

PART IV GUIDELINES--OPTIONAL APPROACH

NEW SECTION

WAC 173-26-270 Purpose of Part IV.

(1) Objectives.

WAC 173-26-270 through 173-26-350 are adopted pursuant to chapter 90.58 RCW, the Shoreline Management Act of 1971, to serve as standards for implementation of the policy of the act for regulation of uses of the shorelines; and provide criteria to local governments and the department in developing and amending master programs. The purposes of Part IV are to: (Text in quotations is excerpted from RCW 90.58.020.)

(a) Protect against adverse impacts.

"Protect against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life. . . ."

Provide measures for the utilization, protection, restoration, and preservation of the state shorelines, which are "among the state's most valuable and fragile of its natural resources."

Prepare standards governing the protection of single-family residences and appurtenant structures from shoreline erosion, giving preference to measures to protect single-family residences occupied before January 1, 1992, where the proposed measure is designed to minimize harm to the shoreline natural environment. (See RCW 90.58.100(6).)

Undertake a "planned, rational, and concerted effort, jointly performed by federal, state and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines."

(b) Protect the public's right to use and access the surface waters of the state.

"Insure the development of shorelines of the state in a manner which, while allowing limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest."

"Protect generally public rights of navigation and corollary rights incidental thereto."

Preserve "the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state to the greatest extent feasible consistent with the overall best interest of the state and the people generally."

Regulate the design, construction, and operation of "permitted uses in the shorelines of the state to minimize, insofar as practical, any interference with the public's use of the water."

(c) Foster reasonable and appropriate uses that are in the public's best interest.

Give preference to uses "which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline." Alterations to the natural conditions of the shorelines of the state, in those limited instances when authorized, shall be given priority for:

- (i) "Single-family residences and their appurtenant structures;
- (ii) Ports; shoreline recreational uses, including, but not limited to, parks, marinas, piers, and other improvements facilitating public access to the shorelines of the state;
- (iii) Industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state; and
- (iv) Other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state."

The previous list is in no particular order of priority.

Conduct the "coordinated planning necessary to protect the public's interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest." Ensure equal treatment and fairness to all parties with respect to the use of shoreline resources.

"Appropriately classify the shorelines and shorelands of the state and revise these classifications when circumstances warrant regardless of whether the change in the circumstances occurs through man-made causes or natural causes."

Reflect that state-owned shorelines of the state are particularly adapted to providing wilderness beaches, ecological study areas, and other recreational uses for the public and give appropriate special consideration to same. (See RCW 90.58.100(4).)

(d) Protection and restoration of ecological functions.

This chapter captures the resource protection and restoration policy of RCW 90.58.020 within the concept of protection and restoration of ecological functions. The relative state of ecological functions in a species' range or habitat has a dramatic effect on the general health of the state's native vegetation, wildlife, and fish. While some native species in our region remain vigorous, others have declined over the years. In recent years numerous species of aquatic and terrestrial life which live in or near the shoreline have seen dramatic declines in population. A number of these species, including several species of salmonids, have declined to such an extent that they have been listed as threatened or endangered under the federal Endangered Species Act (ESA), 16 U.S.C. 1533, or by the Washington state department of fish and wildlife pursuant to RCW 77.12.020. Declines dramatic enough to warrant listing under the ESA or RCW 77.12.020 signify a failure to adequately protect against adverse effects to such species. The listing of such species indicates that particular attention should be paid to the species and their habitat in order to fulfill the act's policy of protecting against adverse effects to the land and its vegetation and wildlife, and the waters of the state and their aquatic life.

Part IV of this chapter provides a specific approach to addressing this important policy of the act.

(2) Responsibilities of state and local governments.

RCW 90.58.050 gives local governments the responsibility of initiating the planning required by the Shoreline Management Act and administering the regulatory program consistent with its policy and provisions. Nothing in this chapter is intended to reduce the opportunity for local governments to pursue local shoreline management objectives, provided they are consistent with the policies of the act and this chapter.

