

Chapter Five

Shoreline Management

A. Findings of Fact

King County adopts the following findings of fact, which are based on the Shoreline Management Act legislative findings in RCW 90.58.020. These findings of fact represent King County's belief and agreement that a coordinated approach to utilizing, managing, and protecting the shoreline resource is necessary and essential. These findings apply to the entire shoreline zone (shorelines and the shorelines of statewide significance).

1. The shoreline zone is one of the most valuable and fragile of King County's natural resources. There is appropriate concern throughout the County relating to the utilization, protection, restoration, and preservation of the shoreline zone.
2. Ever increasing pressures of additional use are being placed on the shoreline zone, which in turn necessitates increased coordination in its management and development.
3. Much of the shoreline zone and the uplands adjacent thereto are in private ownership. Unrestricted construction on the privately owned or publicly owned shoreline zone is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shoreline zone while, at the same time, recognizing and protecting private property rights consistent with the public interest.
4. There is 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 King County's shoreline zone.
5. It is the intent of King County to provide for the management of the shoreline zone by planning for and fostering all reasonable and appropriate uses. This program is designed to insure the development in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest.
6. King County shoreline policies are intended to protect against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.
7. In the implementation of these facts, the public's opportunity to enjoy the physical and aesthetic qualities of natural shoreline zone shall be preserved to the greatest extent feasible consistent with the overall best interest of the state, the County, and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline.
8. Alterations of the natural condition of the shoreline zone, 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 the shoreline zone, industrial and commercial developments which are particularly dependent on their location on or use of the shoreline zone, and other development that will provide an opportunity for substantial numbers of the people to enjoy the shoreline zone.
9. Shorelines and shorelands in King County shall be appropriately designated and these classifications shall be revised when circumstances warrant, regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands

- no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of King County Shoreline Master Program.
10. Permitted uses in the shorelines zone shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline zone and any interference with the public's use of the water.

B. About King County & King County Shorelines

1. Geography and population

King County covers 2,130 square miles and extends from Puget Sound in the west to 8,000-foot Mt. Daniel at the Cascade crest in the east. King County's shoreline zone includes saltwater coastline, river floodplains, and extensive lakes and streams.

With more than 1.7 million people, King County is the most populated county in Washington State and the 13th largest in the nation. Unincorporated King County, the territory outside of cities, includes about 352,000 people. This equates to 20% of the County's population on 82% of its land area. King County's total population has grown by 11% since 1994 and is expected to grow another 15% by 2022.

2. King County's shoreline zone

King County's diverse shoreline zones fringe or flow into Puget Sound. Puget Sound and surrounding lowland lakes and river valleys are relatively young in geologic terms. Puget Sound is a glacially-carved, deep fjord between the Cascade and Olympic Mountains.

Puget Sound is King County's link to the Pacific Ocean via two connections: the Strait of Juan de Fuca and the Strait of Georgia. Water, people and a diverse array of fish and wildlife travel freely between the ocean and King County via the Sound and these straits.

Puget Sound is a large estuary complex created by the freshwater it receives from streams, rivers and springs and tidal exchange introduced through the two straits. It is one of the more prominent and productive estuaries in the world. In 1988, it was identified as an Estuary of National Significance by the U.S. government. Within the Sound are numerous small to large estuaries. The largest estuary in King County is the Green-Duwamish, although it is now a small remnant of its pre-development state.

King County's portion of the Sound lies within the Central Basin and includes Vashon-Maury Island. The Central or Main Basin extends from Admiralty Inlet to Tacoma Narrows. It is the largest and deepest of the five basins in Puget Sound. The major drainages to the Central basin, including Cedar River/Lake Washington watershed (including Lake Sammamish and the Sammamish River), the Green-Duwamish watershed, and Puyallup River/White River watershed, drain a total area of about 2,700 square miles and contribute slightly less than 20% of Puget Sound's freshwater input. The Snohomish watershed (including the Snoqualmie River basin that lies mostly in King County) outlet into Puget Sound lies in Everett.

Puget Sound is a region that has great overlap between valuable natural resources and a burgeoning human population. The productivity, diversity and value of the resources are greatly affected by the extent and density of the population. Due to proximity to transportation routes and abundant food and water resources, most of the region's human development since the mid-1800s, when settlers of European descent started to explore and develop the region, has occurred along Puget Sound's shorelines, large lakes and rivers.

C. Washington State's Shoreline Management Act ("SMA")

1. Overview of Shoreline Management Act

Washington's Shoreline Management Act (SMA) was passed by the Legislature in 1971 and adopted by the public in a 1972 referendum. The goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines."

The Act establishes a broad policy giving preference to uses that:

- protect the quality of water and the natural environment,
- depend on proximity to the shoreline ("water-dependent uses"), and
- 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. Cities and counties are the primary regulators but the state (through the Department of Ecology) has authority to review local programs and permit decisions.

Under the SMA, each city and county adopts a shoreline master program that is based on state guidelines but tailored to the specific needs of the community. The state guidelines are adopted by Ecology. More than 200 cities and all 39 counties have shoreline master programs. Local shoreline master programs combine both plans and regulations. The plans are a comprehensive vision of how shoreline areas will be used and developed over time. Regulations are the standards that shoreline projects and uses must meet.

Ecology provides technical assistance to all local governments undertaking master program amendments. Master programs and master program amendments are only effective after Ecology's approval. In reviewing master programs, Ecology is limited to a decision on whether or not the proposed changes are consistent with the policy and provisions of the Act and state master program guidelines.

Local governments may modify master programs to reflect changing local circumstances, new information, or improved shoreline management approaches. All changes to master programs require public involvement. At a minimum, local governments must hold public hearings. In 2003, Ecology adopted revised state guidelines. Cities and counties with shoreline master programs are required to update their shoreline master programs to bring them into compliance with these new state guidelines. King County is required to adopt its update shoreline master program by December 1, 2009.

2. History of shoreline management in King County

King County adopted its original Shoreline Master Program through two ordinances adopted by the King County Council and approved by the King County Executive, John Spellman, on May 2, 1978. Ordinance 3692 adopted the Shoreline Master Plan, which established the goals, objectives, and policies of the King County Shoreline Master Program. Ordinance 3688 adopted the development regulations that implemented the Shoreline Master Plan. By a letter dated June 30, 1978, Ecology stated that it had approved King County's Shoreline Master Program.

The 1978 Shoreline Master Plan addressed the required elements of the shoreline guidelines originally adopted by Ecology in 1972. The 1978 Plan established goals, objectives, and policies for eight different shoreline elements. For each of the four shoreline environments, it also established general policies. The 1978 Plan stated that:

"Each environment represents a particular emphasis in the type of uses and the extent of development that should occur within it. The system is designed to encourage uses in each Environment which enhance the character of the Environment while at the same time requiring reasonable standards and restrictions on development so that the character of the Environment is not destroyed."

Finally, the 1978 Shoreline Master Plan included general policies for a variety of different shoreline use activities, including agriculture, mining, recreation, and residential development.

The shoreline regulations adopted by Ordinance 3688 were codified in K.C.C. Title 25. The regulations establish the designation criteria, the allowed uses, and development standards for the four shoreline environments recognized by the 1972 state guidelines.

The Shoreline Management Act includes a requirement that development proposals must obtain a shoreline substantial development permit. However, the SMA includes a number of exemptions from this requirement. For example, proposals to construct a single family residence or to construct a bulkhead to protect a single family residence are exempt from the requirement to obtain a substantial development permit. However, even development exempt from obtaining a permit must still comply with the requirements of the Shoreline Management Act, the state guidelines, and King County’s Shoreline Master Program. In order to ensure that permit-exempt activities do comply with the SMA and the King County Shoreline Master Program, King County requires applicants that are exempt from the requirement to obtain a shoreline substantial development permit must apply for a shoreline exemption.

In 1990, the King County Council adopted Ordinance 9614 regulations governing environmentally sensitive areas, some of which include areas also within shoreline jurisdiction. King County updated its critical areas regulations effective January 1, 2005. King County’s Critical Areas Regulations and its Shoreline Master Program both provide that the regulations that are most protective of the environment apply in the case of a conflict.

3. Shoreline jurisdiction under the SMA

Shorelines of the State in King County, as defined by the Washington State Shoreline Management Act, include all marine shorelines, lakes greater than 20 acres, and rivers and streams with a minimum of 20 cubic feet per second (cfs) mean annual flow. The shoreline jurisdiction includes these water bodies and shorelands. Shorelands are defined as those areas extending landward for two hundred feet from the ordinary high water mark, floodways and contiguous floodplain areas landward two hundred feet from such floodways, and all associated wetlands and river deltas. King County currently includes the zero-rise floodway, essentially the 100-year floodplain, in its shoreline jurisdiction¹.

See Technical Appendix E for further description of the methods used to prepare the draft updated shoreline jurisdiction map.

Table S-1 below shows the number of shoreline miles managed under the Shoreline Master Program.

Table S-1. Miles of shoreline under King County’s jurisdiction

Shoreline (miles)		
Lake	River/Stream	Marine
234	1,696	51

D. King County’s Shoreline Master Program

The Shoreline Master Program adopted by King County provides a legal framework for decision making on land use and other activities that complies with the Shoreline Management Act. This section

¹ For the purposes of the King County Shoreline Master Program, *floodways and contiguous floodplain areas 200 feet from such floodways* are defined as those zero-rise floodways that are adjacent to shorelines of the state. Zero-rise floodway is defined in King County Code 21A.06.505 as “the channel of a stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without any measurable increase in base flood elevation. A. *measurable increase in base flood elevation* means a calculated upward rise in the base flood elevation, equal to or greater than 0.01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to alterations of the topography or any other flow obstructions in the floodplain. Zero-rise floodway is broader than the FEMA floodway, but always includes the FEMA floodway. B. Zero-rise floodway includes the entire floodplain unless a critical areas report demonstrates otherwise.”

describes the elements of the Shoreline Master Program, with the details being further developed throughout this chapter.

1. Components of the Shoreline Master Program

The King County Shoreline Master Program consists of four elements: this chapter (Comprehensive Plan, Chapter 5), Technical Appendices A through E, shoreline development regulations (King County Code Titles 20 and 21A), and a Map Folio that contains reference maps.

King County Comprehensive Plan, Chapter 5 (Shoreline Management): This chapter describes King County's shoreline goals and policies. It addresses the shoreline jurisdiction, overall shoreline policy goals, shoreline element policies, Shoreline Master Program relationship other laws, shoreline environment designations, environmental protection, shoreline use and modification, and administrative policies. See, www.metrokc.gov/shorelines.

Shoreline Technical Appendices:

Appendix A: Shoreline Protection and Restoration Plan: The Shoreline Protection and Restoration Plan summarizes the methods and results of King County's shoreline analysis with respect to restoration planning, the elements and applicability of the restoration plan, and the ways in which shoreline restoration is expected to occur over time.

Appendix B: Shoreline Public Access Plan: The King County Shorelines Technical Appendix includes an inventory of existing formal and informal shoreline public access opportunities in the unincorporated area, and identifies gaps in public access opportunities. This Public Access Plan describes King County's priorities for providing new public access to major shorelines in the unincorporated area.

Appendix C: Cumulative Impacts Analysis: The Cumulative Impacts Analysis provides a mechanism for examining the potential success of County policies and regulations in meeting the goal of no net loss of ecological functions.

Appendix D: Shoreline Master Program Checklist and Public Involvement Process: Two background documents show how King County met the State procedural requirements for updating the Program: the Shoreline Master Program Checklist and Public Involvement Process description. **[To be included in March 2008]**

Appendix E: Shorelines Technical Appendix: The Technical Appendix includes the data and analytic methods used to develop King County's shoreline inventory and shoreline characterization (including evaluation of existing physical and ecological processes and functions, public access and recreation, land use and economic development, public facilities and utilities, and archaeological and historic resources). In addition, the Technical Appendix includes methodologies for cumulative impact analysis associated with shoreline management and comprehensive shoreline restoration planning. Specific data can be found at: <http://www.metrokc.gov/shorelines/shorelines-plan-update.aspx>.

Development Regulations: The goals and policies set forth in this chapter are made effective through the regulations adopted in Titles 20 and 21A of the King County Code. These include land use and development regulations and enforcement regulations.

Shoreline Master Program Map Folio: The Map Folio includes all maps produced and referenced as part of the Shoreline Master Program update, with the exception of those maps included in this chapter. All geographic information can be found at: <http://www.metrokc.gov/shorelines/shorelines-plan-update.aspx>

The terms “Shoreline Master Program,” “Shoreline Program” and “Program” are all used throughout this chapter to describe King County’s Shoreline Policies (this chapter), Shoreline Technical Appendices, development regulations and Map Folio in their entirety. The elements of the Shoreline Program and the background documents described above should be read together as a unified document.

2. Shoreline policies

The Shoreline Master Program contains specific policies relating to a wide variety of shoreline uses and issues.

Shoreline policies establish broad shoreline management directives. They are statements of intent by King County that direct or authorize a course of action or specifying criteria for regulatory or non-regulatory action. The policies serve as the basis for regulations that govern use and development along the shoreline.

Pursuant to the SMA, King County's shoreline policies must:

1. Be consistent with the Washington State Shoreline Management Act;
2. Address the master program elements of RCW 90.58.100;
3. Include policies for environmental designations as described in WAC 173-26-211;
4. Be designed and implemented in a manner consistent with all relevant constitutional and other legal limitations on regulation of private property; and
5. Be consistent with the King County Comprehensive Plan and functional plans adopted as components of the Comprehensive Plan.

Shoreline policies provide a comprehensive foundation for the shoreline master program regulations, which are more specific standards that are used to evaluate shoreline development proposals. King County must evaluate permit applications in light of the shoreline policies and may approve a permit only after determining that the development conforms to the policies in the Shoreline Master Plan.

In addition, shoreline policies assist in prioritizing King County's spending on facilities and services within shorelines of the state. Finally, the shoreline policies provide direction for regional issues such as resource management, environmental protection, transportation, inter-governmental coordination and regional planning.

3. Shoreline environments

The Shoreline Management Act requires that shoreline management programs classify shoreline areas into specific environmental designations. Ecology's guidelines recommend six different environmental designations, but does not require that local programs adopt this particular scheme. King County's 1978 Shoreline Master Program adopted the four environment designations recommended by Ecology at that time: Urban, Rural, Conservancy, and Natural. In this update, King County is adopting eight environment designations in total, based on the recommendations from Ecology. These environment designations are:

High Intensity Shoreline Environment: Applied to areas that provide high-intensity water-oriented commercial, transportation, and industrial uses.

Residential Shoreline Environment: Applied to accommodate residential uses at urban densities, while allowing for non-residential uses that are consistent with the protection of the shoreline jurisdiction.

Rural Shoreline Environment: Applied to accommodate rural residential shoreline development, while allowing for rural non-residential uses that are consistent with the protection of the shoreline.

Conservancy Shoreline Environment: Applied to protect and conserve the shoreline for ecological, public safety, and recreation, purposes. Includes areas with important ecological processes and functions, valuable historic and cultural features, flood and geological hazards, agricultural and mineral resource lands, and recreational opportunities. Residential areas can be designated as conservancy shorelines.

Resource Shoreline Environment: Applied to allow for mining and agriculture land uses.

Forestry Shoreline Environment: Applied in areas to allow for forest production and protect municipal water supplies.

Natural Shoreline Environment: Applied to shorelines that are relatively intact or have minimally degraded shoreline functions that are intolerant of human use.

Aquatic Shoreline Environment: Applied to the areas waterward of the ordinary high water mark.

4. Shoreline program elements

The Shoreline Management Act identifies eight "program elements" that must be addressed and included in local shoreline master programs:

Economic development element that considers 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 shorelines of the state.

Public access element that considers public access to publicly owned land along shorelines of the state.

