

9. Shoreline Management Element

This chapter includes the goals and policies from the Nooksack Shoreline Management Master Program that was approved by the Washington Department of Ecology in December 2015 and became effective on January 1, 2016.

1.0 INTRODUCTION

1.1 SHORELINE MANAGEMENT PROGRAM

This document contains the policy component of the Nooksack Shoreline Management Master Program. The goals and policies contained herein constitute the Shoreline Management Element of the City of Nooksack Comprehensive Land Use Plan.

1.2 AUTHORITY

The goals, policies and regulations of the Nooksack Shoreline Master Program are established under the authority of the Shoreline Management Act of 1971, now codified as Chapter 90.58 of the Revised Code of Washington (RCW), and the Shoreline Master Program Guidelines, Chapter 173-26 of the Washington Administrative Code (WAC).

1.3 PURPOSE

The purpose of the Nooksack Shoreline Master Program is:

- A. To further the goals of the Shoreline Management Act as set forth in RCW 90.58.020; and
- B. To promote the public health, safety, and general welfare of the community by providing long range and comprehensive policies and effective and reasonable regulations for development and use of shorelines within the City; and
- C. To manage shorelines in a positive, effective, and equitable manner; and
- D. To plan for and foster all reasonable and appropriate uses, particularly uses directly dependent upon the water; and
- E. To preserve to the greatest extent feasible, consistent with the overall interest of the State, the City and the people generally, the public's opportunity to enjoy the physical and aesthetic qualities of the shorelines of the City by preserving views and increasing public access to the shorelines; and
- F. To manage the shorelines of the City to minimize, insofar as practical, damage to the shoreline area, while actively encouraging the restoration and enhancement of degraded shoreline functions and processes.

2.0 General Elements

The following general elements are included pursuant to RCW 90.58.100 and are addressed throughout the Nooksack Shoreline Management Master Program:

2.1 ECONOMIC DEVELOPMENT

An element related to the location and design of industries, industrial projects of statewide significance, transportation facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state.

GOAL 2.1: Encourage utilization of all economic resources to improve the standard of living for residents of the City of Nooksack while assuring that these economic resources are utilized in a

manner that results in the least possible damage to the shoreline resources and surrounding environment.

Policy 2.1A: Economic development should be encouraged that has minimal adverse effects upon shoreline ecological functions and processes.

Policy 2.1B: Economic development policies established in the Nooksack Comprehensive Plan should be implemented in shoreline areas consistent with this Program.

2.2 PUBLIC ACCESS

An element related to making provision for public access to publicly owned shoreline areas and privately owned shoreline areas where the public has been granted a right of use or access.

GOAL 2.2: Assure acquisition and maintenance of an adequate supply of visual and physical access to the shorelines for the residents of the City of Nooksack and a reasonable number of transient users. Wherever possible, encourage utilization of public property for public access purposes.

Policy 2.2A: Public access should be located, designed, managed and maintained in a manner that protects shoreline processes and assures no net loss of ecological functions.

Policy 2.2B: The protection and provision of physical and visual access to publicly owned shorelands should be encouraged.

2.3 RECREATION

An element related to the preservation and enlargement of recreational opportunities, including, but not limited to, parks and recreational areas.

GOAL 2.3: Maintain an adequate supply of shoreline recreational opportunities for the residents of the City of Nooksack and a reasonable number of transient users.

Policy 2.3A: Recreational development should be located, designed, managed and maintained to assure no net loss of shoreline ecological functions or ecosystem-wide processes.

2.4 CIRCULATION

An element related to the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element.

GOAL 2.4: Develop a safe, convenient, and diversified circulation system, consistent with the shoreline use goals, to assure efficient movement of people during their daily activities without significant adverse impact to or disruption of the natural functions of the shoreline environment.

Policy 2.4A: Transportation goals and policies as outlined in the Nooksack Comprehensive Plan shall be implemented within shoreline areas consistent with this Program.

2.5 SHORELINE USE

An element related to the proposed general location, distribution and extent of uses on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land and water resources.

GOAL 2.5: Establish and implement policies and regulations for shoreline use consistent with the Shoreline Management Act of 1971 and the Nooksack Comprehensive Plan. These policies and regulations should promote a mixture of reasonable and appropriate shoreline uses that enhance the City's character, foster its historic and cultural identity, and protect shoreline resources.

Policy 2.5A: Shoreline and water areas with unique attributes should be identified and reserved for specific long-term uses, including commercial, industrial, residential, recreational, and open space uses.

Policy 2.5B: Activities and facilities shall be located on the shorelines in such a manner as to maintain or improve the ecological functions of the shoreline environment and assure no net loss of ecological functions.

Policy 2.5C: Proposed shoreline uses should be distributed, located and developed in a manner that will maintain or improve the health, safety and welfare of the public when such uses must occupy shoreline areas.

Policy 2.5D: Planning, zoning, and other regulatory and non-regulatory programs governing lands adjacent to shorelines should be consistent with the provisions of this Program.

Policy 2.5E: Preference should be given to water-dependent uses that are consistent with preservation of shoreline ecological functions and processes. Secondary preference should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should be allowed only when substantial public benefit is provided with respect to the goals of the Act for public access and ecological restoration.

2.6 CONSERVATION

An element related to the preservation of natural resources and shoreline ecological functions and processes, including, but not limited to, wetlands, riparian and aquatic habitats, other priority fish and wildlife habitats and species, floodplains, geological features, scenic vistas and aesthetics for fisheries and wildlife protection.

GOAL 2.6: Assure the protection of unique, fragile and scenic elements and non-renewable natural resources within the shorelines of the City of Nooksack, and protect shoreline ecological functions and the processes that sustain them to the maximum extent practicable.

Policy 2.6A: Critical areas should be protected through regulations that provide a level of protection that is at least as protective as the regulations established in Chapter 16.08 NMC.

Policy 2.6B: The protection and preservation of shoreline areas that are ecologically intact and minimally developed or degraded should be encouraged.

Policy 2.6C: Regulations and mitigation standards should be developed and implemented that ensure that new shoreline developments result in no net loss of shoreline ecological functions and processes.

Policy 2.6D: Renewable natural resources should be managed on a sustained yield basis.

Policy 2.6E: Shoreline uses should protect scenic vistas and the aesthetics of the shoreline environment.

2.7 HISTORICAL/CULTURAL RESOURCES

An element related to the protection and restoration of buildings, sites and areas having archaeological, historic, cultural, scientific or educational values within the shorelines of the City of Nooksack.

GOAL 2.7: Preserve, protect and restore areas having archaeological, historic, cultural, educational or scientific values or significance through coordination and consultation with the appropriate local, state, tribal and federal authorities.