In 1995, the Washington state legislature passed Engrossed Substitute House Bill 1724, an act relating to implementing the recommendations of the governor's task force on regulatory reform on integrating growth management planning and environmental review. The bill amended, among other statutes, the Growth Management Act, chapter 36.70A RCW; the Shoreline Management Act, chapter 90.58 RCW; and the State Environmental Policy Act, chapter 43.21C RCW. Section 304 of Engrossed Substitute House Bill 1724 amended RCW 90.58.060(1) to read:

(1) The department shall periodically review and adopt guidelines consistent with RCW 90.58.020, containing the elements specified in RCW 90.58.100 for:

(a) Development of master programs for regulation of the uses of shorelines; and

(b) Development of master programs for regulation of the uses of shorelines of statewide significance.

These guidelines implement the directive to integrate referenced statutes. Specifically, the guidelines are directed toward more efficient planning, permitting, and environmental review and more effective resource management.

NEW SECTION

WAC 173-26-280 Applicability of Part IV.

WAC 173-26-270 through 173-26-350 apply to actions taken in the preparation, amendment, and review of local shoreline master programs pursuant to RCW 90.58.060(1). The master programs prepared or amended pursuant to this chapter, when adopted or approved by the department, shall constitute use regulations for the shorelines of the state.

NEW SECTION

WAC 173-26-290 Master program contents.

(1) Master program concepts.

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

(a) Master program policies and regulations.

Shoreline master programs are both planning and regulatory tools. RCW 90.58.020 establishes the need for both planning and regulatory action.

The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

The act expresses this dual function in RCW 90.58.030 (3)(b):

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

Master programs serve a planning function in several ways. First, they balance and integrate the objectives and interests of local citizens. Therefore, the preparation and amending of master programs shall involve active public participation, as called for in WAC 173-26-300(3). Second, they address the full variety of conditions on the shoreline. Third, they consider and, where necessary to achieve the objectives of chapter 90.58 RCW, influence planning and regulatory measures for adjacent land. For jurisdictions planning under chapter 36.70A RCW, the Growth Management Act, the requirements for integration of shoreline and adjacent land planning are more specific and are described in WAC 173-26-290 (2)(a). Fourth, master programs address conditions and opportunities of specific shoreline segments by classifying the shorelines into "environment designations" as described in WAC 173-26-310.

The results of shoreline planning are summarized in shoreline master program policies that establish broad shoreline management directives. The policies are the basis for regulations that govern use and development along the shoreline. Some development requires a shoreline permit prior to construction. A local government evaluates a permit application with respect to the shoreline master program policies and regulations and issues a permit only after determining that the development conforms to them. The regulations apply to all uses and development within shoreline jurisdiction, whether or not a shoreline permit is required and are implemented through other permitting and regulation activities of the local government. See RCW 90.58.140.

(b) Master program elements.

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

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

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

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

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

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

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

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

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

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

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

(c) Shorelines of statewide significance.

The Shoreline Management Act identifies certain shorelines as "shorelines of statewide significance" and raises their status by setting use priorities and requiring "optimum implementation" of the act's policy. WAC 173-26-350 describes methods to provide for the priorities listed in RCW 90.58.020 and to achieve "optimum implementation" as called for in RCW 90.58.090(4).

(d) Shoreline environment designations.

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

The method for local government to account for different shoreline conditions is to assign an environment designation to each distinct shoreline section in its jurisdiction. The environment designation assignments provide the framework for implementing shoreline policies and regulatory measures specific to the environment designation. WAC 173-26-310 presents guidelines for environment designations in greater detail.

(2) Basic requirements.