Recreational element that identifies recreational opportunities along shorelines, such as parks, tidelands, beaches, and recreational areas, and that pursues acquisition through implementation of the King County Shoreline Master Program.

Circulation element that consists of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities. This general circulation element is consistent with King County's transportation planning efforts.

Land use element that considers the general distribution and location, as well as the extent of use on the shorelines and adjacent areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private use of the land.

Conservation element that addresses the preservation of natural resources including, but not limited to, scenic vistas, aesthetics, and vital estuarine areas for fish and wildlife.

Historic, cultural, scientific and educational element that prevents 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 state office of archaeology and historic preservation.

Flood hazard element that considers the prevention and minimization of flood damages.

5. Shoreline modifications and uses

The Shoreline Management Act requires that local shoreline master programs 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 can include other actions such as clearing, grading or application of chemicals. A shoreline modification is usually undertaken in support of or in preparation for a shoreline use.

Shoreline uses are classified as "water-dependent," "water-related," "water-enjoyment," or "water-oriented."

A water-dependent use is a use or portion of a use that 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.

A water-related use is a use or portion of a use that is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

(a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or

(b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

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 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.

A **water-oriented use** is a use that is water-dependent, water-related, water-enjoyment, or a combination of such uses.

I. SHORELINE JURISDICTION

A. King County's Responsibility to Regulate Shorelines

1. King County assumes primary responsibility for shoreline planning and regulation

King County has primary responsibility for shoreline management planning and for the administration of shoreline regulations within its jurisdiction.

S-101 King County has primary responsibility for planning required by the Shoreline Management Act and for administering its shoreline regulatory program

King County recognizes that its Shoreline Master Program is subject to review and approval by the Washington State Department of Ecology and that the Shoreline Master Program must be consistent with the policies and provisions of the Shoreline Management Act (RCW 90.58). However, King County is responsible for planning and administering its shoreline master program and associated regulations.

2. King County's Shoreline Master Program is intended to be consistent with the Shoreline Management Act & Guidelines

King County's Shoreline Master Program is intended to be consistent with the policies and requirements of Washington's Shoreline Management Act (SMA) (RCW 90.58) and with the required elements of the guidelines for implementing the Shoreline Management Act that are found in WAC 173-26 and 173-28. King County's Shoreline Master Program shall be interpreted consistently with the SMA. In the event of a conflict between SMA and the Program, the Program should be interpreted to give meaning and effect to the SMA.

S-102 King County's Shoreline Master Program is to be interpreted consistently with the policies and requirements of the Shoreline Management Act (RCW 90.58).

S-103 King County's Shoreline Master Program is to be interpreted consistently with the required elements of the shoreline guidelines found in WAC 173-26 and 173-28.

3. King County's Shoreline Master Program is to be liberally construed

By law, the SMA is exempt from the rule of strict construction and must be liberally construed to give full effect to the Act's objectives and purposes. By adopting a liberal standard of construction, the State Legislature demonstrated the importance it attached to protecting the shoreline and accomplishing the goals and policies of the SMA. Consistent with this mandate, and because King County believes that accomplishing the goals and objectives of the SMA within the County is of primary importance, the Shoreline Master Program is to be liberally construed to accomplish its objectives and purpose.

S-104 King County's Shoreline Master Program is exempted from the rules of strict construction and is to be construed liberally to give full effect to its objectives and purpose.

B. Shoreline Jurisdiction

1. Shoreline jurisdiction extends over all “shorelines” and “shorelines of statewide significance” within King County

The SMA applies to all “shorelines of the state” within the County. “Shorelines of the state” are defined to include “shorelines” and “shorelines of statewide significance.”

S-105 King County’s shoreline jurisdiction extends over all “shorelines of the state” within King County, as that term is defined in the SMA. This includes jurisdiction over “shorelines” and “shorelines of statewide significance.”

It is important to understand the distinction between the terms “shorelines” and “shorelines of statewide significance.” Both terms are used throughout the SMA and define the scope of King County’s shoreline jurisdiction. The distinction is important because the SMA imposes greater and more specific obligations when dealing with shorelines of statewide significance.

a. “Shoreline” and “shorelands”

“Shorelines” are defined in the SMA as follows:

“Shorelines” means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

The definition of “shorelines” includes “associated shorelands” which are defined in the SMA as follows:

“Shorelands” or “shoreland areas” means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter.

Thus, King County’s “shoreline jurisdiction” includes not only all water areas within King County above a certain size and volume, but also lands extending 200 feet from the ordinary high water mark, floodways associated with the water area, floodplain areas landward within 200 feet of the floodway, and all wetlands and river deltas associated with the water area.

b. “Shorelines of statewide significance”

“Shorelines of statewide significance,” as specifically defined in the SMA include:

- Those areas of Puget Sound between the ordinary high water mark and the line of extreme low tides;
- Lakes, whether natural, artificial or a combination thereof, with a surface acreage of 1,000 acres or more measured at the ordinary high water mark; and
- Natural rivers or segments thereof downstream of a point where the mean annual flow is measured at 1,000 cubic feet per second or more.

In unincorporated King County, the water bodies that qualify as shorelines of statewide significance include:

- The marine waters around Vashon-Maury Island
- Northeast Lake Washington (north of Kirkland) and southwest Lake Washington (west of Renton)

- Lake Sammamish at Marymoor State Park and Lake Sammamish State Park
- Mud Mountain Reservoir and White River from river mile 15.5 to river mile 46 (excluding the Muckleshoot Indian Reservation from river mile 56 to river mile 61)
- Green River from its confluence with the Duwamish River to river mile 95
- Duwamish River from river mile 3.5 to river mile 5
- Chester Morse Lake (Reservoir)
- Tolt Reservoir
- Mainstem Snoqualmie River to river mile 43 and Middle Fork Snoqualmie River to river mile 39
- South Fork Skykomish River to river mile 30

Associated shorelands that are adjacent to shorelines of statewide significance are included within the shoreline of statewide significance jurisdiction.

c. Options to extend geographic jurisdiction over shorelines and shorelines of statewide significance

The SMA gives King County two options concerning the scope of its shoreline jurisdiction. First, the County may include one-hundred year floodplains:

Any county or city may determine that portion of a one-hundred-year-floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom.

RCW 90.58.030(2)(f)(i). Because King County already regulates one-hundred year floodplains in its Flood Hazard Management Plan, and because the continued regulation of the one-hundred year floodplain is necessary to comply with certain federal requirements under the National Flood Insurance Program, King County is exercising its option to extend its shoreline jurisdiction to cover one-hundred year floodplains.

S-106 King County includes within its shoreline jurisdiction the one-hundred year floodplains of included shorelines of the state.

The SMA also provides the option of extending shoreline jurisdiction to include land necessary for buffers for critical areas that extend beyond the 200 foot shoreland jurisdiction:

Any city or county may also include in its master program land necessary for buffers for critical areas, as defined in chapter 36.70A RCW, that occur within shorelines of the state, provided that forest practices regulated under chapter 76.09 RCW, except conversions to non-forest land use, on lands subject to the provisions of this subsection (2)(f)(ii) are not subject to additional regulations under this chapter.

RCW 90.58.030(2)(f)(ii). Because King County believes that its critical area regulations adequately protect both the critical area and the shoreline, it is not extending its shoreline jurisdiction to include critical area buffers for critical areas located within the shoreline jurisdiction.

S-107 King County's shoreline jurisdiction does not include the buffers of critical areas that extend outside the 200 foot shoreline jurisdiction.

2. Jurisdictional map

Applying these definitions within King County has involved an extensive survey of County's shoreline, which is discussed in more detail in Technical Appendix E. Maps S-1 and S-2 show the complete scope of King County's shoreline jurisdiction and shorelines of statewide significance. Maps S-1 and S-2 are available for public inspection at the King County Department of Development and Environmental Services. [See www.metrokc.gov/shorelines to view draft maps]

II. SHORELINE POLICY GOALS

A. Introduction to Shoreline goals

King County's shoreline zone has a long history of settlement because of the abundant natural resources, availability of water, and usefulness as transportation routes. The shoreline zone also draws people to enjoy the aesthetic and recreational value that marine beaches, lakes, and rivers provide. The shoreline zone supports some of the region's most important industries, such as shipping, fishing, and tourism.

Because of the unique and irreplaceable value of the shorelines of the state, King County recognizes that it is in the public interest to protect the ecological functions of the shoreline zone, while at the same time allowing reasonable and necessary use of the shoreline zone to support the regional economy and provide recreational opportunities for the public.

The high demand for shoreline zone use has, over time, degraded ecological processes, functions, and values in a large number of areas. Many segments of King County's shoreline zone are devoid of native vegetation, the banks are hardened with additions of rock and other materials, sediment movement is no longer driven by natural forces, and valuable fish and wildlife habitat is gone or impaired to a critical state. Unaltered shoreline zones are increasingly rare. We have moved beyond the protection of existing conditions to a point where it has become critical to restore and enhance the degraded shoreline zone.

A vast majority of the shoreline zone, particularly in the lower parts of the regional watersheds and along the marine shorelines is in private ownership, giving the citizens of King County an important role in protecting the shoreline zone's unique and irreplaceable value. The challenge for King County is to manage these lands in a manner that protects, restoration, and enhancement of King County's shoreline zone, while at the same time respecting private property rights and protecting the public interest.

King County has established a set of general policy goals that will provide overarching guidance for discretionary decision making, support shoreline regulations, and define the vision that King County has for the utilization, protection, restoration and enhancement of the shorelines of the state. These policy goals reflect the wide range of SMA mandates, while at the same time preserving the maximum possible flexibility for King County to address the unique shoreline conditions within its jurisdiction.

B. Statement of Applicability

The SMA provides for the management of uses and development within the shoreline zone, whether or not a shoreline substantial development permit is required. Many activities that may not require a shoreline substantial development permit, such as clearing vegetation or construction of a single family residence, can (both individually or cumulatively) adversely impact adjacent properties and natural resources. King County has both the authority and the responsibility to enforce Shoreline Master Program regulations on all uses and development in the shoreline zone.

Because there has been confusion in the past regarding the scope of the SMA, Ecology requires that all master programs contain the following policy statement:

S-201 All proposed uses and development occurring within King County's shoreline jurisdiction must conform to RCW Chapter 90.58, the Shoreline Management Act, and to King County's Shoreline Master Program.

C. Shoreline Preferred Uses

The SMA establishes mandatory preferences for uses that are unique to or dependant upon a shoreline location. These preferred uses apply to the entire shoreline zone, both the shorelines and shorelines of statewide significance. The SMA preferred uses are recognized in the following policies.

S-202 In establishing and implementing shoreline policies and development regulations, King County shall give preference to uses that are unique to or dependent upon a shoreline location. The terms "water-dependent," "water-related," and "water-enjoyment," as defined in WAC 173-26-020, are used when discussing appropriate uses for the different shoreline environments. These preferred use policies apply to the entire shoreline zone (shorelines and shorelines of statewide significance).

S-203 King County, when determining allowable uses and resolving use conflicts in the shorelines zone, shall apply the following preferences and priorities in the order listed below:

- 1. Reserve appropriate areas for protecting and restoring ecological functions to control pollution and prevent damage to the natural environment and to public health.**
- 2. 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 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. Mixed-use developments may be allowed if they include and support water-dependent uses and address specific conditions that affect water-dependent uses.**
- 3. Reserve shoreline areas for other water-related and water-enjoyment uses that are compatible with ecological protection and restoration objectives.**
- 4. 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.**
- 5. Limit nonwater-oriented uses to those locations where the above described uses are inappropriate or where the nonwater-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.**

S-204 For a given circumstance, the preferred use policies, the local economic and land use conditions, and the policies and regulations that assure protection of shoreline resources, may result in determination that other uses may be considered as necessary or appropriate. These other uses may be accommodated, provided that the preferred uses are reasonably provided for throughout the shoreline zone.

D. General Policy Goals

The SMA policies of protecting ecological functions, fostering reasonable use, and maintaining the public right of navigation and corollary uses result in certain mandatory policy goals for the shoreline zone.

These policies apply to both shorelines and shorelines of statewide significance. The policies are not ranked in a specific order. King County reserves the right to balance these general policies based on the unique circumstances, location and physical condition of the shoreline.

S-205 The following policy goals apply to all shorelines in the shoreline zone. The goals are not ranked in importance and have been assigned a number for identification purposes only.

1. The use of shorelines for those economically productive uses which are particularly dependent on shoreline location or use.
2. The use of shorelines and the waters they encompass for public access and recreation.
3. Protection and restoration of the ecological functions of shoreline natural resources.
4. Protection of the public right of navigation and corollary uses of waters of the state.
5. The protection and restoration of buildings and sites having historic, cultural, and educational value.
6. Planning for public facilities and utilities correlated with other shorelines uses.
7. Prevention and minimization of flood damages.
8. Recognizing and protecting private property rights.
9. Preferential accommodation of single-family residential uses.
10. Coordination of shoreline management with other relevant local, state, and federal programs.

E. Shorelines of Statewide Significance Policy Goals

The Shoreline Management Act identifies certain shorelines as "shorelines of statewide significance" and raises their status by setting use priorities and by calling for a higher level of effort in implementing these policy goals. The state legislature has declared that the interest of all people shall be paramount in the management of shorelines of statewide significance.

S-206 The interests of all people shall be paramount in the management of shorelines of statewide significance within King County.

The legislature has established policy goals that govern shorelines of statewide significance. Significantly, these policy goals are ranked in order of preference (i.e., the first goal must be given priority over all subsequent goals).

The following policy recognizes and accepts the policy goals as directed by the SMA for shorelines of statewide significance:

S-207 King County, in developing and implementing its Shoreline Master Program for shorelines of statewide significance, shall give preference, in the following order of preference, to uses that:

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; and
7. Provide for any other element as defined in RCW 90.58.100.

S-208 In developing and implementing policies relating to shorelines of statewide significance, the King County shall provide for optimum implementation of policies that satisfy the statewide interest.

F. State-Owned Shoreline Policy Goals

The State also owns property within King County. The SMA requires that certain policies be adopted with regard to shoreline land owned by the State. This is distinct from shorelines of statewide significance, which may or may not be in State ownership. Because state-owned shoreline is particularly adapted to providing recreational activities for the public, King County has given special consideration to these factors in developing the Shoreline Master Program.

S-209 King County should encourage and help facilitate the use of state-owned shorelines for public recreational activities, where appropriate.

G. Balancing Policy Goals

The policy goals for the management of the shoreline zone have the potential for conflict. Shorelines and the waters they encompass are considered 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 a balance between physical, biological, and chemical systems that may be significantly altered by both natural forces (earthquakes, volcanic eruptions, landslides, storms, droughts, floods) and human activities (industrial, commercial, residential, recreation, navigational). Unbridled use of the shoreline zone ultimately could destroy its utility and value for human use.

S-210 The policy goals of King County's Shoreline Master Program relate both to the use and protection of the extremely valuable and vulnerable shoreline resources of the state.

S-211 It is the policy of King County to accommodate in the shoreline zone 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.

S-212 The policy of achieving both shoreline use 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 avoid or 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.

S-213 King County shall balance shoreline zone use and shoreline zone protection when meeting the policy goals of the Shoreline Management Act.

H. Multiple Approaches to Accomplishing Policy Goals

The policy goals in the Master Program may be achieved through a variety of methods that go beyond simply regulating development within the shoreline zone. There are a wide range of non-regulatory tools available that provide incentives for property owners to work cooperatively with King County to achieve these policy goals. In addition, King County works closely with other public and non-profit groups to achieve mutually beneficial objectives.

