emphasis on key	Low-Future	Yes	Medium

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/ Model	Level of Financial Commit.
		possibly prevent future habitat degradation by instilling a better understanding of interrelationship between habitat, daily actions, and watershed health.		factors limiting the Cedar Chinook population.			

Draft Proposed Outreach & Education Actions for Lake Washington
(by WRIA 8 Public Outreach Committee)

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
C729	Shoreline hardening, riparian vegetation displaced by lawn, invasives, or exotics with low ecological value, overwater structures creating sharp light contrast, water quality degraded by effects of landscape practices	Increase awareness that the lakeshore is also a nursery for juvenile salmon. It's possible to make "home improvements" that can benefit both property owner and salmon. [people pets, and planet]	Lakeshore property owners	Promote concept of living with the lake, instead of just on it through public messaging. Foster idea of sharing the shoreline with other species that inhabit the lakeshore. Carry out through workshops, literature, and development of education and marketing campaigns	High	Lakeside Living Workshop Series; King County Lake Stewardship Program	Variable
C730	Shoreline hardening, riparian vegetation displaced by lawn, invasives, or exotics with low ecological value, overwater structures creating sharp light contrast, water quality degraded by effects of landscape practices	Reduce conditions favored by predator species; protect & restore water quality.	Lakeshore property owners	Offer lakeshore property owners a series of workshops on lakeshore living: natural yard care; reduction of lawn size, shoreline buffer planting design/noxious weed management; alternatives to vertical wall bulkheads; salmon friendly dock design; aquatic weed management; environmentally friendly methods of maintaining boats, docks, decks; porous paving options	High	WRIA 8/KCD Lakeside Living Lakeshore Property Owner Workshops, Seattle Public Utilities and Snohomish County Creek Stewardship Programs, City of Issaquah's Creekside Living Program, Natural Yard Care Neighborhoods	Medium-High

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
C731	Forested parcels threatened by development, (even though difficult to build on); creek mouths degraded or unrecognizable (culverted); riparian vegetation replaced by invasives infested along shoreline	Protect and/or restore forest land, critical areas such as wetlands and shallow water rearing habitat. Promote watershed health through grassroots messaging.	Community, but especially lakeshore property owners.	Identify and encourage shoreline neighborhood and community stewardship associations. Use to foster the ethic of voluntary stewardship, set examples for other neighbors to follow, enlist community support to acquire and restore habitat, and to build a bridge between property owners, agencies, and local governments. Increase potential for media coverage when efforts initiated at community level.	High	Lake Forest Park Stewardship Foundation, Save Lake Sammamish, Denny Creek Neighborhood Association	Low
C732	Riparian vegetation displaced by lawn, invasives, or exotics; water quality compromised by garden chemicals, metals, sediment; elevated water temperatures due to increased water use at times when flows lowest.	Protect and improve rearing and migratory habitat; protect and restore water quality	Lakeshore property owners, general public	Update where necessary salmon-friendly educational materials such as *Salmon Friendly Gardening Practices, Going Native, Watershed Waltz and Sammamish Swing* booklets. Print and distribute to the following prioritized audiences: 1)lakeshore property owners 2) Public places such as libraries, city halls, community centers and where permitted, at home improvement centers and other major retail establishments.	Medium - High	Yes	Low-Medium
C733	Riparian vegetation displaced by lawn, invasives, or exotics; water quality compromised by garden chemicals, metals, sediment.; elevated water temperatures due to increased water use at times when flows lowest.	Protect & restore shoreline buffer plantings to provide source of food & shelter; protect& restore water quality, maintain baseflows of feeder streams in order to provide source of cooler water	Lakeshore property owners	Modify more for "lakeshore living" the existing "Streamside Living Welcome Wagon" program in which residents welcome new homeowners to the neighborhood and provide information concerning "salmon friendly" yard care, lakeshore planting tips, water-wise gardening.	Medium	WaterTenders Streamside Living Welcome Wagon	Low-Medium
C734	Solid overwater surfaces that create sharp light contrast and dark shadows,	Reduce severity of predation on juveniles	Lakeshore property owners	Explain about mutual value of mesh docks, smaller piling sizes, and community docks to salmon and property owners: Reduced predation for fish; reduced maintenance for homeowners, opportunity to watch small	High		Medium

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
	conditions favored by predators.			fish swimming under the dock, and architectural interest provided by new salmon-friendly elevated dock bridges. Outreach could be carried out, for example, by creating a boat owner education campaign. Mailings could be sent with boat registration tab renewal or with property tax notice for shoreline property owners; by literature at marine, sporting goods and hardware stores, at boat shows; and through workshops to homeowners and marine construction industry. Coordinate outreach through appropriate licensing agencies.			
C735	Sharp light contrast and dark hiding spots created by overwater structures, conditions favored by predators	Reduce severity of predation on juveniles by reducing number of docks.	Lakeshore property owners	Offer financial incentives for community docks in terms of reduced: permit fees, loan fees/percentage rates, taxes and permitting time, in addition to reduced construction costs	High		low
C736	Steep shoreline gradient with coarse aggregate caused by wave action on vertical wall bulkheads	Create sandy, shallow water habitat needed by juveniles.	Lakeshore property owners	Utilize niche marketing to promote a "Build a Beach" campaign. Clarify how hardened shorelines prevent the development of shallow, sandy beaches and how alternative treatments can provide these amenities. Of benefit to salmon and to homeowners desiring more easily accessible shallow beach and aesthetics of a cove. Work with media (including design and lifestyle magazines) and real estate community (articles in real estate sections of papers) as well as construction, and design industry professionals	High	Pro Bono advertising campaign development – The Coalition for Drug Free America ad campaign). Bert the Salmon ads	Variable, but low able to get Pro Bono assistance .
C737	Lack of shelter provided by large and small woody debris due to lack of shoreline vegetation; steep dropoffs from shoreline hardening	Reduce conditions favored by predator species.; increase shoreline buffer vegetation and sources for large and small woody debris	Lakeshore property owners	Alternative marketing campaign: work with advertising industry and media. Do a play on "Child Haven" promotion. *Fry Haven*? Contrast picture of a sandy shallow shoreline containing woody debris hiding Chinook juveniles with that of a deep gravelly shoreline with evil looking predator species lurking, gobbling up young Chinook. [A "Chinook need safe places too" idea]. Possibly graphics in style of *Finding Nemo*. Create a marketing niche with landscape related industries to inform property owners about feeding requirements of out-migrating salmon off their beach. Validate need for native vegetation along the shoreline in	High	Various Bert the Salmon Ad campaigns	

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
				how it provides food source for fish and other wildlife. Perhaps an "Are you starving your neighborhood salmon?" campaign that addresses impacts of denuding shorelines of woody and emergent vegetation could be developed. Or maybe flip to more positive "Have you fed your neighborhood salmon today?" Heighten awareness that it is the young juvenile fish that are at risk. (Humans are often more receptive to saving children). Possibly do a play on *Save the Children* charity campaign, showing stressed conditions for juvenile Chinook trying to rear and migrate through lake.			
C738	Lack of appropriate shoreline vegetation, shoreline hardening by vertical wall bulkheads and rip rap walls; docks that create stark light contrast and hiding spots for predators	Reduce conditions favored by predator species by "softening" shoreline; increase shoreline buffer vegetation and sources for large and small woody debris, replace the many docks with more salmon friendly designs	Lakeshore property owners	Demonstration Project. Locate property owner in publicly accessible (or viewable) area willing to remove bulkhead, or shoreline armoring and replace it with more ecologically friendly design. Similarly, renovate existing dock with more salmon-friendly design. Publicize efforts through various means. Demonstration project should contain elements that can be done by average shoreline property owner. Provide information on costs and advantages of alternate treatments.	Medium – High	Redmond River Walk, Juanita Beach, Classic Nursery, Lark Forest Park Stewardship projects	Medium
C739	Coarse substrate, steep slope, dark hiding spots for predators caused by bulkheads and solid surface docks.	Reduce conditions favored by predator species; increase shoreline buffer vegetation and sources for large and small woody debris	Lakeshore property owners, general public	Document video progress on a range of restoration projects from planning to post-construction. Air on government cable channels, in shoreline property owner classes and for libraries, schools, communities groups.	Medium		Variable
C740	Coarse substrate, steep slope, dark hiding spots for	Overcome resistance of shoreline property	Lakeshore property owners,	Combine recreation and education. Organize a Bulkhead Alternatives and Salmon Friendly Dock Design tour to see good examples of design on a residential scale.	Low	King County and People for Puget Sound	Variable

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
	predators caused by bulkheads and solid surface docks.	owners to make such drastic changes to their shorelines by offering local examples of alternative treatments. Ultimate goal is to reduce conditions favored by predator species	general public	Organize as boat tour so properties can be viewed from water (less invasive to property owner). Alternatively, create a self-guided water tour (most shoreline property owners have their own boats) with GPS coordinates to help locate example property.		shoreline homeowner workshops (pilot programs)	
C741	Shoreline hardening, riparian vegetation displaced by lawn, ivasives, or exotics with low ecological value, overwater structures creating sharp light contrast, water quality degraded by effects of landscape practices	Protect and improve water quality; habitat quality - or- Protect & restore riparian vegetation to provide terrestrial food source and shelter; protect& restore water quality, maintain instream flows upstream to provide source of cooler water	Landscape Contractors	Offer professional workshops to landscape designers & contractors on environmentally-friendly lakeshore landscaping. Include topics such as shoreline buffer function and design, native plant selection, installation techniques, use of compost to build healthy soils, and noxious weed control. Determine need for training for non-English speaking participants	Medium – High	Washington Assoc of Landscape Professionals (WALP) Trainings by King County Local Hazardous Waste Management Program	Low
C742	Riparian vegetation displaced by lawn. Water quality compromised by garden chemicals, metals, sediment.	Increase shoreline planting; reduce lawn size to at least have buffer between lawn and shore.	Lakeshore property owners	Work with landscape, design, and real estate industries to sell benefit of "privacy" to homeowners. With restoration of shoreline buffer planting homeowners can increase privacy without sacrificing views. Promote idea of "framed views" as a more sophisticated landscape aesthetic.	Medium - High	1998 Lake Sammamish Shoreline Prop owners workshop Pilot Program	
C743	Lack of shoreline buffer vegetation, increased water use when levels lowest;	Increase native vegetation and source of shelter and food for fish;	Lakeshore property owners , Community	Increase number of native plant salvages where landowners can take plants back to their yards. Publicize opportunity to drop off unwanted native plants at various parks surrounding the lake.	Low – Lake Washin gton	King County Native Plant Salvage Program	

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
	increased perceived need for pesticides	reduce erosion and need for supplemental irrigation (once established)			Low-Med Samma mish		
C744	Lack of appropriate shoreline vegetation	Increase shoreline vegetation and reduce non-native vegetation & spread of invasives	Lakeshore property owners	Reduce permit fees (where applicable) for shoreline restoration, removal & replacement of non-native vegetation	Medium		Low
C745	Water quality degraded by toxics, pesticides, increased nutrient loads, sediment from construction sites; loss of riparian vegetation	Protect and improve water quality	General Public	Publicize emergency call numbers for public to report water quality problems, water diversion from lake for irrigation, , non-permitted vegetation clearing, or tree overspray (pesticide) related incidents.	High	King County Water & Land Division, Seattle Public Utilities Hotlines	Low
C746	Reduced forest and canopy cover; increased impervious areas, decreased infiltration; more flashiness of floods due to intensity of runoff	Protect and improve water quality; reduce quantity of water entering lake: during flood conditions can mix with sanitary sewer flows and enter lake.	General public, but property owners in particular	Increase outreach concerning the benefits of trees and basin-wide forest coverage to protect water quality. Include such actions as significant tree ordinance and information that links canopy cover to storm water issues. Provide clarification on hazardous tree issues. Offer seedlings to replant after hazard trees are removed. Coordinate with commercial nurseries to expand outreach about benefits of trees to salmon.	Medium-High	Sammamish ReLeaf; Mountains-to-Sound Greenway; City tree ordinances, King County Forestry Program	Low
C747	Elevated lake temperatures, lack of cool water sources from feeder streams, insufficient flows in feeder streams to provide source of cooler water, lack of ground water recharge, water	Protect forest cover, reduce paving an d impervious areas, increase infiltration and conditions that mimic natural hydrology, protect water quality	Design, engineering, and construction industries	Provide education to architects, landscape architects, engineers, and developers on sustainable building/design practices. Work with professional associations to highlight building practices that maintain watershed health, importance of maintaining canopy cover and limiting impervious surfaces. Provide incentives to builders that demonstrate a use ecologically sensitive designs and/or techniques. Provide professional workshop and tours focusing on	Medium - High	WALP Trainings by King County Local Hazardous Waste Management Program. Stoneway	Variable

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
	quality, habitat quality			sustainable building/design practices to architects, landscape architects, engineers and developers. Build partnerships with professional associations to highlight the benefits of practices that maintain watershed health. Promote through design competitions and media coverage the use of “rain gardens” and other low impact development practices that mimic natural hydrology. Combine a home & garden tour or “Street of Dreams” type event featuring these landscape and engineering treatments.		Concrete Council for Sustainable Development outreach on pervious pavement. Port Blakely Communities, Issaquah partnerships, Built Green, Sustainable Seattle, LEEDS	
C748	Reduced forest cover, increased impervious area, decreased infiltration and ground water recharge, water quality degraded by runoff	Protect and improve water quality and quantity to more closely mimic natural hydrology	Developers, Architects, Engineers Building Professionals	Use recognition as a means to encourage more salmon sustainable designs and construction. Coordinate with professional association awards, in addition to popular magazine merit awards. Continue to recognize businesses that carry out procedures or use products that protect watershed health. Promote through design competitions and media coverage the use of “rain gardens” and other low impact development practices that mimic natural hydrology. Combine a home/garden tour or “Street of Dreams” type event featuring these landscape /engineering treatments	Medium	AIA, ASLA, Sunset Magazine, and Seattle Times Home and Garden awards, King County Enviro Stars.	Low
C749	Water quality degraded by metals, toxins, pesticides, and nutrient overloads	Protect and improve water quality	General Public	Create a program that addresses impact of car maintenance and offers alternatives that help protect watershed health and water quality. More actively distribute – poster series developed by multi-jurisdictional Water Quality Consortium. Series depict water quality implications of everyday activities such as car washing, ignoring car maintenance, pet wastes. Work with auto parts retailers and gas stations to increase potential for collection of used motor oil/transmission fluids.	Medium	King County Local Hazardous Waste Mgmt Program Water Quality Consortium, Businesses for Clean Water	variable

Proj #	Habitat Condition	Desired Outcome	Target Audience	Proposed Action	Priority	Proven Track Record/Model	Level of Financial Commit.
				Make outreach materials available to non-English speakers.			
C750	Water Quality degraded by toxics and metal fines	Protect and restore water quality	General Public	Build partnerships and seek outreach opportunities with commute trip reduction programs to convey the impacts of automobiles on water quality and salmon habitat. Encourage alternative transportation choices.	Medium	Commute Trip Reduction Programs	Low - Medium
C751	Water Quality degraded by toxics and metal fines degraded by metals and toxins	Protect and restore water quality	General Public, schools/non-profits and Charity groups – and business that offer to host a carwash.	Coordinate with local business community to encourage the use of commercial car washes over washing at home on street or in parking lots. Encourage alternatives to charity cash washes via commercial car wash coupon books or extend car wash kits throughout entire watershed. Make requirement that all charity car washes use coupons or car wash storm drain kit. Distribute "alternative community fundraising idea" brochure to volunteer fundraisers.	Medium - High	Yes, various cities' car wash kit programs. Puget Sound Carwash Association	Low
C752	Water quality degraded by metals and toxins	Protect and restore water quality	Businesses, property management companies, homeowners associations.	Educate and support retail business and homeowner associations on stormwater best management practices specifically related to parking lot cleaning, storm drain maintenance, and boat cleaning.	Medium	Ongoing programs by various jurisdictions within WIRA, e.g. Issaquah, Redmond	Low
C753	Reduced baseflows from streams that feed into lake and subsequent elevated water temperatures in lake	Protect and restore sources of cool water	High end water users and general public	Extend availability of water conservation incentive programs such as rebates for efficient toilets, appliances, soaker hoses, free indoor conservation kits, or free landscape irrigation audits to decrease household and commercial water consumption.	High	Smart & Healthy Landscapes, Water Cents, and other utility incentive programs	Low

APPENDIX E

FUNDING OPPORTUNITIES

Grant Name	Allocating Entity	Web-Site
Acorn Foundation	Acorn Foundation	http://www.commoncounsel.org/Acorn%20Foundation
Allen Family Foundation, Paul G. – Science and Technology Program	Paul G. Allen Family Foundation	http://www.pgafamilyfoundation.org/
Aquatic Lands Enhancement Account (ALEA)	Washington Recreation and Conservation Office	http://www.rco.wa.gov/rcfb/grants/alea.htm
Salmon Recovery Grant Program	Washington Recreation and Conservation Office	http://www.rco.wa.gov/srfb/grants/salmon_recovery.htm
Freshwater Fish Conservation Initiative and other various programs	National Fish and Wildlife Foundation	http://www.nfwf.org/AM/Template.cfm?Section=Fish_Conservation2
Bullitt Foundation	Bullitt Foundation	http://www.bullitt.org/
Water Quality Program	Washington State Department of Ecology	http://www.ecy.wa.gov/programs/wq/funding/FundingPrograms.html
Sea Program	Washington State Department of Ecology	http://www.ecy.wa.gov/programs/sea/sea-grants.htm
Coastal Protection Account	Washington Department of Ecology	
Washington CZM 309 Improvement Grants Program	Washington Department of Ecology	http://www.ecy.wa.gov/programs/sea/czm/309-improv.html
NOAA Restoration Center Partnerships	NOAA Fisheries: Restoration Center	http://www.nmfs.noaa.gov/habitat/restoration/funding_opportunities/funding_nwr.html
Cooperative Endangered Species Conservation Fund	US Fish and Wildlife Service	http://www.fws.gov/endangered/grants/index.html
Doris Duke Charitable Foundation	Doris Duke Charitable Foundation	http://www.ddcf.org/
Fish America Grant Program	Fish America Foundation	http://www.fishamerica.org/grants/
Various	Environmental Protection Agency	http://www.epa.gov/epahome/grants.htm
Landowner incentive program	Washington State Department of Fish and Wildlife	http://wdfw.wa.gov/grants/lip/
King Conservation District Funds	King Conservation District	http://www.kingcd.org/pro_gra.htm

Grant Name	Allocating Entity	Web-Site
The King County Water Quality Block Grant Fund	King County	http://www.kingcounty.gov/environment/grants-and-awards/grant-exchange/waterworks.aspx
King County Community Salmon Fund	National Fish and Wildlife Foundation	http://www.kingcounty.gov/environment/grants-and-awards/grant-exchange/waterworks.aspx
King County Flood Control District	King County	http://www.kingcounty.gov/environment/waterandland/flooding/flood-control-zone-district.aspx

O-4251
ATTACHMENT E

KIRKLAND MUNICIPAL CODE

Title 24

ENVIRONMENTAL PROCEDURES

Chapters:

24.02 **SEPA Procedures and Policies**
~~**24.05**~~ ~~**Shoreline Master Program**~~
~~**24.06**~~ ~~**Shoreline Administration and Procedures**~~

RESCIND

PUBLICATION SUMMARY
OF ORDINANCE NO. 4251

AN ORDINANCE OF THE CITY OF KIRKLAND ADOPTING THE DEPARTMENT OF ECOLOGY APPROVED KIRKLAND SHORELINE MASTER PROGRAM UPDATE, INCLUDING THE NEW SHORELINE ENVIRONMENT DESIGNATIONS MAP, COMPREHENSIVE PLAN AMENDMENTS, ZONING CODE AMENDMENTS, AND THE NEW RESTORATION PLAN, AND REPEALING THE EXISTING SHORELINE MASTER PROGRAM, CHAPTERS 24.05 AND 24.06 OF THE KIRKLAND MUNICIPAL CODE.

Section 1. Adopts a new Kirkland Shoreline Environment Designations Map, a copy of which is attached to the Ordinance as Attachment A.

Section 2. Amends portions of the Kirkland Comprehensive Plan and adds a new chapter to the Comprehensive Plan relating to shorelines, as set forth in Attachment B to the Ordinance.

Section 3. Amends portions of the Kirkland Zoning Code relating to shorelines, as set forth in Attachment C to the Ordinance.

Section 4. Adopts a new Kirkland Shoreline Restoration Plan, a copy of which is attached to the Ordinance as Attachment D.

Section 5. Amends portions of the Kirkland Municipal Code and repeals the existing Shoreline Master Program, as set forth in Attachment E to the Ordinance.

Section 6. Provides a severability clause for the Ordinance.

Section 7. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as August 4, 2010.

Section 8. Provides that a certified copy of the Ordinance shall be provided to the King County Department of Assessments.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its meeting on the _____ day of _____, 2010.

I certify that the foregoing is a summary of Ordinance _____ approved by the Kirkland City Council for summary publication.

_____
City Clerk

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (2).

ORDINANCE NO. 4252

AN ORDINANCE OF THE CITY OF KIRKLAND ADOPTING MISCELLANEOUS AMENDMENTS TO ORDINANCE NO. 3719, THE KIRKLAND ZONING ORDINANCE, AND MAKING THE ZONING ORDINANCE COMPATIBLE WITH THE NEWLY ADOPTED SHORELINE MASTER PROGRAM. File ZON06-00017.

WHEREAS, the Washington Shoreline Management Act (RCW 90.58, referred to herein as "SMA") recognizes that shorelines are among the most valuable and fragile resources of the state, and that state and local government must establish a coordinated planning program to address the types and effects of development occurring along shorelines of state-wide significance; and

WHEREAS, the City of Kirkland ("City") has, with the approval of the State Department of Ecology, updated its Shoreline Master Program ("SMP") pursuant to the SMA and WAC 173-26; and

WHEREAS, on December 1, 2009, the Kirkland City Council adopted Resolution R-4787, a Resolution of Intent to adopt certain amendments to the Kirkland Zoning Code which would be necessitated by the final adoption of the SMP Update; and

WHEREAS, since that time, City staff has processed additional minor amendments to the Kirkland Zoning Code necessitated by the adoption of the SMP Update; and

WHEREAS, the City Council has received recommendations from the Kirkland Planning Commission and Houghton Community Council to adopt those certain minor amendments of the text of the Kirkland Zoning Code, all as set forth in that certain report and recommendation of the Planning Commission dated September 10, 2009 for Part 1 of said amendments and June 24, 2010 for Part 2 of said amendments and bearing Kirkland Department of Planning and Community Development File No. ZON06-00017.

NOW, THEREFORE, the City Council of the City of Kirkland do ordain as follows:

Section 1. Zoning Ordinance amended: The text of Ordinance 3719 as amended, the Kirkland Zoning Ordinance, is hereby amended to read as follows:

As set forth in Attachment A attached to this Ordinance and incorporated herein by this reference.

Section 2. If any section, subsection, sentence, clause, phrase, part or portion of this Ordinance, including those parts adopted by reference, is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. To the extent the subject matter of this ordinance pursuant to Ordinance 2001, is subject to the disapproval jurisdiction of the Houghton Community Council, this ordinance shall become effective within the Houghton Community Council Municipal Corporation only upon approval of the Houghton Community Council or the failure of said Community Council to disapprove this ordinance within 60 days of passage of this ordinance.

Section 4. This Ordinance shall be in full force and effect on August 4, 2010 and after its passage by the Kirkland City Council and shall be published pursuant to Kirkland Municipal Code 1.08.017, in the summary form attached to the original of this ordinance and by this reference approved by the City Council, as required by law.

Section 5. A complete copy of this ordinance shall be certified by the City Clerk, who shall then forward the certified copy to the King County Department of Assessments.

Passed by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 2010.

Signed in authentication thereof this _____ day of _____, 2010.

_____
Mayor

Attest:

_____
City Clerk

Approved as to Form:

_____
City Attorney

ZONING CODE AMENDMENTS

(in order of appearance)

Part 1

Use Zone Charts (revised)

- WDI – Sec 30.10
- WDII – Sec 30.20
- WDII – Sec 30.30
- CBD2 – Sec 50.15
- JBD2 – Sec 52.15
- JBD3 - Sec 52.20
- JBD4 - Sec 52.25
- JBD5 - Sec 52.30
- CBD1 Sec 52.50.10
- PLA2 - Sec 60.15
- PLA3A - Sec 60.20
- PLA3B - Sec 60.25
- PLA6A - Sec 60.55
- PLA6H - Sec 60.90
- PLA6I - Sec 52.95
- PLA15A - Sec 60.170
- PR - Sec 25.08
- BN - Sec 40.08
- RS - Sec 15.08
- RM - Sec 20.08

Other sections

- Chapter 115 - Sec 115.07 (Revised)
- Sec 30.17 in WDI (Deleted)
- Sec 30.27 in WDII (Deleted)
- Sec 30.37 in WDII (Deleted)
- Sec 50.20 in CBD2 (Deleted)
- Sec 52.35 in JDB5 (Deleted)
- Sec 60.18 in PLA 2 (Deleted)
- Sec 60.28 in PLA 3B (Deleted)
- Sec 60.173 in PLA 15 (Deleted)

KZC 180 Plates

- Plate 22 – WDII North Property Line yard and Height of Structure (Deleted)
- Plate 27A, 27B and 27C – Shoreline View Corridor (Revised)
- Plate 28 – North Property Line – Waterfront District (WD) Zones (Deleted)

<u>Part 2</u> (all revised)

- User Guide Sec 1.10
- Chapter 5 Definitions
- Sec 20.08 New General Reg. 10 in RM use zone chart
- Sec 30.20 New General Reg 5 in WDII use ZONE chart
- Sec 75.05 Historic Landmark
- Sec 85.05 Geologically Hazardous Areas
- Sec 90.05, 90.10, 90.15, and 90.135 Drainage Basins
- Sec 95.30 Tree Management and Required Landscaping
- Sec 110.05 Signs
- Sec 105.05 Parking Areas
- Sec 112.4 Affordable Housing Incentives
- Section 115.40, 115.45, 115.47, 116.60, 115.90, 115.85, 115.105, 115.115, 115.120, and 115.125 Miscellaneous
- Sec 117.05, 117.30, 117.35 and 117.40 Personal Wireless Service Facilities
- Sec 162.0 and 162.35 Certain Nonconformances Specially Regulated

30.05 User Guide. The charts in KZC 30.15 contain the basic zoning regulations that apply in the WD I zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 30.10

Zone WD1

Section 30.10 – GENERAL REGULATIONS

The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

~~2. See KZC 30.17 for regulations regarding bulkheads and land surface modification.~~

2. ~~3.~~ The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if:

a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and

b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and

c. The design of the public use area is specifically approved by the City.

(Does not apply to Public Access Pier , ~~or~~ Boardwalk or Public Access Facility; ~~,~~ ~~Moorage Facility for 1 or 2 Boats~~Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units;~~,~~ Public Park~~-~~; ~~or~~ Public Utility uses; Boat Launch; or Water Taxi).

3. The required 30-foot front yard may be reduced, subject to all of the following conditions:

a. The existing primary structure does not conform to the minimum shoreline setback standard;

b. The proposed complete replacement or replacement of portion of the existing primary structure comply with the minimum required shoreline setback established under the provisions of KZC Chapter 83, or as otherwise approved under the shoreline setback reduction provisions established in Section 83.380 KZC;

c. The front yard for the complete replacement or the portion of replacement may be reduced one (1) foot for each one (1) foot of the shoreline setback that is increased in dimension from the setback of the existing non conforming primary structure, provided that subsection 3.d below is met; and

d. Within the front yard, each portion of the replaced or portion of replaced primary structure is setback from the front property line by a distance greater than or equal to the maximum height of that portion above the front property line.

(Does not apply to Public Access Pier, Boardwalk, or Public Access Facility; Boat launch; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units; Public Park; Public Utility uses; Boat Launch; or Water Taxi).