Policy 2.7A: Developments within shoreline areas should be encouraged and, where appropriate, required to avoid or minimize impacts to sites having archaeological, historic, cultural, educational or scientific value or significance.

Policy 2.7B: Opportunities for education related to archaeological, historical and cultural features should be encouraged where appropriate and be incorporated into public and private programs and developments.

Policy 2.7C: Protection and rehabilitation of significant archaeological, historic, and cultural sites should be encouraged and, where appropriate, should be required.

2.8 FLOOD DAMAGE MINIMIZATION

An element that gives consideration to statewide interests in the prevention and minimization of flood damage.

GOAL 2.8: Establish and implement applicable floodplain management strategies to minimize private property damage, improve ecological function and prevent species and habitat loss in wetlands and streams.

2.9 RESTORATION AND ENHANCEMENT

An element related to the restoration and enhancement of shoreline ecological functions consistent with City restoration planning goals and objectives.

GOAL 2.9: Support the restoration and enhancement of shoreline ecological functions within the City of Nooksack through vegetation conservation and timely restoration and enhancement of impaired shoreline areas to achieve a net gain in shoreline ecological functions over time.

Policy 2.9A: The goals and objectives of the City of Nooksack Shoreline Restoration Plan should be supported and pursued to achieve a net gain in shoreline ecological functions.

Policy 2.9B: Areas of existing native vegetation should be protected and allowed to mature to enhance shoreline functions and ecological processes.

Policy 2.9C: Cooperative restoration programs between local, state, and federal agencies, tribes, non-profit organizations, and landowners should be encouraged to address shorelines with impaired ecological functions and/or processes.

Policy 2.9D: Restoration actions should be prioritized to restore native vegetation in riparian areas, improve water quality, and restore native vegetation and natural hydrologic functions of degraded areas.

Policy 2.9E: Restoration and enhancement efforts should be targeted towards improving habitat requirements of sensitive, priority and/or locally important fish and wildlife species.

Policy 2.9F: Shoreline ecological functions and processes and features should be restored and enhanced through voluntary and incentive-based public and private programs.

3.0 SHORELINES OF STATEWIDE SIGNIFICANCE

No shorelines of statewide significance are present within the City of Nooksack.

4.0 ecological protection

Shorelines of the state are among the most valuable and fragile natural resources and there is great concern relating to their utilization, protection, and restoration.

4.1 NO NET LOSS

As established by WAC 173-26-186(8), this SMP is designed to assure, at minimum, no net loss of ecological functions necessary to sustain shoreline natural resources and to plan for restoration of ecological functions where they have been impaired. This section gives detail to the protection of shorelines as natural resources and applies the principle of “no net loss” to ecological function and ecosystem-wide processes to preserve and protect shorelines.

The concept of “net” recognizes that any development has actual or potential, short-term or long-term impacts and that through application of appropriate development standards and employment of mitigation measures in accordance with the appropriate mitigation sequence, those impacts will be addressed in a manner necessary to assure that the end result will not diminish the shoreline resources and the values as they currently exist.

GOAL 4.1: Assure that development and use within shoreline jurisdiction result in no net loss of ecological functions and ecosystem-wide processes.

Policy 4.1A: Shoreline uses and development should occur in a manner that assures no net loss of ecological functions and values. Uses shall be designed and conducted to minimize any resultant damage to the ecology and the environment.

Policy 4.1B: Development standards for density, frontage, setbacks, lot coverage, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should protect existing shoreline ecological functions and processes.

Policy 4.1C: Critical areas associated with shorelines should be protected and managed in accordance with City of Nooksack critical areas regulations.

4.2 EVALUATION OF CUMMULATIVE EFFECTS

Projects and activities authorized through City shoreline permits and shoreline exemptions have the potential to impact shoreline resources both positively and negatively. It’s important for the City to be able to determine the net impact of such projects on the shoreline environment in order to make appropriate adjustments to shoreline policies and regulations.

GOAL 4.2: Track and periodically evaluate the cumulative effects of all city actions related to review and approval of projects and activities within shoreline areas.

Policy 4.2A: The City will maintain a database to track all shoreline permits and shoreline exemptions, including but not limited to: date of permit action, site address, project description, pre- and post-project photographs of the subject area, and description of required mitigation or proposed enhancement activities.

Policy 4.2B: Approximately every five years, the city will conduct an informal review of all approved shoreline permits and shoreline exemptions listed in the database to evaluate the cumulative effects of such activities on shoreline functions and resources, including water quality, habitat, shoreline vegetation, and riparian conditions.

5.0 Shoreline JURISDICTION AND Environment Designations

5.1 SHORELINE JURISDICTION

Consistent with the definitions established in the Shoreline Management Act and implementing regulations, those areas that are within the jurisdiction of the Nooksack Shoreline Management Master Program generally include those areas within the corporate limits of the City of Nooksack as it currently exists, or as subsequently modified through annexation, including:

- A. All river and stream segments having a mean annual flow of at least 20 cubic feet per second, including the Sumas River and Breckenridge Creek, plus those adjacent land areas within 200 feet of the ordinary high water mark of all such river and stream segments; and
- B. All floodways and contiguous floodplain areas landward 200 feet from such floodways; and
- C. Those wetland areas associated with any of the above aquatic areas, including, but not limited to, the Nooksack Slough; and
- D. As a local option, the adjacent land area within fifty (50) feet of the delineated edge of such associated wetlands.

5.2 SHORELINE JURISDICTION MAP

The general locations of those land and water areas subject to the jurisdiction of the Nooksack Shoreline Management Master Program are shown on the City of Nooksack Official Shoreline Map. The map does not necessarily identify or depict the precise, lateral extent of shoreline jurisdiction nor does it identify all associated wetlands. The lateral extent of the shoreline jurisdiction shall be determined on a case-by-case basis based on the location of the ordinary high water mark (OHWM) and presence of associated wetlands.

5.3 SHORELINE ENVIRONMENT DESIGNATIONS ESTABLISHED

RCW 90.58 and WAC 173-26-310(2) require that the City of Nooksack adopt a system of shoreline environment designations to be used for classifying areas falling within shoreline jurisdiction. This classification system is to be based on the existing use pattern, the biological and physical character of the shoreline, and the goals of the community as expressed through the comprehensive plan.

GOAL 5.3: Establish a set of shoreline environment designations that provides a systematic, rational and equitable basis to guide and regulate development within specific shoreline reaches having some degree of geographic unity, but that differ from adjacent reaches in terms of natural features or existing or potential development patterns.

Policy 5.3A: The shoreline environment designations of the City of Nooksack shall include the following designations: Aquatic, Natural, Shoreline Residential, Urban Conservancy and Urban Conservancy-Slough.