- S-214 The King County Shoreline Master Program policies may be achieved by a number of different means, both regulatory and non-regulatory. These include, but are not limited to:**
- 1. Regulations controlling development within the shoreline jurisdiction;**
 - 2. Acquisition of land and easements by purchase, lease, or gift, either alone or in concert with other local governments;**
 - 3. Accepting grants, contributions, and appropriations from any public or private agency or individuals;**
 - 4. Public facility and park planning;**
 - 5. Watershed planning;**
 - 6. Voluntary salmon recovery projects; and**
 - 7. Incentive programs, such as the transfer of development rights or the public benefit rating system.**

III. SHORELINE ELEMENT POLICY GOALS

A. Need for shoreline elements

The Shoreline Management Act requires local master programs to include a number of elements that range from use of the shoreline zone for economic benefit and accommodating necessary infrastructure to protecting both cultural and natural resources. These elements are addressed separately throughout the Plan and are based on the following overarching King County Shoreline Master Program element policy goals.

B. Economic Development Element

King County's economy is the largest and most significant in the Puget Sound Region and in Washington State. With almost half of the state's nonagricultural jobs and almost 83,900 businesses, it is essential that the King County accommodate the industries and infrastructure to support a healthy and vibrant economy. Most of the County's industry and infrastructure lies within the incorporated cities and are not subject to the King County Shoreline Master Program. However, there are some portions of the shoreline zone in unincorporated King County that provide for economic development of the region.

- S-301 King County should plan 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 the shorelines of the state.**

C. Public Access Element

King County believes the shorelines of the state should be accessible to the general public to enjoy and use within the limitations of private property rights and ecological considerations. Since a significant amount of shoreline property is in private ownership, the responsibility to maintain and provide public access falls primarily on public projects. Not all sites are appropriate for use by the public and must be evaluated carefully to ensure that public access can be safely provided without harm. Provisions should also be retained and sought to provide opportunities for the public to enjoy views of the water and shoreline.

- S-302 King County shall:**

1. **Support 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, as well as considering impacts on ecological processes and functions.**
2. **Protect the rights of navigation and the space necessary for water-dependent uses.**
3. **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.**
4. **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.**

When planning shoreline public access, King County should try to achieve an integrated system that can supplement, and be coordinated with, multimodal transportation planning. King County has identified areas of potential public access that will be assessed in more detail through shoreline permits and public projects. See Appendix B for details on the analysis of existing shoreline public access in King County, identified public access gaps and opportunities, and the resulting shoreline Public Access Plan.

- S-303 The King County Shoreline Master Program should increase the amount and diversity of public access to shorelines of the state in areas identified within a shoreline public access gap. New public access should minimize impacts to ecological functions of the shoreline zone, preserve natural shoreline character as possible, protect private property rights and consider public safety.**
- S-304 Public agencies, including local governments, port districts, state agencies, and public utility districts, should include public access in their development proposals if public access is compatible with the activity and can be provided safely. An assessment of the impact of public access on the shoreline and constructed features should also be conducted.**
- S-305 King County shall require public access to shorelines of the state for water-enjoyment, water-related, and nonwater-dependent non-residential uses and for subdivisions of land into more than four parcels unless:**
1. **The development proposal is not compatible with public access;**
 2. **There is a safety or security concern;**
 3. **Inclusion of public access will have an environmental impact that cannot be mitigated; or**
 4. **There are legal limitations on allowing public access.**
- S-306 King County shall adopt development regulations that establish maximum building height limits, setbacks, and view corridors to minimize the impact to existing views from public property or a substantial number of residences. Where there is a conflict between providing direct public access or allowing for water dependent shoreline uses and maintaining existing views, the direct public access or water dependent shoreline uses shall have priority.**

D. Recreational Element

Shorelines provide many opportunities for recreation, such as boating, swimming, beach combing, hiking, and nature viewing. Since much of the shoreline zone is in private ownership, using public lands for recreation will become increasingly important. Opportunities should be sought through public projects to protect and enhance recreational opportunities.

S-307 King County should protect, and when possible, expand recreational opportunities, including, but not limited to parks, beaches, tidelands, swimming beaches and boat launches.

S-308 King County should evaluate opportunities to acquire shoreline property for purposes of public recreation from willing sellers of private property.

E. Circulation Element

Circulation and transportation planning is conducted at many levels in King County. The overarching transportation planning agency in the Puget Sound region is the Puget Sound Regional Council, an association of cities, towns, counties, ports, and state agencies that serves as a forum for developing policies and making decisions about growth and transportation issues in the Puget Sound region. At the local level, cities and counties approve local circulation patterns for their individual jurisdictions. King County should consider the policy goals in this Shoreline Master Program when participating in regional and local transportation planning discussions. See the Current Land Use maps in the Shoreline Master Program Map Folio; these maps show major thoroughfares, transportation routes, terminals and other public utilities and facilities.

S-309 The King County Shoreline Master Program should guide the County's position on transportation plans and projects within the shoreline jurisdiction.

F. Land Use Element

Land use in King County is established through implementation of the Washington State Growth Management Act (GMA). To implement Growth Management, King County relies primarily on the King County Comprehensive Plan and functional plans that are adopted as part of this Comprehensive Plan for facilities and services. This Comprehensive Plan establishes an urban growth line and designates land use and zoning for the unincorporated portions of King County. It also delineates and protects agricultural production districts, forest production districts and mineral resource sites.

S-310 The King County Comprehensive Plan should consider the policy goals of the King County Shoreline Master Program when designating land use and zoning on shorelines of the state and adjacent lands.

G. Conservation Element

The Shoreline Management Act requires local master programs include a conservation element for the preservation of natural resources, including critical areas, scenic vistas, aesthetics, and vital estuarine areas for fish and wildlife.

1. Critical areas

King County's critical areas ordinance is based on best available science and protects coal mine hazard areas; erosion hazard areas; flood hazard areas; seismic hazard areas, landslide hazard areas; volcanic hazard areas; steep slope hazard areas; critical aquifer recharge areas; wetlands; aquatic areas (including lakes, rivers and streams and marine areas); and wildlife habitat conservation areas. The Shoreline Management Act requires that critical areas located within shorelines be protected under the shoreline master program and that at least the same level of protection be provided to critical areas in shorelines as those outside shorelines. Policy S-403 adopts this requirement.

2. Scenic vistas

The natural topography of King County provides numerous scenic vistas of the shorelines of the state. King County should ensure that development occurring both within and outside the shorelines of the state

avoids impacts on scenic vistas and protects view corridors while balancing other policy goals of this Plan.

S-311 King County should consider, and when possible, require protection of scenic vistas of the shorelines of the state when reviewing public and private development proposals.

3. Aesthetics

Natural shorelines are visually aesthetic in their natural state. When these shorelines are altered through development, the aesthetic value of the shoreline should be preserved as much as possible. In areas where shorelines have already been developed with little consideration of the aesthetics, restoration should return the shoreline to an aesthetically-pleasing environment.

S-312 King County should ensure that public and private development proposals protect and restore the aesthetic quality of shorelines in the project design.

4. Vital areas for fish and wildlife

King County's rivers, streams and lakes are home to a wide variety of fish and wildlife. Development of the shorelines has degraded the habitat for many species by activities such as armoring banks against wave action and the erosive force of water flowing downstream, removal of vegetation, straightening channels, and installing in-stream structures for flood control, hydroelectricity and water supply. Degraded shorelines should be restored to provide vital habitat for fish and wildlife and natural shorelines should be preserved.

S-313 Development of shorelines of the state shall protect vital habitat for fish and wildlife, and where possible, should restore degraded habitat.

H. Historic, Cultural, Scientific and Educational Element

The historic, cultural, scientific and educational element provides for protection and restoration of buildings, sites, and areas having archaeological, historical, cultural, or scientific value or significance.

S-314 Shoreline features of historic, cultural, archaeological, or scientific value or significance should be protected to prevent the destruction of, or damage to, any site having archaeological, historic, cultural, or scientific value through coordination and consultation with the appropriate local, state and federal authorities, including affected Indian tribes.

- 1. Sites should be protected in collaboration with appropriate tribal, state, federal, and other local governments. Cooperation among public and private parties is to be encouraged in the identification, protection, and management of cultural resources.**
- 2. Where appropriate, access to such sites should be made available to parties of interest. Access to such sites must be designed and managed in a manner that gives maximum protection to the resource.**
- 3. Opportunities for education related to archaeological, historical and cultural features, should be provided where appropriate and incorporated into public and private programs and development.**

S-315 King County should work with tribal, state, federal and local governments as appropriate to maintain an inventory of all known significant local historic, cultural, scientific and educational sites in observance of applicable state and federal laws protecting such information from public disclosure. As appropriate,

such sites should be preserved and/or restored for study, education and/or public enjoyment to the maximum possible extent.

- S-316 Provisions for historic, cultural, scientific and educational site preservation, restoration and education should be incorporated with open space or recreation areas in site development plans whenever compatible and possible.
- S-317 Cooperation among involved private and public parties should be encouraged to achieve this historic, cultural, scientific and educational objectives.
- S-318 Private and public owners of historic sites should be encouraged to provide public access and educational opportunities at levels consistent with long term protection of both historic values and shoreline ecological functions. Site specific conditions may require public site access to be restricted at times, but educational means should be provided whenever possible.
- S-319 Historic, cultural, scientific and educational site development should be planned and carried out so as to prevent impacts to the resource. Impacts to neighboring properties and other shoreline uses should be limited to temporary or reasonable levels.
- S-320 Owners of property containing identified historic, cultural, scientific and educational sites are encouraged to make substantial development plans known well in advance of application, so that appropriate agencies such as the Washington State Department of Archaeology and Historic Preservation, tribes and others may have ample time to assess the site and make arrangements to preserve historic, cultural, scientific and educational values as applicable.
- S-321 If development is proposed adjacent to an identified historic, cultural, scientific and educational site, then the proposed development should be designed and operated so as to be compatible with continued protection of the historic, cultural or archaeological site.

IV. SHORELINE PLAN RELATIONSHIP TO OTHER LAWS

A. State Shoreline Master Program and Guidelines

The citizens of Washington State adopted the Shoreline Management Act by public referendum in 1971, which was codified in chapter 90.58 of the Revised Code of Washington (RCW). King County first adopted a shoreline master program in 1978 under Ordinance 3692 and the implementing regulations in Title 25, Shoreline Management. In November 2000 the Washington State Department of Ecology adopted new Shoreline Guidelines which were subsequently challenged in the court. The Department of Ecology revised the Shoreline Guidelines that became effective in January 2004.

Each local government that is subject to the Shoreline Management Act must develop or amend its master program for the regulation of uses of shorelines within their jurisdiction. King County is required to update its Shoreline Master Program by December 1, 2009 (RCW 90.58.080(2)(a)(ii)).

B. Washington's Growth Management Act (Chapter 36.70A RCW)

The Washington State Growth Management Act was passed by the Washington State Legislature in 1990 and 1991 and seeks to further protect the quality of life in the Washington State. The Growth Management Act requires that the state's most populous and fastest growing counties and their cities prepare comprehensive land use plans that anticipate growth for a 20-year horizon. Smaller communities and those communities that are experiencing a slow rate of growth may choose to plan under the Growth Management Act, but are not required to do so. Comprehensive plans adopted in accordance with Growth Management Act must manage growth so that development is directed to designated urban areas and away from rural areas. The Growth Management Act also requires local governments to designate and protect critical areas, and identify and protect natural resource lands, which include commercially significant forestry, agriculture, and mining areas.

S-401 The King County Shoreline Master Program must be consistent with the Washington State Growth Management Act.

C. King County Countywide Planning Policies

King County, along with the City of Seattle and suburban cities established the Growth Management Planning Council (GMPC) to prepare a coordinated policy framework for future development in King County. In July 1992, the GMPC adopted Phase 1 of the County-Wide Planning Policies. Phase 2 was adopted in 1994. The King County Countywide Planning Policies have been ratified by a majority of the jurisdictions in King County and therefore apply to all jurisdictions. The County-Wide Planning Policies address critical areas, land use patterns, transportation, community character and open space, affordable housing, development and provision of urban services, siting of public capital facilities, economic development, and regional financing and governance.

S-402 The King County Shoreline Master Program must be consistent with and coordinated with the King County County-Wide Planning Policies.

D. Critical Areas Regulations

King County Code (K.C.C.) Title 21A is the County's zoning code, and the majority of the development regulations for protection of critical areas under the Growth Management Act are codified in K.C.C. chapter 21A.24. K.C.C. chapter 21A.06 contains definitions of terms used in the critical areas chapter. The zoning code is enacted to be consistent with and implement the King County Comprehensive Plan policies for protection of critical areas as defined by RCW 36.70A.030(5) under the Growth Management Act. Critical areas located within shorelines are regulated under the Shoreline Management Act and implemented through local shoreline master programs. The Shoreline Management Act requires that shoreline critical areas protection provide a level of protection that is at least equal to that provided for critical areas protected under the Growth Management Act.

S-403 The King County Shoreline Master Program and implementing regulations shall provide a level of protection for critical areas at least equal to that provided by King County's critical area regulations, codified in King County Code Chapter 21A.24.

The Shoreline Management Act provides options for assuring consistency with the Growth Management Act protection of critical areas. These options range from including the Growth Management Act critical areas regulations in the shoreline master program to preparing a discrete set of shoreline regulations.

S-404 The King County Shoreline Master Program may include by reference portions of the King County critical areas regulations into the Shoreline Master Program to meet the requirements of RCW 90.58.090(3) and 90.58.090(4).

E. Zoning, Clearing and Grading, and Stormwater Regulations

King County has adopted a wide array of development regulations that protect various aspects of the environment and implement other King County policies. These regulations include King County's Surface Water Code (K.C.C. Title 9), Clearing and Grading Regulations (K.C.C. Chapter 16.82), and the King County Zoning Code (K.C.C. Title 21A.) In the shoreline jurisdiction, the Shoreline Master Program may impose additional requirements. Shoreline development regulations must:

1. Be sufficient in scope and detail to ensure implementation of the Shoreline Management Act statewide shoreline management policies, the King County Shoreline Management Plan, and the King County Comprehensive Plan and functional plans adopted to implement the Comprehensive Plan;
2. Include regulations that apply to the environmental designations classified under WAC 173-26-211;
3. Include general regulations, specific use regulations that address issues of concern in regard to specific uses, and modification regulations;
4. Include clearing and grading and stormwater regulations that protect the ecological functions and values of the shorelines; and
5. 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. (RCW 90.58.100)

However, to the extent that it can, consistent with requirements of the SMA, King County will rely on its existing regulations to meet the requirements of the SMA.

S-405 The King County Shoreline Master Program shall rely on King County's existing regulations, including the Surface Water Code (K.C.C. Title 9), Clearing and Grading Regulations (K.C.C. Chapter 16.82), and the King County Zoning Code (K.C.C. Title 21A) to the maximum extent practicable that is consistent with the Shoreline Management Act and the Department of Ecology's Guidelines.

V. SHORELINE ENVIRONMENT DESIGNATIONS

A. Introduction to shoreline environment designations

Shoreline management addresses a wide range of physical conditions and development settings. The Shoreline Master Program classifies shoreline reaches into defined environment designations, based on the existing use pattern, the current biological and physical character of the shoreline, and the goals and aspirations of the community. Accordingly, King County Code Title 21A prescribes environmental protection measures, allowable use provisions, and development standards for each shoreline environment designation.

Shoreline environment designations are made up of eight different shoreline environments:

- A. High Intensity Shoreline
- B. Residential Shoreline
- C. Rural Shoreline
- D. Conservancy Shoreline
- E. Resource Shoreline
- F. Forestry Shoreline
- G. Natural Shoreline

H. Aquatic

This section provides the purpose, criteria, and management policies for each shoreline designation. The shoreline designation maps, Maps S-3(a)-(d), at the end of this chapter show how the designations apply to shoreline reaches within the jurisdiction across the unincorporated area of King County. Shoreline areas that meet the jurisdictional criteria, but that are not mapped or designated, are automatically assigned a Conservancy designation until a Shoreline Master Program amendment is made. [See www.metrokc.gov/shorelines to view draft maps]

Environment Designation Criteria

Shoreline environment designation begins with identifying lands that have been acquired by government agencies for the purpose of protection and preservation, such as the Alpine Lakes Wilderness Area. These areas are generally much less impacted and constrained by land uses and thus considered to be at their highest level of ecological functioning. All such areas within the shoreline jurisdiction are classified as natural shorelines in order to afford the highest protection under the Shoreline Management Program.