4. A view corridor must be maintained across 30 percent of the average parcel width. Refer to KZC Chapter 83 for additional details. ~~The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties (does not apply to Public Access Pier or Boardwalk, Moorage Facility for 1 or 2 Boats, or Public Park uses).~~

5. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

6. May also be regulated under the Shoreline Master Program, ~~KMC Title 24~~ refer to KZC Chapter 83.

Section 30.15	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.010	Detached Dwelling Units	None	3,600 sq. ft./unit, except if 1,800 sq. ft./unit for up to 2 dwelling units if the public access provisions of KZC 83.390 are met~~3,600 sq. ft.~~	30′ . ~~The greater of:~~ ~~a. 15 or~~	. ~~The greater of:~~ ~~a. 15 or~~ ~~b. 1-1/2 times the height of the primary structure above average building elevation minus 10~~′	5′, but two side yards must equal at least 15 feet. ~~10~~′ ~~The greater of:~~	~~a. 15 or~~ ~~b. 15% of the average parcel depth.~~ See Chapter 83 KZC	80%	30′ above average building elevation. This provision may not be varied	E	A	2.0 per unit	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding ~~moorages and public access piers, see the specific listings in this zone~~piers or docks serving detached dwelling units, refer to the specific listings in this zone and Chapter 83 KZC. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use.
				The minimum dimension of any yard, other than those listed, is 5′. See General Regulations									

Section 30.15	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.020	Detached, Attached or Stacked Dwelling Units	Process I, Chapter 145 KZC	3,600 sq. ft. per unit	30'	~~.The greater of: a. 15□ or b. 1-1/2 times the height of the primary structure above average building elevation minus 10□~~	~~10'~~ 5', but the two side yards must equal at least 15 feet.	See Chapter 83 KZC~~The greater of: a. 15□ or b. 15% of the average parcel depth.~~		30' above average building elevation. See also Special Regulation 3	D		.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding moorage and public access piers, see the specific listings in this zone and Chapter 83 KZC. 2. Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. The City shall require signs designating the public pedestrian access and public use areas.~~ 3. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. ~~a~~. The increase is offset by a view corridor that is superior to that required by the General Regulations.~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ 4. ~~The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ REGULATIONS CONTINUED ON NEXT PAGE
				See General Regulations and Spec. Reg. 6									

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.020	Detached, Attached or Stacked Dwelling Units (continued)												REGULATIONS CONTINUED FROM PREVIOUS PAGE 5. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 6. Any required yard, other than the front yard ~~or high water line~~ or shoreline setback ~~required yard~~, may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached shall provide the minimum required yard
.030	Public Access Pier, ~~or~~ Board-walk, or Public Access Facility	. ~~Process I, Chapter 145 KZC~~See Chapter 83 KZC~~.~~	None	See Chapter 83 KZC~~Waterward of the High Waterline~~				--	See Chapter 83 KZC~~Pier decks may not be more than 24' above mean sea level. Diving boards and similar features may not be more than 3 above the deck~~	--	~~See Spec. Reg. 7~~	See KZC 105.25	Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use.~~ ~~2. If a structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a building permit for this use.~~ ~~3. May not treat a structure with creosote, oil base or toxic substances.~~ ~~4. Must provide at least one covered and secured waste receptacle.~~ ~~5. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~6. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~7. Structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high, and visible from the lake.~~ ~~8. North and south property line yards may be decreased for over-water public use facilities which connect with waterfront public access on adjacent property.~~

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Section 30.15	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.040	Piers, docks, boat lifts and canopies serving Detached Dwelling Unit~~Moorage Facility for 1 or 2 boats~~	See Chapter 83 KZC~~None~~		See Chapter 83 KZC~~Waterward of the High Waterline~~				~~80%~~			~~See Spec. Reg. 8~~	None~~1 per each 2 slips. Otherwise, None if the moorage is reserved for the exclusive use of an adjoining residential development.~~	Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use. Various accessory components are permitted as part of a General Moorage Facility. See that listing in this zone.~~ ~~2. Moorage structure may not extend waterward beyond a point 150 feet from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width.~~ ~~3. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a building permit for this use.~~ ~~4. May not treat moorage structure with creosote, oil base or toxic substances.~~ ~~5. Must provide at least one covered and secured waste receptacle.~~ ~~6. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~7. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~8. Moorage structures must display the street address of the subject property.~~ ~~9. Covered moorage is not permitted.~~ ~~10. Aircraft moorage is not permitted.~~
				~~--~~	~~10'~~	~~10'~~	~~--~~						
				~~In addition, no moorage structure may be within: a. 25' of a public park; or b. 25' of another moorage structure not on the subject property. The minimum dimension of any yard, other than those listed, is 5'~~									
.050	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units	See Chapter 83 KZC	None	See Chapter 83 KZC					-			None	Refer to Chapter 83 KZC for additional regulations

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Section 30.15	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
				DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
.0650	Marina ~~General Moorage Facility~~	~~Process IIA, Chapter 150 KZC.~~See Chapter 83 KZC	None~~, but must have at least 100□ of frontage on Lake Washington~~	Landward of the ~~High Waterline~~Ordinary High Water Mark: 30' See Gen. Regs	~~The greater of: a. 15' or b. 1-1/2 times the height of the primary structure above average building elevation minus 10~~	5', but two side yards must equal at least 15 feet~~10'~~	See Chapter 83 KZC ~~For moorage structure, 0'~~ ~~For other structures, the greater of a. 15' or b. 15% of the average parcel depth~~.	80%	Landward of the ~~High Waterline~~ordinary high water mark, 30' above average building elevation. See also Spec. Reg. 32. ~~Waterward of the High Waterline, Dock and Pier decks may not be more than 24' above mean sea level.~~	B	B ~~See Spec. Reg. 13~~	1 per each 2 slips. ~~Otherwise, None, if the moorage is reserved for the exclusive use of an adjoining residential development.~~	1. Refer to Chapter 83 KZC for additional regulations. ~~1. Except as permitted by Special Regulation 16, no structures, other than each moorage structure or public access pier, may be waterward of the high waterline. For regulations regarding public access piers, see the specific listing in this zone.~~ ~~2. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~ ~~3~~2. Structure height may be increased to 35 feet above average building elevation if the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and a. The increase is offset by a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30□ above average building elevation.~~. ~~4. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ ~~5. The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The ability of the land landward of the high waterline to accommodate the necessary support facilities.~~ ~~b. The potential for traffic congestion.~~ ~~6. Moorage structures may not be larger than is necessary to provide safe and reasonable moorage for the boats moored. The City will specifically review size and configuration of moorage~~
				Waterward of the ~~High Waterline~~-Ordinary High Water See Chapter 83 KZC: –	~~10'~~	~~10'~~	–						

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
				~~No moorage structure may be~~ ~~a. Within 100 feet of a public park or~~ ~~b. Closer to a public park than a line that starts where the high waterline of the park intersects with the side property line of the park closest to the moorage structure at a 45° angle from the side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening over water structure; or~~ ~~(See next page for the rest of the Required Yard Regulations)~~								~~structures to insure that:~~ ~~a. The moorage structures are not larger than is necessary to moor the specified number of boats; and~~ ~~b. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and~~ ~~c. The moorage structures will not adversely affect nearby uses; and~~ ~~d. The moorage structures will not have a significant long term adverse effect on aquatic habitats.~~ ~~7. If the moorage structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~REGULATIONS FOR THIS USE CONTINUED ON THE NEXT PAGE~~

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.050	~~General Moorage Facility (continued)~~			~~c. Closer to a lot containing a detached dwelling unit than a line that starts where the high waterline of the lot intersects the side property line of the lot closest to the moorage structure and runs waterward toward the moorage structure at a 30° angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not extend beyond any intervening overwater structure; or~~ ~~d. Within 25 of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than those listed, is 5~~ ~~See previous page for the rest of this column.~~	-				~~8. May not treat moorage structure with creosote, oil base or toxic substance.~~ ~~9. Must provide at least two covered and secured waste receptacles.~~ ~~10. All utility and service lines must be below the pier deck and, where feasible, underground.~~ ~~11. Must provide public restrooms unless moorage is only available for residents of dwelling units on the subject property.~~ ~~12. Piers must be adequately lit. The source of light must not be visible from neighboring properties.~~ ~~13. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high.~~ ~~14. Covered moorage is not permitted.~~ ~~15. Aircraft moorage is not permitted.~~ 3~~16.~~ The following accessory components are allowed if approved through Process IIB, Chapter 152 KZC: a. Boat and motor sales leasing. b. Boat and motor repair and service if: 1) This activity is conducted on dry land and either totally within a building or totally sight screened from adjoining property and the right-of-way; and 2) All dry land motor testing is conducted within a building. ~~c. Boat launching ramp if:~~ ~~1) It is not for use of the general public; and~~ ~~2) Is paved with concrete; and~~

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
													~~3) There is sufficient room on the subject property for maneuvering and parking so that traffic impact on the frontage road will not be significant; and~~ ~~4) Access to the ramp is not directly from the frontage road; and~~ ~~The design of the site is specifically approved by the City.~~ ~~d. Dry land storage. However, stacked storage is not permitted.~~ ~~e.~~ c. Meeting and special events rooms. ~~f.~~ d. Gas and oil sale for boats, if: 1) Storage tanks are underground and on dry land; and 2) The use has facilities to contain and cleanup gas and oil spills. May have an over-water shed that is not more than 50 square feet and 10 feet high as measured from the deck. ~~17. At least one pump-out facility shall be provided for use by the general public. This facility must be easily accessible to the general public and clearly marked for public use.~~

Section 30.15	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.060	Restaurant or Tavern	Process IIA, Chapter 150 KZC	7,200 sq. ft	30' See Gen. Regs~~.~~ See also Spec Reg 5	.~~The greater of: a. 15 or b. 1-1/2 times the height of the primary structure above average building elevation minus 10~~	5', but two side yards must equal at least 15 feet.~~10~~	See Chapter 83 KZC~~The greater of: a. 15, or b. 15% of the average parcel depth.~~	80%	-30' above average building elevation. See also Special Regulation 3.	B	E	1 per each 100 sq. ft. of gross floor area.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding moorages, see the ~~moorage~~ specific listings in this zone and Chapter 83 KZC. 2. Chapter 83 KZC contains regulations regarding shoreline~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas~~. 3. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. ~~a.~~ The increase is offset by a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~. ~~4. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design, and landscaping must mitigate the impacts of that isolation.~~ 4.~~5.~~ Outside storage is not permitted. 5.~~6.~~ The required yard of a structure abutting Lake Washington Boulevard or Lake Street South must be increased two feet for each one foot that structure exceeds 25 feet above average building elevation. 6.~~7.~~ Drive-in or drive-through facilities are prohibited.
				The minimum dimension of any yard, other than those listed, is 5'									

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.070	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.											1. ~~The provisions of Chapter 90 KZC, limiting development in and around wetlands, do not apply to a public park, if the development is approved as part of a Master Plan.~~ 2. This use may include a public access pier, ~~or~~ boardwalk, or public access facility. See ~~KZC 30.15.030~~ the specific listing in this Zone and Chapter 83 KZC for regulations regarding these uses. 3. This use may include swimming beaches or other public recreational uses. See Chapter 83 for regulations regarding these uses.
.080 .090	Public Utility Government Facility Community Facility	Process IIA, Chapter 150 KZC	None	30' See Gen. Regs	~~The greater of: a. 15 or b. 1-1/2 times the height of the primary structure above average building elevation minus~~	5', but two side yards must equal at least 15 feet.~~10'~~	See Chapter 83 KZC~~The greater of: a. 15' or b. 15% of the average parcel depth~~.	80%	-30' above average building elevation. See also Special Regulation 3.	A C See Spec. Reg. 5.	B	See KZC 105.25.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ ordinary high water mark. For the regulation regarding moorages and public access piers, see the specific listings in this zone and Chapter 83 KZC. 2. Chapter 83 KZC contains regulations regarding shoreline. ~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from the adjoining property. The City shall require signs designating the public pedestrian access and public uses areas~~. 3. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and ~~a.~~b. The increase is offset by a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~.

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
					~~10~~'								4. ~~The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design, and landscaping must mitigate the impacts of that isolation.~~ 5. For a Government Facility use, Landscape Category A or B may be required depending on the type of use on the subject property and the impacts on the nearby uses.

Section 30.15	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~North Property Line~~	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~South Property Line~~ Side Property Line	MINIMUMS: REQUIRED YARDS (See Ch. 115): Shoreline Setback~~High Water Line~~	MAXIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
.100	Assisted Living Facility	Process I, Chapter 145 KZC	3,600 sq. ft	30' See Gen. Regs and Soecial Regulation 5.	~~The greater of: a. 15 or b. 1-1/2 times the height of the pri-mary structure above average building elevation minus 10'~~	5', but two side yards must equal at least 15 feet.~~10'~~	See Chapter 83 KZC~~The greater of: a. 15 or b. 15% of the average parcel depth.~~	80%	-30' above average building elevation. See also Special Regulation 7.	D	A	2.0 per independent unit. 1 per assisted living unit	1. A facility that provides both independent dwelling units and assisted living units shall be processed as an assisted living facility. 2. A nursing home use may be permitted as part of an assisted living facility use in order to provide a continuum of care for residents. If a nursing home is included, the following parking standards shall apply to the nursing home portion of the facility: a. One parking stall shall be provided for each bed. 3. For density purposes, two assisted living units shall constitute one dwelling unit. Total dwelling units may not exceed the number of stacked dwelling units allowed on the subject property. Through Process IIB, Chapter 152 KZC, up to 1 1/2 times the number of stacked dwelling units allowed on the property may be approved if the following criteria are met: a. Project is of superior design, and b. Project will not create impacts that are substantially different than would be created by a permitted multifamily development. 4. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulation regarding moorages and public access piers, see the specific listings in this zone and Chapter 83 KZC. 5. The required yard of a structure abutting Lake Washington Boulevard or Lake Street South must be increased two feet for each one foot structure that exceeds 25 feet above average building elevation. ~~5~~.6. Chapter 83 KZC contains regulations regarding shorelin~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property. within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from the adjoining property. The~~
				The minimum dimension of any yard, other than those listed, is 5'.									

Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
													~~City shall require signs designating the public pedestrian access and public uses areas.~~ ~~6.~~7. Structure height may be increased to 35 feet above average building elevation if the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and a. The increase is offset by a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation~~. ~~7. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design, and landscaping must mitigate the impacts of that isolation.~~ 8. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use.
.110	Boat launch (for non-motorized boats)	See Chapter 83 KZC	None	See Chapter 83 KZC					-			None	Refer to Chapter 83 KZC for additional regulations.

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Section 30.15	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.120	Water taxi	See Chapter 83 KZC	None	Landward of the Ordinary High Water Mark				80%	- Landward of the ordinary high water mark, 30 above average building elevation. See also Spec. Reg. 2	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. . Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. The increase is offset be a view corridor that is superior to that required by the General Regulations
				30' See Gen. Regs		5', but two side yards must equal at least 15 feet	See Chapter 83 KZC						

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30.19 User Guide. The charts in KZC 30.25 contain the basic zoning regulations that apply in the WD II zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 30.20

Zone WDII

Section 30.20 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

~~2. See KZC 30.27 for regulations regarding bulkheads and land surface modifications.~~

~~3~~2. May not use lands waterward of the ordinary high water mark~~high waterline~~ to determine lot size or to calculate allowable density.

3. The required yard abutting an unopened right-of-way shall be a site property rather than a front property line.

4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~

Section 30.25	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS						MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS												
			Lot Size	REQUIRED YARDS (See Ch. 115)					Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback ~~High Water Line~~	Side Property Line						
.010	Detached Dwelling Units	None	12,500 sq. ft.	For those properties that conform to the standard shoreline setback requirements established in Chapter 83 KZC, either: a. 10' or b. The average of the existing front yards on the properties abutting the subject property to the	~~5'~~	5'	See Chapter 83 KZC~~The greater of: a. 15' or b. 15% of the average parcel dept~~	5', but 2 side yards must equal at least 15'. ~~-~~ or Spec Reg 5	50%	For properties with a minimum of 45' of frontage along Lake Washington, 30' above average building elevation. See Special Reg 12 Otherwise, 25' above average building elevation	E	A	2.0 per unit.	1. No structure, other than a moorage structure, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding moorage, see ~~the Moorage listing in this zone~~Chapter 83 KZC. 2. For this use, only one dwelling unit may be on each lot regardless of lot size. ~~3. If dwelling units exist on property that abuts the subject property to the north and south, the required high waterline yard is the average of the distance of existing legally constructed structures from the high waterline on these two abutting properties. If, because of abutting properties, the required high waterline yard is increased~~ 3. For properties located south of the Lake Ave W Street End park, the required ~~opposite~~ front yard may be decreased to the average of the existing ~~opposite~~ front yards on the properties abutting the subject property to the north and south. 4. ~~If either the north property line yard or the south property line yard is also the front yard of the subject property, it will be regulated as a front yard.~~ The dimensions of any required yard, other than as specifically listed, will be determined on a case-by-case basis, unless otherwise specified in this section. The City will use the setback for this use in RS zones as a guide for this use. ~~-~~ 5. The gross floor area of any floor above the first story at street or vehicular access easement level shall be reduced by a minimum of 15% of the floor area of the first story, subject to the following conditions: a. The structure must conform to the standard shoreline setback requirements established in Chapter 83 KZC, or as otherwise approved under the shoreline setback reduction provisions established in Section 83.380 KZC. b. The required floor area reductions shall be

Section 30.25	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS												
		Required Review Process	MINIMUMS						MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)					Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~	Side Property Line						
				north and south. Otherwise,20' See Spec. Reg. 3, 6, 7, and 11,										incorporated into one or both facades facing the side property lines in order to provide separation between neighboring residences. (See Plate 36). c. This provision shall not apply to residences that do not contain a ceiling height greater than 16 feet above the street or vehicular access easement level, as measured at the midpoint of the frontage of the subject property on the abutting right-of-way . d. The calculation of gross floor area shall apply the provisions established in KZC 115.42.1. ~~minus five feet.~~ ~~Each portion of a structure must be setback from the north property line by a distance equal to or greater than the height of that portion of the structure above the north property line (See Plate 22).~~ 6. On corner lots with two required front yards, one may be reduced to the average of the front yards for the two adjoining properties fronting the same street as the front yard to be reduced. The applicant may select which front yard will be reduced (see Plate 24). 7. The front required yard provisions shall not apply to public street ends located west of Waverly Way, which shall be regulated as a side yard. 8. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 9. Garages shall comply with the requirements of KZC 115.43, including required front yard. These requirements are not effective within the disapproval jurisdiction of the Houghton Community Council. 10. The required yard along the east side of the vehicular access easements known as 5th Ave W or Lake Avenue West is 0 feet.

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Section 30.25	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS												
		Required Review Process	MINIMUMS						MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)					Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ **Side Property Line**	Shoreline Setback~~High Water Line~~	Side Property Line						
														11. The required yard along the west side of the vehicular access easements known as 5th Ave W or Lake Avenue West is either 5 feet or the average of the existing rear yards on the properties abutting the subject property to the north and south. The garage shall be located to comply with the provisions for parking pads contained in KZC Section 105.47. 12. For the reduction in the front yard, the structure must conform to the standard shoreline setback requirements established in Chapter 83 KZC, or as otherwise approved under the shoreline setback reduction provisions established in Section 83.380 KZC. 13. At the northern terminus of the 5th Ave West vehicular access easement, the average parcel depth shall be measured from the ordinary high water mark to the public pedestrian access easement providing access to Waverly Beach Park. ~~11. The front required yard provisions shall not apply to public street ends located west of Waverly Way, which shall be regulated as a side yard.~~

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Section 30.25	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS												
		Required Review Process	MINIMUMS						MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)					Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~	Side Property Line						
.020	Piers, docks, boat lifts and canopies serving Detached Dwelling Unit~~Moorage Facility for 1 or 2 boats.~~ ~~See also Special Regulations 1 and 11.~~	See Chapter 83 KZC~~None~~	None	~~Landward of the High Waterline~~ ~~20'~~ ~~5'~~ ~~'10~~ -- ~~Waterward of the High Waterline~~ ~~--'~~ ~~10'~~ ~~10'~~ ~~--~~ ~~In addition, no moorage structure may be within either~~ ~~a. 25 of a public park; or~~ ~~b. 25 of another moorage structure not on the subject property.~~ ~~See Special Regulation 1.~~ See Chapter 83 KZC	~~5', but 2 side yards must equal at least 15'.~~		See Chapter 83 KZC~~Landward of the High Waterline, 25 above average building elevation. Waterward of the High Waterline, dock and pier decks may not be more than 24 above mean sea level. Diving boards and similar features may not be more than 3 above the deck.~~	~~E~~	~~See Spec. Reg. 8.~~	None	Refer to Chapter 83 KZC for additional regulations. ~~1. Moorage must be for the exclusive use of residents of the subject property. Renting moorage space is not permitted.~~ ~~2. Moorage structures may not extend waterward beyond a point 150 feet from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width.~~ ~~3. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~4. May not treat moorage structure with creosote, oil base or toxic substances.~~ ~~5. Must provide at least one covered and secured waste receptacle.~~ ~~6. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~7. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~8. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high, and visible from the lake.~~ ~~9. Covered moorage is not permitted.~~ ~~10. Aircraft moorage is not permitted.~~ ~~11. Two or more adjoining waterfront lots may share a mooring facility. If this occurs, the following regulations apply:~~ ~~a. All lots will be taken together as the subject property to determine compliance with the requirements of this use.~~ ~~b. The moorage structure may be built to accommodate two boats for each residential unit on the~~

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Section 30.25	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	MINIMUMS: REQUIRED YARDS: ~~North Property Line~~	MINIMUMS: REQUIRED YARDS: ~~South Property Line~~ Side Property Line	MINIMUMS: REQUIRED YARDS: Shoreline Setback~~High Water Line~~	MINIMUMS: REQUIRED YARDS: Side Property Line	MAXIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
														~~subject property.~~ ~~c. The owner of each lot must deed to the City the over-water development rights to the property. Upon request, the City will, without cost, deed this right back to the owner of a lot, but the number of boats permitted to moor at the shared moorage facility will be reduced by two.~~
.030 .040	Public Utility Government Facility Community Facility	Process IIA, Chapter 150 KZC.	None	20' 20'	~~20~~ ~~10~~	20' 10'	~~The greater of:~~ ~~a. 15, or~~ ~~b. 15% of the average parcel depth.~~ See Chapter 80 KZC	5', but 2 side yards must equal at least 15'	70%	25' above average building elevation	A C See Spec. Reg. 4.	B	See KZC 105.25.	1. Site design must minimize adverse impacts on surrounding residential neighborhoods. 2. If any portion of a structure is adjoining a detached dwelling unit in a low density zone, then either: a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or b. The maximum horizontal facade shall not exceed 50 feet. See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for more details. 3. ~~If either a north property line yard or the south property line yard is also the front yard of the subject property, it will be regulated as a front yard.~~ The dimension of any required yard, other than as specifically listed, will be determined on a case-by-case basis. The City will use the setback for this use in RS zones as a guide. 4. Landscape Category A or B may be required depending on the type of use on the subject property and the impacts associated with the use on nearby

Section 30.25	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS												
		Required Review Process	MINIMUMS						MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)					Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side Property Line	Shoreline Setback~~High Water Line~~	Side Property Line						
														uses
.050	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process.												1. If any portion of a structure is adjoining a low density zone, then either: a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet. See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for more details. ~~2. The provisions of Chapter 90 KZC limiting development in and around wetlands do not apply to a public park, if the development is approved as part of a Master Plan.~~ 3. This use may include a public access pier or boardwalk. See ~~KZC 30.15.030~~Chapter 83 KZC for regulations regarding these uses.

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30.29 User Guide. The charts in KZC 30.35 contain the basic zoning regulations that apply in the WD III zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 30.30

Zone WDIII

Section 30.30 – GENERAL REGULATIONS

The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

~~2.~~ Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

~~3~~2. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

3. The required 30-foot front yard may be reduced, subject to all of the following conditions:
   a. The existing primary structure does not conform to the minimum shoreline setback standard;
   b. The proposed complete replacement or replacement of portion of the existing primary structure comply with the minimum required shoreline setback established under the provisions of KZC Chapter 83, or as otherwise approved under the shoreline setback reduction provisions established in Section 83.380 KZC;
   c. The front yard for the complete replacement or the portion of replacement may be reduced one (1) foot for each one (1) foot of the shoreline setback that is increased in dimension from the setback of the existing non conforming primary structure, provided that subsection 3.d below is met; and
   d. Within the front yard, each portion of the replaced or portion of replaced primary structure is setback from the front property line by a distance greater than or equal to the maximum height of that portion above the front property line.
   (Does not apply to Public Access Pier, Boardwalk, or Public Access Facility; Boat launch; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units; Public Park; Public Utility uses; Boat Launch; or Water Taxi).

4. The required 30-foot front yard may be reduced, subject to the following conditions:
   a. The existing primary structure does not conform to the minimum shoreline setback standard;
   b. The front yard may be reduced one foot for each one foot of the shoreline setback that is increased in dimension;
   c. The new or remodeled primary structure must comply with the minimum required shoreline setback established under the provisions of KZC Chapter 83, or as otherwise approved under the shoreline setback reduction provisions established in Section 83.380 KZC; and
   d. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line. ~~increase in~~

5. May also be regulated under the Shoreline Master Program, ~~KMC Title 24~~Chapter 83 KZC.

Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.010	Detached Dwelling Unit	None	3,600 sq. ft./unit, except if 1,800 sq. ft./unit for up to 2 dwelling units if the public access provisions of KZC 83.390 are met ~~3,600 sq. ft.~~	30' See also Spec. Reg. 2.	t. ~~The greater of: a. 15 or b. 1-1/2 times the height of the primary structure above average building elevation minus 10'~~	5', but 2 side yards must equal at least 15 ~~10~~	See Chapter 83 KZC ~~The greater of: a. 15 or b. 15% of the average parcel depth.~~	80%	30' above average building elevation. This provision may not be varied.	E	A	2.0 per unit.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ ordinary high water mark. For the regulations regarding moorages and public access piers, see the specific listings in this zone and Chapter 83 KZC. ~~3~~2. ~~A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways. ~~4~~ 3. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. ~~5~~4. The required yard of a structure abutting Lake Washington Blvd. must be increased two feet for each one foot that structure exceeds 25 feet above the adjacent centerline of Lake Washington Blvd.

Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~Side	Shoreline Setback~~High Water Line~~						
.020	Attached or Stacked Dwelling Units	Process I, Chapter 145 KZC.	3,600 sq. ft. per unit	30'	~~The greater of: a. 15 or b. 1-1/2 times the height of the primary structure above average building elevation minus 10~~	5', but 2 side yards must equal at least 15 ~~10~~	See Chapter 83 KZC~~The greater of: a. 15' or b. 15% of the average parcel depth~~	80%	30' above average building elevation. See also Spec. Reg. 3	D	A	2.0 per unit.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding moorages and public access piers, see the specific listings in this zone and Chapter 83 KZC. 2. Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways.~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. The City shall require signs designating the public pedestrian access and public uses areas.~~. ~~See Chapter 83 KZC for requirements.~~ ~~5. A view corridor must be maintained across 30% of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ ~~5~~3. Structure height may be increased to 35 feet above average building elevation if the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and a. The increase is offset by a view corridor that is superior to that required by ~~Special Regulation 4~~Chatpter 83 KZC; or b. ~~The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~6~~7. ~~The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ REGULATIONS FOR THIS USE CONTINUED ON THE NEXT PAGE
				See General Regulations									

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Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~	Shoreline Setback~~High Water Line~~						
.020	Attached or Stacked Dwelling Units (continued)												REGULATIONS CONTINUED FROM PREVIOUS PAGE 4. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 5. Any required yard, other than the front required yard or ~~high water line required yard~~shoreline setback, may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached shall provide the minimum required yard.
.030	Public Access Pier, Boardwalk or Public Access Facility	See Chapter 83 KZC~~Process I, Chapter 145 KZC.~~	None	See Chapter 83 KZC~~Waterward of the High Waterline~~ ~~--~~ ~~10'~~ ~~10'~~ ~~--~~ ~~See also Special Regulation 8~~				--	~~Pier decks may not be more than 24□ above mean sea level. Diving boards and similar features may not be more than 3□ above the deck~~	--	~~See Spec. Reg. 7~~	See KZC 105.25.	Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use.~~ ~~2. If a structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~3. May not treat a structure with creosote, oil base or toxic substances.~~ ~~4. Must provide at least one covered and secured waste receptacle.~~ ~~5. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~6. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~7. Structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high, and visible from the lake.~~ ~~8. North and south property line yards may be decreased for over-water public use facilities which connect with waterfront public access on adjacent property.~~

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Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~	Shoreline Setback~~High Water Line~~						
.040	Piers, docks, boat lifts and canopies serving Detached Dwelling Unit.	See Chapter 83 KZC~~None~~	None	See Chapter 83 KZC~~Waterward of the High Waterline~~ ~~--~~ ~~10'~~ ~~10'~~ ~~--~~ ~~In addition, no moorage structure may be within:~~ ~~a. 25□ of a public park; or~~ ~~b. 25□ of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than those listed, is 5□~~				80%	~~Pier decks may not be more than 24□ above mean sea level. Diving boards and similar features may not be more than 3□ above the deck.~~	~~--~~	~~See Spec. Reg. 9.~~	None	Refer to Chapter 83 KZC for additional regulations. ~~1. Moorage must be for the exclusive use of the residents of the subject property. Renting moorage spaces is not permitted.~~ ~~2. No accessory uses, buildings, or activities are permitted as part of this use. Various accessory components are permitted as part of a General Moorage Facility. See that listing in this zone.~~ ~~3. Moorage structure may not extend waterward beyond a point 150 feet from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width.~~ ~~4. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~5. May not treat moorage structure with creosote, oil base or toxic substances.~~ ~~6. Must provide at least one covered and secured waste receptacle.~~ ~~7. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~8. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~9. Moorage structures must display the street address of the subject property. The address must be oriented to the Lake with letters and numbers at least four inches high, and visible from the Lake.~~ ~~10. Covered moorage is not permitted.~~ ~~11. Aircraft moorage is not permitted.~~ ~~12. Live-aboard boats are prohibited.~~

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Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.050	~~General Moorage Facility~~ Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units	See Chapter 83 KZC ~~Process IIA, Chapter 150 KZC.~~	None~~, but must have at least 100□ of frontage on Lake Washington.~~	Landward of the ~~High Waterline~~ Ordinary High Water Mark: 30' ~~See also Spec. Reg. 3.~~	~~The greater of: a. 15□ or of above on~~	5', but 2 side yards must equal at least 15□ ~~10□~~	See Chapter 83 KZC ~~For moorage structure, 0□ For other structures, the greater of: a. 15□ or b. 15% of the average parcel depth.~~	~~80%~~	Landward of the ~~High Waterline~~ Ordinary High Water Mark, 30□ above average building elevation. ~~Waterward of the High Waterline, Dock and Pier decks may not be more than 24□ above mean sea level.~~	B	B ~~See Spec. Reg. 14.~~	None	Refer to Chapter 83 KZC for additional regulations.~~1. Moorage must be for the exclusive use of the residents of the subject property. Renting moorage space is not permitted. 2. No structures, other than moorage structures or public access piers, may be waterward of the high waterline. For regulations regarding public access piers, see the specific listing in this zone. 3. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas. 4. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City. 5. A view corridor must be in one continuous piece. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties. 6. The design on the site must be compatible with the scenic nature of the waterfront. If the development will result in the
				Waterward of the Ordinary High Water Mark, see Chapter 83 KZC: ~~--~~	~~10□~~	~~10□~~	~~--~~						

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		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~	Shoreline Setback~~High Water Line~~						
				~~No moorage structure may be a. Within 100 feet of a public park; or b. Closer to a public park than a line that starts where the high waterline of the park intersects with the side property line of the park closest to the moorage structure at a 45° angle from the side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening overwater structure; or (See next page for the rest of the Required Yard Regulations)~~								~~isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation. 7. The City will determine the maximum allowable number of moorages based on the following factors: a. The ability of the land landward of the high waterline to accommodate the necessary support facilities. b. The potential for traffic congestion. c. The number of moorages shall not exceed the number of dwelling units on the subject property. REGULATIONS FOR THIS USE CONTINUED ON THE NEXT PAGE~~

Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.050	~~General Moorage Facility~~ (~~continued~~)			~~c. Closer to a lot containing a detached dwelling unit than a line that starts where the high waterline of the lot intersects the side property line of the lot closest to the moorage structure and runs waterward toward the moorage structure at a 30° angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not extend beyond any intervening overwater structure; or~~ ~~d. Within 25□ of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than those listed, is 5□~~ ~~(See previous page for the rest of this column)~~							~~8. Moorage structures may not be larger than is necessary to provide safe and reasonable moorage for the boats moored. The City will specifically review size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line; and~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats; and~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and~~ ~~d. The moorage structures will not adversely affect nearby uses; and~~ ~~e. The moorage structures will not have a significant long-term adverse effect on aquatic habitats.~~ ~~9. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~10. May not treat moorage structure with creosote, oil base or toxic substance.~~ ~~11. Must provide at least two covered and secured waste receptacles.~~ ~~12. All utility and service lines must be below the pier deck and, where feasible, underground.~~ ~~13. Piers must be adequately lit. The source of light must not be visible from neighboring properties.~~ ~~14. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high.~~ ~~15. Covered moorage is not permitted.~~ ~~16. Aircraft moorage is not permitted.~~ ~~17. At least one pump-out facility shall be provided.~~

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		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.060	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.											1. ~~The provisions of Chapter 90 KZC limiting development in and around wetlands do not apply to a public park, if the development is approved as part of a Master Plan.~~ 2. This use may include a public access pier, ~~or~~ boardwalk or public access facility. See the specific listing in this Zone and Chapter 83 KZC for regulations regarding these uses. ~~See KZC 30.15.030 for regulations regarding these uses.~~ 3. This use may include swimming beaches or other public recreational uses. See Chapter 83 for regulations regarding these uses.
.070 .080	Public Utility Government Facility Community Facility	Process IIA, Chapter 150 KZC.	None	30'	~~. The greater of: a. 15 or b. 1-1/2 times the height of the primary~~	5', but 2 side yards must equal at least 15' ~~.10'~~	See Chapter 83 KZC ~~The greater of: a. 15 or b. 15% of the average parcel depth.~~	80%	30' above average building elevation. See also Special Regulation 3.	A C See Spec. Reg. 4.	B	See KZC 105.25.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For regulations regarding moorages and public access piers, see the specific listings in this zone and ~~.~~Chapter 83 KZC. ~~2. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from the adjoining property. The City shall require signs designating the public pedestrian access and public uses areas.~~ 2. Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways. ~~A view corridor must be maintained across 30 percent of~~

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Section 30.35	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
					~~structure above average building elevation minus 10~~								~~the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ ~~4.~~3. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and ~~a.~~b. The increase is offset by a view corridor that is superior to that required by Special Regulation 4; or ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~5. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design, and landscaping must mitigate the impacts of that isolation.~~ ~~6.~~4. Landscape Category A or B may be required, depending on the type of use on the subject property and the impacts associated with the use on the nearby uses.

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Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.090	Assisted Living Facility	Process I, Chapter 145 KZC.	3,600 sq. ft.	30□ See also Spec. Reg. 6.	~~. The greater of: a. 15□ or b. 1-1/2 times the height of the pri-mary structure above average building elevation minus 10□~~	5□, but 2 side yards must equal at least 15□ ~~.10□~~	See Chapter 83 KZC ~~The greater of: a. 15□, or b. 15% of the average parcel depth~~.	80%	30□ above average building elevation. See also Special Regulation 8.	D	A	2.0 per independent unit. 1 per assisted living unit.	1. A facility that provides both independent dwelling units and assisted living units shall be processed as an assisted living facility. 2. A nursing home use may be permitted as part of an assisted living facility use in order to provide a continuum of care for residents. If a nursing home is included, the following parking standards shall apply to the nursing home portion of the facility: a. One parking stall shall be provided for each bed. 3. For density purposes, two assisted living units shall constitute one dwelling unit. Total dwelling units may not exceed the number of stacked dwelling units allowed on the subject property. Through Process IIB, Chapter 152 KZC, up to 1 1/2 times the number of stacked dwelling units allowed on the property may be approved if the following criteria are met: a. Project is of superior design, and b. Project will not create impacts that are substantially different than would be created by a permitted multifamily development. 4. No structures, other than moorage structures or public access piers, may be waterward of the high waterline. For the regulation regarding moorages and public access piers, see the specific listings in this zone and Chapter 83 KZC.. ~~5.~~ Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways. ~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from the adjoining property. The City shall require signs designating the public pedestrian access and public uses areas.~~ REGULATIONS CONTINUED ON NEXT PAGE
				The minimum dimension of any yard, other than those listed. is 5'.									

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Section 30.35	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback ~~High Water Line~~						
.090	Assisted Living Facility (continued												~~A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the existing view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ 5. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and ~~a.~~b. The increase is offset by a view corridor that is superior to that required by Chapter 83 KZC~~Special Regulation 7~~; or ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~9. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design, and landscaping must mitigate the impacts of that isolation.~~ 10. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use.
.100	Boat launch (for non-motorized boats)	See Chapter 83 KZC	None	See Chapter 83 KZC								None	Refer to Chapter 83 KZC for additional regulations.

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		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Property Line~~ Side	Shoreline Setback~~High Water Line~~						
.110	Water taxi	See Chapter 83 KZC	None	Landward of the Ordinary High Water Mark				80%	Landward of the ordinary high water mark, 30□ above average building elevation.	B	B	See KZC 105.25.	Refer to Chapter 83 KZC for additional regulations.
				30' See Gen. Regs		5', but 2 side yards must equal at least 15□	See Chapter 83 KZC						

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50.14 User Guide. The charts in KZC 50.17 contain the basic zoning regulations that apply in the CBD 2 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 50.15

Zone CBD -2

Section 50.15 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

~~2. See KZC 50.20 for regulations regarding bulkheads and land surface modification.~~

~~3~~2. Along Lake Street South, north of Kirkland Avenue, buildings exceeding one story above Lake Street South shall demonstrate compliance with the Design Regulations of Chapter 92 KZC and all provisions of the Downtown Plan. Through Design Review (D.R.) the City shall find that any allowance for additional height is clearly outweighed by identified public benefits such as through-block public pedestrian access or through-block view corridors (Does not apply to Public Access Pier, Boardwalk, or Public Access Facility; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; or Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units)~~(does not apply to Public Access Pier or Boardwalk and Moorage Facility for One or Two Boats uses)~~.

~~4~~3. In no case shall the height exceptions identified in KZC 50.62 and 115.60(2)(d) result in a structure which exceeds 28 feet above the abutting right-of-way (Does not apply to Public Access Pier, Boardwalk, or Public Access Facility; Boat launch; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units; or Marina)~~(does not apply to Public Access Pier or Boardwalk, Moorage Facility for One or Two Boats uses and General Moorage Facility Uses)~~.

~~5~~4. South of Second Avenue South, maximum height of structure is three stories above Lake Street South as measured at the midpoint of the frontage of the subject property on Lake Street South. Buildings exceeding two stories shall demonstrate compliance with the design regulations of Chapter 92 KZC and all provisions of the Downtown Plan (Does not apply to Public Access Pier, Boardwalk or Public Access Facility; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; or Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units)~~(does not apply to Public Access Pier or Boardwalk and Moorage Facility for One or Two Boats uses).~~

~~6~~5. For purposes of measuring building height, if the subject property abuts more than one right-of-way, the applicant may choose which right-of-way shall be used to measure the allowed height of structure ~~(does not apply to Public Access Pier or Boardwalk, Moorage Facility for One or Two Boats, and General Moorage Facility uses)~~ (Does not apply to Public Access Pier, Boardwalk or Public Access Facility; Piers, docks, boat lifts and canopies serving Detached Dwelling Unit; Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units).

~~7~~6. May not use land waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

~~8~~7. Development in this zone may also be regulated under the City's Shoreline Master Program; refer to KZC Chapter 83.~~consult that document~~.

Section 50.17	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	Side	Rear	MAXIMUMS: Lot Coverage	Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
.010	A Retail Establishment, other than those specifically listed, limited, or prohibited in this zone, selling goods or providing services, including banking and related financial services	D.R., Chapter 142 KZC	None	0'	0'	0'	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	D	E	One per each 350 sq. ft. of gross floor area. See KZC 50.60..	1. The following provisions, which supersede any conflicting provisions of this Chapter, apply only if the subject property abuts or includes a portion of Lake Washington: ~~a. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property.~~ a. Chapter 83 KZC contains regulations regarding shoreline setbacks and public pedestrian walkways. ~~b. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard.~~ ~~c.~~b. No structure, other than moorage structures, may be waterward of the ~~high waterline~~ordinary high water mark. For regulation regarding moorages, see the moorage listings in this zone and Chapter 83 KZC. ~~d. Must provide public pedestrian access from an adjoining right-of-way to and along the entire waterfront of the subject property within the high waterline yard. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating public pedestrian access and public use areas.~~ 2. The following uses are not permitted in this zone: a. Vehicle service stations. b. The sale, service and/or rental of motor vehicles, sailboats, motor boats, and recreational trailers; provided, that motorcycle sales, service, or rental is permitted if conducted indoors. c. Drive-in facilities and drive-through facilities. 3. Ancillary assembly and manufacture of goods on the premises of this use are permitted only if: a. The assembled or manufactured goods are directly related to and dependent upon this use, and are available for purchase and removal from the premises. b. The outward appearance and impacts of this use with ancillary assembly or manufacturing activities must be no different from other retail uses. 4. The parking requirement for hotel or motel use does not include parking requirements for ancillary meetings and convention facilities. Additional parking requirements for ancillary uses shall be determined on a case-by-case basis.
.020	Entertainment, Cultural and/or Recreational Facility										See KZC 50.60 and 105.25.	
.030	Hotel or Motel										One for each room. See Special Regulation 4 and KZC 50.60.	
.040	Restaurant or Tavern										One per each 125 sq. ft. of gross floor area. See KZC 50.60.	

Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.050	School, Day-Care Center, or Mini School or Day-Care Center	D.R., Chapter 142 KZC.	None	0'	0'	0'	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way	D	E	See KZC 50.60 and 105.25.	1. The following provisions, which supersede any conflicting provisions of this Chapter, apply only if the subject property abuts or includes a portion of Lake Washington: a. Chapter 83 KZC contains regulations regarding shoreline setbacks and public pedestrian walkways.~~a. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property.~~ ~~b. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard.~~ c. No structure, other than moorage structures, may be waterward of the ~~high waterline~~ordinary high water mark. For regulations regarding moorages, see the moorage listings in this zone and Chapter 83 KZC. 2. A six-foot-high fence is required along all property lines adjacent to outside play areas. 3. Structured play areas must be setback from all property lines by at least five feet. 4. Hours of operation may be limited by the City to reduce impacts on nearby residential uses. 5. An on-site passenger loading area may be required depending on the number of attendees and the extent of the abutting right-of-way improvements. 6. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388).

Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.060	Assisted Living Facility See Special Regulation 4.	D.R., Chapter 142 KZC.	None	0'	0'	0'	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	D	A	1.7 per independent unit. 1 per assisted living unit. See KZC 50.60.	1. A facility that provides both independent dwelling units and assisted living units shall be processed as an assisted living facility. 2. A nursing home use may be permitted as part of an assisted living facility use in order to provide a continuum of care for residents. If a nursing home use is included, the following parking standard shall apply to the nursing home portion of the facility: a. One parking stall shall be provided for each bed. 3. The following provisions, which supersede any conflicting provisions of this Chapter, apply only if the subject property abuts or includes a portion of Lake Washington: a. Chapter 83 KZC contains regulations regarding shoreline setbacks and public pedestrian walkways.~~a. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property.~~ ~~b. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard~~. ~~c.~~b. No structure, other than moorage structures, may be waterward of the ~~high waterline~~ordinary high water mark. For regulations regarding moorages, see the moorage listings in this zone and Chapter 83 KZC. ~~d. Must provide public pedestrian access from an adjoining right-of-way to and along the entire waterfront of the subject property within the high waterline yard. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating public pedestrian access and public use areas.~~ 4. This use may be located on the street level floor of a building only if there is a retail space extending a minimum of 30 feet of the building depth between this use and the abutting right-of-way. The Planning Director may approve a reduction to the depth requirement for the retail space if the applicant demonstrates that the proposed configuration of the retail use provides an adequate dimension for a viable retail tenant and provides equivalent or superior visual interest and potential foot traffic as would compliance with the required dimension.

Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.070	Private Club or Lodge	D.R., Chapter 142 KZC.	None	0′	0′	0′	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	D	B	See KZC 50.60 and 105.25.	1. The following provisions, which supersede any conflicting provisions of this Chapter, apply only if the subject property abuts or includes a portion of Lake Washington: a. Chapter 83 KZC contains regulations regarding shoreline setbacks and public pedestrian walkways.~~a. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property.~~ ~~b. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard.~~ ~~c.~~b. No structure, other than moorage structures, may be waterward of the ~~high waterline~~ ordinary high water mark. For regulations regarding moorages, see the moorage listings in this Zone and Chapter 83 KZC. ~~d. Must provide public pedestrian access from an adjoining right-of-way to and along the entire waterfront of the subject property within the high waterline yard. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating public pedestrian access and public use areas.~~ 2. Ancillary assembly and manufacture of goods on premises may be permitted as part of an office use if: a. The ancillary assembled or manufactured goods are subordinate to and dependent on this office use; and b. The outward appearance and impacts of this office use with ancillary assembly and manufacturing activities must be no different from other office uses. 3. This use may be located on the street level floor of a building only if there is a retail space extending a minimum of 30 feet of the building depth between this use and the abutting right-of-way. The Planning Director may approve a reduction to the depth requirement for the retail space if the applicant demonstrates that the proposed configuration of the retail use provides an adequate dimension for a viable retail tenant and provides equivalent or superior visual interest and potential foot traffic as would compliance with the required dimension. 4. Veterinary offices are not permitted in this zone.
080	Office Use									D	One per 350 sq. ft. of gross floor area. See KZC 50.60.	

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Section 50.17	USE ⇩ REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115) Front	Side	Rear	MAXIMUMS: Lot Coverage	Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
.090	Stacked or Attached Dwelling Units	D.R., Chapter 142 KZC	None	0'	0'	0'	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	D	A	1.7 per unit. See KZC 50.60.	1. The following provisions, which supersede any conflicting provisions of this Chapter, apply only if the subject property abuts or includes a portion of Lake Washington: a.Chapter 83 KZC contains regulations regarding shoreline setbacks and public pedestrian walkways. ~~A high waterline yard equal in depth to the greater of 15 ft. or 15 percent of the average parcel depth is hereby established on the subject property.~~ ~~b. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard.~~ ~~c.~~b. No structure, other than moorage structures, may be waterward of the ~~high waterline~~ordinary high water mark. For regulations regarding moorages, see the moorage listings in this Zone and Chapter 83 KZC. ~~d. Must provide public pedestrian access from an adjoining right-of-way to and along the entire waterfront of the subject property within the high waterline yard. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating public pedestrian access and public use areas.~~ 2. This use may be located on the street level floor of a building only if there is a retail space extending a minimum of 30 feet of the building depth between this use and the abutting right-of-way. The Planning Director may approve a reduction to the depth requirement for the retail space if the applicant demonstrates that the proposed configuration of the retail use provides an adequate dimension for a viable retail tenant and provides equivalent or superior visual interest and potential foot traffic as would compliance with the required dimension.
.100	Public Access Pier ~~or~~, Boardwalk, or Public Access Facility			Landward of the ~~high waterline~~ordinary high water mark: 0	0	0	--	~~Pier decks may not be more than 24 feet above mean sea level. Diving boards and similar features may not be more than 3 feet above the deck.~~See Chapter 83 KZC	--	~~See Spec. Reg. 7.~~	--	1. Refer to Chapter 83 KZC for additional regulations.~~No accessory uses, buildings, or activities may be permitted as part of this use.~~ ~~2. If a structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~3. May not treat structures with creosote, oil base, or toxic substances.~~ ~~4. Must provide at least one covered and secured waste receptacle.~~ ~~5. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~6. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~
				~~Waterward of the high waterline~~: ~~0~~	~~10~~	~~0~~						
				~~See Special Regulation 8.~~								

Section 50.17	USE ⇩ REGULATIONS ⇨	Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												~~7. The pier or boardwalk must display the street address of the subject property. The address must be oriented to and visible from the lake with letters and numbers at least four inches high.~~ ~~8. The side property line yards may be reduced for over water public access piers or boardwalks which connect with waterfront public access on adjacent property~~.
.110	Piers, docks, boat lifts and canopies serving Detached Dwelling Unit~~Moorage Facility for One or Two Boats~~	D.R., Chapter 142 KZC. Also see Chapter 83 KZC	None	Landward of the ~~high waterline~~ordinary high water mark			100%	See Chapter 83 KZC~~Pier decks may not be more than 24 feet above mean sea level. Diving boards and similar features may not be more than 3 feet above the deck.~~	--	~~See Spec. Reg. 9.~~	~~See KZC 50.60 and 105.25.~~None	1. Refer to Chapter 83 KZC for additional regulations.~~No accessory use, buildings, or activities are permitted as part of this use. Various accessory components are permitted as part of a General Moorage Facility. See that listing in this zone.~~ ~~2. Moorage structures may not extend waterward beyond a point 150 feet from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width.~~ ~~3. If moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~4. May not treat structures with creosote, oil-based, or toxic substances.~~ ~~5. Moorage structures may not be closer than 25 feet to another moorage structure not on the subject property.~~ ~~6. Must provide at least one covered and secured waste receptacle.~~ ~~7. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~8. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~ ~~9. Moorage structures must display the street address of the subject property. The address must be oriented to and visible from the lake, with letters and numbers at least four inches high.~~ ~~10. Covered moorage is not permitted.~~ ~~11. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property. No structure other than moorage structures may be within the high waterline yard.~~
				0'	0'	0'						
				~~Waterward of the high waterline~~								
				~~0~~	~~10~~	~~0~~						
				~~See Special Regulation 5.~~								

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Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units	D.R., Chapter 142 KZC. See Chapter 83 KZC	None	0'	0'	0'	100%	See Chapter 83 KZC	-	-	None	Refer to Chapter 83 KZC for additional regulations.
.120	~~General Moorage Facility~~Marina	~~Process IIA, Chapter 150 KZC, and~~ D.R., Chapter 142 KZC. Also see Chapter 83 KZC	None, ~~but must have at least 100 ft. of frontage on Lake Wash-ington.~~	0'	0'	0'	100%	Landward of the ~~high waterline~~ordinary high water mark, 28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way. ~~Waterward of the high waterline, pier decks may not be more than 24 feet above mean sea level. Diving boards and similar fea-tures may not be more than 3 feet above the deck.~~	See Spec. Reg. ~~5~~3.	B ~~See Spec. Reg. 14.~~	See KZC 50.60 and 105.25.	1. Refer to Chapter 83 KZC for additional regulations. ~~The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The topography of the area.~~ ~~b. The ability of the land waterward of the high waterline to support the moorages.~~ ~~c. The nature of nearby uses.~~ ~~d. The potential for traffic congestion.~~ ~~e. The effect on existing habitats.~~ ~~2. Moorage structures may not be larger than is reasonably necessary to provide safe and reasonable moorage for the boats to be moored. The City will specifically review the size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the Outer Harbor Line.~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats.~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation.~~ ~~3~~2. The following accessory components are allowed if approved through Process IIB, Chapter 152 KZC: a. Gas and oil sale for boats, if: 1) Storage tanks are underground and on dry land; and 2) The use has facilities to contain and clean up oil and gas spills. b. An over-water shed, which is no more than 50 square feet and not more than 10 feet high as measured from the deck, accessory to oil and gas sale for boats. c. Boat and motor sales and leasing.
				See Spec. Reg 10.								

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Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												d. Boat or motor repair and service if: 1) This activity is conducted on dry land and either totally within a building or totally sight screened from the adjoining property and the right-of-way; and 2) All dry land motor testing is conducted within a building. e. Meeting and special events rooms. ~~4. Must provide public pedestrian access from an adjoining right-of-way to and along the entire waterfront of the subject property within the high waterline yard. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating public pedestrian access and public use areas.~~ ~~5~~3. The City may require the applicant to install a buffer between the subject property and adjoining property. The City will use the requirements of Chapter 95 as a guide for requiring a buffer. ~~6. At least one pump-out facility shall be provided for use by the general public. This facility must be easily accessible to the general public and clearly marked for public use.~~ ~~7. Must provide public restrooms unless moorage is available only for the residents of dwelling units on the subject property.~~ ~~8. If moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~9. May not treat moorage structures with creosote, oil based, or toxic substances.~~ ~~10. No moorage structure may be within:~~ ~~a. 100 feet of a public park;~~ ~~b. 50 feet of any abutting lot that contains a detached dwelling unit; and~~ ~~c. 25 feet of another moorage structure not on the subject property.~~ ~~11. Must provide at least two covered and secured waste receptacles.~~ ~~12. All utility lines must be below the pier decks and, where feasible, underground.~~ ~~13. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~ ~~14. Moorage structures must display the street address of the subject~~

Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												~~property. The address must be oriented to and visible from the lake, with letters and numbers at least four inches high.~~ ~~15. Covered moorage is not permitted. Aircraft moorage is not permitted.~~ ~~16. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property. No structure other than moorage structures may be within the high waterline yard.~~ ~~17. Balconies that are at least 15 feet above finished grade may extend up to four feet into the high waterline yard.~~ ~~18. No structures, other than moorage structures, may be waterward of the high waterline.~~
	Tour Boat	D.R., Chapter 142 KZC See Chapter 83 KZC.	None	0'	0'	0'	100%	Landward of the ordinary high water mark, 28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	See Spec. Reg. 2	B	See KZC 50.60 and 105.25.	1. Refer to Chapter 83 KZC for additional regulations. 2. The City may require the applicant to install a buffer between the subject property and adjoining property. The City will use the requirements of KZC Chapter 95 as a guide for requiring a buffer.
	Passenger Only Ferry Terminal	D.R., Chapter 142 KZC See Chapter 83 KZC.	None	0'	0'	0'	100%	Landward of the ordinary high water mark, 28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each	See Spec. Reg. 2	B	See KZC 50.60 and 105.25.	1. Refer to Chapter 83 KZC for additional regulations. 2. The City may require the applicant to install a buffer between the subject property and adjoining property. The City will use the requirements of Chapter 95 as a guide for requiring a buffer.

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Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
								right-of-way.				
	Water Taxi	D.R., Chapter 142 KZC See Chapter 83 KZC.	None	0'	0'	0'	100%	Landward of the ordinary high water mark, 28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	See Spec. Reg. 2	B	See KZC 50.60 and 105.25.	1. Refer to Chapter 83 KZC for additional regulations. 2. The City may require the applicant to install a buffer between the subject property and adjoining property. The City will use the requirements of Chapter 95 as a guide for requiring a buffer.
	Boat Launch (motorized boats)	D.R., Chapter 142 KZC See Chapter 83 KZC.	None	0'	0'	0'	100%	Landward of the ordinary high water mark, 28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each	See Spec. Reg. 2	B	See KZC 50.60 and 105.25.	1. Refer to Chapter 83 KZC for additional regulations. 2. The City may require the applicant to install a buffer between the subject property and adjoining property. The City will use the requirements of Chapter 95 as a guide for requiring a buffer.

Section 50.17	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
								right-of-way.				
.130	Public Utility	D.R., Chapter 142 KZC.	None	0'	0'	0'	100%	28' above the abutting right-of-way measured at the midpoint of the frontage of the subject property on each right-of-way.	D	B	See KZC 50.60 and 105.25.	1. May be permitted only if locating this use in the immediate area of subject property is necessary to permit efficient service to the area or the City as a whole. 2. No structures, other than moorage structures, may be waterward at the ~~high waterline~~ordinary high water mark. For regulations regarding moorages, see the moorage listings in this zone and Chapter 83 KZC.
.140	Government Facility											
.150	Community Facility											
.160	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.										

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52.14 User Guide. The charts in KZC 52.17 contain the basic zoning regulations that apply in the JBD 2 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use

Section 52.15

Zone JBD-2

Section 52.15 – GENERAL REGULATIONS

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. Must provide a public pedestrian access easement if the Planning Official determines that it will furnish a pedestrian connection or part of a connection between 98th Avenue NE and 100th Avenue NE. Pathway improvements will also be required if the easement will be used immediately. No more than two complete connections shall be required.

3. The maximum height of structures on the subject property may be increased by up to 13 feet if a view corridor is maintained across 30 percent of the average parcel width for the portion of the building above 26 feet. The corridor will be located to provide the widest view corridor given development on adjacent properties to the north and south.

