

Chapter 173-26 WAC

SHORELINE MASTER PROGRAM GUIDELINES

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WAC 173-26-171 Authority, Purpose and Effects of Guidelines.

(1) Authority.

RCW 90.58.090 authorizes and directs the department to adopt "guidelines consistent with RCW 90.58.020, containing the elements specified in RCW 90.58.100" for development of local master programs for regulation of the uses of "shorelines" and "shorelines of statewide significance." RCW 90.58.200 authorizes the department and local governments "to adopt such rules as are necessary and appropriate to carry out the provisions of" the Shoreline Management Act.

(2) Purpose.

The general purpose of the guidelines is to implement the "cooperative program of shoreline management between local government and the state." Local government shall have the primary responsibility for initiating the planning required by the Shoreline Management Act and "administering the regulatory program consistent with the policy and provisions" of the Act. "[T]he department shall act primarily in a supportive and review capacity with an emphasis on providing assistance to local government and insuring compliance with the policy and provisions" of the Act. RCW 90.58.050.

In keeping with the relationship between state and local governments prescribed by the Act, the guidelines have three specific purposes: to assist local governments in developing master programs; to serve as standards for the regulation of shoreline development in the absence of a master program along with the policy and provisions of the Act and, to be used along with the policy of RCW 90.58.020, as criteria for state review of local master programs under RCW 90.58.090.

(3) Effect.

(a) The guidelines are guiding parameters, standards, and review criteria for local master programs. The guidelines allow local governments substantial discretion to adopt master programs reflecting local circumstances and other local regulatory and non-regulatory programs related to the policy goals of shoreline management as provided in the policy statements of RCW 90.58.020, WAC 173-26-176 and WAC 173-26-181. The policy of RCW 90.58.020 and these guidelines constitute standards and criteria to be used by the department in reviewing the adoption and amendment of local master programs under RCW 90.58.090 and by the growth management hearings board and shorelines hearings board adjudicating appeals of department decisions to approve, reject, or modify proposed master programs and amendments under RCW 90.58.190.

(b) Under RCW 90.58.340, the guidelines, along with the policy of the Act and the master programs, also shall be standards of review and criteria to be used by state agencies, counties, and public and municipal corporations in determining whether the use of lands under their respective jurisdictions adjacent to the shorelines of the state are subject to planning policies consistent with the policies and regulations applicable to shorelines of the state.

(c) The guidelines do not regulate development on shorelines of the state in counties and cities where approved master programs are in effect. In local jurisdictions without approved master programs, development on the shorelines of the state must be consistent with the policy of RCW 90.58.020 and the applicable guidelines under RCW 90.58.140.

(d) As provided in RCW 90.58.060, the department is charged with periodic review and update of these guidelines to address technical and procedural issues that arise as from the review of Shoreline Master Programs (SMPs) as well as compliance of the guidelines with statutory provisions. As a part of this process Ecology will compile information concerning the effectiveness and efficiency of these guidelines and the master programs adopted pursuant thereto with regard to accomplishment of the policies of the Shoreline Management Act and the corresponding principles and specific requirements set forth in these guidelines.

WAC 173-26-176 General Policy Goals of the Act and Guidelines for Shorelines of the State.

(1) The guidelines are designed to assist local governments in developing, adopting, and amending master programs that are consistent with the policy and provisions of the Act. Thus, the policy goals of the Act are the policy goals of the guidelines. The policy goals of the Act are derived from the policy statement of RCW 90.58.020 and the description of the elements to be included in master programs under RCW 90.58.100.

(2) The policy goals for the management of shorelines harbor potential for conflict. The Act recognizes that the shorelines and the waters they encompass are “among the most valuable and fragile” of the state’s natural resources. They are valuable for economically productive industrial and commercial uses, recreation, navigation, residential amenity, scientific research and education. They are fragile because they depend upon balanced physical, biological, and chemical systems that may be adversely altered by natural forces (earthquakes, volcanic eruptions, landslides, storms, droughts, floods) and human conduct (industrial, commercial, residential, recreation, navigational). Unbridled use of shorelines ultimately could destroy their utility and value. The prohibition of all use of shorelines also could eliminate their human utility and value. Thus, the policy goals of the Act relate both to utilization and protection of the extremely valuable and vulnerable shoreline resources of the state. The Act calls for the accommodation of “all reasonable and appropriate uses” consistent with “protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life” and consistent with “public rights of navigation.” The Act’s policy of achieving both shoreline utilization and protection is reflected in the provision that “permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, in so far as practical, any resultant damage to the ecology and environment of the shoreline area and the public’s use of the water.” RCW 90.58.020.

(3) The Act’s policy of protecting ecological functions, fostering reasonable utilization and maintaining the public right of navigation and corollary uses encompasses the following general policy goals for shorelines of the state. The statement of each policy goal is followed by the statutory language from which the policy goal is derived.

(a) The utilization of shorelines for economically productive uses that are particularly dependent on shoreline location or use.

RCW 90.58.020:

“The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration and preservation.”

“It is the policy of the state to provide for the management of the shorelines by planning for and fostering all reasonable and appropriate uses.”

“[U]ses shall be preferred which are...unique to or dependent upon use of the state’s shoreline.”

“Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state.”

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(a) An economic development element for the location and design of industries, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state;...

(d) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shorelines use element.

(e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;...”

(b) The utilization of shorelines and the waters they encompass for public access and recreation.

RCW 90.58.020:

“[T]he public’s opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally.

“Alterations of the natural conditions of the shorelines of the state, in those limited instances when authorized, shall be given priority for...development that will provide an opportunity for substantial numbers of people to enjoy the shorelines of the state.”

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(b) A public access element making provisions for public access to publicly owned areas;

(c) A recreational element for the preservation and enlargement of recreational opportunities, including but not limited to parks, tidelands, beaches, and recreational areas;...”

(4) Master programs will reflect that state-owned shorelines of the state are particularly adapted to providing wilderness beaches, ecological study areas, and other recreational activities for the public and will give appropriate special consideration to same.”

(c) Protection and restoration of the ecological functions of shoreline natural resources.

RCW 90.58.020:

“The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization protection, restoration, and preservation.”

“This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life...”

“To this end uses shall be preferred which are consistent with the control of pollution and prevention of damage to the natural environment.”

“Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area....”

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(f) A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;

(g) An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;...”

(d) Protection of the public right of navigation and corollary uses of waters of the state.

RCW 90.583.020:

“This policy contemplates protecting...generally public rights of navigation and corollary rights incidental thereto.”

“Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical,...any interference with the public’s use of the water.”

(e) The protection and restoration of buildings and sites having historic, cultural and educational value.

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(g) An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;...”

(f) Planning for public facilities and utilities correlated with other shorelines uses.

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(d) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element.”

(g) Prevention and minimization of flood damages.

RCW 90.58.100:

“(2) The master programs shall include, when appropriate, the following:

(h) An element that gives consideration to the state-wide interest in the prevention and minimization of flood damages.”

(h) Recognizing and protecting private property rights.

RCW 90.58.020:

“The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership;...and, therefore coordinated planning is necessary...while, at the same time, recognizing and protecting private rights consistent with the public interest.”

(i) Preferential accommodation of single family uses.

RCW 90.58.020:

“Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures....”

RCW 90.58.100:

“(6) Each master program shall contain standards governing the protection of single family residences and appurtenant structures against damage or loss due to shoreline erosion. The standards shall govern the issuance of substantial development permits for shoreline protection, including structural methods such as construction of bulkheads, and nonstructural methods of protection. The standards shall provide for methods which achieve effective and timely protection against loss or damage to single family residences and appurtenant structures due to shoreline erosion. The standards shall provide a preference for permit issuance fore measures to protect single family residences occupied prior to January 1, 1992, where the proposed measure is designed to minimize harm to the shoreline natural environment.”

(j) Coordination of shoreline management with other relevant local, state, and federal programs.

RCW 90.58.020:

“In addition [the legislature] finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state.”

“...and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state...”

“There is, therefor, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state’s shorelines.”

RCW 90.58.100:

“In preparing the master programs, and any amendments thereto, the department and local governments shall to the extent feasible:

(a) Utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts;

(b) Consult with and obtain the comments of any federal, state, regional, or local agency having any special expertise with respect to any environmental impact;

(c) Consider all plans, studies, surveys, inventories, and systems of classification made or being made by federal, state, regional, or local agencies, by private individuals, or by organizations dealing with pertinent shorelines of the state;

(d) Conduct or support such further research, studies, surveys, and interviews as are deemed necessary;

(e) Utilize all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;

(f) Employ, when feasible, all appropriate modern scientific data processing and computer techniques to store, index, analyze, and manage the information gathered.”

WAC 173-26-181 Special Policy Goals of the Act and Guidelines for Shorelines of State-Wide Significance.

In accordance with RCW 90.58.020, the “department, in adopting guidelines for shorelines of state-wide significance, and local government, in developing master programs for shorelines of state-wide significance, shall give preference to uses in the following order of preference which:

- (1) Recognize and protect the state-wide interest over local interest;
- (2) Preserve the natural character of the shoreline;
- (3) Result in long term over short term benefit;
- (4) Protect the resources and ecology of the shoreline;
- (5) Increase public access to publicly owned areas of the shorelines;
- (6) Increase recreational opportunities for the public in the shoreline;
- (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.”

WAC 173-26-186 Governing Principles of the Guidelines.

The governing principles listed below are intended to articulate a set of foundational concepts that underpin the guidelines, guide the development of the planning policies and regulatory provisions of master programs, and provide direction to the department in reviewing and approving master programs. These governing principles, along with the policy statement of RCW 90.58.020, other relevant provisions of the Act, the regulatory reform policies and provisions of RCW 34.05.328, and the policy goals set forth in WAC 173-26-175 and WAC 173-26-180 should be used to assist in the interpretation of any ambiguous provisions and in the reconciliation of any conflicting provisions of the guidelines.

(1) The guidelines are subordinate to the Act. Any inconsistency between the guidelines and the Act must be resolved in accordance with the Act.

(2) The guidelines are intended to reflect the policy goals of the Act, as described in WAC 173-26-176 and WAC 173-26-181.

(3) All relevant policy goals must be addressed in the planning policies of master programs.

(4) The planning policies of master programs (as distinguished from the development regulations of master programs) may be achieved by a number of means, only one of which is the regulation of development. Other means, as authorized by RCW 90.58.240, include, but are not limited to: the acquisition of lands and easements within shorelines of the state by purchase, lease, or gift, either alone or in concert with other local governments; and accepting grants, contributions, and appropriations from any public or private agency or individual. Additional other means may include, but are not limited to, public facility and park planning, watershed planning, voluntary salmon recovery projects and incentive programs.

(5) The Policy goals of the Act, implemented by the planning policies of master programs, may not be achievable by development regulation alone. Planning policies should be pursued through the regulation of development of private property only to an extent that is consistent with all relevant constitutional and other legal limitations (where applicable, statutory limitations such as those contained in Ch. 82.02 RCW and RCW 43.21C.060) on the regulation of private property. Local government should use a process designed to assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights. A process established for this purpose, related to the constitutional takings limitation, is set forth in a publication entitled, "*State of Washington, Attorney General's Recommended Process for Evaluation of Proposed Regulatory or Administrative Actions to Avoid Unconstitutional Takings of Private Property*," first published in February 1992. The attorney general is required to review and update this process on at least an annual basis to maintain consistency with changes in case law by RCW 36.70A.370.

(6) The territorial jurisdictions of the master program's planning function and regulatory function are legally distinct. The planning function may, and in some circumstances must, look beyond the territorial limits of shorelines of the state. RCW 90.58.340. The regulatory function is limited to the territorial limits of shorelines of the state, RCW 90.58.140(1), as defined in RCW 90.58.030(2).

(7) The planning policies and regulatory provisions of master programs and the comprehensive plans and development regulations, adopted under RCW 36.70A.040 shall be integrated and coordinated in accordance with RCW 90.58.340, RCW 36.70A.480, RCW 34.05.328(1)(h), and 1995 wash. laws ch. 347, §1.

(8) Through numerous references to and emphasis on the maintenance, protection, restoration, and preservation of "fragile" shoreline "natural resources," "public health," "the land and its vegetation and wildlife," "the waters and their aquatic life," "ecology," and "environment," the Act makes protection of the shoreline environment an essential statewide policy goal consistent with the other policy goals of the Act. It is recognized that shoreline ecological functions may be impaired not only by shoreline development subject to the substantial development permit requirement of the Act but also by past actions, unregulated activities, and development that is exempt from the Act's permit requirements. The principle regarding protecting shoreline ecological systems is accomplished by these guidelines in several ways, and in the context of related principles. These include:

(a) Local government is guided in its review and amendment of local master programs so that it uses a process that identifies, inventories, and ensures meaningful understanding of current and potential ecological functions provided by affected shorelines.

(b) Local master programs shall include policies and regulations designed to achieve no net loss of those ecological functions.

(i) Local master programs shall include regulations and mitigation standards ensuring that each permitted development will not cause a net loss of ecological functions of the shoreline; local government shall design and implement such regulations and mitigation standards in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property.

(ii) Local master programs shall include regulations ensuring that exempt development in the aggregate will not cause a net loss of ecological functions of the shoreline.

(c) For counties and cities containing any shorelines with impaired ecological functions, master programs shall include goals and policies that provide for restoration of such impaired ecological functions. These master program provisions shall identify existing policies and programs that contribute to planned restoration goals and identify any additional policies and programs that local government will implement to achieve its goals. These master program elements regarding restoration should make real and meaningful use of established or funded non-regulatory policies and programs that contribute to restoration of ecological functions, and should appropriately consider the direct or indirect effects of other regulatory or non-regulatory programs under other local, state, and federal laws, as well as any restoration effects that may flow indirectly from shoreline development regulations and mitigation standards.

(d) Local master programs shall evaluate and consider cumulative impacts of reasonably foreseeable future development on shoreline ecological functions and other shoreline functions fostered by the policy goals of the Act. To ensure no net loss of ecological functions and protection of other shoreline functions and/or uses, master programs shall contain policies, programs, and regulations that address adverse cumulative impacts and fairly allocate the burden of addressing cumulative impacts

among development opportunities. Evaluation of such cumulative impacts should consider:

- (i) current circumstances affecting the shorelines and relevant natural processes;
- (ii) reasonably foreseeable future development and use of the shoreline; and
- (iii) beneficial effects of any established regulatory programs under other local, state, and federal laws.

It is recognized that methods of determining reasonably foreseeable future development may vary according to local circumstances, including demographic and economic characteristics and the nature and extent of local shorelines.

(e) The Guidelines are not intended to limit the use of regulatory incentives, voluntary modification of development proposals, and voluntary mitigation measures that are designed to restore as well as protect shoreline ecological functions.

(9) To the extent consistent with the policy and use preference of 90.58.020, this chapter (WAC 173-26), and these principles, local governments have reasonable discretion to balance the various policy goals of this chapter, in light of other relevant local, state, and federal regulatory and non-regulatory programs, and to modify master programs to reflect changing circumstances.

(10) Local governments, in adopting and amending master programs and the department in its review capacity shall, to the extent feasible, as required by RCW 90.58.100(1):

(a) Utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts;

(b) Consult with and obtain the comments of any federal, state, regional, or local agency having any special expertise with respect to any environmental impact;

(c) Consider all plans, studies, surveys, inventories, and systems of classification made or being made by federal, state, regional, or local agencies, by private individuals, or by organizations dealing with pertinent shorelines of the state;

(d) Conduct or support such further research, studies, surveys, and interviews as are deemed necessary;

(e) Utilize all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;

(f) Employ, when feasible, all appropriate, modern scientific data processing and computer techniques to store, index, analyze, and manage the information gathered.

(11) In reviewing and approving local government actions under 90.58.090, the department shall insure that the state's interest in shorelines is protected, including compliance with the policy and provisions of 90.58.020.

WAC 173-26-191 Master program contents.

(1) Master program concepts.

The following concepts are the basis for effective shoreline master programs.

(a) Master program policies and regulations.

Shoreline master programs are both planning and regulatory tools. Master programs serve a planning function in several ways. First, they balance and integrate the objectives and interests of local citizens. Therefore, the preparation and amending of master programs shall involve active public participation, as called for in WAC 173-26-201(3). Second, they address the full variety of conditions on the shoreline. Third, they consider and, where necessary to achieve the objectives of chapter 90.58 RCW, influence planning and regulatory measures for adjacent land. For jurisdictions planning under chapter 36.70A RCW, the Growth Management Act, the requirements for consistency between shoreline and adjacent land planning are more specific and are described in WAC 173-26-191(1)(e). Fourth, master programs address conditions and opportunities of specific shoreline segments by classifying the shorelines into "environment designations" as described in WAC 173-26-211.

The results of shoreline planning are summarized in shoreline master program policies that establish broad shoreline management directives. The policies are the basis for regulations that govern use and development along the shoreline. Some master program policies may not be fully attainable by regulatory means due to the constitutional and other legal limitations on the regulation of private property. The policies may be pursued by other means as provided in RCW 90.58.240. Some development requires a shoreline permit prior to construction. A local government evaluates a permit application with respect to the shoreline master program policies and regulations and approves a permit only after determining that the development conforms to them. The regulations apply to all uses and development within shoreline jurisdiction, whether or not a shoreline permit is required, and are implemented through an administrative process established by local government pursuant to RCW 90.58.050 and 140 and enforcement pursuant to RCW 90.58.210-230.

(b) Master program elements.

RCW 90.58.100(2) states that the master programs shall, when appropriate, include the following elements:

- (a) An economic development element for the location and design of industries, industrial projects of statewide significance, transportation facilities, port facilities, tourist facilities, commerce, and other developments that are particularly dependent on their location on or use of shorelines of the state;*
- (b) A public access element making provision for public access to publicly owned areas;*
- (c) A recreational element for the preservation and enlargement of recreational*

opportunities, including, but not limited to, parks, tidelands, beaches, and recreational areas;

(d) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element;

(e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;

(f) A conservation element for the preservation of natural resources, including, but not limited to, scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;

(g) An historic, cultural, scientific, and educational element for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values;

(h) An element that gives consideration to the statewide interest in the prevention and minimization of flood damages; and

(i) Any other element deemed appropriate or necessary to effectuate the policy of this chapter.

The Growth Management Act (chapter 36.70A RCW) also uses the word "element" for discrete components of a comprehensive plan. To avoid confusion, "master program element" refers to the definition in the Shoreline Management Act as cited above. Local jurisdictions are not required to address the master program elements listed in the Shoreline Management Act as discrete sections. The elements may be addressed throughout master program provisions rather than used as a means to organize the master program.

(c) Shorelines of statewide significance.

The Shoreline Management Act identifies certain shorelines as "shorelines of statewide significance" and raises their status by setting use priorities and requiring "optimum implementation" of the act's policy. WAC 173-26-251 describes methods to provide for the priorities listed in RCW 90.58.020 and to achieve "optimum implementation" as called for in RCW 90.58.090(4).

(d) Shoreline environment designations.

Shoreline management must address a wide range of physical conditions and development settings along shoreline areas. Effective shoreline management requires that the shoreline master program prescribe different sets of environmental protection measures, allowable use provisions, and development standards for each of these shoreline segments.

The method for local government to account for different shoreline conditions is to assign an environment designation to each distinct shoreline section in its jurisdiction. The environment designation assignments provide the framework for implementing shoreline policies and regulatory measures specific to the environment designation.

WAC 173-26-211 presents guidelines for environment designations in greater detail.

(e) Consistency with comprehensive planning and other development regulations.

Shoreline management is most effective and efficient when accomplished within the context of comprehensive planning. For cities and counties planning under the Growth Management Act, chapter 36.70A RCW requires mutual and internal consistency between the comprehensive plan elements and implementing development regulations (including master programs). The requirement for consistency is amplified in WAC 365-195-500:

Each comprehensive plan shall be an internally consistent document and all elements shall be consistent with the future land use map. This means that each part of the plan should be integrated with all other parts and that all should be capable of implementation together. Internal consistency involves at least two aspects:

(1) Ability of physical aspects of the plan to coexist on the available land.

(2) Ability of the plan to provide that adequate public facilities are available when the impacts of development occur (concurrency).

Each plan should provide mechanisms for ongoing review of its implementation and adjustment of its terms whenever internal conflicts become apparent.

The Growth Management Act also calls for coordination and consistency of comprehensive plans among local jurisdictions. RCW 36.70A.100 states:

. . . The comprehensive plan of each county or city that is adopted pursuant to RCW 36.70A.040 shall be coordinated with, and consistent with, the comprehensive plans adopted pursuant to chapter 36.70A RCW of other counties or cities with which the county or city has, in part, common borders or related regional issues.

Since master program goals and policies are an element of the local comprehensive plan, the requirement for internal and intergovernmental plan consistency may be satisfied by watershed-wide or regional planning.

Legislative findings provided in Laws of 1995, chapter 347, section 1 (See RCW 36.70A.470 Notes) state:

The legislature recognizes by this act that the Growth Management Act is a fundamental building block of regulatory reform. The state and local governments have invested considerable resources in an act that should serve as the integrating framework for all other land-use related laws. The Growth Management Act provides the means to effectively combine certainty for development decisions, reasonable environmental protection, long-range planning for cost-effective infrastructure, and orderly growth and development.

And, RCW 36.70A.480(1) (The Growth Management Act) states:

For shorelines of the state, the goals and policies of the Shoreline Management Act as set forth in RCW 90.58.020 are added as one of the goals of this chapter as set forth in RCW 36.70A.020. The goals and policies of a shoreline master program for a county or city approved under chapter 90.58 RCW shall be considered an element of the county or city's comprehensive plan. All other portions of the shoreline master program for a county or city

adopted under chapter 90.58 RCW, including use regulations, shall be considered a part of the county or city's development regulations.

Furthermore, RCW 36.70A.481 states:

Nothing in RCW 36.70A.480 shall be construed to authorize a county or city to adopt regulations applicable to shorelands as defined in RCW 90.58.030 that are inconsistent with the provisions of chapter 90.58 RCW.

The Shoreline Management Act addresses the issue of consistency in RCW 90.58.340, which states:

All state agencies, counties, and public and municipal corporations shall review administrative and management policies, regulations, plans, and ordinances relative to lands under their respective jurisdictions adjacent to the shorelines of the state so as to achieve a use policy on said land consistent with the policy of this chapter, the guidelines, and the master programs for the shorelines of the state. The department may develop recommendations for land use control for such lands. Local governments shall, in developing use regulations for such areas, take into consideration any recommendations developed by the department as well as any other state agencies or units of local government (1971 ex.s. c 286 § 34.)

Pursuant to the statutes cited above, the intent of these guidelines is to assist local governments in preparing and amending master programs that fit within the framework of applicable comprehensive plans, facilitate consistent, efficient review of projects and permits, and effectively implement the Shoreline Management Act. It should be noted the Ecology's authority under the Shoreline Management Act is limited to review of Shoreline Master Programs based solely on consistency with the SMA and these guidelines. It is the responsibility of the local government to assure consistency between the master program and other elements of the comprehensive plan and development regulations.

Several sections in these guidelines include methods to achieve the consistency required by both the Shoreline Management Act and the Growth Management Act.

First, WAC 173-26-191 (2)(b) and (c) describe optional methods to integrate master programs and other development regulations and the local comprehensive plan.

Second, WAC 173-26-221 through 173-26-251 translate the broad policy goals in the Shoreline Management Act into more specific policies. They also provide a more defined policy basis on which to frame local shoreline master program provisions and to evaluate the consistency of applicable sections of a local comprehensive plan with the Shoreline Management Act.

Finally, WAC 173-26-211(3) presents specific methods for testing consistency between shoreline environment designations and comprehensive plan land use designations.

(2) Basic requirements.

This chapter describes the basic components and content required in a master program. A master program must be sufficient and complete to implement the Shoreline Management Act and the provisions of this chapter. A master program shall contain policies and regulations as necessary for reviewers to evaluate proposed shoreline uses and

developments for conformance to the Shoreline Management Act. As indicated in WAC 173-26-020, for this chapter: The terms "shall," "must," and "are required" and the imperative voice, mean a mandate; the action is required; The term "should" means that the particular action is required unless there is a demonstrated, sufficient reason, based on a policy of the Shoreline Management Act and this chapter, for not taking the action; and, The term "may" indicates that the action is within discretion and authority, provided it satisfies all other provisions in this chapter.

(a) Master program contents.

Master programs shall include the following contents:

(i) Master program policies.

Master programs shall provide clear, consistent policies that translate broad statewide policy goals set forth in WAC 173-26-176 and 181 into local directives. Policies are statements of intent directing or authorizing a course of action or specifying criteria for regulatory and non-regulatory actions by a local government. Master program policies provide a comprehensive foundation for the shoreline master program regulations, which are more specific, standards used to evaluate shoreline development. Master program policies also are to be pursued and provide guidance for public investment and other non-regulatory initiatives to assure consistency with the overall goals of the master program.

Shoreline policies shall be developed through an open comprehensive shoreline planning process. For governments planning under the Growth Management Act, the master program policies are considered a shoreline element of the local comprehensive plan and shall be consistent with the planning goals of RCW 36.70A.020, as well as the Act's general and special policy goals set forth in WAC 173-26-176 and 181.

At a minimum, shoreline master program policies shall:

- (A) Be consistent with state shoreline management policy goals and specific policies listed in this chapter and the policies of the Shoreline Management Act;
- (B) Address the master program elements of RCW 90.58.100; and
- (C) Include policies for environment designations as described in WAC 173-26-211. The policies shall be accompanied by a map or physical description of the schematic environment designation boundaries in sufficient detail to compare with comprehensive plan land use designations.
- (D) Be designed and implemented in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property.

(ii) Master program regulations.

RCW 90.58.100 states:

The master programs provided for in this chapter, when adopted or approved by the department, shall constitute use regulations for the various shorelines of the state.

In order to implement the directives of the Shoreline Management Act, master program regulations shall:

- (A) Be sufficient in scope and detail to ensure the implementation of the Shoreline Management Act, statewide shoreline management policies of this chapter, and local master program policies;
- (B) Include environment designation regulations that apply to specific environments consistent with WAC 173-26-211; and
- (C) Include general regulations, use regulations that address issues of concern in regard to specific uses, and shoreline modification regulations; and,
- (D) Design and implement regulations and mitigation standards in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property.

(iii) Administrative provisions.

(A) Statement of applicability.

The Shoreline Management Act's provisions are intended to provide for the management of all development and uses within its jurisdiction, whether or not a shoreline permit is required. Many activities that may not require a substantial development permit, such as clearing vegetation or construction of a residential bulkhead, can, individually or cumulatively, adversely impact adjacent properties and natural resources, including those held in public trust. Local governments have the authority and responsibility to enforce master program regulations on all uses and development in the shoreline area. There has been, historically, some public confusion regarding the Shoreline Management Act's applicability in this regard. Therefore, all master programs shall include the following statement:

"All proposed uses and development occurring within shoreline jurisdiction must conform to chapter 90.58 RCW, the Shoreline Management Act, and this master program."

In addition to the requirements of the SMA, permit review, implementation, and enforcement procedures affecting private property must be conducted in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property. Administrative procedures should include provisions insuring that these requirements and limitations are considered and followed in all such

decisions.

While the master program is a comprehensive use regulation applicable to all land and water areas within the jurisdiction described in the act, its effect is generally on future development and changes in land use. Local government may find it necessary to regulate existing uses to avoid severe harm to public health and safety or the environment and in doing so should be cognizant of constitutional and other legal limitations on the regulation of private property. In some circumstances existing uses and properties may become non-conforming with regard to the regulations and master programs should include provisions to address these situations in a manner consistent with achievement of the policy of the act and consistent with constitutional and other legal limitations.

(B) Conditional use and variance provisions.

RCW 90.58.100(5) states:

Each master program shall contain provisions to allow for the varying of the application of use regulations of the program, including provisions for permits for conditional uses and variances, to insure that strict implementation of a program will not create unnecessary hardships or thwart the policy enumerated in RCW 90.58.020. Any such varying shall be allowed only if extraordinary circumstances are shown and the public interest suffers no substantial detrimental effect. The concept of this subsection shall be incorporated in the rules adopted by the department relating to the establishment of a permit system as provided in RCW 90.58.140(3).

All master programs shall include standards for reviewing conditional use permits and variances which conform to chapter 173-27 WAC.

(C) Administrative permit review and enforcement procedures.

RCW 90.58.140(3) states:

The local government shall establish a program, consistent with rules adopted by the department, for the administration and enforcement of the permit system provided in this section. The administration of the system so established shall be performed exclusively by the local government.

Local governments may include administrative, enforcement, and permit review procedures in the master program or the procedures may be defined by a local government ordinance separate from the master program. In either case, these procedures shall conform to the Shoreline Management Act, specifically RCW 90.58.140, 143, 210 and 220 and to chapter 173-27 WAC.

Adopting review and enforcement procedures separate from the master program allows local governments to more expeditiously revise their shoreline permit review procedures and to integrate them with other permit processing activities.

(D) Documentation of project review actions and changing conditions in shoreline areas.

Master programs or other local permit review ordinances addressing shoreline project review shall include a mechanism for documenting all project review actions in shoreline areas. Local governments shall also identify a process for periodically evaluating the cumulative effects of authorized development on shoreline conditions. This process could involve a joint effort by local governments, state resource agencies, affected Indian tribes, and other parties.