Part IV of this chapter describes the basic components and content required in a master program. As indicated in WAC 173-26-020, for this chapter, the terms "shall," "must," and "are required" and the imperative voice mean a mandate; the action must be done. As noted in WAC 173-26-020, the term "should" means that the particular action is required unless there is a demonstrated, compelling reason, based on a policy of the Shoreline Management Act and this chapter, against taking the action. The term "may" indicates that the action is acceptable, provided it satisfies all other provisions in this chapter. A master program as submitted to the department for approval shall be sufficient and complete to implement the Shoreline Management Act and the provisions of this chapter. A master program shall contain all of the policies and regulations necessary for the department and other reviewers to evaluate shoreline permits for conformance to the Shoreline Management Act and this chapter.

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

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

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

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

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

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

The Growth Management Act also calls for coordination between local jurisdictions. RCW 36.70A.100 states:

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

This statutory provision complements watershed-wide or regional planning described in WAC 173-26-300.

Furthermore, legislative findings provided in Engrossed Substitute House Bill 1724, section 1, chapter 347, Laws of 1995 states:

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

Engrossed Substitute House Bill 1724 also added RCW 36.70A.480(1) to the Growth Management Act, which states:

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

Furthermore, RCW 36.70A.481 states:

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

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

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

Pursuant to the statutes cited above, the intent of these guidelines is to assist local governments in preparing and amending master programs that fit within the framework of applicable comprehensive plans, facilitate consistent, efficient

environmental review, effectively implement the Shoreline Management Act, and address PFC requirements for T&E species.

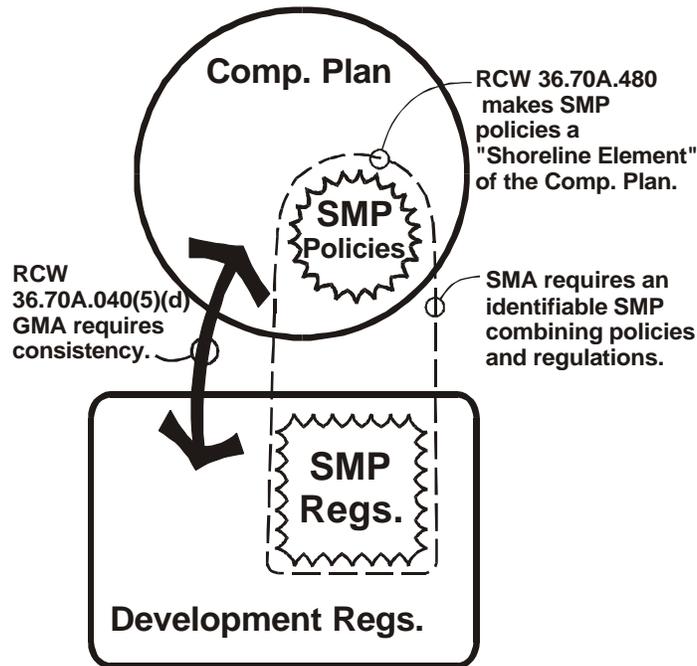


Figure 1. Relationship of master program to comprehensive plan and local development regulations for governments planning under RCW 36.70A.
(This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

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

First, WAC 173-26-290 (2)(b) and (c) describe optional methods to integrate master programs and other development regulations and the local comprehensive plan.

Second, WAC 173-26-320 through 173-26-350 translate the broad objectives in the Shoreline Management Act into more specific policies. They also provide a more defined policy basis on which to frame local shoreline master program provisions and to evaluate the consistency of applicable sections of a local comprehensive plan with the Shoreline Management Act.

Finally, WAC 173-26-310(3) presents specific methods for testing consistency between shoreline environment designations and comprehensive plan land use designations.

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

Shoreline master program provisions sometimes address similar issues as other comprehensive plan elements and development regulations, such as the zoning code and critical area ordinance. For the purposes of completeness and consistency, local governments may include other locally adopted policies and regulations within their master programs. For example, a local government may include specific portions of its critical area ordinance in the master program, provided the critical area ordinance

is consistent with this chapter. This can ensure that local master programs are consistent with other regulations.