King County relies on zoning as a significant factor in establishing environment designations. This is particularly true for the forestry and resource environments. These two designations include areas that have been designated as natural resource lands under the Growth Management Act.

King County has a long history of comprehensive planning and basin planning. Basin plans were developed throughout the county and helped identify fragile aquatic resources. Relying on these plans, King County has assigned zoning that is appropriate given the nature of the resources that need protection. As a result, fragile resources generally have zoning classifications that permit only low intensity development. King County's zoning regulations limit high intensity development to urban areas designated under the County Wide Planning Policies and the King County Comprehensive Plan. Because of this history of incorporating environmental protection concerns into zoning, King County should rely on zoning as a factor in determining shoreline environments.

King County recognizes, however, that zoning by itself is insufficient to determine the shoreline environment designations. Therefore, it uses the following characteristics to help establish the appropriate shoreline environment for a given shoreline reach:

- Whether the reach is in a flood hazard area or a channel migration zone;
- Whether the reach is a public property held for recreation; and
- Whether the reach has a restoration priority that demonstrates it has both basin conditions and existing shoreline condition that support extra efforts to maintain ecological functions and values.

Figure S-1 depicts the decision making process that is used to determine the appropriate shoreline environment designation for a given shoreline reach.

Flowchart for Shoreline Environment Designations

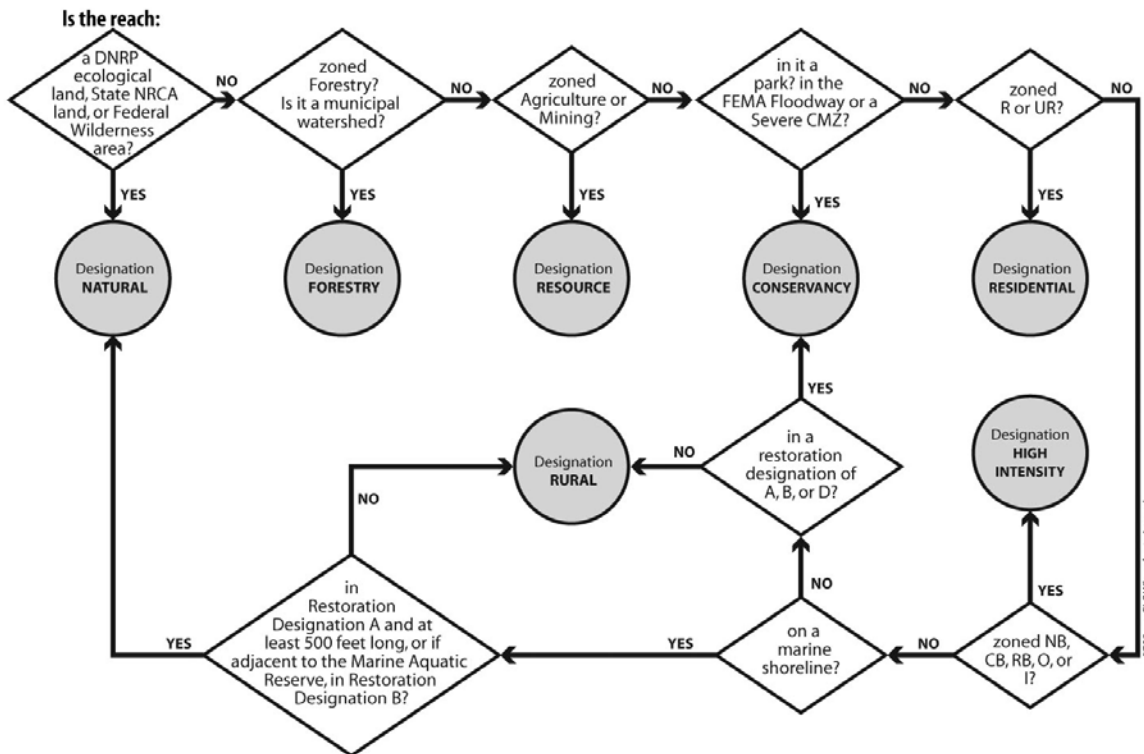


Figure S-1. Pathway of decisions in applying criteria to produce shoreline designations.

In addition to identification of areas currently meeting the criteria for high protection and the consideration of current zoning, the restoration designation (see the Shoreline Management Program Appendix A) is included in the designation as a way to incorporate more strongly the current degree of alteration along the shoreline, the biological importance of the reach in a watershed context, and the restoration priorities associated with the combination of the two analyses. Restoration designations combine the reach characterization based on the results from an alterations analysis with the context of basin analyses (See Table S-2.) Each designation has specific restoration goals associated with it, based on the conditions observed onsite and in the basin. These are based on work discussed in the Shoreline Protection and Restoration Plan, Appendix A, of the Shoreline Management Program, largely concerned with whether it is most appropriate to implement measures to protect or conserve a site, restore it to a previous condition, or undertake projects to enhance its current condition or to create new features with ecological functions.

The marine shoreline, which in unincorporated King County occurs only around Vashon Island, is treated a little differently than freshwater shorelines in the designation strategy. This is in recognition of both the differing character of marine shorelines, which are subject to tidal influences, wakes from large commercial vessels, and some variation in the ecological processes affecting them, as well as the creation of the Marine Reserve along Maury Island and Quartermaster Harbor shorelines by the Washington State Department of Natural Resources. More protection by shoreline designation was afforded to marine shorelines with active feeder bluffs and little alteration to processes, particularly along shorelines adjacent to the Marine Reserve.

Restoration Score	Basin Condition	Reach Condition	Actions
A	High	High	Conserve, Preserve
B	High	Moderate	Conserve, Preserve, Restore, Enhance
C	High	Low	Restore, Enhance
D	Moderate	High	Conserve, Enhance, Restore, Preserve
E	Moderate	Moderate	Conserve, Enhance, Restore
F	Moderate	Low	Enhance, Restore
G	Low	High	Enhance, Conserve
H	Low	Moderate	Enhance, Create
I	Low	Low	Enhance, Create

Table S-2. Restoration scores and associated actions.

General Shoreline Management Policies

Management policies are specified for each designation. In addition, King County applies general shoreline management policies that apply within all designations.

- S-500 King County shall ensure that new uses and development within the shoreline jurisdiction do not cause a net loss of shoreline ecological functions and processes.**
- S-501 King County shall allow removal of noxious weeds and invasive vegetation as long as appropriate best management practices are followed.**
- S-502 King County should allow construction of new structural shoreline stabilization and flood control works within the shoreline jurisdiction only if King County determines there is a documented need to protect an existing structure, and if mitigation is applied, consistent with WAC 173-26-231. New development should be designed and located to preclude the need for such work.**
- S-503 King County should protect shorelines and conduct restoration in areas that have been previously degraded.**

B. High Intensity Shoreline Environment

Purpose

The purpose of the High Intensity Shoreline Environment is to provide for high intensity water-oriented commercial and industrial uses.

High Intensity Designation Criteria

- S-504 A shoreline may be designated High Intensity if the shoreline is zoned Neighborhood Business (NB), Commercial Business (CB), Regional Business (RB), Office (O), or Industrial (I).**

High Intensity Management Policies:

- S-505** In the High Intensity Shoreline Environment, King County shall give priority to non-residential land uses that are water-dependent or water-related.
- S-506** King County shall discourage nonwater-oriented, non-residential land uses in the High Intensity Shoreline Environment. Mixed use developments that include and support water dependent uses may be allowed. King County should allow nonwater-oriented land uses in the High Intensity Shoreline Environment only in limited situations and only if they do not conflict with or limit opportunities for water-dependent uses or are located on sites where there is no direct access to the shoreline.
- S-507** Prior to allowing expansion of a high intensity non-water oriented use in the shoreline environment, King County shall determine that there is no feasible alternative for locating the expansion outside of the shoreline jurisdiction.
- S-508** King County should require that visual or physical public shoreline access should be provided whenever feasible in the High Intensity Shoreline Environment.
- S-509** King County shall protect the aesthetic character of the shoreline in the High Intensity Shoreline Environment through development regulations, including sign controls, development siting criteria, screening requirements and architectural standards, landscaping requirements, and maintenance of natural vegetation.
- S-510** King County shall require that the scale and density of new uses and development within the High Intensity Environment is compatible with, and protects or enhances, the existing character of the area.

C. Residential Shoreline Environment

Purpose

The purpose of the residential shoreline environment is to accommodate residential and commercial uses on a scale appropriate with urban residential zones.

Residential Shoreline Designation Criteria

- S-511** A shoreline may be designated Residential Shoreline if the shoreline is zoned Residential (R) or Urban Reserve (UR) and is not located in a FEMA Floodway, a severe channel migration hazard area, or a public recreation park.

Residential Shoreline Environment Management Policies:

- S-512** King County shall require that the scale and density of new uses and development within the Residential Shoreline Environment is compatible with, and protects or enhances, the existing residential character of the area.
- S-513** King County should encourage public or private outdoor recreation facilities that are compatible with the character of the area in the Residential Shoreline Environment. Water-dependent and water-enjoyment recreation facilities that provide opportunities for substantial numbers of people to access and enjoy the shoreline are preferred uses in the Residential Shoreline environment.
- S-514** King County should discourage non-water-oriented commercial uses in the Residential Shoreline Environment. Non-water-oriented commercial uses may be allowed as part of a mixed-use development if the primary use is residential, and if the non-water-oriented uses provide a substantial benefit with respect to the goals

and policies of this Program, such as providing public access or restoring degraded shorelines.

C. Rural Shoreline Environment

Purpose

The purpose of the Rural Shoreline Environment is to accommodate land uses normally associated with rural levels of development while providing appropriate public access and recreational uses to the maximum extent practicable.

Rural Shoreline Environment Designation Criteria

S-515 A shoreline may be designated Rural Shoreline if the shoreline is zoned Rural Area (RA) and does not meet the criteria for Conservancy Shoreline or Natural Shoreline.

Rural Shoreline Environment Management Policies:

S-516 King County should limit uses in the Rural Shoreline Environment to those rural development activities and associated services that sustain the shoreline's physical and biological resources and that protect options for restoration to maximum extent practicable given the nature of rural development.

S-517 King County should require that multi-family and multi-lot residential and recreational developments in the Rural Shoreline Environment provide public access and joint use for community recreational facilities.

E. Conservancy Shoreline Environment

Purpose

The purpose of the Conservancy Shoreline Environment is to conserve areas that are a high priority for restoration, include valuable historic and cultural areas or provide recreational opportunities.

Conservancy Shoreline Environment Designation Criteria

S-518 A shoreline may be designated Conservancy Shoreline if the shoreline is not zoned A, F or M, is not designated a natural shoreline and is:

- 1. Primarily within an identified FEMA floodway or severe channel migration hazard zone;**
- 2. A lake shoreline or a river shoreline with a restoration plan rating of A, B, or D;**
- 3. A marine shoreline with a restoration plan rating of A, B, or D; or**
- 4. In public ownership and managed for public access or recreation.**

Conservancy Shoreline Environment Management Policies:

S-519 King County should limit uses in the Conservancy Shoreline Environment to those that sustain the shoreline area's physical and biological resources or to uses of a nonpermanent nature that do not substantially degrade the rural or natural character of the shoreline area or disturb historic and cultural resources. King County should discourage non-residential uses in the Conservancy Shoreline except as follows:

- 1. King County should allow forestry and agriculture in the Conservancy Shoreline Environment.**

2. **King County should allow water-dependent and water-enjoyment recreation facilities as preferred uses if significant adverse impacts to the shoreline are mitigated.**

- S-520 King County shall require that new uses or development preserve the existing character of the shoreline consistent with the purpose of the environment, including:**
1. **Limiting density and lot coverage so that the total effective impervious surface in the shoreline jurisdiction is no greater than ten percent in order to maintain the existing hydrologic character of basins draining to the shoreline; and**
 2. **Allowing for greater lot coverage for development of lots legally created prior to the date of adoption of this update to King County's Shoreline Master Program. In these cases, impervious surface coverage shall be limited to the maximum extent practicable.**

F. Resource Shoreline Environment

Purpose

The purpose of the Resource Shoreline Environment is to allow for mining and agricultural uses on lands that have been designated under the Growth Management Act as agricultural lands of long term commercial significance or mineral resource lands.

Resource Shoreline Environment Designation Criteria

- S-521 A shoreline may be designated Resource Shoreline if the shoreline is zoned for agriculture or mining.**

Resource Shoreline Environment Management Policies:

- S-522 King County should limit uses in the Resource Shoreline Environment to allowed agricultural and mining activities consistent with policies of other programs within the county and state.**
- S-523 King County should allow construction of new structural shoreline stabilization and flood control works in the Resource Shoreline Environment only if King County determines there is a documented need to protect an existing structure or ecological processes and functions, and if mitigation is applied, consistent with WAC 173-26-231. New development should be designed and located to preclude the need for such work.**
- S-524 King County shall adopt development standards for the Resource Shoreline Environment to preserve the existing character of the shoreline consistent with the purpose of the environment.**

G. Forestry Shoreline Environment

Purpose

The purpose of the Forestry Shoreline Environment is to allow for forestry uses.

Forestry Shoreline Designation Criteria

- S-525 A shoreline may be designated Forestry Shoreline if the shoreline is within the forest production district and is not designated as a Natural Shoreline or a Conservancy Shoreline.**

Forestry Shoreline Management Policies:

- S-526** King County shall require forest practices in the Forestry Shoreline Environment to comply with standards that provide protection for ecological functions equal to or greater than the forest practice rules adopted to the Washington State Department of Natural Resources and in effect on January 1, 2007. The forest practice rules implement the Forest and Fish Agreement, which was implemented through a Washington State Department of Natural Resources Habitat Conservation Plan under the Endangered Species Act. The Habitat Conservation Plan was approved by the National Oceanic and Atmospheric Administration and the United States Fish and Wildlife Service. If the Washington Department of Natural Resources modifies forest practice rules such that they provide a level of protection for ecological functions that is less than the forest practice rules in effect on January 1, 2007, the current standards shall remain in place for forestry activities in the Forestry Shoreline Environment.
- S-527** King County shall allow activities related to the direct management and delivery of municipal domestic water supplies in the Forestry Shoreline Environment only when consistent with municipal domestic water supply best management practices.

F. Natural Shoreline Environment

Purpose

The purpose of the Natural Shoreline Environment is to protect those shoreline areas that are relatively free of human influence and are of high ecological quality. This designation allows only very low intensity uses in order to maintain the existing high levels of ecological process and function.

Natural Shoreline Environment Designation Criteria

- S-528** A shoreline may be designated Natural Shoreline if the shoreline is:
- 1. Of high ecological quality and is performing an important, irreplaceable ecological process or function that would be damaged by human activity;**
 - 2. Unable to support new development or uses without significant adverse impacts to ecological processes and functions or risk to human safety;**
 - 3. A federally designated wilderness area or in an area managed by the King County Department of Natural Resources and Parks as natural lands; or**
 - 4. A marine shoreline reach that has a restoration plan rating of A or B, and that extends at least five hundred feet along the ordinary high water mark.**

Natural Shoreline Environment Management Policies:

- S-529** King County shall not allow new shoreline armoring in the Natural Shoreline Environment.
- S-530** King County shall not allow the following new uses in the Natural Shoreline Environment:
- 1. Commercial uses;**
 - 2. Industrial uses;**
 - 3. Nonwater-oriented recreation uses that require shoreline modification in order to provide shoreline access;**
 - 4. Mining; and**

5. Transportation facilities, utility corridors, and parking areas that can be located outside of the Natural Shoreline environment.