Policy 5.3B: Those areas within the City of Nooksack and designated urban growth area that are within shoreline jurisdiction shall be shown on the Official Shoreline Map. This map shall also identify the locations of areas included in each shoreline environment designation.

Policy 5.3C: The purpose, designation criteria, management policies and development regulations applicable to each environment designation shall be established and implemented through this Program.

Policy 5.3D: Those areas within shoreline jurisdiction for which a shoreline environment designation is not shown on the Official Shoreline Map shall be designated the same as the immediately adjacent shoreline area or, where no such area exists, shall be designated Urban Conservancy.

5.4 AQUATIC ENVIRONMENT

5.4.1 Purpose

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

5.4.2 Designation Criteria

Shoreline areas shall be included in the aquatic environment if they include lands waterward of the ordinary high water mark of the Sumas River, Breckenridge Creek and the Nooksack Slough. Areas included in the aquatic designation shall include the underlying lands and water column.

5.4.3 Policies

The following management policies shall apply to areas within the aquatic environment:

Policy 5.4.3A: New over-water structures shall only be allowed for water-dependent uses or public access or ecological restoration.

Policy 5.4.3B: The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.

Policy 5.4.3C: In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.

Policy 5.4.3D: Uses that adversely impact the ecological functions of critical freshwater habitat should not be allowed except where necessary to support or further other shoreline goals and policies when impacts can be mitigated to the maximum extent possible.

Policy 5.4.3E: Shoreline uses and modifications shall be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

5.5 NATURAL ENVIRONMENT

5.5.1 Purpose

The purpose of the “natural” environment is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low intensity uses be allowed to maintain ecological functions and ecosystem-wide processes.

5.5.2 Designation Criteria

Shoreline areas shall be included in the natural environment based on meeting any of the following criteria:

- (1) The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity; or
- (2) The shoreline contains forested areas that generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent water bodies; or
- (3) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or
- (4) The shoreline contains largely undisturbed areas of wetlands or unstable bluffs; or

- (5) The shoreline is unable to support new development or uses without significant ecological impacts to ecological functions or risk to human safety; or
- (6) The shoreline is especially sensitive to human disturbance and important for the conservation and recovery of threatened or endangered species.

5.5.3 Policies

The following management policies shall apply to areas within the natural environment:

Policy 5.5.3A: Any use that would substantially degrade the ecological functions or natural character of the shoreline area should be prohibited.

Policy 5.5.3B: The following new uses shall not be allowed in the "natural" environment:

- Commercial uses.
- Industrial uses.
- Non-water-oriented recreation.
- Roads, utility corridors, and parking areas that can be located outside of "natural" designated shorelines.

Policy 5.5.3C: Access may be permitted for scientific, historical, cultural, educational, and low-intensity water-oriented recreational purposes, provided that no significant ecological impact on the area will result.

Policy 5.5.3D: Single family residential development is discouraged within this shoreline environment, but may be allowed on existing lots of record through approval of a conditional use permit if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of this environment designation.

Policy 5.5.3E: Agricultural uses of a very low intensity nature may be consistent with the Natural Environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.

Policy 5.5.3F: Development or significant vegetation removal shall not be allowed that would reduce the capability of vegetation to perform normal ecological functions or result in net loss of vegetation.

Policy 5.5.3G: Subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions shall not be allowed.

Policy 5.5.3H: The City should utilize grants and other funding sources to purchase those properties located in the Natural environment that contain high-value fish and wildlife habitats or species.

5.6 SHORELINE RESIDENTIAL ENVIRONMENT

5.6.1 Purpose

The purpose of the "shoreline residential" environment is to accommodate residential development and appurtenant structures that are consistent with the goals of RCW 90.58 and this Program. An additional purpose is to provide appropriate public access and recreational uses.

5.6.2 Designation Criteria

Shoreline areas shall be included in the shoreline residential environment if they lie within urban growth areas, as defined in RCW 36.70A.110, incorporated municipalities, "rural areas of more intense development," or "master planned resorts," as described in RCW 36.70A.360, if they are

predominantly single-family or multifamily residential development or are planned and platted for such development.

5.6.3 Policies

The following management policies shall apply to areas within the shoreline residential environment:

Policy 5.6.3A: Development should be permitted only in those shoreline areas where adequate setbacks or buffers are possible to ensure no net loss of shoreline ecological functions, where there are adequate access, water, sewage disposal, and utilities systems and public services available, and where the environment can support the proposed use in a manner which protects or restores the ecological functions.

Policy 5.6.3B: Densities or minimum frontage width standards in the "shoreline residential" environment shall be established to protect the shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

Policy 5.6.3C: Development standards for setbacks or buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be established to ensure no net loss of ecological functions.

Policy 5.6.3D: Multifamily and multi-lot residential and recreational developments should provide community or public access and joint use for community recreational facilities where appropriate.

Policy 5.6.3E: Access, utilities, and public services should be available and adequate to serve existing needs and planned future development.

Policy 5.6.3F: Public or private outdoor recreation facilities should be encouraged if compatible with the character of the area. Preferred uses include water-dependent and water-enjoyment recreation facilities that provide opportunities for substantial numbers of people to access and enjoy the shoreline.

5.7 URBAN CONSERVANCY ENVIRONMENT

5.7.1 Purpose

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

5.7.2 Designation Criteria

Shoreline areas shall be included in the urban conservancy environment based on meeting any of the following criteria:

- (1) The area is suitable for a mix of water-related or water-enjoyment uses with other uses that allow a substantial number of people to enjoy the shoreline; or
- (2) The area is comprised of open space, critical areas, floodplains, or other areas that should not be more intensively developed; or
- (3) The area retains important ecological functions, even though partially developed; or
- (4) The area has potential for ecological restoration; or
- (5) The area has the potential for development that is compatible with ecological restoration.

5.7.3 Policies

The following management policies shall apply to areas within the urban conservancy environment:

Policy 5.7.3A: Uses that preserve the natural character of the area or promote preservation of open space, critical areas, floodplain, or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if found compatible.

Policy 5.7.3B: Standards shall be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications. These standards shall ensure that new development does not result in a net loss of shoreline ecological function or further degrade other shoreline values.

Policy 5.7.3C: Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be avoided or mitigated.

Policy 5.7.3D: Water-oriented uses should be given priority over non-water-oriented uses.

5.8 URBAN CONSERVANCY-SLOUGH ENVIRONMENT

5.8.1 Purpose

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

5.8.2 Designation Criteria

Shoreline areas shall be included in the urban conservancy environment based on meeting any of the following criteria:

- (1) The area is suitable for a mix of water-related or water-enjoyment uses with other uses that allow a substantial number of people to enjoy the shoreline; or
- (2) The area is comprised of open space, critical areas, floodplains, or other areas that should not be more intensively developed; or
- (3) The area retains important ecological functions, even though partially developed; or
- (4) The area has potential for ecological restoration; or
- (5) The area has the potential for development that is compatible with ecological restoration.

