
ENVIRONMENT DESIGNATIONS REPORT

Project: Comprehensive Shoreline Master Program Update
• **Task 7: Environment Designations**

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**CITY OF KIRKLAND
SHORELINE MASTER PROGRAM UPDATE
ENVIRONMENT DESIGNATIONS**

1.0 INTRODUCTION

The Shoreline Management Act (SMA) Guidelines [WAC 173-26-211(2)(a)] require local shoreline master programs (SMPs) to “classify shoreline areas into specific environment designations. This classification system shall be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through comprehensive plans as well as the criteria in [WAC 173-26-211]”.

The Guidelines also stipulate that an “up-to-date and accurate” map should be prepared that clearly illustrates the boundaries of the appropriate environment designations, by parcel if feasible. Common boundary descriptions must be prepared that also identify the location and extent of each environment designation. The common boundary descriptions and the criteria in RCW 90.58.030(2) and WAC 173-26-211 supersede the map when there are conflicts [WAC 173-26-211(2)(b)].

In the event that a jurisdictional area is not mapped or included in the common boundary descriptions for each environment designation, it will automatically be assigned an “Urban Conservancy” designation. That designation will apply until an SMP amendment is approved that assigns the appropriate designation to that area [WAC 173-26-211(2)(e)].

The City’s Comprehensive Plan and SMP are required to be consistent [WAC 173-26-211(3)]. For example, an area planned for commercial development in the Comprehensive Plan should not be assigned a Shoreline Residential environment designation that would preclude commercial development. So although the SMA directs designations to be assigned based on a number of variables, including biological character, in practice the first level of environment designation assignments will be based on planned land use. Secondly, assignment of environment designations such as Natural or Urban Conservancy to parks and other open space may be more rooted in biological and physical characteristics. Not only must the overall uses allowed be consistent between the Comprehensive Plan and the SMP, but also the restrictive provisions of each should not combine such that the use is effectively precluded on any parcel.

2.0 ASSIGNMENT OF ENVIRONMENT DESIGNATIONS

The Guidelines recommend use of six environment designations: High Intensity, Shoreline Residential, Urban Conservancy, Rural Conservancy, Natural and Aquatic. Only “Rural Conservancy” is not an appropriate designation for the City of Kirkland’s shoreline jurisdiction. Under the Guidelines, the City has the option of establishing additional shoreline environments provided they are consistent with the Guidelines. In recognition of clear differences in density and condition, the City has elected to establish two distinct residential environments. The City will re-title its “High Intensity” equivalent as “Urban Mixed” and its Shoreline Residential environment will be divided into “Residential - L” and “Residential - M/H.” The “Aquatic” designation applies to all areas waterward of the ordinary high water mark. The following table

provides the Guideline's criteria for each of the four remaining standard environment designations and the additional residential environment, and a discussion of how each shoreline inventory segment falls within those criteria. Four inventory segments were originally evaluated (A through D). However, the City is not including the Potential Annexation Area (Segment A) in this update of its SMP.

Table 1. Analysis of Consistency of Each Inventory Segment with Environment Designation Criteria.

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
A "Natural" 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;	<p>✓ Yarrow Bay in particular is virtually ecologically intact. Juanita Bay is less so, in some areas, although much of Juanita Bay Park and extending up the Forbes Creek corridor have high ecological value. The segment's shoreline has been altered very little: 7% armored, 1.5 ft² over-water cover/linear foot, and approximately 3% impervious surface. See Tables 6-8, Section 4.2 of <i>Final Analysis Report</i>. Table 19 shows Moderate and High levels of function for 15 indicators.</p>	<p>NO. The shoreline is heavily altered: 83% armored, 9 ft² over-water cover/foot, and approximately 29% impervious surface. See Tables 6-8, Section 4.3 of <i>Final Analysis Report</i>. Table 18 shows Low and Low-Moderate levels of function for 15 indicators.</p>	<p>NO. The shoreline is heavily altered: 90% armored, 24.1 ft² over-water cover/foot, and approximately 55% impervious surface. See Tables 6-8, Section 4.4 of <i>Final Analysis Report</i>. Table 18 shows Low and Low-Moderate levels of function for 15 indicators.</p>
(B) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or	<p>✓ Both Yarrow and Juanita Bay portions contain large wetland areas. Yarrow Bay is a unique lakeshore habitat in Kirkland, and is uncommon in Lake Washington. In particular, Juanita Bay Park is utilized for educational purposes. See Section 4.2.3 of <i>Final Analysis Report</i></p>	NO	NO
(C) The shoreline is unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.	<p>✓ Yarrow Bay in particular is very sensitive to alteration, as are the undeveloped wetland areas of Juanita Bay Park and associated wetlands continuing to the east of the Park.</p>	<p>NO. Segment C could support additional upland development without degrading the baseline condition further.</p>	<p>NO. Segment D could support additional upland development without degrading the baseline condition further.</p>

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Supporting Shoreline Inventory Information	
Environment Designation Criteria (WAC 173-26-211)	Segment B Segment C Segment D
Assign a "High-Intensity [Urban Mixed]" environment designation to shoreline areas within incorporated municipalities, urban growth areas, and industrial or commercial "rural areas of more intense development," as described by RCW 36.70A.070, if they: currently support high-intensity uses related to commerce, transportation or navigation; or	<p>NO</p> <p>✓ A small area (3%) of Segment B in the northeast corner of Juanita Bay is zoned Commercial, Office and Office/Multi-Family. Actual uses in these zones include some office space, Michael's parking area, vet clinic, condominium, and undeveloped wetland areas</p> <p>✓ 29% of the segment is zoned Commercial, and includes private marinas, hotels, restaurants, and office space. In addition, Marina Park hosts high-intensity commerce and transportation-related facilities and activities, such as a public marina, public boat launch, and Argosy Cruises. Other high-intensity uses in Marina Park include the summer concert series, and special events at the rentable Pavilion.</p>
are suitable and planned for high-intensity water-oriented uses	<p>NO</p> <p>✓ Portions of Juanita Beach Park (outside of Juanita Creek and its associated buffer) are suitable and planned for high-intensity water-oriented uses as part of development of the approved Master Plan, including short-term moorage, a boat rental float, a bathhouse with concessions and boat rental activities, a lakefront promenade, a community commons that can be used for community events, including a Farmer's Market, movie nights, as well as potential future urban amenities including restaurants, etc.</p> <p>✓ Low probability for additional high-intensity water-oriented uses – segment largely built out. Marina Park has the greatest potential for additional development of water-oriented uses.</p>