Shoreline master programs may include other policies and regulations by referencing a specific, dated edition. When including referenced regulations within a master program, local governments shall ensure that the public has an opportunity to participate in the formulation of the regulations or in their incorporation into the master program, as called for in WAC 173-26-300 (3)(b)(i). In the approval process, the department will review the referenced development regulation sections as part of the master program. A copy of the referenced regulations shall be submitted to the department with the proposed master program or amendment. If the development regulation is amended, the edition referenced within the master program will still be the operative regulation in the master program. Changing the referenced regulations in the master program to the new edition will require a master program amendment.

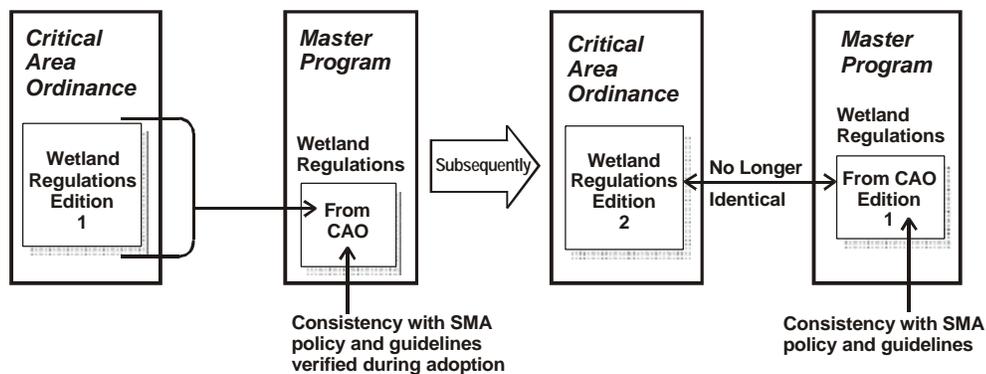


Figure 2. Optional method to incorporate other development regulations into a master programs by reference. (Note: If the referenced critical area ordinance is changed, the CAO provisions in the SMP are not automatically amended.) (This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

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

Local governments may integrate master program policies and regulations into their comprehensive plan policies and implementing development regulations rather than preparing a discrete master program in a single document. Master program provisions that are integrated into such plans and development regulations shall be clearly identified so that the department can review these provisions for approval and evaluate development proposals for compliance. RCW 90.58.120 requires that all adopted regulations, designations, and master programs be available for public inspection at the department or the applicable county or city. Local governments shall identify all documents which contain master program provisions and which provisions constitute part of the master program. Clear identification of master program provisions is also necessary so that interested persons and entities may be involved in master program preparation and amendment, as called for in RCW 90.58.130.