5.8.3 Policies

The following management policies shall apply to areas within the urban conservancy environment:

Policy 5.8.3A: Uses that preserve the natural character of the area or promote preservation of open space, critical areas, floodplain, or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if found compatible.

Policy 5.8.3B: Standards shall be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications. These standards shall ensure that new development does not result in a net loss of shoreline ecological function or further degrade other shoreline values.

Policy 5.8.3C: Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be avoided or mitigated.

Policy 5.8.3D: Water-oriented uses should be given priority over non-water-oriented uses.

6.0 General master program provisions

6.1 ARCHAEOLOGICAL AREAS AND HISTORIC SITES.

Native American and pioneer villages, military forts, old settlers homes, and trails were often located on shorelines because of the proximity of food resources and because water provided a practical means of transportation. These sites are nonrenewable resources and many are in danger of being lost through present day changes in land use and urbanization. Because of their rarity and the educational and cultural links they provide to our past, these locations should be preserved whenever possible.

Policy 6.1A: Sites should be permanently preserved to show respect for their cultural or historic significance and, where appropriate, to provide opportunities for scientific study and public observation.

Policy 6.1B: In areas documented to contain archeological or cultural resources, developers shall be required to have the site inspected and evaluated by a professional archaeologist in consultation with affected Indian tribes prior to permit issuance.

Policy 6.1C: Developers shall be required to stop work immediately and notify City officials, affected Indian tribes and the state department of archaeology and historic preservation if sites containing archaeological or cultural resources are uncovered during excavation.

Policy 6.1D: Developers should be required to obtain all legal permits regarding archaeological areas and historic sites.

Policy 6.1E: In accordance with state law, all activities and development within shoreline jurisdiction shall comply with the applicable requirements of RCW 27.44, RCW 27.53, RCW 68.58, RCW 68.60 and WAC 25-48-060.

6.2 CRITICAL AREAS

Critical areas, as defined in RCW 36.70A.030 include the following:

- (1) *Wetlands;*
- (2) *Areas with a critical recharging effect on aquifers used for potable waters;*
- (3) *Fish and wildlife habitat conservation areas;*
- (4) *Frequently flooded areas; and*
- (5) *Geologically hazardous areas.*

Impacts to critical areas can result in significant adverse effects to public health and safety, the land and its vegetation and wildlife, and the waters of the state and their aquatic life.

Policy 6.2A: The public interest should be promoted and enhanced by reducing risks to life and property, by protecting and restoring ecological functions and ecosystem-wide processes and ensuring no net loss of these functions.

Policy 6.2B: In managing and regulating critical areas, scientific and technical information should be utilized as described in WAC 173-26-201(2)(a).

Policy 6.2C: Critical areas should be managed consistent with the minimum guidelines contained in WAC 365-190.

Policy 6.2D: The protection of existing ecological functions and ecosystem-wide processes should be encouraged and, wherever possible, restoration of degraded areas should be supported.

Policy 6.2E: The protection and restoration of critical areas within shoreline jurisdiction should be encouraged through implementation of the full range of planning and regulatory measures.

Policy 6.2F: Development standards for density, frontage, setbacks, lot coverage, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should be utilized to protect existing shoreline ecological functions and processes.

Policy 6.2G: Critical area regulations shall adhere to standards established in the following sections of this Program, unless it is demonstrated through scientific and technical information as provided in RCW 90.58.100(1) and as described in WAC 173-26-201(2)(a) that an alternative provides better resource protection.

6.2.1 Wetlands

Wetlands provide many important ecological functions including flood attenuation, reduction of impacts to water quality, ground water recharge, maintenance of base in-stream flows, and provision of habitat for fish and wildlife. Impacts to wetlands can also contribute to adverse impacts on other important resources.

Policy 6.2.1A: Wetlands should be managed to achieve a policy of no net loss of wetland area, functions and values.

Policy 6.2.1B: Wetlands should be categorized to reflect differences in wetland quality and function, and higher quality/functioning wetlands should receive greater protection.

Policy 6.2.1C: Wetland regulations should address all activities and uses to assure no net loss of ecological functions in these critical areas.

Policy 6.2.1D: Buffers around wetlands should be provided that are adequate to ensure that wetland functions are protected and maintained over the long-term.

Policy 6.2.1E: Potential impacts to wetland buffers should also be considered when evaluating development proposals.

Policy 6.2.1F: Wetlands should be managed consistent with the mitigation priority sequence defined in WAC173-26-020, and compensatory mitigation should be allowed only after mitigation sequencing has been applied.

6.2.2 Rivers and Streams – Critical Freshwater Habitat

Many ecological functions associated with rivers and streams are impacted both by activities within the stream corridor and those occurring on adjacent uplands throughout the watershed.

Policy 6.2.2A: River and stream corridors should be protected and restored where necessary to ensure no net loss of ecological functions within shoreline jurisdiction.

Policy 6.2.2B: Damage to riverine shoreline areas that retain their ecological functions should be avoided or mitigated.

Policy 6.2.2C: Degraded riverine shoreline areas should be restored wherever feasible.

Policy 6.2.2D: Incentives should be provided to encourage re-connection of the main river channel with associated water bodies, dry channels, and associated wetlands.

Policy 6.2.2E: Except where necessary to protect life and property, new restrictions to channel movement within the channel migration zone should not be allowed, and natural channel configurations within the channel migration zone should be encouraged over time.

Policy 6.2.2F: Vegetation conservation areas or buffers should be established along all river and stream corridors.

Policy 6.2.2G: Development within the channel migration zone, vegetation conservation area or established buffers should not be allowed unless it can be shown that adverse impacts to natural channel movement, ecological functions and ecosystem-wide processes can be avoided or minimized, and impacts can be appropriately mitigated.

6.3 FLOOD DAMAGE MINIMIZATION

Flood hazard reduction measures consist of both structural and non-structural measures. Structural measures may include construction of dikes, levees, revetments and floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program. Non-structural measures may include setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and storm water management programs.

Policy 6.3A: Where feasible, non-structural flood hazard reduction measures should be given preference over structural measures.

Policy 6.3B: When available and where consistent with the Shoreline Management Act, flood hazard reduction policies and regulations should be based on applicable watershed management plans, comprehensive flood hazard management plans or other comprehensive planning efforts.

Policy 6.3C: Flood hazard protection measures should not result in a net loss of ecological functions associated with the rivers and streams.