- S-531** King County may allow single-family residential development in the Natural Shoreline Environment as a shoreline conditional use if the density and intensity of such use is limited as necessary to protect ecological processes and functions and is consistent with the purpose of the environment. King County shall require new subdivisions or short-subdivisions in the Natural Shoreline Environment to locate new structures outside of the shoreline jurisdiction to the maximum extent practicable.
- S-532** King County shall allow scientific, historical, cultural, and educational research uses in the Natural Shoreline Environment if no significant ecological impact on the area will result.
- S-533** Except for removal of noxious weeds or invasive vegetation as provided for in S-501, King County shall not allow vegetation removal in the Natural Shoreline Environment that will reduce the capability of vegetation to perform normal ecological processes and functions.
- S-534** King County shall allow agricultural uses of a very low intensity within the Natural Shoreline Environment if the use is subject to appropriate limitations or conditions to ensure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation, and consistent with Policy S-533.
- S-535** King County shall allow passive and low-impact recreational activities in the Natural Shoreline Environment. New passive and low impact recreation activities shall use designs that avoid or minimize impacts to shoreline processes and functions. Maintenance of trails and campsites shall minimize disturbance and restoration of impacted areas is encouraged.
- S-536** King County should use tax incentives, easements, and buyouts to protect shorelines in the natural area designation with important fish and wildlife habitat that are at risk due to moderate to high intensity development.

H. Aquatic Environment

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.

Aquatic Shoreline Environment Designation Criteria

- S-537** A shoreline may be designated Aquatic if it is waterward of the ordinary high water mark of the shoreline.

Aquatic Shoreline Environment Management Policies:

- S-538** King County shall allow new over-water structures in the Aquatic Shoreline Environment only for water-dependent uses, public access, or ecological restoration.

- S-539 King County shall limit the size of new over-water structures in the Aquatic Shoreline Environment to the minimum necessary to support the structure's intended use.**
- S-540 King County shall encourage multiple uses of over-water facilities in the Aquatic Shoreline Environment in order to reduce the impacts of shoreline development and increase the effective use of water resources.**
- S-541 King County shall require all developments and uses on navigable waters or their beds in the Aquatic Shoreline Environment to 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 and materials necessary to create or sustain their habitat, particularly those species dependent on migration.**
- S-542 King County shall not allow uses in the Aquatic Shoreline Environment that adversely impact the ecological processes and functions of critical saltwater and freshwater habitats, except when necessary to achieve the objectives of RCW 90.58.020, and then only when the adverse impacts are mitigated according to the sequence described in WAC 173-26-201 (2)(e) as necessary to assure no net loss of ecological processes and functions.**
- S-543 King County shall require shoreline uses and modifications in the Aquatic Shoreline Environment to be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.**
- S-544 King County shall consider the guidance in the Maury Island Aquatic Reserve Management Plan in making decisions about permitted uses in the shoreline.**

VI. ENVIRONMENTAL PROTECTION POLICY GOALS

A. General Environmental Protection Policy Goals

The State Shoreline Master Program Guidelines recognize that shoreline ecological functions may be impaired not only by shoreline developments that are required to obtain shoreline substantial development permits, but also by past actions, unregulated activities, and developments that are exempt from the shoreline substantial development permit requirements. The loss or degradation of ecological functions from any of these activities can significantly impact shoreline natural resources and may also adversely impact human health and safety.

The concept of ecological functions recognizes that any ecological system is composed of a wide variety of interacting physical, chemical, and biological processes and their components, that are interdependent in varying degrees and at different scales, and which result in the landscape, habitats and species as they exist at any time. Ecological functions are the work performed or roles played individually or collectively within ecosystems by these processes and components.

1. Cumulative Impacts and "No Net Loss" of Ecological Functions

Nearly all shoreline areas, even substantially developed or degraded areas, retain important ecological functions that contribute to the survival and successful reproduction of plants and animals. For example, an intensely developed harbor area may also have an important function as a fish migration corridor and

feeding area critical to species survival. In addition, it must be recognized that ecosystems are interconnected, and many species may depend on the functioning of multiple systems for critical resources. As examples, anadromous fish depend upon the viability of freshwater, marine, and terrestrial shoreline ecosystems, and many wildlife species associated with shorelines depend on the functioning of both terrestrial and aquatic environments. Therefore, the policies for protecting and restoring ecological functions generally should apply to the maximum extent possible to all shoreline areas, not just those that remain relatively unaltered.

The SMA requires that King County's Shoreline Master Program achieves no net loss of ecological function from new uses or development, and that it addresses the cumulative impacts on shoreline ecological functions that would result from future shoreline development. The SMA also requires local governments to plan for restoration of ecological functions where they have been impaired, thus working towards net gain. The following policies ensure that King County will address cumulative impacts and prevent any net loss of ecological shoreline functions.

- S-601 King County's Shoreline Master Program policies and regulations must achieve no net loss of ecological functions.**
- S-602 King County's Shoreline Master Program shall include regulations and mitigation standards to ensure that permitted and exempt developments in the aggregate will not cause a net loss of ecological functions of the shoreline.**
- S-603 King County's Shoreline Master Program goals and policies will promote restoration of impaired ecological functions. Policies and programs and non-regulatory actions that contribute to restoration goals will be identified. King County should consider the direct and indirect effects of other regulatory or non-regulatory programs of other local, state, and federal laws, as well as any restoration effects that may result from shoreline development regulations and mitigation standards.**
- S-604 The King County Shoreline Master Program identifies restoration opportunities and planning elements that together will improve the overall condition of habitat and resources within the shoreline area. See Shorelines Protection and Restoration Plan, Appendix A.**
- S-605 The King County Shoreline Master Program considers the cumulative impacts of reasonably foreseeable future development on shoreline ecological functions in order to ensure no net loss of ecological functions and protection of other shoreline functions or uses.**
- S-606 King County shall fairly allocate the burden of addressing cumulative impacts among development opportunities. King County should adopt policies and regulations that are designed to avoid the need for individualized cumulative impacts analysis for commonly occurring and planned development.**
- S-607 King County shall prefer and provide special permitting considerations for docks and piers that are shared among multiple landowners.**
- S-608 When updating the Shoreline Master Program, King County should analyze proposed policies and regulations to determine whether they will cause cumulative adverse impacts to the shoreline and consider how such impacts could be avoided. The evaluation of cumulative impacts should consider:**
 - 1. Current condition of the shorelines and associated natural processes;**
 - 2. Reasonably foreseeable future development and shoreline uses;**

3. **An appropriate evaluation of the effect on shoreline ecological functions that are caused by unregulated activities, development exempt from permitting, and effects such as the incremental impact of residential bulkheads, residential piers, or runoff from newly developed properties; and**
4. **Beneficial effects of any established regulatory programs under other local, state, and federal laws.**

S-609 For development proposals that may have impacts that cannot be anticipated or uncommon impacts that have not been considered or identified at time of adoption of the King County Shoreline Master Program, King County 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.

S-610 King County shall consider and address cumulative impacts on all functions and uses of the shoreline that are consistent with the RCW Chapter 90.58. For example, a cumulative impact of allowing development of docks or piers could interfere with navigation on a water body.

2. Ongoing Evaluation, Review of Cumulative Impacts and Duty to Update

King County will periodically review the Shoreline Master Program and make amendments that it determines are necessary to reflect changing local circumstances, new information, and improved data, and to meet the requirements of RCW 90.58.080 and applicable guidelines. King County will also monitor actions taken to implement the Shoreline Master Program and the shoreline conditions to inform updates of Shoreline Master Program provisions and improve shoreline management over time.

S-611 King County shall periodically review and amend its Shoreline Master Program using a process that inventories and ensures meaningful understanding of current and potential ecological functions provided by affected shorelines.

B. Shoreline Critical Areas

1. Standard for protection under the SMA

The Growth Management Act requires King County to protect the functions and values of critical areas, which are defined as wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. When King County's Shoreline Master Program is approved by the Washington State Department of Ecology (Ecology), critical areas located within the shoreline jurisdiction are protected under the Shoreline Master Program rather than the Growth Management Act. The Shoreline Master Program must provide equal or better protection of critical areas within shoreline jurisdiction that are provided for critical areas located outside of shoreline jurisdiction, as well as optimum protection of shorelines of state-wide significance. In addition to the policies in the King County Shoreline Master Program for the protection of critical areas, the King County Comprehensive Plan and functional plans adopted as an element of the King County Comprehensive Plan guide the protection of critical areas within the shoreline jurisdiction.

2. Use of scientific and technical information

The Shoreline Management Act requires local governments to use scientific and technical information when establishing protection measures for critical areas. To achieve this requirement, King County has, to the extent feasible:

1. Used a systematic interdisciplinary approach that ensures the integrated use of the natural and social sciences and the environmental design arts;
2. Consulted with and obtained the comments of any federal, state, regional, or local agency having any special expertise with respect to environmental impacts;

3. Considered 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;
4. Used all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;
5. Employed, when possible, all appropriate, modern scientific data processing and computer techniques to store, index, analyze, and manage the information gathered.

King County has reviewed and synthesized a wide range of scientific information resulting in regulatory standards based on the best available science for the protection of critical areas. In addition, King County considered state, tribal and federal programs to provide a full spectrum of planning and regulatory measures to guide critical areas protection in shorelines.

S-612 In considering development regulations to protect shoreline ecological functions and values, King County shall consider the scientific and technical information contained in functional plans adopted to implement the Comprehensive Plan, adopted watershed plans, King County critical areas regulations and state, tribal and federal programs.

In order to ensure no net loss of shoreline ecological functions resulting from development proposed in shoreline critical areas, the King County Shoreline Master Programs requires that these development proposals analyze the environmental impacts of the proposal and consider measures to avoid, if possible, and then mitigate for the adverse environmental impacts.

S-613 King County shall apply the following sequence of steps listed in order of priority in evaluating the impacts of development on critical areas within the shoreline jurisdiction:

1. **Avoid the impacts altogether;**
2. **Minimize impacts;**
3. **Rectify impacts by repairing, rehabilitating or restoring the affected environment;**
4. **Reduce or eliminate the impacts over time;**
5. **Compensate for impacts by replacing, enhancing or providing substitute resources; and**
6. **Monitor the impact and taking appropriate corrective measures.**

3. Wetlands

When determining allowed uses within wetlands and their buffers in shorelines of the state, consideration should be given to those uses that would result in no net loss of wetland area and wetland function. Consideration should be given to specific uses that are likely to impact the physical, chemical, and biological processes that create and sustain wetlands.

S-614 King County wetland regulations shall address the following uses to achieve, at a minimum, no net loss of wetland area and functions:

1. **Removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;**
2. **Dumping, discharging, or filling with any material, including discharges of storm water and domestic, commercial, or industrial wastewater;**
3. **Draining, flooding, or disturbing of the open water level, duration of inundation, or groundwater table;**
4. **Driving of pilings;**
5. **Placing of obstructions;**
6. **Construction, reconstruction, demolition, or expansion of any structure;**
7. **Significant vegetation removal, except for forest practices regulated under chapter 76.09 RCW;**

8. **Other uses or development that results in a significant ecological impact to the physical, chemical or biological characteristics of wetlands; and**
9. **Activities reducing the functions of buffers.**

Wetlands shall be categorized based on rarity, irreplaceability, or sensitivity to disturbance, as well as the functions the wetland provides. The Shoreline Management Act provides the option of using specified wetland rating systems or developing a regionally specific system, provided the system is scientifically based and provides a method to distinguish wetland quality and function. King County adopted the Washington State Wetland Rating System for Western Washington for use in categorizing wetlands under the Growth Management Act critical areas development standards.

S-615 King County shall categorize wetlands within shorelines of the state as provided for in Chapter 4, Environment, of this Comprehensive Plan.

The King County Shoreline Master Program provisions that would allow limited alterations to wetlands shall be consistent with the policy of no net loss of wetland area and functions, wetland rating, and scientific and technical information.

S-616 King County should allow alterations to wetlands only if there is no net loss of wetland functions and values.

The King County Shoreline Master Program requires buffers be delineated and protected around wetlands. The size of the wetland buffer is based on the classification of the wetland and its characteristics and whether the wetland is located within or outside of the Urban Growth Area. Mitigation measures have been established to obtain a reduced buffer width in return for added measures to address light, noise, toxic runoff, change in water regime, pets and human disturbance, dust, and degraded buffer condition. Other modifications to buffer widths are allowed through buffer averaging. Circumstances, such as the presence of threatened or endangered species or proximity to steep slopes, may authorize increased buffer widths.

S-617 King County shall delineate buffers around wetlands to protect and maintain wetland functions. Buffer widths shall be based on ecological function, characteristics and setting, potential impacts with adjacent land use, and other relevant factors.

The King County Shoreline Management Program requires that mitigation measures achieve equivalent or greater wetland functions including, but not limited to, habitat complexity, connectivity and other biological functions, and seasonal hydrological dynamics. Preferential consideration is given to measures that replace the impacted functions directly and in the immediate vicinity of the impact.

S-618 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.

King County may authorize alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact. Authorization of compensatory mitigation measures may require appropriate safeguards, terms, or conditions as necessary to ensure no net loss of ecological functions.

S-619 King County may allow compensatory mitigation only after a mitigation sequence is applied (see Policy S-613) and higher priority means of mitigation are determined to be infeasible.

1. **Compensatory mitigation replacement ratios or other mitigation provisions shall consider:**

- a. the risk of failure of the compensatory mitigation action;
 - b. the length of time the compensatory mitigation action will take to replace adequately the impacted wetland functions and values; and
 - c. the gain or loss of the type, quality, and quantity of the ecological functions of the compensation.
2. Performance standards shall be established to evaluate the success of compensatory mitigation.
 3. Long-term monitoring shall be required to determine if performance standards are met.
 4. Long-term protection and management shall be required for compensatory mitigation sites.

4. Critical Aquifer Recharge Areas

King County has classified and mapped critical aquifer recharge areas according to the vulnerability of the aquifer. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute contamination that may degrade ground water and by hydrogeologic conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that will degrade ground water and by hydrogeologic conditions that do not facilitate degradation. Critical aquifer recharge areas are required to be protected under the Growth Management Act as a critical area.

S-620 The King County Shoreline Master Program shall protect critical aquifer recharge areas consistent with the King County Comprehensive Plan and KCC Chapter 21A.24.

5. Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological processes and events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices, so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided. Under the King County Shoreline Master Program, geologically hazardous areas include:

1. Erosion hazard areas;
2. Landslide hazard areas;
3. Seismic hazard areas;
4. Coal mine hazard areas;
5. Volcanic hazard areas; and
6. Steep slope hazard areas.

The following policies to protect health and safety and also to reduce the loss of ecological functions apply to geological hazardous areas located within shorelines of the state.

S-621 Development regulations for geologically hazardous areas shall meet the minimum requirements in WAC 365-190-080(4).

S-622 King County shall prohibit development and new lot creation in geologically hazardous areas if it would result in increased risk of injury to people or property damage, consistent with 21A.24.

S-623 King County shall prohibit new development that requires structural stabilization in geologically hazardous areas. Stabilization will be allowed in these areas only if the stabilization is necessary to protect existing allowed uses, there is no

alternative location available, and no net loss of ecological functions will result. Stabilization measures shall conform to WAC 173-26-231.

S-624 King County may allow stabilization structures or measures in geologically hazardous areas to protect existing primary residential structures, if there are no alternatives, including relocation or reconstruction of the residential structure, the stabilization is in conformance with WAC 173-26-231, and no net loss of ecological functions will result.