4. See Chapters 100 and 162 KZC for information about nonconforming signs. KZC 162.35 describes when nonconforming signs must be brought into conformance or removed (does not apply to Public Parks uses).

5. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

52.19 The charts in KZC 52.22 contain the basic zoning regulations that apply in the JBD 3 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 52.15

Zone JBD-3

Section 52.20 – GENERAL REGULATIONS

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. A 10-foot landscape buffer shall be provided along 98th Avenue NE. Alternative techniques for framing this entryway to the business district may be proposed by the applicant as part of D.R.

3. The maximum height of structures on the subject property may be increased by up to 13 feet if a view corridor is maintained across 30 percent of the average parcel width for the portion of the building above 26 feet. The corridor will be located to provide the widest view corridor given development on adjacent properties to the north and south

4. See Chapters 100 and 162 KZC for information about nonconforming signs. KZC 162.35 describes when nonconforming signs must be brought into conformance or removed (does not apply to Public Parks uses).

5. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

52.24 User Guide. The charts in KZC 52.27 contain the basic zoning regulations that apply in the JBD 4 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 52.25

Zone JBD-4

Section 52.25 – GENERAL REGULATIONS

The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. Must provide public pedestrian access as required under Chapter 83 KZC.~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~

~~3. A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided they do not obscure the view from Juanita Drive or 98th Avenue NE to and beyond Lake Washington. This corridor must be adjacent to either of the side property lines, whichever will result in the widest view corridor, given development on adjacent properties to the east and west (does not apply to Public Parks uses).~~

~~4~~3. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

~~5~~4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

52.29 User Guide. The charts in KZC 52.32 contain the basic zoning regulations that apply in the JBD 5 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 52.30

Zone
JBD-5

Section 52.30 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. Must provide public pedestrian access as required under Chapter 83 KZC.~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~

~~3. A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided they do not obscure the view from Juanita Drive or 98th Avenue NE to and beyond Lake Washington. This corridor must be adjacent to either of the side property lines, whichever will result in the widest view corridor, given development on adjacent properties to the east and west (does not apply to Public Access Pier or Boardwalk, Public Parks, Moorage Facility for 1 or 2 Boats and General Moorage Facility uses).~~

~~4. Must provide a required yard of 15 feet or 15 percent of average parcel depth, whichever is greater, measured from the high waterline. To the extent that this provision is inconsistent with other required yard dimensions identified in this Chapter, this provision shall govern (does not apply to Public Access Pier or Boardwalk, Public Parks, Moorage Facility for 1 or 2 Boats and General Moorage Facility uses).~~

~~5~~3. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

~~6~~4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

Section 52.32	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.160	Public Access Pier ~~or~~ Boardwalk or Public Access Facility	D.R., Chapter 142 KZC. Also see Chapter 83 KZC	~~None~~	~~Landward of the high waterline~~ ~~0'~~ ~~0'~~ ~~0'~~ ~~Waterward of the high waterline~~ ~~0'~~ ~~10'~~ ~~0'~~ ~~See also Spec. Reg. 8~~ See Chapter 83 KZC			~~--~~	~~Pier decks may not be more than 24 feet above mean sea level. Diving boards and similar features may not be more than 3 feet above the deck.~~	~~--~~	~~See Spec. Reg. 7.~~	~~--~~	Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities may be permitted as part of this use.~~ ~~2. If a structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~3. May not treat structures with creosote, oil base, or toxic substances.~~ ~~4. Must provide at least one covered and secured waste receptacle.~~ ~~5. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~6. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~ ~~7. The pier or boardwalk must display the street address of the subject property. The address must be oriented to and visible from the lake with letters and numbers at least four inches high.~~ ~~8. The side property line yards may be reduced for over water public access piers or boardwalks which connect with waterfront public access on adjacent property.~~ ~~9. See KZC 52.35 for regulations regarding bulkheads and land surface modification.~~ ~~10. This development may also be regulated under the City's Shoreline Master Program; consult that document.~~ ~~11. May not use land waterward of the high waterline to determine lot size or to calculate allowable density.~~

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Section 52.32	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.170	Piers, docks, boat lifts and canopies serving Detached Dwelling Unit~~Moorage Facility for One or Two Boats~~	None	~~None~~	~~Landward of the high waterline~~ ~~0'~~ ~~0'~~ ~~0'~~ ~~Waterward of the high waterline~~ ~~0'~~ ~~10'~~ ~~0'~~ ~~See Spec. Reg. 5.~~ See Chapter 83 KZC			~~80%~~	~~Pier decks may not be more than 24 feet above mean sea level. Diving boards and similar features may not be more than 3 feet above the deck.~~	–	~~See Spec. Reg. 9.~~	~~See KZC 105.25.~~	Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use. Various accessory components are permitted as part of a General Moorage Facility. See that listing in this zone.~~ ~~2. Moorage structures may not extend waterward beyond a point 150 ft. from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width.~~ ~~3. If moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~4. May not treat structures with creosote, oil base, or toxic substances.~~ ~~5. Moorage structures may not be closer than 25 feet to another moorage structure not on the subject property.~~ ~~6. Must provide at least one covered and secured waste receptacle.~~ ~~7. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~8. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~ ~~9. Moorage structures must display the street address of the subject property. The address must be oriented to and visible from the lake, with letters and numbers at least four inches high.~~ ~~10. Covered moorage is not permitted. Aircraft moorage is nor permitted.~~ ~~11. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property. No structure other than moorage structures may be within the high waterline yard.~~ ~~12. See KZC 52.35 for regulations regarding bulkheads and land surface modification. In addition, refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.~~ ~~13. This development may also be regulated under the City's Shoreline Master Program; consult that document.~~ ~~14. May not use land waterward of the high waterline to determine lot size or to calculate allowable density.~~

Section 52.32	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.175	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units	None										Refer to Chapter 83 KZC for additional regulations.

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Section 52.32	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.180	~~General Moorage Facility~~Marina	~~Process IIA, Chapter 150 KZC, and~~ D.R., Chapter 142 KZC.	None. ~~but must have at least 100□ of frontage on Lake Washington~~.	Landward of the ~~high waterline~~ordinary high water mark 0' ~~Waterward of the high waterline~~ ~~0□~~ ~~See also Spec. Reg. 5.~~	0' ~~10□~~	0' ~~0□~~	80%	Landward of the ~~high waterline~~ordinary high water mark 26□ above average building elevation. ~~Waterward of the high waterline, pier decks may not be more than 24 feet above mean sea level. Diving boards and similar features may not be more than 3□ above the deck~~.	See Spec. Reg. 4.	B ~~See Spec. Reg. 13~~.	See KZC 105.25.	1. Refer to Chapter 83 KZC for additional regulations.~~1. The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The topography of the area.~~ ~~b. The ability of the land waterward of the high waterline to support the moorages.~~ ~~c. The nature of nearby uses.~~ ~~d. The potential for traffic congestion.~~ ~~e. The effect on existing habitats.~~ ~~2. Moorage structures may not be larger than is reasonably necessary to provide safe and reasonable moorage for the boats to be moored. The City will specifically review the size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the Outer Harbor Line.~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats.~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation.~~ ~~3.~~2. The following accessory components are allowed if approved through Process IIB, Chapter 152 KZC: a. Gas and oil sale for boats, if: 1) Storage tanks are underground and on dry land; and 2) The use has facilities to contain and clean up oil and gas spills. b. An over-water shed, which is no more than 50 square feet and not more than 10 feet high as measured from the deck, accessory to oil and gas sale for boats. c. Boat and motor sales and leasing. d. Boat or motor repair and service if: 1) This activity is conducted on dry land and either totally within a building or totally sight screened from the adjoining property and the right-of-way; and 2) All dry land motor testing is conducted within a building. e. Meeting and special events rooms. 4. The City may require the applicant to install a buffer between the subject

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Section 52.32	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS									
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												property and adjoining property. The City will use the requirements of Chapter 95 KZC as a guide for requiring a buffer. REGULATIONS CONTINUED ON NEXT PAGE
.180	~~General Moorage Facility (Continued)~~											~~5. At least one pump-out facility shall be provided. This facility must be easily accessible to the general public and clearly marked for public use, unless moorage is available only for the residents of dwelling units on the subject property.~~ ~~6. Must provide restrooms unless moorage is available only for the residents of dwelling units on the subject property.~~ ~~7. If moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to proposing this use.~~ ~~8. May not treat moorage structures with creosote, oil base, or toxic substances.~~ ~~9. No moorage structure may be within:~~ ~~a. 100 feet of a public park;~~ ~~b. 50 feet of any abutting lot that contains a detached dwelling unit; or~~ ~~c. 25 feet to another moorage structure not on the subject property.~~ ~~10. Must provide at least two covered and secured waste receptacles.~~ ~~11. All utility lines must be below the pier decks and, where feasible, underground.~~ ~~12. Piers must be adequately lit; the source of the light must not be visible from off the subject property.~~ ~~13. Moorage structures must display the street address of the subject property. The address must be oriented to and visible from the lake, with letters and numbers at least four inches high.~~ ~~14. Covered moorage is not permitted. Aircraft moorage is nor permitted.~~ ~~15. A high waterline yard equal in depth to the greater of 15 feet or 15 percent of the average parcel depth is hereby established on the subject property. No structure other than moorage structures may be within the high waterline yard.~~ ~~16. No structures, other than moorage structures, may be waterward~~

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Section 52.32	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												~~of the high waterline.~~ ~~17. See KZC 52.35 for regulations regarding bulkheads and land surface modification.~~ ~~18. This development may also be regulated under the City's Shoreline Master Program; consult that document.~~ ~~19. May not use land waterward of the high waterline to determine lot size or to calculate allowable density.~~
	Passenger Only Ferry Terminal	See Chapter 83 KZC.	None	0'.	0'.	0'.	80%	Landward of the Ordinary High Water Mark, 26□ above average building elevation.	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations.
	Water Taxi	See Chapter 83 KZC.	None	0'.	0'.	0'.	80%	Landward of the Ordinary High Water Mark, 26□ above average building elevation.	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations.
	Boat Launch (motorized boats)	See Chapter 83 KZC.	None	0'.	0'.	0'.	80%	Landward of the Ordinary High Water Mark, 26□ above average building elevation.	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations.

49.05 User Guide. The charts in KZC 49.15 contain the basic zoning regulations that apply in each P zone of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 49.10

Zone P

Section 49.10 – GENERAL REGULATIONS

The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.

3. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

The charts in KZC 50.12 contain the basic zoning regulations that apply in the CBD 1 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 50.10

Zone CBD-1A & 1B

Section 50.10 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. The maximum height of structure shall be measured at the midpoint of the frontage of the subject property on the abutting right-of-way, excluding First Avenue South. See KZC 50.62 for additional building height provisions.

3. The street level floor of all buildings shall be limited to one or more of the following uses: Retail; Restaurant or Tavern; Banking and Related Financial Services; and Entertainment, Cultural and/or Recreational Facility use. The required uses shall have a minimum depth of 20 feet and an average depth of at least 30 feet (as measured from the face of the building on the abutting right-of-way). Buildings proposed and built after April 1, 2009, and buildings that existed prior to April 1, 2009, which are at least 10 feet below the maximum height of structure, shall have a minimum depth of 10 feet and an average depth of at least 20 feet containing the required uses listed above.
The Design Review Board (or Planning Director if not subject to D.R.) may approve a minor reduction in the depth requirements if the applicant demonstrates that the requirement is not feasible given the configuration of existing or proposed improvements and that the design of the retail frontage will maximize visual interest. Lobbies for residential, hotel, and office uses may be allowed within this space subject to applicable design guidelines.

4. Where public improvements are required by Chapter 110 KZC, sidewalks on pedestrian-oriented streets within CBD 1A and 1B shall be as follows:
Sidewalks shall be a minimum width of 12 feet. The average width of the sidewalk along the entire frontage of the subject property abutting each pedestrian-oriented street shall be 13 feet. The sidewalk configuration shall be approved through D.R.

5. Upper story setback requirements are listed below. For purposes of the following regulations, the term “setback” shall refer to the horizontal distance between the property line and any exterior wall of the building. The measurements shall be taken from the property line abutting the street prior to any potential right-of-way dedication.
a. Lake Street: No portion of a building within 30 feet of Lake Street may exceed a height of 28 feet above Lake Street except as provided in KZC 50.62.
b. Central Way: No portion of a building within 30 feet of Central Way may exceed a height of 41 feet above Central Way except as provided in KZC 50.62.
c. Third Street and Main Street: Within 40 feet of Third Street and Main Street, all stories above the second story shall maintain an average setback of at least 10 feet from the front property line.
d. All other streets: Within 40 feet of any front property line, other than Lake Street, Central Way, Third Street, or Main Street, all stories above the second story shall maintain an average setback of at least 20 feet from the front property line.

e. The required upper story setbacks for all floors above the second story shall be calculated as Total Upper Story Setback Area as follows:
Total Upper Story Setback Area = (Linear feet of front property line(s), not including portions of the site without buildings that are set aside for vehicular areas) x (Required average setback) x (Number of stories proposed above the second story). See Plate 35.
f. The Design Review Board is authorized to allow a reduction of the required upper story setback by no more than five feet subject to the following:
1) Each square foot of additional building area proposed within the setback is offset with an additional square foot of public open space (excluding area required for sidewalk dedication) at the street level.
2) The public open space is located along the sidewalk frontage and is not covered by buildings.
3) For purposes of calculating the offsetting square footage, along Central Way, the open space area at the second and third stories located directly above the proposed ground level public open space is included. Along all other streets, the open space area at the second story located directly above the proposed ground level public open space is included.
4) The design and location is consistent with applicable design guidelines.
g. The Design Review Board is authorized to allow rooftop garden structures within the setback area.
h. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

60.14 **User Guide. The charts in KZC 60.17 contain the basic zoning regulations that apply in Planned Area 2, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.**

Section 60.15

Zone PLA2

Section 60.15 – GENERAL REGULATIONS

The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. Development in parts of this zone may be limited by Chapter 83 or 90 KZC, regarding development near streams, lakes and wetlands. In addition, the site must be designed to concentrate development away from, and to minimize impact on, the wetlands.

3. ~~See KZC 60.18 for regulations concerning bulkheads and land surface modifications (does not apply to Mini-School or Mini-Day-Care (7 – 12 attendees) and Day-Care Home (6 or less attendees) uses).~~

~~4~~3. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

~~5~~4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

Section 60.17	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.010	Attached or Stacked Dwelling Unit	Process IIB, Chapter 152 KZC.	35,000 sq. ft. per unit	20'	5', but 2 side yards must equal at least 15'	10'	60%	25' above average building elevation. See Special Regulation ~~4~~ 3.	D	A	1.7 per unit.	1. No structure may be waterward of the ~~high waterline~~ordinary high water mark. ~~2. No structure may be within 50 feet of the high waterline of the canal. No structure may be within 100 feet of the high waterline of the remainder of Lake Washington.~~ ~~3.~~2. If the development includes portions of Planned Area 3, the applicant may propose and the City may require that part or all of the density allowed in Planned Area 2 be developed in Planned Area 3. ~~4.~~3. The height of a structure may be increased as long as neither of the following maximums is exceeded: a. The structure may not exceed 60 feet above average building elevation. b. The structure may not exceed a plane that starts 3.5 feet above the outside westbound lane of SR 520 and ends at the high waterline of Lake Washington in the zone, excluding the canal. ~~5.~~4. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use. ~~6.~~5. The side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of five feet. ~~7.~~6. The rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot.
				See Spec. Regs. ~~2,~~ ~~6~~5, and ~~7~~6.								

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Section 60.17	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.020	Mini-School or Mini-Day-Care	Process IIB, Chapter 152 KZC. None	35,000 sq. ft.	20' ~~See Special Regulation 2.~~	5', but 2 side yards must equal at least 15'	10'	60%	25' above average building elevation. See Special Regulation ~~4~~ 3.	D	B	See KZC 105.25.	1. No structure may be waterward of the ~~high waterline~~ordinary high water mark. ~~2. No structure may be within 50 feet of the high waterline of the canal. No structure may be within 100 feet of the high waterline of the remainder of Lake Washington.~~ ~~3.~~2. If the development includes portions of Planned Area 3, the applicant may propose and the City may require that part or all of the density allowed in Planned Area 2 be developed in Planned Area 3. ~~4.~~3. The height of a structure may be increased as long as neither of the following maximums is exceeded: a. The structure may not exceed 60 feet above average building elevation. b. The structure may not exceed a plane that starts 3.5 feet above the outside westbound lane of SR 520 and ends at the high waterline of Lake Washington in the zone, excluding the canal. ~~5.~~4. May locate on the subject property if: a. It will serve the immediate neighborhood in which it is located; or b. It will not be detrimental to the character of the neighborhood in which it is located. ~~6.~~5. A six-foot-high fence is required along the property lines adjacent to the outside play areas. ~~7.~~6. Hours of operation may be limited by the City to reduce impacts on nearby residential areas. ~~8.~~7. Structured play areas must be setback from all property lines by five feet. ~~9.~~8. An on-site passenger loading area may be required depending on the number of attendees and the extent of the abutting right-of-way improvements. ~~10.~~9. The location of parking and passenger loading areas shall be designed to reduce impacts on nearby residential areas. ~~11.~~10. May include accessory living facilities for staff persons. ~~12.~~11. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388).

Section 60.17	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.030	Public Utility	Process IIA, Chapter 150 KZC.	None	20'	20' on each side	10'	70%	25' above average building elevation.	A	A	See KZC 105.25.	1. Site design must minimize adverse impacts on surrounding residential neighborhoods. 2. Landscape Category A may be required depending on the type of use on the subject property and the impacts associated with the use on the nearby uses.
.040	Government Facility				10' on each side				B See Spec. Reg. 2.	B		
.050	Community Facility	Process IIB, Chapter 152 KZC.										
.060	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process.										1. Portions of the park located within the wetlands must be devoted exclusively to passive recreation that is not consumptive of the natural environment.

60.19 User Guide. The charts in KZC 60.22 contain the basic zoning regulations that apply in Planned Area 3A, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 60.20

Zone PLA3A

Section 60.20 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provision of this code may apply to the subject property

2. Developments in parts of this zone may be limited by Chapter 83 or 90 KZC, regarding development near streams, lakes, and wetlands.

3. The site must be designed to concentrate development away from and to minimize impacts on the wetlands (does not apply to Detached Dwelling Unit, Attached or Stacked Dwelling Unit, Mini-School or Mini-Day-Care and Public Park uses).

4. If the development includes portions of Planned Area 2, the applicant may propose and the City may require that part or all of the density allowed in Planned Area 2 be developed in Planned Area 3 (does not apply to Detached Dwelling Unit, Attached or Stacked Dwelling Unit, Public Utility, Government or Community Facility, and Public Park uses).

5. The height of structures may be increased if:
a. The structure does not exceed 60 feet above average building elevation,
b. The amount of pervious surface on the subject property in this zone significantly exceeds 50 percent, and
c. The site is designed to the maximum extent feasible to provide views through the subject property from Lake Washington Boulevard and Bellevue Way while complying with the General Regulations.
(Does not apply to Detached Dwelling Unit, Attached or Stacked Dwelling Unit, Public Utility, Government or Community Facility, and Public Park uses).

6. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

7. The required yard of a structure abutting Lake Washington Boulevard or Lake Street South must be increased two feet for each one foot that structure extends 25 feet above average building elevation.

8. City entryway design must be provided on the subject property adjacent to Lake Washington Boulevard as follows:
a. An earthern berm, 12 feet wide and with a uniform height of three feet at the center;
b. Lawn covering the berm;
c. London Plane at least two inches in diameter, planted 30 feet on center along the berm.

9. Vehicular circulation on the subject property must be designed to minimize traffic impacts on Lake Washington Boulevard and at the SR-520 interchange. The city may limit access points onto Lake Washington Boulevard and Points Drive and require traffic control devices and right-of-way realignment (does not apply to Detached Dwelling Unit, Attached or Stacked Dwelling Unit, Public Utility, Government or Community Facility, and Public Park uses).

10. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

Section 60.22	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	Side	Rear	MAXIMUMS: Lot Coverage	Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
.010	Detached Dwelling Unit	None	5,000 sq. ft. per unit	20'	5'	10' See Spec. Reg. 4.	70%	30' above average building elevation.	E	A	2.0 per unit.	1. Access points onto Lake Washington Boulevard must be minimized to prevent arterial congestion and traffic safety hazards. Shared access points must be utilized where feasible. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use. 3. For attached or stacked dwelling units, the side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of five feet. 4. For attached or stacked dwelling units, the rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot.
.020	Attached or Stacked Dwelling Unit				5', but 2 side yards must equal at least 15' See Spec. Reg. 3.				D		1.7 per unit.	
.030	Attached or Stacked Dwelling Units	Process IIB, Chapter 152 KZC.	Must be part of a development with a site area of at least 15 acres with 3,600 sq. ft. per unit.		10' on each side. See Spec. Reg. 2	10' See Spec. Reg. 3.		30' above average building elevation. See General Regulations.				1. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use. 2. The side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of 10 feet. 3. The rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot.

Section 60.22	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.040	Office Uses	Process IIB, Chapter 152 KZC.	Must be part of a development with a site area of at least 15 acres. See Special Regulation 1.	20'	5', but 2 side yards must equal at least 15'	10'	70%	30; above average building elevation. See General Regulations.	C	D	If a Medical, Dental, or Veterinary office, then 1 per each 200 sq. ft. of gross floor area. Otherwise, one per each 300 sq. ft. of gross floor area.	1. The minimum lot size for this use is 7,200 square feet if the subject property has frontage on Lake Washington Boulevard. 2. The following regulations apply to veterinary offices only: a. May only treat small animals on the subject property. b. Outside runs and other outside facilities for the animals are not permitted. c. Site must be designed so that noise from this use will not be audible off the subject property. A certification to this effect, signed by an Acoustical Engineer, must be submitted with the development permit application. 3. Ancillary assembly and manufacture of goods on the premises of this use are permitted only if: a. The ancillary assembled or manufactured goods are subordinate to and dependent on this use. b. The outward appearance and impacts of this use with ancillary assembly or manufacturing activities must be no different from other office uses.

Section 60.22	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115) Front	Side	Rear	MAXIMUMS: Lot Coverage	Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
.050	Development Containing Attached, or Stacked Dwelling Units and Office uses.	Process IIB, Chapter 152 KZC.	Must be part of a development with a site area of at least 15 acres with 3,600 sq. ft. per unit.	20'	5', but 2 side yards must equal at least 15' See Spec. Reg. 4.	10' See Spec. Reg. 5.	70%	30' above average building elevation. See General Regulations.	C	D	See KZC 105.25.	1. A veterinary office is not permitted in any development containing dwelling units. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 3. Ancillary assembly and manufacture of goods on the premises of this use are permitted only if: a. The ancillary assembled or manufactured goods are subordinate to and dependent on this use. b. The outward appearance and impacts of this use with ancillary assembly or manufacturing activities must be no different from other office uses. 4. The side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of five feet. 5. The rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot.
.060	School or Day-Care Center		Must be part of a development with a site area of at least 15 acres. See Special Regulation 1.	If this use can accommodate 50 or more students or children, then: 50'	50' on each side	50'		30' above average building elevation. See General Regulations	D	B		1. The minimum lot size for this use is 7,200 square feet if the subject property has frontage on Lake Washington Boulevard. 2. A six-foot-high fence is required only along the property lines adjacent to the outside play areas. 3. Hours of operation may be limited to reduce impacts on nearby residential areas. 4. Structured play areas must be setback from all property lines as follows: a. 20 feet if this use can accommodate 50 or more students or children. b. 10 feet if this use can accommodate 13 to 49 students or children. 5. An on-site passenger loading area must be provided. The City shall determine the appropriate size of the loading areas on a case-by-case basis, depending on the number of attendees and the extent of the abutting right-of-way improvements. Carpooling, staggered loading/unloading time, right-of-way improvements or other means may be required to reduce traffic impacts on any nearby residential uses.
				If this use can accommodate 13 to 49 students or children, then: 20'	20' on each side	20'						

Section 60.22	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
												6. May include accessory living facilities for staff persons. 7 The location of parking and passenger loading areas shall be designed to reduce impacts on any nearby residential areas. 8. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388).
.070	Mini-School or Mini-Day-Care	Process IIB, Chapter 152 KZC.	Must be part of a development with a site area of at least 15 acres.	20'	5', but 2 side yards must equal at least 15'	10'	70%	30' above average building elevation. See General Regulations.	E	B	See KZC 105.25.	1. A six-foot-high fence is required along the property lines adjacent to the outside play areas for mini-schools and mini-day-care centers only. 2. Hours of operation may be limited by the City to reduce impacts on nearby residential uses. 3. Structured play areas must be setback from all property lines by five feet. 4. An on-site passenger loading area may be required depending on the number of attendees and the extent of the abutting right-of-way improvements. 5. The location of parking and passenger loading areas shall be designed to reduce impacts on any nearby residential areas. 6. May include accessory living facilities for staff persons. 7. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388).
.080	(Reserved)											
.090	Convalescent Center or Nursing Home	Process IIB, Chapter 152 KZC.	Must be part of a development with a site area of at least 15 acres. See Special Regulation 1.	20'	10' on each side	10'	70%	30' above average building elevation. See General Regulations.	C	B	1 for each bed	1. The minimum lot size for this use is 7,200 square feet if the subject property has frontage on Lake Washington Boulevard.

Section 60.22	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.100	Church	Process IIB, Chapter 152 KZC.	Must be part of a develop-ment with a site area of at least 15 acres. See Spe-cial Reg-ulation 1.	20'	20' on each side	20'	70%	30' above aver-age building elevation. See General Regulations.	C	B	1 for every 4 people based on maximum occu-pancy load of any area of wor-ship. See Special Regulation 2.	1. The minimum lot size for this use is 7,200 square feet if the subject property has frontage on Lake Washington Boulevard. 2. No parking is required for day-care or school ancillary to the use.
.110	Public Utility		None					30' above aver-age building elevation.	A		See KZC 105.25	1. Landscape Category A or B may be required depending on the type of use on the subject property and the impacts associated with the use on the nearby uses.
.120	Government Facility or Community Facility				10' on each side	10'			C See Spec. Reg. 1.			
.130	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.										1. Any portion of the park located within the wetland must be devoted exclusively to passive recreation that is not consumptive

60.54 User Guide. The charts in KZC 60.57 contain the basic zoning regulations that apply in Planned Area 6A, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 60.55

Zone PLA6A

Section 60.55 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provision of this code may apply to the subject property.

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.
(Does not apply to Detached Dwelling Unit uses).

3. The required yard of a structure abutting Lake Washington Blvd. or Lake Street South must be increased two feet for each one foot that structure exceeds 25 feet above average building elevation (does not apply to Public Park uses).

4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

60.94 User Guide. The charts in KZC 60.97 contain the basic zoning regulations that apply in Planned Area 6I, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 60.95

Zone PLA6I

Section 60.95 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provision of this code may apply to the subject property..

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.
(Does not apply to Detached Dwelling Unit uses).

3. The required yard of a structure abutting Lake Washington Boulevard or Lake Street South must be increased two feet for each one foot that structure exceeds 25 feet above average building elevation (does not apply to Public Park uses).

4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

60.89 User Guide. The charts in KZC 60.92 contain the basic zoning regulations that apply in Planned Area 6H, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 60.90

Zone PLA6H

Section 60.90 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provision of this code may apply to the subject property..

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.
(Does not apply to Detached Dwelling Unit uses).

3. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

60.169 User Guide. The charts in KZC 60.172 contain the basic zoning regulations that apply in Planned Area 15A, including sub-zones. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use

Section 60.170

Zone PLA15A

Section 60.170 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. A view corridor shall be provided and maintained across the subject property as follows and as described in Plate 27 (does not apply to Development containing Attached or Stacked Dwelling Units and Restaurant or Tavern and General Moorage Facility use under an approved Master Plan):
a. A view corridor must be maintained across 30 percent of the average parcel width; and
b. Along Lake Washington Boulevard, the view corridor of 30 percent of the average parcel width shall be increased 2.5 feet for each foot, or portion thereof, that any building exceeds 30 feet above average building elevation. If the subject property does not directly abut Lake Washington Boulevard, the length of the view corridor along its east property line shall be determined by projecting the view corridor as required along Lake Washington Boulevard across the subject property to the view corridor required along the shoreline; and
c. Along the shoreline, the width of the view corridor shall be:
1. Sixty percent of the length of the high waterline if the height of any building is greater than 30 feet but less than or equal to 35 feet above average building elevation, or
2. Seventy percent of the high waterline if the height of any building is greater than 35 feet above average building elevation. If the subject property does not directly abut the shoreline, the width of the view corridor along its west property line shall be determined by projecting the view corridor as required along Lake Washington Boulevard across the subject property to the view corridor required along the shoreline; and
d. The view corridor must be in one continuous piece; and
e. Within the view corridor, structures, parking areas and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. Trees or shrubs that mature to a height of greater than three feet above average grade may not be placed in the required view corridor. Parking stalls or loading areas are not permitted in the required view corridor that would result in vehicles obscuring the line of sight from Lake Washington Boulevard to the high waterline as shown in Plate 27; and
f. The view corridor must be adjacent to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.

3. Structures may extend into the required front yard along Lake Washington Boulevard, provided that:
a. The entire structure within the required front yard is below the elevation of Lake Washington Boulevard; and
b. A public use area with superior landscaping is provided over the entire structure within the required front yard, the design of which is approved by the City; and
c. The required view corridor is provided for the portion of the structure within the required yard; and
d. Landscaping or other similar measures shall be provided to screen the exterior walls of any portion of the structure within the required yard that are visible from Lake Washington Boulevard or adjacent properties.

~~4. The required north property line is five feet if the adjacent property to the north contains a use other than residential.~~

~~5~~4. Trees or shrubs that mature to a height that would exceed the height of the primary structure are not permitted to be placed on the subject property.

~~6. See KZC 60.173 for regulations regarding bulkheads and land surface modifications.~~

~~7~~5. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

~~8~~6. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

Section 60.172	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.010	Detached Dwelling Unit	Process I, Chapter 145 KZC.	5,000 sq. ft.	30' See also Spec. Reg. 1. ~~The greater of:~~	~~a. 15', or b. 1 1/2 times the height of the primary structure above average building elevation minus 10'~~	5', but two side yards must equal at least 15 feet.	~~10'The greater of:a. 15' or b. 15% of the average parcel depth.~~ See Chapter 83 KZC	80%	30' above average building elevation.	E	A	2.0 per unit.	1. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the city. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 3. An applicant may propose a development containing residential uses and moorage facilities using this use listing only if the use of the moorage facilities is limited to the residents of the subject property.
				The minimum dimension of any yard, other than those listed, is 5'									

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Section 60.172	USE ⇩ REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
.020	Attached or Stacked Dwelling Units	Process IIB, Chapter 152 KZC.	7,200 sq. ft. with at least 3,600 sq. ft. per unit	30' See also Spec. Regs. 3 and 4. ~~The greater of:~~	~~a. 15 □, or b. 1 1/2 times the height of the primary structure above average building elevation minus 10' See General Regulations.~~	5, but two side yards must equal at least 15 feet. ~~10' The greater of:~~	~~a. 15' or b. 15% of the average parcel depth.~~ See Chapter 83 KZC	80%	30' above average building elevation. See Spec. Reg. 5.	D	A	2.0 per unit.	1. No structures, other than moorage structures or public access piers, may be waterward of the high waterline. For regulations regarding moorages and public access piers, see the specific listings in this zone. 2. Must provide public pedestrian access as required under Chapter 83 KZC. ~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. The City shall require signs designating the public pedestrian access and public use areas.~~ 3. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard, from north to south property lines, is developed as a public use area; and c. The design of the public use area is specifically approved by the city. 4. The required front yard for any portion of the structure over 30 feet in height above average building elevation shall be 35 feet. This required front yard cannot be reduced under Special Regulation 3 above for a public use area. 5. Structure height may be increased to 40 feet above average
.025	Office		No NC								D	If medical or dental office, then one per each 200 sq ft. of gross floor area otherwise, one per 300 sq ft of gross floor area.	

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Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
				The minimum dimension of any yard, other than those listed, is 5' See Spec. Reg. 10.									building elevation if: a. Obstruction of views from existing development lying east of Lake Washington Boulevard is minimized; and b. Maximum lot coverage is 80 percent, but shall not include any structure allowed within the required front yard under the General Regulations in KZC 60.170; and c. Maximum building coverage is 50 percent, but shall not include any structure allowed within the required front yard under the General Regulations in KZC 60.170 or any structure below finished grade; and
.020	Attached or Stacked Dwelling Units (continued)												d. A waterfront area developed and open for public use shall be provided with the location and design specifically approved by the City. Public amenities shall be provided, such as non-motorized watercraft access or a public pier. A public use easement document shall be provided to the City for the public use area, in a form acceptable to the City. The City shall require signs designating the public use area; and e. The required public pedestrian access trail from Lake Washington Boulevard to the shoreline shall have a trail width of at least six feet and shall have a grade separation from the access driveway; and f. No roof top appurtenances, including elevator shafts, roof decks or plantings, with the exception of ground cover material on the roof not to exceed four inches in height, shall be on the roof of the building or within the required view corridors. 6. A transportation demand management plan shall be provided and implemented for the subject property, including provisions for safe pedestrian crossing and vehicle turning movements to and from the subject
.025	Office												

Section 60.172	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
.020 .025													property to Lake Washington Boulevard, and bus stop improvements if determined to be needed by METRO. The City shall review and approve the plan. 7. The design of the site must be compatible with the scenic nature of the waterfront. 8. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 9. An applicant may propose a development containing residential uses and moorage facilities using this use listing only if the use of the moorage facilities is limited to the residents of the subject property. 10. Any required yard, other than the front ~~or high water line~~ required yard, may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached shall provide the minimum required yard.

Section 60.172	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~North Property Line~~	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~South~~ Side Property Line	MINIMUMS: REQUIRED YARDS (See Ch. 115): Shoreline Setback~~High Water Line~~	MAXIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
.030	Public Access Pier, ~~or~~ Public Access Facility, or Boardwalk	Process IIB, Chapter 152 KZC. Also See Chapter 83 KZC.	~~None~~	See Chapter 83 KZC.~~Waterward of the High Waterline~~				–	See Chapter 83 KZC.~~Pier decks may not be more than 24□ above mean sea level. Diving boards and similar features may not be more than 3□ above the deck.~~	–	~~See Spec. Reg. 7.~~	See KZC 105.25.	1. Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use.~~ ~~2. If a structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a building permit for this use.~~ ~~3. May not treat a structure with creosote, oil base or toxic substances.~~ ~~4. Must provide at least one covered and secured waste receptacle.~~ ~~5. All utility lines must be below the pier deck and, where feasible, underground.~~ ~~6. Piers must be adequately lit; the source of the light must not be visible from neighboring properties.~~ ~~7. Structure must display the street address of the subject property. The address must be oriented to the Lake with letters and numbers at least four inches high, and visible from the Lake.~~ ~~8. North and south property line yards may be decreased for over-water public use facilities which connect with waterfront public access or adjacent property.~~
				~~–~~	~~10'~~	~~10'~~	~~–~~						
				~~See Special Regulation 8.~~									
.040	Piers, docks, boat lifts and canopies serving Detached Dwelling	See Chapter 83 KZC.~~None~~		See Chapter 83 KZC.~~Waterward of the High Waterline~~				80%	See Chapter 83 KZC.~~Pier decks may~~		~~See Spec. Reg.~~	None~~1 per each 2 slips. Otherwise, none if the moorage facility~~	1. Refer to Chapter 83 KZC for additional regulations. ~~1. No accessory uses, buildings, or activities are permitted as part of this use. Various accessory components are permitted as part of a General Moorage Facility. See that listing in this zone.~~
				~~–~~	~~10□~~	~~10□~~	~~–~~						

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Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
	UnitMoorage Facility for 1 or 2 Boats			In addition, no moorage structure may be within: a. 25□ of a public park; or b. 25□ of another moorage structure not on the subject property. The minimum dimension of any yard, other than those listed, is 5□					not be more than 24□ above mean sea level. Diving boards and similar features may not be more than 3□ above the deck.		8.	is reserved for the exclusive use of an adjoining residential development.	2. Moorage structures may not extend waterward beyond a point 150 feet from the high waterline. In addition, piers and docks may not be wider than is reasonably necessary to provide safe access to the boats, but not more than eight feet in width. 3. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use. 4. May not treat moorage structure with creosote, oil base or toxic substances. 5. Must provide at least one covered and secured waste receptacle. 6. All utility lines must be below the pier deck and, where feasible, underground. 7. Piers must be adequately lit; the source of the light must not be visible from neighboring properties. 8. Moorage structures must display the street address of the subject property. The address must be oriented to the Lake with letters and numbers at least four inches high, and visible from the Lake. 9. Covered moorage is not permitted. 10. Aircraft moorage is not permitted.
.045	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units			See Chapter 83 KZC.					See Chapter 83 KZC.			None	1. Refer to Chapter 83 KZC for additional regulations.
.050	General Moorage FacilityMarina	Process IIB, Chapter	None, but must have at	Landward of the High WaterlineOrdinary High Water Mark				80%	Landward of the High WaterlineOrd	B	B See Spec.	1 per each 2 slips. Otherwise, none if the	1. Refer to Chapter 83 KZC for additional regulations. 1. Except as permitted by Special Regulation 17, no structures, other than moorage structures or public access piers, may be waterward of

Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
		152 KZC. Also See Chapter 83 KZC.	~~least 100□ of front-age on Lake Washington.~~	30□ See Spec. Reg. ~~3~~ 2.	~~The greater of: a. 15□ or b. 1-1/2 times the height of the primary structure above average building elevation minus 10□~~	5', but two side yards must equal at least 15 feet.~~10□~~	~~For moorage structure, 0□ For other structures, the greater of: a. 15□ or b. 15% of the average parcel depth.~~ See Chapter 83 KZC		inary High Water Mark, 30□ above average building elevation. See Spec. Reg. 4~~.~~3 ~~Waterward of the High Waterline, Dock and Pier decks may not be more than 24□ above mean sea level.~~		~~Reg. 14.~~	~~moorage facility is reserved for the exclusive use of an adjoining residential development.~~	~~the high waterline. For regulations regarding public access piers, see the specific listing in this zone.~~ ~~2. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~ ~~3.~~2. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City. ~~4.~~3. Structure height may be increased to 35 feet above average building elevation if the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and a. The increase is offset be a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~5.~~4. ~~The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ ~~6. The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The ability of the land landward of the high waterline to accom-~~
			~~Waterward of the High Waterline~~										

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Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
				~~–~~	~~10'~~	~~10'~~	~~–~~						~~modate the necessary support facilities.~~ ~~b. The potential for traffic congestion.~~ ~~REGULATIONS FOR THIS USE CONTINUED ON THE NEXT PAGE~~
				~~No moorage structure may be:~~ ~~a. Within 100' feet of a public park; or~~ ~~b. Closer to a public park than a line that starts where the high waterline of the park intersects with the side property line of the park closest to the moorage structure at a 45° angle from the side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening overwater structure; or~~ ~~(See next page for the rest of the Required Yard Regulations)~~									

Section 60.172	USE ⇩ REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
													DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS
.050	~~General Moorage Facility~~Marina (continued)			~~c. Closer to a lot containing a detached dwelling unit than a line that starts where the high waterline of the lot intersects the side property line of the lot closest to the moorage structure and runs waterward toward the moorage structure at a 30° angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not extend beyond any intervening overwater structure; or~~ ~~d. Within 25 of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than those listed, is 5~~ ~~(See previous page for the rest of this column)~~							~~7. Moorage structures may not be larger than is necessary to provide safe and reasonable moorage for the boats moored. The City will specifically review the size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line; and~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats; and~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and~~ ~~d. The moorage structures will not adversely affect nearby uses; and~~ ~~e. The moorage structures will not have a significant long-term adverse effect on aquatic habitats.~~ ~~8. If the moorage structure will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~9. May not treat moorage structure with creosote, oil base or toxic substance.~~ ~~10. Must provide covered and secured waste receptacles on all piers.~~ ~~11. All utility and service lines must be below the pier deck and, where feasible, underground.~~ ~~12. Must provide public restrooms unless moorage is only available for residents of dwelling units on the subject property.~~ ~~13. Piers must be adequately lit. The source of light must not be visible from neighboring properties.~~ ~~14. Moorage structures must display the street address of the subject property. The address must be oriented to the Lake with letters and numbers at least four inches high.~~ ~~15. Covered moorage is not permitted.~~ ~~16. Aircraft moorage is not permitted.~~ ~~17.~~ The following accessory components are allowed if approved

Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
													through Process IIB, Chapter 152 KZC: a. Boat and motor sales leasing. b. Boat and motor repair and service if: 1) The activity is conducted on dry land and either totally within a building or totally sight screened from adjoining property and the right-of-way; and 2) All dry land motor testing is conducted within a building. c. Boat launch ramp if: 1) It is not for the use of the general public; and 2) Is paved with concrete; and 3) There is sufficient room on the subject property for maneuvering and parking so that traffic impact on the frontage road will not be significant; and 4) Access to the ramp is not directly from the frontage road; and 5) The design of the site is specifically approved by the City. d. Dry land storage. However, stacked storage is not permitted. e. Meeting and special events rooms. f. Gas and oil sale for boats, if: 1) Storage tanks are underground and on dry land; and 2) The use has facilities to contain and cleanup gas and oil spills. May have an over-water shed that is not more than 50 square feet and 10 feet high as measured from the pier deck. ~~18. At least one pump-out facility shall be provided for use by the general public. This facility must be easily accessible to the general public and clearly marked for public use.~~

Section 60.172	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
.055	Tour Boat	See Chapter 83 KZC.	None	30□ See Spec. Reg. 2.		5', but two side yards must equal at least 15 feet.	See Chapter 83 KZC	80%	Landward of the Ordinary High Water Mark, 30□ above average building elevation. See Spec. Reg. 3	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City. 3. Structure height may be increased to 35 feet above average building elevation if: a. the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. The increase is offset be a view corridor that is superior to that required by the General Regulations
	Passenger Only Ferry Terminal	See Chapter 83 KZC.	None	30□ See Spec. Reg. 2.		5', but two side yards must equal at least 15 feet.	See Chapter 83 KZC	80%	Landward of the Ordinary High Water Mark, 30□ above average building elevation. See Spec. Reg. 3	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City. 3. Structure height may be increased to 35 feet above average building elevation if: a. the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. The increase is offset be a view corridor that is superior to that required by the General Regulations

Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
	Boat Launch (motorized boats)	See Chapter 83 KZC.	None	30□ See Spec. Reg. 3.		5', but two side yards must equal at least 15 feet.	See Chapter 83 KZC	80%	Landward of the Ordinary High Water Mark, 30□ above average building elevation.	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City.
	Boat Launch (for non-motorized boats)	See Chapter 83 KZC.	None	30□ See Spec. Reg. 3.		5', but two side yards must equal at least 15 feet.	See Chapter 83 KZC	80%	Landward of the Ordinary High Water Mark, 30□ above average building elevation.	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. The required 30-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City.

Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
	Water Taxi	See Chapter 83 KZC.	None	30□ See Spec. Reg. 2.		5', but two side yards must equal at least 15 feet.	See Chapter 83 KZC	80%	Landward of the Ordinary High Water Mark, 30□ above average building elevation. See Spec. Reg. 3	B	B	See KZC 105.25	1. Refer to Chapter 83 KZC for additional regulations. 2. The required 30-foot front yard may be reduced onefoot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard (from north to south property lines) is developed as a public use area; and c. The design of the public use area is specifically approved by the City. 3. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and b. The increase is offset be a view corridor that is superior to that required by the General Regulations
~~.060~~	~~Professional Football, Baseball, or Soccer Practice or Play Facility~~	~~Process IIB, Chapter 152 KZC.~~	~~3 acres See Special Regulation 6.~~	~~20□ See Spec. Reg. 3. The greater of:~~	~~a. 15□ or b. 15% of the average parcel depth.~~	~~10□ The greater of:~~	~~a. 15□ or b. 15% of the average parcel depth.~~	~~80%~~	~~30□ above average building elevation. See Special Regulation 4.~~	~~C~~	~~B~~	~~See KZC 105.25.~~	~~1. No structures, other than moorage structures or public access piers, may be waterward of the high waterline. For regulations regarding moorages, see the moorage listings in this zone.~~ ~~2. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~ ~~3. The required 20-foot front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if:~~ ~~a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and~~

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Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
				~~The minimum dimension of any yard, other than those listed, is 5 feet~~									~~b. Substantially, the entire width of this yard, from north to south property lines, is developed as a public use area; and~~ ~~c. The design of the public use area is specifically approved by the City.~~ ~~4. Structure height may be increased to 35 feet above average building elevation if the increase does not impair views of the lake from properties east of Lake Washington Boulevard; and~~ ~~a. The increase is offset be a view corridor that is superior to that required by the General Regulations; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~5. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ ~~6. Subsequent division of an approved Master Plan into smaller lots is permitted provided that the required minimum acreage is met for the Master Plan.~~
.070	Development containing: Attached or Stacked Dwelling Units; and Restaurant or Tavern; and ~~General Moorage Facility~~ Marina See Special Regulation 1 for other uses also allowed.	See Special Regulation 2.	5 acres with no less than 3,100 sq. ft. per dwelling unit. See also Special Regulations 3 and	See Special Regulation 7.							See Spec. Reg. 8	See KZC 105.25.	1. The following uses and components are also allowed: a. Retail establishment. b. Office use. c. Hotel. d. Boat and motor repair and service if: 1) This activity is conducted on dry land and either totally within a building or totally sight screened from adjoining property and the right-of-way; and 2) All dry land motor testing is conducted within a building. e. Dry land boat storage. However, stacked storage is not permitted. f. Gas and oil sales or boats if: 1) Storage tanks are underground and on dry land; and 2) The use has facilities to contain and clean up gas and oil spills. May have an over-water shed that is not more than 50 square feet and 10 feet high as measured from the pier deck.

Section 60.172	USE ⇩ REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
													DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS
			14.										g. Meeting and or special events rooms. h. Boat launching ramp if it is paved with concrete. i. School or day-care center. j. Mini-school or mini-day-care center, or day-care home. 2. Development must be consistent with an approved Master Plan. The Master Plan must address all properties within PLA-15A and PLA-15B, which are owned by the applicant. The Master Plan will be approved in two stages: a. The first stage will result in approval of a Preliminary Master Plan using Process IIB, Chapter 152 KZC. The Preliminary Master Plan shall consist of at least the following: 1) A site plan which diagrammatically shows the general location, shape and use of the major features of development. 2) A written description of the planned development which discusses the elements of the site plan and indicates the maximum number of dwelling units and their probable size; the maximum area to be developed with nonresidential uses; the maximum size of moorage facilities and the maximum number of moorage slips; the maximum and minimum number of parking stalls; and the schedule of phasing for the final Master Plan.
.070	Development containing: Attached or Stacked Dwelling Units; and Restaurant or Tavern; and ~~General Moorage Facility~~ Marina (continued)												In approving the Preliminary Master Plan, the City shall determine the appropriate review process for the Final Master Plan. The City may determine that the Final Master Plan be reviewed using Process IIA, Chapter 150 KZC, if the Preliminary Master Plan shows the placement, approximate dimensions and uses of all structures, vehicular and pedestrian facilities, open space and other features of development. Otherwise, the Final Master Plan shall be reviewed using Process IIB, Chapter 152 KZC. b. The second stage will result in approval of a final Master Plan using Process IIA, Chapter 150 KZC, or Process IIB, Chapter 152 KZC, as established by the Preliminary Master Plan. The final Master Plan shall set forth a detailed development plan which is consistent with the Preliminary Master Plan. Each phase of the Master Plan shall set forth a schedule for obtaining building permits for and construction of that phase. 3. Part of the unit count allowed in Planned Area 15A may be devel-

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			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
													oped in Planned Area 15B. The maximum permitted number of dwelling units on the subject property in Planned Area 15A is computed using the following formula: (The total lot area in square feet divided by 3,100) minus the unit count transferred to Planned Area 15B = the maximum permitted number of dwelling units. 4. The maximum amount of allowable floor area for nonresidential use is computed using the following formula: (The maximum number of dwelling units allowed on the subject property - the number of dwelling units proposed) x the average square footage of the dwelling units = amount of square footage available for nonresidential use. 5. Development must provide opportunities for public access to, use of and views of the waterfront by including all of the following elements: a. A public pedestrian access trail along the entire waterfront of the subject property within connections to Lake Washington Boulevard at or near either end; b. Waterfront areas developed and open for public use; c. Improvements to and adjacent to Lake Washington Boulevard which are open for public use; and d. Corridors which allow unobstructed views of Lake Washington from Lake Washington Boulevard. In addition, obstruction of views from existing development lying east of Lake Washington Boulevard must be minimized. REGULATIONS FOR THIS USE CONTINUED ON THE NEXT PAGE

Section 60.172	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
.070	Development containing: Attached or Stacked Dwelling Units; and Restaurant or Tavern; and ~~General Moorage Facility~~Marina (continued)												REGULATIONS CONTINUED FROM PREVIOUS PAGE 6. All nonresidential uses, except office uses, must be located and designed to have substantial waterfront orientation and accessibility from waterfront public use areas. 7. The City will determine required yards, lot coverage, structure height and landscaping based on the compatibility of development with adjacent uses and the degree to which public access, use and views are provided. Also see Chapter 83 KZC for required shoreline setback. 8. All signs must be approved as part of a Comprehensive Design Plan in accordance with KZC 100.80. 9. Must comply with General Regulations and Special Regulations 6 – 16 for the use listing in this zone entitled "General Moorage Facility." 10. Must provide pumping facilities to remove effluent from boat holding tanks. 11. Must provide a waste oil tank. 12. Vehicular circulation on the subject property must be designed to mitigate traffic impacts on Lake Washington Boulevard and Lakeview Drive. Access points must be limited, with primary access located at the intersection of Lake Washington Boulevard and Lakeview Drive. The City may required traffic control devices and right-of-way realignment or limit development if necessary to further reduce traffic impacts. 13. The regulations for this use may not be modified with a Planned Unit Development. 14. Subsequent subdivision of an approved Master Plan into smaller lots is permitted provided that the required minimum acreage is met for the Master Plan. 15. Restaurant uses with drive-in or drive-through facilities are not permitted in this zone.

Section 60.172	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback ~~High Water Line~~						
.080 .090	Public Utility Government Facility Community Facility	Process IIA, Chapter 150 KZC.	None	30□ See Spec. Reg. 3.	~~The greater of: a. 15□ or b. 1-1/2 times the height of the primary structure above average building elevation minus 10□~~	5', but two side yards must equal at least 15 feet. ~~10□~~	~~The greater of: a. 15□ or b. 15% of the average parcel depth.~~ See Chapter 83 KZC	80%	30' above average building elevation. See Special Regulation 4.	A	B	See KZC 105.25.	1. No structures, other than moorage structures or public access piers, may be waterward of the ~~high waterline~~ordinary high water mark. For the regulations regarding moorages, see the ~~moorage~~ specific listings in this zone and Chapter 83 KZC. 2. Chapter 83 KZC contains regulations regarding shoreline setbacks, view corridors, and public pedestrian walkways~~Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas~~. 3. The required 30□ front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30 feet of the front property line, each portion of a structure is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard, from north to south property lines, is developed as a public use area; and c. The design of the public use area is specifically approved by the City. 4. Structure height may be increased to 35 feet above average building elevation if: a. The increase does not impair views of the lake from properties east of Lake Washington Boulevard; and ~~a.~~b. The increase is offset by a view corridor that is superior to that required by the General Regulations~~; or~~ ~~b. The increase is offset by maintaining comparable portions of the structure lower than 30 feet above average building elevation.~~ ~~5. The design of the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached~~

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		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South~~ Side Property Line	Shoreline Setback~~High Water Line~~						
													~~dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ 6. Landscape Category A or B may be required depending on the type of use on the subject property and the impacts associated with the use on the nearby uses.
.100	Public Park	Development standards will be determined on a case-by-case basis. See Chapter 49 KZC for required review process.											

25.05 User Guide. The charts in KZC 25.10 contain the basic zoning regulations that apply in each PR 8.5, PR 5.0, PR 3.6, PR 2.4 and PR 1.8 zone of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 25.08

Zone PR

Section 25.08 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.

3. The required yard of a structure abutting Lake Washington Boulevard or Lake St. S. must be increased two feet for each one foot that structure exceeds 25 feet above average building elevation (does not apply to Public Park uses).
4. If the property is located south of NE 85th Street between 124th Avenue and 120th Avenue, to the extent possible, the applicant shall save existing viable significant trees within the required landscape buffers separating nonresidential development from adjacent single-family homes.
5. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

40.05 User Guide. The charts in KZC 40.10 contain the basic zoning regulations that apply in each of the BN zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 40.08

Zone BN

Section 40.08 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. If any portion of a structure is adjoining a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet in width.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.

3. The required yard of a structure abutting Lake Washington Blvd. or Lake Street South must be increased two feet for each one foot that structure exceeds 25 feet above average building elevation (does not apply to Public Park uses).

4. At least 75 percent of the total gross floor area located on the ground floor of all structures on the subject property must contain retail establishments, restaurants, taverns, or offices. These uses shall be oriented to an adjacent arterial, a major pedestrian sidewalk, a through block pedestrian pathway or an internal pathway.
5. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83.

15.05 User Guide. The charts in KZC 15.10 contain the basic zoning regulations that apply in each RS 35, RS 12.5, RS 8.5, RS 7.2, RS 6.3 and RS 5.0 zones of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 15.08

Zone RS

Section 15.08 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. If any portion of a structure is adjoining a detached dwelling unit in a low density zone, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation, or
b. The maximum horizontal facade shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.
(Does not apply to Detached Dwelling Unit and Mini-School or Mini-Day-Care Center uses).

3. May not use lands waterward of the ~~high waterline~~ ordinary high water mark to determine lot size or to calculate allowable density.

4. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

20.05 User Guide. The charts in KZC 20.10 contain the basic zoning regulations that apply in each RM 5, RM 3.6, RM 2.4, and RM 1.8 zone of the City. Use these charts by reading down the left hand column entitled Use. Once you locate the use in which you are interested, read across to find the regulations that apply to that use.

Section 20.08

Zone RM

Section 20.08 – GENERAL REGULATIONS
The following regulations apply to all uses in this zone unless otherwise noted:

1. Refer to Chapter 1 KZC to determine what other provisions of this code may apply to the subject property.

2. If any portion of a structure is adjoining a low density zone or a low density use in PLA 17, then either:
a. The height of that portion of the structure shall not exceed 15 feet above average building elevation; or
b. The horizontal length of any facade of that portion of the structure which is parallel to the boundary of the low density zone shall not exceed 50 feet.
See KZC 115.30, Distance Between Structures/Adjacency to Institutional Use, for further details.
(Does not apply to Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units~~General Moorage Facility~~ and Detached Dwelling Units uses).

3. If the subject property is located east of JBD 2 and west of 100th Avenue NE, the following regulation applies:
Must provide a public pedestrian access easement if the Planning Official determines that it will furnish a pedestrian connection or part of a connection between 98th Avenue NE and 100th Avenue NE. Pathway improvements will also be required if the easement will be used immediately. No more than two complete connections shall be required.
~~(Does not apply to General Moorage Facility uses).~~

4. If the subject property is located within the North Rose Hill neighborhood, east of Slater Avenue NE and north of NE 116th Street, the minimum required front yard is 10 feet. Ground floor canopies and similar entry features may encroach into the front yard; provided, the total horizontal dimension of such elements may not exceed 25 percent of the length of the structure. No parking may encroach into the required 10-foot front yard.

5. Any required yard abutting Lake Washington Boulevard or Lake Street South must be increased two feet for each one foot the structure exceeds 25 feet above average building elevation.
(Does not apply to Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units and ~~General Moorage Facility and~~ Public Park uses).