(b) Including other documents in a master program by reference.

Shoreline master program provisions sometimes address similar issues as other comprehensive plan elements and development regulations, such as the zoning code and critical area ordinance. For the purposes of completeness and consistency, local governments may include other locally adopted policies and regulations within their master programs. For example, a local government may include its critical area ordinance in the master program to provide for compliance with the requirements of RCW 90.58.090(4), provided the critical area ordinance is also consistent with this chapter. This can ensure that local master programs are consistent with other regulations.

Shoreline master programs may include other policies and regulations by referencing a specific, dated edition. When including referenced regulations within a master program, local governments shall ensure that the public has an opportunity to participate in the formulation of the regulations or in their incorporation into the master program, as called for in WAC 173-26-201(3)(b)(i). In the approval process the department will review the referenced development regulation sections as part of the master program. A copy of the referenced regulations shall be submitted to the department with the proposed master program or amendment. If the development regulation is amended, the edition referenced within the master program will still be the operative regulation in the master program. Changing the referenced regulations in the master program to the new edition will require a master program amendment.

(c) Incorporating master program provisions into other plans and regulations.

Local governments may integrate master program policies and regulations into their comprehensive plan policies and implementing development regulations rather than preparing a discrete master program in a single document. Master program provisions that are integrated into such plans and development regulations shall be clearly identified so that the department can review these provisions for approval and evaluate development proposals for compliance. RCW 90.58.120 requires that all adopted regulations, designations, and master programs be available for public inspection at the department or the applicable county or city. Local governments shall identify all documents which contain master program provisions and which provisions constitute part of the master program. Clear identification of master program provisions is also necessary so that interested persons and entities may be

involved in master program preparation and amendment, as called for in RCW 90.58.130.

Local governments integrating all or portions of their master program provisions into other plans and regulations shall submit to the department a listing and copies of all provisions that constitute the master program. The master program shall also be sufficiently complete and defined to provide:

- (i) Clear directions to applicants applying for shoreline permits and exemptions; and
- (ii) Clear evaluation criteria and standards to the local governments, the department, other agencies, and the public for reviewing permit applications with respect to state and local shoreline management provisions.

(d) Multi-jurisdictional master program.

Two or more adjacent local governments are encouraged to jointly prepare master programs. Jointly proposed master programs may offer opportunities to effectively and efficiently manage natural resources, such as drift cells or watersheds, that cross jurisdictional boundaries. Local governments jointly preparing master programs shall provide the opportunity for public participation locally in each jurisdiction, as called for in WAC 173-26-201(3)(b), and submit the multi-jurisdictional master program to the department for approval.

WAC 173-26-201 Comprehensive process to prepare or amend shoreline master programs.

(1) Applicability.

This section outlines a comprehensive process to prepare or amend a shoreline master program. Local governments shall incorporate the steps indicated if one or more of the following criteria apply:

- (a) The master program amendments being considered represent a significant modification to shoreline management practices within the local jurisdiction, they modify more than one environment designation boundary, or significantly add, change or delete use regulations;
- (b) Physical shoreline conditions have changed significantly, such as substantial changes in shoreline use or priority habitat integrity, since the last comprehensive master program amendment;
- (c) The master program amendments being considered contain provisions that will affect a substantial portion of the local government's shoreline areas;
- (d) There are substantive issues that must be addressed on a comprehensive basis. This may include issues such as salmon recovery, major use conflicts or public access;
- (e) The current master program and the comprehensive plan are not mutually consistent;
- (f) There has been no previous comprehensive master program amendment since the original master program adoption; or
- (g) Monitoring and adaptive management indicate that changes are necessary to avoid loss of ecological functions.

Other revisions that do not meet the above criteria may be made without undertaking this comprehensive process provided that the process conforms to the requirements of WAC 173-26-030 to 160.

All master program amendments are subject to approval by the department as provided in RCW 90.58.090(3) and (4).

(2) Basic concepts.

(a) Use of scientific and technical information.

To satisfy the requirements for the use of scientific and technical information in RCW 90.58.100(1), local governments shall incorporate the following two steps into their master program development and amendment process.

First, identify and assemble the most current, accurate, and complete scientific and technical information available that is applicable to the issues of concern. The context, scope, magnitude, significance, and potential limitations of the scientific

information should be considered. At a minimum, make use of and, where applicable, incorporate all available scientific information, aerial photography, inventory data, technical assistance materials, manuals and services from reliable sources of science. Local governments should also contact relevant state agencies, universities, affected Indian tribes, port districts and private parties for available information. While adequate scientific information and methodology necessary for development of a master program should be available, if any person, including local government chooses to initiate scientific research with the expectation that it will be used as a basis for master program provisions, that research shall use accepted scientific methods, research procedures and review protocols. Local governments are encouraged to work interactively with neighboring jurisdictions, state resource agencies, affected Indian tribes, and other local government entities such as port districts to address technical issues beyond the scope of existing information resources or locally initiated research.

Local governments should consult the technical assistance materials produced by the department. When relevant information is available and unless there is more current or specific information available, those technical assistance materials shall constitute an element of scientific and technical information as defined in these guidelines and the use of which is required by the Act.

Second, base master program provisions on an analysis incorporating the most current, accurate, and complete scientific or technical information available. Local governments should be prepared to identify the following:

- (i) Scientific information and management recommendations on which the master program provisions are based;
- (ii) Assumptions made concerning, and data gaps in, the scientific information; and
- (iii) Risks to ecological functions associated with master program provisions. Address potential risks as described in WAC 173-26-201(3)(d).

The requirement to use scientific and technical information in these guidelines does not limit a local jurisdiction's authority to solicit and incorporate information, experience, and anecdotal evidence provided by interested parties as part of the master program amendment process. Such information should be solicited through the public participation process described in WAC 173-26-201(3)(b). Where information collected by or provided to local governments conflicts or is inconsistent, the local government shall base master program provisions on a reasoned, objective evaluation of the relative merits of the conflicting data.

(b) Adaptation of Policies and Regulations.

Effective shoreline management requires the evaluation of changing conditions and the modification of policies and regulations to address identified trends and new information. Local governments should monitor actions taken to implement the master program and shoreline conditions to facilitate appropriate updates of master program provisions to improve shoreline management over time. In reviewing proposals to amend master programs, the department shall evaluate

whether the change promotes achievement of the policies of the master program and the Act. As provided in WAC 173-26-171(3)(d), Ecology will, periodically review these guidelines, based in part on information provided by local government, and through that process local government will receive additional guidance on significant shoreline management issues that may require amendments to master programs.

(c) Protection of ecological functions of the shorelines.

This chapter implements the Act's policy on protection of shoreline natural resources through protection and restoration of ecological functions necessary to sustain these natural resources. The concept of ecological functions recognizes that any ecological system is composed of a wide variety of interacting physical, chemical and biological components, that are interdependent in varying degrees and scales, and that produce the landscape and habitats as they exist at any time. Ecological functions are the work performed or role played individually or collectively within ecosystems by these components.

As established in WAC 173-26-186(8) these guidelines are designed to assure, at minimum, no net loss of ecological functions necessary to sustain shoreline natural resources and to plan for restoration of ecological functions where they have been impaired. Managing shorelines for protection of their natural resources depends on sustaining the functions provided by:

- Ecosystem-wide processes such as those associated with the flow and movement of water, sediment and organic materials; the presence and movement of fish and wildlife and the maintenance of water quality.
- Individual components and localized processes such as those associated with shoreline vegetation, soils, water movement through the soil and across the land surface and the composition and configuration of the beds and banks of water bodies.

The loss or degradation of the functions associated with ecosystem-wide processes, individual components and localized processes can significantly impact shoreline natural resources and may also adversely impact human health and safety. Shoreline master programs shall address ecological functions associated with applicable ecosystem-wide processes, individual components and localized processes identified in the ecological systems analysis described in WAC 173-26-201(3)(d)(i).

Nearly all shoreline areas, even substantially developed or degraded areas, retain important ecological functions. For example, an intensely developed harbor area may also serve as a fish migration corridor and feeding area critical to species survival. Also, ecosystems are interconnected. For example, the life cycle of anadromous fish depends upon the viability of freshwater, marine, and terrestrial shoreline ecosystems, and many wildlife species associated with the shoreline depend on the health of both terrestrial and aquatic environments. Therefore, the policies for protecting and restoring ecological functions generally apply to all shoreline areas, not just those that remain relatively unaltered.

Master programs shall contain policies and regulations that assure at minimum, no net

loss of ecological functions necessary to sustain shoreline natural resources. To achieve this standard while accommodating appropriate and necessary shoreline uses and development, master programs should establish and apply:

- Environment designations with appropriate use and development standards, and
- Provisions to address the impacts of specific common shoreline uses, development activities and modification actions, and
- Provisions for the protection of critical areas within the shoreline, and
- Provisions for mitigation measures and methods to address unanticipated impacts.

When based on the inventory and analysis requirements and completed consistent with the specific provisions of these guidelines, the master program should ensure that development will be protective of ecological functions necessary to sustain existing shoreline natural resources and meet the standard. The concept of “net” as used herein, recognizes that any development has potential or actual, short term or long term impacts and that through application of appropriate development standards and employment of mitigation measures in accordance with the mitigation sequence, those impacts will be addressed in a manner necessary to assure that the end result will not diminish the shoreline resources and values as they currently exist. Where uses or development that impact ecological functions are necessary to achieve other objectives of RCW 90.58.020, master program provisions shall, to the greatest extent feasible, protect existing ecological functions and avoid new impacts to habitat and ecological functions before implementing other measures designed to achieve no net loss of ecological functions.

Master Programs shall also include policies that promote restoration of ecological functions, as provided in WAC 173-26-201(2)(f), where such functions are found to have been impaired based on analysis described in WAC 173-26-201(3)(d)(i). It is intended that local government, through the master program, along with other regulatory and non-regulatory programs contribute to restoration by planning for and fostering restoration and that such restoration occur through a combination of public and private programs and actions. Local government should identify restoration opportunities through the shoreline inventory process and authorize, coordinate and facilitate appropriate publicly and privately initiated restoration projects within their Master Programs. The goal of this effort is master programs which include planning elements that, when implemented, serve to improve the overall condition of habitat and resources within the shoreline area of each city and county.

(d) Preferred uses.

As summarized in WAC 173-26-176 the Act establishes policy that preference be given to uses that are unique to or dependent upon a shoreline location. Consistent with this policy, these guidelines use the terms "water-dependent," "water-related," and "water-enjoyment," as defined in WAC 173-26-020, when discussing appropriate uses for various shoreline areas.

Shoreline areas, being a limited ecological and economic resource, are the setting for competing uses and ecological protection and restoration activities. Consistent with

RCW 90.58.020 and WAC 173-26-171 through 186 local governments shall, when determining allowable uses and resolving use conflicts on shorelines within their jurisdiction, apply the following preferences and priorities in the order listed below, starting with (i) of this subsection. For shorelines of statewide significance, also apply the preferences as indicated in WAC 173-26-251(2).

- (i) Reserve appropriate areas for protecting and restoring ecological functions to control pollution and prevent damage to the natural environment and public health.
- (ii) Reserve shoreline areas for water-dependent and associated water related uses. Harbor areas, established pursuant to Article XV of the State Constitution, and other areas that have reasonable commercial navigational accessibility and necessary support facilities such as transportation and utilities should be reserved for water-dependent and water-related uses that are associated with commercial navigation unless the local governments can demonstrate that adequate shoreline is reserved for future water-dependent and water-related uses and unless protection of the existing natural resource values of such areas preclude such uses. Local governments may prepare master program provisions to allow mixed-use developments that include and support water-dependent uses and address specific conditions that affect water-dependent uses.
- (iii) Reserve shoreline areas for other water-related and water-enjoyment uses that are compatible with ecological protection and restoration objectives.
- (iv) Locate single-family residential uses where they are appropriate and can be developed without significant impact to ecological functions or displacement of water-dependent uses.
- (v) Limit non-water-oriented uses to those locations where the above described uses are inappropriate or where non-water-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.

Evaluation pursuant to the above criteria, local economic and land use conditions, and policies and regulations that assure protection of shoreline resources, may result in determination that other uses are considered as necessary or appropriate and may be accommodated provided that the preferred uses are reasonably provided for in the jurisdiction.

(e) Environmental impact mitigation.

- (i) To assure no net loss of shoreline ecological functions, master programs shall include provisions that require proposed individual uses and developments to analyze environmental impacts of the proposal and include measures to mitigate environmental impacts not otherwise avoided or mitigated by compliance with the master program and other applicable regulations. To the extent Washington's State Environmental Policy Act of 1971 (SEPA), chapter 43.21C RCW, is applicable, the analysis of such environmental impacts shall be conducted consistent with the rules

implementing SEPA, which also address environmental impact mitigation in WAC 197-11-660 and define mitigation in WAC 197-11-768. Master programs shall indicate that, where required, mitigation measures shall be applied in the following sequence of steps listed in order of priority, with (a) of this subsection being top priority.

- (A) Avoiding the impact altogether by not taking a certain action or parts of an action;
 - (B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
 - (C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - (D) Reducing or eliminating the impact over time by preservation and maintenance operations;
 - (E) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
 - (F) Monitoring the impact and the compensation projects and taking appropriate corrective measures.
- (ii) In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

Consistent with the WAC 173-26-186 (5) and (8), master programs shall also provide direction with regard to mitigation for the impact of the development so that:

A) Application of the mitigation sequence achieves no net loss of ecological functions for each new development and does not result in required mitigation in excess of that necessary to assure that development will result in no net loss of shoreline ecological functions and not have a significant adverse impact on other shoreline functions fostered by the policy of the act.

(B) When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed that address limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact may be authorized. Authorization of compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.

(f) Shoreline Restoration Planning

Consistent with principle WAC 173-26-186(8)(c), master programs shall include goals, policies and actions for restoration of impaired shoreline ecological functions. These master program provisions should be designed to achieve overall improvements in shoreline ecological functions over time, when compared to the status upon adoption of the master program. The approach to restoration planning may vary significantly among local jurisdictions, depending on:

- The size of the jurisdiction;
- The extent and condition of shorelines in the jurisdiction;
- The availability of grants, volunteer programs or other tools for restoration; and,
- The nature of the ecological functions to be addressed by restoration planning.

Master program restoration plans shall consider and address the following subjects:

- (i) Identify degraded areas, impaired ecological functions, and sites with potential for ecological restoration;
- (ii) Establish overall goals and priorities for restoration of degraded areas and impaired ecological functions;
- (iii) Identify existing and ongoing projects and programs that are currently being implemented, or are reasonably assured of being implemented (based on an evaluation of funding likely in the foreseeable future), which are designed to contribute to local restoration goals;
- (iv) Identify additional projects and programs needed to achieve local restoration goals, and implementation strategies including identifying prospective funding sources for those projects and programs;
- (v) Identify timelines and benchmarks for implementing restoration projects and programs and achieving local restoration goals;
- (vi) Provide for mechanisms or strategies to ensure that restoration projects and programs will be implemented according to plans and to appropriately review the effectiveness of the projects and programs in meeting the overall restoration goals.;

(3) Steps in preparing and amending a master program.

(a) Process overview.

This section provides a generalized process to prepare or comprehensively amend a shoreline master program. Local governments may modify the timing of the various steps, integrate the process into other planning activities, add steps to the process, or work jointly with other jurisdictions or regional efforts, provided the provisions of this chapter are met.

The department will provide a shoreline master program amendment checklist to help local governments identify issues to address. The checklist will not create new or additional requirements beyond the provisions of this chapter. The checklist is intended to aid the preparation and review of master program amendments. Local governments shall submit the completed checklist with the proposed master program amendments.

(b) Participation process.

(i) Participation Requirements

Local government shall comply with the provisions of RCW 90.58.130 which

states:

To insure that all persons and entities having an interest in the guidelines and master programs developed under this chapter are provided with a full opportunity for involvement in both their development and implementation, the department and local governments shall:

(1) Make reasonable efforts to inform the people of the state about the shoreline management program of this chapter and in the performance of the responsibilities provided in this chapter, shall not only invite but actively encourage participation by all persons and private groups and entities showing an interest in shoreline management programs of this chapter; and

(2) Invite and encourage participation by all agencies of federal, state, and local government, including municipal and public corporations, having interests or responsibilities relating to the shorelines of the state. State and local agencies are directed to participate fully to insure that their interests are fully considered by the department and local governments.

Additionally, the provisions of WAC 173-26-100 apply and include provisions to assure proper public participation and, for local governments planning under the Growth Management Act, the provisions of RCW 36.70A.140 also apply.

At a minimum, all local governments shall be prepared to describe and document their methods to ensure that all interested parties have a meaningful opportunity to participate.

(ii) Communication with state agencies .

Before undertaking substantial work, local governments shall notify applicable state agencies to identify state interests, relevant regional and statewide efforts, available information, and methods for coordination and input. Contact the department for a list of applicable agencies to be notified.

(iii) Communication with affected Indian tribes.

Prior to undertaking substantial work, local governments shall notify affected Indian tribes to identify tribal interests, relevant tribal efforts, available information and methods for coordination and input. Contact the individual tribes or coordinating bodies such as the Northwest Indian Fisheries Commission, for a list of affected Indian tribes to be notified.

(c) Inventory shoreline conditions.

Gather and incorporate all pertinent and available information, existing inventory data and materials from state agencies, affected Indian tribes, watershed management planning, port districts and other appropriate sources. Ensure that, whenever possible, inventory methods and protocols are consistent with those of neighboring jurisdictions and state efforts. The department will provide, to the extent possible, services and resources for inventory work. Contact the department to determine information sources and other relevant efforts. Map inventory information at an appropriate scale.

Local governments shall be prepared to demonstrate how the inventory information was used in preparing their local master program amendments.

Collection of additional inventory information is encouraged and should be coordinated with other watershed, regional, or statewide inventory and planning efforts in order to ensure consistent methods and data protocol as well as effective use of fiscal and human resources. Local governments should be prepared to demonstrate that they have coordinated with applicable inter-jurisdictional shoreline inventory and planning programs where they exist. Two or more local governments are encouraged to jointly conduct an inventory in order to increase the efficiency of data gathering and comprehensiveness of inventory information. Data from inter-jurisdictional, watershed, or regional inventories may be substituted for an inventory conducted by an individual jurisdiction, provided it meets the requirements of this section.

Local government shall, at a minimum, and to the extent such information is relevant and reasonably available, collect the following information:

- (i) Shoreline and adjacent land use patterns and transportation and utility facilities, including the extent of existing structures, impervious surfaces, vegetation and shoreline modifications in shoreline jurisdiction. Special attention should be paid to identification of water-oriented uses and related navigation, transportation and utility facilities.
- (ii) Critical areas, including wetlands, aquifer recharge areas, fish and wildlife conservation areas, geologically hazardous areas, and frequently flooded areas. See also WAC 173-26-221.
- (iii) Degraded areas and sites with potential for ecological restoration.
- (iv) Areas of special interest, such as priority habitats, developing or redeveloping harbors and waterfronts, previously identified toxic or hazardous material clean-up sites, dredged material disposal sites, or eroding shorelines, to be addressed through new master program provisions.
- (v) Conditions and regulations in shoreland and adjacent areas that affect shorelines, such as surface water management and land use regulations. This information may be useful in achieving mutual consistency between the master program and other development regulations.
- (vi) Existing and potential shoreline public access sites, including public rights-of-way and utility corridors.
- (vii) General location of channel migration zones, and flood plains.
- (viii) Gaps in existing information. During the initial inventory, local governments should identify what additional information may be necessary for more effective shoreline management.
- (ix) If the shoreline is rapidly developing or subject to substantial human changes such as clearing and grading, past and current records or historical aerial photographs may be necessary to identify cumulative impacts, such as bulkhead construction, intrusive development on priority habitats, and conversion of harbor areas to non-water oriented uses.

- (x) If archaeological or historic resources have been identified in shoreline jurisdiction, consult with the state historic preservation office and local affected Indian tribes regarding existing archaeological and historical information.

(d) Analyze shoreline issues of concern.

Before establishing specific master program provisions, local governments shall analyze the information gathered in (c) and as necessary to ensure effective shoreline management provisions, address the topics below, where applicable.

(i) Characterization of functions and ecosystem-wide processes.

(A) Prepare a characterization of shoreline ecosystems and their associated ecological functions. The characterization consists of three steps:

- (I) Identify the ecosystem-wide processes and ecological functions based on the list in (C) below that apply to the shoreline(s) of the jurisdiction.
 - (II) Assess the ecosystem-wide processes to determine their relationship to ecological functions present within the jurisdiction and identify which ecological functions are healthy, which have been significantly altered and/or adversely impacted and which functions may have previously existed and are missing based on the values identified in (D) below; and
 - (III) Identify specific measures necessary to protect and/or restore the ecological functions and ecosystem-wide processes.
- (B) The characterization of shoreline ecological systems may be achieved by using one or more of the approaches below:
- (I) If a regional environmental management plan, such as a watershed plan or coastal erosion study, is ongoing or has been completed, then conduct the characterization either within the framework of the regional plan or use the data provided in the regional plan. This methodology is intended to contribute to an in-depth and comprehensive assessment and characterization.
 - (II) If a regional environmental management plan has not been completed, use available scientific and technical information, including flood studies, habitat evaluations and studies, water quality studies, and data and information from environmental impact statements. This characterization of ecosystem-wide processes and the impact upon the functions of specific habitats and human health and safety objectives may be of a generalized nature.
 - (III) One or more local governments may pursue a characterization which includes a greater scope and complexity than listed in items (I) and (II) of this subsection.

(C) Shoreline ecological functions include, but are not limited to:

In rivers and streams and associated floodplains:

Hydrologic: Transport of water and sediment across the natural range of flow variability; attenuating flow energy; developing pools, riffles, gravel bars, recruitment and transport of large woody debris and other organic material and;

Shoreline Vegetation: maintaining temperature; removing excessive nutrients and toxic compound, sediment removal and, stabilization; attenuation of flow energy; and provision of large woody debris and other organic matter.

Hyporheic functions: removing excessive nutrients and toxic compound, water storage, support of vegetation, and sediment storage and maintenance of base flows.

Habitat for native aquatic and shoreline-dependent birds, invertebrates, mammals; amphibians; and anadromous and resident native fish: Habitat functions may include but are not limited to; space or conditions for reproduction; resting, hiding and migration; and food production and delivery.

In lakes:

Hydrologic: Storing water and sediment, attenuating wave energy, removing excessive nutrients and toxic compounds, recruitment of large woody debris and other organic material.

Shoreline Vegetation: maintaining temperature; removing excessive nutrients and toxic compound, attenuating wave energy, sediment removal and stabilization; and providing woody debris and other organic matter.

Hyporheic functions: removing excessive nutrients and toxic compound, water storage, support of vegetation, and sediment storage and maintenance of base flows.

Habitat for aquatic and shoreline-dependent birds, invertebrates, mammals; amphibians; and anadromous and resident native fish: Habitat functions may include but are not limited to; space or conditions for reproduction, resting, hiding and migration; and food production and delivery.

In marine waters:

Hydrologic: Transporting and stabilizing sediment, attenuating wave and tidal energy, removing excessive nutrients and toxic compounds; recruitment, redistribution and reduction of woody debris and other organic material.

Vegetation: maintaining temperature; removing excessive nutrients and toxic compound, attenuating wave energy, sediment removal and,

stabilization; and providing woody debris and other organic matter.

Habitat for aquatic and shoreline-dependent birds, invertebrates, mammals; amphibians; and anadromous and resident native fish: Habitat functions may include but are not limited to; space or conditions for reproduction, resting, hiding and migration; and food production and delivery.

Wetlands:

Hydrological: Storing water and sediment, attenuating wave energy, removing excessive nutrients and toxic compounds, recruiting woody debris and other organic material.

Vegetation: maintaining temperature; removing excessive nutrients and toxic compound, attenuating wave energy, removing and stabilizing sediment; and providing woody debris and other organic matter.

Hyporheic functions: removing excessive nutrients and toxic compound, storing water and maintaining base flows, storing sediment and support of vegetation.

Habitat for aquatic and shoreline-dependent birds, invertebrates, mammals; amphibians; and anadromous and resident native fish: Habitat functions may include but are not limited to; space or conditions for reproduction, resting, hiding and migration; and food production and delivery.

(D) The overall condition of habitat and shoreline resources are determined by the following ecosystem wide processes and ecological functions:

The distribution, diversity, and complexity of the watersheds, marine environments, and landscape-scale features that form the aquatic systems to which species, populations, and communities are uniquely adapted.

The spatial and temporal connectivity within and between watersheds and along marine shorelines. Drainage network connections include flood plains, wetlands, upslope areas, headwater tributaries, and naturally functioning routes to areas critical for fulfilling life history requirements of aquatic and riverine-dependent species.

The shorelines, beaches, banks, marine near-shore habitats, and bottom configurations that provide the physical framework of the aquatic system.

The timing, volume, and distribution of woody debris recruitment in rivers, streams and marine habitat areas.

The water quality necessary to maintain the biological, physical, and chemical integrity of the system and support survival, growth, reproduction, and migration of individuals composing aquatic and

riverine communities.

The sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.

The range of flow variability sufficient to create and sustain fluvial, aquatic, and wetland habitats, the patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows, and duration of flood plain inundation and water table elevation in meadows and wetlands.

The species composition and structural diversity of plant communities in river and stream areas and wetlands that provides summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of woody debris sufficient to sustain physical complexity and stability.

(E) Local governments should use the characterization and analysis called for in this section to prepare master program policies and regulations designed to achieve no net loss of ecological functions necessary to support shoreline resources and to plan for the restoration of the ecosystem-wide processes and individual ecological functions on a comprehensive basis over time.

(ii) Shoreline use analysis and priorities.

Conduct an analysis to estimate the future demand for shoreline space and potential use conflicts. Characterize current shoreline use patterns and projected trends to ensure appropriate uses consistent with chapter 90.58 RCW and WAC 173-26-201(2)(d) and 173-26-211(5).

If the jurisdiction includes a designated harbor area or urban waterfront with intensive uses or significant development or redevelopment issues, work with the Washington state department of natural resources and port authorities to ensure consistency with harbor area statutes and regulations, and to address port plans. Identify measures and strategies to encourage appropriate use of these shoreline areas in accordance with the use priorities of chapter 90.58 RCW and WAC 173-26-201(2)(d) while pursuing opportunities for ecological restoration.

(iii) Addressing Cumulative Impacts In Developing Master Programs

The principles that regulation of development shall achieve no net loss of ecological function requires that master program policies and regulations address the cumulative impacts on shoreline ecological functions that would result from future shoreline development and uses that are reasonably foreseeable from proposed master programs. To comply with the general obligation to assure no net loss of shoreline ecological function, the process of developing the policies and regulations of a shoreline master program requires

assessment of how proposed policies and regulations cause and avoid such cumulative impacts.

Evaluating and addressing cumulative impacts shall be consistent with the guiding principle in WAC 173-26-186(8)(d). An appropriate evaluation of cumulative impacts on ecological functions will consider the factors identified in WAC 173-26-186(8)(d)(i) thru (iii) and the effect on the ecological functions of the shoreline that are caused by unregulated activities, development exempt from permitting, effects such as the incremental impact of residential bulkheads, residential piers, or runoff from newly developed properties. Accordingly, particular attention should be paid to policies and regulations that address platting or subdividing of property, laying of utilities, and mapping of streets that establish a pattern for future development that is to be regulated by the master program.

There are practical limits when evaluating impacts that are prospective and sometimes indirect. Local government should rely on the assistance of state agencies and appropriate parties using evaluation, measurement, estimation, or quantification of impact consistent with the guidance of RCW 90.58.100(1) and WAC 173-26-201(2)(a). Policies and regulations of a master program are not inconsistent with these guidelines for failing to address cumulative impacts where a purported impact is not susceptible to being addressed using an approach consistent with RCW 90.58.100(1).

Complying with the above guidelines is the way that master program policies and regulations should be developed to assure that the commonly occurring and foreseeable cumulative impacts do not cause a net loss of ecological functions of the shoreline. For such commonly occurring and planned development, policies and regulations should be designed without reliance on an individualized cumulative impacts analysis. Local government shall fairly allocate the burden of addressing cumulative impacts.

For development projects that may have un-anticipatable or uncommon impacts that cannot be reasonably identified at the time of master program development, the master program policies and regulations should use the permitting or conditional use permitting processes to ensure that all impacts are addressed and that there is no net loss of ecological function of the shoreline after mitigation.

Similarly, Local government shall consider and address cumulative impacts on other functions and uses of the shoreline that are consistent with the Act. For example, a cumulative impact of allowing development of docks or piers could be interference with navigation on a water body.

(iv) Shorelines of statewide significance.

If the area contains shorelines of statewide significance, undertake the steps outlined in WAC 173-26-251.

(v) Public access.

Identify public access needs and opportunities within the jurisdiction and explore actions to enhance shoreline recreation facilities, as described in WAC 173-26-221(4).

(vi) Enforcement and coordination with other regulatory programs.