6. Fish and Wildlife Habitat Conservation Areas

King County is required by the Growth Management Act to protect fish and wildlife habitat conservation areas as critical area. The Washington Department of Community, Trade, and Economic Development (DCTED) adopted guidelines to assist local governments in designating critical areas, including fish and wildlife habitat conservation areas. The DCTED guidelines are designed to define and protect areas necessary to maintain species in suitable habitats within their natural geographic distribution, at least in part so that isolated subpopulations are not created. DCTED identifies the following areas as being suitable for fish and wildlife habitat conservation areas:

1. Areas with which endangered, threatened, and sensitive species have a primary association; areas critical for habitat connectivity;
2. Habitats and species of local importance;
3. Commercial and recreational shellfish areas;
4. Kelp and eelgrass beds; herring, smelt and sand lance spawning areas;
5. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;
6. Waters of the state;
7. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
or
8. State natural area preserves and natural resource conservation areas.

The King County Comprehensive Plan and its development regulations protect the functions and values of fish and wildlife habitat conservation areas through its provisions governing aquatic areas and wildlife habitat conservation areas.

The Washington State Department of Ecology guidelines divide fish and wildlife habitat conservation areas into critical saltwater and critical freshwater habitats.

a. Critical saltwater habitat

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; flats, spits, intertidal habitats with vascular plants, and areas with which priority species have a primary association. Critical saltwater habitats include both the shorelines and the adjacent submerged areas.

S-625 King County shall provide a high level of protection to critical saltwater habitats due to the important ecological functions they provide.

S-626 Protection and restoration of critical saltwater habitats should integrate management of shorelands as well as submerged areas.

Comprehensive planning for the protection and restoration of critical saltwater habitat should include state resource agencies, local and regional government entities including, but not limited to the Port of Seattle and Sound Transit, and affected Indian Tribes. To reverse the impacts from development on salt water habitats, the King County Shoreline Master Program should look for opportunities to restore saltwater shorelines and protect them from further degradation. All resources should be reviewed and considered.

S-627 King County shall adopt use policies and development regulations to achieve consistency among and between shorelands and adjacent lands as directed in RCW 90.58.340.

- S-628 As part of its management planning for critical saltwater habitats, King County should include an evaluation of current data and trends regarding:**
- 1. Available inventory and collection of necessary data regarding physical characteristics of the habitat, including upland conditions, and any information on species population trends;**
 - 2. Terrestrial and aquatic vegetation;**
 - 3. 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;**
 - 4. Restoration potential;**
 - 5. Tributaries and small streams flowing into marine waters;**
 - 6. Dock and bulkhead construction, including an inventory of bulkheads serving no protective purpose;**
 - 7. Conditions and ecological function in the near-shore area;**
 - 8. Uses surrounding the critical saltwater habitat areas that may negatively impact those areas, including permanent or occasional upland, beach, or over-water uses; and**
 - 9. An analysis of what data gaps exist and a strategy for gaining this information.**

Because of the need for a higher level of protection for critical saltwater habitat, allowed uses should be carefully limited and only allowed to meet other policy goals of the Shoreline Management Act.

- S-629 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:**
- 1. 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;**
 - 2. 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;**
 - 3. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat; and**
 - 4. The project is consistent with the state's interest in resource protection and species recovery.**

- S-630 Public or private noncommercial docks for public, individual residential or community use may be authorized provided that:**
- 1. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible; and**
 - 2. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.**

b. Critical freshwater habitat

Critical freshwater habitats are equally important to saltwater areas as fish and wildlife habitat conservation areas along shorelines of the state. Critical freshwater habitats include streams and rivers, with their associated channel migration zones, floodplains, wetlands, and lakes. Shorelines along these freshwater habitats often have been highly developed and are currently adversely impacted by improper storm water, sewer, or industrial outfalls, unmanaged clearing and grading, and surface water runoff from buildings and parking lots. Some impacts include altered quality and quantity of runoff, as well as destruction or alteration of vegetation. Potential impacts from vegetation changes can include increased

water temperatures and altered hydrographic conditions. All of these changes create inhospitable conditions in water bodies for priority species and, in addition, make them more susceptible to problems stemming from catastrophic flooding, droughts, landslides and channel changes.

Some freshwater habitats, particularly rivers and floodplains, often are considered as hazardous areas that can threaten life and property during catastrophic events, such as flooding. Development can exacerbate such conditions.

To reverse the impacts from development on critical fresh water habitats, the King County Shoreline Master Program should look for opportunities to restore freshwater shorelines and protect them from further degradation.

- S-631 King County should establish priorities for protection and restoration, where appropriate, along unincorporated river corridors and lake shorelines.**
- S-632 King County should regulate uses and development as necessary within and along stream channels, associated channel migration zones, wetlands, lake shorelines, and floodplains within the shoreline jurisdiction-area, to assure that no net loss of ecological functions results from new development near freshwaters of the state, including associated hyporheic zones.**
- S-633 King County shall protect ecological functions associated with critical freshwater habitat as necessary to assure no net loss from shoreline activities and associated changes.**
- S-634 King County should facilitate authorization of appropriate restoration projects.**

C. Frequently Flooded Areas and Channel Migration Hazard Areas

The King County 2006 Flood Hazard Management Plan was adopted as a functional plan of the King County Comprehensive Plan. The Flood Plan outlines the policies, programs, and projects that King County uses to reduce the risk from flooding and channel migration. The King County 2006 Flood Hazard Management Plan was reviewed for consistency with the Shoreline Management Act and determined to be consistent with the SMA. King County maps Channel Migration Hazard Areas and applies critical areas regulations to assure that channel migration can be accommodated.

- S-635 The policies contained within the King County Flood Hazard Management Plan, or its successor, constitute the policies for the protection of frequently flooded areas and channel migration within shorelines. Provisions implementing these policies are included in the critical areas regulations.**

D. Shoreline Vegetation Conservation

A major intent of vegetation conservation is to protect and restore the ecological functions and ecosystem-wide processes performed by stands of vegetation along shorelines. Vegetation conservation can 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 particular plant and animal species and their habitats, and to enhance shoreline uses.

In King County, aquatic environments, as well as their associated upland and wetland vegetated areas, provide significant habitat for a wide variety of fish and wildlife species. Healthy environments for aquatic species are inseparably linked with the ecological integrity of the surrounding terrestrial ecosystems. For example, nearly continuous stretches of mature forest characterize the natural riparian conditions of the Pacific Northwest. Riparian areas along marine shorelines provide the same or similar 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 cool water temperatures required by salmonids, spawning forage fish, and other aquatic biota.
- Providing external organic inputs critical for some aquatic life.
- Providing food for various insects and other benthic macro invertebrates, which are in turn food sources for fish, birds, and other wildlife.
- 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 for introduction into the aquatic system. Large woody debris is a primary structural component in streams that functions as a hydraulic roughness element to moderate flows and store sediment. Large woody debris also serves a pool-forming function, providing critical salmonid rearing and refuge habitat. Abundant large woody debris increases aquatic diversity and stabilizes systems.
- Regulation of microclimates in the lake and stream-riparian and intertidal corridors.
- Providing critical wildlife habitat, including migration corridors and feeding, watering, rearing, and refuge areas.

The length, width, and species composition of a shoreline vegetation community all contribute substantively to aquatic ecological functions. Likewise, the biological communities of the aquatic environment are 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, there is a greater risk that important functions will not be performed.

Sustaining individual functions requires varying 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 introduction of fallen trees, especially conifers, into the stream channel is an important attribute that is critical to natural stream channel maintenance.

Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas². Vegetation conservation provisions generally include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species.

S-636 Vegetation conservation provisions apply to shoreline uses and developments even if they are exempt from the requirement to obtain a permit.

S-637 Vegetation conservation standards shall not apply retroactively to existing uses and structures, such as existing agricultural practices.

S-638 King County shall adopt planning provisions to address vegetation conservation and restoration and regulatory provisions to address conservation of vegetation, as necessary, to assure no net loss of shoreline ecological processes and

² 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.

functions, to avoid adverse impacts to soil hydrology, and to reduce the hazard of slope failures or accelerated erosion.

- S-639** King County should identify which ecological processes and functions are important to the local aquatic and terrestrial ecology, and then 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.
- S-640** King County should adopt development regulations for vegetated areas along streams, which once supported or could in the future support mature trees, that include buffers of sufficient width to facilitate the growth of mature trees and periodic recruitment of woody vegetation into the water body to support vegetation-related shoreline functions.
- S-641** King County should adopt mechanisms to implement the vegetation conservation policies of this chapter. These mechanisms may include setback or buffer requirements, clearing and grading standards, regulatory incentives, environment designation standards, or other provisions. Selective pruning of trees for safety and view protection may be allowed. Removal of noxious weeds and invasive vegetation should be allowed consistent with policy S-501.

E. Water Quality, Stormwater and Non-Point Pollution

The Shoreline Master Program must protect against adverse impacts to the public health, to the land with its vegetation and wildlife, and to the waters of the state and their aquatic life. The intent of water quality, stormwater and non-point pollution policies is to provide shoreline protection by preventing adverse impacts.

- S-642** Shoreline Master Program water quality, stormwater, and non-point pollution policies apply to all development and uses in shorelines of the state that affect water quality.
- S-643** King County should work to prevent impacts to water quality and storm water quantity that would result in a net loss of shoreline ecological functions, degraded aesthetic qualities, or a significant impact to recreational opportunities.
- S-644** King County should ensure mutual consistency between shoreline management provisions and other regulations that address water quality and storm water quantity, including Public Health – Seattle & King County standards, the King County Surface Water Design Manual, and King County Code Chapter 9.04 and Chapter 9.12. The regulations that are most protective of ecological functions shall apply.
- S-645** The Shoreline Master Program shall include provisions to implement the water quality, stormwater and non-point pollution policies in this section.

VII. SHORELINE USE & SHORELINE MODIFICATION

A. Shoreline Use versus Shoreline Modification

The Shoreline Management Act makes a distinction between a shoreline use and shoreline modifications. A shoreline use is an activity that is allowed within the shorelines zone. In most cases in order to engage in an activity, the shoreline must be modified. This means that shoreline modifications are often undertaken in support of or in preparation for an activity along shorelines. Shoreline modifications often involve construction of a physical element, such as a dike, breakwater, dredged basin, or fill, as well as other actions such as clearing, grading, application of chemicals, or significant vegetation removal.

B. Shoreline Use

Land uses in King County are based on federal, state, and local policies and regulations. The baseline permitted uses are codified in the King County Zoning Code, Title 21A. Land uses that would be allowed by King County's Zoning Code may be limited by the King County Shoreline Master Program and implementing development regulations in Titles 20 and 21A.

- S-701 King County shall give preference to uses in the shoreline that are consistent with the control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon the shoreline zone.**
- S-702 Development within the shoreline zone shall protect the public's health, safety, and welfare, as well as the land, including its vegetation and wildlife, and protect property rights while implementing the policies of the Shoreline Management Act.**
- S-703 Where there is a conflict between the permitted uses in K.C.C. Chapter 21A.08 and the Shoreline Master Program, preference shall be given first to water-dependent uses, then to water-related uses, and finally to water-enjoyment uses.**
- S-704 Shoreline Master Program development regulations shall ensure no net loss of ecological functions associated with the shoreline zone.**

1. Shoreline Conditional Uses

For the purposes of the King County Shoreline Master Program, a shoreline conditional use may be appropriate in order to:

- 1. Effectively address unanticipated uses that are not classified in the Shoreline Master Program;
 - 2. Address cumulative impacts; or
 - 3. 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 designation within the Shoreline Master Program or with the Shoreline Management Act policies.
- S-705 The following types of uses and development should require a shoreline conditional use permit:**
- 1. **Uses and development that may significantly impair or alter the public's use of the water areas of the state;**

2. **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; and**
3. **Development in critical saltwater habitats.**

2. Agriculture

The Shoreline Management Act defines agricultural activities as:

"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;"

The Shoreline Management Act prohibits Shoreline Master Programs from requiring modification to or limiting existing agricultural activities on agricultural lands in the shoreline jurisdiction. This limitation does not apply to new agricultural activities. As required by the Growth Management Act, King County has designated agricultural lands of long-term commercial significance. These lands have been included in agricultural production districts under the King County Comprehensive Plan.

S-706 The King County Shoreline Master Program shall not require modification of or limit existing agricultural activities in the shoreline jurisdiction occurring within the agricultural production districts within King County. Agricultural activities within the shoreline jurisdiction shall be governed by existing provisions of the King County Comprehensive Plan and the King County Code.

S-707 New agricultural activities in the agricultural production districts that are conducted in the shoreline jurisdiction shall comply with the provisions of K.C.C. Chapter 21A.24 as they apply to agricultural activities.

Land uses meeting the definition of "agricultural activities" also occur outside the designated agricultural production districts. The King County Shoreline Master Program encourages agricultural uses, but they must be compatible with the shoreline designation in which they are proposed. In addition, under the rare circumstances when land is removed from the agricultural production districts, any development occurring on that land must be consistent with the shoreline designation where it is located.

S-708 New agricultural activities within the shoreline jurisdiction and outside the agricultural production districts shall be consistent with the shoreline designation where the land is located.

S-709 Agricultural activities within the shoreline jurisdiction and outside the agricultural production districts shall be located and designed to ensure no net loss of ecological functions and shall not result in an adverse impact on other shoreline resources and ecological values. These agricultural activities shall comply with the provisions of K.C.C. Chapter 21A.24 as they apply to agricultural activities.

S-710 Development and uses on land removed from the agricultural production districts shall be consistent with the shoreline designation where the land is located.

3. Forestry

In general, Ecology's guidelines require local shoreline master programs to rely on the Forest Practices Act and the rules implementing the act and the *Forest and Fish Report* as adequate management of commercial forest uses within the shoreline zone. When a property owner chooses to convert commercial timber land to a use other than timber production, the regulations for commercial forestry no longer apply.

S-711 If land is being converted to a non-forest use through Class IV-General forest practice, the provisions of the King County Shoreline Management Program that apply to development activities governs the proposed land use.

Because shorelines of statewide significance require a higher level of protection, special provisions apply to forestry within shorelines of statewide significance.

S-712 Within shorelines of statewide significance, selective commercial timber cutting shall be used for timber harvest within two hundred feet abutting landward of the ordinary high water mark so that no more than thirty percent of the merchantable trees may be harvested in any ten year period of time. Through a shoreline conditional use permit, King County may approve:

- 1. Other timber harvesting methods in those limited instances where the topography, soil conditions, or silviculture practices necessary for regeneration render selective logging ecologically detrimental; and**
- 2. Clear cutting of timber that is solely incidental to the preparation of land for other uses authorized by the King County Shoreline Master Program.**

S-713 For forest practice conversions and other Class IV-General forest practices, where there is a likelihood of conversion to nonforest uses, King County shall ensure that there is no net loss of shoreline ecological functions, that the ecological quality of the watershed's hydrologic system, and that there are no significant adverse impacts to other shoreline uses, resources, and values such as navigation, recreation, and public access.

4. Surface Drilling for Oil and Gas

The Shoreline Management Act prohibits surface drilling in the waters of Puget Sound north to the Canadian boundary and the Strait of Juan de Fuca seaward from the ordinary high water mark and on all lands within one thousand feet landward from that line.

S-714 Surface drilling for oil or gas shall be prohibited in Puget Sound seaward from the ordinary high water mark and on all lands within one thousand feet landward from the ordinary high water mark on Puget Sound.

5. Aquaculture

Aquaculture is the culture or farming of food fish, shellfish, or other aquatic plants and animals. Aquaculture is dependent on the use of the water area and, when consistent with goals for aesthetics, public access, control of pollution and prevention of damage to the environment, is a preferred use of the water area. Aquaculture is a growing industry of statewide significance. Aquaculture should be accommodated so long as it does not result in a net loss of ecological functions. The visual and aesthetic impacts of aquaculture should not overwhelm adjacent land uses.