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
Assign an "Urban Conservancy" environment designation to shoreline areas appropriate and planned for development that is compatible with maintaining or restoring of the ecological functions of the area, that are not generally suitable for water-dependent uses and that lie in incorporated municipalities, urban growth areas, or commercial or industrial "rural areas of more intense development" if any of the following characteristics apply:			
(A) They are suitable for water-related or water-enjoyment uses;	<p>✓ The park areas of Juanita Bay are suitable for and experience a mix of water-related and water-enjoyment uses, including boating, swimming, and birding, among others. Yarrow Bay is suitable for and experiences passive water-enjoyment uses, such as non-motorized boating, wildlife observation, etc.</p>	<p>✓ Segment C contains three public parks comprising 24% of the shoreline that provide a mix of water-related and water enjoyment uses.</p>	<p>✓ Segment D contains six public parks comprising 18% of the shoreline that provide a mix of water-related and water enjoyment uses.</p>
(B) They are open space, flood plain or other sensitive areas that should not be more intensively developed;	<p>✓ Both Yarrow and Juanita Bays contain large wetland and floodplain areas. See Section 4.2.3 and Figures 10 and 11 of <i>Final Analysis Report</i>.</p>	<p>✓ Parks in this segment total 24% of the area. The parks generally do not contain sensitive areas.</p>	<p>✓ Parks in this segment total 18% of the area. The parks generally do not contain sensitive areas.</p>
(C) They have potential for ecological restoration;	<p>✓ All segments have potential for ecological restoration, although the probability of restoration occurring is highest on publicly owned lands. Segment B has the highest percentage of parks/open space. Segments C and D also contain a number of developed parks, many of which have shoreline armoring and limited shoreline vegetation that could benefit from enhancement.</p>		
(D) They retain important ecological functions, even though partially developed; or	<p>✓ The slightly developed sections of Segment B, primarily Juanita Beach Park and the immediate surrounding property to the west, as well as the nearshore portions of Juanita Bay Park retain substantial ecological function. Both areas have shallow-water habitat, no shoreline armoring, and Juanita Bay Park contains substantial aquatic and riparian vegetation.</p>	<p>NO. The shoreline is heavily altered: 83% armored, 9 ft² over-water cover/foot, and approximately 29% impervious surface. See Tables 6-8, Section 4.3 of Final Analysis Report. Table 18 shows Low and Low-Moderate levels of function for 15 indicators.</p>	<p>NO. The shoreline is heavily altered: 90% armored, 24.1 ft² over-water cover/foot, and approximately 55% impervious surface. See Tables 6-8, Section 4.4 of Final Analysis Report. Table 18 shows Low and Low-Moderate levels of function for 15 indicators.</p>

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Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
(E) They have the potential for development that is compatible with ecological restoration.	<p>✓ Juanita Beach Park and the more developed portions of Juanita Bay Park could accommodate additional development that, when coupled with appropriate restoration, could result in net improvements to ecological functions. However, it is likely that any development of the Yarrow Bay Wetlands and contiguous wetland areas could not be off-set by restoration.</p>	<p>✓ Entire segment has potential for ecological restoration, although the probability of restoration occurring is highest on publicly owned lands.</p>	<p>✓ Entire segment has potential for ecological restoration, although the probability of restoration occurring is highest on publicly owned lands. Segment contains a number of developed parks, many of which have shoreline armoring and limited shoreline vegetation that could benefit from enhancement.</p>
Assign a " Shoreline Residential - L " environment designation to shoreline areas inside urban growth areas, as defined in RCW 36.70A.110, incorporated municipalities, "rural areas of more intense development," or "master planned resorts," as described in RCW 36.70A.360, if they are:	<p>NO. Only 10% of the segment is zoned for residential use. Currently, small areas of Segment B at the north end of Juanita Bay contain condominiums.</p>	<p>✓ 76% of the segment is zoned for low-density residential uses.</p>	<p>NO. Segment is predominately zoned for high or moderate density residential, commercial, or mixed-use development.</p>
planned and platted for low-density residential development	<p>NO. As identified in Section 4.2.1 of the <i>Final Analysis Report</i>, several properties along the west edge of the Yarrow Bay Wetlands are planned for low density residential development; but are mapped as wetland, floodplain, medium landslide hazard area, seismic hazard area, hydric soils, and/or are protected critical area buffers, and as such are likely undevelopable unless a shoreline variance is obtained. Assignment of a Shoreline Residential environment to these areas would be inconsistent with the biological and physical character.</p>	<p>✓ Residential capacity in this segment would allow for an additional 13 single-family units.</p>	<p>✓ Segment contains a small area of property developed and planned for low-density residential development.</p>
[New designation not included in WAC] Assign an " Residential - M/H " environment designation to shoreline areas inside urban growth areas,			

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
as defined in RCW 36.70A.110, and incorporated municipalities if they are: predominantly multifamily residential development or	NO. Only 10% of the segment is zoned for residential use. Currently, small areas of Segment B at the north end of Juanita Bay and west of Juanita Beach Park contain condominiums.	NO. 76% of the segment is zoned for and developed with low-density residential uses.	✓ 53% of the segment is zoned for and developed with medium-density residential uses.
planned for medium or high-density residential development	✓ Existing high-density residential development and/or zoning is present in the following areas: 1) at northwest edge of Juanita Bay, 2) west of Juanita Beach Park, and 3) on the east side of 98 th Avenue NE.	NO. Residential capacity in this segment would allow for an additional 13 single-family units.	✓ Residential capacity in this segment would allow for an additional 401 multi-family units
PRELIMINARY DESIGNATIONS	<ul style="list-style-type: none"> • Natural • Urban Conservancy • Urban Mixed • Residential - M/H 	<ul style="list-style-type: none"> • Residential - L • Residential - M/H • Urban Conservancy 	<ul style="list-style-type: none"> • Urban Mixed • Urban Conservancy • Residential - M/H • Low-Density Residential

As indicated in Table 1 above, none of the inventory segments fall strictly within one shoreline environment designation based on the above criteria. In the division of designations within the shoreline environment as a whole and the segments, the over-riding criteria is that the environment designations “be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through comprehensive plans as well as the criteria in this section” (WAC 173-26-211(2)(a)). This is further elaborated in WAC 173-26-211(3) as follows:

The following criteria are intended to assist local governments in evaluating the consistency between master program environment designation provisions and the corresponding comprehensive plan elements and development regulations. In order for shoreline designation provisions, local comprehensive plan land use designations, and development regulations to be internally consistent, all three of the conditions below should be met:

- (a) **Provisions not precluding one another.** The comprehensive plan provisions and shoreline environment designation provisions should not preclude one another. To meet this criteria, the provisions of both the comprehensive plan and the master program must be able to be met. Further, when considered together and applied to any one piece of property, the master program use policies and regulations and the local zoning or other use regulations should not conflict in a manner that all viable uses of the property are precluded.
- (b) **Use compatibility.** Land use policies and regulations should protect preferred shoreline uses from being impacted by incompatible uses. The intent is to prevent water-oriented uses, especially water-dependent uses, from being restricted on shoreline areas because of impacts to nearby nonwater-oriented uses. To be consistent, master programs, comprehensive plans, and development regulations should prevent new uses that are not compatible with preferred uses from locating where they may restrict preferred uses or development.
- (c) **Sufficient infrastructure.** Infrastructure and services provided in the comprehensive plan should be sufficient to support allowed shoreline uses. Shoreline uses should not be allowed where the comprehensive plan does not provide sufficient roads, utilities, and other services to support them. Infrastructure plans must also be mutually consistent with shoreline designations. Where they do exist, utility services routed through shoreline areas shall not be a sole justification for more intense development.