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

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

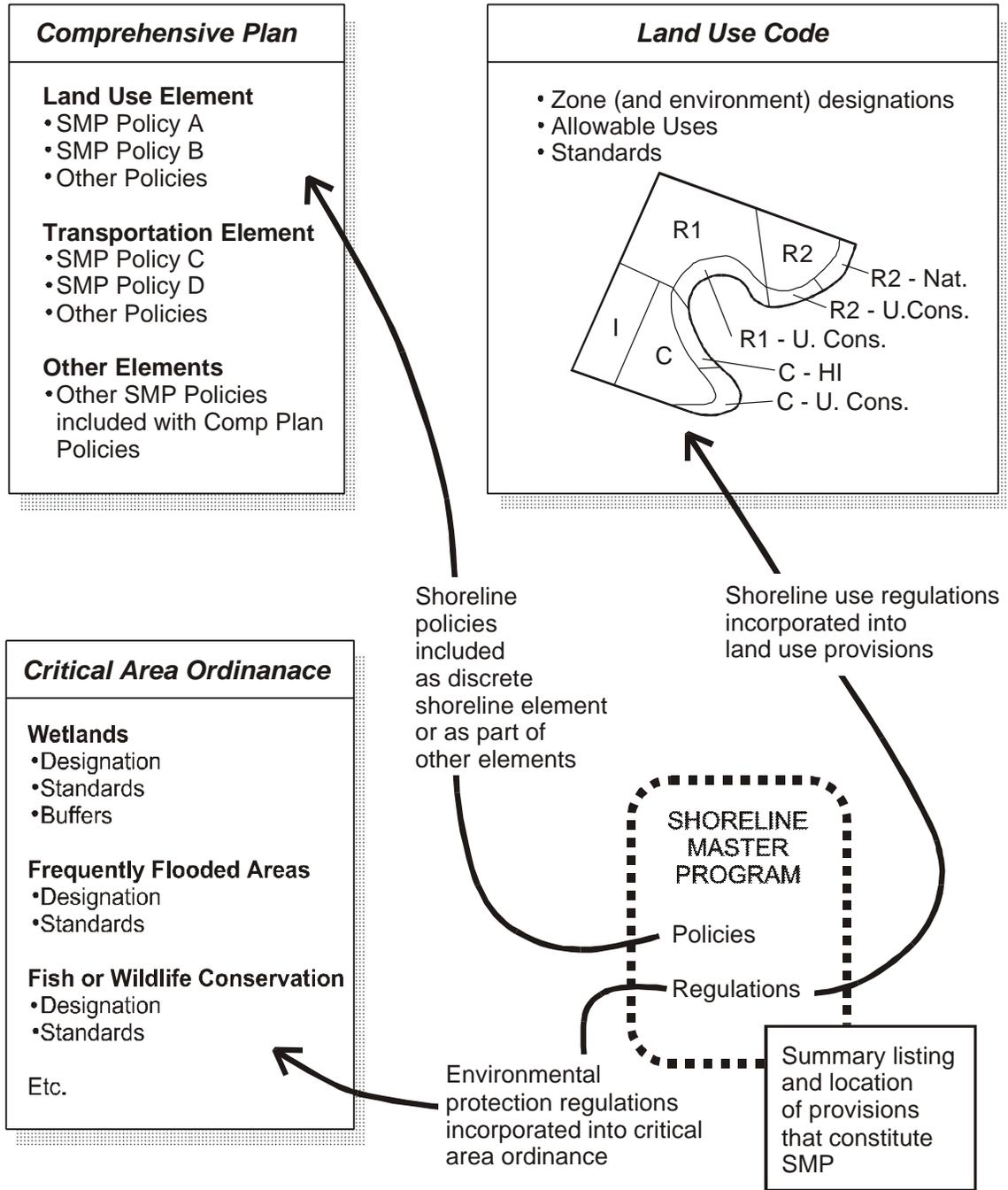


Figure 3. Method to incorporate master program provisions into a comprehensive plan and local development regulations. (Note: All master program provisions must be clearly identified as such.)

(This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

(d) Multijurisdictional master program.

Two or more adjacent local governments are encouraged to jointly prepare master programs. Jointly proposed master programs may offer opportunities to effectively and efficiently manage natural resources, such as drift cells or watersheds, that cross jurisdictional boundaries. Local governments jointly preparing master programs shall provide the opportunity for public participation locally in each jurisdiction, as called for in WAC 173-26-300 (3)(b), and submit the multijurisdictional master program to the department for approval.

(e) Master program contents.

Master programs shall include the following contents described in (e)(i) through (iii) of this subsection.

(i) Master program policies.

Master programs shall provide clear, consistent policies that translate broad statewide objectives of this chapter into local directives. Policies are statements of intent directing or authorizing a course of action or specifying criteria on which to make a public decision. They provide a comprehensive basis for the shoreline master program regulations, which generally are more specific, prescriptive standards used to evaluate shoreline development.

Shoreline policies shall be developed through a comprehensive shoreline planning process allowing for public and affected Indian tribes participation. For governments planning under the Growth Management Act, the master program policies are considered a shoreline element of the local comprehensive plan and shall also be consistent with the planning goals of RCW 36.70A.020.