Local governments planning under the Growth Management Act shall review their comprehensive plan policies and development regulations to ensure mutual consistency. In order to effectively administer and enforce master program provisions, local governments should also review their current permit review and inspection practices to identify ways to increase efficiency and effectiveness and to ensure consistency.

(vii) Water quality and quantity.

Identify water quality and quantity issues relevant to master program provisions, including those that affect human health and safety. At a minimum, consult with appropriate federal, state, tribal, and local agencies.

(viii) Vegetation conservation.

Identify how existing shoreline vegetation provides ecological functions and determine methods to ensure protection of those functions. Identify important ecological functions that have been degraded through loss of vegetation. Consider the amount of vegetated shoreline area necessary to achieve ecological objectives. While there may be less vegetation remaining in urbanized areas than in rural areas, the importance of this vegetation, in terms of the ecological functions it provides, is often as great or even greater than in rural areas due to its scarcity. Identify measures to ensure that new development meets vegetation conservation objectives.

(ix) Special area planning.

Some shoreline sites or areas require more focused attention than is possible in the overall master program development process due to complex shoreline ecological issues, changing uses, or other unique features or issues. In these circumstances, the local government is encouraged to undertake special area planning. Special area planning also may be used to address: Public access, vegetation conservation, shoreline use compatibility, port development master planning, ecological restoration, or other issues best addressed on a comprehensive basis.

The resultant plans may serve as the basis for facilitating state and local government coordination and permit review. Special area planning shall provide for public and affected Indian tribe participation and compliance with all applicable provisions of the Act and WAC 173-26-090 to 120.

(e) Establish shoreline policies.

Address all of the elements listed in RCW 90.58.100(2) and all applicable provisions of these guidelines in policies. These policies should be reviewed for mutual consistency with the comprehensive plan policies. If there are shorelines of statewide significance, ensure that the other comprehensive plan policies affecting shoreline jurisdiction are consistent with the objectives of RCW 90.58.020 and 90.58.090(4).

(f) Establish environment designations.

Establish environment designations and identify permitted uses and development standards for each environment designation.

Based on the inventory in (c) of this subsection and the analysis in (d) of this subsection, assign each shoreline segment an environment designation.

Prepare specific environment designation policies and regulations.

Review the environment designations for mutual consistency with comprehensive plan land use designations as indicated in WAC 173-26-211(3).

In determining the boundaries and classifications of environment designations, adhere to the criteria in WAC 173-26-211(5).

(g) Prepare other shoreline regulations.

Prepare other shoreline regulations based on the policies and the analyses described in this section as necessary to assure consistency with the guidelines of this chapter. The level of detail of inventory information and planning analysis will be a consideration in setting shoreline regulations. As a general rule, the less known about existing resources, the more protective shoreline master program provisions should be to avoid unanticipated impacts to shoreline resources. If there is a question about the extent or condition of an existing ecological resource, then the master program provisions shall be sufficient to reasonably assure that the resource is protected in a manner consistent with the policies of these guidelines. Local governments may accomplish this by including master program requirements for an on-site inventory at the time of project application and performance standard that assure appropriate protection.

(h) Submit for review and approval.

Local governments are encouraged to work with department personnel during preparation of the master program and to submit draft master program provisions to the department for informal advice and guidance prior to formal submittal.

Local governments shall submit the completed checklist, as described in WAC 173-26-201(3)(a), with their master program amendments proposed for adoption. Master program review and formal adoption procedures are described in Parts I and II of this chapter.

- (c) To facilitate consistency with land use planning, local governments planning under chapter 36.70A RCW are encouraged to illustrate shoreline designations on the comprehensive plan Future Land Use Map as described in WAC 365-195-300 (2)(d).
- (d) Pursuant to RCW 90.58.040, the map should clearly illustrate what environment designations apply to all shorelines of the state as defined in RCW 90.58.030(2)(c) within the local government's jurisdiction in a manner consistent with WAC 173-26-211(4) and (5).
- (e) The map and the master program should note that all areas within shoreline jurisdiction that are not mapped and/or designated are automatically assigned a "rural conservancy" designation, or "urban conservancy" designation if within a municipality or urban growth area, or the comparable environment designation of the applicable master program until the shoreline can be re-designated through a master program amendment.
- (f) The following diagram summarizes the components of the environment designation provisions.

(3) Consistency between shoreline environment designations and the local comprehensive plan.

As noted in WAC 173-26-191(1)(e), RCW 90.58.340 requires that policies for lands adjacent to the shorelines be consistent with the Shoreline Management Act, implementing rules, and the applicable master program. Conversely, local comprehensive plans constitute the underlying framework within which master program provisions should fit. The Growth Management Act, where applicable, designates shoreline master program policies as an element of the comprehensive plan and requires that all elements be internally consistent. Chapter 36.70A RCW also requires development regulations to be consistent with the comprehensive plan.

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 non-water-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.

(4) General Environment Designation Provisions.

(a) Requirements

For each environment designation, the shoreline master program shall describe:

(i) Purpose statement.

The statement of purpose shall describe the shoreline management objectives of the designation in a manner that distinguishes it from other designations.

(ii) Classification criteria.

Clearly stated criteria shall provide the basis for classifying or reclassifying a specific shoreline area with an environment designation.

(iii) Management policies.

These policies shall be in sufficient detail to assist in the interpretation of the environment designation regulations and, for jurisdictions planning under chapter 36.70A RCW, to evaluate consistency with the local comprehensive plan.

(iv) Regulations.

Environment-specific regulations shall address the following where necessary to account for different shoreline conditions:

- (A) Types of shoreline uses permitted, conditionally permitted, and prohibited;
- (B) Building or structure height and bulk limits, setbacks, maximum density or minimum frontage requirements, and site development standards; and
- (C) Other topics not covered in general use regulations that are necessary to assure implementation of the purpose of the environment designation.

(b) The recommended classification system.

The recommended classification system consists of six basic environments:

"High-intensity," "shoreline residential," "urban conservancy," "rural conservancy," "natural," and "aquatic" as described in this section and WAC 173-26-211(5). Local governments should assign all shoreline areas an environment designation consistent with the corresponding designation criteria provided for each environment. In delineating environment designations local government should assure that existing shoreline ecological functions are protected with the proposed pattern and intensity of development. Such designations should also be consistent with policies for restoration of degraded shorelines.

(c) Alternative systems

(i) Local governments may establish a different designation system or may retain their current environment designations, provided it is consistent with the purposes and policies of this section and WAC 173-26-211(5).

(ii) Local governments may use "parallel environments" where appropriate. Parallel environments divide shorelands into different sections generally running parallel to the shoreline or along a physical feature such as a bluff or railroad right of way. Such environments may be useful, for example, to accommodate resource protection near the shoreline and existing development further from the shoreline. Where parallel environments are used, developments and uses allowed in one environment should not be inconsistent with the achieving the purposes of the other.

(5) The Designations

(a) "Natural" environment.

(i) 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 should include planning for restoration of degraded shorelines within this environment.

(ii) Management policies.

(A) Any use that would substantially degrade the ecological functions or natural character of the shoreline area should not be allowed.

(B) The following new uses should not be allowed in the "natural" environment:

- Commercial uses.
- Industrial uses.
- Nonwater-oriented recreation.
- Roads, utility corridors, and parking areas that can be located outside

of "natural"-designated shorelines.

- (C) Single family residential development may be allowed as a conditional use within the "natural" environment 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.
- (D) Commercial forestry may be allowed as a conditional use in the "natural" environment provided it meets the conditions of the State Forest Practices Act and its implementing rules and is conducted in a manner consistent with the purpose of this environment designation.
- (E) Agricultural uses of a very low intensity nature may be consistent with the Natural Environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.
- (F) Scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational access uses may be allowed provided that no significant ecological impact on the area will result.
- (G) New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed. Do not allow the subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions. That is, each new parcel must be able to support its intended development without significant ecological impacts to the shoreline ecological functions.

(iii) 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 low very 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.

(b) "Rural conservancy" environment.

(i) Purpose.

The purpose of the "rural conservancy" environment is to protect ecological functions, conserve existing natural resources and valuable historic and cultural areas in order to provide for sustained resource use, achieve natural flood plain processes, and provide recreational opportunities. Examples of uses that are appropriate in a "rural conservancy" environment include low-impact outdoor recreation uses, timber harvesting on a sustained-yield basis, agricultural uses, aquaculture, low-intensity residential development and other natural resource based low-intensity uses.

(ii) Management policies.

(A) Uses in the "rural conservancy" environment should be limited to those which sustain the shoreline area's physical and biological resources and uses of a nonpermanent nature that do not substantially degrade ecological functions or the rural or natural character of the shoreline area.

Except as noted, commercial and industrial uses should not be allowed. Agriculture, commercial forestry, and aquaculture when consistent with provisions of this chapter may be allowed. Low intensity, water-oriented commercial and industrial uses may be permitted in the

limited instances where those uses have located in the past or at unique sites in rural communities that possess shoreline conditions and services to support the development.

Water-dependent and water-enjoyment recreation facilities that do not deplete the resource over time, such as boating facilities, angling, hunting, wildlife viewing trails, and swimming beaches, are preferred uses, provided significant adverse impacts to the shoreline are mitigated.

Mining is a unique use as a result of its inherent linkage to geology. Therefore, mining and related activities may be an appropriate use within the rural conservancy environment when conducted in a manner consistent with the environment policies and the provisions of WAC 173-26-241(h) and when located consistent with mineral resource lands designation criteria pursuant to RCW 36.70A.170 and WAC 365-190-070.

- (B) Developments and uses that would substantially degrade or permanently deplete the biological resources of the area should not be allowed.
- (C) Construction of new structural shoreline stabilization and flood control works should only be allowed where there is a documented need to protect an existing structure or ecological functions and mitigation is applied, consistent with WAC 173-26-231. New development should be designed and located to preclude the need for such work.
- (D) Residential development standards shall ensure no net loss of shoreline ecological functions and should preserve the existing character of the shoreline consistent with the purpose of the environment. As a general matter, meeting this provision will require density, lot coverage, vegetation conservation and other provisions.

Scientific studies support density or lot coverage limitation standards that assure that development will be limited to a maximum of ten percent total impervious surface area within the lot or parcel, will maintain the existing hydrologic character of the shoreline. However an alternative standard developed based on scientific information that meets the provisions of this chapter and accomplishes the purpose of the environment designation may be used.

Master programs may allow greater lot coverage to allow development of lots legally created prior to the adoption of a master program prepared under these guidelines. In these instances, master programs shall include measures to assure protection of ecological functions to the extent feasible such as requiring that lot coverage is minimized and vegetation is conserved.

- (V) New shoreline stabilization, flood control measures, vegetation removal, and other shoreline modifications should be designed and managed consistent with these guidelines to ensure that the natural shoreline functions are protected. Such shoreline modification should not be

inconsistent with planning provisions for restoration of shoreline ecological functions.

(iii) Designation Criteria

Assign a "rural conservancy" environment designation to shoreline areas outside incorporated municipalities and outside urban growth areas, as defined by RCW 36.70A.110, if any of the following characteristics apply:

- (A) The shoreline is currently supporting lesser-intensity resource-based uses, such as agriculture, forestry, or recreational uses, or is designated agricultural or forest lands pursuant to RCW 36.70A.170;
- (B) The shoreline is currently accommodating residential uses outside urban growth areas and incorporated cities or towns;
- (C) The shoreline is supporting human uses but subject to environmental limitations, such as properties that include or are adjacent to steep banks, feeder bluffs, or flood plains or other flood-prone areas;
- (D) The shoreline is of high recreational value or with unique historic or cultural resources; or
- (E) The shoreline has low-intensity water-dependent uses.

Areas designated in a local comprehensive plan as "rural areas of more intense development," as provided for in chapter 36.70A RCW, may be designated an alternate shoreline environment, provided it is consistent with the objectives of the Growth Management Act and this chapter. "Master planned resorts" as described in RCW 36.70A.360 may be designated an alternate shoreline environment, provided the applicable master program provisions do not allow significant ecological impacts.

Lands that may otherwise qualify for designation as rural conservancy and which are designated as "mineral resource lands" pursuant to RCW 36.70A.170 and WAC 365-190-070 may be assigned a designation within the "rural conservancy" environment that allows mining and associated uses in addition to other uses consistent with the rural conservancy environment.

(c) "Aquatic" environment.

(i) 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.

(ii) Management policies.

- (A) Allow new over-water structures only for water-dependent uses, public

access, or ecological restoration.

- (B) The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
- (C) In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.
- (D) All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
- (E) Uses that adversely impact the ecological functions of critical saltwater and freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of ecological functions.
- (F) Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

(iii) Designation Criteria

Assign an "aquatic" environment designation to lands waterward of the ordinary high-water mark.

Local governments may designate submerged and intertidal lands with shoreland designations (e.g., "high-intensity" or "rural conservancy") if the management policies and objectives for aquatic areas are met. In this case, the designation system used must provide regulations for managing submerged and intertidal lands that are clear and consistent with the "aquatic" environment management policies in this chapter. Additionally, local governments may assign an "aquatic" environment designation to wetlands.

(d) "High-intensity" environment.

(i) Purpose.

The purpose of the "high-intensity" 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.

(ii) Management policies.

- (A) In regulating uses in the "high-intensity" environment, first priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. Non-water oriented

uses should not be allowed except as part of mixed use developments. Non-water oriented uses may also be allowed 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. Such specific situations should be identified in shoreline use analysis or special area planning, as described in WAC 173-26-200 (3)(d).

If an analysis of water-dependent use needs as described in WAC 173-26-201(3)(d)(ii) demonstrates the needs of existing and envisioned water-dependent uses for the planning period are met, then provisions allowing for a mix of water-dependent and non-water dependent uses may be established. If those shoreline areas also provide ecological functions, apply standards to assure no net loss of those functions.

- (B) Full utilization of existing urban areas should be achieved before further expansion of intensive development is allowed. Reasonable long-range projections of regional economic need should guide the amount of shoreline designated "high-intensity." However, consideration should be given to the potential for displacement of non-water oriented uses with water oriented uses when analyzing full utilization of urban waterfronts and before considering expansion of such areas.
- (C) Policies and regulations shall assure no net loss of shoreline ecological functions as a result of new development. Where applicable, new development shall include environmental cleanup and restoration of the shoreline to comply with any relevant state and federal law.
- (D) Where feasible, visual and physical public access should be required as provided for in WAC 173-26-221(4)(d).
- (E) 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.

(iii) Designation Criteria

Assign a "high-intensity" 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 are suitable and planned for high-intensity water-oriented uses.

(e) "Urban conservancy" environment.

(i) Purpose.

The purpose of the "urban conservancy" environment is to protect and restore ecological functions of open space, floodplain and other sensitive lands where they exist in urban and developed settings, while allowing a variety of compatible uses.

(ii) Management policies.

- (A) Uses that preserve the natural character of the area or promote preservation of open space, floodplain or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
- (B) Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications within the "urban conservancy" designation. These standards shall ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.
- (C) Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
- (D) Water-oriented uses should be given priority over non-water oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.
- (E) Mining is a unique use as a result of its inherent linkage to geology. Therefore, mining and related activities may be an appropriate use within the urban conservancy environment when conducted in a manner consistent with the environment policies and the provisions of WAC 173-26-240 (h) and when located consistent with mineral resource lands designation criteria pursuant to RCW 36.70A.170 and WAC 365-190-070.

(iii) 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, 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;
- (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.

Lands that may otherwise qualify for designation as urban conservancy and which are designated as "mineral resource lands" pursuant to RCW

36.70A.170 and WAC 365-190-070 may be assigned a designation within the "urban conservancy" environment that allows mining and associated uses in addition to other uses consistent with the urban conservancy environment.

(f) "Shoreline residential" environment.

(i) Purpose.

The purpose of the "shoreline residential" environment is to accommodate residential development and appurtenant structures that are consistent with this chapter. An additional purpose is to provide appropriate public access and recreational uses.

(ii) Management policies

- (A) Standards for density or minimum frontage width, setbacks, lot coverage limitations, buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be set to assure no net loss of shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

Local governments may establish two or more different "shoreline residential" environments to accommodate different shoreline densities or conditions, provided both environments adhere to the provisions in this chapter.

- (B) Multifamily and multi-lot residential and recreational developments should provide public access and joint use for community recreational facilities.
- (C) Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
- (D) Commercial development should be limited to water-oriented uses.

(iii) Designation Criteria

Assign a "shoreline residential" 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 predominantly single-family or multifamily residential development or are planned and platted for residential development.

WAC 173-26-221 General master program provisions.

The provisions of this section shall be applied either generally to all shoreline areas or to shoreline areas that meet the specified criteria of the provision without regard to environment designation. These provisions address certain elements as required by RCW 90.58.100(2) and implement the principles as established in WAC 173-26-186.

(1) *Archaeological and historic resources.*

(a) Applicability.

The following provisions apply to archaeological and historic resources that are either recorded at the State Historic Preservation Office and/or by local jurisdictions or have been inadvertently uncovered. Archaeological sites located both in and outside shoreline jurisdiction are subject to chapter 27.44 RCW (Indian graves and records) and chapter 27.53 RCW (Archaeological sites and records) and development or uses that may impact such sites shall comply with chapter 25-48 WAC as well as the provisions of this chapter.

(b) Principles.

Due to the limited and irreplaceable nature of the resource(s), prevent the destruction of or damage to any site having historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Indian tribes, and the office of archaeology and historic preservation.

(c) Standards.

Local shoreline master programs shall include policies and regulations to protect historic, archaeological, and cultural features and qualities of shorelines and implement the following standards. A local government may reference historic inventories or regulations. Contact the office of archaeology and historic preservation and affected Indian tribes for additional information.

- (i) Require that developers and property owners immediately stop work and notify the local government, the office of archaeology and historic preservation and affected Indian tribes if archaeological resources are uncovered during excavation.
- (ii) Require that permits issued in areas documented to contain archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

(2) *Critical areas.*

(a) Applicability.

Pursuant to the provisions of RCW 90.58.090(4) as amended by Chapter 321 Laws of 2003 (ESHB 1933), shoreline master programs must provide for management of

critical areas designated as such pursuant to RCW 36.70A.170(1)(d) and required to be protected pursuant to RCW 36.70A.060(2) that are located within the shorelines of the state with policies and regulations that:

- (i) are consistent with the specific provisions of this section (2) critical areas and section (3) flood hazard reduction, and these guidelines, and
- (ii) provides a level of protection to critical areas within the shoreline area that is at least equal to that provided by the local government's critical area regulations adopted pursuant to the Growth Management Act for comparable areas other than shorelines.

When approved by Ecology pursuant to RCW 90.58.090(4), a local government's SMP becomes regulations for protection of critical areas in the shorelines of the state in the jurisdiction of the adopting local government except as noted in RCW 36.70A.480(3)(b) and (6).

The provisions of this section and section (3) flood hazard reduction shall be applied to critical areas:

"Critical areas" include the following areas and ecosystems:

- (a) Wetlands;*
- (b) Areas with a critical recharging effect on aquifers used for potable waters;*
- (c) Fish and wildlife habitat conservation areas;*
- (d) Frequently flooded areas; and*
- (e) Geologically hazardous areas."*

The provisions of WAC 365-190-080, to the extent standards for certain types of critical areas are not provided by this section and section (3) flood hazard reduction, and to the extent consistent with these guidelines are also applicable to and provide further definition of critical area categories and management policies.

As provided in 90.58.030(2)(f)(ii) and 36.70A.480 RCW, as amended by Chapter 321 Laws of 2003 (ESHB 1933, Any city or county may also include in its master program land necessary for buffers for critical areas, as defined chapter 36.70A RCW, that occur within shoreline of the state, provided that forest practices regulated under chapter 76.09 RCW, except conversions to non-forest land use, on lands subject the provision of this subsection (2)(f)(ii) are not subject to additional regulations. If a local government does not include land necessary for buffers for critical areas that occur within shorelines of the state, as authorized above, then the local jurisdiction shall continue to regulate those critical areas and required buffers pursuant to RCW 36.70A.060(2).

(b) Principles.

Local master programs, when addressing critical areas, shall implement the following principles:

- (i) Shoreline master programs shall adhere to the standards established in the following sections, unless it is demonstrated through scientific and technical information as provided in 90.58.100(1) and as described in WAC 173-26-201 (2)(a) that an alternative approach provides better resource protection.
- (ii) In addressing issues related to critical areas, use scientific and technical

information, as described in WAC 173-26-201(2)(a). The role of Ecology in reviewing master program provisions for critical areas in shorelines of the state will be based on the Shoreline Management Act and these guidelines, and a comparison with requirements in currently adopted critical area ordinances for comparable areas to ensure that the provisions are at least equal to the level of protection provided by the currently adopted critical area ordinance.

- (iii) In protecting and restoring critical areas within shoreline jurisdiction, integrate the full spectrum of planning and regulatory measures, including the comprehensive plan, inter-local watershed plans, local development regulations, and state, tribal, and federal programs.
- (iv) The planning objectives of shoreline management provisions for critical areas shall be the protection of existing ecological functions and ecosystem-wide processes and restoration of degraded ecological functions and ecosystem-wide processes. The regulatory provisions for critical areas shall protect existing ecological functions and ecosystem-wide processes.
- (v) Promote human uses and values that are compatible with the other objectives of this section, such as public access and aesthetic values, provided they do not significantly adversely impact ecological functions.

(c) Standards.

When preparing master program provisions for critical areas, local governments should implement the following standards and the provisions of WAC 365-190-080 and use scientific and technical information, as provided for in WAC 173-26-201(2)(a).

In reviewing the critical areas segment of a master program, the Department of Ecology shall first assure consistency with these standards of this section (Critical Areas, (WAC 173-26-221(2)) and with the Flood Hazard Reduction section (WAC 173-26-221(3)), and shall then assure that the master program also provides protection of comparable critical areas that is at least equal to the protection provided by the local governments adopted and valid critical area regulations in effect at the time of submittal of the SMP.

In conducting the review for equivalency with local regulations, the department shall not further evaluate the adequacy of the local critical area regulations. Incorporation of the adopted and valid critical area regulations in effect at the time of submittal by reference as provided in section 173-26-191(2)(b) shall be deemed to meet the requirement for equivalency. However, a finding of equivalency does not constitute a finding of compliance with the requirements of this section and section (3) flood hazard reduction, nor with the guidelines overall.

Note that provisions for frequently flooded areas are included in WAC 173-26-221(3).

(i) Wetlands.

(A) Wetland use regulations.

Local governments should consult the department's technical guidance documents on wetlands.

Regulations shall address the following uses to achieve, at a minimum, no net loss of wetland area and functions, including lost time when the wetland does not perform the function:

- The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
- The dumping, discharging, or filling with any material, including discharges of storm water and domestic, commercial, or industrial wastewater;
- The draining, flooding, or disturbing of the water level, duration of inundation, or water table;
- The driving of pilings;
- The placing of obstructions;
- The construction, reconstruction, demolition, or expansion of any structure;
- Significant vegetation removal, provided that these activities are not part of a forest practice governed under chapter 76.09 RCW and its rules; or
- Other uses or development that results in a significant ecological impact to the physical, chemical, or biological characteristics of wetlands.
- Activities reducing the functions of buffers described in (c)(i)(D) of this subsection.

(B) Wetland rating or categorization.

Wetlands shall be categorized based on the rarity, irreplaceability, or sensitivity to disturbance of a wetland and the functions the wetland provides. Local governments should either use the Washington State Wetland Rating System, Eastern or Western Washington version as appropriate, or they should develop their own, regionally specific, scientifically based method for categorizing wetlands. Wetlands should be categorized to reflect differences in wetland quality and function in order to tailor protection standards appropriately. A wetland categorization method is not a substitute for a function assessment method, where detailed information on wetland functions is needed.

(C) Alterations to wetlands.

Master program provisions addressing alterations to wetlands shall be consistent with the policy of no net loss of wetland area and functions, wetland rating, scientific and technical information, and the mitigation

priority sequence defined in WAC 173-26-201(2)(e).

(D) Buffers.

Master programs shall contain requirements for buffer zones around wetlands. Buffer requirements shall be adequate to ensure that wetland functions are protected and maintained in the long-term. Requirements for buffer zone widths and management shall take into account the ecological functions of the wetland, the characteristics and setting of the buffer, the potential impacts associated with the adjacent land use, and other relevant factors.

(E) Mitigation.

Master programs shall contain wetland mitigation requirements that are consistent with WAC 173-26-201(2)(e) and which are based on the wetland rating.

(F) Compensatory mitigation.

Compensatory mitigation shall be allowed only after mitigation sequencing is applied and higher priority means of mitigation are determined to be infeasible.

Requirements for compensatory mitigation must include provisions for:

- (I) Mitigation replacement ratios or a similar method of addressing the following:
 - The risk of failure of the compensatory mitigation action;
 - The length of time it will take the compensatory mitigation action to adequately replace the impacted wetland functions and values;
 - The gain or loss of the type, quality, and quantity of the ecological functions of the compensation wetland as compared with the impacted wetland.
- (II) Establishment of performance standards for evaluating the success of compensatory mitigation actions;
- (III) Establishment of long-term monitoring and reporting procedures to determine if performance standards are met; and
- (IV) Establishment of long-term protection and management of compensatory mitigation sites.

Credits from a certified mitigation bank may be used to compensate for unavoidable impacts.

(ii) Geologically hazardous areas.

Development in designated geologically hazardous areas shall be regulated in accordance with the following:

(A) Consult minimum guidelines for geologically hazardous areas, WAC 365-190-080(4).

(B) Do not allow new development or the creation of new lots that would cause foreseeable risk from geological conditions to people or improvements during the life of the development.

(C) Do not allow new development that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. The stabilization measures shall conform to WAC 173-26-231.

(D) Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

(iii) Critical saltwater habitats

(A) Applicability.

Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sandlance, Subsistence, commercial and recreational shellfish beds, mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association. Critical saltwater habitats require a higher level of protection due to the important ecological functions they provide. Ecological functions of marine shorelands can affect the viability of critical saltwater habitats. Therefore, effective protection and restoration of critical saltwater habitats should integrate management of shorelands as well as submerged areas.

(B) Principles.

Master programs shall include policies and regulations to protect critical saltwater habitats and should implement planning policies and programs to restore such habitats. Planning for critical saltwater habitats shall incorporate the participation of state resource agencies to assure consistency with other legislatively created programs in addition to local and regional government entities with an interest such as port districts. Affected Indian tribes shall also be consulted. Local governments should review relevant comprehensive management plan policies and development regulations for shorelands and adjacent lands to achieve consistency as directed in RCW 90.58.340. Local governments should base management planning on information provided by state resource agencies and affected Indian tribes unless they demonstrate that they

possess more accurate and reliable information.

The management planning should include an evaluation of current data and trends regarding the following:

- Available inventory and collection of necessary data regarding physical characteristics of the habitat, including upland conditions, and any information on species population trends;
- Terrestrial and aquatic vegetation;
- The level of human activity in such areas, including the presence of roads and level of recreational types (passive or active recreation may be appropriate for certain areas and habitats);
- Restoration potential;
- Tributaries and small streams flowing into marine waters;
- Dock and bulkhead construction, including an inventory of bulkheads serving no protective purpose;
- Conditions and ecological functions in the near-shore area;
- Uses surrounding the critical saltwater habitat areas that may negatively impact those areas, including permanent or occasional upland, beach, or over-water uses; and
- An analysis of what data gaps exist and a strategy for gaining this information.

The management planning should address the following, where applicable:

- Protecting a system of fish and wildlife habitats with connections between larger habitat blocks and open spaces and restoring such habitats and connections where they are degraded;
- Protecting existing and restoring degraded riparian and estuarine ecosystems, especially salt marsh habitats;
- Establishing adequate buffer zones around these areas to separate incompatible uses from the habitat areas;
- Protecting existing and restoring degraded near-shore habitat;
- Protecting existing and restoring degraded or lost salmonid habitat;
- Protecting existing and restoring degraded upland ecological functions important to critical saltwater habitats, including riparian vegetation;
- Improving water quality;
- Protecting existing and restoring degraded sediment inflow and transport regimens; and
- Correcting activities that cause excessive sediment input where human activity has led to mass wasting.

Local governments, in conjunction with state resource agencies and affected Indian tribes, should classify critical saltwater habitats and protect and restore seasonal ranges and habitat elements with which federal-listed and state-listed endangered, threatened, and priority

species have a primary association and which, if altered, may reduce the likelihood that a species will maintain its population and reproduce over the long term.

Local governments, in conjunction with state resource agencies and affected Indian tribes, should determine which habitats and species are of local importance.

All public and private tidelands or bedlands suitable for shellfish harvest shall be classified as critical areas. Local governments should consider both commercial and recreational shellfish areas. Local governments should review the Washington department of health classification of commercial and recreational shellfish growing areas to determine the existing condition of these areas. Further consideration should be given to the vulnerability of these areas to contamination or potential for recovery. Shellfish protection districts established pursuant to chapter 90.72 RCW shall be included in the classification of critical shellfish areas. Local governments shall classify kelp and eelgrass beds identified by the department of natural resources' aquatic resources division, the department, and affected Indian tribes as critical saltwater habitats.

Comprehensive saltwater habitat management planning should identify methods for monitoring conditions and adapting management practices to new information.

(C) Standards.