As a result, the comprehensive plan largely drives the assignment of designations. In the City of Kirkland, the existing biological character of the shoreline primarily plays a role in distinguishing between the Natural and Urban Conservancy environment designation assignments. In less developed areas outside of city limits, the actual shoreline conditions may not yet reflect the level of alteration allowed by the zoning. However, this situation is not common in Kirkland, and is only found at the west edge of the Yarrow Bay Wetlands where undeveloped wetlands and buffers are located in an area designated for residential development. Figure 1 in Appendix A illustrates the existing environment designations (seven categories) and

Figures 2a and 2b in Appendix A illustrate the proposed environment designations (four categories, plus new Aquatic and Residential - M/H designations). Table 2 outlines the relationship between the current comprehensive plan land use classifications, existing environment designations, and proposed environment designations.¹ In general, the City’s Urban Mixed designations correlate with Ecology’s High-Intensity designation [the City elects to retain the name “Urban Mixed” for this environment], the City’s Conservancy 1 designation correlates with Ecology’s Urban Conservancy designation, the City’s Conservancy 2 designation correlates with Ecology’s Natural designation, and the City’s Urban Residential and Suburban Residential designations correlate with Ecology’s Shoreline Residential designation (broken into Residential - L and Residential - M/H).

Table 2. Summary of Comprehensive Plan Designations, Existing Shoreline Environment Designations, and Proposed Environment Designations by Segment.

Segment	Comprehensive Plan Classification	Existing Shoreline Environment Designation	Proposed Shoreline Environment Designation
Segment B	Commercial	Urban Residential 1 Urban Mixed 1 Conservancy 1	Urban Mixed Natural ¹
	Low Density Residential	Conservancy 2	Natural ²
	Medium Density Residential	Conservancy 2 Urban Mixed 1	Natural ² Residential - M/H
	High Density Residential	Urban Residential 1	Residential - M/H and Urban Conservancy ³
	Office	Urban Mixed 1	Urban Mixed
	Office/Multi-Family	Conservancy 2	Natural ²
	Park/Open Space	Conservancy 1 & 2 Urban Residential 1	Natural Urban Conservancy and Urban Mixed
Segment C	Low Density Residential	Suburban Residential	Residential - L
	Park/Open Space		Urban Conservancy
	Medium Density Residential	Urban Residential 1	Residential - M/H
Segment D	Commercial	Urban Mixed 1 / 2 Urban Residential 1	Urban Mixed
	Park/Open Space	Urban Mixed 1 Urban Residential 1	Urban Mixed Urban Conservancy
	Low Density Residential	Urban Residential 1 Urban Residential 2	Residential - L
	Medium Density Residential	Urban Residential 1 / 2	Residential - M/H
	High Density Residential	Urban Residential 1	Residential - M/H

¹ This table is for comparison purposes only. The existing environment designations were not part of the City’s decision-making for establishing the boundaries of new environment designations. The Comprehensive Plan classifications were only part of the elements considered in assigning the new environment designations.

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Segment	Comprehensive Plan Classification	Existing Shoreline Environment Designation	Proposed Shoreline Environment Designation
	Office / Multi-Family		Urban Mixed

¹ Inconsistency between Comprehensive Plan and proposed environment designation – Natural designation assigned to undeveloped portion of property along northeast corner of Juanita Bay that contain wetlands that are contiguous with the Juanita Bay Park wetland complex.

² Inconsistency between Comprehensive Plan and proposed environment designation – Natural designation assigned to entire undeveloped parcels and undeveloped portions of parcels at northwest and southwest ends of Yarrow Bay Wetlands that contain wetlands and are contiguous with the Yarrow Bay Wetlands.

³ Inconsistency between Comprehensive Plan and proposed environment designations - Urban Conservancy is assigned to portion of an undeveloped parcel that is encumbered by the stream buffer for Juanita Creek and is undeveloped and functioning as open space. Property is a common Tract created as part of the plat of the Juanita Beach Camps and is owned in common by the property owners of lots within this plat.

The following table (Table 3) provides additional information regarding the City’s existing environment designation system and how it relates to the proposed environment designation system.²

Table 3. Definitions of and Correlations between Existing and Proposed Environment Designation Systems.

Existing Shoreline Environment Designation (KMC 24.05.095)	Proposed Shoreline Environment Designation
<p><u>Conservancy</u>: These are characteristically large undeveloped or sparsely developed areas exhibiting some natural constraints such as wetland conditions, frequently containing a variety of flora and fauna and in a natural or seminatural state.</p>	<p><u>Natural</u>: shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low intensity uses be allowed in order to maintain the ecological functions and ecosystem-wide processes. Includes largely undisturbed portions of shoreline areas such as wetlands and ecologically intact shoreline habitats</p> <p><u>Urban Conservancy</u>: open space, floodplain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses</p>
<p><u>Suburban Residential</u>: These are areas typified by single-family residential development on medium sized or larger lots in areas where topography, transportation systems and development patterns make it extremely unlikely that more intensive use would be appropriate.</p>	<p><u>Residential - L</u>: predominantly single-family residential development or are planned and platted for low-density residential development</p>

² This table is for comparison purposes only. The existing environment designations were not part of the City’s decision-making for establishing the boundaries of new environment designations.

Existing Shoreline Environment Designation (KMC 24.05.095)	Proposed Shoreline Environment Designation
<p><u>Urban Residential</u>: These are areas containing, for the most part, single-family residential uses on small lots and multifamily residential developments, with some land being used for restaurants, marinas, and other commercial uses which depend on or benefit from a shoreline location.</p>	<p><u>Residential - M/H</u>: predominantly multifamily residential development or are planned and platted for medium or high-density residential development</p>
<p><u>Urban Mixed</u>: The two types of areas which are appropriate for this classification are as follows: (A) Areas which have been intensively developed with a mix of residential and commercial uses; (B) Large mostly undeveloped areas without serious environmental constraint and with good access which will allow for more intensive mixed use development.</p>	<p><u>Urban Mixed</u>: shoreline areas that currently support high-intensity uses related to commerce, transportation or navigation; or are suitable and planned for high-intensity water-oriented uses.</p>

3.0 ENVIRONMENT DESIGNATION PURPOSE, CRITERIA AND POLICIES

The Shoreline Master Program Guidelines requires each jurisdiction's SMP to contain for each of its proposed environment designations a statement of purpose, designation criteria, and management policies (WAC 173-26-211(4)(a)(i-iii)). Because the City will be using Ecology's recommended environment designation categories (with the exception of a name change from High Intensity to Urban Mixed and a division of Shoreline Residential into Residential - M/H and Residential - L), it is appropriate to begin development of Kirkland's environment designation purposes, criteria, and policies from Ecology's recommended language, as provided with some revisions below. These are just a starting point, and can be further amended and supplemented as the City and the public see fit, provided that amendment and supplementation do not undermine or contradict Ecology's guidance, do not conflict with the Comprehensive Plan, are consistent with the purpose of that environment, and are appropriately reflective of ecological and land use conditions in that environment. Any areas within shoreline jurisdiction that are not mapped and/or designated are automatically assigned an Urban Conservancy designation until the shoreline can be re-designated through a master program amendment.

3.1 Natural

3.1.1 Purpose

The purpose of the "Natural" environment is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low intensity uses be allowed in order to maintain the ecological functions and ecosystem-wide processes. Consistent with the policies of the designation, local government should include planning for restoration of degraded shorelines within this environment.

3.1.2 Designation Criteria

A “Natural” 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.

