WAC 173-26-201 Process to prepare or amend shoreline master programs. (1) **Applicability.** This section outlines the process to prepare a comprehensive shoreline master program adoption or update. This section also establishes approval criteria for shoreline master program amendments.

(a) All master program amendments are subject to the minimum procedural rule requirements of WAC 173-26-010 through 173-26-160, and approval by the department as provided in RCW 90.58.090.

(b) Comprehensive master program adoptions and updates shall fully achieve the procedural and substantive requirements of these guidelines.

(c) Master program amendments may be approved by the department provided:

(i) The proposed amendment will not foster uncoordinated and piecemeal development of the state's shorelines;

(ii) The amendment is consistent with all applicable policies and standards of the act;

(iii) All procedural rule requirements for public notice and consultation have been satisfied; and

(iv) Master program guidelines analytical requirements and substantive standards have been satisfied, where they reasonably apply to the amendment. All master program amendments must demonstrate that the amendment will not result in a net loss of shoreline ecological functions.

(2) **Basic concepts.**

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

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

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

Second, base master program provisions on an analysis incorporating the most current, accurate, and complete scientific or technical

information available. Local governments should be prepared to identify the following:

(i) Scientific information and management recommendations on which the master program provisions are based;

(ii) Assumptions made concerning, and data gaps in, the scientific information; and

(iii) Risks to ecological functions associated with master program provisions. Address potential risks as described in WAC 173-26-201 (3)(d).

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

(b) **Adaptation of policies and regulations.** Effective shoreline management requires the evaluation of changing conditions and the modification of policies and regulations to address identified trends and new information. Local governments should monitor actions taken to implement the master program and shoreline conditions to facilitate appropriate updates of master program provisions to improve shoreline management over time. In reviewing proposals to amend master programs, the department shall evaluate whether the change promotes achievement of the policies of the master program and the act. As provided in WAC 173-26-171 (3)(d), ecology will periodically review these guidelines, based in part on information provided by local government, and through that process local government will receive additional guidance on significant shoreline management issues that may require amendments to master programs.

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

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

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

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

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

Master programs shall contain policies and regulations that assure, at minimum, no net loss of ecological functions necessary to sustain shoreline natural resources. To achieve this standard while accommodating appropriate and necessary shoreline uses and development, master programs should establish and apply:

• Environment designations with appropriate use and development standards; and

• Provisions to address the impacts of specific common shoreline uses, development activities and modification actions; and

• Provisions for the protection of critical areas within the shoreline; and

• Provisions for mitigation measures and methods to address unanticipated impacts.

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

Master programs shall also include policies that promote restoration of ecological functions, as provided in WAC 173-26-201 (2)(f), where such functions are found to have been impaired based on analysis described in WAC 173-26-201 (3)(d)(i). It is intended that local government, through the master program, along with other regulatory and nonregulatory programs, contribute to restoration by planning for and fostering restoration and that such restoration occur through a combination of public and private programs and actions. Local government should identify restoration opportunities through the shoreline inven-

tory process and authorize, coordinate and facilitate appropriate publicly and privately initiated restoration projects within their master programs. The goal of this effort is master programs which include planning elements that, when implemented, serve to improve the overall condition of habitat and resources within the shoreline area of each city and county.

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

Shoreline areas, being a limited ecological and economic resource, are the setting for competing uses and ecological protection and restoration activities. Consistent with RCW 90.58.020 and WAC 173-26-171 through 173-26-186, local governments shall, when determining allowable uses and resolving use conflicts on shorelines within their jurisdiction, apply the following preferences and priorities in the order listed below, starting with (d)(i) of this subsection. For shorelines of statewide significance, also apply the preferences as indicated in WAC 173-26-251(2).

(i) Reserve appropriate areas for protecting and restoring ecological functions to control pollution and prevent damage to the natural environment and public health. In reserving areas, local governments should consider areas that are ecologically intact from the uplands through the aquatic zone of the area, aquatic areas that adjoin permanently protected uplands, and tidelands in public ownership. Local governments should ensure that these areas are reserved consistent with constitutional limits.

(ii) Reserve shoreline areas for water-dependent and associated water-related uses. Harbor areas, established pursuant to Article XV of the state Constitution, and other areas that have reasonable commercial navigational accessibility and necessary support facilities such as transportation and utilities should be reserved for water-dependent and water-related uses that are associated with commercial navigation unless the local governments can demonstrate that adequate shoreline is reserved for future water-dependent and water-related uses and unless protection of the existing natural resource values of such areas preclude such uses. Local governments may prepare master program provisions to allow mixed-use developments that include and support water-dependent uses and address specific conditions that affect water-dependent uses.

(iii) Reserve shoreline areas for other water-related and water-enjoyment uses that are compatible with ecological protection and restoration objectives.

(iv) Locate single-family residential uses where they are appropriate and can be developed without significant impact to ecological functions or displacement of water-dependent uses.