Policy 6.3D: River and stream corridors should be retained in or restored to more natural hydrological conditions, and it should be recognized that seasonal flooding is an essential natural process.

Policy 6.3E: New development should not be allowed that significantly or cumulatively increases flood hazard, nor results in a net loss of ecological function.

Policy 6.3F: New development within the shoreline area, including the subdivision of land, should not be allowed that requires structural flood hazard reduction measures, except where necessary to support water-dependent uses.

Policy 6.3G: Where allowed, structural flood hazard reduction measures should be set back as far as possible from the channel migration zone.

Policy 6.3H: New structural flood hazard reduction measures may be allowed within the channel migration zone if it is determined through a geotechnical analysis that no other alternative to reduce flood hazard to existing development is feasible.

6.4 PUBLIC ACCESS

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

Policy 6.4A: The amount and diversity of public access to the state's shorelines, including physical and visual access, should be increased, consistent with the natural shoreline character, private property rights, public rights under the Public Trust Doctrine, public safety, and local public access planning.

Policy 6.4B: The public's opportunity to enjoy the physical and aesthetic qualities of the shorelines of the state, including views of the water, should be protected.

Policy 6.4C: The public interest with respect to the public's right to access waters of the state held in public trust should be promoted and enhanced while protecting private property rights and ensuring public safety.

Policy 6.4D: Development within the shoreline area should be regulated, where appropriate, to minimize interference with the public's ability to access the shoreline.

Policy 6.4E: A local public access planning process should be undertaken utilizing input from affected property owners to identify specific public access needs and opportunities within the City shoreline area. This process should result in an integrated plan for development of

shoreline public access, including prioritization of projects and locations, and establishment of public access requirements for shoreline permits.

Policy 6.4F: Consistent with local public access planning, all development within the shoreline area should be required to make a proportionate contribution, either material or financial, toward meeting public access goals, either through dedication of land, granting of easements, provision of public access facilities, or other appropriate means.

Policy 6.4G: Public access improvements that have the potential to result in a net loss of ecological functions should be designed to minimize adverse impacts, and such improvements that would likely cause significant ecological impacts that cannot be mitigated should not be allowed.

6.5 VEGETATION CONSERVATION

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

Policy 6.5A: The ecological functions and ecosystem-wide processes performed by vegetation along shorelines should be protected and restored.

Policy 6.5B: Vegetation conservation efforts should be encouraged to protect human safety and property, increase the stability of river banks, reduce the needs for structural stabilization measures, improve the visual and aesthetic qualities of the shoreline, and enhance shoreline uses.

Policy 6.5C: Vegetation conservation and restoration policies and regulations should be implemented as necessary to assure no net loss of ecological functions, to avoid adverse impacts on soil and hydrology, and to reduce the hazard of slope failures or accelerated erosion.

Policy 6.5D: Riparian corridors and significant habitat should be protected and restored.

Policy 6.5E: The importance of shoreline vegetation should be recognized, including: providing shade to maintain cooler water temperature, providing organic input, providing food, stabilizing banks and minimizing erosion, reducing fine sediment through stormwater retention and filtering, providing a source of large woody debris, regulating the microclimate, and providing critical riparian habitat.

6.6 VIEWS AND AESTHETICS

Scenic vistas, views of the water and aesthetic qualities of the shoreline area are important, and the public's ability and opportunity to enjoy shoreline views and aesthetics should be protected.

Policy 6.6A: Areas with scenic vistas, views of the water and high aesthetic value should be identified and protected.

Policy 6.6B: Developments should be designed to minimize adverse impacts on views from public property and views enjoyed by a substantial number of residents.

Policy 6.6C: Policies related to the protection of views and aesthetics should be implemented through site planning, height limitations, setbacks, siting of buildings and accessories, screening, vegetation conservation, architectural controls, sign control regulations, appropriate development siting, screening and architectural standards, designation of view corridors and maintenance of natural vegetative buffers.

6.7 WATER QUALITY, STORMWATER AND NONPOINT POLLUTION

Water quality refers to the physical characteristics of water within shoreline jurisdiction, including water quantity and hydrological, chemical, aesthetic, recreation-related, and biological characteristics. The following policies refer to development and uses affecting water quality and quantity, including the creation of impervious surfaces and the development of storm water management facilities.

Policy 6.7A: New development should be prohibited from causing significant ecological impacts due to alterations in water quality, quantity or flow characteristics.

Policy 6.7B: Policies and regulations related to storm water runoff should maintain or contribute to assuring no net loss of ecological functions, including ground water recharge and hydrological base flow considerations.

Policy 6.7C: Storm water outfalls should not result in a net loss of ecological functions and ecosystem-wide processes.

Policy 6.7D: Storm water facilities and discharges to wetlands within shoreline jurisdiction should only be allowed where impacts to water quality, quantity and flow characteristics have been fully considered and mitigated.

7.0 Shoreline Use Policies

The following activities have been identified as those types of uses that can occur on shorelines of the City of Nooksack. Policy statements have been developed for these various activities in order to insure the proper use of the shoreline.

7.1 AGRICULTURE

Agriculture includes those methods used in vegetation and soil management as defined by WAC 173-26-020. The methods used in the agricultural processes have a great effect on the conditions of shorelines and water quality. These policies shall not apply retroactively to agricultural operations meeting the definition of existing and ongoing agriculture, but shall apply to new agricultural development, including associated clearing and grading in support of new agricultural uses.

Policy 7.1A: Agricultural uses shall generally be located outside of shoreline areas and be designed to assure no net loss of ecological functions or ecosystem-wide processes.

Policy 7.1B: A buffer zone of naturally occurring vegetation should be maintained between all tilled areas and bodies of water within shoreline jurisdiction.

Policy 7.1C: Livestock shelters and animal feeding facilities located within the shoreline area should make provisions to control run-off from feeds, manure, and associated animal wastes.

Policy 7.1D: Agricultural practices shall not use products which can potentially harm aquatic life within the shoreline area, except where used consistent with an approved Integrated Pest Management Plan.

Policy 7.1E: The watering of livestock in associated bodies of water shall not be permitted.

Policy 7.1F: Tilled areas shall meet erosion control best management practices as outlined by the Natural Resource Conservation Service, U.S. Dept. of Agriculture.

Policy 7.1G: The local SMP shall not require modification of or limit ongoing and existing agricultural activities occurring on lands zoned for agriculture and where such agricultural activities are recognized as pre-existing non-conforming uses on lands not zoned for agriculture.

Policy 7.1H: The SMP recognizes the importance of agriculture and supports its continued viability in the community while maintaining shoreline ecological functions and processes.