Such shoreline areas include largely undisturbed portions of shoreline areas such as wetlands, estuaries, unstable bluffs, coastal dunes, spits, and ecologically intact shoreline habitats. Shorelines inside or outside urban growth areas may be designated as “Natural.”

Ecologically intact shorelines, as used here, means 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. In forested areas, they generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent water bodies. Recognizing that there is a continuum of ecological conditions ranging from near natural conditions to totally degraded and contaminated sites, this term is intended to delineate those shoreline areas that provide valuable functions for the larger aquatic and terrestrial environments which could be lost or significantly reduced by human development. Whether or not a shoreline is ecologically intact is determined on a case-by-case basis.

The term “ecologically intact shorelines” applies to all shoreline areas meeting the above criteria ranging from larger reaches that may include multiple properties to small areas located within a single property.

Areas with significant existing agriculture lands should not be included in the “Natural” designation, except where the existing agricultural operations involve very low intensity uses where there is no significant impact on natural ecological functions, and where the intensity or impacts associated with such agriculture activities is unlikely to expand in a manner inconsistent with the “Natural” designation.

In the City of Kirkland, the following shoreline areas are designated Natural.

- Areas in Juanita Bay Park within 200 feet of the Lake Washington ordinary high water mark.

- Associated wetlands in and adjacent to Juanita Bay Park, extending east up the Forbes Creek corridor to 11th Court NE and north up to the north boundary of parcel 1791500315.
- Associated wetlands in and adjacent to the Yarrow Bay Wetlands complex, including all or portions of parcels classified in the Comprehensive Plan as Residential - L, Medium Density Residential, and Office/Multi-Family that contain associated wetlands.

3.1.3 Management Policies

- 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.

3.2 Urban Conservancy

3.2.1 Purpose

The purpose of the “Urban Conservancy” environment is 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.

3.2.2 Designation Criteria

Assign an “Urban Conservancy” environment designation to shoreline areas appropriate and planned for development that is compatible with maintaining or restoring of 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.

In the City of Kirkland, the following shoreline areas are designated Urban Conservancy.

- All areas classified as Park/Open Space in the Comprehensive Plan, unless designated as Natural or Urban Mixed.
- Portion of High Density Residential property in the Comprehensive Plan located within 75 feet of the ordinary high water mark of Juanita Creek.

3.2.3 Management Policies

- 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.

3.3 Residential - L

3.3.1 Purpose

The purpose of the “Residential - L” environment is to accommodate low-density residential development and appurtenant structures that are consistent with this chapter.

3.3.2 Designation Criteria

Assign a “Residential - L” environment designation 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 single-family residential development.

In the City of Kirkland, the following shoreline areas are designated Residential - L.

- All areas classified as Residential - L in the Comprehensive Plan, except for those parcels containing associated wetlands contiguous with the Yarrow Bay Wetlands as described in Section 3.1.2.

3.3.3 Management Policies

- 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.

3.4 Residential - M/H

3.4.1 Purpose

The purpose of the “Residential - M/H” environment is to accommodate moderate 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 which depend on or benefit from a shoreline location.

3.4.2 Designation Criteria

Assign a “Residential - M/H” environment designation 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 for medium- or high-density residential development.

In the City of Kirkland, the following shoreline areas are designated Residential - M/H.

- a. All areas classified as High Density Residential and Medium Density Residential in the Comprehensive Plan, except the following:
 - (a) A portion of high-density residential property located within 75 feet of the ordinary high water mark of Juanita Creek, which is contained within the Urban Conservancy shoreline environment as described in Section 3.2.2.

- (b) A portion of medium-density property which is comprised of associated wetlands in and adjacent to the Yarrow Bay Wetlands complex. These properties are contained within the Natural shoreline environment as described in Section 3.1.

3.4.3 Management Policies

- 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.

3.5 Urban Mixed

3.5.1 Purpose

The purpose of the “Urban Mixed” environment is to provide for high-intensity water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.

3.5.2 Designation Criteria

Assign an “Urban Mixed” environment designation 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.

In the City of Kirkland, the following shoreline areas are designated Urban Mixed.

- All areas classified as Commercial, Office or Office/Multi-Family in the Comprehensive Plan, except for the following:

- a. A portion of Commercial property which is comprised of associated wetlands in and adjacent to Juanita Bay Park. These properties are contained within the Natural shoreline environment as described in Section 3.1
 - b. A portion of Office/Multi-family property which is comprised of associated wetlands in and adjacent to the Yarrow Bay Wetlands complex. These properties are contained within the Natural shoreline environment as described in Section 3.1.
- The following areas classified as Park/Open Space in the Comprehensive Plan:
 - a. Marina Park, and
 - b. Juanita Beach Park, except that portion located within 75 feet of the ordinary high water mark of Juanita Creek, which is contained within the Urban Conservancy shoreline environment as described in Section 3.2.2.

3.5.3 Management Policies

- 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.

3.6 Aquatic

3.5.1 Purpose

The purpose of the “Aquatic” environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.

3.6.2 Designation Criteria

Assign an “Aquatic” environment designation to lands waterward of the ordinary high-water mark.

In the City of Kirkland, the following shoreline areas are designated Aquatic.

- Lake Washington, landward of the ordinary high water mark.

3.6.3 Management Policies

- 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. Development within the Aquatic environment should be compatible with the adjoining upland development.
- e. New overwater structures for water-dependent uses and public access are permitted, provided they will not preclude attainment of ecological restoration.
- f. Public recreational uses of the water should be protected against competing uses that would interfere with these activities.
- g. 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.
- h. Existing residential uses located over the water and in the Aquatic environment may continue, but should not be enlarged or expanded.

4.0 ENVIRONMENT DESIGNATION REGULATIONS

The Shoreline Master Program Guidelines requires each jurisdiction's SMP to contain environment-specific regulations (WAC 173-26-211(4)(a)(iv)). The environment-specific regulations must include a list of uses and modifications that may be approved through a Substantial Development Permit (SDP) or Conditional Use Permit (CUP) or which are prohibited, and numerical standards for building or structure height and bulk limits, setbacks, maximum density or minimum frontage requirements, and other site development standards.

4.1 Shoreline Use and Modification Matrix

Table 4 indicates which uses and modifications may be allowed or are prohibited. Where there is a conflict between the chart and the written provisions in Chapter 83 of the Shoreline Master Program, the written provisions shall apply. Any use, development or substantial development not classified elsewhere in the Shoreline Master Program or listed below shall require a CUP. If a particular activity is not considered a Substantial Development, as outlined in the definition of *Substantial Development* included in Section 5.0, then it is exempt from a requirement to obtain a SDP. It is not exempt, however, from the Shoreline Management Act or this Master Program, and must be consistent with the applicable policies and provisions. If any part of a proposed development is not eligible for exemption, then a Substantial Development Permit is required for the entire proposed development project. A development or use that is listed as a Conditional Use pursuant to this Master Program or is an unlisted use, must obtain a CUP even though the development or use does not require a SDP. When a development or use is proposed that does not comply with the bulk, dimensional and performance standards of this Master Program, such development or use can only be authorized by approval of a Variance.

Table 4. Shoreline Use and Modification Matrix.