S-715 Aquaculture is a water-dependent use and, when consistent with control of pollution and avoidance of adverse impacts to the environment and preservation of habitat for native species, is a preferred use of the shoreline (WAC 173-26-241(3)(b)).

S-716 Aquaculture activities should be designed, located and operated in a manner that supports long term beneficial use of the shoreline and protects and maintains

shoreline ecological functions and processes. Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions; adversely affect the quality or extent of habitat for native species including eelgrass, kelp, and other macroalgae; adversely impact other habitat conservation areas; or interfere with navigation or other water dependent uses.

- S-717** Aquaculture facilities should be designed, operated and located so as not to spread disease to native aquatic life, establish new nonnative species that cause significant ecological impacts, or substantially impact the aesthetic qualities and public access of the shoreline.
- S-718** Preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts and lesser impacts to native plant and animal species. In general, projects that require no structures, submerged structures or intertidal structures are preferred over those that involve substantial floating structures. Projects that involve little or no substrate modification are preferred over those that involve substantial modification. Projects that involve little or no supplemental food sources, pesticides, herbicides or antibiotic application are preferred over those that involve such practices.
- S-719** Aquaculture that involves significant risk of cumulative adverse effects on water quality, sediment quality, benthic and pelagic organisms, and/or wild fish populations through potential contribution of antibiotic resistant bacteria, or escapement of non-native species, or other adverse effects on native species and their habitats should not be permitted.
- S-720** Legally established aquaculture enterprises, including authorized experimental projects, should be protected from incompatible uses that may seek to locate nearby. Use or developments that have a high probability of damaging or destroying an existing aquaculture operation may be denied.

6. Boating Facilities

Boating facilities provide the boating public recreational opportunities on waters of the state, but should be sited carefully to assure no net loss of ecological functions and to maintain the aesthetic quality of the shoreline. For purposes of the King County Shoreline Master Program, "boating facilities" do not include docks serving four or fewer single-family residences.

- S-721** Boating facilities shall be located only at sites with suitable environmental conditions, shoreline configuration, access, and neighboring uses, and:
- 1. Meet health, safety and welfare requirements;**
 - 2. Mitigate aesthetic impacts;**
 - 3. Provide public access in new marinas, unless there is a safety or security concern;**
 - 4. Limit the impacts to shoreline resources from boaters living in their vessels;**
 - 5. Assure no net loss of shoreline ecological functions or other significant adverse impacts; and**
 - 6. Protect the rights of navigation.**

7. Commercial Development

The King County Shoreline Master Program establishes a hierarchy for commercial development within the shoreline zone. Preference should be given to water-dependent commercial uses over nonwater-dependent commercial uses, then water-related and water-enjoyment commercial uses over nonwater-oriented commercial uses. Some commercial uses within the shoreline zone may be required to incorporate appropriate design and operational elements to qualify as water-related or water-enjoyment. Public access and ecological restoration are considered appropriate mitigation for the impact to the

shoreline zone unless it is determined public access is infeasible or inappropriate. Most commercial land in unincorporated King County is located outside the shoreline zone.

- S-722 King County shall require all commercial development on public land to provide public access, unless the use is incompatible or there are public safety concerns.**
- S-723 King County shall prohibit nonwater-oriented commercial uses in the shoreline zone unless they meet the following criteria:**
 - 1. 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;**
 - 2. 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.**
- S-724 King County may allow nonwater-oriented commercial development in the shoreline zone if the site is physically separated from the shoreline zone by another property or public right of way.**
- S-725 King County should not allow nonwater-dependent commercial uses over water except in existing structures or in the limited instances where they are auxiliary to and necessary in support of water-dependent uses.**
- S-726 King County shall prohibit commercial development that will have significant adverse impact to other shoreline uses, resources and values such as navigation, recreation and public access. King County shall require mitigation for all commercial development to ensure that it does not cause a net loss of ecological functions.**

8. Industry

The King County Shoreline Master Program establishes a hierarchy for industrial development within the shoreline zone. Most industrial land in King County is located within cities rather than within unincorporated King County.

- S-727 In the shoreline zone, King County shall give preference to industrial uses in the following order: first, water-dependent industrial uses; second, water-related industrial uses; and third, non-water-oriented industrial uses.**
- S-728 In order to mitigate for the impacts of industrial development within the shoreline zone, King County should require ecological restoration and public access, unless it determines that public access is infeasible or inappropriate.**
- S-729 King County should require public access for industrial uses located on public land in the shoreline zone, unless King County determines that public access is infeasible or inappropriate.**
- S-730 King County should encourage Industrial development and redevelopment to locate where environmental cleanup and restoration of the shoreline zone can be incorporated.**
- S-731 King County should prohibit new nonwater-oriented industrial development in the shoreline zone, except when the use is part of a mixed-use project that includes water-dependent uses or navigability is severely limited and the use provides a significant public benefit with respect to the Shoreline Management Act's objectives, such as providing public access and ecological restoration.**

S-732 King County may allow nonwater-oriented industrial uses in the shoreline zone if the site is physically separated from the shoreline zone by another property or public right of way.

9. In-Water Structures

"In-water structure" means a structure placed by humans within a stream, river, or lake 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-water structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish collection weir, or other purposes.

S-733 In-water 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, hydro-geological processes, and natural scenic vistas.

S-734 The location and planning of in-water 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 habitat for threatened or endangered species.

10. Mining

King County has identified and designated land that is appropriate for the removal of sand, gravel, soil, minerals and other extractable resources. In King County, gravel removal was a common method of flood control in the first half of the 20th century. However, mining within shorelines can have significant impacts, particularly to habitat for threatened and endangered aquatic and riparian species.

S-735 Mining may be allowed within the shoreline zone if it is:

- 1. Consistent with the environment designation policies of the King County Shoreline Master Program and provisions of the Shoreline Management Act; and**
- 2. Located within mineral resource lands designated by the King County Comprehensive Plan.**

S-736 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 standard of no net loss of ecological function 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 restoration, creation, or enhancement of habitat for threatened or endangered species.

S-737 The King County Shoreline Master Program provisions and permit requirements for mining should be coordinated with the requirements of Chapter 78.44 RCW.

S-738 The proposed subsequent use of mined property shall be consistent with the provisions of the shoreline designation in which the property is located.

S-739 King County shall not permit mining within the active channel of a river unless:

- 1. 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;**

2. The mining and any associated permitted activities will not have significant adverse impacts to habitat for threatened or endangered species nor cause a net loss of ecological functions of the shoreline;
3. The determinations required by 1. and 2. of this subsection 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 the State Environmental Policy Act (SEPA) and the Ecology rules;
4. In considering renewal, extension, or reauthorization of gravel bar and other in-channel mining operations in locations where they have previously been conducted, King County shall require compliance with this policy if that no such review has previously been conducted. Where there has been prior review, King County shall review the previous determinations in order to ensure that current site conditions comply with the Program; and
5. These requirements do not apply to dredging of authorized navigation channels when conducted in accordance with WAC 173-26-231 (3)(f).

S-740 King County shall require a shoreline conditional use permit for mining activity within a severe channel migration hazard zone located within the shoreline zone.

11. Recreational Development

Recreational development includes uses and activities designed to allow public enjoyment and use of the water and shoreline zone. King County recreational planning provides for parks, trails, open space, and opportunities for both active and passive recreational use in King County.

S-741 Recreational development is allowed in the shoreline zone and must be consistent with the shoreline environment designation in which the property is located.

S-742 King County shall plan to provide public recreational uses on County-owned shoreline, consistent with the goals of this chapter.

12. Residential Development

The Shoreline Management Act recognizes single-family residential development as a priority use within shorelines of the state. The term "residential development" also includes attached and multifamily dwelling units as well as subdivision of shoreline land into new residential lots. In King County, single detached dwelling units are the most common shoreline development. Residential development is often fairly high density to maximize water frontage. Care must be taken to assure that shoreline residential development and the related impacts from shoreline armoring, stormwater runoff, on-site sewage disposal systems, introduction of pollutants, and vegetation modification and removal do not result in significant damage to the shoreline.

S-743 Single Family Residential development is a priority use in the shoreline zone in King County.

S-744 Shoreline zone residential development, including accessory 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 these structures and uses.

S-745 New over-water residences, including floating homes, are not a preferred use and shall be prohibited in the shoreline zone. Existing communities of floating or over-water homes should be reasonably accommodated to allow improvements associated with life-safety matters and to ensure protection of private property rights. King County shall limit the expansion of existing floating home or over-

water communities to the minimum necessary to ensure consistency with constitutional and other legal limitations that protect private property.

S-746 King County should require multi-family residential development and subdivisions within the shoreline jurisdiction creating more than four lots to provide community or public access, consistent with the public access plan in Appendix B.

S-747 King County shall require subdivisions to:

- 1. Be designed, configured and developed in a manner that ensures that no net loss of ecological functions results from the subdivision at full build-out of all lots;**
- 2. Prevent the need for new shoreline stabilization or flood risk reduction measures that would cause significant impacts to other properties or public improvements or a net loss of shoreline ecological functions; and**
- 3. Implement the provisions and policies for shoreline designations and the general policy goals of this Plan.**

13. Transportation and Parking

Providing for transportation and parking is necessary to support water-dependent uses, to support the regional economy, and for access to privately owned property. However, transportation facilities should be located and designed to have the least impact on the ecological functions of the shoreline.

Transportation planning in shorelines should not be focused totally on automobiles, but should consider a wide range of options, including buses, light rail, commuter rail, bicycle, equestrian, and pedestrian facilities. Transportation planning can be a tool for finding opportunities to provide public access to the shorelines.

S-748 King County shall require transportation and parking plans and projects to be consistent with the public access policies in this Plan, the public access plan in Appendix B, and environmental protection provisions.

S-749 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 King County Shoreline Master Program.

S-750 Transportation and parking facilities shall be planned, located and designed to have the least possible adverse effect on unique or fragile shoreline features, 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 transportation facilities or transportation facility expansions should not be constructed within the shoreline zone.

S-751 Parking facilities in the shoreline zone are not a preferred use. King County shall allow parking facilities in the shoreline zone only when necessary to support an authorized use and when an alternatives analysis shows there are no feasible alternatives outside of the 200-ft shoreline zone. Parking facilities in the shoreline zone shall use Low Impact Designs, such as porous concrete and vegetated swales, and be planned, located and designed to minimize the environmental and visual impacts.

14. Utilities

Utilities include services and facilities that produce, convey, store, or process power, gas, water, sewage, storm water, communications, oil, or waste. Utilities that are classified as on-site utilities serving only one primary use are considered "accessory utilities" and are considered part of the primary use.

- S-752** Utility facilities shall be designed and located to assure no net loss of 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.
- S-753** King County shall not allow utility production and processing facilities, such as power plants and sewage treatment plants that are nonwater-oriented, or parts of such facilities, in the shoreline zone unless King County determines that no other feasible option is available.
- S-754** Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of the shoreline zone where feasible. Transmission facilities located within the shoreline zone shall assure no net loss of shoreline ecological functions.
- S-755** Utilities should be located in existing rights of way and corridors whenever possible.
- S-756** King County should discourage the location of pipelines and cables on tidelands, particularly those running roughly parallel to the shoreline zone, and the development of facilities that may require periodic maintenance that disrupts shoreline ecological functions, unless no other feasible alternative location exists. King County shall ensure that any utility facilities that are allowed do not result in a net loss of shoreline ecological functions or significant impacts to other shoreline resources and values

C. Shoreline Modifications

1. General Policies Governing Shoreline Modifications

A shoreline modification is construction of a physical element, such as a dike, breakwater, dredged basin, or fill, as well as other actions such as clearing, grading, application of chemicals, or significant vegetation removal to support or prepare for a shoreline use. These activities should be directly related to a legal shoreline use and should not be conducted for other purposes.

- S-757** King County should allow structural shoreline modifications only when necessary to support or protect a legally established structure or a legally existing shoreline use that is in danger of loss or substantial damage, or when some modifications are necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.
- S-758** In order to reduce the adverse effects of shoreline modifications, King County should limit shoreline modifications in number and extent to the maximum extent practicable.
- S-759** King County shall only allow shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.
- S-760** King County shall ensure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions. In order to achieve no net loss of ecological functions, King County shall give preference to those types of shoreline modifications that have a lesser impact on ecological functions and by requiring mitigation of identified impacts resulting from shoreline modifications.

S-761 Where applicable, King County shall develop regulations and impose conditions based on scientific and technical information and a comprehensive analysis of shoreline conditions for drift cells for marine waters or reaches for lakes and river and stream systems.

S-762 King County should plan for the enhancement of impaired ecological functions where feasible and appropriate, while accommodating permitted uses. As shoreline modifications occur, King County should incorporate all feasible measures to protect ecological shoreline functions and ecosystem-wide processes.

2. Shoreline Stabilization

Shorelines are impacted by wind and wave action, currents, tides, and flood waters, resulting in erosion of banks and shifts in channels. These impacts are natural processes that support ecological functions of shorelines, but they also impact human use of shorelines.

These natural processes are likely to be affected by climate change. Lowland rivers may see higher flows in the autumn and winter and mid-elevation rivers may see higher winter flows. In both cases, these changes could lead to more frequent flooding. The marine shorelines around Vashon and Maury Islands and the Duwamish Estuary may also see effects due to sea-level rise. Increased sea elevations will make development and infrastructure in low-lying areas more susceptible to flooding due to high tides and storms. Waves will encroach further onto low-lying beaches and cause greater beach erosion, threatening or damaging low-lying structures. At the same time steep slopes may receive increased moisture, due to predicted changes in precipitation patterns, potentially resulting in an increase in landslides that may cause property destruction and threaten human safety.

Humans have long desired to "control" these natural processes by constructing shoreline stabilization structures. The negative side of structural solutions includes the high cost of construction, long-term cost of maintenance and repair, the false sense of security for humans relying on these structures, and the high impact to the shoreline environment. These negative impacts are likely to increase as the effects of climate change become more apparent. These impacts include:

1. Beach starvation where sediment is prevented from supplying the beach, thus impeding a dynamic process.
2. Habitat degradation, particularly through removal of shoreline vegetation.
3. Sediment impoundment where the sources of sediment are lost and longshore transport is diminished, resulting in lowering of down-drift beaches, narrowing of the high tide beach, and the coarsening of beach sediment.
4. Exacerbation of erosion as wave energy is reflected back from hard surfaces onto the beach, increasing erosion.
5. Ground water impacts that can lead to a rise of the water table on the landward side of an erosion control structure, which results in increased pore pressures in the beach material and accelerated erosion of sand-sized material from the beach.
6. Hydraulic impacts where wave energy is reflected back onto the beach, resulting in scour lowering the beach elevation, or coarsening the beach resulting in failure of the structure.
7. Loss of shoreline vegetation and the loss of erosion control that the vegetation provided, as well loss of the habitat function provided by vegetation.
8. Loss of large woody debris, which plays an important role in biological diversity and habitat, as well as stabilizing the shoreline.
9. Restriction of channel movement and creation of side channels, impacting recruitment of large woody debris and gravel for spawning.

As alternatives to constructing a hard-surfaced structural facility, nonstructural methods ((may be used)) that have lesser impacts on ecological functions are available. These nonstructural methods may also allow for adaptation to the effects of climate change. For example, if buildings are constructed further away from the existing water edge, beyond the range of sea-level rise, shoreline protection would be

unnecessary. For most projects, a range of options is available, from “soft” measures such as revegetation to stabilize banks and provide a variety of other ecological functions to hard measures such as bulkheads which tend to detract from or provide only limited ecological function. These measures include, but are not limited to:

1. Vegetation enhancement;
2. Upland drainage control;
3. Biotechnical measures;
4. Beach enhancement;
5. Anchor trees;
6. Gravel placement;
7. Rock revetments;
8. Gabions;
9. Concrete groins;
10. Retaining walls and bluff walls;
11. Bulkheads; and
12. Seawalls.