Docks, bulkheads, bridges, fill, floats, jetties, utility crossings, and other human-made structures shall not intrude into or over critical saltwater habitats except when all of the conditions below are met:

- The public's need for such an action or structure is clearly demonstrated and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020;
- Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in unreasonable and disproportionate cost to accomplish the same general purpose;
- The project including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.
- The project is consistent with the state's interest in resource protection and species recovery.

Private, non-commercial docks for individual residential or community use may be authorized provided that:

- Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible;
- The project including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.

Until an inventory of critical saltwater habitat has been done, shoreline master programs shall condition all over-water and near-shore developments in marine and estuarine waters with the requirement for an inventory of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions. The methods and extent of the inventory shall be consistent with accepted research methodology. At a minimum, local governments should consult with department technical assistance materials for guidance.

(iv) Critical freshwater habitats

(A) Applicability.

The following applies to master program provisions affecting critical freshwater habitats, including those portions of streams, rivers, wetlands, and lakes, their associated channel migration zones, and flood plains designated as such.

(B) Principles.

Many ecological functions of river and stream corridors depend both on continuity and connectivity along the length of the shoreline and on the conditions of the surrounding lands on either side of the river channel. Environmental degradation caused by development such as improper storm-water sewer or industrial outfalls, unmanaged clearing and grading, or runoff from buildings and parking lots within the watershed, can degrade ecological functions downstream. Likewise, gradual destruction or loss of the vegetation, alteration of runoff quality and quantity along the corridor resulting from incremental flood plain development can raise water temperatures and alter hydrographic conditions and degrade other ecological functions, thereby making the corridor inhospitable for priority species and susceptible to catastrophic flooding, droughts, landslides and channel changes. These conditions also threaten human health, safety, and property. Long stretches of river and stream shorelines have been significantly altered or degraded in this manner. Therefore, effective management of river and stream corridors depends on:

- (I) Planning for protection, and restoration where appropriate, along the entire length of the corridor from river headwaters to the mouth; and
- (II) Regulating uses and development within the stream channel, associated channel migration zone, wetlands, and the flood plain, to the extent such areas are in the shoreline jurisdictional area, as necessary to assure no net loss of ecological functions associated with the river or stream corridors, including the associated hyporheic zone, results from new development.

As part of a comprehensive approach to management of critical

freshwater habitat and other river and stream values, local governments should integrate master program provisions, including those for shoreline stabilization, fill, vegetation conservation, water quality, flood hazard reduction, and specific uses, to protect human health and safety and to protect and restore the corridor's ecological functions and ecosystem-wide processes.

Applicable master programs shall contain provisions to protect hydrologic connections between water bodies, water courses, and associated wetlands. Restoration planning should include incentives and other means to restore water connections that have been impeded by previous development.

Master program provisions for river and stream corridors should, where appropriate, be based on the information from comprehensive watershed management planning where available.

(C) Standards.

Master programs shall implement the following standards within shoreline jurisdiction:

- (I) Provide for the protection of ecological functions associated with critical freshwater habitat as necessary to assure no net loss.
- (II) Where appropriate, integrate protection of critical freshwater habitat, protection with flood hazard reduction and other river and stream management provisions.
- (III) Include provisions that facilitate authorization of appropriate restoration projects.
- (IV) Provide for the implementation of the principles identified in (B) above.

(3) Flood hazard reduction.

(a) Applicability.

The following provisions apply to actions taken to reduce flood damage or hazard and to uses, development, and shoreline modifications that may increase flood hazards. Flood hazard reduction measures may consist of nonstructural measures, such as setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and storm water management programs, and of structural measures, such as dikes, levees, revetments, floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program. Additional relevant critical area provisions are in WAC 173-26-221(2).

(b) Principles.

Flooding of rivers, streams, and other shorelines is a natural process that is affected

by factors and land uses occurring throughout the watershed. Past land use practices have disrupted hydrological processes and increased the rate and volume of runoff, thereby exacerbating flood hazards and reducing ecological functions. Flood hazard reduction measures are most effective when integrated into comprehensive strategies that recognize the natural hydrogeological and biological processes of water bodies. Over the long term, the most effective means of flood hazard reduction is to prevent or remove development in flood-prone areas, to manage storm water within the flood plain, and to maintain or restore river and stream system's natural hydrological and geomorphological processes.

Structural flood hazard reduction measures, such as diking, even if effective in reducing inundation in a portion of the watershed, can intensify flooding elsewhere. Moreover, structural flood hazard reduction measures can damage ecological functions crucial to fish and wildlife species, bank stability, and water quality. Therefore, structural flood hazard reduction measures shall be avoided whenever possible. When necessary, they shall be accomplished in a manner that assures no net loss of ecological functions and ecosystem-wide processes.

The dynamic physical processes of rivers, including the movement of water, sediment and wood, cause the river channel in some areas to move laterally, or “migrate”, over time. This is a natural process in response to gravity and topography and allows the river to release energy and distribute its sediment load. The area within which a river channel is likely to move over a period of time is referred to as the channel migration zone (CMZ) or the meander belt. Scientific examination as well as experience has demonstrated that interference with this natural process often has unintended consequences for human users of the river and its valley such as increased or changed flood, sedimentation and erosion patterns. It also has adverse effects on fish and wildlife through loss of critical habitat for river and riparian dependent species. Failing to recognize the process often leads to damage to, or loss of, structures and threats to life safety.

Applicable shoreline master programs should include provisions to limit development and shoreline modifications that would result in interference with the process of channel migration that may cause significant adverse impacts to property or public improvements and or result in a net loss of ecological functions associated with the rivers and streams. (See also section 221(3)(C)).

The channel migration zone should be established to identify those areas with a high probability of being subject to channel movement based on the historic record, geologic character and evidence of past migration. It should also be recognized that past action is not a perfect predictor of the future and that human and natural changes may alter migration patterns. Consideration should be given to such changes that may have occurred and their effect on future migration patterns.

For management purposes, the extent of likely migration along a stream reach can be identified using evidence of active stream channel movement over the past one hundred years. Evidence of active movement can be provided from historic and current aerial photos and maps and may require field analysis of specific channel and valley bottom characteristics in some cases. A time frame of one hundred years was chosen because aerial photos, maps and field evidence can be used to evaluate

movement in this time frame.

In some cases, river channels are prevented from normal or historic migration by human-made structures or other shoreline modifications. The definition of channel migration zone indicates that in defining the extent of a CMZ, local governments should take into account the river's characteristics and its surroundings. Unless otherwise demonstrated through scientific and technical information, the following characteristics should be considered when establishing the extent of the CMZ for management purposes:

- Within incorporated municipalities and Urban Growth Areas, areas separated from the active river channel by legally existing artificial channel constraints that limit channel movement should not be considered within the channel migration zone.
- All areas separated from the active channel by a legally existing artificial structure(s) that is likely to restrain channel migration, including transportation facilities, built above or constructed to remain intact through the 100 year flood, should not be considered to be in the channel migration zone.
- In areas outside incorporated municipalities and Urban Growth Areas, channel constraints and flood control structures built below the 100 year flood elevation do not necessarily restrict channel migration and should not be considered to limit the channel migration zone unless demonstrated otherwise using scientific and technical information.

Master programs shall implement the following principles:

- (i) Where feasible, give preference to nonstructural flood hazard reduction measures over structural measures.
- (ii) Base shoreline master program flood hazard reduction provisions on applicable watershed management plans, comprehensive flood hazard management plans, and other comprehensive planning efforts, provided those measures are consistent with the Shoreline Management Act and this chapter.
- (iii) Consider integrating master program flood hazard reduction provisions with other regulations and programs, including (if applicable):
 - Storm water management plans;
 - Flood plain regulations, as provided for in chapter 86.16 RCW;
 - Critical area ordinances and comprehensive plans, as provided in chapter 36.70A RCW; and the
 - National Flood Insurance Program.
- (iv) Assure that flood hazard protection measures do not result in a net loss of ecological functions associated with the rivers and streams.
- (v) Plan for and facilitate returning river and stream corridors to more natural hydrological conditions. Recognize that seasonal flooding is an essential natural process.

- (vi) When evaluating alternate flood control measures, consider the removal or relocation of structures in flood-prone areas.
- (vii) Local governments are encouraged to plan for and facilitate removal of artificial restrictions to natural channel migration, restoration of off channel hydrological connections and return river processes to a more natural state where feasible and appropriate.

(c) Standards.

Master programs shall implement the following standards within shoreline jurisdiction:

- (i) Development in floodplains should not significantly or cumulatively increase flood hazard or be inconsistent with a comprehensive flood hazard management plan adopted pursuant to chapter 86.12 RCW, provided the plan has been adopted after 1994 and approved by the department. New development or new uses in shoreline jurisdiction, including the subdivision of land, should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway. The following uses and activities may be appropriate and or necessary within the channel migration zone or floodway:
 - Actions that protect or restore the ecosystem-wide processes or ecological functions.
 - Forest practices in compliance with the Washington State Forest Practices Act and its implementing rules.
 - Existing and ongoing agricultural practices, provided that no new restrictions to channel movement occur.
 - Mining when conducted in a manner consistent with the environment designation and with the provisions of WAC 173-26-241(3)(h)
 - Bridges, utility lines, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate cost. Where such structures are allowed, mitigation shall address impacted functions and processes in the affected section of watershed or drift cell.
 - Repair and maintenance of an existing legal use, provided that such actions do not cause significant ecological impacts or increase flood hazards to other uses.
 - Development with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.
 - Modifications or additions to an existing non-agricultural legal use, provided that channel migration is not further limited and that the new development includes appropriate protection of ecological functions.
 - Development in incorporated municipalities and designated urban growth areas, as defined in Chapter 36.70A RCW, where existing

structures prevent active channel movement and flooding.

- Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure includes appropriate mitigation of impacts to ecological functions associated with the river or stream.
- (ii) Allow new structural flood hazard reduction measures in shoreline jurisdiction only when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development, that nonstructural measures are not feasible, that impacts ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, and that appropriate vegetation conservation actions are undertaken consistent with WAC 173-26-221(5).

Structural flood hazard reduction measures shall be consistent with an adopted comprehensive flood hazard management plan approved by the department that evaluates cumulative impacts to the watershed system.

- (iii) Place new structural flood hazard reduction measures landward of the associated wetlands, and designated vegetation conservation areas, except for actions that increase ecological functions, such as wetland restoration, or as noted below. Provided that such flood hazard reduction projects be authorized if it is determined that no other alternative to reduce flood hazard to existing development is feasible. The need for, and analysis of feasible alternatives to, structural improvements shall be documented through a geotechnical analysis.
- (v) Require that new structural public flood hazard reduction measures, such as dikes and levees, dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.
- (vi) Require that the removal of gravel for flood management purposes be consistent with an adopted flood hazard reduction plan and with this chapter and allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution.

(4) Public access.

(a) Applicability.

Public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. Public access provisions below apply to all

shorelines of the state unless stated otherwise.

(b) Principles.

Local master programs shall:

- (i) Promote and enhance the public interest with regard to rights to access waters held in public trust by the state while protecting private property rights and public safety.
- (ii) Protect the rights of navigation and space necessary for water-dependent uses.
- (iii) To the greatest extent feasible consistent with the overall best interest of the state and the people generally, protect the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the state, including views of the water.
- (iv) Regulate the design, construction, and operation of permitted uses in the shorelines of the state to minimize, insofar as practical, interference with the public's use of the water.

(c) Planning process to address public access.

Local governments should plan for an integrated shoreline area public access system that identifies specific public needs and opportunities to provide public access. Such a system can often be more effective and economical than applying uniform public access requirements to all development. This planning should be integrated with other relevant comprehensive plan elements, especially transportation and recreation. The planning process shall also comply with all relevant constitutional and other legal limitations that protect private property rights.

Where a port district or other public entity has incorporated public access planning into its master plan through an open public process, that plan may serve as a portion of the local government's public access planning, provided it meets the provisions of this chapter. The planning may also justify more flexible off-site or special area public access provisions in the master program. Public participation requirements in WAC 173-26-201(3)(b)(i) apply to public access planning.

At a minimum, the public access planning should result in public access requirements for shoreline permits, recommended projects, port master plans, and/or actions to be taken to develop public shoreline access to shorelines on public property. The planning should identify a variety of shoreline access opportunities and circulation for pedestrians-including disabled persons-bicycles, and vehicles between shoreline access points, consistent with other comprehensive plan elements.

(d) Standards.

Shoreline master programs should implement the following standards:

- (i) Based on the public access planning described in (c) of this subsection, establish policies and regulations that protect and enhance both physical and visual public access. The master program shall address public access on

public lands. The master program should seek to increase the amount and diversity of public access to the state's shorelines consistent with the natural shoreline character, property rights, public rights under the Public Trust Doctrine, and public safety.

- (ii) Require that shoreline development by public entities, including local governments, port districts, state agencies, and public utility districts, include public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment. Where public access planning as described in WAC 173-26-221(4)(c) demonstrates that a more effective public access system can be achieved through alternate means, such as focusing public access at the most desirable locations, local governments may institute master program provisions for public access based on that approach in lieu of uniform site-by-site public access requirements.
- (iii) Provide standards for the dedication and improvement of public access in developments for water-enjoyment, water-related, and non-water-dependent uses and for the subdivision of land into more than four parcels. In these cases, public access should be required except:
 - (A) Where the local government provides more effective public access through a public access planning process described in WAC 173-26-221(4)(c).
 - (B) Where it is demonstrated to be infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment or due to constitutional or other legal limitations that may be applicable.

In determining the infeasibility, undesirability, or incompatibility of public access in a given situation, local governments shall consider alternate methods of providing public access, such as off-site improvements, viewing platforms, separation of uses through site planning and design, and restricting hours of public access.
 - (C) For individual single-family residences not part of a development planned for more than four parcels.
- (iv) Adopt provisions, such as maximum height limits, setbacks, and view corridors, to minimize the impacts to existing views from public property or substantial numbers of residences. Where there is an irreconcilable conflict between water-dependent shoreline uses or physical public access and maintenance of views from adjacent properties, the water-dependent uses and physical public access shall have priority, unless there is a compelling reason to the contrary.
- (v) Assure that public access improvements do not result in a net loss of shoreline ecological functions.

(5) Shoreline vegetation conservation.

(a) Applicability.

Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species.

Unless otherwise stated, vegetation conservation does not include those activities covered under the Washington State Forest Practices Act, except for conversion to other uses and those other forest practice activities over which local governments have authority. As with all master program provisions, vegetation conservation provisions apply even to those shoreline uses and developments that are exempt from the requirement to obtain a permit. Like other master program provisions, vegetation conservation standards do not apply retroactively to existing uses and structures, such as existing agricultural practices.

(b) Principles.

The intent of vegetation conservation is to protect and restore the ecological functions and ecosystem-wide processes performed by vegetation along shorelines. Vegetation conservation should also be undertaken to protect human safety and property, to increase the stability of river banks and coastal bluffs, to reduce the need for structural shoreline stabilization measures, to improve the visual and aesthetic qualities of the shoreline, to protect plant and animal species and their habitats, and to enhance shoreline uses.

Master programs shall include; planning provisions that address vegetation conservation and restoration, and regulatory provisions that address conservation of vegetation; as necessary to assure no net loss of shoreline ecological functions and ecosystem-wide processes, to avoid adverse impacts to soil hydrology, and to reduce the hazard of slope failures or accelerated erosion.

Local governments should address ecological functions and ecosystem-wide processes provided by vegetation as described in WAC 173-26-201(3)(d)(i).

Local governments may implement these objectives through a variety of measures, where consistent with Shoreline Management Act policy, including clearing and grading regulations, setback and buffer standards, critical area regulations, conditional use requirements for specific uses or areas, mitigation requirements, incentives and non-regulatory programs.

In establishing vegetation conservation regulations, local governments must use available scientific and technical information, as described in WAC 173-26-201 (2)(a). At a minimum, local governments should consult shoreline management assistance materials provided by the department and *Management Recommendations for Washington's Priority Habitats*, prepared by the Washington state department of fish and wildlife where applicable.

Current scientific evidence indicates that the length, width, and species composition of a shoreline vegetation community contribute substantively to the aquatic ecological functions. Likewise, the biota within the aquatic environment is essential to ecological functions of the adjacent upland vegetation. The ability of vegetated areas to provide critical ecological functions diminishes as the length and width of the vegetated area along shorelines is reduced. When shoreline vegetation is removed, the narrower the area of remaining vegetation, the greater the risk that the functions will not be performed.

In the Pacific Northwest, aquatic environments, as well as their associated upland vegetation and wetlands, provide significant habitat for a myriad of fish and wildlife species. Healthy environments for aquatic species is inseparably linked with the ecological integrity of the surrounding terrestrial ecosystem. For example, a nearly continuous corridor of mature forest characterizes the natural riparian conditions of the Pacific Northwest. Riparian corridors along marine shorelines provide many of the same functions as their freshwater counterparts. The most commonly recognized functions of the shoreline vegetation include, but are not limited to:

- Providing shade necessary to maintain the cool temperatures required by salmonids, spawning forage fish, and other aquatic biota.
- Providing organic inputs critical for aquatic life.
- Providing food in the form of various insects and other benthic macroinvertebrates.
- Stabilizing banks, minimizing erosion, and reducing the occurrence of landslides. The roots of trees and other riparian vegetation provide the bulk of this function.
- Reducing fine sediment input into the aquatic environment through storm water retention and vegetative filtering.
- Filtering and vegetative uptake of nutrients and pollutants from ground water and surface runoff.
- Providing a source of large woody debris into the aquatic system. Large woody debris is the primary structural element that functions as a hydraulic roughness element to moderate flows. Large woody debris also serves a pool-forming function, providing critical salmonid rearing and refuge habitat. Abundant large woody debris increases aquatic diversity and stabilization.
- Regulation of microclimate in the stream-riparian and intertidal corridors.
- Providing critical wildlife habitat, including migration corridors and feeding, watering, rearing, and refugia areas.

Sustaining different individual functions requires different widths, compositions and densities of vegetation. The importance of the different functions, in turn, varies with the type of shoreline setting. For example, in forested shoreline settings, periodic recruitment of fallen trees, especially conifers, into the stream channel is an important attribute, critical to natural stream channel maintenance. Therefore, vegetated areas along streams which once supported or could in the future support mature trees should be wide enough to accomplish this periodic recruitment process.

Woody vegetation normally classed as trees may not be a natural component of plant communities in some environments, such as in arid climates and on coastal dunes. In

these instances, the width of a vegetated area necessary to achieve the full suite of vegetation-related shoreline functions may not be related to vegetation height.

Local governments should identify which ecological processes and functions are important to the local aquatic and terrestrial ecology and conserve sufficient vegetation to maintain them. Such vegetation conservation areas are not necessarily intended to be closed to use and development but should provide for management of vegetation in a manner adequate to assure no net loss of shoreline ecological functions.

(c) Standards.

Master programs shall implement the following requirements in shoreline jurisdiction.

- (i) Establish vegetation conservation standards that implement the principles in WAC 173-26-221(5)(b). Methods to do this may include setback or buffer requirements, clearing and grading standards, regulatory incentives, environment designation standards, or other master program provisions. Selective pruning of trees for safety and view protection may be allowed and the removal of noxious weeds should be authorized.

Additional vegetation conservation standards for specific uses are included in WAC 173-26-241(3).

(6) Water quality, storm water, and nonpoint pollution.

(a) Applicability.

The following section applies to all development and uses in shorelines of the state, as defined in WAC 173-26-020, that affect water quality.

(b) Principles.

Shoreline master programs shall, as stated in RCW 90.58.020, protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life, through implementation of the following principles:

- (i) Prevent impacts to water quality and storm water quantity that would result in a net loss of shoreline ecological functions, or a significant impact to aesthetic qualities, or recreational opportunities.
- (ii) Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and storm water quantity, including public health, storm water, and water discharge standards. The regulations that are most protective of ecological functions shall apply.

(c) Standards.

Shoreline master programs shall include provisions to implement the principles of

this section.

WAC 173-26-231 Shoreline modifications.

(1) Applicability.

Local governments are encouraged to prepare master program provisions that distinguish between shoreline modifications and shoreline uses. Shoreline modifications are generally related to construction of a physical element such as a dike, breakwater, dredged basin, or fill, but they can include other actions such as clearing, grading, application of chemicals, or significant vegetation removal. Shoreline modifications usually are undertaken in support of or in preparation for a shoreline use; for example, fill (shoreline modification) required for a cargo terminal (industrial use) or dredging (shoreline modification) to allow for a marina (boating facility use).

The provisions in this section apply to all shoreline modifications within shoreline jurisdiction.

(2) General principles applicable to all shoreline modifications.

Master programs shall implement the following principles:

- (a) Allow structural shoreline modifications only where they are demonstrated to be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage or are necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.
- (b) Reduce the adverse effects of shoreline modifications and, as much as possible, limit shoreline modifications in number and extent.
- (c) Allow only shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.
- (d) Assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions. This is to be achieved by giving preference to those types of shoreline modifications that have a lesser impact on ecological functions and requiring mitigation of identified impacts resulting from shoreline modifications.
- (e) Where applicable, base provisions on scientific and technical information and a comprehensive analysis of drift cells for marine waters or reach conditions for river and stream systems. Contact the department for available drift cell characterizations.
- (f) Plan for the enhancement of impaired ecological functions where feasible and appropriate while accommodating permitted uses. As shoreline modifications occur, incorporate all feasible measures to protect ecological shoreline functions and ecosystem-wide processes.
- (g) Avoid and reduce significant ecological impacts according to the mitigation sequence in WAC 173-26- 201(2)(e).

(3) Provisions for specific shoreline modifications.

(a) Shoreline stabilization.

(i) Applicability.

Shoreline stabilization includes actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, tides, wind, or wave action. These actions include structural and nonstructural methods.

Nonstructural methods include building setbacks, relocation of the structure to be protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization.

(ii) Principles.

Shoreline are by nature unstable, although in varying degrees. Erosion and accretion are natural processes that provide ecological functions and thereby contribute to sustaining the natural resource and ecology of the shoreline. Human use of the shoreline has typically led to hardening of the shoreline for various reasons including reduction of erosion or providing useful space at the shore or providing access to docks and piers. The impacts of hardening any one property may be minimal but cumulatively the impact of this shoreline modification is significant.

Shoreline hardening typically results in adverse impacts to shoreline ecological functions such as:

- Beach starvation. Sediment supply to nearby beaches is cut off, leading to "starvation" of the beaches for the gravel, sand, and other fine-grained materials that typically constitute a beach.
- Habitat degradation. Vegetation that shades the upper beach or bank is eliminated, thus degrading the value of the shoreline for many ecological functions, including spawning habitat for salmonids and forage fish.
- Sediment impoundment. As a result of shoreline hardening, the sources of sediment on beaches (eroding "feeder" bluffs) are progressively lost and longshore transport is diminished. This leads to lowering of down-drift beaches, the narrowing of the high tide beach, and the coarsening of beach sediment. As beaches become more coarse, less prey for juvenile fish is produced. Sediment starvation may lead to accelerated erosion in down-drift areas.
- Exacerbation of erosion. The hard face of shoreline armoring, particularly concrete bulkheads, reflects wave energy back onto the beach, exacerbating erosion.
- Ground water impacts. Erosion control structures often raise the water table on the landward side, which leads to higher pore pressures in the

beach itself. In some cases, this may lead to accelerated erosion of sand-sized material from the beach.

- Hydraulic impacts. Shoreline armoring generally increases the reflectivity of the shoreline and redirects wave energy back onto the beach. This leads to scouring and lowering of the beach, to coarsening of the beach, and to ultimate failure of the structure.
- Loss of shoreline vegetation. Vegetation provides important "softer" erosion control functions. Vegetation is also critical in maintaining ecological functions.
- Loss of large woody debris. Changed hydraulic regimes and the loss of the high tide beach, along with the prevention of natural erosion of vegetated shorelines, lead to the loss of beached organic material. This material can increase biological diversity, can serve as a stabilizing influence on natural shorelines, and is habitat for many aquatic-based organisms, which are, in turn, important prey for larger organisms.
- Restriction of channel movement and creation of side channels. Hardened shorelines along rivers slow the movement of channels, which, in turn, prevents the input of larger woody debris, gravels for spawning, and the creation of side channels important for juvenile salmon rearing, and can result in increased floods and scour.

Additionally, hard structures, especially vertical walls often create conditions that lead to failure of the structure. In time, the substrate of the beach coarsens and scours down to bedrock or a hard clay. The footings of bulkheads are exposed, leading to undermining and failure. This process is exacerbated when the original cause of the erosion and "need" for the bulkhead was from upland water drainage problems. Failed bulkheads and walls adversely impact beach aesthetics, may be a safety or navigational hazard, and may adversely impact shoreline ecological functions.

"Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while "soft" structural measures rely on less rigid materials, such as biotechnical vegetation measures or beach enhancement. There is a range of measures varying from soft to hard that include:

- Vegetation enhancement;
- Upland drainage control;
- Biotechnical measures;
- Beach enhancement;
- Anchor trees;
- Gravel placement;
- Rock revetments;
- Gabions;
- Concrete groins;
- Retaining walls and bluff walls;
- Bulkheads; and

- Seawalls.

Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

Structural shoreline stabilization often results in vegetation removal and damage to near-shore habitat and shoreline corridors. Therefore, master program shoreline stabilization provisions shall also be consistent with WAC 173-26-221(5), vegetation conservation, and where applicable, WAC 173-26-221(2), critical areas.

In order to implement RCW 90.58.100(6) and avoid or mitigate adverse impacts to shoreline ecological functions where shoreline alterations are necessary to protect single-family residences and ~~principal~~ primary appurtenant structures in danger from active shoreline erosion, master programs should include standards setting forth the circumstances under which alteration of the shoreline is permitted, and for the design and type of protective measures and devices.

(iii) Standards.

In order to avoid the individual and cumulative net loss of ecological functions attributable to shoreline stabilization, master programs shall implement the above principles and apply the following standards:

- (A) New development should be located and designed to avoid the need for future shoreline stabilization to the extent feasible. Subdivision of land must be regulated to assure that the lots created will not require shoreline stabilization in order for reasonable development to occur using geotechnical analysis of the site and shoreline characteristics. New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis. New development that would require shoreline stabilization which causes significant impacts to adjacent or down-current properties and shoreline areas should not be allowed.
- (B) New structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:
 - (I) To protect existing primary structures:
 - New or enlarged structural shoreline stabilization measures for an existing primary structure, including residences, should not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger from shoreline erosion caused by tidal action, currents, or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site

- drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization.
- The erosion control structure will not result in a net loss of shoreline ecological functions.
- (II) In support of new non-water-dependent development, including single-family residences, when all of the conditions below apply:
- The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.
 - Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as tidal action, currents, and waves.
 - The erosion control structure will not result in a net loss of shoreline ecological functions.
- (III) In support of water-dependent development when all of the conditions below apply:
- The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.
 - Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.
 - The erosion control structure will not result in a net loss of shoreline ecological functions.
- (IV) To protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to chapter 70.105D RCW when all of the conditions below apply:
- Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - The erosion control structure will not result in a net loss of shoreline ecological functions.
- (C) An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.
- The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.

- Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.
 - Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing structure, remove it as part of the replacement measure.
 - Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high-water mark.
 - For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.
- (D) Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate, would foreclose the opportunity to use measures that avoid impacts on ecological functions. Thus, where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures.
- (E) When any structural shoreline stabilization measures are demonstrated to be necessary, pursuant to above provisions,
- limit the size of stabilization measures to the minimum necessary. Use measures designed to assure no net loss of shoreline ecological functions Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
 - Ensure that publicly financed or subsidized shoreline erosion control measures do not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. See public access provisions; WAC 173-26-221(4). Where feasible,

incorporate ecological restoration and public access improvements into the project.

- Mitigate new erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems. Where sediment conveyance systems cross jurisdictional boundaries, local governments should coordinate shoreline management efforts. If beach erosion is threatening existing development, local governments should adopt master program provisions for a beach management district or other institutional mechanism to provide comprehensive mitigation for the adverse impacts of erosion control measures.

(F) For erosion or mass wasting due to upland conditions, see WAC 173-26-221(2)(c)(ii).

(b) Piers and docks.

New piers and docks shall be allowed only for water-dependent uses or public access. As used here, a dock associated with a single family residence is a water dependent use provided that it is designed and intended as a facility for access to watercraft and otherwise complies with the provisions of this section. Pier and dock construction shall be restricted to the minimum size necessary to meet the needs of the proposed water-dependent use. Water-related and water-enjoyment uses may be allowed as part of mixed-use development on over-water structures where they are clearly auxiliary to and in support of water-dependent uses, provided the minimum size requirement needed to meet the water-dependent use is not violated.

New pier or dock construction, excluding docks accessory to single-family residences, should be permitted only when the applicant has demonstrated that a specific need exists to support the intended water-dependent uses. If a port district or other public or commercial entity involving water-dependent uses has performed a needs analysis or comprehensive master plan projecting the future needs for pier or dock space, and if the plan or analysis is approved by the local government and consistent with these guidelines, it may serve as the necessary justification for pier design, size, and construction. The intent of this provision is to allow ports and other entities the flexibility necessary to provide for existing and future water-dependent uses.