The chart is coded according to the following legend. SD = Substantial Development 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
	SD	SD	SD	SD	SD	SD
Commercial Uses						
Water-dependent uses						
Float plane landing and mooring facilities ¹	X	X	X	X	CU	adjacent upland environment
Water-related, water-enjoyment commercial uses						
Any water-oriented Retail Establishment other than those specifically listed in this chart, selling goods or providing services.	X	SD ²	X	X	SD	X

¹ Limited to water-based aircraft facilities for air charter operations.

² Permitted as an accessory use to a Public Park.

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The chart is coded according to the following legend. SD = Substantial Development 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 ²	X	CU ^{3,5}	SD ⁴	adjacent upland environme
Retail establishment providing gas and oil sale for boats	X	X	X	CU ^{3,5}	CU ⁵	adjacent upland environme
Retail establishment providing boat and motor repair and service	X	X	X	CU ^{3,5}	CU ⁵	X
Restaurant or Tavern ⁶	X	X	X	CU ³	SD	X
Concession Stand	X	SD ²	X	X	SD ²	X
Entertainment or cultural facility	X	CU ⁷	X	X	SD	X
Hotel or Motel	X	X	X	CU ⁸ /X	SD	X
Nonwater-oriented, nonwater-dependent 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 ⁹	X
Office Uses	X	X	X	X	SD ⁹	X

³ 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.

⁴ Permitted in the Juanita Business District or as an accessory use to a marina.

⁵ Accessory to a marina only.

⁶ Drive-in or drive-through facilities are prohibited.

⁷ Use must be open to the general public.

⁸ Permitted in Planned Area 3B established in the Lakeview Neighborhood Plan only.

⁹ Permitted as part of mixed-use development containing water-oriented 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.

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The chart is coded according to the following legend. SD = Substantial Development 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
Neighborhood-oriented Retail Establishment	X	X	X	CU ¹⁰	SD ⁹	X
Private Lodge or Club	X	X	X	X	SD ⁹	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
Industrial Uses						
Water-dependent uses	X	X	X	X	X	adjacent upland environment
Water-related uses	X	X	X	X	X	X
Nonwater-oriented uses	X	X	X	X	X	X
Recreational Uses						
Water-dependent uses						
Marina ¹¹	X	CU	X	SD	SD	See adjacent upland environments
Piers, docks, boat lifts and canopies serving Detached Dwelling Unit ¹¹	X	X	SD	SD	SD ¹⁵	
Piers, docks, boat lifts and canopies serving Detached, Attached or Stacked Dwelling Units ¹¹	X	X	X	SD	SD	
Float	X	SD ²	X	X	SD ²	

¹⁰ Permitted if located on the east side of Lake Washington Blvd NE between NE 60th Street and 7th Ave S.

¹¹ No boat moored in or off the shoreline of Kirkland shall be used as a place of habitation.

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The chart is coded according to the following legend. SD = Substantial Development 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
Tour Boat Facility	X	X	X	X	SD ¹²	
Moorage buoy ¹¹	X	SD	SD	SD	SD	
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	
Water-related, water-enjoyment uses						
Any water-oriented recreational development other than those specifically listed in this chart	X	CU	CU	CU	SD	X
Other Public Park Improvements ¹³	CU	SD	SD	SD	SD	X
Public Access Facility	SD ¹⁴	SD	SD	SD	SD	See adjacent
Nonwater-oriented uses						
Nonwater-oriented recreational development.	X	X	X	X	SD ⁹	X
Residential Uses						
Detached dwelling unit	CU	CU	SD	SD	SD ¹⁵	X
Accessory dwelling unit ¹⁶	X	X	SD	SD	SD ¹⁵	X

¹² Permitted as an accessory use to a Marina or Public Park only.

¹³ This use does not include other public recreational uses or facilities specifically listed in this chart

¹⁴ Limited to trails, viewpoints, interpretative signage and similar passive and low-impact facilities.

¹⁵ Permitted if located south of NE 60th Street only.

¹⁶ One accessory dwelling unit (ADU) is permitted as subordinate to a detached dwelling unit

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The chart is coded according to the following legend. SD = Substantial Development 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
Detached, Attached or Stacked Dwelling Units	X	X	X	SD	SD	X
Houseboats	X	X	X	X	X	X
Assisted Living Facility ¹⁷	X	X	X	CU	SD	X
Convalescent Center or Nursing Home	X	X	X	CU ¹⁸	SD ¹⁹	X
Land division	SD ²⁰	SD ²⁰	SD	SD	SD	X
Institutional Uses						
Float plane landing and mooring facilities (public)	X	X	X	X	CU	adjacent upland environment
Government Facility	X	SD	SD	SD	SD	X
Community Facility	X	X	X	X	SD	X
Church	X	X	X	CU ¹⁸	SD ¹⁹	X
School or Day-Care Center	X	X	X	CU ¹⁸	SD ⁹	X
Mini-School or Mini-Day-Care Center	X	X	X	SD ¹⁸	SD ⁹	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 ²¹	SD ²¹	SD ²¹	SD ²¹	
Nonwater-oriented						

¹⁷ A nursing home use may be permitted as part of an assisted living facility use.

¹⁸ Permitted if located on the east side of Lake Washington Blvd NE/Lake St S, or the east side of 98th Avenue NE.

¹⁹ 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.

²⁰ May not create any new lot that would be wholly contained within shoreland area in this shoreline environment.

²¹ Permitted as an accessory use to a marina or a public park.

The chart is coded according to the following legend. SD = Substantial Development 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
Arterials, Collectors, and neighborhood access streets	CU	SD ²² /CU	SD	SD	SD	X
Helipad	X	X	X	X	X	X
Utilities						
Utility production and processing facilities	X	CU ²³	CU ²³	CU ²³	CU ²³	X
Utility transmission facilities	CU ²³	SD ²³	SD ²³	SD ²³	SD ²³	CU ²³
Personal Wireless Service Facilities ²⁴	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 ²⁵ /CU	SD ²⁵ /CU	See adjacent upland environments
Dredging and dredge materials disposal	SD ²⁵ /CU					
Fill waterward of the ordinary high water mark	SD ²⁵ /CU					
Land surface modification	SD ²⁵ /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 Shoreline Stabilization Measures	X	SD	SD	SD	SD	

4.2 Site Development Standards

²² Construction of pedestrian and bicycle facilities only.

²³ This use may be allowed provided there is no other feasible route or location.

²⁴ New towers are not permitted.

²⁵ Permitted under a substantial development permit when associated with a restoration or enhancement project.

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: <ul style="list-style-type: none"> 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.
Shoreline Setback	n/a	Thirty (30) % of the average parcel depth, except in no case is the	Outside of shoreline 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	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.