6. If the subject property is located between Juanita Drive and Lake Washington or 98th Avenue NE and Lake Washington, ~~the following regulations apply:~~refer to Chapter 83 KZC for regulations regarding shoreline setbacks, and public pedestrian walkways.~~a. Must provide a required yard of 15 feet or 15 percent of average parcel depth, measured from the high waterline. To the extent that this provision is inconsistent with other required yard dimensions identified in this chapter, this provision shall govern.~~
~~b. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~
~~c. A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one contiguous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided they do not obscure the view from Juanita Drive or 98th Avenue NE to and beyond Lake Washington. This corridor must be adjacent to either of the side property lines, whichever will result in the widest view corridor given development on adjacent properties.~~
~~(Does not apply to General Moorage Facility, Detached Dwelling Units and Public Park uses).~~

7. If the property is located in the NE 85th Street Subarea, the following shall apply:
a. If the subject property is located south of NE 85th Street between 124th Avenue NE and 120th Avenue NE, the applicant shall to the extent possible save existing viable significant trees within the required landscape buffer separating nonresidential development from adjacent single-family homes.
b. If the subject property is located directly north of the RH 4 zone, the applicant shall install a through-block pedestrian pathway pursuant to the standards in KZC 105.19(3) to connect an east-west pedestrian pathway designated in the Comprehensive Plan between 124th Avenue NE and 120th Avenue NE. (See Plate 34K).

8. May not use lands waterward of the ~~high waterline~~ordinary high water mark to determine lot size or to calculate allowable density.

9. May also be regulated under the Shoreline Master Program, refer to KZC Chapter 83~~KMC Title 24~~.

Section 20.10	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.010	Detached Dwelling Units	None	5,000 sq. ft. in an RM 5.0. Otherwise, 3,600 sq. ft.	20′	5′, but 2 side yards must equal at least 15′.	10′	60%	If adjoining a low density zone other than RSX, then 25′ above average building elevation. Otherwise, 30′ above average building elevation. See Spec. Reg. 8.	E	A	2.0 per unit.	1. For this use, only one dwelling unit may be on each lot regardless of the size of the lot. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 3. If the property is in an RM 1.8, 2.4, or 3.6 zone and contains less than 5,000 sq. ft., each side yard may be five feet.
.020	Detached, Attached or Stacked Dwelling Units Stacked Dwelling Units are not permitted in RM 5.0.	Within the NE 85th Street Subarea, D.R., Chapter 142 KZC. Otherwise, none.	3,600 sq. ft. with a density as established on the Zoning Map. See Spec. Reg. 1.		5′, but 2 side yards must equal at least 15′. See Spec. Reg. 6.	10′ See Spec. Reg. 7.			D See Spec. Reg. 4.		1.7 per unit.	1. Minimum amount of lot area per dwelling unit is as follows: a. In RM 5.0 zones, the minimum lot area per unit is 5,000 sq. ft. b. In RM 3.6 zones, the minimum lot area per unit is 3,600 sq. ft. c. In RM 2.4 zones, the minimum lot area per unit is 2,400 sq. ft. d. In RM 1.8 zones, the minimum lot area per unit is 1,800 sq. ft. 2. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities and activities associated with this use. 3. Chapter 115 KZC contains regulations regarding common recreational space requirements for this use. 4. If the subject property is located within the NRH neighborhood, west of Slater Avenue NE and south of NE 100th Street, and if it adjoins a low density zone or a low density use in PLA 17, then landscape category A applies. 5. Development located in the RM 3.6 zone in North Rose Hill, lying between Slater Avenue NE and 124th Avenue NE, and NE 108th Place (extended) and approximately NE 113th Place (extended) shall comply with the following: a. Each development shall incorporate at least two acres; and b. Significant vegetation that provides protection from I-405 shall be retained to the maximum extent feasible. 6. The side yard may be reduced to zero feet if the side of the dwelling unit is attached to a dwelling unit on an adjoining lot. If one side of a dwelling unit is so attached and the opposite side is not, the side that is not attached must provide a minimum side yard of five feet. REGULATIONS CONTINUED ON NEXT PAGE

Section 20.10	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.020	Detached, Attached or Stacked Dwelling Units (continued)											REGULATIONS CONTINUED FROM PREVIOUS PAGE 7. The rear yard may be reduced to zero feet if the rear of the dwelling unit is attached to a dwelling unit on an adjoining lot. 8. Where the 25-foot height limitation results solely from an adjoining low density zone occupied by a school that has been allowed to increase its height to at least 30 feet, then a structure height of 30 feet above average building elevation is allowed.
.030	Church	Within the NE 85th Street Subarea, D.R., Chapter 142 KZC. Otherwise, Process IIA, Chapter 150 KZC.	7,200 sq. ft.	20′	20′	20′	70%	If adjoining a low density zone other than RSX, then 25′ above average building elevation. Otherwise, 30′ above average building elevation.	C See Spec. Reg. 3.	B	1 for every 4 people based on maximum occupancy load of worship. See Spec. Reg. 2.	1. The property must be served by a collector or arterial street. 2. No parking is required for day-care or school ancillary to the use. 3. If the subject property is located within the NRH neighborhood, west of Slater Avenue NE and south of NE 100th Street, and if it adjoins a low density zone or a low density use in PLA 17, then landscape category A applies.

Section 40.10	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~North Property Line~~	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~South~~ Side Property Line	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~High Water Lin~~ Shoreline Setbacke	MAXIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
.040	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units.~~General Moorage Facility~~	See Chapter 83 KZC	None, ~~but must have at least 100□ of front-age on Lake Washington.~~	30□ See also Spec. Reg. 4.	~~Landward of the high waterline the greater of: a. 15□ or b. 1-1/2 times the height of the primary structure above average building elevation minus 10□.~~	5', but two side yards must equal at least 15 feet.~~1 0□~~	See Chapter 83 KZC~~F or moor-age structure, 0□ For other structures the greater of: a. 15□ or b. 15% of the average parcel depth.~~	~~60%~~	Landward of the-ordinary high water mark~~high waterline~~ 30□ above average building elevation. ~~Waterward of the high waterline, dock and pier decks may not be more than 24□ above mean sea level.~~	B	B	None	1. Refer to Chapter 83 KZC for additional regulations. 2. Chapter 83 KZC contains regulations regarding shorelin ~~1. Moorage may only be used by residents of the dwelling units on the subject property, or their guests.~~ ~~2. Except as permitted by Special Regulation 18, no structures, other than moorage structures or public access piers or boardwalks, may be waterward of the high waterline. For regulations regarding public access piers, see the specific listing in this zone.~~ ~~3. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~ 4. The required 30□ front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30□ of the front property line, each portion of a structure-is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard, from north to south property lines, is developed as a public use area; and c. The design of the public use area is specifically approved by the City. ~~5. A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent~~
				~~Waterward of the high waterline:~~									

Section 40.10	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Side~~ Property Line	~~High Water Line~~ Shoreline Setback						
	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units~~General Moorage Facility (continued)~~	See Chapter 83 KZC		~~–~~	~~10□~~	~~10□~~	~~–~~					None	~~to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ ~~6. The design on the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ ~~REGULATIONS CONTINUED ON NEXT PAGE~~ Refer to Chapter 83 KZC for additional regulations.~~7. The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The ability of the land landward of the high waterline to accommodate the necessary support facilities.~~ ~~b. The potential for traffic congestion.~~ ~~c. The number of moorages shall not exceed the number of dwelling units on the subject property.~~ ~~8. Moorage structures may not be larger than is necessary to provide safe and reasonable moorage for the boats moored. The City will specifically review the size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line; and~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats; and~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and~~ ~~d. The moorage structures will not adversely affect nearby uses; and~~ ~~e. The moorage structures will not have a significant long-term adverse effect on aquatic habitats.~~
				~~No moorage structure may be:~~ ~~a. Within 100□ of a public park; or~~ ~~b. Closer to a public park than a line that starts where the high waterline of the park intersects with the side property line of the park closest to the moorage structure at the 45-degree angle from that side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening over water structure; or~~ ~~REGULATIONS CONTINUED ON NEXT PAGE~~ See Chapter 83 KZC ~~c. Closer to a lot containing a detached dwelling unit than a line that starts where the high waterline of the lot intersects the side property~~										

ATTACHMENT A

O-4252

Section 40.10	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	South Side Property Line	~~High Water Lin~~ Shoreline Setbacke						
				~~line of the lot closest to the moorage structure at a 30-degree angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not exceed beyond any intervening over water structure; or~~ ~~d. Within 25□ of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than listed, is 5□.~~								~~9. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~10. May not treat moorage structure with creosote, oil base, or toxic substance.~~ ~~11. Must provide at least two covered and secured waste receptacles.~~ ~~12. All utility and service lines must be below the pier deck and, where feasible, underground.~~ ~~13. Piers must be adequately lit. The source of the light must not be visible from neighboring properties.~~ ~~14. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high.~~ ~~15. Covered moorage is not permitted.~~ ~~16. Aircraft moorage is not permitted.~~ ~~17. At least one pump-out facility shall be provided.~~ ~~18. See KZC 30.11 for regulations regarding bulkheads and land surface modification.~~

Section 20.10	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.050	School or Day-Care Center	Within the NE 85th Street Sub-area, D.R., Chapter 142 KZC. Otherwise, Process IIA, Chapter 150 KZC.	7,200 sq. ft.	If this use can accommodate 50 or more students or children, then: 50’	50’ on each side	50’	70%	If adjoining a low density zone other than RSX, then 25□ above average building elevation. Otherwise, 30□ above average building elevation. See Spec. Reg. 8.	D	B	See KZC 105.25.	1. May locate on the subject property only if: a. It will not be materially detrimental to the character of the neighborhood in which it is located. b. Site and building design must minimize adverse impacts on surrounding residential neighborhoods. 2. A six-foot-high fence is required only along the property line adjacent to the outside play areas. 3. Structured play areas must be set back from all property lines as follows: a. Twenty feet if this use can accommodate 50 or more students or children. b. Ten feet if this use can accommodate 13 to 49 students or children. 4. An on-site passenger loading area must be provided. The City shall determine the appropriate size of the loading area on a case-by-case basis, depending on the number of attendees and the extent of the abutting right-of-way improvements. Carpooling, staggered loading/unloading time, right-of-way improvements or other means may be required to reduce traffic impacts on nearby residential uses. 5. May include accessory living facilities for staff persons. 6. To reduce impacts on nearby residential uses, hours of operation of the use may be limited and parking and passenger loading areas relocated. 7. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388). 8. For school use, structure height may be increased, up to 35 feet, if: a. The school can accommodate 200 or more students; and b. The required side and rear yards for the portions of the structure exceeding the basic maximum structure height are increased by one foot for each additional one foot of structure height; and c. The increased height is not specifically inconsistent with the applicable neighborhood plan provisions of the Comprehensive Plan; and d. The increased height will not result in a structure that is incompatible with surrounding uses or improvements. *This special regulation is not effective within the disapproval jurisdiction of the Houghton Community Council.*
				If this use can accommodate 13 to 49 students or children, then: 20’	20’ on each side	20’						

Section 20.10	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115) Front	Side	Rear	MAXIMUMS: Lot Coverage	Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
.060	Grocery Store, Drug Store, Laundromat, Dry Cleaners, Barber Shop, Beauty Shop or Shoe Repair Shop See Spec. Reg. 9.	Process IIA, Chapter 150 KZC. Also see Chapter 83 KZC for properties in shoreline jurisdiction.	7,200 sq. ft.	20'	5' but 2 side yards must equal at least 15'.	10'	60%	If adjoining a low density zone other than RSX, then 25□ above average building elevation. Otherwise, 30□ above average building elevation.	B	E	1 per each 300 sq. ft. of gross floor area.	1. This use may be permitted only if it is specifically consistent with the Comprehensive Plan in the proposed location. 2. May only be permitted if placement, orientation, and scale indicate this use is primarily intended to serve the immediate residential area. 3. Must be located on a collector arterial or higher volume right-of-way. 4. Placement and scale must indicate pedestrian orientation. 5. Must mitigate traffic impacts on residential neighborhood. 6. Gross floor area may not exceed 3,000 square feet. 7. May not be located above the ground floor of a structure. 8. Hours of operation may be limited to reduce impacts on nearby residential uses. 9. This use is not permitted in an RM zone located within the NE 85th Street Subarea.
.070	Mini-School or Mini-Day-Care	Within the NE 85th Street Sub-area, D.R., Chapter 142 KZC. Otherwise, none.	3,600 sq. ft.						D	B	See KZC 105.25.	1. May locate on the subject property if: a. It will not be materially detrimental to the character of the neighborhood in which it is located. b. Site design must minimize adverse impacts on surrounding residential neighborhoods. 2. A six-foot-high fence is required along the property line adjacent to the outside play areas. 3. Structured play areas must be set back from all property lines by five feet. 4. An on-site passenger loading area may be required depending on the number of attendees and the extent of the abutting right-of-way improvements. 5. To reduce impacts on nearby residential uses, hours of operation of the use may be limited and parking and passenger loading areas relocated. 6. May include accessory living facilities for staff persons. 7. These uses are subject to the requirements established by the Department of Social and Health Services (WAC Title 388).

Section 20.10	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.080	Assisted Living Facility (Not permitted in RM 5.0)	Within the NE 85th Street Sub-area, D.R., Chapter 142 KZC. Otherwise, none.	3,600 sq. ft.	20'	5' but 2 side yards must equal at least 15□.	10'	60%	If adjoining a low density zone other than RSX, then 25□ above average building elevation. Otherwise, 30□ above average building elevation.	D See Spec. Reg. 6.	A	1.7 per independent unit. 1 per assisted living unit.	1. A facility that provides both independent dwelling units and assisted living units shall be processed as an assisted living facility. 2. If a nursing home use is combined with an assisted living facility use in order to provide a continuum of care for residents, the required review process shall be the least intensive process between the two uses. 3. For density purposes, two assisted living units shall constitute one dwelling unit. Total dwelling units may not exceed the number of stacked dwelling units allowed on the subject property. Through Process IIB, Chapter 152 KZC, up to 1 1/2 times the number of stacked dwelling units allowed on the property may be approved if the following criteria are met: a. Project is of superior design, and b. Project will not create impacts that are substantially different than would be created by a permitted multifamily development. 4. The assisted living facility shall provide usable recreation space of at least 100 square feet per unit, in the aggregate, for both assisted living units and independent dwelling units, with a minimum of 50 square feet of usable recreation space per unit located outside. 5. Chapter 115 KZC contains regulations regarding home occupations and other accessory uses, facilities, and activities associated with this use. 6. If the subject property is located within the NRH neighborhood, west of Slater Avenue NE and south of NE 100th Street, and if it adjoins a low density zone or a low density use in PLA 17, then landscape category A applies.
.090	Convalescent Center or Nursing Home	Within the NE 85th Street Sub-area, D.R., Chapter 142 KZC. Otherwise, Process IIA, Chapter 150 KZC.	7,200 sq. ft.		10' on each side		70%		C See Spec. Reg. 2	B	1 for each bed.	1. If a nursing home use is combined with an assisted living facility use in order to provide a continuum of care for residents, the required review process shall be the least intensive process between the two uses. 2. If the subject property is located within the NRH neighborhood, west of Slater Avenue NE and south of NE 100th Street, and if it adjoins a low density zone or a low density use in PLA 17, then Landscape Category A applies.

Section 20.10	USE ⇩ / REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS				MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)			Lot Coverage	Height of Structure				
				Front	Side	Rear						
.100	Public Utility	Within the NE 85th Street Sub-area, D.R., Chapter 142 KZC. Otherwise, Process IIA, Chapter 150 KZC.	None	20’	20’ on each side	20’	70%	If adjoining a low density zone other than RSX, then 25□ above average building elevation. Otherwise, 30□ above average building elevation.	A See Spec. Regs. 2 and 3.	B	See KZC 105.25.	1. Site design must minimize adverse impacts on surrounding residential neighborhoods. 2. Landscape Category A or B may be required depending on the type of use on the subject property and the impacts associated with the use on the nearby uses. 3. If the subject property is located within the NRH neighborhood, west of Slater Avenue NE and south of NE 100th Street, and if it adjoins a low density zone or a low density use in PLA 17, then Landscape Category A applies.
.110	Government Facility Community Facility				10’ on each side	10’			C See Spec. Regs. 2 and 3.			
.120	Public Park	Development standards will be determined on case-by-case basis. See Chapter 49 KZC for required review process.										

Section 40.10	USE ⇩ / REGULATIONS ⇨	Required Review Process	MINIMUMS: Lot Size	MINIMUMS: REQUIRED YARDS (See Ch. 115): Front	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~North Property Line~~	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~South~~ Side Property Line	MINIMUMS: REQUIRED YARDS (See Ch. 115): ~~High Water Lin~~ Shoreline Setbacke	MAXIMUMS: Lot Coverage	MAXIMUMS: Height of Structure	Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
		DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
.040	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units.~~General Moorage Facility~~	See Chapter 83 KZC	None, ~~but must have at least 100□ of front-age on Lake Washington.~~	30□ See also Spec. Reg. 4.	~~Landward of the high waterline the greater of: a. 15□ or b. 1-1/2 times the height of the primary structure above average building elevation minus 10□.~~	5', but two side yards must equal at least 15 feet.~~1 0□~~	See Chapter 83 KZC~~F or moor-age structure, 0□ For other structures the greater of: a. 15□ or b. 15% of the average parcel depth.~~	~~60%~~	Landward of the-ordinary high water mark~~high waterline~~ 30□ above average building elevation. ~~Waterward of the high waterline, dock and pier decks may not be more than 24□ above mean sea level.~~	B	B	None	1. Refer to Chapter 83 KZC for additional regulations. 2. Chapter 83 KZC contains regulations regarding shorelin ~~1. Moorage may only be used by residents of the dwelling units on the subject property, or their guests.~~ ~~2. Except as permitted by Special Regulation 18, no structures, other than moorage structures or public access piers or boardwalks, may be waterward of the high waterline. For regulations regarding public access piers, see the specific listing in this zone.~~ ~~3. Must provide public pedestrian access from the right-of-way to and along the entire waterfront of the subject property within the high waterline yard. Access to the waterfront may be waived by the City if public access along the waterfront of the subject property can be reached from adjoining property. In addition, the City may require that part or all of the high waterline yard be developed as a public use area. The City shall require signs designating the public pedestrian access and public use areas.~~ 4. The required 30□ front yard may be reduced one foot for each one foot of this yard that is developed as a public use area if: a. Within 30□ of the front property line, each portion of a structure-is setback from the front property line by a distance greater than or equal to the height of that portion above the front property line; and b. Substantially, the entire width of this yard, from north to south property lines, is developed as a public use area; and c. The design of the public use area is specifically approved by the City. ~~5. A view corridor must be maintained across 30 percent of the average parcel width. The view corridor must be in one continuous piece. Within the view corridor, structures, parking areas, and landscaping will be allowed, provided that they do not obscure the view from Lake Washington Boulevard to and beyond Lake Washington. This corridor must be adjacent~~
				~~Waterward of the high waterline:~~									

Section 40.10	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS											
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	~~South Side~~ Property Line	~~High Water Line~~ Shoreline Setback						
	Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units~~General Moorage Facility (continued)~~	See Chapter 83 KZC		~~–~~	~~10□~~	~~10□~~	~~–~~					None	~~to either the north or south property line, whichever will result in the widest view corridor given development on adjacent properties.~~ ~~6. The design on the site must be compatible with the scenic nature of the waterfront. If the development will result in the isolation of a detached dwelling unit, site design, building design and landscaping must mitigate the impacts of that isolation.~~ ~~REGULATIONS CONTINUED ON NEXT PAGE~~ Refer to Chapter 83 KZC for additional regulations.~~7. The City will determine the maximum allowable number of moorages based on the following factors:~~ ~~a. The ability of the land landward of the high waterline to accommodate the necessary support facilities.~~ ~~b. The potential for traffic congestion.~~ ~~c. The number of moorages shall not exceed the number of dwelling units on the subject property.~~ ~~8. Moorage structures may not be larger than is necessary to provide safe and reasonable moorage for the boats moored. The City will specifically review the size and configuration of moorage structures to insure that:~~ ~~a. The moorage structures do not extend waterward of the point necessary to provide reasonable draft for the boats to be moored, but not beyond the outer harbor line; and~~ ~~b. The moorage structures are not larger than is necessary to moor the specified number of boats; and~~ ~~c. The moorage structures will not interfere with the public use and enjoyment of the water or create a hazard to navigation; and~~ ~~d. The moorage structures will not adversely affect nearby uses; and~~ ~~e. The moorage structures will not have a significant long-term adverse effect on aquatic habitats.~~
				~~No moorage structure may be:~~ ~~a. Within 100□ of a public park; or~~ ~~b. Closer to a public park than a line that starts where the high waterline of the park intersects with the side property line of the park closest to the moorage structure at the 45-degree angle from that side property line. This setback applies whether or not the subject property abuts the park, but does not extend beyond any intervening over water structure; or~~ ~~REGULATIONS CONTINUED ON NEXT PAGE~~ See Chapter 83 KZC ~~c. Closer to a lot containing a detached dwelling unit than a line that starts where the high waterline of the lot intersects the side property~~										

ATTACHMENT A

O-4252

Section 40.10	USE ⇩ REGULATIONS ⇨	DIRECTIONS: FIRST, read down to find use...THEN, across for REGULATIONS										
		Required Review Process	MINIMUMS					MAXIMUMS		Landscape Category (See Ch. 95)	Sign Category (See Ch. 100)	Required Parking Spaces (See Ch. 105)	Special Regulations (See also General Regulations)
			Lot Size	REQUIRED YARDS (See Ch. 115)				Lot Coverage	Height of Structure				
				Front	~~North Property Line~~	South Side Property Line	~~High Water Lin~~ Shoreline Setbacke						
				~~line of the lot closest to the moorage structure at a 30-degree angle from that side property line. This setback applies whether or not the subject property abuts the lot, but does not exceed beyond any intervening over water structure; or~~ ~~d. Within 25□ of another moorage structure not on the subject property.~~ ~~The minimum dimension of any yard, other than listed, is 5□.~~								~~9. If the moorage structures will extend waterward of the Inner Harbor Line, the applicant must obtain a lease from the Washington State Department of Natural Resources prior to submittal of a Building Permit for this use.~~ ~~10. May not treat moorage structure with creosote, oil base, or toxic substance.~~ ~~11. Must provide at least two covered and secured waste receptacles.~~ ~~12. All utility and service lines must be below the pier deck and, where feasible, underground.~~ ~~13. Piers must be adequately lit. The source of the light must not be visible from neighboring properties.~~ ~~14. Moorage structures must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least four inches high.~~ ~~15. Covered moorage is not permitted.~~ ~~16. Aircraft moorage is not permitted.~~ ~~17. At least one pump-out facility shall be provided.~~ ~~18. See KZC 30.11 for regulations regarding bulkheads and land surface modification.~~

Revisions to Definitions Chapter 5 of the Kirkland Zoning Ordinance as follows:

.060 Average Parcel Depth – The average of the distance from the ~~high waterline~~ ordinary high water mark to the ~~street providing~~ public right of way or vehicular access easement road, whichever provides the direct access to the subject property as measured along the side property lines or the extension of those lines where the water frontage of the subject property ends, the center of the ~~high waterline~~ ordinary high water mark of the subject property and the quarter points of the ~~high waterline~~ordinary high water mark of the subject property. See ~~the following diagram for examples~~ Plate 19. ~~At the northern terminus of the 5th Ave West private access easement, the average parcel depth shall be measured from the high waterline to the public pedestrian access easement providing access to Waverly Beach Park.~~

.065 Average Parcel Width – The average of the distance from the north to the south property lines as measured along the ordinary high water mark ~~high waterline~~ and the front property line, or along the east and west property lines if the parcel does not abut the ordinary hig water mark ~~high waterline~~ of Lake Washington.

.245 Dry Land – The area of the subject property landward of the ~~high waterline~~ordinary high water mark.

~~.365 High Waterline – The line where the water meets the land when the water level of Lake Washington is 21.8 feet above mean sea level based on the Corps of Engineers Datum Point. High Waterline shall be construed to be the same as Ordinary High Water Mark (OHWM), as defined in WAC 173-16-030(10).~~

~~.612 Ordinary High Waterline – This term has the same meaning as "high waterline."~~

.720 Property Line – Those lines enclosing a lot and those lines defining a recorded vehicular access easement. The following are categories of property lines:

1. Front property line is any property line that is adjacent to a street or vehicular access easement or tract more than 21 feet in width, except when said vehicular access easement or tract:

a. Is located entirely on an adjacent lot or lots and does not serve the subject property; or

b. Encompasses a hammerhead turnaround required by the Fire Department, whether or not it is located on or serves the subject property.

Neither the Burlington Northern, I-405, nor SR-520 rights-of-way shall be considered front property lines.

2. Rear property line is any property line that is farther from and essentially parallel to a front property line except on a lot which contains two or more front property lines; or any property line that is adjacent to a street, alley or vehicular access easement or tract 21 feet or less in width, except when said vehicular access easement or tract serves only one lot, or is located entirely on an adjacent lot or lots and does not serve the subject property; or any property line that is adjacent to a vehicular access easement or tract which encompasses a hammerhead turnaround required by the Fire Department.

3. Side property line is any property line other than a front property line or a rear property line, or in Waterfront District Zones, any property line other than a ~~north, south,~~ front~~,~~ or ordinary high water mark. ~~high waterline~~~~shoreline setback required under Chapter 83 KZC~~~~.~~

~~4. North property line is the property line running essentially east to west at the northern end of the lot, at an angle of more than 67° 30' from a line running true north-south (see Plate 28).~~

~~5. South property line is the property line running essentially east to west at the southern end of a lot that also contains a north property line.~~

~~6. High Waterline – This term is defined separately in this chapter.~~

.727 Public Access Pier or Boardwalk – An elevated structure which is constructed waterward of the ~~high waterline~~ordinary high water mark and intended for public use.

.775 Required Yard – Those areas adjacent to and interior from the property lines and involving the following designations (if two required yards are coincidental, the yard with the greater dimensions shall predominate):

1. Front: That portion of a lot adjacent to and parallel with any front property lines and at a distance therefrom equal to the required front yard depth.

2. Rear: That portion of a lot adjacent to and parallel with the rear property line and at a distance therefrom equal to the required rear yard depth.

3. Side: That portion of a lot adjacent to and parallel with the side property line and at a distance therefrom equal to the required side yard depth. All yards not otherwise categorized shall be designated side yards.

~~4. North Property Line Yard: That portion of a lot adjacent to and parallel with the north property line and at a distance therefrom equal to the required north property line yard depth.~~

~~5. South Property Line Yard: That portion of a lot adjacent to and parallel with the south property line and at a distance therefrom equal to the required south property line yard depth.~~

~~6. High Waterline Yard: That portion of a lot adjacent to and parallel with the high waterline and at a distance landward therefrom equal to the required high waterline yard depth.~~

115.07 Accessory Dwelling Units

One accessory dwelling unit (ADU) is permitted as subordinate to a single-family dwelling; provided, that the following criteria are met:

1. Number of Occupants – The total number of occupants in the principal dwelling unit and the ADU combined shall not exceed the maximum number established for a single-family dwelling as defined in KZC 5.10.300.

2. Owner Occupancy – One of the units must be the principal residence of the property owner(s).

3. Subdivision – Accessory dwelling units shall not be subdivided or otherwise segregated in ownership from the principal dwelling unit.

4. Scale – The square footage of the accessory dwelling unit shall not exceed 40 percent of the primary residence and accessory dwelling unit combined. If the accessory unit is completely located on a single floor, the Planning Director may allow increased size in order to efficiently use all floor area.

   Detached accessory dwelling units shall not exceed 800 square feet of gross floor area. The gross floor area shall not include area with less than five feet of ceiling height, as measured between the finished floor and the supporting members for the roof. When calculating the square footage of the ADU (see KZC 5.10.340, definition of "gross floor area"), covered exterior elements such as decks and porches will not be included; provided, the total size of all such covered exterior elements does not exceed 200 square feet. An accessory dwelling unit will be considered to be "detached" from the principal unit if it has any of the following characteristics:

   a. It does not share a common roof structure with the principal unit.

   b. It is not integrated into the footprint of the principal unit.

   c. The design is inconsistent with the existing roof pitch, siding treatment, and window style of the principal unit.

5. Location. The accessory dwelling unit may be added to or included within the principal unit, or located in a detached structure. Detached structures must conform with the setbacks, height restrictions, lot coverage and other applicable zoning regulations required for single-family dwellings in the applicable use zone; provided, that an accessory dwelling unit shall not be considered a "dwelling unit" in the context of Special Regulations in Chapters 15 through 60 KZC which limit the number of detached dwelling units on each lot to one.