Where new piers or docks are allowed, master programs should contain provisions to require new residential development of two or more dwellings to provide joint use or community dock facilities, when feasible, rather than allow individual docks for each residence.

Piers and docks, including those accessory to single-family residences, shall be designed and constructed to avoid or, if that is not possible, to minimize and mitigate the impacts to ecological functions, critical areas resources such as eelgrass beds and fish habitats and processes such as currents and littoral drift. See WAC 173-26-221 (2)(c)(iii) and (iv). Master programs should require that structures be made of

materials that have been approved by applicable state agencies.

(c) Fill.

Fills shall be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.

Fills waterward of the ordinary high-water mark shall be allowed only when necessary to support: water-dependent use, public access, cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan, disposal of dredged material considered suitable under, and conducted in accordance with the Dredged Material Management Program of the Department of Natural Resources, expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible, mitigation action, environmental restoration, beach nourishment or enhancement project . Fills waterward of the ordinary high-water mark for any use except ecological restoration should require a conditional use permit.

(d) Breakwaters, jetties, groins, and weirs.

Breakwaters, jetties, groins, and weirs located waterward of the ordinary high-water mark shall be allowed only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose. Breakwaters, jetties, groins, weirs, and similar structures should require a conditional use permit, except for those structures installed to protect or restore ecological functions, such as woody debris installed in streams. Breakwaters, jetties, groins, and weirs shall be designed to protect critical areas and shall provide for mitigation according to the sequence defined in WAC 173-26-201(2)(e).

(e) Beach and dunes management.

Washington's beaches and their associated dunes lie along the Pacific Ocean coast between Point Grenville and Cape Disappointment, and as shorelines of statewide significance are mandated to be managed from a statewide perspective by the Act. Beaches and dunes within shoreline jurisdiction shall be managed to conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal beaches. Beaches and dunes should also be managed to reduce the hazard to human life and property from natural or human-induced actions associated with these areas.

Shoreline master programs in coastal marine areas shall provide for diverse and appropriate use of beach and dune areas consistent with their ecological, recreational, aesthetic, and economic values, and consistent with the natural limitations of beaches, dunes, and dune vegetation for development. Coastal master programs shall institute development setbacks from the shoreline to prevent impacts to the natural, functional, ecological, and aesthetic qualities of the dune.

"Dune modification" is the removal or addition of material to a dune, the reforming or reconfiguration of a dune, or the removal or addition of vegetation that will alter the

dune's shape or sediment migration. Dune modification may be proposed for a number of purposes, including protection of property, flood and storm hazard reduction, erosion prevention, and ecological restoration.

Coastal dune modification shall be allowed only consistent with state and federal flood protection standards and when it will not result in a net loss of shoreline ecological functions or significant adverse impacts to other shoreline resources and values.

Dune modification to protect views of the water shall be allowed only on properties subdivided and developed prior to the adoption of the master program and where the view is completely obstructed for residences or water-enjoyment uses and where it can be demonstrated that the dunes did not obstruct views at the time of original occupancy, and then only in conformance with the above provisions.

(f) Dredging and dredge material disposal.

Dredging and dredge material disposal shall be done in a manner which avoids or minimizes significant ecological impacts and impacts which cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

New development should be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging. Dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins should be allowed where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

Dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high-water mark. The project must be either associated with a MTCA or CERCLA habitat restoration project or, if approved through a shoreline conditional use permit, any other significant habitat enhancement project.

Master programs should include provisions for uses of suitable dredge material that benefit shoreline resources. Where applicable, master programs should provide for the implementation of adopted regional interagency dredge material management plans or watershed management planning.

Disposal of dredge material on shorelands or wetlands within a river's channel migration zones shall be discouraged. In the limited instances where it is allowed, such disposal shall require a conditional use permit. This provision is not intended to address discharge of dredge material into the flowing current of the river or in deep water within the channel where it does not substantially effect the geo-hydrologic character of the channel migration zone.

(g) Shoreline habitat and natural systems enhancement projects.

Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

Master programs should include provisions fostering habitat and natural system enhancement projects. Such projects may include shoreline modification actions such as 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. Master program provisions should assure that the projects address legitimate restoration needs and priorities and facilitate implementation of the restoration plan developed pursuant to WAC 173-26-201(2)(f).

WAC 173-26-241 Shoreline Uses.

(1) Applicability.

The provisions in this section apply to specific common uses and types of development to the extent they occur within shoreline jurisdiction. Master programs should include these, where applicable, and should include specific use provisions for other common uses and types of development in the jurisdiction. All uses and development must be consistent with the provisions of the environment designation in which they are located and the general regulations of the master program.

(2) General use provisions.

(a) Principles.

Shoreline master programs shall implement the following principles:

- (i) Establish a system of use regulations and environment designation provisions consistent with WAC 173-26-201(2)(d) and 173-26-211 that gives preference to those uses that are consistent with the control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon uses of the state's shoreline areas.
- (ii) Ensure that all shoreline master program provisions concerning proposed development of property are established, as necessary, to protect the public's health, safety, and welfare, as well as the land and its vegetation and wildlife, and to protect property rights while implementing the policies of the Shoreline Management Act.
- (iii) Reduce use conflicts by including provisions to prohibit or apply special conditions to those uses which are not consistent with the control of pollution and prevention of damage to the natural environment or are not unique to or dependent upon use of the state's shoreline. In implementing this provision, preference shall be given first to water-dependent uses, then to water-related uses and water-enjoyment uses.
- (iv) Establish use regulations designed to assure no net loss of ecological functions associated with the shoreline.

(b) Conditional uses.

- (i) Master programs shall define the types of uses and development that require shoreline conditional use permits pursuant to RCW 90.58.100(5). Requirements for a conditional use permit may be used for a variety of purposes, including:
 - To effectively address unanticipated uses that are not classified in the master program as described in WAC 173-27-030.
 - To address cumulative impacts.

- To provide the opportunity to require specially tailored environmental analysis or design criteria for types of use or development that may otherwise be inconsistent with a specific environment designation within a master program or with the Shoreline Management Act policies.

In these cases, allowing a given use as a conditional use could provide greater flexibility within the master program than if the use were prohibited outright.

- (ii) If master programs permit the following types of uses and development, they should require a conditional use permit:
 - (A) Uses and development that may significantly impair or alter the public's use of the water areas of the state.
 - (B) Uses and development which, by their intrinsic nature, may have a significant ecological impact on shoreline ecological functions or shoreline resources depending on location, design, and site conditions.
 - (C) Development in critical saltwater habitats.
- (iii) The provisions of this section are minimum requirements and are not intended to limit local government's ability to identify other uses and developments within the master program as conditional uses where necessary or appropriate.

(3) Standards.

Master programs shall establish a comprehensive program of use regulations for shorelines and shall incorporate provisions for specific uses consistent with the following as necessary to assure consistency with the policy of the act and where relevant within the jurisdiction.

(a) Agriculture

- (i) For the purposes of this section, the terms agricultural activities, agricultural products, agricultural equipment and facilities and agricultural land shall have the specific meanings as provided in WAC 173-26-020.
- (ii) Master programs shall not require modification of or limit agricultural activities occurring on agricultural lands. In jurisdictions where agricultural activities occur, master programs shall include provisions addressing new agricultural activities on land not meeting the definition of agricultural land, conversion of agricultural lands to other uses, and other development on agricultural land that does not meet the definition of agricultural activities.
- (iii) Nothing in this section limits or changes the terms of the current exception to the definition of substantial development. A substantial development permit is required for any agricultural development not specifically exempted by the provisions of RCW 90.58.030(3)(e)(iv).
- (iv) Master programs shall use definitions consistent with the definitions found in WAC 173-26-020 (3).
- (v) New agricultural activities are activities that meet the definition of agricultural activities but are proposed on land not currently in agricultural use. Master

programs shall include provisions for new agricultural activities to assure that:

- (A) Specific uses and developments in support of agricultural use are consistent the environment designation in which the land is located.
- (B) Agricultural uses and development in support of agricultural uses, are located and designed to assure no net loss of ecological functions and to not have a significant adverse impact on other shoreline resources and values.

Measures appropriate to meet this requirements include provisions addressing water quality protection, and vegetation conservation, as described in WAC 173-26-220(5) and (6). Requirements for buffers for agricultural development shall be based on scientific and technical information and management practices adopted by the applicable state agencies necessary to preserve the ecological functions and qualities of the shoreline environment.

- (vi) Master programs shall include provisions to assure that development on agricultural land that does not meet the definition of agricultural activities, and the conversion of agricultural land to non-agricultural uses, shall be consistent the environment designation, and the general and specific use regulations applicable to the proposed use and do not result in a net loss of ecological functions associated with the shoreline..

(b) Aquaculture.

Aquaculture is the culture or farming of food fish, shellfish, or other aquatic plants and animals. This activity is of statewide interest. Properly managed, it can result in long-term over short-term benefit and can protect the resources and ecology of the shoreline. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area. Local government should consider local ecological conditions and provide limits and conditions to assure appropriate compatible types of aquaculture for the local conditions as necessary to assure no net loss of ecological functions.

Potential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, wind protection, commercial navigation, and, in marine waters, salinity. The technology associated with some forms of present-day aquaculture is still in its formative stages and experimental. Local shoreline master programs should therefore recognize the necessity for some latitude in the development of this use as well as its potential impact on existing uses and natural systems.

Aquaculture should not be permitted in areas where it would result in a net loss ecological functions, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses. Aquacultural facilities should be designed and located so as not to spread disease to native aquatic life, establish new nonnative species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline. Impacts to ecological functions shall be mitigated according to the mitigation sequence described in WAC

173-26-020.

(c) Boating facilities.

For the purposes of this chapter, "boating facilities" excludes docks serving four or fewer single-family residences. Shoreline master programs shall contain provisions to assure no net loss of ecological functions as a result of development of boating facilities while providing the boating public recreational opportunities on waters of the state.

Where applicable, shoreline master programs should, at a minimum, contain:

- (i) Provisions to ensure that boating facilities are located only at sites with suitable environmental conditions, shoreline configuration, access, and neighboring uses.
- (ii) Provisions that assure that facilities meet health, safety, and welfare requirements. Master programs may reference other regulations to accomplish this requirement.
- (iii) Regulations to avoid, or if that is not possible, to mitigate aesthetic impacts.
- (iv) Provisions for public access in new marinas, particularly where water-enjoyment uses are associated with the marina, in accordance with WAC 173-26-221(4).
- (v) Regulations to limit the impacts to shoreline resources from boaters living in their vessels (live-aboard).
- (vi) Regulations that assure that the development of boating facilities, and associated and accessory uses, will not result in a net loss of shoreline ecological functions or other significant adverse impacts.
- (vii) Regulations to protect the rights of navigation.
- (viii) Regulations restricting vessels from extended mooring on waters of the state except as allowed by applicable state regulations and unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

(d) Commercial development.

Master programs shall first give preference to water-dependent commercial uses over non-water-dependent commercial uses; and second, give preference to water-related and water-enjoyment commercial uses over non-water-oriented commercial uses.

The design, layout and operation of certain commercial uses directly affects their classification with regard to whether or not they qualify as water related or water enjoyment uses. Master programs shall assure that commercial uses that may be authorized as water related or water enjoyment uses are required to incorporate appropriate design and operational elements so that they meet the definition of water related or water enjoyment uses.

Master programs should require that public access and ecological restoration be

considered as potential mitigation of impacts to shoreline resources and values for all water-related or water-dependent commercial development unless such improvements are demonstrated to be infeasible or inappropriate. Where commercial use is proposed for location on land in public ownership, public access should be required. Refer to WAC 173-26-221(4) for public access provisions.

Master programs should prohibit non-water-oriented commercial uses on the shoreline unless they meet the following criteria:

- (i) The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration; or
- (ii) Navigability is severely limited at the proposed site; and the commercial use provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration.

In areas designated for commercial use, non-water-oriented commercial development may be allowed if the site is physically separated from the shoreline by another property or public right of way.

Non-water-dependent commercial uses should not be allowed over water except in existing structures or in the limited instances where they are auxiliary to and necessary in support of water-dependent uses.

Master Programs shall assure that commercial development will not result in a net loss of shoreline ecological functions or have significant adverse impact to other shoreline uses, resources and values provided for in 90.58.020RCW such as navigation, recreation and public access .

(e) Forest practices.

Local master programs should rely on the Forest Practices Act and rules implementing the act and the *Forest and Fish Report* as adequate management of commercial forest uses within shoreline jurisdiction. However, local governments shall, where applicable, apply this chapter to Class IV-General forest practices where shorelines are being converted or are expected to be converted to non-forest uses.

Forest practice conversions and other Class IV-General forest practices where there is a likelihood of conversion to non-forest uses, shall assure no net loss of shoreline ecological functions and shall maintain the ecological quality of the watershed's hydrologic system. Master programs shall establish provisions to ensure that all such practices are conducted in a manner consistent with the master program environment designation provisions and the provisions of this chapter. Applicable shoreline master programs should contain provisions to ensure that when forest lands are converted to another use, there will be no net loss of shoreline ecological functions or significant adverse impacts to other shoreline uses, resources and values provided for in 90.58.020RCW such as navigation, recreation and public access .

Master programs shall implement the provisions of RCW 90.58.150 regarding

selective removal of timber harvest on shorelines of statewide significance. Exceptions to this standard shall be by conditional use permit only.

Lands designated as "forest lands" pursuant to RCW 36.70A.170 shall be designated consistent with either the "natural," "rural conservancy," environment designation.

Where forest practices fall within the applicability of the Forest Practices Act, local governments should consult with the department of natural resources, other applicable agencies, and local timber owners and operators.

(f) Industry.

Master programs shall first give preference to water-dependent industrial uses over non-water-dependent industrial uses; and second, give preference to water-related industrial uses over non-water-oriented industrial uses.

Regional and statewide needs for water-dependent and water-related industrial facilities should be carefully considered in establishing master program environment designations, use provisions, and space allocations for industrial uses and supporting facilities. Lands designated for industrial development should not include shoreline areas with severe environmental limitations, such as critical areas.

Where industrial development is allowed, master programs shall include provisions that assure that industrial development will be located, designed, or constructed in a manner that assures no net loss of shoreline ecological functions and such that it does not have significant adverse impacts to other shoreline resources and values.

Master Programs should require that industrial development consider incorporating public access as mitigation for impacts to shoreline resources and values unless public access cannot be provided in a manner that does not result in significant interference with operations or hazards to life or property, as provided in WAC 173-26-221(4). Where industrial use is proposed for location on land in public ownership, public access should be required. Industrial development and redevelopment should be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.

New non-water-oriented industrial development should be prohibited on shorelines except when:

- (i) The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration; or
- (ii) Navigability is severely limited at the proposed site; and the industrial use provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration.

In areas designated for industrial use, non-water-oriented industrial uses may be allowed if the site is physically separated from the shoreline by another property or public right of way.

(g) In-stream structural uses.

"In-stream structure" means a structure placed by humans within a stream or river waterward of the ordinary high water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

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

(h) Mining.

Mining is the removal of sand, gravel, soil, minerals, and other earth materials for commercial and other uses. Historically, the most common form of mining in shoreline areas is for sand and gravel because of the geomorphic association of rivers and sand and gravel deposits. Mining in the shoreline generally alters the natural character, resources, and ecology of shorelines of the state and may impact critical shoreline resources and ecological functions of the shoreline. However, in some circumstances, mining may be designed to have benefits for shoreline resources, such as creation of off channel habitat for fish or habitat for wildlife. Activities associated with shoreline mining, such as processing and transportation, also generally have the potential to impact shoreline resources unless the impacts of those associated activities are evaluated and properly managed in accordance with applicable provisions of the master program.

A shoreline master program should accomplish two purposes in addressing mining. First, identify where mining may be an appropriate use of the shoreline, which is addressed in this section and in the environment designation sections above. Second, ensure that when mining or associated activities in the shoreline are authorized, those activities will be properly sited, designed, conducted, and completed so that it will cause no net loss of ecological functions of the shoreline.

(i) Identification of shoreline areas where mining may be designated as appropriate shall:

- (A) Be consistent with the environment designation provisions of WAC 173-26-211 and where applicable WAC 173-26-251(2) regarding shorelines of statewide significance; and
- (B) Be consistent with local government designation of mineral resource lands with long term significance as provided for RCW 36.70A.170(1)(c), RCW 36.70A.130, and RCW 36.70A.131; and
- (C) Be based on a showing that mining is dependent on a shoreline location in the

city or county, or portion thereof, which requires evaluation of geologic factors such as the distribution and availability of mineral resources for that jurisdiction, as well as evaluation of need for such mineral resources, economic, transportation, and land use factors. This showing may rely on analysis or studies prepared for purposes of GMA designations, be integrated with any relevant environmental review conducted under SEPA (RCW 43.21C), or otherwise be shown in a manner consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a).

(ii) Master programs shall include policies and regulations for mining, when authorized, that accomplish the following:

- (A) New mining and associated activities shall be designed and conducted to comply with the regulations of the environment designation and the provisions applicable to critical areas where relevant. Accordingly, meeting the no net loss of ecological function standard shall include avoidance and mitigation of adverse impacts during the course of mining and reclamation. It is appropriate, however, to determine whether there will be no net loss of ecological function based on evaluation of final reclamation required for the site. Preference shall be given to mining proposals that result in the creation, restoration, or enhancement of habitat for priority species.
- (B) Master program provisions and permit requirements for mining should be coordinated with the requirements of chapter 78.44 RCW.
- (C) Master programs shall assure that proposed subsequent use of mined property is consistent with the provisions of the environment designation in which the property is located and that reclamation of disturbed shoreline areas provides appropriate ecological functions consistent with the setting.
- (D) Mining within the active channel or channels (a location waterward of the ordinary high-water mark) of a river shall not be permitted unless:
 - (I) Removal of specified quantities of sand and gravel or other materials at specific locations will not adversely affect the natural processes of gravel transportation for the river system as a whole; and
 - (II) The mining and any associated permitted activities will not have significant adverse impacts to habitat for priority species nor cause a net loss of ecological functions of the shoreline.
 - (III) The determinations required by paragraphs I and II above shall be made consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a). Such evaluation of impacts should be appropriately integrated with relevant environmental review requirements of SEPA (RCW 43.21C) and the SEPA rules (WAC 197-11).
 - (IV) In considering renewal, extension or reauthorization of gravel bar and other in-channel mining operations in locations where they have previously been conducted local government shall require compliance with this subsection (D) to the extent that no such review has previously been conducted. Where there has been prior review, local

government shall review previous determinations comparable to the requirements of this section to assure compliance with this subsection (D) under current site conditions.

(V) The provisions of this section do not apply to dredging of authorized navigation channels when conducted in accordance with WAC 173-27-231(3)(f).

(E) Mining within any channel migration zone that is within Shoreline Management Act jurisdiction shall require a shoreline conditional use permit.

(i) Recreational development.

Recreational development includes commercial and public facilities designed and used to provide recreational opportunities to the public. Master programs should assure that shoreline recreational development is given priority and is primarily related to access to, enjoyment and use of the water and shorelines of the State. Commercial recreational development should be consistent with the provisions for commercial development in (d) above. Provisions related to public recreational development shall assure that the facilities are located, designed and operated in a manner consistent with the purpose of the environment designation in which they are located and such that no net loss of shoreline ecological functions or ecosystem-wide processes results.

In accordance with RCW 90.58.100(4), master program provisions shall reflect that state-owned shorelines are particularly adapted to providing wilderness beaches, ecological study areas, and other recreational uses for the public and give appropriate special consideration to the same.

For all jurisdictions planning under the Growth Management Act, master program recreation policies shall be consistent with growth projections and level-of-service standards established by the applicable comprehensive plan.

(j) Residential development.

Single-family residences are the most common form of shoreline development and are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. Without proper management, single family residential use can cause significant damage to the shoreline area through cumulative impacts from shoreline armoring, storm water runoff, septic systems, introduction of pollutants, and vegetation modification and removal. Residential development also includes multifamily development and the creation of new residential lots through land division.

Master programs shall include policies and regulations that assure no net loss of shoreline ecological functions will result from residential development. Such provisions should include specific regulations for setbacks and buffer areas, density, shoreline armoring, vegetation conservation requirements, and, where applicable, on-site sewage system standards for all residential development and uses and applicable

to divisions of land in shoreline jurisdiction.

Residential development, including appurtenant structures and uses, should be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect such structures and uses. (See RCW 90.58.100(6).)

New over-water residences, including floating homes, are not a preferred use and should be prohibited. It is recognized that certain existing communities of floating and/or over water homes exist and should be reasonably accommodated to allow improvements associated with life safety matters and property rights to be addressed provided that any expansion of existing communities is the minimum necessary to assure consistency with constitutional and other legal limitations that protect private property.

New multiunit residential development, including the subdivision of land for more than four parcels, should provide community and/or public access in conformance to the local government's public access planning and this chapter.

Master programs shall include standards for the creation of new residential lots through land division that accomplish the following:

- (i) Plats and subdivisions must be designed, configured and developed in a manner that assures that no net loss of ecological functions results from the plat or subdivision at full build-out of all lots.
- (ii) Prevent the need for new shoreline stabilization or flood hazard reduction measures that would cause significant impacts to other properties or public improvements or a net loss of shoreline ecological functions.
- (iii) Implement the provisions of WAC 173-26-211 and 173-26-221.

(k) Transportation and parking.

Master programs shall include policies and regulations to provide safe, reasonable, and adequate circulation systems to, and through or over shorelines where necessary and otherwise consistent these guidelines.

Transportation and parking plans and projects shall be consistent with the master program public access policies, public access plan, and environmental protection provisions.

Circulation system planning shall include systems for pedestrian, bicycle, and public transportation where appropriate. Circulation planning and projects should support existing and proposed shoreline uses that are consistent with the master program.

Plan, locate, and design proposed transportation and parking facilities where routes will have the least possible adverse effect on unique or fragile shoreline features, will not result in a net loss of shoreline ecological functions or adversely impact existing or planned water-dependent uses. Where other options are available and feasible, new roads or road expansions should not be built within shoreline jurisdiction.

Parking facilities in shorelines are not a preferred use and shall be allowed only as

necessary to support an authorized use. Shoreline master programs shall include policies and regulations to minimize the environmental and visual impacts of parking facilities.

(I) Utilities.

These provisions apply to services and facilities that produce, convey, store, or process power, gas, sewage, communications, oil, waste, and the like. On-site utility features serving a primary use, such as a water, sewer or gas line to a residence, are "accessory utilities" and shall be considered a part of the primary use.

Master programs shall include provisions to assure that:

All utility facilities are designed and located to assure no net loss shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.

Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, that are non-water-oriented shall not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.

Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of the shoreline area where feasible and when necessarily located within the shoreline area shall assure no net loss of shoreline ecological functions.

Utilities should be located in existing rights of way and corridors whenever possible.

Development of pipelines and cables on tidelands, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance which disrupt shoreline ecological functions should be discouraged except where no other feasible alternative exists. When permitted, provisions shall assure that the facilities do not result in a net loss of shoreline ecological functions or significant impacts to other shoreline resources and values.

WAC 173-26-251 Shorelines of statewide significance.

(1) Applicability.

The following section applies to local governments preparing master programs that include shorelines of statewide significance as defined in RCW 90.58.030.

(2) Principles.

Chapter 90.58 RCW raises the status of shorelines of statewide significance in two ways. First, the Shoreline Management Act sets specific preferences for uses of shorelines of statewide significance. RCW 90.58.020 states:

The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of statewide significance. The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

- (1) Recognize and protect the statewide interest over local interest;*
- (2) Preserve the natural character of the shoreline;*
- (3) Result in long term over short term benefit;*
- (4) Protect the resources and ecology of the shoreline;*
- (5) Increase public access to publicly owned areas of the shorelines;*
- (6) Increase recreational opportunities for the public in the shoreline;*
- (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.*

Second, the Shoreline Management Act calls for a higher level of effort in implementing its objectives on shorelines of statewide significance. RCW 90.58.090(4) states:

The department shall approve those segments of the master program relating to shorelines of statewide significance only after determining the program provides the optimum implementation of the policy of this chapter to satisfy the statewide interest.

Optimum implementation involves special emphasis on statewide objectives and consultation with state agencies. The state's interests may vary, depending upon the geographic region, type of shoreline, and local conditions. Optimum implementation may involve ensuring that other comprehensive planning policies and regulations support Shoreline Management Act objectives.

Because shoreline ecological resources are linked to other environments, implementation of ecological objectives requires effective management of whole ecosystems. Optimum implementation places a greater imperative on identifying, understanding, and managing ecosystem-wide processes and ecological functions that sustain resources of statewide importance.

(3) Master program provisions for shorelines of statewide significance.

Because shorelines of statewide significance are major resources from which all people of the state derive benefit, local governments that are preparing master program provisions for

shorelines of statewide significance shall implement the following:

(a) Statewide interest.

To recognize and protect statewide interest over local interest, consult with applicable state agencies, affected Indian tribes, and statewide interest groups and consider their recommendations in preparing shoreline master program provisions. Recognize and take into account state agencies' policies, programs, and recommendations in developing use regulations. For example, if an anadromous fish species is affected, the Washington state departments of fish and wildlife and ecology and the governor's salmon recovery office, as well as affected Indian tribes, should, at a minimum, be consulted.

(b) Preserving resources for future generations.

Prepare master program provisions on the basis of preserving the shorelines for future generations. For example, actions that would convert resources into irreversible uses or detrimentally alter natural conditions characteristic of shorelines of statewide significance should be severely limited. Where natural resources of statewide importance are being diminished over time, master programs shall include provisions to contribute to the restoration of those resources.

(c) Priority uses.

Establish shoreline environment designation policies, boundaries, and use provisions that give preference to those uses described in RCW 90.58.020(1) through (7). More specifically:

- (i) Identify the extent and importance of ecological resources of statewide importance and potential impacts to those resources, both inside and outside the local government's geographic jurisdiction.
- (ii) Preserve sufficient shorelands and submerged lands to accommodate current and projected demand for economic resources of statewide importance, such as commercial shellfish beds and navigable harbors. Base projections on statewide or regional analyses, requirements for essential public facilities, and comment from related industry associations, affected Indian tribes, and state agencies.
- (iii) Base public access and recreation requirements on demand projections that take into account the activities of state agencies and the interests of the citizens of the state to visit public shorelines with special scenic qualities or cultural or recreational opportunities.

(d) Resources of statewide importance.

Establish development standards that:

- (i) Ensure the long-term protection of ecological resources of statewide importance, such as anadromous fish habitats, forage fish spawning and rearing areas, shellfish beds, and unique environments. Standards shall

consider incremental and cumulative impacts of permitted development and include provisions to insure no net loss of shoreline ecosystems and ecosystem-wide processes.

- (ii) Provide for the shoreline needs of water-oriented uses and other shoreline economic resources of statewide importance.
- (iii) Provide for the right of the public to use, access, and enjoy public shoreline resources of statewide importance.

(e) Comprehensive plan consistency.

Assure that other local comprehensive plan provisions are consistent with and support as a high priority the policies for shorelines of statewide significance. Specifically, shoreline master programs should include policies that incorporate the priorities and optimum implementation directives of chapter 90.58 RCW into comprehensive plan provisions and implementing development regulations.

WAC 173-26-020 Definitions

In addition to the definitions and concepts set forth in RCW 90.58.030, as amended, and the other implementing rules for the SMA, as used herein, the following words and phrases shall have the following meanings:

(1) "Act" means the Washington State Shoreline Management Act, chapter 90.58 RCW.

(2) "Adoption by rule" means an official action by the department to make a local government shoreline master program effective through rule consistent with the requirements of the Administrative Procedure Act, chapter 34.05 RCW, thereby incorporating the adopted shoreline master program or amendment into the state master program.

(3) (a) "Agricultural activities" means 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;

(b) "Agricultural products" includes but is not limited to horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products;

(c) "Agricultural equipment" and "agricultural facilities" includes, but is not limited to: (i) The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains; (ii) corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands; (iii) farm residences and associated equipment, lands, and facilities; and (iv) roadside stands and on-farm markets for marketing fruit or vegetables; and

(d) "Agricultural land" means those specific land areas on which agriculture activities are conducted as of the date of adoption of a local master program pursuant to these guidelines as evidenced by aerial photography or other documentation. After the effective date of the master program land converted to agricultural use is subject to compliance with the requirements of the master program.

(4) "Amendment" means a revision, update, addition, deletion, and/or reenactment to an existing shoreline master program.

(5) "Approval" means an official action by a local government legislative body agreeing to submit a proposed shoreline master program or amendments to the department for review and official action pursuant to this chapter; or an official action by the department to make a local government shoreline master program effective, thereby incorporating the approved shoreline master program or amendment into the state master program.

(6) "Channel migration zone (CMZ)" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

(7) "Department" means the state department of ecology.

(8) "Development regulations" means the controls placed on development or land uses by a county or city, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

(9) "Document of record" means the most current shoreline master program officially approved or adopted by rule by the department for a given local government jurisdiction, including any changes resulting from appeals filed pursuant to RCW 90.58.190.

(10) "Drift cell," "drift sector," or "littoral cell" means a particular reach of marine shore in which littoral drift may occur without significant interruption and which contains any natural sources of such drift and also accretion shore forms created by such drift.