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SHORELINE ENVIRONMENT	
DEVELOPMENT STANDARDS	
Aquatic	
Natural	shoreline setback permitted to be less than 30 feet or require d to be greater than 60 feet, except as otherwise specifically allowed through this Chapter.
Urban Conservancy	
Residential - L	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 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
Residential - M/H	
Urban Mixed	

DEVELOPMENT STANDARDS		SHORELINE ENVIRONMENT					
		Aquatic	Natural	Urban Conserancy	Residential - L	Residential - M/H	Urban Mixed
Maximum Lot Coverage		n/a	50%	50%	not adjacent to the property, then the setback of the adjacent property without a dwelling unit for the purposes of determining an average setback shall be based upon 30% of the average parcel depth.	60%	80% except for the following: In the CBD zones, 100% for properties that do not abut Lake Washington; otherwise 90%
Maximum Height of Structure ³		n/a	25' above ABE ¹	35' above ABE.	25' above ABE	35' above ABE.	35' above ABE
Other Residential Uses (Attached, Stacked, and Detached Dwelling Units; Assisted Living Facility; Convalescent Center or Nursing Home)							
Maximum Density ²		n/a	N/a	n/a	n/a	3,600 sq. ft./unit, except if 1,800 sq. ft./unit for up to	No minimum lot size in the CBD zones; otherwise 1,800

¹ Structure height may be increased to 30' above ABE in the Natural shoreline environment. See KZC 83.180.6.c.1(a).

² For density purposes, two assisted living units shall constitute one dwelling unit.

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DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	Natural	Urban Conservancy	Residential - L	Residential - M/H	Urban Mixed
Shoreline Setback	n/a	N/a	n/a	n/a	2 dwelling units if the public access provisions of KZC 83.420 are met; The greater of: a. 25' or b. 15% of the average parcel depth. In the PLA 15A zone located south of NE 52 nd Street, mixed-use developments approved under a Master Plan shall comply with the Master Plan provisions.	sq. ft./unit The greater of: a. 25' or b. 15% of the average parcel depth. In the PLA 15A zone located south of NE 52 nd Street, mixed-use developments approved under a Master Plan shall comply with the Master Plan provisions.
Maximum Lot Coverage	n/a	N/a	n/a	n/a	80%	80% except for the CBD zones, 100% on properties that do not abut Lake Washington; otherwise 90%
Maximum Height of Structure ³	n/a	n/a	n/a	n/a	30' above ABE ⁴	41' above ABE, except for the following: <ul style="list-style-type: none"> In the CBD zones, if located on the east side of Lake Street South 55'

³ The height limit is restricted to that portion of the building physically located within the shoreline jurisdiction and applies to landward structures only. Permitted increases in building height are addressed in KZC 83.180.6.c).

⁴ Structure height may be increased to 35' above ABE. See KZC 83.180.5.c.1)b).

SHORELINE ENVIRONMENT	
DEVELOPMENT STANDARDS	
	<p>Aquatic</p> <p>Natural</p> <p>Urban Conservancy</p> <p>Residential - L</p> <p>Residential - M/H</p> <p>Urban Mixed</p>
	<p>above the abutting right-of-way measured at the midpoint of the frontage of the subject property.</p> <ul style="list-style-type: none"> 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.⁵
Commercial Uses	
Minimum Lot Size	n/a
Shoreline Setback	<p>n/a</p> <p>n/a</p> <p>Water-dependent uses: 0', Water-related use: 25', Water-enjoyment use: 30', Other uses: Outside of shoreline jurisdictional area, if feasible, otherwise 50'.</p> <p>n/a</p> <p>n/a</p> <p>n/a</p> <p>The greater of: a. 25' or b. 15% of the average parcel depth.</p> <p>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.</p>

⁵ See KZC 83.180.6.c.1(d).

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DEVELOPMENT STANDARDS		SHORELINE ENVIRONMENT					
		Aquatic	Natural	Urban Conservancy	Residential - L	Residential - M/H	Urban Mixed
Maximum Lot Coverage	n/a	n/a	n/a	50%	n/a	80%	80% except for the CBD zones, 100% on properties that do not abut Lake Washington; otherwise 90%
Maximum Height of Structure ³	n/a	n/a	n/a	If adjoining the Residential-L Shoreline Environment, then 25' above ABE. Otherwise, 30' above ABE. ⁴	n/a	30' above ABE ⁴	41' above ABE, except for the following: <ul style="list-style-type: none"> 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 52 nd 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	n/a
Shoreline Setback	n/a	Water-dependent uses:	Water-dependent uses:	Water-dependent uses: 0', Water-related use: 25', Water-enjoyment	30% of the average parcel depth, except in no case is the	The greater of: a. 25' or b. 15% of the average	The greater of: a. 25' or b. 15% of the average parcel

⁶ See KZC 83.180.6.c.1(d).

SHORELINE ENVIRONMENT	
DEVELOPMENT STANDARDS	
	<p>Aquatic</p> <p>0', Water-related use: 25', Water enjoyment use: 30', Other uses: Outside of shoreline area, if feasible, otherwise 50'.</p>
	<p>Natural</p> <p>0', Water-related use: 25', Water enjoyment use: 30', Other uses: Outside of shoreline area, if feasible, otherwise 50'.</p>
	<p>Urban Conservancy</p> <p>use: 30', Other uses: Outside of shoreline jurisdictional area, if feasible, otherwise 50'.</p>
	<p>Residential - L</p> <p>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.</p>
	<p>Residential - M/H</p> <p>parcel depth.</p>
	<p>Urban Mixed</p> <p>depth.</p> <p>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.</p>
Maximum Lot Coverage	<p>80% except for the following:</p> <ul style="list-style-type: none"> In the CBD zones, 100% on properties that do not abut Lake Washington; otherwise 90%
Maximum Height of Structure ³	<p>41' above ABE, except for the following:</p> <ul style="list-style-type: none"> In the CBD zones, if

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DEVELOPMENT STANDARDS		SHORELINE ENVIRONMENT					
		Aquatic	Natural	Urban Conservancy	Residential - L	Residential - M/H	Urban Mixed
				Environment, then 25' above ABE. Otherwise, 30' above ABE ⁴			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. <ul style="list-style-type: none"> 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	n/a
Shoreline Setback	n/a	n/a	n/a	Outside of shoreline jurisdictional area, if feasible, otherwise 50'.	Outside of the shoreline jurisdictional 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	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.

DEVELOPMENT STANDARDS		SHORELINE ENVIRONMENT					
		Aquatic	Natural	Urban Conservancy	Residential - L	Residential - M/H	Urban Mixed
Maximum height of structure ³		n/a	n/a	If adjoining the Residential-L Shoreline Environment, then 25' above ABE. Otherwise, 30' above ABE ⁴	25' above ABE	30' above ABE ⁴	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		n/a	n/a	Outside of shoreline area, if possible, 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	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.

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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	n/a	n/a	
Maximum Height of Structure ³	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	n/a	Outside of shoreline area, if possible, otherwise 50'.	Outside of shoreline area, if possible, 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.	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.	
Maximum Lot Coverage	n/a	5%	30%	50%	80%	80% except in the CBD zones, 100% on properties that do not abut Lake Washington; otherwise 90%	
Maximum Height of Structure ³	n/a	25' above	If adjoining the Residential-L Shoreline	25' above ABE	30' above ABE ⁴	41' above ABE, except for the following:	

DEVELOPMENT STANDARDS	SHORELINE ENVIRONMENT					
	Aquatic	Natural	Urban Conservancy	Residential - L	Residential - M/H	Urban Mixed
		ABE	Environment, then 25' above ABE. Otherwise, 30' above ABE ⁴			<ul style="list-style-type: none"> 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 shall comply with the Master Plan provisions.