7.2 AQUACULTURE

Aquaculture is the culture of food fish, shellfish, or other aquatic plants and animals. It is generally recognized that development of aquaculture within the City of Nooksack is unlikely.

Policy 7.2A: Aquaculture should be consistent with the surrounding shoreline environment.

Policy 7.2B: Consideration should be given to protecting visual and physical access to shoreline areas when locating aquaculture uses.

Policy 7.2C: 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; adversely impact habitat for threatened or endangered species; or interfere with water-dependent uses.

Policy 7.2D: Aquaculture should not be permitted in areas where it would result in a net loss of ecological function, and should be designed and located so as not to spread disease to native aquatic life, establish new non-native species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline.

7.3 COMMERCIAL DEVELOPMENT

Commercial developments are those uses that are involved in wholesale and retail trade or business activities. Because most commercial developments depend on people to support their various activities, these developments lead to concentrations of people and traffic, which in turn have a great effect on the condition of the shoreline. Water-dependent commercial developments

require a shoreline location. It is recognized that these types of commercial development are unlikely in Nooksack. If unregulated, non-water-dependent commercial development can have an undesirable impact on the shoreline.

Policy 7.3A: Commercial development should not result in a net loss of ecological functions or have significant adverse impacts to other shoreline uses, resources and values provided in RCW 90.58.020 such as recreation and public access.

Policy 7.3B: Preference should be given first to water-dependent commercial uses over non-water-dependent commercial uses; and second to water-related and then to water-enjoyment commercial uses over non-water-oriented commercial uses.

Policy 7.3C: Although some activities, such as restaurants, do not require a shoreline location, they do increase public enjoyment of the shoreline and should be given consideration for location there.

Policy 7.3D: Commercial developments on shorelines should be encouraged to locate in areas where commercial developments already exist.

Policy 7.3E: Commercial developments requiring parking should locate these facilities on upland areas away from the immediate water's edge to minimize impacts to shoreline activities and resources.

Policy 7.3F: Consideration should be given to the effect on public physical and visual access likely to result from new commercial development.

Policy 7.3G: Commercial developments should provide public access, unless such improvements are demonstrated to be infeasible or present hazards to life or property.

Policy 7.3H: Restoration of impaired shoreline ecological functions and processes should be encouraged as part of commercial development.

7.4 INDUSTRIAL DEVELOPMENT

This category includes those industrial uses engaged in primary production. It is recognized that water-dependent industry is unlikely in the City of Nooksack. Non-water-dependent industrial development can have a very great impact on shoreline areas.

Policy 7.4A: Shoreline priority should first be given to those industries that require a waterfront location for their operations, and second to those industries that are water-related over non-water oriented uses.

Policy 7.4B: Industrial development should not be located or designed in a manner that will result in a net loss of ecological function or that will interfere with other shoreline uses, resources or values.

Policy 7.4C: Where feasible, industrial development should incorporate environmental cleanup and restoration of the shoreline area.

Policy 7.4D: Vegetation removal should be limited to the minimum necessary to accommodate permitted primary structures.

Policy 7.4E: Industrial development should be compatible with the surrounding shoreline area.

Policy 7.4F: Cooperative use of parking and storage facilities by industry should be encouraged.

Policy 7.4G: Wherever possible, industrial development should not interfere with public visual and physical access to the shoreline.

Policy 7.4H: Industrial development should be encouraged to provide public access, except where such access would pose a threat to public health or safety or to private property.

Policy 7.4I: Industrial development on publicly owned lands should be required to provide public access.

Policy 7.4J: Restoration of impaired shoreline ecological functions and processes should be encouraged as part of industrial development.

Policy 7.4K: The heights of buildings should be limited to that height necessary to perform the primary function.

7.5 IN-STREAM STRUCTURES

An in-stream structure is waterward of the ordinary high water mark and either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow.

Policy 7.5A: In-stream structures should serve to protect and preserve ecosystem-wide processes, ecological functions, and cultural resources, including fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas.

Policy 7.5B: The location and planning of in-stream structures shall give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

Policy 7.5C: Failing, harmful, unnecessary, or ineffective in-stream structures should be removed and, where appropriate, replaced. Where feasible, shoreline ecological functions and processes should be restored.

7.6 MINING

Mining is the removal of sand, gravel, soil, minerals, and other earth materials from the earth for economic use. Mining alters the natural character, resources and ecology of shorelines and may adversely affect critical shoreline resources.

Policy 7.6A: Mining should be prohibited within shoreline jurisdiction.

7.7 RECREATIONAL DEVELOPMENT

Recreation is the refreshment of body and mind outdoors or indoors through forms of play, sports, amusement or relaxation. Water-related recreation accounts for a very high proportion of all recreational activity in the Pacific Northwest. The recreational experience may be an active one involving boating, swimming, fishing or hunting or the experience may be passive such as enjoying the natural beauty of a shoreline, nature study, or picnicking.

Policy 7.7A: Shoreline recreational development should provide an adequate supply of commercial and public facilities for active and passive recreational uses without causing significant ecological impacts.

Policy 7.7B: Where possible, shoreline recreational facilities should be linked to other recreational attractions by pedestrian and bicycle trails.

Policy 7.7C: Only those recreational activities that are compatible with the shoreline environment in which they are located should be encouraged, and these uses should be developed to insure that no net loss of shoreline ecological functions or ecosystem-wide processes results.

Policy 7.7D: First priority should be given to water-dependent recreational uses and second priority should be given to water-enjoyment and water-related recreational uses over non-water oriented uses.

Policy 7.7E: Priority should be given to recreational developments that provide opportunities for public access to the shoreline area.

Policy 7.7F: Private investment in recreation facilities should be encouraged.

Policy 7.7G: Recreational development requiring extensive structures, utilities and roads and/or substantial modifications of topography or vegetation removal should not be located or expanded in areas where damage to persons, property, and/or shoreline functions and processes is likely to occur.

Policy 7.7H: Trail links between shoreline parks and public access points should be encouraged for walking, bicycle riding and other non-motorized vehicle access where appropriate.

Policy 7.7I: Where appropriate, recreation facilities should incorporate public education regarding shoreline ecological functions and processes, the role of human actions on the environment and the importance of public involvement in shoreline management.

7.8 RESIDENTIAL DEVELOPMENT

Residential development includes single-family and multifamily development, camping clubs, mobile home parks, or the creation of new residential lots through subdivision or conversion from another use. All residential development, including residential development exempt from the shoreline permit requirements, should be consistent with the following policies.

Policy 7.8A: Residential subdivisions proposed for the shoreline area should incorporate clustering of dwelling units to reduce physical and visual impacts on shorelines and to reduce utility and road costs. Where appropriate, such developments should include public or private open space and recreation facilities.