(11) "Ecological functions" or "shoreline functions" means 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. See Section 200(2)(c).

(12) "Ecosystem-wide processes" means 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 and the associated ecological functions.

(13) "Feasible" means, for the purpose of this chapter, that an action, such as a development project, mitigation, or preservation requirement, 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.

In 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 reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

(14) "Fill" means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

(15) "Flood plain" is synonymous with one hundred-year floodplain and means that land area 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 regulation maps or a reasonable method which meets the objectives of the act.

(16) "Geotechnical report" or "geotechnical analysis" means 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 of 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.

(17) "Grading" means 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.

(18) "Guidelines" means those standards adopted by the department to implement the policy of chapter 90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria for local governments and the department in developing and amending master programs.

(19) "Local government" means any county, incorporated city or town which contains within its boundaries shorelines of the state subject to chapter 90.58 RCW.

(20) "Marine" means pertaining to tidally influenced waters, including oceans, sounds, straits, marine channels, and estuaries, including the Pacific Ocean, Puget Sound, Straits of Georgia and Juan de Fuca, and the bays, estuaries and inlets associated therewith.

(21) "May" means the action is acceptable, provided it conforms to the provisions of this chapter.

(22) "Must" means a mandate; the action is required.

(23) "Nonwater-oriented uses" means those uses that are not water-dependent, water-related, or water-enjoyment.

(24) "Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes:

- Comparatively high fish or wildlife density;
- Comparatively high fish or wildlife species diversity;
- Fish spawning habitat;
- Important wildlife habitat;
- Important fish or wildlife seasonal range;
- Important fish or wildlife movement corridor;
- Rearing and foraging habitat;
- Important marine mammal haul-out;
- Refugia habitat;
- Limited availability;
- High vulnerability to habitat alteration;
- Unique or dependent species; or
- Shellfish bed.

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as, old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

(25) "Priority species" means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below.

(a) Criterion 1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the department of fish and wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

(b) Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.

(c) Criterion 3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

(d) Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

(26) "Provisions" means policies, regulations, standards, guideline criteria or environment designations.

(27) "Restore", "Restoration" or "ecological restoration" means the reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including but not limited to re-vegetation, 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.

(28) "Shall" means a mandate; the action must be done.

(29) "Shoreline areas" and "shoreline jurisdiction" means all "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

(30) "Shoreline master program" or "master program" means the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020.

As provided in RCW 36.70A.480, the goals and policies of a shoreline master program for a county or city approved under chapter 90.58 RCW shall be considered an element of the county or city's comprehensive plan. All other portions of the shoreline master program for a county or city adopted under chapter 90.58 RCW, including use regulations, shall be considered a part of the county or city's development regulations.

(31) "Shoreline modifications" means 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, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

(32) "Should" means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and this chapter, against taking the action.

(33) "Significant vegetation removal" means 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.

(34) "State master program" means the cumulative total of all shoreline master programs and amendments thereto approved or adopted by rule by the department.

(35) "Substantially degrade" means to cause significant ecological impact.

(36) "Water-dependent use" means 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 operations.

(37) "Water-enjoyment use" means 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 for 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-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

(38) "Water-oriented use" means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

(39) "Water quality" means 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.

(40) "Water-related use" means 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 its services less expensive and/or more convenient.

Commenter	Identifier	Subject	Summary of Comment	Follow-up/ Response	Context
Citizen/NGO (SPOCA)	3.3	Shoreline Redevelopment/ Restoration	The Shoreline Master Plan's restoration component should include criteria regarding the installation of shoreline bulkheads, as well as the net-benefits of removing bulkheads.	Emphasis that the City was not attempting to return Lake Washington to predevelopment conditions, but rather limit the negative impacts of future development on Lake Washington.	<i>Correspondence (5-17 November 2007)</i>
Citizen/NGO (SPOCA)	3.3	Species/Habitat	Urged the city to continue its current emphasis on removing and controlling invasive species		<i>Correspondence (5-17 November 2007)</i>
Citizen/NGO (SPOCA)	3.3	Shoreline Regulation	Advocated expanding the Shoreline Master Plan study area to include additional sources of non-point pollution for Lake Washington.	Regarding the issue of run-off, the City was engaged in on-going efforts, including education and incentives, to help shoreline property owners address these concerns.	<i>Correspondence (5-17 November 2007)</i>
Citizen/NGO (SPOCA)	3.3	Shoreline Regulation	Expressed concern over Appendix F of the Shoreline Master Plan Draft Inventory, stating that it misrepresented the negative impacts of marina and recreational boats on the shoreline, since the causes of these impacts were already illegal.		<i>Correspondence (5-17 November 2007)</i>
Citizen/NGO (SPOCA)	2.6; 2.8; 3.3	Shoreline Regulation	Power/pump-out stations could be offered boaters to encourage them from dumping raw sewage (such as Marina Park).	Comment forwarded to Parks and Community Services Dept.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006) ; Correspondence (5-17 November 2007)</i>
Citizen/NGO (SPOCA)	3.3	Shoreline Regulation	Referred the City to a recent study concerning efforts by the Denny Park Neighborhood Assoc. to address storm water run-off.	These suggestions and references are being considered.	<i>Correspondence (5-17 November 2007)</i>

Citizens/ Property Owners	4.8	Shoreline Master Program Process	Appreciated the City of Kirkland's recent shoreline presentation, and stated that they will attempt to involve other homeowners in future meetings.		<i>Correspondence (25 September 2007)</i>
Citizens/ Property Owners	4.8	Shoreline Master Program Process	Expressed concern that Kirkland was changing "rapidly".		<i>Correspondence (25 September 2007)</i>
Citizens/ Property Owners	4.8	Shoreline Redevelopment/ Restoration	Encouraged use of sand filters (e.g., treat run-off).		<i>Kirkland Public Forum: Updating Shoreline Master Program (September 2006)</i>
Local Employee	4.6	Shoreline Regulation	Warned of the dangers inherent in incorporating the Army Corps' of Engineers design standards into a critical area ordinance (which could cause a backlash from affected property owners).	The respondent's suggestions would be forwarded to the City of Kirkland Deputy Director of Planning and Community Dev.	<i>Official Correspondence (7-10 September 2007)</i>
Local Employee	4.6	Shoreline Regulation	Lauded the efforts of the Senior Planner within whom he was communicating, stating that the Planner was effective in listening to the concerns of private property owners, and was not unduly burdening them with federal and state shoreline and ecological requirements.	Although the WA State Dept. of Ecology's guidelines for local Shoreline Master Plan updates are ambiguous, they do provide considerable flexibility for how local governments respond	<i>Official Correspondence (7-10 September 2007)</i>
Local Gov. (Kirkland)	4.5	Shoreline Regulation	Person commented on specific language in Sections 4.2.1 and 4.2.2 regarding land uses and the presence of condominium piers. Also suggested changes to Figure 8.	The specific comments and suggestions had been implemented.	<i>Public Comments provided on the Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline (August 2006)</i>

Citizen	2.6; 4.4	Shoreline Redevelopment/ Restoration	Expressed concern over the removal of trees from Heritage Park.	Referred to <i>City of Kirkland Natural Resource Management Plan</i> . Document identifies criteria for retaining trees.	Report on the Tour of Innovative Shoreline Design (30 September 2006) ; Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	4.4	Shoreline Redevelopment/ Restoration	Alarmed about recent street flooding that had resulted from breakdowns within the municipal water pipe system.		Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	2.4; 3.1; 3.3; 3.6; 4.4;	Shoreline Redevelopment/ Restoration	Concerned over the amount of storm water run-off that empties into Lake Washington from non-point pollution sources.	Storm water being addressed in Section 3.3.2 (<i>Storm water Utilities</i>) and the <i>Surface Water Master Plan</i> .	Report on the Tour of Innovative Shoreline Design (30 September 2006) ; Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)

Citizen	4.4	Shoreline Redevelopment/ Restoration	Dismayed that on a recent public tour of de-armored shoreline homes, no examples from Kirkland were used, and was doubtful whether the examples that were used were applicable to Kirkland shoreline property owners.	Either completely removing or softening the portion of Kirkland's shoreline located along private property is unlikely to be accomplished on a grand scale. As a result, the Shoreline Master Plan is designed to be site-specific.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	3.3; 4.4	Shoreline Regulation	How is public access being addressed in Shoreline Master Plan? Also, will city require public access through waterfront single-family properties?	City has no intention of requiring or promoting access through single-family neighborhoods. For more information of existing possible future public access sites, refer to Juanita Beach Park Master Plan.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	4.4	Shoreline Regulation	What are the established speed limits within Lake Washington?	King County only limits boating speeds within 100 yards of shoreline. Otherwise, a boat operator allowed to exercise judgment, but must be able to bring a "watercraft to a stop within the assured clear distance ahead."	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	4.4	Shoreline Regulation	What new regulations may be developed concerning docks?	City considering requiring consistency with state/federal regulations. Also, would likely allow some flexibility in enforcement.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)

Citizen	3.6	Shoreline Redevelopment/ Restoration	Asked whether Lake Washington's historic pre-development condition was considered in the recent Draft Shoreline Master Program Inventory?	Although historic conditions were considered, the present conditions constituted the baseline from which all potential impacts are assessed.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	3.3; 3.6	Shoreline Master Program Process	How do the shoreline inventories specifically related to shoreline habitat restoration and specie health, and what measures were being used to address this issue?	Inventories would serve as indicators for addressing habitat restoration and specie health, particularly as a result of piers, bulkheads, and storm water discharges. City departments will coordinate to address these issues.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	3.6	Shoreline Master Program Process	Questioned the accuracy and best available science regarding statements in the report.	Some statements based on conjecture removed from the report. Other speculative statements remain since they are supported by best available science.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	3.3; 3.6	Shoreline Master Program Process	What positive changes had occurred since the adoption of the original Shoreline Master Plan? What about future improvements to shoreline ecological conditions?	Text has been added to the document that addresses past positive shoreline changes. Specifically, refer to sections 2.1 and 3.3.1. Future improvements will be addressed in the future Restoration Plan.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)

Local Gov. (Kirkland)	4.5	Shoreline Regulation	Commented on specific language in Sections 4.2.1 and 4.2.2 regarding land uses and the presence of condominium piers. Also suggested changes to Figure 8.	The specific comments and suggestions had been implemented.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen/NGO (SPOCA)	3.3	Shoreline Redevelopment/ Restoration	How is the Shoreline Master Plan addressing sediment flow into Juanita Creek and Juanita Bay?	City has added a section to the Shoreline Master Plan that addresses Juanita Creek: Section 4.2.4.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen/NGO (SPOCA)	3.3	Shoreline Redevelopment/ Restoration	What specific opportunities exist for improving the shoreline's ecological functions?	Potential for replacing solid decking with grating on boardwalk over Forbes Creek; in Denny Creek, Also, further discussion of ecological improvements on residential properties. Refer to sections 3.11; 4.3.4; and 4.4.4.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	4.2	Species/Habitat	Expressed concern over maintaining wildlife habitat (especially for birds) in Juanita Bay.	Shoreline wildlife habitat was being addressed in the <i>Final Shoreline Analysis Report</i>	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	4.1	Shoreline Regulation	Asked that inhabitants of Lake Washington (e.g. their dwelling is a boat) be allowed to temporarily use boat moorage covers.		<i>Correspondence (8 February 1999)</i>

Citizen	4.3	Shoreline Regulation	Referenced 'Figure 7a' concerning boatlifts	Two additional boatlifts were included in Figure 7a.	Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Citizen	3.2; 3.3; 4.3	Species/Habitat	Inquired about invasive species along the shoreline. For example, how severe are invasive species?	Referred to the Final Shoreline Analysis Report section 3.10.3 and 4.2.5, where the subject of invasive species is discussed in-depthly. Invasive species include water lily and milfoil. However, unsure as to the full extent to which invasive species impact shoreline 9but will be addressed in future reports).	Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006); Public Comments provided on the <i>Draft Shoreline Master Program Inventory and Characterization for the City of Kirkland's Lake Washington Shoreline</i> (August 2006)
Local Gov. (Kirkland)	3.8	Shoreline Master Program Process	How do we communicate this process to more people, in order to get them involved?		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.6	Shoreline Master Program Process	Since Port Townsend's Shoreline Master Plan close to completion, has it been analyzed as a comparison?	State Dept. of Ecology official answered: Not yet, but it may inform Kirkland's future process.	<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.7	Shoreline Master Program Process	Will the city use advisory committees to help inform the Shoreline Master Program process?	City of Kirkland Senior Planner responded: Because of the restrictive timeline, advisory committees are not feasible. Instead, public meetings will be used as substitutes.	<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>

Citizen	3.1	Shoreline Redevelopment/ Restoration/ Regulation	Although most property owners would be open to changes that improve Lake Washington, felt that the permitting process needs to be more conducive toward accommodating residents/property owners.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.6	Shoreline Research	Are there any studies on storm water runoff (within the Watershed Co. report)?	A representative from the Watershed Co. answered: Storm water runoff is addressed in their report, and will continue to be addressed. However, most storm water-related issues are outside of the Shoreline Master Program's jurisdiction.	<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.1	Shoreline Redevelopment/ Restoration/ Regulation	Property owners should be able to push shoreline portion of their property farther into the Lake as an incentive to remove bulkheads.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen/NGO (SPOCA)	3.3	Shoreline Regulation	Felt that the city had made many improvements to the shoreline as a result of the Shoreline Management Act. These included a low number of bulkheads (relative to its urban setting) and a high amount of access.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.2; 4.6	Species/Habitat	In favor of improving environment for both wildlife and humans. However, emphasis may vary (i.e. favor human activities if sustainable; encourage environmental stewardship).		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
NGO	3.4	Shoreline Master Program Process	Stated that central goal of the tour was for neighbors to learn from each other.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>

Citizen	3.5	Shoreline Regulation	Inquired whether any incentive existed for restoring commercial/mixed uses along the shoreline.	City of Kirkland Senior Planner responded: No incentives currently exist, but the idea is being explored.	<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.1	Shoreline Redevelopment/Restoration	permitting process for private property owners by creating local improvement districts and partnering with private owners to Redevelopment large swath of shoreline at once.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	2.3; 3.1	Shoreline Pollution/Trash	Concerned over garbage dumped into the Lake by boaters.	Unfortunately, because boaters may come from outside Kirkland, it is a regional issue. However, an effort is needed to educate boaters on this issue.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006) ; Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.1	Shoreline Pollution/Trash	Raccoons using nearby storm water pipe		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen/NGO (SPOCA)	3.3	Shoreline Recreation	Valued the water quality of and access to Lake Washington. Also felt that the City offered particularly good shoreline access.		<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	3.1	Shoreline Regulation	What constitutes the near shore zone?	Generally, the near shore comprises the first 30' of shoreline at a depth of 9'. However, recent research may change these benchmarks.	<i>Kirkland Public Forum: Updating Kirkland's Shoreline Master Plan (18 September, 2006)</i>
Citizen	2.13	Shoreline Master Program Process	The city should engage the press, in order to highlight positive changes that have occurred with Kirkland's shoreline.		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>

Citizen	2.14	Shoreline Master Program Process	(Regarding the tour component) will the bus tour be videotaped?	City of Kirkland Senior Planner responded: The bus tour will be videotaped, and made available to the public.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.15	Shoreline Master Program Process	How can one give further input after the meeting?	Any additional comments should be made by e-mail, mail, or writing.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.11; 2.12	Shoreline Redevelopment/Restoration	City should be as site-specific as possible when addressing shoreline conditions on private property.		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Local Gov. (Kirkland)	2.9	Shoreline Regulation	How can the permit process be streamlined for applicants that use the correct approach?	Opportunities exist, but it requires coordination.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.10	Shoreline Regulation	Do all Lake Washington cities require the same criteria for permits?	Jurisdictions do have the same permit criteria, and there is an effort to bring these criteria more closely in-line.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen/ Property Owner	1.1	Shoreline Redevelopment/Restoration	How much did it cost to Redevelopment and de-armor a double lot located along the shoreline?	The cost was \$ 200,000-250,000. Meeting attendees felt that this was "a very good deal."	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.2	Shoreline Redevelopment/Restoration	How well did a double-lot along the shoreline that had recently been de-armored survive storm/erosion damage?	Property owner responded: So far no evidence of any weather-related damage.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen/Property Owner	1.3	Shoreline Redevelopment/Restoration	Regarding a recently de-armored shoreline property, would the owners have done anything differently (concerning the de-armoring process)?	Only change would have been to orient the fireplace differently	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>

Federal Gov. (NOAA)	1.4	Shoreline Redevelopment/Restoration	Would the owners of a recently de-armored shoreline property have preferred a contiguous beach (than what was built)?	Initially the owners would have preferred a contiguous beach, but this would have required sacrificing trees.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen/NGO (SPOCA)	1.5	Shoreline Redevelopment/Restoration	Regarding a recently de-armored shoreline property, how are the environmental benefits of de-armoring a shoreline property quantified?	Tour coordinators answered: The benefits are realized through the increase or restoration of endangered species habitat.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.6	Shoreline Redevelopment/Restoration	How does one go about planning for shoreline design?	One must decide upfront what the needs and priorities are, and clearly articulate goals.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.6	Shoreline Master Program Process	How does one avoid being overwhelmed by the extant of decisions required for planning Kirkland's shoreline?	One must decide upfront what the needs and priorities are, and clearly articulate goals.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.7	Shoreline Redevelopment/Restoration	Should docks be constructed of aluminum (in order to minimize impact)?	Not per se. Rather how the material will impact species habitat should be main concern.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.7	Shoreline Redevelopment/Restoration	When importing new soils (as part of shoreline restoration), do the supporting geotextile fabrics prevent sinkholes? Are they muskrat proof?	Usually fabrics are, but they may require an additional metal mesh	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.8	Shoreline Redevelopment/Restoration	Does a property owner need permits for property redevelopments below the ordinary high water mark?	Yes, an owner would need to obtain a permit.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.9	Shoreline Redevelopment/Restoration	Should property owners' use large boulders/stones when redeveloping shoreline property? If so, do they need to obtain a permit for this?	Property owners should always consult with the city first (as some boulder/stones may not be beneficial). Permits would be required.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>

Citizen/NGO (SPOCA)	1.10	Shoreline Redevelopment/Restoration	(Referring to the tour's overall comments) Why is there so much emphasis on salmon, rather than other species?	The salmon are officially listed as threatened; as such, governments are required to protect them.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	1.11	Species/Habitat	Do invasive predators (e.g. bass) prefer non-native plant species?	Yes, non-native predators do associate with non-native plants.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.1	Shoreline Research	Regarding shoreline restoration efforts, how much study had gone into offshore areas (of Lake Washington), and its topography, and water depth (as well as the best available science to account for these factors)?	Restoration will likely be constrained by what can be done, and will be informed by other local efforts.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.2	Shoreline Master Program Process	Asked to have the Shoreline Master Program's timeline clarified?	The City is farther along in the process than other Lake Washington jurisdictions.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizens	2.3; 2.4	Species/Habitat	Milfoil is an issue--there was too much of it and it smelled foul.	Best way to remove it is by pulling it from the roots. Moreover, milfoil removal is addressed in a recent Dept. of Fish and Wildlife publication.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.5	Species/Habitat	A comment was made about the balance between salmon (a native species) and bass and sculpin (non-native)		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.6	Shoreline Regulation	Reduce street setbacks for new homes, so as to keep homes farther away from the shoreline.		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.6	Shoreline Regulation	Could moorage rates be increased?		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>

Citizen	2.6	Shoreline Redevelopment/ Restoration	Could native trees be planted that support eagles and osprey?		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.7	Shoreline Recreation	Could boaters could be directed toward the free pump station (at Yarrow Bay)?		<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>
Citizen	2.8	Shoreline Redevelopment/ Restoration	How can the shoreline be softened (i.e. remove bulkheads)--particularly since most of the shoreline is privately owned?	Cost-effective opportunities exist, such as through official certification courses, which in turn can be used for community outreach/education.	<i>Report on the Tour of Innovative Shoreline Design (30 September 2006)</i>

Patrice Tovar

From: Patrice Tovar
Sent: Wednesday, July 11, 2007 1:48 PM
To: 'Paul Berton Birkeland'
Cc: 'spike@adww.com'; 'kitb@wickconst.com'; 'd.db@verizon.net'; 'l.lakeplace@verizon.net'; 'tonyfassbind@verizon.net'; 'kathy@feekcorp.com'; 'johngraham1@comcast.net'; 'jack@rafn.com'; 'kayseim157@aol.com'; 'rickseim@cbbain.com'
Subject: RE: Kirkland's Shoreline Master Program Update

Thank you for your additional comments. I have asked staff in the Parks and Public Works departments for responses to your first three points and will pass that information on to you when I receive it.

Your fourth point concerns the relationship between property characteristics and the feasibility of replacing bulkheads with softer shoreline. We are aware that the improvements featured on the shoreline tour are not practical for every property and do not mean to imply that everyone should have them. The purpose of the tour was to enable stakeholders to see examples of designs now preferred by State and Federal permitting agencies and to hear about the designs' costs and benefits.

As you may know, permitting agencies have begun to focus on these designs because studies have found that traditional bulkheads and docks create conditions that favor predators of the baby Chinook salmon (a threatened species) that live in the shallows of Lake Washington's shoreline. Interestingly, owners of the properties featured on the tour described how the innovative designs function better for their own needs and desires as well, e.g. water access, safety, aesthetics, and overall usability of their land.

You are correct that there are many properties in Kirkland that will not be able to (and will not be expected to) accommodate the softened shorelines featured on the tour. However, there actually are some in Kirkland that have already done so and others that may potentially accommodate some of the improvements, rather than sweeping changes. It is my understanding that the consultant that arranged the tour did try to include Kirkland properties, but was unable to find a willing owner.

Your comments, questions, and perspective are valuable contributions to this project. Ongoing involvement of shoreline property owners will produce a much better Shoreline Master Program, and I appreciate very much your taking the time to think and communicate about these issues.

Patrice

From: Paul Berton Birkeland [mailto:birk129@hotmail.com]
Sent: Tuesday, July 10, 2007 7:54 AM
To: Patrice Tovar
Cc: spike@adww.com; kitb@wickconst.com; d.db@verizon.net; l.lakeplace@verizon.net; tonyfassbind@verizon.net; kathy@feekcorp.com; johngraham1@comcast.net; jack@rafn.com; kayseim157@aol.com; rickseim@cbbain.com
Subject: RE: Kirkland's Shoreline Master Program Update

Thanks. Unfortunately I have conflicts with upcoming meetings, but I have forwarded this e mail to other shoreline owners. I will add a few comments:

1. Trees have been removed from Heritage Park by City of Kirkland - some old, grand and glorious, and replacements seem to be few and far between.
2. Storm water runoff coming down Market Street, goes directly into Lake Washington, and contains a great deal of rubber and oil residue. This should somehow be kept out of Lake Washington. This is a

very heavily travelled street, and to dump oily water from it into Lake Washington seems a shame.

3. The flooding on our street has taken place on THREE separate occasions over past five years, and resulted from three separate, and distinct, breakdowns in Kirkland City water pipe breaks. The cistern at the SE corner of Waverly Park, at SW end of Market Street, needs enlargement to handle these problems.

4. No homes on Lake Avenue West or 5th Avenue West were used in your examples, and I doubt you contacted any of us for access - at least I know of nobody contacted by your folks for access to their properties. Using Hunts Point or Yarrow Point properties, many of which are 500-600 feet deep, to show how we can eliminate bulkheads and create softer shorelines is simply not in synch with 100 foot deep (or less) properties in much of Kirkland where zoning allows construction within 15 feet of the shoreline. From Yarrow Bay to Juanita Bay, I doubt 10% of the lots are much more than 100 feet deep, and many lots on Champagne and Holmes Point (I lived on Holmes Point for many years) are also very shallow. In short, your desire to knock down bulkheads and thus create softer shorelines is simply not consistent with the shoreline in most of Kirkland, thus thus, that suggestion simply does not work, and indeed shows a lack of understanding of Kirkland waterfront properties, their sizes, setback requirements, and physical location of existing structures.

I have no doubt that we need to adopt some changes to bring back fisheries to Lake Washington. I must add, however, that in our 29 years living on Lake Avenue West, we have seen a dramatic turn around in the bald eagle population, we now have otters in our area, and even osprey are seen flying above us - something we cannot recall prior to about the year 2000. So some progress has been made, but the fish population seems not to have recovered as well as might be expected.

From: "Patrice Tovar" <PTovar@ci.kirkland.wa.us>
To: <Birk129@hotmail.com>
Subject: Kirkland's Shoreline Master Program Update
Date: Mon, 9 Jul 2007 15:26:15 -0700

Hello,

During the past several months Kirkland staff has been working behind the scenes to compile the input received from stakeholders, finalize the shoreline inventory, analysis, and characterization; study Shoreline Master Program requirements; and determine how the new SMP should be organized.

Your input was much appreciated. The attached letter describes how the Shoreline Analysis Report was revised in response to your comments. A hard copy will follow by mail. The final report has been posted at http://www.ci.kirkland.wa.us/depart/Planning/Plans_and_Projects/Shoreline_Master_Program.htm and is available on request in both hard copy and CD formats.

We hope you will continue to participate in our Shoreline Master Program Update process. Study sessions will be held by the Planning Commission this Thursday, July 12, and by the Houghton Community Council on Monday, July 16. At these meetings, staff will introduce the purpose, process, and products that have been produced so far. Shoreline Environment Designations will be the focus of study sessions on August 20 (Houghton Community Council) and August 23 (Planning Commission). Please note that in both July and August, the dates for Houghton Community Council's meetings have changed from the dates recently advertised.

Over the next several months, the SMP updates will be gradually drafted during the study sessions and then presented for comment in public hearings, before a final draft goes to the City Council for decision. Written comments are welcome throughout the process and oral comments can be offered during the upcoming study sessions as well as at the public hearings that will be held toward the end of the process. The staff memo and other materials for upcoming meetings are posted at <http://www.ci.kirkland.wa.us/depart/Planning.htm>.

7/11/2007

Best regards,

Patrice Tovar, AICP

MONDAY - THURSDAY 7:00 - 4:00

Telecommute FRIDAY 7:00 - 4:00

(425) 587-3259 or e-mail Mon.-Fri.

<< SMPresponsetoBirkelandcomments72007.doc >>

7/11/2007

From: Richard Sandaas [eride@msn.com]
Sent: Saturday, November 17, 2007 12:14 PM
To: Stacy Clauson
Subject: Re: SMP Update Process
Dear Stacy:

Thank you for your reply.
I appreciate the information sources on the City's stormwater activities and will follow up on that. There is also an important information resource on stormwater that the Denny Creek Neighborhood Alliance developed through its efforts in studying Denny Creek. I'll see about getting a copy of that into the hands of Jenny Gaus. This study showed that while individual developments had installed stormwater retention/detention facilities, it wasn't done in a systematic way. Among the impacts are alteration of watersheds and increases in the 'spikes' of flows into the Denny Creek and on into Lake Washington. The impacts range from impeding fish runs to pollution entering the lake. It just seems that there is an opportunity to link SMP objectives and remediation projects with the stormwater program.
We'll stay engaged in the process and thanks again for the information.

Richard Sandaas

----- Original Message ----- We

From: [Stacy Clauson](#)
To: [Richard Sandaas](#)
Sent: Thursday, November 15, 2007 2:37 PM
Subject: RE: SMP Update Process

Dear Richard,

I just wanted to drop a quick note letting you know that I have received your comments and appreciate your remarks. In the coming months, we will be looking closely at policies and regulations pertaining to issues addressed in your letter. Thank you for also providing additional resources addressing shipyard management - I will be reviewing these documents to see how they pertain to this process.

I did want to take this opportunity to respond to one concern you raised in your letter addressing a perceived emphasis on returning the shoreline to what are essentially predevelopment conditions. I want to clarify that the City is not proposing that properties within the shoreline jurisdiction return to predevelopment conditions. As part of our update process, we will be evaluating opportunities to promote the use of fish- and wildlife-friendly shoreline protection measures for the design of shoreline structures such as docks and bulkheads.

In order to meet the requirements of the state guidelines for updating the SMP, the City will need to ensure that the program does not result in a net loss of ecological functions that existed at the time we started our update process. That baseline is established by the shoreline inventory, analysis, and characterization that the City completed in December 2006, which is available by following this link: http://www.ci.kirkland.wa.us/_shared/assets/Shoreline_report_120120065562.pdf . The City will

need to demonstrate that it has accomplished the goal of no net loss through an analysis of cumulative impacts that might occur through implementation of the updated SMP.

In response to your comments concerning stormwater runoff and nonpoint pollution, I did want to provide some information on City initiatives related to this topic. In general, surface water programs projects and behaviors that apply to the City as a whole will also be used within the shoreline management area to protect the quantity and quality of stormwater runoff. Please see Kirkland's 2005 *Surface Water Master Plan* (www.ci.kirkland.wa.us then search for "surface water master plan") and the City website for further details. Further, Jenny Gaus, the City's Senior Stormwater Utility Engineer, can be reached at 425-587-3850 or by e-mail at JGaus@ci.kirkland.wa.us for further details.