5.0 KEY DEFINITIONS

- 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 ordinary high water mark.
- 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 173-14-040 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 ordinary high water mark and the perimeter of a wetland.
- 6. Average Parcel Depth:** The average of the distance from the high waterline to the street providing 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 of the subject property and the quarter points of the high waterline of the subject property. 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.
- 7. Average Parcel Width:** The average of the distance from the north to the south property lines as measured along the ordinary high water mark and the front property line, or along the east and west property lines if the parcel does not abut Lake Washington.
- 8. Bioengineering:** Project designs or construction methods which 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 which 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.
- 9. Boat:** Any contrivance used or capable of 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.
- 10. Boat house:** An overwater structure designed for the storage of boats, but not including boat lift canopies.
- 11. Boat Launch:** Graded slopes, slabs, pads, planks, or rails used for launching boats by means of a trailer, hand, or mechanical device.
- 12. Boat Lift:** Lifts for motorized boats, kayaks, canoes and jet skis. Includes floating lifts, which are designed to not contact the substrate of the Lake; ground-based lifts, which are designed to be in contact with or supported by the substrate of the Lake; and suspended lifts, which are designed to be affixed to the existing overwater structure with no parts contacting the substrate.
- 13. Breakwater:** Protective structures which are normally built offshore to provide protection from wave action.
- 14. Buffer:** The area immediately adjacent to wetlands and streams that protects these sensitive areas and

provides essential habitat elements for fish and/or wildlife.

15. 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(b) and 83.510.3(b). The buffer setback serves to protect the wetland or stream buffer during development activities, use, and routine maintenance occurring adjacent to these resources.

16. 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.

17. Canopy: A cover installed as a component of a boatlift.

18. 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.

19. 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.

20. 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.

21. 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.

22. Conditional Uses: A use, development, or substantial development which is classified as a conditional use in section 83.170 or which is not classified within the SMP. Those activities identified as conditional uses or not classified in this Master Program must be treated according to the review criteria established in WAC 173-27-160.

23. 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.

24. 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 which 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.

25. Dock: A structure that floats on the surface of the water, without piling supports, but which is attached to land. Typically used for boat moorage, swimming, public access, and other activities that require access to deep water.

26. Drainage Basin: A specific area of land drained by a particular Kirkland watercourse and its tributaries.

27. 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.

28. Dry Land Boat Storage: A commercial service providing storage of boats and other boat on the upland portion of a property.

29. 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 that constitute the shoreline's natural ecosystem.

30. Ecological Restoration: See Restore.

31. 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.

32. Ecosystem-wide Processes: The suite of naturally occurring physical and geologic 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.

33. Feasible: An action, such as a development project, mitigation, or preservation requirement, which meets all of the following conditions:

a. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;

b. The action provides a reasonable likelihood of achieving its intended purpose; and

c. The action does not physically preclude achieving the project's primary intended legal use.

d. Cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant.

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.

34. 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 booth, and other accessory uses or structures necessary for its operation. A passenger-only ferry terminal does not include provisions for the ferrying of vehicles.

35. Fill: The addition of soil, sand, rock, gravel, sediment, earth-retaining structure, or other material to an area waterward of the ordinary high water mark, in wetland, or on shorelands in a manner that raises the elevation or creates dry land.

36. Float: A structure that floats on the surface of the water, which 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.

37. 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.

38. Floodplain: Synonymous with the one hundred year floodplain and means the land susceptible to inundation 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 regulations maps or a reasonable method that meets the objectives of the Shoreline Management Act.

39. Frequently Flooded Areas: All areas shown on the Kirkland Sensitive Areas Maps as being within a 100-year floodplain, as well as all areas regulated by Chapter 21.56 KMC.

40. 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.

41. Geotechnical Analysis: See Geotechnical Report.

42. 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.

43. 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.

44. 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. These include bulkheads, rip-rap, groins, and similar structures.

45. Helipad: A takeoff and landing area for helicopters.

46. 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 semipermanent anchorage/moorage facilities.

47. Impervious Surface: A hard surface water which 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 which 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, driveway, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam, or other surfaces which 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

48. 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.

49. 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.

50. Land Surface Modification: The clearing or removal of trees, shrubs, groundcover and other vegetation, excluding trees, and all grading, excavation and filling of materials.

51. Large Woody Debris: Trunks or branches of trees that have fallen in or been placed in a waterbody and serve the purposes of stabilization or habitat for fish and aquatic insects.

52. 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 drainageways and storage areas.
- Preservation of portions of the site in undisturbed, natural conditions.
- Reduction of the use of piped systems. Whenever possible, site design should use multifunctional open drainage systems such as vegetated swales or filter strips which also help to fulfill landscaping and open space requirements.
- Use of environmentally sensitive site design and green building construction that reduces runoff from structures, such as green roofs.

53. 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.

54. 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.

55. Minor Improvements: Walkways, pedestrian bridges, benches, and similar features, as determined by the Planning Official, pursuant to KZC 83.500.3(e) and 83.510.3(e).

56. Moorage buoy: A floating object, sometimes carrying a signal or signals, anchored to provide a mooring place away from the shore.

57. Must: means a mandate; the action is required.

58. 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.

59. Nonconforming use or development: A shoreline use or development which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program.

60. Non-Water-Oriented Use: Uses that are not water-dependent, water-related, or water-enjoyment.

61. 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 ordinary high water mark cannot be found, the ordinary high water mark adjoining fresh water shall be the line of mean high water, or as amended by the State. For Lake Washington, the ordinary high water mark corresponds with a lake elevation of 21.8 feet.

62. Outfall: A structure used for the discharge of a stormwater or sewer system into a receiving water.

63. Pervious: As opposed to impervious surfaces, these are surfaces that allow water to pass through at rates similar to pre-developed conditions. There are various types of pervious surfaces, including pervious asphalt, pervious concrete and grass or pervious pavers.

64. Permitted Uses: Uses which are allowed within the applicable shoreline environment, provided that they must meet the policies, use requirements, and regulations of this Chapter 83 KZC and any other applicable regulations of the City or state.

65. Pier: A structure supported by pilings 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.

66. Piling: The structural supports for piers, usually below the pier decking and anchored in the water.

67. Preserve: The protection of existing ecological shoreline processes or functions.

68. Primary Basins: The primary basins shown on the Kirkland Sensitive Areas Map.

69. 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.

70. 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.

- 71. Public Access Pier or Boardwalk:** An elevated structure that is constructed waterward of the ordinary high water mark and intended for public use.
- 72. 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.
- 73. Public Use Area:** A portion of private property that is dedicated to public use and which 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.
- 74. Qualified Professional:** An individual with relevant education and training, as determined by the Planning Official, and with at least three years' experience in biological fields such as botany, fisheries, wildlife, soils, ecology, and similar areas of specialization, and including a professional wetland scientist.
- 75. Rain Garden:** Rain gardens and bioretention areas are landscaping 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.
- 76. 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.
- 77. Restoration:** See Restore.
- 78. Revetment:** A shoreline protective structure constructed on a slope, and used to prevent erosion.
- 79. 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, and other riparian features that are important to both riparian forest and aquatic system conditions.
- 80. Salmonid:** A member of the fish family salmonidae, which include chinook, coho, chum, sockeye, and pink salmon; rainbow, steelhead, and cutthroat trout; brown trout; brook and dolly varden char, kokanee, and white fish.
- 81. Secondary Basins:** The secondary basins depicted on the Kirkland Sensitive Areas Map.
- 82. Shall:** Means a mandate; the action must be taken.
- 83. Shorelands:** Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred 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 the Shoreline Management Act; the same to be designated as to location by the Department of Ecology.
- 84. Shoreland Areas:** See Shorelands.
- 85. Shoreline Functions:** See Ecological Functions.
- 86. 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.
- 87. 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.