(v) Limit nonwater-oriented uses to those locations where the above described uses are inappropriate or where nonwater-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.

Evaluation pursuant to the above criteria, local economic and land use conditions, and policies and regulations that assure protection of shoreline resources, may result in determination that other uses are considered as necessary or appropriate and may be accommoda-

ted provided that the preferred uses are reasonably provided for in the jurisdiction.

(e) **Environmental impact mitigation.**

(i) To assure no net loss of shoreline ecological functions, master programs shall include provisions that require proposed individual uses and developments to analyze environmental impacts of the proposal and include measures to mitigate environmental impacts not otherwise avoided or mitigated by compliance with the master program and other applicable regulations. To the extent Washington's State Environmental Policy Act of 1971 (SEPA), chapter 43.21C RCW, is applicable, the analysis of such environmental impacts shall be conducted consistent with the rules implementing SEPA, which also address environmental impact mitigation in WAC 197-11-660 and define mitigation in WAC 197-11-768. Master programs shall indicate that, where required, mitigation measures shall be applied in the following sequence of steps listed in order of priority, with (e)(i)(A) of this subsection being top priority.

(A) Avoiding the impact altogether by not taking a certain action or parts of an action;

(B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;

(C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

(D) Reducing or eliminating the impact over time by preservation and maintenance operations;

(E) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and

(F) Monitoring the impact and the compensation projects and taking appropriate corrective measures.

(ii) In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

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

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

(B) When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the watershed that 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 may be authorized. Authorization of compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.

(f) **Shoreline restoration planning.** Consistent with principle WAC 173-26-186 (8)(c), master programs shall include goals, policies and actions for restoration of impaired shoreline ecological functions. These master program provisions should be designed to achieve overall

improvements in shoreline ecological functions over time, when compared to the status upon adoption of the master program. The approach to restoration planning may vary significantly among local jurisdictions, depending on:

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

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

(i) Identify degraded areas, impaired ecological functions, and sites with potential for ecological restoration;

(ii) Establish overall goals and priorities for restoration of degraded areas and impaired ecological functions;

(iii) Identify existing and ongoing projects and programs that are currently being implemented, or are reasonably assured of being implemented (based on an evaluation of funding likely in the foreseeable future), which are designed to contribute to local restoration goals;

(iv) Identify additional projects and programs needed to achieve local restoration goals, and implementation strategies including identifying prospective funding sources for those projects and programs;

(v) Identify timelines and benchmarks for implementing restoration projects and programs and achieving local restoration goals;

(vi) Provide for mechanisms or strategies to ensure that restoration projects and programs will be implemented according to plans and to appropriately review the effectiveness of the projects and programs in meeting the overall restoration goals.

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

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

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

(b) **Participation process.**

(i) **Participation requirements.** Local government shall comply with the provisions of RCW 90.58.130 which states:

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

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

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

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

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

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

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

(c) **Inventory shoreline conditions.** Gather and incorporate all pertinent and available information, existing inventory data and materials from state and federal agencies, individuals and nongovernmental entities with expertise, affected Indian tribes, watershed management planning, port districts and other appropriate sources. Ensure that, whenever possible, inventory methods and protocols are consistent with those of neighboring jurisdictions and state efforts. The department will provide, to the extent possible, services and resources for inventory work. Contact the department to determine information sources and other relevant efforts. Map inventory information at an appropriate scale. The department may provide an inventory of shoreline conditions to the local jurisdiction.

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

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

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

(i) Shoreline and adjacent land use patterns and transportation and utility facilities, including the extent of existing structures, impervious surfaces, vegetation and shoreline modifications in shoreline jurisdiction. Special attention should be paid to identification of ecologically intact blocks of upland vegetation, developed areas with largely intact riparian vegetation, water-oriented uses and related navigation, transportation and utility facilities.

(ii) Existing aquatic and terrestrial wildlife habitats; native aquatic vegetation; riparian and associated upland plant communities; and critical areas, including wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, geologically hazardous areas, and frequently flooded areas. See also WAC 173-26-221.

(iii) Altered and degraded areas and sites with potential for ecological restoration.

(iv) Areas of special interest, such as priority habitats, ecologically intact late successional native plant communities, developing or redeveloping harbors and waterfronts, previously identified toxic or hazardous material clean-up sites, dredged material disposal sites, or eroding shorelines, to be addressed through new master program provisions.

(v) Conditions and regulations in shoreland and adjacent areas that affect shorelines, such as surface water management and land use regulations. This information may be useful in achieving mutual consistency between the master program and other development regulations.

(vi) Existing and potential shoreline public access sites, including public rights of way and utility corridors.

(vii) General location of channel migration zones, and flood plains.

(viii) Gaps in existing information. During the initial inventory, local governments should identify what additional information may be necessary for more effective shoreline management.

(ix) If the shoreline is rapidly developing or subject to substantial human changes such as clearing and grading, past and current records or historical aerial photographs may be necessary to identify cumulative impacts, such as bulkhead construction, intrusive development on priority and critical habitats, and conversion of harbor areas to nonwater-oriented uses.