Most properties within the shoreline management area discharge runoff directly to Lake Washington via pipes. As a result the quality of this runoff can have a direct impact on the quality of water in Lake Washington. It is very difficult to remove materials once they are discharged into the lake. Thus, as part of the City's Shoreline Master Program update process, the City will be exploring opportunities to extend and emphasize existing programs to engage the community in behaviors that prevent discharges and protect water quality in the shoreline management area. Such programs include the following:

- Education and incentives for use of natural yard care techniques that reduce the use of fertilizers and pesticides and prevent soil erosion
- Encourage use of Low Impact Development (LID) techniques that reduce or prevent creation of impervious surfaces, that protect and increase the cover of vegetation, and that reduce the amount of existing impervious surface that is directly connected to pipes and/or to Lake Washington
- Require use of "best management practices" (BMPs) for property maintenance. For example, sweeping parking areas rather than hosing them down, stenciling drains with the message "dump no waste, drains to lake," and covering and containing stored materials such as swimming pool chemicals, topsoil, or fuels
- Investigate and resolve water quality complaints promptly and thoroughly with an emphasis on prevention of future discharges

These actions, in addition to City actions to identify and resolve water quality issues in the city as a whole, will result in improved quality of water in Lake Washington.

Kirkland has also been an active participant in the region's efforts to recover sustainable, healthy and harvestable runs of salmonids. Each year funding is dedicated to stream and wetland protection in the [Capital Improvement Program](#) (CIP). City projects such as the Juanita Beach Park Stream Restoration (see project CSD-0057 in the Capital Improvement Program) are designed and constructed to restore and/or protect streams. The City often monitors and studies the chemistry, physical characteristics, and biological status of waterways within the City. This helps to identify sources of pollution, potential for streams to support fish and other aquatic species, and the distribution and health of fish and other aquatic species.

Again, thank you for your comments and I would appreciate it if you could stay engaged and informed of this process and provide your insights into our revised Shoreline Master Program.

Stacy Clauson
Associate Planner
City of Kirkland
Planning and Community Development
123 Fifth Avenue
Kirkland, WA 98033
425-587-3248
sclauson@ci.kirkland.wa.us

From: Richard Sandaas [mailto:eride@msn.com]
Sent: Monday, November 05, 2007 10:37 AM
To: Stacy Clauson
Subject: SMP Update Process

Good Morning Stacy:

After our email exchange I went back and reviewed some of the materials that have been developed to date. This prompted some thoughts and comments so I've drafted a letter which incorporates them. Please let me know if you have any questions or would like to discuss them.

Thanks,
Richard Sandaas

Richard K. Sandaas
12453 Holmes Point Drive
Kirkland, WA 98034
425 922 4152
eride@msn.com

November 5, 2007

Ms. Stacy Clauson
Associate Planner
City of Kirkland
Planning and Community Development Department
123 Fifth Avenue
Kirkland, WA 98033

Reference: Shoreline Master Program Update Process

Dear Ms. Clauson:

By way of introduction, I am a shoreline property owner in Holmes Point, which is part of the Proposed Annexation Area and also the chair of the Shoreline Property Owners Association, SPOCA. We have been following the Kirkland SMP update process since 2006 and provided comments on the Draft Inventory.

In this letter I would like to provide you with some comments and suggestions as you proceed in your role as Project Manager for the SMP update process.

We have observed in the Kirkland SMP update process as well as others that there is an emphasis on returning the shoreline to what are essentially predevelopment conditions. Several examples relate to the condition of Lake Washington prior to the construction of the ship canal and Chittenden Locks. One of the targets in this thinking is bulkhead and shoreline 'hardening'. In our comment letter a year ago, we raised concerns about a blanket policy of bulkhead removal and outlined specific reasons. These included understanding the reasons for their installation in the first place, direct benefit of removal, unintended consequences, and cost benefit for removal. These criteria should be included in the Restoration Plan.

We have also gone on record regarding the impacts of invasive weeds, stormwater runoff, and non-point pollution. We now see that the Shoreline Analysis Report incorporates information on invasive weeds. We urge that continued emphasis be placed on removing and controlling them because of their negative impacts on fish habitat as well as safety to swimmers and boaters.

Harkening back to the Clean Water Act of the 1970's, SPOCA has a strong interest in fishable and swimmable waters. Today, the most serious threat to this goal is stormwater runoff and nonpoint pollution. All the possible shoreline based restoration ideas in total will fall far short of the beneficial impact that a systematic program dealing with stormwater runoff and nonpoint sources would provide. We recognize that the SMP update process is focused on the 200 foot zone adjacent to water bodies. However there is a unique opportunity to leverage the SMP update process to include impacts on Lake Washington that are beyond this zone.

Appendix F, Nonpoint Source Pollution from Marinas and Recreational Boating is a document which we have recently seen and not commented on. Many of the impacts mentioned come from actions which are either illegal or prohibited. To paint a picture that recreational boating and marinas routinely produce these kinds of impacts is inaccurate. Additionally, this document should not remain as the stand alone in your information resources regarding impacts of marinas. I refer you to the recent agreement coming out of the leadership of the Northwest Marine Trade Association regarding shipyard management in our region. It is a leading edge approach to the management of shipyard activities. Additionally, Washington is one of 23 states which has a Clean Marina Program providing marina certification. Regarding boats, Appendix F mentions sewage discharge from recreational boats. This discharge is illegal and boats with marine heads must have means of dealing with sewage. A low cost and effective project for the City of Kirkland would be the installation of a sewage pump out facility at Marina Park.

We appreciate the opportunity to be involved in the SMP update process and look forward to a continuing dialog.

Very truly yours,

Richard K. Sandaas

From: Paul Stewart
Sent: Monday, September 10, 2007 5:55 PM
To: Amy Summe; Stacy Clauson
Subject: FW: CRUISE ATTENDANCE

Attachments: SMPForumsSummaryReportFinalFeb07.doc.rtf
FYI – see below.

Paul Stewart
425-587-3227

From: Patrice Tovar
Sent: Monday, September 10, 2007 11:14 AM
To: 'Daved'
Cc: Paul Stewart
Subject: RE: CRUISE ATTENDANCE

Please see my responses below...

From: Daved [mailto:Daved@waterfrontconstruction.com]
Sent: Monday, September 10, 2007 9:28 AM
To: Patrice Tovar
Subject: RE: CRUISE ATTENDANCE

Good luck with your future plans. Thank you!

I really wish you were staying with the city because you are the first planner from Kirkland that actually requested and was open to any input from us. We have come up against a new breed of shoreline planners and regulators who look for ways to prevent property owners from reasonably enjoying their waterfronts and rather than "How can we help you" we get more of "How can we stop you or make the mitigation and requirements so expensive that you will cancel the project and go away". I am confident that my successor will continue our efforts to include you and everyone that has interest in Kirkland's Shoreline Master Program update. My supervisor – Paul Stewart, Kirkland Deputy Director of Planning – has been very enthusiastic about encouraging the participation of those who live or work on our shoreline, and he will be supervising my successor. I will forward this email thread to Paul and also print it out to file with the other comments we have received. All written comments will be viewed by Kirkland Planning Commission, Houghton Community Council and Kirkland City Council before any decisions are made about amendments to the Shoreline Master Program.

Local governments are collapsing more and more under the pressure from state and federal agencies and failing to stand up on behalf of its citizens. Seattle, Bellevue and King County are just the tip of the iceberg and in recent years Kirkland has been leaning in the same direction. The requirement to update Shoreline Master Plans has caused a lot of panic at the local level and I don't know what is at stake for local governments but if they are doing what is required in the Shoreline Management Act and not trying to make a name for themselves one would think there is nothing to get excited about.

You would know better than me what is at stake during the update of the SMP. Can you offer an explanation of what local governments have to gain or lose and what is the guiding reference for their SMP update?

The short answer is that Ecology will only approve a Shoreline Master Program update that is consistent with:

- The policies in the State Shoreline Management Act (SMA), and
- The Shoreline Master Program Guidelines adopted by the State.

This is a very challenging project because for the most part, the SMA and the Guidelines do not specify exactly

how to write a Shoreline Master Plan that will be acceptable. So local governments -- and Ecology staff -- are figuring it out as they go along. Recently Ecology has approved the first few Shoreline Master Program updates, so there are some examples now to guide the way. In addition, Ecology is in the process of writing a new how-to manual for the benefit of local governments and all who are participating in the process. They hope to have it ready for distribution this fall. To more directly address your concern, though, the good news is that the non-specificity of the SMA and Guidelines means there is a fair amount of flexibility for local governments -- as long as Ecology determines that their updated Shoreline Master Programs will not result in net loss of the ecologic functions that existed at the time they started their updates. That baseline is established by the shoreline inventory, analysis and characterization that each local government is required to do at the beginning of their process to update their Shoreline Master Program. Kirkland's was completed in December 2006 and is available at http://www.ci.kirkland.wa.us/depart/Planning/Code_Updates/Shoreline_Master_Program.htm. You might want to sign up for automatic email updates at that website. Hard copies of the Shoreline Analysis Report are also available. Let me know if you want one. You may also be interested in the draft list of Kirkland's objectives for this project, which was drafted last year by staff in collaboration with stakeholders, including members of SPOCA. The attached document lists those objectives as well as additional objectives and concerns expressed by stakeholders at public forums held here last year.

All the best,
Patrice

Thanks.

Sincerely,

David Douglas
Permit Coordinator
Waterfront Construction, Inc.
10315 19th Ave SE, Ste 106
Everett, WA 98208
Phone: (425) 357-0312
Fax: (425) 357-0320

From: Patrice Tovar [mailto:PTovar@ci.kirkland.wa.us]
Sent: Monday, September 10, 2007 8:42 AM
To: Daved
Subject: RE: CRUISE ATTENDANCE

Hi David,

I am retiring from planning because I have an opportunity to return to my previous career in fine art. It is a long time dream of mine, so I can't pass it up.

I will be interested to follow Kirkland's progress from afar and am glad you and your organization will continue to give Kirkland the benefit of your input.

Patrice

From: Daved [mailto:Daved@waterfrontconstruction.com]
Sent: Friday, September 07, 2007 2:19 PM
To: Patrice Tovar
Subject: RE: CRUISE ATTENDANCE

Thanks Patrice,

I'm sorry to hear you are leaving. Are you staying in public service, going private or fortunate enough to be retiring?

Sincerely,

David Douglas
Permit Coordinator
Waterfront Construction, Inc.
10315 19th Ave SE, Ste 106
Everett, WA 98208
Phone: (425) 357-0312
Fax: (425) 357-0320

From: Patrice Tovar [mailto:PTovar@ci.kirkland.wa.us]
Sent: Friday, September 07, 2007 1:32 PM
To: Daved
Cc: Paul Stewart
Subject: RE: CRUISE ATTENDANCE

Hi David,

Thanks for your message. I remember meeting you at the WRIA 8 meeting on Mercer Island and am glad you or someone from Waterfront Construction will be on the cruise.

I will not be working for the City of Kirkland after September 21st but will forward your message to Paul Stewart, Kirkland's Deputy Planning Director, who is coordinating and will be attending the cruise. Also, I will make sure that my successor receives a copy of your message. Thanks for the information.

Patrice

From: Daved [mailto:Daved@waterfrontconstruction.com]
Sent: Friday, September 07, 2007 1:25 PM
To: Patrice Tovar
Subject: CRUISE ATTENDANCE

Hi Patrice,

I or someone from our company (Waterfront Construction, Inc) would like to attend the cruise. We are current on state and federal permitting regulations and guidelines and the shoreline master plans of other waterfront communities along Lake Washington, those who and do not support state and federal intervention into local government decisions and management of their shorelines.

We have attended various meetings in the area and I met you at the WRIA 8 meeting on Mercer Island. You stated you might want to consult with us prior to making changes in the Kirkland SMP. You may want to also check with your Bellevue neighbors to the south on the impacts of incorporating the Corps' design standards into their CAO have caused. It has been nothing short of a nightmare for many of the property owners they are paid to serve. We believe there can be a balance between people and fish and when the scales tip too far one way or the other someone will suffer. We also believe the scale should tip to the human side unless there is irrefutable evidence that harm is being done to the environment which hurts people in the long-term. Up to this point best available science has not been able to substantiate docks and bulkheads hurt fish or the environment but it is still used as a regulating tool against property owners.

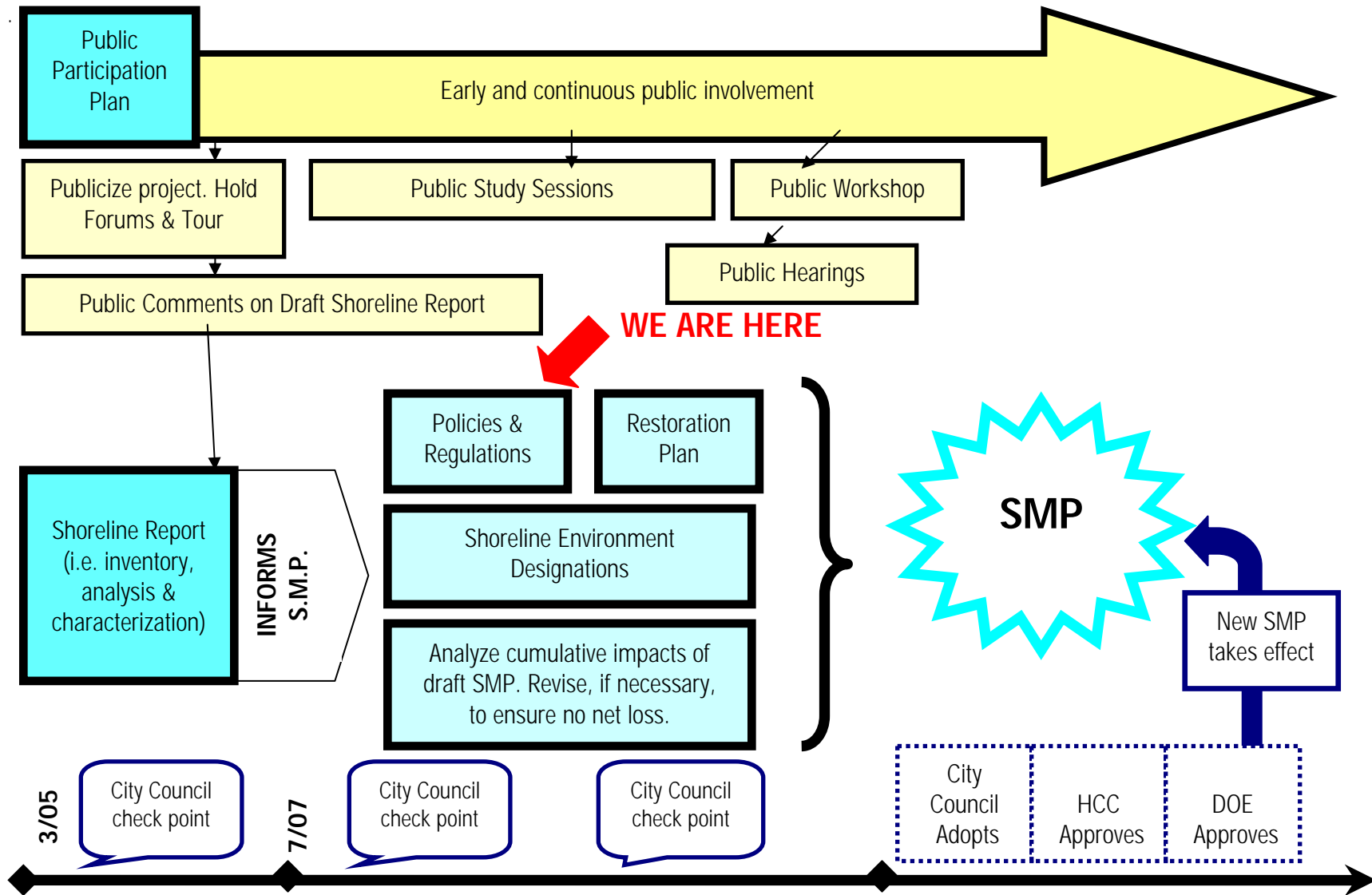
Kirkland may want guard itself and its citizens from too much state and federal intervention because your residents will come knocking on your door as their local leaders and public servants and not the doors of Olympia or Washington DC. Once the change is made it is impossible to go back. Although your waterfront property owners are a small percentage of the city's total population they do pay the highest taxes and represent things the Puget Sound is best known for.

Please reserve a seat or two for us if possible or let me know how we can be assured a couple seats.

Thanks a lot.

Sincerely,

David Douglas
Permit Coordinator
Waterfront Construction, Inc.
10315 19th Ave SE, Ste 106
Everett, WA 98208
Phone: (425) 357-0312
Fax: (425) 357-0320



UPDATING KIRKLAND'S SHORELINE MASTER PROGRAM (SMP) Phases 3-6 Plan Preparation and Adoption January 29, 2008 Subject to Change		
Date	Meeting	Task
December, 2007- February, 2008		<ul style="list-style-type: none"> • Staff prepares: <ul style="list-style-type: none"> ○ Outline for SMP Plan <i>Note: Need to investigate whether to have stand-alone or intergrated plan</i> <ul style="list-style-type: none"> ○ Draft policies for Land Use, Shoreline Environment Designations and Natural Environment <i>Note: Policies must be consistent with SMA + SMP Guidelines and consistent with findings in our shoreline analysis report</i>
February 25, 2008	Houghton Community Council Study	<ul style="list-style-type: none"> • Staff presents framework for review and plan components • Staff presents work program • Staff receives direction on review process & schedule • Staff presents proposed outline of SMP Plan • Staff presents preliminary issues and draft policies for Land Use and Shoreline Environment Designations <i>Note: Policies must be consistent with SMA + SMP Guidelines and consistent with findings in our shoreline analysis report</i>
February 28, 2008	Planning Commission Study	<ul style="list-style-type: none"> • Staff presents framework for review and plan components • Staff presents work program • Staff receives direction on review process & schedule • Staff presents proposed outline of SMP Plan • Staff presents preliminary issues and draft policies for Land Use and Shoreline Environment Designations • Discuss format and structure of public participation effort to occur in May-June <i>Note: Policies must be consistent with SMA + SMP Guidelines and consistent with findings in our shoreline analysis report</i>
March 13, 2008	Planning Commission Study	<ul style="list-style-type: none"> • Staff presents preliminary issues and draft policies for Natural Environment, Open Space/Parks, Utilities, Transportation, Archaeological and Design Issues

March 24, 2008	Houghton Community Council	<ul style="list-style-type: none"> Staff presents preliminary issues and draft policies for Natural Environment, Open Space/Parks, Utilities, Transportation, Archaeological and Design Issues
March-April, 2008		<ul style="list-style-type: none"> Staff prepares: <ul style="list-style-type: none"> Revisions to draft shoreline policies and draft Shoreline Environment Designations Reviews consistency between Shoreline Environment Designations and Comprehensive Plan Draft shoreline use and shoreline modification listings Staff sends draft Master Program Policies¹ to Ecology for review <i>Note: Policies must be consistent with SMA + SMP Guidelines and include written justification and rationale for recommended designations based on findings in the shoreline analysis report</i>
April 1, 2008	City Council Check-In	<ul style="list-style-type: none"> Brief CC on work program Identify and overview key initial issues
April 10, 2008	Planning Commission Study	<p>Staff presents to PC:</p> <ul style="list-style-type: none"> Revised policies and Shoreline Environment Designations Draft shoreline use and shoreline modification listings Obtain input on general issues/concepts that should be included in draft standards
April 28, 2008	Houghton Community Council Study	<p>Staff presents:</p> <ul style="list-style-type: none"> Revised policies and Shoreline Environment Designations Draft shoreline use and shoreline modification listings Obtain input on general issues/concepts that should be included in draft standards
May 6, 2008	City Council Check-In	Brief CC on draft SMP Policies and Shoreline Environment Designations
May – June 2008		Public participation on key policy issues in draft SMP (e.g. workshop, open house, focus group)

¹ Element of the City's Shoreline Master Program

July 10, 2008	Planning Commission Study	Staff presents draft standards for shoreline uses (boating facilities, commercial development, industry, in-stream structural uses, recreational development, residential development, transportation and parking, and utilities).
August 14, 2008	Planning Commission Study	Staff presents: <ul style="list-style-type: none"> • Revisions to draft standards for shoreline uses • Draft standards for shoreline modifications (shoreline stabilization, piers and docks, fill, dredging and dredge material disposal, shoreline habitat and natural systems enhancement projects)
August 25, 2008	Houghton Community Council Study	Staff presents: <ul style="list-style-type: none"> • Draft standards for shoreline uses • Draft standards for shoreline modifications
August, 2008		Staff sends draft Shoreline Environment Designations, Map Folio and Shoreline Regulations ² to DOE for review
September 11, 2008	Planning Commission Study	<ul style="list-style-type: none"> • Revisit environment designations, policies and regulations if necessary • Staff presents Cumulative Impact Analysis (to confirm that policies and regulations would prevent net loss of ecological functions)
October 9, 2008	Planning Commission Study	Staff presents Restoration Plan and Implementation Strategy, with following components: <ul style="list-style-type: none"> • Based on inventory, analysis, and characterization of ecological functions and processes • Establishes overall restoration goals • Identifies specific priority restoration areas • Lists current and ongoing programs that contribute to achieving the goals • Lists additional projects necessary for success • Includes an implementation strategy that addresses: <ul style="list-style-type: none"> ○ Funding; ○ Timelines; and • Benchmarks.
October 27, 2008	Houghton Community Council	<ul style="list-style-type: none"> • Staff presents Cumulative Impact Analysis • Revisit environment designations, policies and regulations if necessary • Staff presents Restoration Plan

² Element of the City's Shoreline Master Program

November, 2008		Staff sends draft Cumulative Impact Analysis ³ and Shoreline Restoration Plan ⁴ to DOE for review
November/ December		Staff prepares environmental review
November 4, 2008	City Council Check-In	Brief Council on draft SMP
November 2008	Public Workshop	Hold a public workshop prior to public hearings by PC and HCC
December 11, 2008	Planning Commission Study	Planning Commission reviews remaining issues, addresses any feedback received from DOE based on reviews
January 26, 2009	Houghton Community Council Public Hearing	Staff presents: <input type="checkbox"/> Draft Plan HCC receives public comments HCC directs changes to the drafts, and makes recommendation to City Council
February 12, 2009	Planning Commission Public Hearing	Staff presents: <input type="checkbox"/> Draft Plan PC receives public comments PC directs changes to the drafts, and makes recommendation to City Council
March 12, 2009	Planning Commission Study	Planning Commission reviews remaining issues
March 23, 2009	Houghton Community Council	<input type="checkbox"/> Staff presents Draft Plan for final review <input type="checkbox"/> HCC reviews final draft and gives recommendation to City Council
March 26, 2008	Planning Commission Study	<input type="checkbox"/> Staff presents Draft Plan for final review <input type="checkbox"/> PC reviews final draft and gives approval for final version for City Council
April 28, 2009	City Council	CC Study Session on the draft SMP
May 26, 2009	City Council	CC Study Session on draft SMP
June - July 2009	City Council Study	CC Study Sessions and local adoption of Draft SMP (Note: must notify DOE and CTED 60 days prior to adoption)
To be determined	Department of Ecology	State conducts another comment period on the SMP
TBD		State works with Kirkland to finalize SMP

³ Element of the City's Shoreline Master Program

⁴ Element of the City's Shoreline Master Program

Sample Shoreline Master Program Outline (Integrated)

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
Shoreline Management Policies			
New Shoreline Master Program Policies chapter in Comprehensive Plan	Shoreline environment management policies	Shoreline Management Goals (see WAC 173-26-176 and WAC 173-26-181; should be consistent with planning goals of RCW 36.70A.020) (Should function as: statement of intent directing or authorizing a course of action or specifying criteria for regulatory and non-regulatory actions by a local government; a comprehensive foundation for SMP regulations; and guidance for public investment and other non-regulatory initiatives to assure consistency with SMA).	<ul style="list-style-type: none"> I. Introduction II. Shoreline Use Element <ul style="list-style-type: none"> A. General Goals/Shorelines of Statewide Significance B. Shoreline Environment Designations C. Managing Shoreline Uses and Activities <ul style="list-style-type: none"> 1. Residential 2. Commercial 3. Industrial III. Natural Environment <ul style="list-style-type: none"> A. Shoreline Critical Areas <ul style="list-style-type: none"> 1. Geologically hazardous areas 2. Frequently flooded areas 3. Wetlands 4. Fish and wildlife habitat conservation areas B. Water Quality and Quantity C. Vegetation Conservation D. Managing Shoreline Activities <ul style="list-style-type: none"> 1. Fill 2. Dredging 3. Shoreline Protective Structures 4. In-Stream features E. Shoreline Habitat and Natural Systems Enhancement Projects IV. Open Space and Parks <ul style="list-style-type: none"> A. Public Parks B. Private Shoreline Recreational Uses

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
			<ul style="list-style-type: none"> 1. Marinas 2. Overwater structures (piers and docks, floats, buoys) V. Transportation <ul style="list-style-type: none"> A. Public Access B. Streets C. Parking VI. Utilities VII. Archaeological and historic resources
Shoreline Regulations			
New Shoreline Administration Chapter		RCW 90.58-140, 143, 210 and 220 WAC 173-27	<ul style="list-style-type: none"> I. User Guide II. Shoreline Permits <ul style="list-style-type: none"> A. Purpose B. Permit Required <ul style="list-style-type: none"> 1. Shoreline Jurisdiction 2. Exemptions <ul style="list-style-type: none"> a. Letter of exemption C. Proposal Requiring Approval through Process IIA, IIB or III D. Pre-Submittal Meeting E. Applications F. Determination of Completeness of Application G. Voiding of Application Due to Inactivity H. Compliance with SEPA I. Notice of Application and Comment Period J. Official File K. Burden of Proof <ul style="list-style-type: none"> 1. Substantial Development Permit 2. Shoreline Variance 3. Shoreline Conditional Use Permit L. Decision <ul style="list-style-type: none"> 1. Substantial Development Permit

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
			<ul style="list-style-type: none"> 2. Shoreline Variance 3. Shoreline Conditional Use Permit M. Effect of the Decision <ul style="list-style-type: none"> 1. Substantial Development Permit 2. Shoreline Variance 3. Shoreline Conditional Use Permit N. Appeals <ul style="list-style-type: none"> 1. Substantial Development Permit 2. Shoreline Variance 3. Shoreline Conditional Use Permit O. Notice of the Appeal Hearing P. Scope of the Appeal Q. Staff Report on the Appeal R. Public Hearing on the Appeal S. Electronic Sound Recordings T. Burden of Proof U. Continuation of the Hearing V. Decision on the Appeal W. Filing with the Department of Ecology and Attorney General X. Shoreline Hearings Board Review Y. Lapse of Approval Z. Bonds AA. Complete Compliance Required BB. Time Limits III. Enforcement and Penalties IV. Annexation of Shorelines V. Nonconformances <ul style="list-style-type: none"> A. Continuance of Non-conformances B. Alteration or expansion of nonconformities
New Shoreline Regulations chapter in		WAC 173-26-221 WAC 173-26-231	<ul style="list-style-type: none"> I. Purpose and Intent II. Applicability

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
Zoning Code			<ul style="list-style-type: none"> A. Shoreline Jurisdiction III. Shoreline Master Program & Relationship to Other Policies and Regulations <ul style="list-style-type: none"> A. Shoreline Master Program Policies B. Shoreline Master Program Regulations C. Relationship to Other Policies and Regulations IV. General Regulations V. Shoreline Environments VI. Uses and Activities in Shoreline Environment <ul style="list-style-type: none"> A. Shoreline Use Table B. Prohibited Uses C. Relationship to Other regulations VII. Use Regulations <ul style="list-style-type: none"> A. Utilities B. Commercial and Retail Uses C. Residential Use D. Recreation E. Institutional and Religious Uses VIII. Shoreline Development Standards <ul style="list-style-type: none"> A. Density B. Buffer/setback C. Maximum impervious surface D. Maximum building height E. View Corridors IX. General Design Requirements <ul style="list-style-type: none"> A. Piers, Docks and Floats B. Marinas C. Boat Launches D. Water-oriented accessory uses E. Shoreline Protective structures <p>Explore combining with use table, similar to current Use Zone</p>

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
			Charts. Consider: Density/lot size, high waterline setback, accessory use (size, height) maximum impervious area, building height
Chapter 5 KZC		WAC 173-26-020	Definitions
WD I, II, III, BN, RM 1.8, RM 3.6, P, RS 12.5, CBD 1, CBD 2, RS 8.5, RS 35, RS 5.0, PR 3.6, PR 3.6 (2), PR 3.6 (4), PLA 2, PLA 3A, PLA 3B, PLA 6A, PLA 6I, PLA 6H, PLA 9, PLA 15A, JBD 4, 5 JBD 2 Use zone Charts			Within applicable use zone charts, place references back to Shoreline Regulation chapters for special height, setback and area requirements. Also, add setback and height provision with SMP notation to Use Zone Charts Be sure to note that this standard applies to portion of building located within SMP only
Critical Area Regulations		WAC 173-26-221	Explore possibility of adopting existing regulations. Add to/amend existing chapter (if necessary): <ul style="list-style-type: none"> • Wetland rating system • Shoreline Buffers • Mitigation ratios • In-stream features • Restoration projects
Consider how to address SMP in following general provisions contained in KZC 92, 95, 105, 110, 115: Lighting, open space and recreation, service areas, stormwater facilities, tree retention and landscaping, roads,		WAC 173-26-221 WAC 173-26-231 WAC 173-26-241	Need to address: <ul style="list-style-type: none"> • Vegetation conservation within shorelines (Chapter 95) • Clearing, grading, landfilling and excavation within shorelines (Chapter 115) • Dredging (Chapter 115) • Parking facilities within shorelines (Chapter 105) • Streets within shorelines (Chapter 105 and 110) • Shoreline access (Chapter 105)

Comprehensive Plan/Code Citation	SMP Element	Reference DOE Guideline	Notes
pedestrian and bicycle circulation, parking lot location and design			

A. **Introduction**

Statutory Framework

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

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

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

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

Vision

The City of Kirkland’s identity is strongly influenced and defined by its waterfront setting. Views of Lake Washington give Kirkland its sense of place and the City’s integrated network of trails, parks, and open spaces along the shoreline provide abundant opportunities for public access to the shoreline. The City’s waterfront parks provide places and host events where people can gather and interact. Kirkland’s shoreline commercial districts also provide opportunities for residents and visitors to enjoy the City’s unique natural setting along the shoreline. The waterfront provides many varied recreational opportunities to meet the needs of Kirkland citizens and provides a gateway to the City. It also provides vital habitat for fish and wildlife and the natural systems within the shoreline serve many essential biological, hydrological and geological functions.