S-763 King County shall require shoreline stabilization to be consistent with WAC 173-26-221(5) for vegetation retention and WAC 173-26-221(2) for protection of critical areas.

S-764 King County shall adopt standards to first avoid then mitigate the impact to shoreline ecological functions when alteration of the shoreline is allowed for the construction of single detached dwelling units and accessory structures. These standards shall address the design and type of protective measures and devices that are allowed.

When new development occurs within the shoreline zone, the following measures apply:

S-765 King County shall require new shoreline development to be located and designed to avoid the need for future shoreline stabilization to the maximum extent practicable.

S-766 King County shall require the use of soft methods to the maximum extent practicable, as determined by a qualified specialist, for shoreline stabilization whenever necessary to protect existing property or, when for new development, no options exist to locate in such a manner as to avoid shoreline stabilization.

S-767 King County shall require that lots in new subdivisions and short subdivisions to be created so that shoreline stabilization will not be necessary in order for reasonable development to occur, using geotechnical analysis of the site and shoreline characteristics.

S-768 King County shall require new development on steep slopes or bluffs to 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.

S-769 King County shall not allow new development that requires shoreline stabilization that will cause significant adverse impacts to adjacent or down-current properties and shoreline areas.

S-770 King County shall notify all prospective developers of new development along Vashon and Maury Islands that their development may be impacted by sea-level rise and should encourage all such new development to be set-back a sufficient

distance to avoid the need for shoreline protection during the expected life of the development.

New “hard” structural stabilization measures should be used as a last resort after exploring and evaluating other soft measures.

S-771 King County shall not allow new “hard” structural stabilization measures except when necessary:

- 1. To protect existing nonwater-dependent development and structures, including single-family residences, when all of the conditions below apply:**
 - a. the erosion is not being caused by upland conditions, such as the loss of vegetation and drainage;**
 - b. 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;**
 - c. the need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report submitted by a qualified specialist. The damage must be caused by natural processes, such as tidal action, currents, and waves; and**
 - d. mitigation is provided such that the erosion control structure will not result in a net loss of shoreline ecological functions.**
- 2. To protect water-dependent development when all of the conditions below apply:**
 - a. the erosion is not being caused by upland conditions, such as the loss of vegetation and drainage;**
 - b. nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient;**
 - c. the need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report; and**
 - d. the erosion control structure will not result in a net loss of shoreline ecological functions.**
- 3. 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:**
 - a. Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient; and**
 - b. The erosion control structure will not result in a net loss of shoreline ecological functions.**

The King County shoreline zone includes a large number of shoreline stabilization structures, many of which were constructed years ago with little or no consideration of the impact on ecological functions of the shorelines.

S-772 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.

S-773 King County shall require replacement of shoreline protection structures to be designed, located, sized, and constructed to assure no net loss of ecological functions or, if infeasible to provide such protection, to use the least impacting approach to protection and provide mitigation for unavoidable impacts.

S-774 Replacement walls or bulkheads protecting a residence shall not encroach waterward as measured at an elevation of two-feet above the current ordinary high-water mark, unless the residence was occupied prior to January 1, 1972, and

there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure and be located on the landward side of the existing structure.

- S-775** If a net loss of ecological functions associated with critical saltwater habitats will result from leaving an existing shoreline protection structure that is proposed for replacement, King County shall require the structure to be removed.
- S-776** King County encourages soft shoreline stabilization measures that use placement or growth of natural materials that closely resemble natural scales and configurations and that provide restoration of shoreline ecological functions waterward of the ordinary high-water mark.
- S-777** King County should encourage replacement protection structures located on Vashon and Maury Islands to be located outside of the 100 year floodplain whenever possible. The edge of 100-year floodplain is consistent with a two-foot sea-level rise.

King County should make decisions on shoreline stabilization measures based on technical studies and reports that objectively analyze the current conditions and the impact of the proposed stabilization measure. A geotechnical report addressing geologic and habitat conditions developed by a qualified geologist or geotechnical engineer and habitat specialist should be a requirement of a development proposal application that includes shoreline stabilization as part of the development.

- S-778** When shoreline stabilization is proposed, King County shall require a geotechnical report to address the need to prevent potential damage to a primary structure by estimating time frames and rates of erosion, thus providing a report on the urgency associated with the specific situation. King County should not allow hard armoring solutions, unless a geotechnical report confirms that there is a significant possibility that the 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 immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions. If 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, the report may still be used to justify more immediate authorization to protect against erosion using soft measures.

The construction of shoreline stabilization measures results in impacts to the ecological functions of the shoreline. The following measures should be considered to mitigate the impacts of shoreline stabilization projects.

- S-779** If structural shoreline stabilization measures are demonstrated to be necessary, King County shall:
 - 1. Limit the size of stabilization measures to the minimum necessary;
 - 2. Require the use of measures designed to assure no net loss of shoreline ecological functions;
 - 3. Require the use of soft approaches, unless they are demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
- S-780** King County shall 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. Where feasible, King County shall require ecological restoration and public access improvements to be incorporated into the project.

S-781 King County shall discourage new development and redevelopment on feeder bluffs. Where a legal building lot exists and the landowner has no option to locate new development or redevelopment away from feeder bluffs and other areas that affect beach sediment-producing areas, King County shall require that they avoid, to the maximum extent practicable, and then minimize the adverse impacts to sediment conveyance systems from erosion control measures.

S-782 King County should prioritize feeder bluffs as areas for protection using acquisition, easement, TDR and other programs that eliminate or reduce development threats.

Erosion is the breakdown of soil, mud, rock, and other particles by the agents of wind, water, or ice or by living organisms. These materials are moved downward or down-slope in response to gravity. Upland conditions may contribute to this on-going natural physical process and may impact the ability of people to use the shoreline zone. This impact leads to the desire for shoreline stabilization to arrest this action.

S-783 The impacts of erosion and mass wasting should be mitigated through protection of geological hazardous areas.

3. Piers and Docks

Piers and docks are some of the most commonly requested modifications to the shorelines. Because they extend over the water, piers and docks can have a significant impact on the ecological functions of the shorelines. Careful consideration should be given to the construction of new piers and docks, and how they are constructed in order to minimize their impacts.

S-784 King County shall allow new piers and docks only for water-dependent uses or public access. If it is designed and intended as a facility for access to watercraft, a dock associated with a single-family residence is considered a water-dependent use.

S-785 King County shall require pier and dock construction to be limited to the minimum size necessary to meet the needs of the proposed water-dependent use.

S-786 King County may allow water-related and water-enjoyment uses 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.

S-787 King County shall allow new pier or dock construction, excluding docks accessory to single-family residences, only when the applicant has demonstrated that a specific need exists to support the intended water-dependent uses.

S-788 If new piers or docks are allowed, King County shall require new residential development of two or more dwelling units to provide joint use or community dock facilities, when feasible, rather than individual docks for each dwelling unit.

S-789 King County shall require piers and docks, including those accessory to single-family residences, to be designed and constructed to avoid and then minimize and mitigate the impacts to ecological processes and functions. King County shall require piers and docks to be constructed of non-toxic materials. Where toxic materials, such as treated wood, are proposed, the proponent must show that no non-toxic alternative exists.

4. Fill

Fill means the addition of soil, sand, rock, gravel, sediment, earth retaining structures, 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. Fill is not permitted within the 100-year floodplain without providing compensatory flood storage to prevent a rise in the base flood, which is a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood." Fill can impact ecological functions and ecosystem processes, including channel migration.

S-790 King County shall require fill to be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration and side channels.

S-791 King County shall allow fill waterward of the ordinary high-water mark allowed only when necessary to support:

- 1. Water-dependent use;**
- 2. Public access;**
- 3. Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan;**
- 4. Disposal of dredged material considered suitable under, and conducted in accordance with, the dredged material management program of the Washington Department of Natural Resources;**
- 5. 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; or**
- 6. Mitigation actions, environmental restoration, beach nourishment, and enhancement projects.**

S-792 King County shall require a shoreline conditional use permit for fill waterward of the ordinary high-water mark for any use except ecological restoration.

5. Breakwaters, Jetties, Groins and Weirs

Breakwaters, jetties, groins, and weirs are all structural elements that are constructed to absorb or deflect wave action or to control excess sediment. A breakwater is an off-shore structure, either floating or not, which may or may not be connected to the shore and is designed to absorb and reflect back into the water body the energy of the waves. A jetty is an artificial barrier used to change the natural littoral drift to protect inlet entrances from clogging by transported sediment. A groin is a barrier type structure extending from the backshore into the water across the beach, which is constructed to interrupt sediment movement along the shore. A weir is a small dam in a stream or river to control the flow of water. While each of these structural elements may be appropriate under specific circumstances, they should be allowed only under limited circumstances.

S-793 King County shall allow breakwaters, jetties, ~~groins~~, and weirs located waterward of the ordinary high-water mark only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

S-794 Groins are prohibited except as a component of a professionally designed community or public beach management program that encompasses an entire drift sector or reach for which alternatives are infeasible, or where installed to protect or restore shoreline biological functions or processes.

S-795 King County shall require a shoreline conditional use permit for the construction of breakwaters, jetties, groins, weirs, and similar structures, except for those structures installed to protect or restore ecological functions, such as woody debris installed in streams.

S-796 Breakwaters, jetties, groins, and weirs shall be designed to protect critical areas and shall provide for mitigation according to the sequence in policy S-613 and defined in WAC 173-26-201 (2)(e).

6. 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 Shoreline Management Act. There are no beaches and associated dunes in King County.

7. Dredging and Dredge Material Disposal

Dredging is the removal, displacement, or disposal of unconsolidated earth material such as sand, silt, gravel, or other submerged materials, from the bottom of water bodies, ditches, or natural wetlands. Long-term maintenance and support activities are also considered dredging. Dredging can cause significant ecological damage, which cannot always be avoided. Mitigation measures should be required to assure no net loss of ecological functions.

King County has a channel monitoring program for King County rivers, which can be used to inform decisions on dredging activities. While only certain reaches of these rivers have been surveyed, King County recognizes the need to continue and enhance the channel monitoring program. In addition, King County should avoid development of shorelines that would require new or maintenance dredging.

S-797 King County shall require new development should be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.

S-798 King County shall allow dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins when necessary to assure safe and efficient accommodation of existing navigational uses. Significant ecological impacts shall be minimized and mitigation shall be provided such that there is no net loss of ecological functions. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged or existing authorized location, depth, and width.

S-799 King County shall not allow dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material, except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed shall be located waterward of the ordinary high-water mark. The project must be either associated with a habitat restoration project under the Model Toxics Control Act or the Comprehensive Environmental Response, Compensation, and Liability Act, or, if approved through a shoreline conditional use permit, any other significant habitat enhancement project.

S-800 King County shall discourage disposal of dredge material on shorelands and in side channels within a river's channel migration zone. King County shall not allow disposal of dredge material in wetlands located within the shoreline zone. In the limited instances where it is allowed, such disposal shall require a shoreline conditional use permit.

S-801 King County shall require dredging to be conducted consistent with Policy RCM-3 of the 2006 King County Flood Hazard Management Plan.

8. Shoreline Habitat and Natural Systems Enhancement Projects

Shoreline habitat and natural systems enhancement projects should be supported and coordinated with other planning processes, such as salmon conservation plans and the 2006 King Count Flood Hazard Management Plan.

S-802 King County should allow for habitat and natural systems enhancement projects that include, but are not limited to:

- 1. Modification of vegetation;**
- 2. Removal of nonnative or invasive plants;**
- 3. Shoreline stabilization; and**
- 4. Dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.**

S-803 Habitat and natural systems enhancement projects should assure that the projects address legitimate restoration needs and priorities and facilitate implementation of the King County Shoreline Master Program Shoreline Protection and Restoration Plan, Appendix A.

VIII. PRIMARY & ADMINISTRATIVE POLICIES

A. Reservation of Right to Appeal Department of Ecology Decisions

By law, King County's Shoreline Master Program must be approved by the Washington State Department of Ecology (Ecology). Ecology has the power to reject or modify part or all of the Program elements.

1. Reservation of right to submit alternate proposal to Ecology

If Ecology recommends a change to some or all of the elements in the King County Shoreline Program, King County reserves the right to submit an alternate proposal for approval.

S-901 If the Department of Ecology recommends changes to any elements of the King County Shoreline Master Program, King County reserves the right to submit an alternate proposal to the Department for its review and approval.

2. Appeal of Ecology's decision to reject or modify King County Shoreline Master Program.

If Ecology rejects or modifies part or all of the elements of the King County Shoreline Master Program, King County reserves the right to appeal this decision, in whole or part, to the Growth Management Hearings Board and the courts.

S-902 If the Department of Ecology rejects part or all of King County's Shoreline Master Program, or if the Department of Ecology recommends changes that are unacceptable to King County, King County reserves the right to appeal the Department's decision to the Growth Management Hearings Board.

B. Effective Date of King County's Shoreline Master Program and Shoreline Regulations

- 1. Effective date of the King County Shoreline Master Program and associated regulations upon direct approval by the Department of Ecology**

The King County Shoreline Master Program becomes effective on the date the Program is approved by the Washington State Department of Ecology. The Program regulations become effective on the date of the Department of Ecology letter to King County approving the Program. Pursuant to the Shoreline Management Act, this is the effective date of the Program, regardless of any appeals filed by any individual or entity.

S-903 King County's Shoreline Master Program will become effective on the date of the letter from the Department of Ecology to King County approving the Program.

2. Effective date of Program if the Department of Ecology recommends changes or modifications to the Program.

If Ecology rejects or modifies elements of King County's Shoreline Master Program, the Program will become effective as indicated in the following policies.

S-904 If the Department of Ecology recommends changes to King County's Shoreline Master Program and King County accepts those changes, the Program becomes effective on the date the Department of Ecology receives written notice from King County of its agreement to accept the proposed changes.

S-905 If the Department of Ecology recommends changes to King County's Shoreline Master Program and King County submits an alternate proposal in response and the Department accepts the alternate proposal, the Program will become effective on the date of the letter from the Department of Ecology to King County accepting the alternate proposal.

S-906 If King County files an appeal with the Growth Management Hearings Board regarding a decision by the Department of Ecology to reject or modify part or all of the King County Shoreline Master Program, the Program will not become effective until the appeal is resolved and the Program is approved by the Department of Ecology.

3. Publication of notice of effective date of King County Shoreline Management Program and associated shoreline regulations.

King County will publish a general notice to inform the public of the effective date of the Shoreline Master Program.

S-907 Upon receipt of the letter from the Department of Ecology approving the King County Shoreline Master Program, King County will promptly publish notice that the Department of Ecology has taken final action and approved the Program. The notice will indicate the effective date.

C. Treaty Rights Not Affected by Shoreline Master Plan

King County has sought the input of and consulted with Tribes located in and adjacent to King County when developing the Shoreline Master Program. However, the Program and associated shoreline regulations shall not be construed to affect any treaty rights established between the United States and the individual Tribes.

S-908 Nothing in the King County Shoreline Master Program shall be construed to affect any treaty right to which the United States is a party.

D. Power to Abate Nuisance Retained by King County and the State Of Washington

Adoption of the Shoreline Master Program is a requirement of the Shoreline Management Act. King County's compliance with this state law should not be construed in any way to limit or modify all other powers possessed by King County.

- S-909 Nothing in the King County Shoreline Master Program shall be construed to limit the power of King County or the State of Washington to abate nuisances within the shoreline jurisdiction.**
- S-910 King County specifically reserves all rights, power, and authority granted to it by law. Nothing in the King County Shoreline Master Program shall be construed in any way to limit any power or authority possessed by King County.**