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

(xi) Information specific to the aquatic environment for siting in-water uses and development, such as sediment contamination, intertidal property ownership, aquaculture operations, shellfish beds, shellfish protection districts, and areas that meet department of health shellfish water quality certification requirements.

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

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

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

(I) Identify the ecosystem-wide processes and ecological functions based on the list in (d)(i)(C) of this subsection that apply to the shoreline(s) of the jurisdiction.

(II) Assess the ecosystem-wide processes to determine their relationship to ecological functions present within the jurisdiction and identify which ecological functions are healthy, which have been significantly altered and/or adversely impacted and which functions may have previously existed and are missing based on the values identified in (d)(i)(D) of this subsection; and

(III) Identify specific measures necessary to protect and/or restore the ecological functions and ecosystem-wide processes.

(B) The characterization of shoreline ecological systems may be achieved by using one or more of the approaches below:

(I) If a regional environmental management plan, such as a watershed plan or coastal erosion study, is ongoing or has been completed, then conduct the characterization either within the framework of the regional plan or use the data provided in the regional plan. This methodology is intended to contribute to an in-depth and comprehensive assessment and characterization.

(II) If a regional environmental management plan has not been completed, use available scientific and technical information, including flood studies, habitat evaluations and studies, water quality studies, and data and information from environmental impact statements. This characterization of ecosystem-wide processes and the impact upon the functions of specific habitats and human health and safety objectives may be of a generalized nature.

(III) One or more local governments may pursue a characterization which includes a greater scope and complexity than listed in (d)(i)(B)(I) and (II) of this subsection.

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

In rivers and streams and associated flood plains:

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

Shoreline vegetation: Maintaining temperature; removing excessive nutrients and toxic compound, sediment removal and stabilization; attenuation of high stream flow energy; and provision of woody debris and other organic matter.

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

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

In lakes:

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

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

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

In marine waters:

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

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

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

Wetlands:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(iii) **Addressing cumulative impacts in developing master programs.** The principle that regulation of development shall achieve no net loss of ecological function requires that master program policies and regulations address the cumulative impacts on shoreline ecological functions that would result from future shoreline development and uses that are reasonably foreseeable from proposed master programs. To comply with the general obligation to assure no net loss of shoreline ecological function, the process of developing the policies and regulations of a shoreline master program requires assessment of how proposed policies and regulations cause and avoid such cumulative impacts.

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

There are practical limits when evaluating impacts that are prospective and sometimes indirect. Local government should rely on the

assistance of state agencies and appropriate parties using evaluation, measurement, estimation, or quantification of impact consistent with the guidance of RCW 90.58.100(1) and WAC 173-26-201 (2)(a). Policies and regulations of a master program are not inconsistent with these guidelines for failing to address cumulative impacts where a purported impact is not susceptible to being addressed using an approach consistent with RCW 90.58.100(1).

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

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

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

(iv) **Shorelines of statewide significance.** If the area contains shorelines of statewide significance, undertake the steps outlined in WAC 173-26-251.

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

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

(vii) **Water quality and quantity.** Identify water quality and quantity issues relevant to master program provisions, including those that affect human health and safety. Review data and information specific to shellfish areas. Identify measures to protect water quality for human health as described in WAC 173-26-221(6). At a minimum, consult with appropriate federal, state, tribal, and local agencies.

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

(ix) **Special area planning.** Some shoreline sites or areas require more focused attention than is possible in the overall master program

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

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

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

(f) **Establish environment designations.** Establish environment designations and identify permitted uses and development standards for each environment designation.

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

Prepare specific environment designation policies and regulations.

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

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

(g) **Prepare other shoreline regulations.** Prepare other shoreline regulations based on the policies and the analyses described in this section as necessary to assure consistency with the guidelines of this chapter. The level of detail of inventory information and planning analysis will be a consideration in setting shoreline regulations. As a general rule, the less known about existing resources, the more protective shoreline master program provisions should be to avoid unanticipated impacts to shoreline resources. If there is a question about the extent or condition of an existing ecological resource, then the master program provisions shall be sufficient to reasonably assure that the resource is protected in a manner consistent with the policies of these guidelines.

(h) **Submit for review and approval.** Local governments are encouraged to work with department personnel during preparation of the master program and to submit draft master program provisions to the department for informal advice and guidance prior to formal submittal.

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

[Statutory Authority: Chapter 90.58 RCW. WSR 17-17-016 (Order 15-06), § 173-26-201, filed 8/7/17, effective 9/7/17. Statutory Authority: RCW 90.58.120, 90.58.200, 90.58.060 and 43.21A.681. WSR 11-05-064 (Order 10-07), § 173-26-201, filed 2/11/11, effective 3/14/11. Statutory Au-

thority: RCW 90.58.060 and 90.58.200. WSR 04-01-117 (Order 03-02), § 173-26-201, filed 12/17/03, effective 1/17/04.]