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

The City developed its first Shoreline Master Program in 1974 as a component of the Comprehensive Plan. Key considerations within this plan and subsequent amendments have included conservation,

public access to the shoreline, and the guidance for water-oriented recreational uses to locate along the Kirkland shoreline. These initial policy objectives are reflected in today's protection of the City's significant natural areas as open space, as well as the extensive shoreline trail system and network of shoreline parks which have been established over time.

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

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

To address these changes as well as plan for emerging issues, the City has initiated an extensive update of its Shoreline Master Program. The new program is needed to respond to current conditions and the community's vision for the future.

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

- Provide a healthy environment along the shoreline to enable current and future generations to enjoy using it.
- Provide a healthy environment along the shoreline to preserve fish and wildlife and their habitats.
- Protect the City's investments as well as those of property owners along and near the shoreline.
- Produce an updated Shoreline Master Program (SMP) that is supported by Kirkland's elected officials, citizens, property owners and businesses, the State of Washington, and other key interest groups with an interest in the shoreline.
- Efficiently achieve the SMP mandates of the State.

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

The City of Kirkland's Shoreline Master Program represents the City's participation in a coordinated planning effort to protect the public interest associated with the shorelines of the State while, at the same time, recognizing and protecting private property rights consistent with the public interest. The Program preserves the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the State and protects the functions of shorelines so that, at a minimum, the City achieves a 'no net loss' of ecological functions.

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

Organization

The policies are grouped under four sections: Land Use, Open Space/Parks, Natural Environment and Transportation. The Shoreline *Land Use* section works together with other policies of the Shoreline Master Program contained in this Chapter of the Comprehensive Plan. The Shoreline Land Use section addresses the general distribution and location of shoreline uses, the *Open Space/Parks* section more specifically addresses issues of public park operations and maintenance and standards for private shoreline recreation uses and modifications. The *Natural Environment* section more specifically addresses shoreline critical areas, water quality, vegetation, and shoreline modifications such as filling and dredging. The *Transportation* section addresses both public access and circulation within the shoreline area.

B. Shoreline Master Program Goals and Policies

Shoreline Land Use

Goal SMP-1: *Provide a land use pattern along the shoreline that reflects the following priorities:*

- (1) Recognize and protect the statewide interest over local interest;*
- (2) Preserve the natural character of the shoreline;*
- (3) Result in long term over short term benefit;*
- (4) Protect the resources and ecology of the shoreline;*
- (5) Increase public access to the shoreline;*
- (6) Increase recreational opportunities for the public in the shoreline;*

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

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

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

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

- How to manage new growth and redevelopment to be sensitive to and not degrade habitat, ecological systems and other shoreline resources.
- How to foster those uses that are unique to or depend on the proximity to the shoreline or provide an opportunity for substantial numbers of the people to enjoy the shoreline.
- How to ensure that land uses and shoreline activities are designed and conducted to minimize damage to the ecology of the shorelines and/or interference with the public's use

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

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

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

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

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

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

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

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

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

- Water-related uses. A water-related use is dependant on a shoreline location because it has a functional requirement associated with a waterfront location, such as the transport of goods by water, or uses that support water-dependant uses. Examples include boat sales and outfitters and manufacturers that transport goods by water. These uses are typically not located along Kirkland's shoreline, though the Yarrow Bay Marina contains a boat repair and service facility.
- Water-enjoyment uses. A water enjoyment use is a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use, or a use that draws substantial numbers of people to the shoreline and that provides opportunities, through its design, location or operation, for the public to enjoy the physical and aesthetic benefits of the shoreline. Examples include parks and trails, museums, restaurants, and aquariums. Water enjoyment uses such as restaurants, retail stores, and offices are the primary commercial use along Kirkland's shoreline.
- Single family residential uses. The City contains a single-family residential neighborhood in the shoreline area within the Market Neighborhood.
- Shoreline recreation. The shoreline contains an extensive network of open spaces and public parks along the shoreline, providing places for fishing, swimming, boating, wildlife viewing and other recreational and educational activities.

Shoreline Environment Designations

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

Environment designations are analogous to zoning designations for areas under SMP jurisdiction. Their intent is to encourage uses that will protect or enhance the current or desired character of a shoreline based on their physical, biological and development characteristics.

Managing Shoreline Land Uses

Goal SMP - 3 Shoreline uses shall be located, designed and managed to prevent and, where possible, restore significant adverse impacts on water quality, fish and wildlife habitats, the environment and other uses.

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

Given existing conditions, there is very little capacity for future development within the shoreline. However, it is anticipated that expansion, redevelopment or alteration to existing development will occur over time. With remodeling or replacement, opportunities exist to improve the shoreline

environment. In particular, improvements to nearshore vegetation cover and reductions in impervious surface coverage are two key opportunity areas on private property to restore ecological function along the shoreline. Reduction or modification of shoreline armoring and reduction of overwater cover and in-water structures provide other opportunities.

Policy SMP – 3.1 Shoreline Master Program development regulations shall ensure no net loss of ecological functions associated with the shoreline zone.

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

Policy SMP – 3.2 Provide adequate setbacks and buffers from the water and ample open space and pervious areas to protect natural features and minimize use conflicts.

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

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

Policy SMP – 3.3 New or redevelopment should include establishment or preservation of appropriate shoreline vegetation to contribute to the ecological functions of the shoreline area, while still allowing for view protection.

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

A native plant buffer can also provide homeowners with an attractive landscape that offers variety and seasonal color; reduced maintenance; more privacy without sacrificing views; increased property values, improved water quality; and a yard that is safer for families, pets and the planet. Proper plant selection and design can ensure that views are not diminished.

Policy SMP – 3.4 Development should incorporate low-impact development practices, where feasible, to reduce the amount of impervious surface area.

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

Policy SMP – 3.5 Encourage the development of joint-use overwater structures, such as joint use docks, to reduce impacts to the shoreline environment.

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

Policy SMP - 3.6 Allow variations to development standards that are compatible with surrounding development in order to facilitate restoration opportunities along the shoreline.

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

Goal SMP - 4 The Shoreline Master Program should incorporate a variety of management tools, including improvement of City practices and programs, public acquisition, public involvement and education, incentives, and regulation and enforcement to achieve its goals for the shoreline area.

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

Goal SMP - 5 While implementing the Shoreline Master Program, private property rights should be respected.

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

Residential

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

Policy SMP – 6.1 Structures or other development accessory to residential uses are permitted in the shoreline jurisdiction.

Accessory uses such as garages, sheds, accessory dwelling units, and fences are common features that are normally applicable to residential uses located landward of the ordinary high water mark and should be permitted.

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

The City contains a number of existing overwater residential structures that were constructed prior to the City's limitation on overwater structures to water dependent uses. These existing structures have created large areas of overhead cover, impacting the aquatic environment. Many of these structures are likely to be remodeled and modernized in the future and these activities should be carefully reviewed to prevent adverse impacts.

Policy SMP – 6.3 New subdivisions of land within the shoreline should be designed to:

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

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

Policy SMP – 6.4 Single-family development within areas impacted by critical areas shall be carefully evaluated to protect ecological functions and ensure some reasonable economic use for all property within Kirkland's shoreline.

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

Commercial

Goal SMP – 7 Plan for commercial development along the shoreline the will enhance and provide access to the waterfront.

Policy SMP – 7.1 Water-enjoyment uses are appropriate within the shoreline area of the Central Business District.

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

Policy SMP – 7.2 Development standards for the shoreline area in the Central Business District should address visual access and linkages to the shoreline.

Development along the shoreline has often “turned its back” to Lake Washington, with active areas located opposite the lake and separated from it by large surface parking lots. As a result of this historical development pattern, existing development along the shoreline area in the Downtown core is not well oriented to capitalize on its waterfront setting. Future growth and redevelopment along the shoreline in the Downtown should celebrate the waterfront setting by reorienting the downtown to the lake. Improvements should be made to the visual and physical linkage between buildings and the lake. One key opportunity is to develop a large public plaza over the Marina Park parking lot in order to better connect the Downtown to the lake and the park. Opportunities to connect existing pedestrian routes should also be a high-priority objective.

Existing development on the west side of Lake Street and bordering the shoreline is presently low in height and, as a result, allows public views of the lake from many vantages around Downtown and also allows evening sun into the Downtown core. In general, lower building heights should be considered in this area, unless greater building heights are offset by substantial public benefits, such as through-block public pedestrian access or view corridors.

Policy SMP – 7.3 Development within Carillon Point and the surrounding commercial area should continue to maximize public access, use, and visual access to the lake.

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

Immediately south of Carillon Point, the Yarrow Bay Marina and new office development provides opportunities for public use and enjoyment of the waterfront, including boat rental facilities, a public

waterfront trail and waterfront access area with seating and interpretative signs. In addition, public views across the site have been preserved in an expansive view corridor.

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

Policy SMP – 7.4 Enhance the physical and visual linkages to Lake Washington in the Juanita Business District.

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

The ability to enhance physical and visual access to the Lake is challenging in this area. Several of the shoreline properties are developed with residential condominiums, which are unlikely to redevelop. Some of the commercial properties are significantly encumbered by wetlands that are associated with Lake Washington.

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

Policy SMP – 7.5 Commercial uses should be allowed in the area located between the Central Business District and Planned Area 15 if public access to and use of the shoreline is enhanced.

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

Policy SMP – 7.6 Limited commercial uses, such as a hotel/motel and limited marina use, should be allowed within Planned Area 3B.

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

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

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

Policy SMP – 7.8 Overwater commercial development other than docks, piers and similar features that support water dependent uses should be prohibited.

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

**City of Kirkland
Grant No. G0600236**

WORKING DRAFT – FOR DISCUSSION ONLY

ENVIRONMENT DESIGNATIONS REPORT

Project: Comprehensive Shoreline Master Program Update

- **Task 7: Environment Designations**

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This report was funded in part through a grant from the Washington Department of Ecology.



This report was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration.

The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its subagencies.

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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]” ~~[WAC 173-26-211(2)(a)]~~.

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)].

~~Because the SMP is a component of t~~The City’s Comprehensive Plan and SMP, there is a requirement for to be consistency consistent between the two plans [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. The City will title its “High Intensity” equivalent as “Urban Mixed.” 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 environment designations, 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;	✓ 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 ft ² 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.	NO. The shoreline is heavily altered: 83% armored, 9 ft ² 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.	NO. The shoreline is heavily altered: 90% armored, 24.1 ft ² 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.
(B) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or	✓ 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>	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.	✓ 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.	NO. Segment C could support additional upland development without degrading the baseline condition further.	NO. Segment D could support additional upland development without degrading the baseline condition further.

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	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	✓ 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 on lots that contain multi-family development	NO	✓ 29% of the segment is zoned Commercial, and includes marinas, Argosy Cruises, hotels, restaurants, and office space.
are suitable and planned for high-intensity water-oriented uses	See above	NO	Low probability for additional high-intensity water-oriented uses – segment largely built out.
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;	✓ 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.	✓ Segment C contains three public parks comprising 24% of the shoreline that provide a mix of water-related and water enjoyment uses.	✓ Segment D contains six public parks comprising 18% of the shoreline that provide a mix of water-related and water enjoyment uses.
(B) They are open space, flood plain or other sensitive areas that should not be more intensively developed;	✓ 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> .	✓ Parks in this segment total 24% of the area. The parks generally do not contain sensitive areas.	✓ Parks in this segment total 18% of the area. The parks generally do not contain sensitive areas.
(C) They have potential for ecological restoration;	✓ 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.		

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
(D) They retain important ecological functions, even though partially developed; or	✓ The slightly developed sections of Segment B, primarily Juanita Beach Park and 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.	NO. The shoreline is heavily altered: 83% armored, 9 ft ² 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.	NO. The shoreline is heavily altered: 90% armored, 24.1 ft ² 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.
(E) They have the potential for development that is compatible with ecological restoration.	✓ 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.	✓ Entire segment has potential for ecological restoration, although the probability of restoration occurring is highest on publicly owned lands.	✓ 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.
Assign a " Shoreline Residential " 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:			
predominantly single-family or multifamily residential development or	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.	✓ 76% of the segment is zoned for residential uses.	✓ 53% of the segment is zoned for residential uses.
are planned and platted for residential development	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	✓ 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.

Environment Designation Criteria (WAC 173-26-211)	Supporting Shoreline Inventory Information		
	Segment B	Segment C	Segment D
	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. Existing high-density residential development and zoning is present at northwest edge of Juanita Bay		
PRELIMINARY DESIGNATIONS	<ul style="list-style-type: none"> • Natural • Urban Conservancy • High Intensity Urban Mixed • Shoreline Residential 	<ul style="list-style-type: none"> • Shoreline Residential • Urban Conservancy 	<ul style="list-style-type: none"> • High Intensity Urban Mixed • Urban Conservancy • Shoreline 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. The existing biological character of the shoreline primarily plays a role in distinguishing between the Natural and Urban Conservancy environment designation assignments. 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 a new Aquatic designation). Table 2 outlines the relationship between the current comprehensive plan land use classifications, existing environment designations, and proposed environment designations. 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.

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	High Intensity Urban Mixed and Urban Conservancy ¹
	Low Density Residential	Conservancy 2	Natural ²
	Medium Density Residential	Conservancy 2	Natural
	High Density Residential	Urban Residential 1	Shoreline Residential
	Office	Urban Mixed 1	Urban Mixed High Intensity
	Office/Multi-Family	Conservancy 2	Natural
	Park/Open Space	Conservancy 1 & 2	Natural and Urban Conservancy
Segment C	Low Density Residential	Suburban Residential	Shoreline Residential
	Park/Open Space		Urban Conservancy
	Medium Density Residential	Urban Residential 1	Shoreline Residential
Segment D	Commercial	Urban Mixed 1 / 2 Urban Residential 1	Urban Mixed High Intensity
	Park/Open Space	Urban Mixed 1 Urban Residential 1	Urban Conservancy
	Low Density Residential	Urban Residential 2	Shoreline Residential
	Medium Density Residential	Urban Residential 1 / 2	Shoreline Residential
	High Density Residential	Urban Residential 1	Shoreline Residential
	Office / Multi-Family		Urban Mixed High Intensity

¹ Inconsistency between Comprehensive Plan and proposed environment designations - Urban Conservancy is assigned to small portions of two otherwise developed parcels that are undeveloped wetland contiguous to and associated 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.

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.

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>Shoreline Residential</u>: predominantly single-family or multifamily residential development or are planned and platted for residential development</p>
<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>Shoreline Residential</u></p> <p style="text-align: center;">AND</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>High-Intensity</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 [\(with the exception of a name change from High Intensity to Urban Mixed\)](#), it is appropriate to begin development of Kirkland’s environment designation purposes, criteria, and policies from Ecology’s recommended language,

as provided below. These are just a starting point, and can be 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.

- ~~Associated wetlands east of 98th Avenue NE, in the Forbes Creek corridor. 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 Low Density Residential, Medium Density Residential, and Office/Multi-Family that contain associated wetlands.

3.1.3 Management Policies

- (A) Any use that would substantially degrade the ecological functions or natural character of the shoreline area should not be allowed.
- (B) The following new uses should not be allowed in the “Natural” environment:
- Commercial uses.
 - Industrial uses.
 - Nonwater-oriented recreation.
 - Roads, utility corridors, and parking areas that can be located outside of “Natural” designated shorelines.
- (C) Single-family residential development may be allowed as a conditional use within the “Natural” environment 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. ~~[Consider removing this WAC language— not recommended]~~
- (D) Commercial forestry may be allowed as a conditional use in the “Natural” environment provided it meets the conditions of the State Forest Practices Act and its implementing rules and is conducted in a manner consistent with the purpose of this environment designation. ~~[Consider removing this WAC language— not appropriate]~~

~~(E)~~ Agricultural uses of a very low intensity nature may be consistent with the Natural environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation. ~~[Consider removing this WAC language— not appropriate]~~

~~(E)~~(E) Scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational access uses may be allowed provided that no significant ecological impact on the area will result.

~~(G)~~(F) New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should not be allowed. Do not allow the subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions. That is, each new parcel must be able to support its intended development without significant ecological impacts to the shoreline ecological functions.

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](#).
- Portions of parcels that are vegetated wetlands associated and contiguous with Lake Washington and the Juanita Bay Park wetland complex.

3.2.3 Management Policies

- (A) Uses that preserve the natural character of the area or promote preservation of open space, flood plain or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
- (B) Standards should be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications within the “Urban Conservancy” designation. These standards shall ensure that new development does not result in a net loss of shoreline ecological functions or further degrade other shoreline values.
- (C) Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
- (D) 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.

3.3 Shoreline Residential

3.3.1 Purpose

The purpose of the “Shoreline Residential” environment is to accommodate residential development and appurtenant structures that are consistent with this chapter. An additional purpose is to provide appropriate public access and recreational uses.

3.3.2 Designation Criteria

Assign a “Shoreline Residential” 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 or multifamily residential development or are planned and platted for residential development.

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

- All areas classified as High Density Residential, Medium Density Residential, and Low Density Residential in the Comprehensive Plan, except for those parcels containing associated wetlands contiguous with the Yarrow Bay Wetlands as described in Section 3.1.2.
- Portions of parcels that are vegetated wetlands associated and contiguous with Lake Washington and the Juanita Bay Park wetland complex.

3.3.3 Management Policies

- (A) Standards for density or minimum frontage width, setbacks, lot coverage limitations, buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be set to assure no net loss of shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

- (B) Multifamily and multi-lot residential and recreational developments should provide public access and joint use for community recreational facilities.
- (C) Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
- (D) Commercial development should be limited to water-oriented uses. [Note: recommend deleting if commercial development will be prohibited in this environment]

3.4 High-Intensity Urban Mixed

3.4.1 Purpose

The purpose of the “High-Intensity 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.

3.4.2 Designation Criteria

Assign an “High-Intensity 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 High-Intensity Urban Mixed.

- All areas classified as Commercial and Office/Multi-Family in the Comprehensive Plan, except for those parcels containing wetlands associated and contiguous with the Yarrow Bay Wetlands as described in Section 3.1.2 and the Juanita Bay Park wetlands as described in Section 3.2.2.

3.4.3 Management Policies

- (A) In regulating uses in the “High-Intensity Urban Mixed” environment, first priority should be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should not be allowed except as part of mixed-use developments. Nonwater-oriented uses may also be allowed 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. Such specific situations should be identified in shoreline use analysis or special area planning, as described in WAC 173-26-200(3)(d).

If an analysis of water-dependent use needs as described in WAC 173-26-201(3)(d)(ii) demonstrates the needs of existing and envisioned water-dependent uses for the planning period are met, then provisions allowing for a mix of water-dependent and nonwater-dependent uses may be established. If those shoreline areas also provide ecological functions, apply standards to assure no net loss of those functions.

- (B) Full utilization of existing urban areas should be achieved before further expansion of intensive development is allowed. Reasonable long-range projections of regional economic

need should guide the amount of shoreline designated “[Urban Mixed High Intensity](#).” However, consideration should be given to the potential for displacement of nonwater-oriented uses with water-oriented uses when analyzing full utilization of urban waterfronts and before considering expansion of such areas.

- (C) Policies and regulations shall assure no net loss of shoreline ecological functions as a result of new development. Where applicable, new development shall include environmental cleanup and restoration of the shoreline in accordance with any relevant state and federal law.
- (D) Where feasible, visual and physical public access should be required as provided for in WAC 173-26-221(4)(d).
- (E) 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.

3.5 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.

3.5.2 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.

3.5.3 Management Policies

- (A) Allow new over-water structures only for water-dependent uses, public access, or ecological restoration.
- (B) The size of new over-water structures should be limited to the minimum necessary to support the structure’s intended use.
- (C) In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.
- (D) All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

- (E) Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of ecological functions.
- (F) Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

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 Chapters **X-X** 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. **[WORKING DRAFT]**

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	Shoreline Residential	High-Intensity Mixed Urban	Aquatic ¹
SHORELINE USE					
Agriculture	X	X	X	X	X
Aquaculture	X	X	X	X	X
Boating facilities	X	<u>CU</u> <u>SD</u>	SD	SD	SD
Commercial:					
Water-dependent	X	<u>CU</u> <u>SD</u>	X	SD	CU
Water-related, water-enjoyment	X	<u>CU</u> <u>SD</u>	X	<u>CU</u> <u>SD</u>	X
Nonwater-oriented, nonwater-dependent	X	<u>CU</u>	X	CU	X
Forest practices	X	X	X	X	X
Industry:					
Water-dependent	X	X	X	CU	CU
Water-related	X	X	X	X	X
Nonwater-oriented	X	X	X	X	X
In-stream structures ²	CU	CU	CU	CU	NA
Mining	X	X	X	X	X
Parking (accessory)	X	SD	SD	SD	X
Parking (primary, including paid)	X	X	X	<u>X</u> <u>CU</u>	X
Recreational development:					
Water-dependent	CU ³	SD	SD	SD	SD
Water-related, water-enjoyment	CU ³	SD	SD	SD	CU
Nonwater-oriented	X	CU	CU	CU	X
Residential development:					
Single-family residential	<u>X</u> <u>CU</u>	<u>X</u> <u>CU</u>	SD	<u>X</u> <u>CU</u>	X
Multifamily residential	X	X	SD	SD	X
Land division	X	X	SD	SD	X
Transportation:					
Water-dependent	X	SD	CU	SD	P
Nonwater-oriented	X	CU ⁴	SD ⁴	SD ⁴	CU ⁴
Utilities (primary)	X	CU ⁴	SD ⁴	SD ⁴	CU ⁴
SHORELINE MODIFICATIONS					
Breakwaters/jetties/rock weirs/groins	X	X	X	CU	CU
Dredging and dredge materials disposal	CU ⁵	CU ⁵	CU ⁵	CU ⁵	CU ⁵
Fill	CU ⁵	CU ⁵	CU ⁵	CU ⁵	CU ⁵
Piers and docks	X	SD	SD	SD	SD

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	Shoreline Residential	High-Intensity Urban Mixed	Aquatic ¹
Shoreline habitat and natural systems enhancement projects	SD	SD	SD	SD	SD
Shoreline stabilization	X	CU	CU	CU	CU

Notes to Matrix:

1. The use or shoreline modification may be allowed in the Aquatic Environment if, and only if, permitted in the adjacent upland environment.
2. In-stream structures are only permitted as a Conditional Use if for purposes of fish and wildlife enhancement, including habitat improvements and fish passage improvements.
3. Recreational developments may be allowed as a Conditional Use if they are passive and low-impact.
4. The use may be allowed provided there is no other feasible route or location.
5. Dredging and fills are only allowed as conditional uses when associated with a restoration project, when necessary to maintain access to existing structures or uses, or when necessary to maintain existing public recreation uses, and only when appropriate state and federal permits have been received.

4.2 Site Development Standards

4.2.1 Natural Environment

XX

4.2.2 Urban Conservancy Environment

XX

4.2.3 Shoreline Residential Environment

XX

4.2.4 High-Intensity Environment

XX

4.2.5 Aquatic Environment

XX

5.0 KEY DEFINITIONS

1. Boating facilities: piers or docks serving multi-family developments or more than four single-family residences and private or public marinas. In- and over-water structures that provide access exclusively for fishing, swimming, wildlife viewing or other strictly passive

water-enjoyment use are not considered boating facilities. Piers or docks serving up to four single-family residences are also not considered boating facilities.

- 1.2. 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.
- 2.3. Ecological functions or shoreline 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.
- 3.4. 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 and the associated ecological functions.
- 4.5. Feasible: an action, such as a development project, mitigation, or preservation requirement, 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. In 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 reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.
- 5.6. Fill: the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.
- 6.7. 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.
- 7.8. Non-water-oriented: Those uses that are not water-dependent, water-related, or water-enjoyment.
- 8.9. Restore, restoration or ecological restoration: the reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including but not limited to re-vegetation, 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
- 9.10. Shall: a mandate; the action must be done.

~~10.11.~~ Shoreline areas and shoreline jurisdiction means all “shorelines of the state” and “shorelands” as defined in RCW 90.58.030.

~~11.12.~~ Shoreline modifications: 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, weir, dredged basin, fill, bulkhead, or other shoreline structure. They can include other actions, such as clearing, grading, or application of chemicals.

~~12.13.~~ Should: the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and this chapter, against taking the action.

~~13.14.~~ 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.

~~14.15.~~ Substantial development: any development of which the total cost or fair market value exceeds five thousand dollars, or any development which materially interferes with the normal public use of the water or shorelines of the state. The dollar threshold established in this subsection (3)(e) must be adjusted for inflation by the Office of Financial Management every five years, beginning July 1, 2007, based upon changes in the consumer price index during that time period. “Consumer price index” means, for any calendar year, that year’s annual average consumer price index, Seattle, Washington area, for urban wage earners and clerical workers, all items, compiled by the Bureau of Labor and Statistics, United States Department of Labor. The Office of Financial Management must calculate the new dollar threshold and transmit it to the Office of the Code Reviser for publication in the Washington State Register at least one month before the new dollar threshold is to take effect. The following shall not be considered substantial developments for the purpose of this chapter:

- a. Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements;
- b. Construction of the normal protective bulkhead common to single family residences;
- c. Emergency construction necessary to protect property from damage by the elements;
- d. Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels. A feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or

- vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations;
- e. Construction or modification of navigational aids such as channel markers and anchor buoys;
 - f. Construction on shorelands by an owner, lessee, or contract purchaser of a single family residence for his own use or for the use of his or her family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter;
 - g. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single and multiple family residences. This exception applies if the fair market value of the dock does not exceed ten thousand dollars, but if subsequent construction having a fair market value exceeding two thousand five hundred dollars occurs within five years of completion of the prior construction, the subsequent construction shall be considered a substantial development for the purpose of this chapter;
 - h. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water for the irrigation of lands;
 - i. The marking of property lines or corners on state owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;
 - j. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed, or utilized primarily as a part of an agricultural drainage or diking system;
 - k. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:
 - i. The activity does not interfere with the normal public use of the surface waters; The activity will have no significant adverse impact on the environment including, but not limited to, fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values;
 - ii. The activity does not involve the installation of a structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity;
 - iii. A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the local jurisdiction to ensure that the site is restored to preexisting conditions; and
 - iv. The activity is not subject to the permit requirements of RCW 90.58.550;
 - l. The process of removing or controlling an aquatic noxious weed, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other state agencies under chapter 43.21C RCW.

15.16. Water dependent: A use or portion of a use which cannot exist in a location that is not adjacent to the water but is dependent on the water by reason of the intrinsic nature of its operations. Examples of water-dependent uses include ship cargo terminal loading areas,

fishing, ferry and passenger terminals, barge loading facilities, ship building and dry docking, marinas, aquaculture, float plane facilities, surface water intake, and sewer outfalls.

16.17. Water enjoyment: 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 for 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 available to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment. Primary water-enjoyment uses may include, but are not limited to:

- Parks with activities enhanced by proximity to the water;
- Piers and other over water improvements that include substantial public access to shorelines of the state;
- Restaurants that directly incorporate visual access to and enjoyment of the water;
- Museums with an orientation to shoreline topics;
- Aquariums; and
- Resorts that directly incorporate access to and enjoyment of the water.

17.18. Water-oriented: A use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

18.19. Water related: A use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon or substantially benefited by a shoreline location because:

- (a) the use has a functional requirement for a shoreline 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 its services less expensive and/or more convenient.

Water-related uses include manufacturing of ship parts large enough that transportation becomes a significant factor in the product's cost, professional services serving primarily water-dependent uses, and storage of water-transported foods. Other examples of water-related uses include the warehousing of goods transported by water, seafood processing plants, hydroelectric generating plants, gravel storage when transported by barge, oil refineries where transport is by tanker, and upland log storage for water-borne transportation.

APPENDIX A

ENVIRONMENT DESIGNATION MAPS