At a minimum, shoreline master program policies shall:

- (A) Be consistent with state shoreline management policies listed in this chapter and the objectives of the Shoreline Management Act;
- (B) Address the master program elements of RCW 90.58.020;
- (C) Include policies for environment designations as described in WAC 173-26-310. The policies shall be accompanied by a map or physical description of the schematic environment designation boundaries in sufficient detail to compare with comprehensive plan land use designations; and
- (D) Be consistent with protection and restoration requirements for T&E species.

(ii) Master program regulations.

RCW 90.58.100 states:

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

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

- (A) Be sufficient in scope and detail to ensure the implementation of the Shoreline Management Act, statewide shoreline management policies of this chapter, and local master program policies;
- (B) Include environment designation regulations that apply to specific environments consistent with WAC 173-26-310; and
- (C) Include general regulations, use regulations that address issues of concern to specific uses, and shoreline modification regulations that protect shoreline ecological functions from the effects of human-made modifications to the shoreline.

To comply with Part IV of chapter 173-26 WAC, regulations shall also be consistent with the properly functioning condition requirements for T&E species.

(iii) Administrative provisions.

(A) Statement of applicability.

The Shoreline Management Act's provisions apply to all development and uses within its jurisdiction, whether or not a shoreline permit is required. Many activities that may not require a substantial development permit, such as clearing vegetation or construction of a residential bulkhead, can cause serious damage to adjacent properties, natural resources, and lands held in public trust. Local governments have the authority and responsibility to condition a project even though it is exempt from the requirement for a substantial development permit. There has been, historically, some public confusion regarding the Shoreline Management Act's applicability. Therefore, all master programs shall include the following statement:

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

(B) Conditional use and variance provisions.

RCW 90.58.100(5) states:

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

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

(C) Administrative permit review and enforcement procedures.

RCW 90.58.140(3) states:

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

Local governments may, but are not required to, include administrative, enforcement, and permit review procedures into the master program. These procedures shall conform to the Shoreline Management Act, specifically RCW 90.58.140, and to chapter 173-27 WAC. However, the procedures may be defined by a local government ordinance separate from the master program.

Adopting review and enforcement procedures separate from the master program allows local governments greater flexibility in revising their shoreline permit review procedures and integrating them with other permit processing activities.

However, master programs shall include a mechanism, such as a letter of exemption, to ensure that all development, including development exempted from a substantial development permit, meets the conditions of the permit or letter of exemption, the applicable master program, and the Shoreline Management Act. See WAC 173-26-300 (2)(g).

Local governments, in conjunction with state agencies, must provide enforcement mechanisms needed to assure that development within shoreline jurisdiction will incorporate PFC requirements for T&E species.

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

Master programs shall include a mechanism for documenting project review actions and evaluating their cumulative effects on shoreline conditions. See WAC 173-26-300 (2)(b) and (3)(h). This process could involve a joint effort by local governments, state resource agencies, affected Indian tribes, and other parties.

NEW SECTION

WAC 173-26-300 Comprehensive process to prepare or amend shoreline master programs.

(1) Applicability.

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

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

If a local jurisdiction has undertaken a recent comprehensive update of the master program but seeks to make minor revisions, such as an adjustment to a single environment designation boundary, to bring the master program into compliance with these guidelines or other state requirements, these modifications may be made without undertaking a fully comprehensive process.

All master program amendments, even amendments that do not fit within the criteria above, are subject to approval by the department.

(2) Basic concepts and principles.

(a) Use of scientific and technical information.

RCW 90.58.100(1) states:

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

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

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

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

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

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

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

To address the requirements for the use of scientific and technical information, 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, and affected Indian tribes for available information. If local governments initiate scientific research as a basis for master program provisions, that research shall use accepted scientific methods and research procedures and be subject to peer review. Local governments are encouraged to work interactively with neighboring jurisdictions, state resource agencies and affected Indian tribes to address technical issues beyond the scope of existing information resources or locally initiated research.

In addition, local governments shall identify all shoreline areas which provide habitats that support T&E species.

Local governments should consult with the technical assistance materials produced by the department. 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.