6. Entrances. The primary entrance to the accessory dwelling unit shall be located in such a manner as to be clearly secondary to the main entrance to the principal unit and shall not detract from or alter the single-family character of the principal unit.

7. Parking. There shall be one off-street parking space provided for the accessory dwelling unit.

~~8. WD I and WD III Zones. Properties located in the WD I and WD III Zones which develop accessory dwelling units must provide public pedestrian access consistent with the regulations contained in KZC 30.15.020 and 30.35.020 for attached or stacked dwelling units.~~

8. ~~9.~~Applicable Codes. The portion of a single-family dwelling in which an accessory dwelling unit is proposed must comply with all standards for health and safety contained in all applicable codes, with the following exception for ceiling height. Space need not meet current Uniform Building Code (UBC) ceiling height requirements if it was legally constructed as habitable space.

9. ~~10.~~Permitting

a. Application

1) The property owner shall apply for an accessory dwelling unit permit with the Building Department. The application shall include an affidavit signed by the property owner agreeing to all the general requirements outlined in this section.

In the event that proposed improvements in the accessory dwelling unit do not require a building permit, a registration form for the unit must be completed and submitted to the Planning Department.

2) The registration form as required by the City shall include a property covenant. The covenant must be filed by the property owner with the City for recording with the King County Department of Records and Elections to indicate the presence of the accessory dwelling unit, and reference to other standards outlined in this section. The covenant shall run with the land as long as the accessory dwelling unit is maintained on the property.

3) If an ADU was or is created without being part of a project for which a building permit was or is finaled, an ADU inspection will be required for issuance of an ADU permit. The ADU inspection fee will cover a physical inspection of the ADU. This fee will be waived if the ADU existed on January 1, 1995, and the ADU permit is applied for by December 31, 1995.

b. Eliminating an Accessory Dwelling Unit – Elimination of a registered accessory dwelling unit may be accomplished by the owner filing a certificate with the Planning Department, or may occur as a result of enforcement action.

c. Preexisting Units – That portion of a single-family residence which meets the definition of accessory dwelling unit which existed on January 1, 1995, may be legally established, and not subject to zoning violation fines, if the following requirements are met:

1) An application for an accessory dwelling permit is filed by December 31, 1997;

2) The accessory dwelling unit is determined to meet the requirements of this section, as well as the other code requirements referred to in KZC 115.65(5)(g).

d. Appeals. An applicant may appeal to the Hearing Examiner the decision of the Planning Official in denying a request to construct an accessory dwelling unit. A written notice of appeal shall be filed with the Planning Department within 14 calendar days of the date the Planning Official's decision was mailed or otherwise delivered to the applicant. The City shall give notice of the hearing to the applicant at least 17 calendar days prior to the hearing. The applicant shall have the burden of proving the Planning Official made an incorrect decision. Based on the Hearing Examiner's findings and conclusions, he or she may affirm, reverse, or modify the decision being appealed.

Miscellaneous

WDI

~~30.17 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability, public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorage.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation or moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the following regulations apply:~~

~~1) Material Used for Landfill – The material used in the landfill must be nondissolving and nondecomposing. The fill material must not contain organic and inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~2) Use of Vegetation – Exposed fill areas must be stabilized with vegetation.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~b. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for bulkhead approved under paragraph 1 of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

~~c. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~d. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~e. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See Chapter 115 KZC for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

~~30.17 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability, public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorage.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation or moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the following regulations apply:~~

~~1) Material Used for Landfill – The material used in the landfill must be nondissolving and nondecomposing. The fill material must not contain organic and inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~2) Use of Vegetation – Exposed fill areas must be stabilized with vegetation.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~b. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for bulkhead approved under paragraph 1 of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

~~c. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~d. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~e. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See KMC Title 29 for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

WDII

~~30.27 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability, public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the applicant must comply with the provisions of subsections (3)(c) and (d) of this section.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

~~c. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~d. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~e. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See Chapter 115 KZC for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

WDIII

~~Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability, public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorage.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation or moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the following regulations apply:~~

~~1) Material Used for Landfill – The material used in the landfill must be nondissolving and nondecomposing. The fill material must not contain organic and inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~2) Use of Vegetation – Exposed fill areas must be stabilized with vegetation.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section.~~

~~b. Required Permit – The City will use Process I, described in Chapter 145 KZC, to review and decide upon an application for land surface modification within the high waterline yard. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for a bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

~~d. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the exposing habitat.~~

~~e. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~f. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See Chapter 115 KZC for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

CBD-2

~~50.20 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve navigability or public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the applicant must comply with the provisions of subsections (3)(d) and (3)(e) of this section.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for a bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

c. Public Use Area Required – If the land surface modification within the high waterline yard is proposed as part of a development other than a small moorage facility, the City shall require that part of the high waterline be developed as a public use area. The size and design of the public use area must be specifically approved by the City based on the size of the subject property, the use on the subject property, and the ability to use design features to separate the public use area from the private elements of the development.

d. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.

e. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.

f. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.

4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See KMC Title 29 for those regulations.

5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.

JBD-5

~~52.35 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section.~~

~~b. Required Permit – The City will use Process I, described in Chapter 145 KZC, to review and decide upon an application for a bulkhead. A permit may also be required from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~d. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~e. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~f. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~g. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~h. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve navigability or public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorage.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation and moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the applicant must comply with the provisions of subsections (3)(e) and (3)(f) of this section.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section.~~

~~b. Required Permit – The City will use Process I, described in Chapter 145 KZC, to review and decide upon an application for land surface modification within the high waterline yard. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within the one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for a bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(h) of this section.~~

~~d. Public Use Area Required – If the land surface modification within the high waterline yard is proposed as part of a development other than a small moorage facility, the City shall require that part of the high waterline be developed as a Public Use Area. The size and design of the Public Use Area must be specifically approved by the City based on the size of the subject property, the use on the subject property, and the ability to use design features to separate the Public Use Area from the private elements of the development.~~

~~e. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~f. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~g. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See KMC Title 29 for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

PLA2

~~60.18 Bulkhead and Land Surface Modification~~

~~1. Bulkheads – Bulkheads are not permitted in this zone.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use the City Council Process IIB as described in Chapter 152 KZC to review and decide upon an application for a land surface modification waterward of the high waterline.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if the application is filed be a public agency to improve navigability, public recreation, or public safety; and~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved fill on the subject property.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the material for the fill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~f. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~3. Land Surface Modification within the Regulated Wetland – Land surface modification within a regulated wetland and within a wetland buffer is regulated by Chapter 90 KZC. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~4. Land Surface Modification Other than Waterward of the High Waterline or the Regulated Wetland or Wetland Buffer – See KMC Title 29 for regulations regarding land surface modifications other than waterward of the high waterline or within the regulated wetland or wetland buffer.~~

~~5. Emergency Measures – An applicant may take emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

PLA3B

~~60.28 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section. A permit may be required from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~c. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~d. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~e. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline. If there has been severe and unusual erosion within one year preceding the application for the bulkhead, the City may allow the placement of the bulkhead to recover the dryland area lost by this erosion.~~

~~f. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~g. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed;~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability or public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorage.~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation and moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the following regulations apply:~~

~~1) Material Used for Landfill – The material used in the landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~2) Use of Vegetation – Exposed fill areas must be stabilized with vegetation.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult with that agency for further information.~~

~~b. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within the one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for a bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(g) of this section.~~

~~c. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.~~

~~d. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See KMC Title 29 for those regulations.~~

~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

PLA15A

~~60.173 Bulkhead and Land Surface Modification~~

~~1. Bulkheads~~

~~a. General – Bulkheads are permitted in this zone subject to all of the conditions and restrictions of this section.~~

~~b. Required Permit – The City will use Process I, described in Chapter 145 KZC, to review and decide upon an application for a bulkhead. A permit may also be required from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – A bulkhead may be constructed only if:~~

~~1) It is needed to prevent significant erosion due to wave action; and~~

~~2) The use of vegetation will not sufficiently stabilize the shoreline to prevent significant erosion.~~

~~d. Prohibited Location – A bulkhead may not be erected within a wetland or between a wetland and the lake.~~

~~e. Design of Bulkhead – The bulkhead must be designed to minimize the transmittal of wave energy to other properties.~~

~~f. Placement of the Bulkhead – The bulkhead may not extend waterward of the high waterline unless it is associated with approved fill.~~

~~g. Change in Configuration of the Land – Except as allowed under subsections (2) and (3) of this section, alteration of the horizontal or vertical configuration of the land must be kept to a minimum.~~

~~h. Backfill – The extent and nature of any backfill proposed landward of the bulkhead must be approved by the City.~~

~~2. Land Surface Modification Waterward of the High Waterline~~

~~a. General – Land surface modification waterward of the high waterline is permitted in this zone subject to all of the conditions and restrictions in this section.~~

~~b. Required Permit – The City will use Process IIB, described in Chapter 152 KZC, to review and decide upon an application for a land surface modification waterward of the high waterline. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification waterward of the high waterline only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) The land surface modification will not result in erosion of the shoreline or undermine stability of neighboring properties; and~~

~~3) Either:~~

~~a) The application is filed by a public agency to improve navigability, public recreation, or public safety; or~~

~~b) The application is to create a public use or recreation area; or~~

~~c) The application is for dredging to remove silt or sediment deposited because of severe and unusual erosion or resulting from the existence of a bulkhead on nearby property; or~~

~~d) At such time as permitted by the Shoreline Master Program, the application is for dredging to provide sufficient draft for boat moorages; or~~

~~e) The application is consistent with an approved Master Plan for a "development containing attached or stacked dwelling units, restaurants or taverns and general moorage facilities."~~

~~d. Requirements for Dredging – If the land surface modification involves dredging, the following regulations apply:~~

~~1) Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity on the subject property.~~

~~2) The applicant shall restore any beneficial vegetation disturbed during dredging.~~

~~3) The dredging shall be the minimum necessary to provide sufficient draft for navigation or moorage.~~

~~e. Requirements for Fill – If the land surface modification involves fill, the following regulations apply:~~

~~1) Material Used for Landfill – The material used in the landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality or the existing habitat.~~

~~2) Vegetation – Exposed fill areas must be stabilized with vegetation.~~

~~3) Public Use Area Required – If the fill is proposed as part of a "Development containing attached or stacked dwelling units, restaurants or taverns and general moorage facilities," part of the high waterline yard shall be developed as a public use area. The size and design of the public use area must be specifically approved by the City based on the size of the subject property, the use on the subject property, and the ability to use design features to separate the public use area from the private elements of the development.~~

~~3. Land Surface Modification within the High Waterline Yard~~

~~a. General – Land surface modification in the high waterline yard is permitted in this zone subject to all of the conditions and restrictions of this section.~~

~~b. Required Permit – The City will use Process I, described in Chapter 145 KZC, to review and decide upon an application for land surface modification within the high waterline yard. This activity may also require a permit from the U.S. Army Corps of Engineers. Consult that agency for further information.~~

~~c. Allowable Reasons – The City may approve an application for a land surface modification within the high waterline yard only if:~~

~~1) No unique or significant natural area of flora or fauna will be destroyed; and~~

~~2) Either:~~

~~a) The application is filed by a public agency to improve public safety, recreation, or access; or~~

~~b) The application is part of a development proposal for the subject property and is to improve access to a pier or beach; or~~

~~c) The land surface modification is necessary to provide public access; or~~

~~d) The land surface modification is necessary to the structural safety of a structure; or~~

~~e) There has been severe and unusual erosion within the one year directly preceding the application and the land surface modification is to restore the shoreline to its configuration prior to this erosion; or~~

~~f) This application is part of an application for bulkhead approved under subsection (1) of this section. For backfill landward of a bulkhead, see subsection (1)(h) of this section.~~

~~d. Material Used for Landfill – The material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality or the existing habitat.~~

~~e. Use of Vegetation – The applicant shall stabilize exposed areas left after land surface modification with vegetation.~~

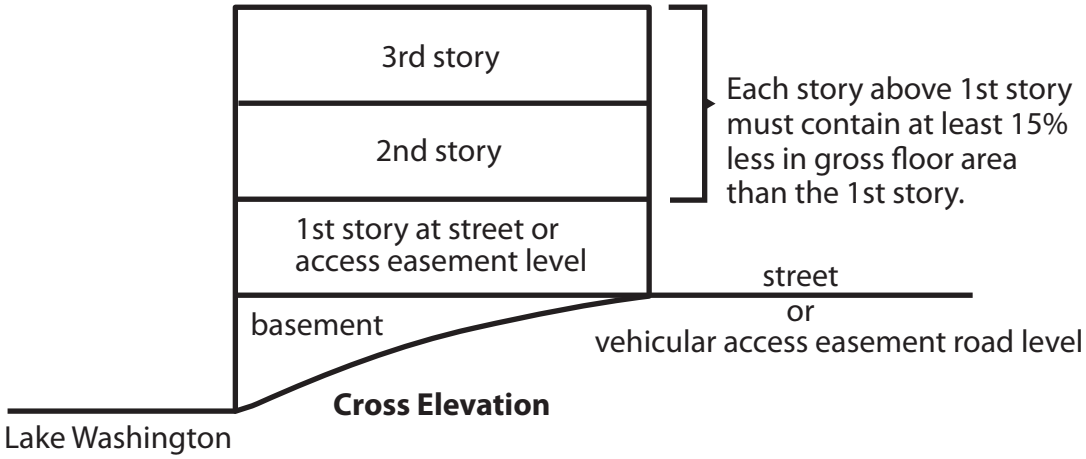
~~f. Disposition of Excavated Materials – Dredging spoils may not be deposited in Lake Washington and may be deposited on the subject property only if this is part of an approved development activity.~~

~~4. Land Surface Modification Landward of the High Waterline Yard – Land surface modification landward of the high waterline yard is regulated like land surface modifications throughout the City. See KMC Title 29 for those regulations.~~

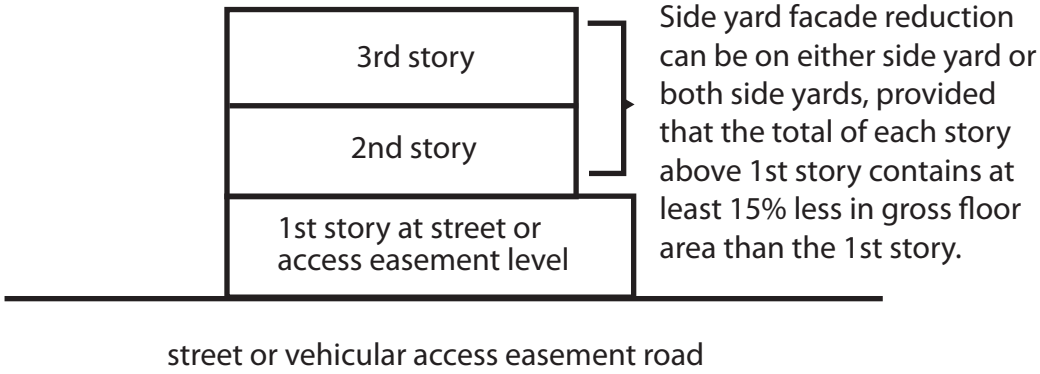
~~5. Emergency Measures – An applicant may erect a temporary bulkhead and take other emergency measures to protect against harm to persons or property resulting from imminent and unanticipated natural hazards. The area modified must be restored to the condition that existed immediately prior to any emergency modification as soon as practicable after the emergency.~~

Plate 36

Story at Street or Access Easement Level



Cross Elevation



Front Elevation

ATTACHMENT A-PART 2

Part 2

ZONING CODE AMENDMENTS

Chapter 1 – USER GUIDE

1.10 Additional Regulations

In addition to the regulations in the use zone charts, this code contains a variety of provisions that may apply to the subject property or to a particular use or activity on the property. The following list of questions will help you determine what other factors of this code may contain regulations that are of interest.

1.-through 22 no change

23. Personal Wireless Service Facilities – Do you want to know the City's requirements for the installation of communication antennae or towers, cell sites, or other equipment used in wireless communications? If so, see Chapter 117 KZC.

24. Design Review – Do you want to learn about the City's Design Review and process? If so, read Chapter 92 KZC.

25. Trees – Are you interested in pruning or removing trees or thinking about doing anything on your property that may impact trees, e.g., grading, building, remodeling, or demolishing? If so, you should read Chapter 95 KZC before you begin to design.

26. Landscaping – Are you interested in landscaping your property? If so, you should read KZC 95.52, Prohibited Vegetation.

27. Properties near Lake Washington – Is the subject property located within 200 feet of the ordinary high water mark of Lake Washington or contains a wetland abutting Lake Washington? If so, you should read Chapter 83 KZC, Shoreline Management.

Chapter 5 – DEFINITIONS

Sections:
5.05 User Guide
5.10 Definitions

5.05 User Guide

The definitions in this chapter apply for this code. Also see definitions contained in Chapter 83 KZC for shoreline management, Chapter 90 KZC for drainage basins, Chapter 95 KZC for tree management and required landscaping, and Chapter

113 KZC for cottage, carriage and two/three-units homes that are applicable to those chapters.

5.10 Definitions

The following definitions apply throughout this code unless, from the context, another meaning is clearly intended:

.105 Bulkhead – A wall or embankment used for retaining earth. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

~~.126 Class A Streams – As defined in Chapter 90 KZC.~~

~~.127 Class B Streams – As defined in Chapter 90 KZC.~~

~~.128 Class C Streams – As defined in Chapter 90 KZC.~~

~~.230 Dredging~~

~~– Removal of earth and other materials from the bottom of a body of water or from a wetland.~~

~~.235 Dredging Spoils~~

~~– The earth and other materials removed from the floor of a body of water or a wetland by the dredging process.~~ d

~~.245 Dry Land~~
~~– The area of the subject property landward of the high waterline.~~

.326 Frequently Flooded Areas – ~~As defined in Chapter 90 KZC.~~For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as defined in Chapter 90 KZC.

.328 Geologically Hazardous Areas – ~~As defined in Chapter 85 KZC.~~ For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as defined in Chapter 90 KZC.

.365 High Waterline – This term has the same meaning as “ordinary high waterline”. ~~The line where the water meets the land when the water level of Lake Washington is 21.8 feet above mean sea level based on the Corps of Engineers Datum Point. High Waterline shall be construed to be the same as Ordinary High Water Mark (OHWM), as defined in WAC 173-16-030(10)~~.

.410 Institutional Uses – The following uses: schools, churches, colleges, universities, hospitals, parks, governmental facilities and public utilities. Also see Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act.

~~.525 Mean Sea Level – The level of Puget Sound at zero tide as established by the US Army Corps of Engineers.~~.

ATTACHMENT A-PART 2

.545 Moorage Facility – A pier, dock, ~~buoy~~ or other structure providing docking or moorage space or a buoy for waterborne pleasure craft. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

.612 Ordinary High Waterline – the mark on the shores of all waters that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual and so long continued in ordinary years, as to mark upon the soil or vegetation a character distinct from that of the abutting upland, provided that in any area where the ordinary high water line cannot be found, the ordinary high water line adjoining freshwater shall be the elevation of the mean annual flood. This term has the same meaning as "high waterline."See Chapter 83 KZC for term "ordinary high water mark" applicable to properties within jurisdiction of the Shoreline Management Act.

.725 Public Access – A portion of private property subject to an easement giving the public the right to stand on or traverse this portion of the property. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

.837 Shoreline Management Act – The Act as adopted under the authority of Chapter 90.58 RCW and Chapter 173-26 WAC.

.840 Shoreline Master Program – Consists of Chapters 83 and 141 KZC, the Shoreline Chapter of the Kirkland Comprehensive Plan and the City of Kirkland Restoration Plan ~~The ordinance of the City of Kirkland~~ adopted under the authority of Chapter 90.58 RCW.

.895 Stream – ~~As defined in Chapter 90 KZC.~~ For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as defined in Chapter 90 KZC.

.985 Wetland – ~~As defined in Chapter 90 KZC.~~ For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as defined in Chapter 90 in KZC.

CHAPTER 20.05 MULTIFAMILY RESIDENTIAL (RM) ZONES)

Section 20.08 – General Regulations

New General Regulation No 10.

10) Residential uses may have an associated private shoreline park that is commonly owned and used by residents and guests.

Section 30 19 WATERFRONT DISTRICT II

ATTACHMENT A-PART 2

Section 30.20 – General Regulations

New General Regulation No 5.

5.) Residential uses abutting Lake Washington may have an associated private shoreline park that is commonly owned and used by residents and guests.

Chapter 75 – HISTORIC LANDMARK OVERLAY ZONE AND HISTORIC RESIDENCE DESIGNATION

75.05 User Guide

This chapter establishes mechanisms for designating certain areas or improvements in the City as historic landmarks or historic residences. This chapter also contains regulations that govern the use and alteration of any area or improvement that has been designated as an historic landmark or historic residence.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

Chapter 85 – GEOLOGICALLY HAZARDOUS AREAS

85.05 User Guide

1. This chapter establishes special regulations that apply to development on property containing geologically hazardous areas. These regulations add to and, in some cases, supersede other regulations of this code. See Chapter 95 KZC for additional regulations that address trees and other vegetation within and outside of geologically hazardous areas.

2. If you are interested in developing property that contains a geologically hazardous area, or if you wish to participate in the City's decision on a proposed development on any of these areas, you should read this chapter.

3. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

Chapter 90 – DRAINAGE BASINS

90.05 User Guide

~~These~~ The regulations in this chapter apply to activities, work, and conditions in or near any stream, wetland, frequently flooded area, or lake in the City. For properties within jurisdiction of the Shoreline Management Act, the regulations in Chapter 83 KZC must be met. These regulations add to and in some cases supersede other City regulations. Anyone interested in conducting any development activity on or near a wetland, stream, lake, or frequently flooded area; wishing to participate in the City's decision on a proposed development on or near any of these areas, or wishing to have a determination made as to the presence of one of these areas on their ~~his or her~~ property, should read these regulations. See also KZC 95.23.5.d.39, Trees in Critical Areas or Critical Area Buffers; and KZC 95.50.11, Installation Standards for Required Plantings – Mitigation and Restoration Plantings in Critical Areas and Critical Area Buffers.

Chapter 83 KZC contains wetland, stream and flood hazard reduction regulations for properties located within jurisdiction. However, regulations contained in this chapter that are not addressed in Chapter 83 KZC continue to apply, such as bond or performance security, dedication and liability.

90.10 Purpose

These regulations were prepared to comply with the Growth Management Act, Chapter 36.70A RCW. The purpose of these regulations is to protect the environment, human life, and property. This purpose will be achieved by preserving the important ecological functions of wetlands, streams, lakes, and frequently flooded areas. The designation and classification of these sensitive areas is intended to assure their preservation and protection from loss or degradation, and to restrict incompatible land uses.

Sensitive areas perform a variety of valuable biological, chemical, and physical functions that benefit the City and its residents. The functions of sensitive areas include, but are not limited to, the following:

1. Wetlands – Wetlands help maintain water quality; store and convey storm and flood water; recharge ground water; provide fish and wildlife habitat; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. The City's goal is to achieve no net loss of wetlands through retention of wetland functions, values, and acreage within each drainage basin. Wetlands are protected in part by buffers, which are upland areas adjacent to wetlands.

   Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into wetlands.

   The primary purpose of wetland regulations is to achieve a goal of no net loss of wetland function, value, and acreage within each drainage basin, which, where possible, includes enhancing and restoring wetlands.

2. Streams – Streams and their associated buffers provide important fish and wildlife habitat and travel corridors; help maintain water quality; store and convey storm and flood water; recharge groundwater; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. Streams are protected in part by buffers, which are adjacent upland areas that interact with streams.

   Stream buffers – sometimes known as riparian buffers – serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into streams.

   The primary purpose of stream regulations is to avoid reducing stream and riparian corridor functions, and where possible, to enhance and restore streams and riparian areas.

3. Lakes – Lakes provide important fish and wildlife habitat; store and convey storm and flood water; recharge ground water; store ground water discharge; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. Many uses and activities in and around lakes are regulated under the wetland regulations, because the shallow perimeter of most lakes (the littoral zone) often meets the definition of a wetland.

   Lake Washington is a Shoreline of the State, and is subject to the Shoreline Management Act. Uses and a~~A~~ctivities near, on or in Lake Washington are regulated by the applicable use zone regulations in Chapters 15 through 60 ~~that include Lake Washington (see the Kirkland Zoning Code)~~and by the shoreline regulations in Chapter 83 KZC and Chapter 141 KZC. Uses and a~~A~~ctivities in wetlands contiguous to Lake Washington are subject primarily to the wetland regulations in Chapter 83 KZC, but also some applicable regulations in this chapter~~both the Shoreline Master Program and the wetland regulations~~. Wetland buffers not located within 200 feet of the ordinary high water mark of Lake Washington are subject to the wetland buffer regulations in this chapter.

   The primary purpose of the lake regulations is to avoid impacts to lakes and contiguous riparian areas, and where possible, to enhance and restore lakes.

90.15 Applicability

1. General – These regulations apply to any property that contains any of the following:

   a. Streams;

   b. Type 1 or 2 wetlands;

   c. Type 3 wetlands greater than 1,000 square feet in a primary basin;

   d. Type 3 wetlands greater than 2,500 square feet in a secondary basin;

   e. Totem Lake and Forbes Lake;

f. Frequently flooded areas; and

g. Buffers required for the preceding six features.

2. Conflicting Provisions – ~~The provisions of t~~These~~se~~ regulations in this chapter supersede any conflicting regulations ~~provisions in~~of the Kirkland Zoning Code. For properties within jurisdiction of the Shoreline Management Act, the regulations in Chapter 83 KZC supersede any conflicting regulation in this chapter. If more than one regulation ~~provision of these regulations~~ applies to the subject property, then the regulation that provides the greatest protection to sensitive areas shall apply. ~~If these regulations and the Shoreline Master Program both apply to the subject property, then the regulation that provides the greatest protection to sensitive areas shall apply.~~

90.135 Maximum Development Potential

1. Dwelling Units – The maximum potential number of dwelling units for a site which contains a wetland, stream, minor lake, or their buffers shall be the buildable area in square feet divided by the minimum lot area per unit or the maximum units per acre as specified by Chapters 15 through 60 KZC, plus the area of the required sensitive area buffer in square feet divided by the minimum lot area per unit, the maximum units per acre or as specified by Chapters 15 through 60 KZC, multiplied by the development factor derived from subsection (2) of this section:

   MAXIMUM DWELLING UNIT POTENTIAL = (BUILDABLE AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT OR MAXIMUM UNITS PER ACRE) + [(BUFFER AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT OR MAXIMUM UNITS PER ACRE) X (DEVELOPMENT FACTOR)]

   For purposes of this subsection only, “buildable area” means the total area of the subject property minus sensitive areas and their buffers.

   For developments providing affordable housing units pursuant to Chapter 112 KZC, or cottage, carriage or two/three-unit homes pursuant to Chapter 113 KZC, the density bonus and resulting maximum density shall be calculated using the maximum dwelling unit potential of this section as the base to which the bonus units will be added.

   For multifamily development, if application of the maximum development potential formula results in a fraction, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least 0.50 .~~66.~~ For single-family development, if application of the maximum development potential formula results in a fraction, the number of permitted dwelling units (lots) shall not be rounded up, regardless of the fraction. This provision shall not be construed to preclude application of Chapter 22.28 KMC.

   Lot size and/or density may be limited by or through other provisions of this code or other applicable law, and the application of the provisions of this chapter may result in the necessity for larger lot sizes or lower density due to inadequate buildable area.

2. Development Factor – The development factor, consisting of a “percent credit,” to be used in computing the maximum potential number of dwelling units for a site which contains a sensitive area buffer is derived from the following table:

Chapter 95 – TREE MANAGEMENT AND REQUIRED LANDSCAPING

ATTACHMENT A-PART 2

95.30 Tree Retention, Protection and Density Associated with Development Activity

1. Introduction.

The City's objective is to retain as many viable trees as possible on a developing site while still allowing the development proposal to move forward in a timely manner. To that end, the City requires approval of a tree retention plan tree permit in conjunction with all development permits resulting in site disturbance and with any proposed for any tree removal on developed sites not exempted by KZC 95.20. This section includes provisions that allow development standards to be modified in order to retain viable significant trees.