88. Shoreline Setback: The distance measured in feet that a structure or improvement must be located from the ordinary high water mark.

89. 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.

90. 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.

91. 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 ordinary high water mark 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.

92. 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.

93. Sign, Interpretive: A permanent sign without commercial message, located on a publicly-accessible sit, 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.

94. 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.

95. Soft 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.

96. 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.

97. 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.

98. Transportation Facilities: **Facilities that include road pavement, curb and cutter, sidewalk and landscape strip as regulated under KZC 110.**

99. Tour Boat Facility: A moorage pier designed for commercial tour boat usage.

100. Tree: A woody plant with one main stem at a minimum height of 12' measured from the existing ground, having a distinct head in most cases. The Urban Forester shall have the authority to determine whether any specific woody plant shall be considered a tree or a shrub.

101. Upland: Generally described as the dry land area above and landward of the ordinary high water mark.

102. 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.

103. 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.

104. Utility Transmission Facilities: Infrastructure and facilities for the conveyance of services, such as power lines, cables, and pipelines.

105. View Corridor: An open area of the subject property that provides views unobstructed by structures across the subject property from the adjacent right-of-way to Lake Washington.

106. Water-Dependent Use: A use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operation.

107. 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 which 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-orientated space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

108. Water-Oriented Use: A use that is water-dependent, water-related, or water-enjoyment or a combination of such uses.

109. Water Quality: The physical characteristics of water within shoreline 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.

110. Water-Related Use: A use or portion of a use which 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.

111. Watershed: A region or area bounded on the periphery by a parting of water and draining to a particular watercourse or body of water.

112. Watershed Restoration Plan: A plan, developed or sponsored by the department of fish and wildlife, the department of ecology, the department of natural resources, the 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, recreation, 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;

113. 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 miles of streamreach, in which less than twenty-five 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 square feet in floor area and is located above the ordinary high water mark of the stream.

114. 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 would not include accessory facilities such as ticketing booths and would not include the transport of vehicles.

115. 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, 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.

116. 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.

APPENDIX A

ENVIRONMENT DESIGNATION MAPS





 0 250 500 Feet

 Scale 1" = 500'

 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
 Shoreline Master Program - City of Kirkland

<ul style="list-style-type: none">  Residential - Low  Urban Conservancy  Urban Mixed  Residential - Medium High 	<ul style="list-style-type: none">  Aquatic  Residential - Low  Natural  Urban Conservancy  Urban Mixed  Residential - Medium High
--	--

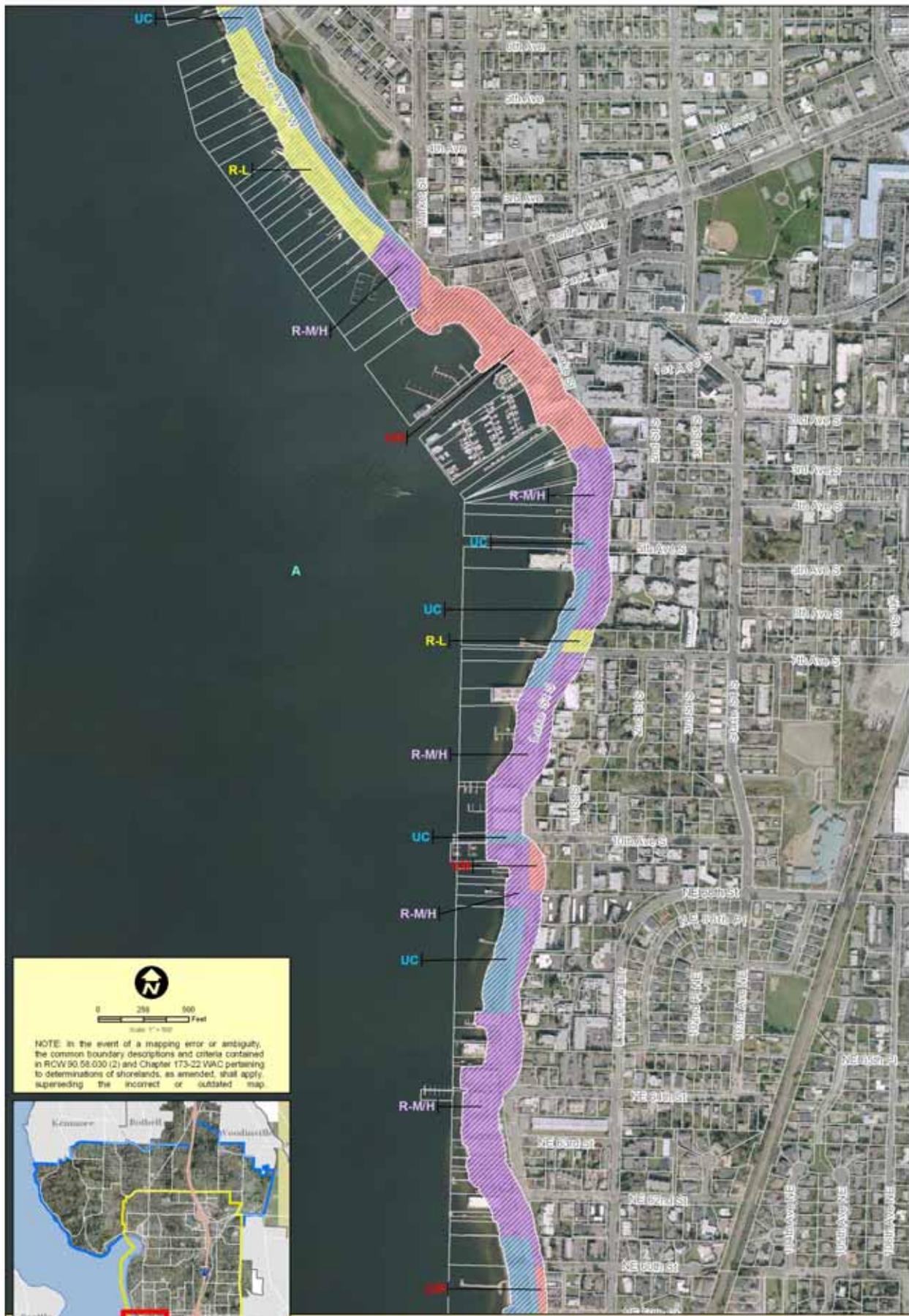
Shoreline Management Area



Figure Xa

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 0 250 500 Feet
 Scale 1" = 500'
 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
Shoreline Master Program - City of Kirkland

<p>A Aquatic</p> <p>R-L Residential - Low</p> <p>N Natural</p> <p>UC Urban Conservancy</p> <p>UM Urban Mixed</p> <p>R-MH Residential - Medium/High</p>	<p>UC Urban Conservancy</p> <p>R-L Residential - Low</p> <p>R-MH Residential - Medium/High</p>	<p>Shoreline Management Area</p>
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Figure Xc

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