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

- (i) Scientific information and management recommendations on which the master program provisions are based;
- (ii) Assumptions 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 173-26-300 (3)(g).

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 173-26-300 (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. In such instances, particular consideration shall be given to protecting T&E species.

(b) Monitoring and adaptive management.

The protection and restoration of PFC for T&E and priority species and overall protection of ecological functions requires making decisions based on an ecosystem perspective. Recognizing the complexity of ecosystems and the degree of uncertainty about the outcomes of many management actions, effective shoreline management will require a process of adaptive learning and change. To achieve and effectively maintain PFC, the state and local government shoreline policies and regulations shall have and implement adaptive management strategies that clearly identify existing and desired future conditions, measurable performance criteria, procedures and schedules to monitor progress toward performance criteria, management options, specific thresholds for changes, and applicable management responses. Priorities for monitoring specific performance criteria should be tied to the degree of uncertainty for effectiveness of measures. Actions with a high degree of effectiveness or low risk to PFC and ecological functions should be low priority for monitoring and adaptive management.

- (i) Responsive adaptive management requires a cooperative effort on the part of local governments, the department, other resource agencies and affected Indian tribes. As part of the master program amendment process, local governments shall conduct the following adaptive management activities:
 - (A) Obtain base line inventory information as described in WAC 173-26-300 (3)(c).
 - (B) Conduct the ecological analysis as described in WAC 173-26-300 (3)(d)(i) and cumulative impact analysis as described in WAC 173-26-300 (3)(d)(iii).
 - (C) Set measurable performance criteria, thresholds, or benchmarks, such as area of natural or restored vegetation or length of unmodified or restored shoreline to maintain and restore PFC.
 - (D) Establish a program of monitoring land use and shoreline permit activities, including letters of exemption, to accurately assess the condition of the shoreline with respect to the performance criteria.
 - (E) Identify a long term funding source and commitment.
 - (F) Identify a timely procedure to incrementally adjust management activities to respond to new information. In some cases, monitoring results may lead to changes in master program provisions.

(ii) In addition, the department, in conjunction with local governments and applicable state agencies, shall institute the following statewide monitoring and regulatory response program:

- (A) Local governments shall keep records of all permit and land use actions regulated under the master program, including letters of exemption and impact analysis documentation prepared under chapter 43.21C RCW, and provide such information to the department.
- (B) The department shall compile all such documentation into a readily accessible data base.
- (C) The department shall visit a minimum of 100 completed projects per year and verify whether or not the in-place construction meets the permit or letter of exemption requirements. The department shall inform local governments of its findings and required actions, if any. Where possible and appropriate, the department's visit will take place at the time of the local government's final inspection and prior to occupancy together with follow up visits thereafter.
- (D) Each year, the department shall prepare a summary report of the site visits along with related information. The report shall include findings and recommendations for alleviating conditions or trends that could constitute take or inhibit the attainment or maintenance of properly functioning condition. The information will document development actions, assess current levels of compliance, and identify shoreline management activities requiring change in order to achieve PFC objectives. Where applicable, the findings will be compared to ongoing monitoring of ecological functions by other agencies.
- (E) The 100 site visits will be selected by the department to represent the full range of development actions and shoreline conditions (e.g., marine, riverine, Eastern Washington, Western Washington, etc.).
- (F) The department, along with local governments, shall evaluate the effectiveness of current guidelines in achieving Shoreline Management Act policies, giving particular consideration to the conservation of habitat that supports T&E species, at least once every five years, as called for in RCW 90.58.060(3). The department shall amend the guidelines to achieve PFC and other Shoreline Management Act objectives.

In addition, the department shall participate as appropriate in more detailed inventory monitoring and adaptive management activities conducted by other state resource agencies.

(c) Ecological functions.

(i) General.

RCW 90.58.020 includes the following statement:

This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of

the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.