In order to make better decisions about tree retention, particularly during all stages of development, tree removal retention plans permits will require specific information about the existing trees before removal is allowed. Different levels of detail correspond to the scale of the project or activity. Specific tree retention plan review standards are provided in this section KZC 95.35(4) and include establish tree retention priorities, and incentives, and variations to development standards in order to facilitate preservation of healthy, viable, significant trees.

A minimum tree density approach is being used to retain as many viable trees as possible with new development activity. The requirement to meet a minimum tree density applies to new single-family homes, cottages, carriage units, two/three-unit homes and duplex developments and major redevelopments, and new residential subdivisions and short subdivisions. If such a site falls below the minimum density with existing trees, supplemental planting is required. A tree density for existing trees to be retained is calculated to see if new trees are required in order to meet the minimum density for the entire site. Supplemental tree location priority is set as well as minimum size of supplemental trees to meet the required tree density.

The importance of effective protection of retained trees during construction is emphasized with specific protection standards in the last part of this section. These standards must be adhered to and included on demolition, grading and building plans as necessary.

Properties within jurisdiction of the Shoreline Management Act are subject to additional tree retention and protection regulations as set forth in Chapter 83 KZC.

Chapter 100 – SIGNS

100.05 User Guide

Chapters 15 through 60 KZC, which contain the use zone charts, assign a sign category to each use in each zone. This category is either A, B, C, D, E, or F. This chapter contains the specific requirements in each sign category. If you do not know what sign category applies to the subject property, you should consult the appropriate use zone chart.

This chapter also contains regulations regarding special signs (e.g., political, real estate or temporary signs). These regulations are contained in KZC 100.115.

ATTACHMENT A-PART 2

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

Chapter 105 – PARKING AREAS, VEHICLE AND PEDESTRIAN ACCESS, AND RELATED IMPROVEMENTS

105.05 User Guide

This chapter contains information on vehicle and pedestrian circulation areas, parking areas, and related improvements. For the most part, this chapter will not tell you how many parking spaces are required for a particular use. This information is listed for most uses in the use zone charts. However, this chapter does provide a mechanism for determining the specific parking requirement for some uses. It also contains a mechanism for requesting permission to increase or decrease the parking requirements of this code. Finally, this chapter contains requirements regarding the location and minimum dimensions of parking areas and other vehicular and pedestrian circulation areas.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

Chapter 112 – AFFORDABLE HOUSING INCENTIVES – MULTIFAMILY

4. Dimensional Standards Modification – To the extent necessary to accommodate the bonus units allowed under subsection (2)(b) of this section on site, the following requirements of the Kirkland Zoning Code may be modified through the procedures outlined in this subsection. These modifications may not be used to accommodate the units resulting from the base density calculation.

   a. Maximum Lot Coverage. The maximum lot coverage may be increased by up to five percentage points over the maximum lot coverage permitted by the underlying use zone. Maximum lot coverage may not be modified through this provision on properties with streams, wetlands, minor lakes or their buffers. In addition, this modification would require a shoreline variance as set forth in Chapter 141 KZC for properties within jurisdiction of the Shoreline Management Act. See Chapter 83 KZC.

   b. Parking Requirement. The required parking may be reduced to 1.0 space per affordable housing unit. No additional guest parking is required for affordable housing units. If parking is reduced through this provision, the owner of the affordable housing unit shall sign a covenant, in a form acceptable to the City Attorney, restricting the occupants of each affordable housing unit to a maximum of one automobile.

   c. Structure Height. Maximum height for structures containing affordable housing units may be increased by up to six feet for those portions of the structure(s) that are at least 20 feet from all property lines. Maximum structure height may not be modified through this provision for any portion of a structure that is adjoining a low density zone. This modification may be permitted or may require a shoreline variance as set forth in Chapter 141 KZC for properties within jurisdiction of the Shoreline Management Act, See Chapter 83 KZC.

d. Required Yards. Structures containing affordable housing units may encroach up to five feet into any required yard except that in no case shall a remaining required yard be less than five feet. A modification to the shoreline setback would require a shoreline variance set forth in Chapter 141 KZC for properties within jurisdiction of the Shoreline Management Act. See Chapter 83 KZC.

e. Common Recreational Space. Common recreational open space per unit, when required, may be reduced by 50 square feet per affordable housing unit.

Chapter 115 – MISCELLANEOUS USE DEVELOPMENT AND PERFORMANCE STANDARDS

115.40 Fences

1. General

a. Fences not over six feet in height may be anywhere on the subject property except:

1) A fence may not be within 15 feet of any street curb, or the edge of the street pavement, if no curb exists; or

2) If the applicant can show with a survey, or other reasonable means, the location of his/her property line, the fence can be placed on the property line regardless of the distance from a street curb or the edge of the pavement.

3) A fence may not violate the provisions of KZC 115.135.

4) A detached dwelling unit abutting a neighborhood access or collector street may not have a fence over 3.5 feet in height within the required front yard.

On corner lots with two required front yards, this restriction shall apply only within the front yard adjacent to the front facade of the structure.

5) No fence of any height may be placed waterward of the ~~within a~~ shoreline setback required in Chapter 83 KZC ~~high waterline setback yard~~ or within any portion of a side yard ~~north or south property line yard which~~ that coincides ~~is coincident~~ with the shoreline setback.~~high waterline setback yard~~.

b. Fences over six feet in height may not be located in a required setback yard. See KZC 115.115, Required Yards, for regulations relating to fences on retaining walls.

c. The Planning Official may approve a modification to the fence height requirements, except within the shoreline setback regulated under Chapter 83 KZC, if:

1) The modification is necessary because of the size, configuration, topography or location of the subject property; and

2) The modification will not have any substantial detrimental effect on abutting properties or the City as a whole.

115.45 Garbage and Recycling Receptacles and Enclosures – Storage Space, Placement and Screening

1. Purpose and Intent – The purpose of these regulations is to ensure the provision of areas for the collection, storage, loading and pickup of garbage and recyclable materials by requiring that adequate and convenient space is functionally located at all new projects, except as exempted in subsection (5) of this section.

   For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

2. Storage Space – Space provided for garbage and recycling receptacles shall comply with Public Works Pre-approved Plans and Policies.

3. Placement – Garbage and recycling receptacles must comply with the following:

   a. Be set back a minimum of five feet from side property lines, 10 feet from rear property lines and 10 feet from front property lines; or

   b. Comply with the setbacks established for the use with which they are associated;

   c. Be located outside landscape buffers required by Chapter 95 KZC;

   d. Be located to minimize visibility from any street, pedestrian walkway, or public park; and

   e. Be located to provide convenient and safe access for residents, service vehicles and employees.

4. Screening – Garbage and recycling receptacles must be screened from view from the street and from adjacent properties by a solid screening enclosure. The screening shall meet or exceed the standards established in the Public Works Pre-approved Plans and Policies.

5. Exemptions

   a. Detached dwelling units, two/three-unit homes, moorage facilities, parks, and construction sites are exempt from the requirements of this section.

   b. A Public Works official may approve an exemption to the requirements of this section if the applicant proposes alternative, workable measures that meet the intent of this section.

115.47 Loading and Service Areas Placement and Screening

Loading and service areas must be located so they are not visible from any street or pedestrian walkway. If that location is not physically possible, loading and service

areas must be screened from public view using a compact evergreen hedge, a solid wall or fence, or in a manner approved by the Planning Official.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

115.60 Height Regulations – Exceptions

1. General – No element or feature of a structure, other than as listed in subsection (2) of this section, may exceed the applicable height limitation established for each use in each use zone in Chapters 15 through 60 KZC.

   For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

115.90 Calculating Lot Coverage

1. General – The area of all structures and pavement and any other impervious surface on the subject property will be calculated as a percentage of total lot area. If the subject property contains more than one use, the maximum lot coverage requirements for the predominant use will apply to the entire development.

2. Exceptions

   a. Wood decks may be excluded if constructed with gaps between the boards and if there is pervious surface below the decks.

   b. An access easement or tract that is not included in the calculation of lot size will not be used in calculating lot coverage for any lot it serves or crosses.

   c. For detached dwelling units in low density zones and having a front yard, 10 feet of the width of a driveway, outside of the required front yard, serving a garage or carport; provided, that:

      1) This exception cannot be used for flag or panhandle lots;

      2) The portion of the driveway excepted from lot coverage calculations shall not exceed 10 percent of the lot area; and

      3) The portion of the driveway excepted is not located in an access easement.

   d. Grass grid or brick pavers and compact gravel, when installed over a pervious surface, will be calculated as impervious surface at a ratio of 50 percent of the total area covered.

   e. Outdoor swimming pools.

   f. Pedestrian walkways required by Chapter 83 KZC and KZC 105.18.

g. Pervious areas below eaves, balconies, and other cantilevered portions of buildings.

h. Landscaped areas at least two feet wide and 40 square feet in area located over subterranean structures if the Planning Official determines, based on site-specific information submitted by the proponent and prepared by a qualified expert, soil and depth conditions in the landscaped area will provide cleansing and percolation similar to that provided by existing site conditions.

i. Retaining walls not immediately adjacent to other impervious areas

115.85 Lighting Regulations

(new number 3)

3. Exterior Lighting Requirements for the Shoreline Management Area

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

115.105 Outdoor Use, Activity and Storage

1. Shoreline Management Area

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

~~1~~2. Residential Uses

Uses and activities normally associated with a residential use are allowed unless Chapters 15 through 60 KZC limit outside activity for a residential use in a particular zone. The outdoor storage of firewood may be located within setback yards only if (1) it is stacked immediately adjacent to or within a supporting structure, (2) it is visually screened from adjoining properties by a building, solid screening fence, solid screening enclosure, dense evergreen landscaping, rockery or retaining wall, and (3) the height of the firewood stack does not exceed the greater of six feet or the height of either the supporting structure or visual screen.

~~2~~3. Commercial and Industrial Nonresidential Uses

a. General – Subject to the requirements of subsections (2)(b) through (f) of this section, the uses and activities that are allowable on a site may be conducted out of doors unless Chapters 15 through 60 KZC limit outside activity for a particular use in a particular zone.

115.115 Required Yards

1. General – This section establishes what structures, improvements, and activities may be in or take place in required yards as established for each use in each zone in Chapters 15 through 60 KZC.

2. Exceptions and Limitations in Some Zones – Chapters 15 through 60 KZC contain specific regulations regarding what may be located in ~~or take place in~~ required yards. Chapter 83 contains specific regulations regarding what may be located in the required shoreline setback. Where applicable, those specific regulations supersede the provisions of this section.

115.120 Rooftop Appurtenances

1. Scope – The regulations contained in this section apply to all construction except: (a) single-family detached residential, and (b) personal wireless service facilities regulated by Chapter 117 KZC.

   For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

115.125 Rounding of Fractions of Dwelling Units

In many zones, the number of dwelling units allowed on the subject property is determined by dividing the lot size by the number of square feet this code requires per unit. When this results in a fraction, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least ~~0.66~~ 0.50.

Chapter 117 – PERSONAL WIRELESS SERVICE FACILITIES

117.05 User Guide

This chapter establishes the conditions under which personal wireless service facilities (PWSF) may locate and operate in different areas of the City. The provisions of this chapter add to and in some cases supersede the other regulations of this code. If you wish to install, operate, or alter PWSF in Kirkland, you should read the provisions of this chapter.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

117.30 Prohibited Devices

1. Except as exempted pursuant to KZC 117.25, PWSF that are not permanently affixed to a support structure and which are capable of being moved from location to location (e.g., “cell on wheels”) are prohibited.

ATTACHMENT A-PART 2

2. Towers are prohibited on properties within jurisdiction of the Shoreline Management Act as set forth in Chapter 83 KZC.

117.35 Permit Required

In all instances, a permit must be obtained from the City before any PWSF may be constructed on any public or private land or right-of-way, including I-405, SR 520, and the Burlington Northern Railroad right-of-way, within the City limits.

117.40 Application Review Process

After the applicant has satisfied the pre-submittal meeting requirements of KZC 117.45, an application to site a PWSF shall be processed according to the table below. This table does not include all requirements for PWSF. Additional requirements and standards affecting design and location of PWSF can be found in KZC 117.65 (PWSF Standards), 117.70 (Equipment Structure Standards), and 117.75 (Screening).

Review Process	Facility Type[1]
1. Planning Official Decision (Planning Official issues decision.)	a) Co-location of antennas on existing towers in nonresidential zones. b) Attachment of antennas to existing buildings or mechanical equipment enclosures in a nonresidential zone. See KZC 117.65(7). c) Attachment of antennas to existing water reservoirs, utility poles, or other support structures in any zone.[2] See KZC 117.65(6) and (7). d) Attachment of antennas to replacement utility poles in any zone, where the diameter of the replacement pole will not exceed 18 inches or increase the diameter of the existing pole by more than 50 percent, whichever is less.[2] See KZC 117.65(6). e) Attachment of antennas to existing buildings within a public park, regardless of zone, if approved by the Park Board.
2. Process I Permit (Planning Director decision following public notice and comment, per Chapter 145 KZC.)	a) Co-location of antennas on existing towers in residential zones, not resulting in any increase to tower height. b) New towers in nonresidential zones, not exceeding 40 feet in height.[4] c) Attachment of antennas to replacement utility poles in any zone, where the diameter of the replacement pole will not exceed 24 inches or increase the diameter of the existing pole by more than 100 percent, whichever is less.[2] See KZC 117.65(6). d) Attachment of antennas to nonresidential buildings, such as schools or churches, in residential zones, except when located in a public park.[3] See KZC 117.65(7).
3. Process IIA Permit (Hearing Examiner holds public hearing and issues decision, per Chapter 150 KZC.)	a) New towers in nonresidential zones, exceeding 40 feet in height.[4] b) Attachment of antennas to replacement utility poles in any zone, where the diameter of the replacement pole will exceed the diameter of the existing pole by more than 100 percent, or 24 inches, whichever is less. c) Attachment of antennas to multifamily residential buildings in residential zones.[3]
4. Process IIB Permit (Hearing Examiner holds public	a) Co-location of antennas on existing towers in residential zones resulting in an increase in tower height.[3]

hearing, City Council issues decision, per Chapter 152 KZC.)	b) New towers in residential zones, not exceeding 40 feet in height.[3, 4] c) Departures from standards contained in this chapter, subject to the limitations of KZC 117.80. d) Any facility that does not qualify for review as a Planning Official Decision, Process I permit, or Process IIA permit as listed above.[3]

Footnotes:

1 Although this table specifically addresses antennas and towers, it is presumed that for each facility there will be associated equipment structures, and there may be structural alterations to existing support structures. Such equipment structures and structural alterations shall be reviewed through the same process as the facility with which they are associated, subject to the limitations of KZC 117.20.

2 Attachment of antennas to existing water reservoirs or other support structures, or to existing or replacement utility poles, where such attachment results in a height increase to the original support structure, may be approved only once through the review process indicated. Any subsequent proposal that would result in a height increase shall be reviewed through Process IIB.

3 If in a residential zone, the applicant shall demonstrate that a diligent effort has been made to locate the proposed facility in a nonresidential zone, and that due to valid considerations including physical constraints or technological feasibility, no other location is available.

4 An application for a new tower shall not be approved unless the applicant demonstrates, to the satisfaction of the City, that an attempt was made to co-locate the proposed antenna on an existing structure, and that such attempt was spatially, structurally, or technically infeasible. New towers are prohibited on properties within jurisdiction of the Shoreline Management Act as set forth in Chapter 83 KZC.

Chapter 162 – NONCONFORMANCE

162.05 User Guide

This chapter establishes when and under what circumstances nonconforming aspects of a use or development must be brought into conformance with this code. You need to consult the provisions of this chapter only if there is some aspect of the use or development on the subject property that is not permitted under this code.

For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

162.35 Certain Nonconformances Specifically Regulated

7. Nonconforming Height, Yards, and View Corridors

Any structural alteration of a roof or exterior wall which does not comply with height, required yard, or view corridor standards will require that the nonconforming height, setback or view corridor be brought into conformance. Excepted from this section is the repair or maintenance of structural members. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.~~.~~

8. Nonconformances to Design Regulations in Design Districts

Nonconformances to the design regulations of Chapter 92 KZC are governed by Chapter 142 KZC.

~~9. Nonconforming Waterfront Access Trails~~

~~Nonconforming waterfront access trails are governed by KMC 24.05.210.~~

~~10~~9. Personal Wireless Service Facilities

Existing or nonconforming personal wireless service facilities are governed by KZC 117.15, New and Existing Facilities. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

~~11~~10. Vehicular Access Easement or Tract Standards

Nonconforming access easements and tracts are governed by KZC 105.10(2)(i).

~~12~~11. Nonconforming Paddock Areas

a. Paddock areas as required under KZC 115.20 must be brought into conformance if a proposed alteration or replacement of an existing dwelling unit on the subject property in any 12-month period exceeds 50 percent of the replacement cost of that dwelling unit.

b. See KZC 162.45, Prohibition on Increasing Nonconformance, for proposed modifications, alterations, or replacements of any other improvements on the subject property.

~~13~~12. Any Other Nonconformance

If any nonconformance exists on the subject property, other than as specifically listed in the prior subsections of this section, these must be brought into conformance if:

a. The applicant is making any alteration or change or doing any other work in a consecutive 12-month period to an improvement that is nonconforming or houses, supports or is supported by the nonconformance, and the cost of the alteration, change or other work exceeds 50 percent of the replacement cost of that improvement; or

b. The use on the subject property is changed and this code establishes more stringent or different standards or requirements for the nonconforming aspect of the new use than this code establishes for the former use.

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (2).

PUBLICATION SUMMARY
OF ORDINANCE NO. 4252

AN ORDINANCE OF THE CITY OF KIRKLAND ADOPTING MISCELLANEOUS AMENDMENTS TO ORDINANCE NO. 3719, THE KIRKLAND ZONING ORDINANCE, AND MAKING THE ZONING ORDINANCE COMPATIBLE WITH THE NEWLY ADOPTED SHORELINE MASTER PROGRAM.

Section 1. Adopts various amendments to the Kirkland Zoning Code which make the Zoning Code compatible with the newly adopted Shoreline Master Program Update.

Section 2. Provides a severability clause for the Ordinance.

Section 3. Provides that the Ordinance may be subject to the disapproval jurisdiction of the Houghton Community Council.

Section 4. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as August 4, 2010.

Section 5. Provides that a certified copy of the Ordinance shall be provided to the King County Department of Assessments.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its meeting on the _____ day of _____, 2010.

I certify that the foregoing is a summary of Ordinance _____ approved by the Kirkland City Council for summary publication.

_____
City Clerk

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (3).

ORDINANCE NO. 4253

AN ORDINANCE OF THE CITY OF KIRKLAND ADOPTING MISCELLANEOUS AMENDMENTS TO THE KIRKLAND MUNICIPAL CODE TO MAKE THE KIRKLAND MUNICIPAL CODE COMPATIBLE WITH THE NEWLY ADOPTED SHORELINE MASTER PROGRAM UPDATE. FILE ZON06-00017.

WHEREAS, the Washington Shoreline Management Act (RCW 90.58, referred to herein as "SMA") recognizes that shorelines are among the most valuable and fragile resources of the state, and that state and local government must establish a coordinated planning program to address the types and effects of development occurring along shorelines of state-wide significance; and

WHEREAS, the City of Kirkland ("City") has, with the approval of the State Department of Ecology, updated its Shoreline Master Program ("SMP") pursuant to the SMA and WAC 173-26; and

WHEREAS, the Kirkland Municipal Code ("KMC") amendments contained in this Ordinance will make the KMC consistent with the newly adopted SMP; and

WHEREAS, the City Council has received recommendations from the Kirkland Planning Commission and Houghton Community Council to adopt the KMC amendments contained in this Ordinance, all as set forth in the recommendation of the Planning Commission dated June 24, 2010 and bearing Kirkland Department of Planning and Community Development File No. ZON06-00017.

NOW, THEREFORE, the City Council of the City of Kirkland do ordain as follows:

Section 1. KMC Sections 22.08.054, 22.08.055, 22.08.056, 22.12.010 and 22.20.010 are hereby amended to read as follows:

As set forth in Attachment A attached to this Ordinance and incorporated herein by this reference.

Section 2. If any section, subsection, sentence, clause, phrase, part or portion of this Ordinance, including those parts adopted by reference, is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

Section 3. To the extent the subject matter of this ordinance pursuant to Ordinance 2001, is subject to the disapproval jurisdiction of the Houghton Community Council, this ordinance shall become effective within the Houghton Community Council Municipal Corporation only upon approval of the Houghton Community Council or the failure of said Community Council to disapprove this ordinance within 60 days of passage of this ordinance.

Section 4. This Ordinance shall be in full force and effect on August 4, 2010 and after its passage by the Kirkland City Council and shall be published pursuant to Kirkland Municipal Code 1.08.017, in the summary form attached to the original of this ordinance and by this reference approved by the City Council, as required by law.

Section 5. A complete copy of this Ordinance shall be certified by the City Clerk, who shall then forward the certified copy to the King County Department of Assessments.

Passed by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 2010.

Signed in authentication thereof this _____ day of _____, 2010.

_____
Mayor

Attest:

_____
City Clerk

Approved as to Form:

_____
City Attorney

Chapter 22.08 –SUBDIVISION ORDINANCE

AMENDMENTS

DEFINITIONS

22.08.054 Class A streams.

For "Class A streams", see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act, otherwise see Chapter 90 KZC~~means stream that are used by salmonids. Class A streams generally correlate with Type 3 streams as defined in the Washington State Hydraulic Code. (Ord. 3705 § 2 (part), 1999)~~

22.08.055 Class B streams.

For "Class B streams", see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act, otherwise see Chapter 90 KZC ~~means perennial streams (during years of normal precipitation) that are not used by salmonids. Class B streams generally correlate with Type 4 streams as defined in the Washington State Hydraulic Code. (Ord. 3705 § 2 (part), 1999)~~

22.08.056 Class C streams.

For "Class C streams", see definition in Chapter 83 KZC for properties within jurisdiction of the Shoreline Management Act, otherwise see Chapter 90 KZC~~ means intermittent or ephemeral streams (during years of normal precipitation) not used by salmonids. Class C streams generally correlate with Type 5 streams as defined in the Washington State Hydraulic Code. (Ord. 3705 § 2 (part), 1999)~~

Chapter 22.12

PRELIMINARY PLAT PROCEDURE

22.12.010 Purpose.

(a) The provisions of this chapter describe the procedure that the city will use to review and decide upon proposed subdivisions. Please refer to Chapters 22.28 and 22.32 for the substantive requirements that apply to subdivisions. For properties within jurisdiction of the Shoreline Management Act, see Chapter 83 KZC.

(b) Alterations and vacations of subdivisions shall follow the procedural requirements outlined in Chapter 22.26 of this code. (Ord. 3705 § 2 (part), 1999)

Chapter 22.20

SHORT SUBDIVISIONS

22.20.010 Purpose.

The provisions of this chapter describe the procedure that the city will use to review and decide upon proposed short subdivision. Please refer to Chapters 22.28 and 22.32 for the substantive requirements that apply to short subdivisions. For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. (Ord. 3705 § 2 (part), 1999)

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (3).

PUBLICATION SUMMARY
OF ORDINANCE NO. 4253

AN ORDINANCE OF THE CITY OF KIRKLAND ADOPTING MISCELLANEOUS AMENDMENTS TO THE KIRKLAND MUNICIPAL CODE TO MAKE THE KIRKLAND MUNICIPAL CODE COMPATIBLE WITH THE NEWLY ADOPTED SHORELINE MASTER PROGRAM UPDATE. FILE ZON06-00017.

Section 1. Adopts amendments to Kirkland Municipal Code ("KMC") Sections 22.08.054, 22.08.055, 22.08.056, 22.12.010 and 22.20.010 relating to subdivision regulations.

Section 2. Provides a severability clause for the Ordinance.

Section 3. Provides that the Ordinance may be subject to the disapproval jurisdiction of the Houghton Community Council.

Section 4. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as August 4, 2010.

Section 5. Provides that a certified copy of the Ordinance shall be provided to the King County Department of Assessments.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its meeting on the _____ day of _____, 2010.

I certify that the foregoing is a summary of Ordinance _____ approved by the Kirkland City Council for summary publication.

_____
City Clerk

Council Meeting: 08/03/2010
Agenda: Unfinished Business
Item #: 10. c. (4).

ORDINANCE NO. 4254

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO PLANNING DEPARTMENT FEES AND AMENDING KMC 5.74.070 BY ADDING FEES FOR SHORELINE EXEMPTIONS AND ALTERNATIVE FOR SHORELINE TREE REPLACEMENT AND VEGETATION, AND REVISING THE TERM FOR GENERAL MOORAGE FACILITY RELATING TO THE NEWLY ADOPTED SHORELINE MASTER PROGRAM UPDATE. FILE ZON06-00017.

The City Council of the City of Kirland do ordain as follows:

Section 1. The schedule contained in KMC 5.74.070 for Planning Official Decisions and Process I Review are hereby amended to read

As set forth in Attachment A attached to this Ordinance and incorporated herein by this reference.

Section 2. This Ordinance shall be in full force and effect on August 4, 2010 and after its passage by the Kirkland City Council and shall be published pursuant to Kirkland Municipal Code 1.08.017, as required by law.

Passed by majority vote of the Kirkland City Council in open meeting this _____ day of _____, 2010.

Signed in authentication thereof this _____ day of _____, 2010.

_____
Mayor

Attest:

_____
City Clerk

Approved as to Form:

_____
City Attorney

CITY OF KIRKLAND LAND USE PERMIT FEE SCHEDULE
Effective: April 1, 2010

	FEE AMOUNT
Preliminary Project Review	$504.00
Presubmittal Meeting, Integrated Development Plan, and/or Predesign Conference Note: Fee subtracted from the application if the application is submitted within six months of the date of the preliminary project review meeting date. Credit does not apply to subsequent meetings related to the same project.	

Planning Official Decisions	
Accessory Dwelling Unit *(not required if reviewed concurrently with a building permit)*	$414.00
Personal Wireless Service Facility Planning Official Decision	$8,352.00
Personal Wireless Service Facility Subsequent or Minor Modification	$828.00
Parking Modification	$525.00
Sensitive Area Planning Official Decision	$2,071.00
Administrative Design Review	
If application involves new gross floor area (new buildings or additions to existing buildings)	$2,071.00
No new gross floor area	$0.00
Master Sign Plan Approval Modification	$828.00
Off-Site Directional Sign Approval Modification	$525.00
Design Review Approval Modification	$1,049.00
Design Review Approval Extension	$414.00
Historic Residence Alteration	$828.00
Rooftop Appurtenance Modification	$828.00
Multiple Private or ROW Tree Removal Permit	$200.00
Forest Management Plan	$300.00
Shoreline Area - Alternative Options for Tree Replacement or for Vegetation Compliance in Setback	$200.00
Shoreline Substantial Development Exemption	$200.00

Planning Director Decisions	
Temporary Use Permit	$212.00
Variance Exception	$1,049.00
Off-Site Directional Sign	$1,049.00
Master Sign Plan	$2,927.00
Short Plat or Subdivision Approval Modification	$828.00
Process I Approval Modification	$828.00
Process IIA, IIB or III Approval Modification	$1,049.00
Lot Line Alteration	$1,049.00
Binding Site Plan	$2,085.00
Multifamily Housing Property Tax Exemption Conditional Certificate	$1,049.00
Multifamily Housing Property Tax Exemption Contract Amendment	$525.00
Multifamily Housing Property Tax Exemption Conditional Certificate Extension	$525.00
Noise Variance	$525.00

Process I Review	
Short Subdivision	
Base Fee	$4,141.00
Fee per lot	$966.00
Innovative Short Subdivision	
Fixed Fee	$6,764.00
Fee per lot	$966.00
Substantial Development Permit	
Piers and Docks Associated with Multifamily Development and Marinas and Moorage Facilities Associated with Commercial Uses~~General Moorage Facility~~	$10,436.00
Other Shoreline Improvements	$4,473.00
Personal Wireless Service Facility Process I Review	$10,436.00
Other Process I Review	
Residential	
Base Fee	$4,141.00
Fee per new residential unit	$483.00
Nonresidential	
Base Fee	$4,141.00
Fee per square foot new GFA	$0.29
Mixed Use	