Policy 7.8B: Residential development should not result in a net loss of ecological functions. The following measures should be incorporated into applicable regulations: setbacks, buffers, density allowances, vegetation conservation requirements and limitations on shoreline armoring.

Policy 7.8C: Residential development that at a size and location that will cause significant ecological impacts should not be permitted.

Policy 7.8D: Subdivisions and conversions from non-residential uses should be required to create lots of sufficient size and configuration to allow residences to be constructed without causing significant ecological impacts.

Policy 7.8E: Subdivisions should be encouraged not to locate any structure within close proximity of the immediate water's edge, and instead use this area as open space.

Policy 7.8F: Vegetation removal should be limited to the minimum necessary to accommodate permitted primary residential structures.

Policy 7.8G: Subdivisions should be encouraged to provide community or public physical and/or visual access to shorelines.

Policy 7.8H: Erosion and sedimentation control measures should be included as part of the development plans.

Policy 7.8I: Residential development should be planned and built to minimize the need for shoreline stabilization and flood hazard reduction measures.

Policy 7.8J: Single-family residences are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

7.9 TRANSPORTATION AND PARKING

A road is a linear passageway for motor vehicles, and a railroad is a linear passageway with tracks for train traffic. The construction of linear transportation facilities and parking associated with allowed uses can both support and limit access to shorelines. Such development can also impair the visual qualities of water-oriented vistas, expose soils to erosion, increase storm water runoff, and accelerate or retard development along shorelines.

Policy 7.9A: Whenever feasible, major highways and railroads should be located away from shorelines.

Policy 7.9B: Safe, reasonable and adequate circulation systems to, and through or over, shorelines should be provided and maintained.

Policy 7.9C: The impact on the natural shoreline environment should be considered when designing, locating and constructing transportation facilities and parking in the shoreline area. Impacts to shoreline ecological functions and processes should be mitigated to the maximum extent practicable.

Policy 7.9D: Parking facilities shall only be allowed as necessary to support an authorized use and should be located in upland areas away from the water's edge unless no practicable alternative exists.

Policy 7.9E: Road and transportation planning should make provisions for public transportation, pedestrian and bicycle access to shoreline areas, where appropriate.

Policy 7.9F: Provisions should be made in highway and road design for compatible multiple uses, such as utility lines, pedestrian shore access, scenic pull-outs and view points.

Policy 7.9G: Railroad construction should be limited to maintenance of existing facilities.

Policy 7.9H: Transportation facilities should be located and designed to avoid impacts to public recreation and public access areas and to significant natural, historic, archaeological or cultural sites.

7.10 UTILITIES

Utilities are systems, services or facilities that produce, convey, store, or process various items including electricity, oil, gas, communications, sewage, water and the like. The installation of this apparatus necessarily disturbs the landscape, but can be planned to have minimal visual and physical effect on the environment.

Policy 7.10A: Utility facilities should be designed and located to assure no net loss of shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and planned uses.

Policy 7.10B: Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, that are non-water-oriented should not be allowed within shoreline areas, unless it can be demonstrated that no other feasible option is available.

Policy 7.10C: Multiple use corridors should be used as much as possible when locating utilities.

Policy 7.10D: After a utility installation/maintenance project has been completed, the affected area should be replanted with native vegetation.

Policy 7.10E: The location of utilities should be chosen so as not to obstruct scenic views.

Policy 7.10F: Where possible, utilities should be placed underground to minimize impacts to the aesthetic qualities of the area.

Policy 7.10G: Utilities should be located in existing rights-of-way and utility corridors when available.

Policy 7.10H: Utilities should be located and designed to avoid impacts to public recreation and public access areas and to significant natural, historic, archaeological or cultural sites.

8.0 SHORELINE MODIFICATION POLICIES

Shoreline modifications are related to construction of a physical element such as a dike, bulkhead, or fill. They can also include such activities as clearing and grading, or significant vegetation removal.

8.1 BOAT RAMPS

Boat ramps are permanent structures for launching watercraft. It is recognized that development of boat ramps in the City of Nooksack is unlikely.

Policy 8.1A: Boat ramps are water-dependent uses and should be given priority for shoreline location.

Policy 8.1B: Boat ramps should be sited, designed and constructed to minimize adverse effects on the shoreline and shoreline resources.

Policy 8.1C: New boat ramps should only be allowed for water-dependent uses or public access.

Policy 8.1D: Land disturbance associated with boat ramp construction should be limited to the minimum necessary to accommodate the proposed use.

Policy 8.1E: New construction should be allowed only when it has been shown that a specific need exists to support the proposed use.

Policy 8.1F: Boat ramps should be designed and constructed to avoid or minimize impacts to critical habitat and should result in no net loss of ecological function, while contributing to public physical and visual access to and enjoyment of waters of the state.

8.2 DOCKS

A dock is a structure built over or floating upon the water, used as a landing place for marine transport or for recreational purposes. A concentration of docks along the shore can interfere with or prevent public use of the water surface.

Policy 8.2A: New docks should be allowed only for water-dependent uses or public access.

Policy 8.2B: Docks associated with a single family residence is considered a water-dependent use, provided that it is designed and used as a facility to access watercraft and other moorage facilities are not available or feasible. Moorage for water-related and water-enjoyment uses or shared moorage for multifamily use should be allowed as part of a mixed-use development or where they provide public access.

Policy 8.2C: Dock construction should be limited to the minimum necessary to accommodate the proposed use.

Policy 8.2D: New construction should be allowed only when it has been shown that a specific need exists to support the proposed use.

Policy 8.2E: Docks should be designed and constructed to avoid or minimize impacts to critical habitat and sediment transport and should result in no net loss of ecological function, while contributing to public physical and visual access to and enjoyment of waters of the state.

Policy 8.2F: Docks should be constructed of materials that will not adversely affect water quality or aquatic plants and animals in the long term.

8.3 DREDGING

Dredging is the removal of unconsolidated material (gravel, sand, and silt) or other earthen materials from the bottom of a water body, for navigational purposes, underwater crossings, obtaining fill material, or construction projects. If not adequately regulated, dredging has the potential to cause significant environmental harm.

Policy 8.3A: Dredging and dredging disposal should only be done in a manner that avoids significant ecological impacts.

Policy 8.3B: Dredging other than for flood control, channel maintenance, and habitat creation/enhancement purposes should not be permitted.

Policy 8.3C: Dredging should be prohibited unless all appropriate feasibility studies have been completed and reviewed.

Policy 8.3D: In those instances where dredging is permitted, the shoreline area should not be used as a disposal site for dredge spoils, unless such use would create or enhance habitat value.

Policy 8.3E: All proposals for dredging operations should be coordinated and consistent with plans, policies, guidelines, and regulations of federal, state, and/or local agencies.

8.4 LANDFILL AND EXCAVATION

This category includes those activities that re-shape or change the character of the surface of the land. Activities covered by this section include land clearing, landscaping, excavation and grading or other earth moving projects.

Policy 8.4A: Landfill and excavation should only be permitted to the minimum extent necessary to accommodate an approved shoreline use or development.

Policy 8.4B: Landfill and excavation activities should be located, designed, and constructed to protect shoreline resources and to assure no net loss of ecological functions and ecosystem-wide processes.

Policy 8.4C: Fills waterward of the ordinary high water mark should be allowed only when necessary to support: water-dependent uses, public access, ecological restoration, and other uses as outlined by WAC 173-26-231(3)(c). Unavoidable impacts should be mitigated to the maximum extent practicable.

Policy 8.4D: Landfill should be permitted in limited instances to restore uplands where recent erosion has rapidly reduced upland area, to build beaches and protective berms for shore stabilization or recreation, to restore or enhance degraded shoreline ecological functions and processes, or to moderately elevate low uplands to make such uplands more suitable for purposes consistent with this Program.

Policy 8.4E: Fill and excavation activities should have appropriate feasibility studies completed and reviewed prior to authorization. Factors such as total water surface reduction, impediment to water flow and circulation, reduction of water quality, and destruction of habitat should be considered before granting a permit.

Policy 8.4F: Fill should not be allowed where shore stabilization works would be required to maintain the materials placed.

Policy 8.4G: Erosion control best management practices should be utilized during construction. The perimeters of landfills and excavations should be landscaped or otherwise stabilized to retard soil erosion.

Policy 8.4H: Fill material should be of a quality that will not result in adverse impacts to water quality.

8.5 OUTDOOR ADVERTISING AND SIGNS

Signs are publicly displayed boards whose purpose is to provide information, direction or advertising. Signs and billboards, because they are intended to be very visible, can have a great effect on the aesthetics of an area.

Policy 8.5A: In general, signs should be constructed to minimize interference with visual access to the shoreline. Where such locations are available, signs should be constructed against existing buildings to minimize visual obstructions of the shoreline and water bodies.

Policy 8.5B: Size, height, density and lighting of signs should be compatible with adjacent shoreline uses.

Policy 8.5C: Signs should be designed mainly to identify the premises and nature of enterprise without unduly distracting uninterested passers-by.

Policy 8.5D: No off-premise advertising signs or billboards should be permitted within the shoreline area.

Policy 8.5E: Moving or flashing signs and neon lighting for signs within the shoreline area should be prohibited.

Policy 8.5F: Interpretive signage should be allowed and, where appropriate, encouraged within the shoreline area.

8.6 SHORELINE FLOOD PROTECTION

Shoreline flood protection refers to flood control structures along streamways and includes rip-rapping, and construction of levees and dikes, but excludes other shoreline stabilization work such as bulkheads and groins.

Policy 8.6A: The design, location and construction of shoreline flood protection features should be undertaken only if it minimizes alteration of the natural shoreline.

Policy 8.6B: Shoreline flood protection should minimize any intrusion on areas below the ordinary high water mark.

Policy 8.6C: Wherever possible, construction of shoreline flood protection structures should provide for protection, preservation and restoration of ecological functions and ecosystem-wide processes.

Policy 8.6D: Wherever possible, construction of shoreline flood protection facilities should provide opportunities for public access to the shoreline.

Policy 8.6E: New construction should be located and designed to avoid the need for new shoreline flood protection in the future.

8.7 SHORELINE HABITAT AND NATURAL SYSTEMS ENHANCEMENT PROJECTS

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

Policy 8.7A: Shoreline habitat and natural systems enhancement projects shall be encouraged where consistent with the City's restoration plan.

Policy 8.7B: Projects including modification of vegetation, removal of nonnative or invasive plants, shoreline stabilization, dredging, and filling, shall also be encouraged, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

8.8 SHORELINE STABILIZATION

Shoreline stabilization includes actions taken to address erosion impacts to property, housing, businesses, or structures caused by natural processes. These can include both non-structural and structural methods of stabilization. Non-structural methods include setbacks, relocation of structures, ground water management, and planning and regulatory measures. Structural methods include shore defense works such as rip-rap, bulkheads and groins. Bulkheads are wall-like structures erected at bank edge, the purpose of which is to protect uplands or fills from erosion by moving water. Groins are wall-like structures extending from the bank, the purpose of which is to divert the natural longshore movement of materials and cause a beach to build on the drift side of the groin.

Policy 8.8A: Wherever possible, construction of shoreline stabilization should result in no net loss of ecological functions and ecosystem-wide processes. Mitigation should be provided if necessary to insure no net loss of shoreline functions and processes.

Policy 8.8B: Shoreline stabilization should be constructed in a manner that will minimize alteration of the natural shoreline.

Policy 8.8C: New development should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.

Policy 8.8D: New stabilization measures should not be allowed except when necessity is demonstrated and should only be allowed for the purpose of protecting existing upland areas and not for the purpose of creating new uplands.

Policy 8.8E: New or expanded structural shore stabilization should only be allowed when non-structural measures, vegetation planting, or on-site drainage improvements would be insufficient to achieve the identified objectives.

Policy 8.8F: Shore stabilization should not be permitted to unnecessarily interfere with public access to public shorelines, nor with other appropriate shoreline uses including, but not limited to, navigation, or private recreation.

Policy 8.8G: Wherever feasible, opportunities for public access should be incorporated into the design and construction of shoreline stabilization projects.

Policy 8.8H: The use of natural-appearing rock and other natural materials should be encouraged in construction of shoreline stabilization.

Policy 8.8I: Failing, harmful, unnecessary, or ineffective structures should be removed and, where appropriate, replaced. Where feasible, shoreline ecological functions and processes should be restored using non-structural methods or less harmful long-term stabilization measures.

Policy 8.8J: Before locating groins, the effect of these structures on the movement of water and drift materials, on fish and wildlife, and on the aesthetic quality of the shoreline should be considered.

Policy 8.8K: Groins should only be allowed where necessary to support public access, shoreline stabilization or other public purpose.

8.9 SOLID WASTE DISPOSAL

Solid waste disposal includes collection, transport and disposal of all discarded or spent materials other than liquids such as sewage or wastewater. The shoreline is a particularly sensitive area and consequently especially susceptible to the environmental impacts that often accompany the operation of solid waste disposal facilities.

Policy 8.9A: Solid waste disposal facilities should not be permitted in the shoreline area.

Policy 8.9B: Solid waste transfer stations should only be allowed by conditional use within shoreline areas where no other feasible location exists.