This chapter implements the above-cited statutory policy through the protection and restoration of ecological functions. The concept of ecological functions, as defined in WAC 173-26-020, recognizes that successful management of the shoreline environment depends on sustaining the:

- Ecosystem-wide fluvial, current, and wave processes, including those that form habitats, and
- Individual functions and their processes that are present in each habitat type.

The loss or degradation of one or more ecosystem-wide processes or individual functions can significantly impact shoreline habitats and human health and safety. Shoreline master programs shall address the applicable ecosystem-wide processes and individual ecological functions identified in the ecological systems analysis described in WAC 173-26-300 (3)(d)(i).

Nearly all shoreline areas, even substantially developed or degraded areas, retain some 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, ecological systems are themselves 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 objectives for protection and restoration of ecological functions generally apply to all shoreline areas, not just those that remain relatively unaltered.

Master programs shall contain provisions to protect and to contribute to the restoration of ecological functions and ecosystem-wide processes based on analysis described in WAC 173-26-300 (3)(d)(i).

(ii) Functions related to properly functioning condition.

Several provisions in Part IV of this chapter require that master programs be directed toward the maintenance or attainment of "properly functioning condition" for T&E species. This subsection amplifies the intent of those provisions and describes the method for determining whether or not a master program meets the requirement for PFC.

Master program provisions must not allow development that impairs currently properly functioning habitat, reduces the functioning of already impaired habitat, or retards the long-term progress of impaired habitat toward PFC.

In order to satisfy the conditions of Part IV related to PFC, local governments must demonstrate that master program provisions accomplish the following two requirements:

- Maintain PFC where it occurs.
- Contribute to the attainment of PFC where proper functioning has been impaired. Master programs must include provisions that will result in the

long-term improvement of impaired conditions even if those provisions, in themselves, will not achieve PFC in the foreseeable future.

The methodology for local governments to demonstrate conformance to this standard is described by the process below. The methodology tasks listed below also fit within the requirements of WAC 173-26-300 (2)(c)(i) and the process described in WAC 173-26-300(3).

- **Task 1:** Identify the status and biological requirements of the affected species regarding the life history phases within the jurisdiction. This information may be obtained through the department and other local state and federal resource agencies. Contact the department for access to necessary information.
- **Task 2:** Evaluate what aspects of the baseline inventory conditions are achieving species' requirements. As part of the analysis conducted in WAC 173-26-300 (3)(d)(i), (iii), (viii), (ix), and (x), analyze the implications of the information gathered as part of inventory described in WAC 173-26-300 (3)(c). As part of the inventory process, identify those stretches of shorelines with baseline conditions determined to be either "properly functioning," "at risk," or "not properly functioning." With respect to properly functioning condition determination, it is particularly important to identify those functions that have been altered to the point that they are limiting or threatening species survival and recovery. These are the functions that shall be given top priority for restoration.
- **Task 3:** Consider cumulative impacts in the jurisdiction. Accomplish this task through the cumulative impact analysis described in WAC 173-26-300 (3)(d)(iii). Establish master program provisions to address cumulative impacts to properly functioning condition as described in WAC 173-26-300 (3)(g).
- **Task 4:** Determine the effects of the proposed master program on T&E species. This evaluation may be accomplished through analysis included in an impact evaluation conducted under the Washington State Environmental Policy Act. In order to approve a master program, the department must find that development conducted under the jurisdiction of the Shoreline Management Act and allowed by the proposed master program does not have the potential to hinder attainment of properly functioning condition and has an insignificant (extremely low) probability of harming T&E species or resulting in the destruction or adverse modification of their shoreline and aquatic habitat. In making this evaluation, the department will consider the ways that master program provisions will protect existing habitats with PFC and restore impaired conditions critical to species' survival.
- **Task 5:** Establish shoreline policies, regulations and environment designations, as appropriate to protect PFC and ecological functions along those shorelines that are "properly functioning" and "at risk," and to restore ecological functions of those shorelines "not properly functioning" to the point where they effectively contribute to and eventually attain PFC for all

shoreline areas within the watershed, sub-basin, or shoreline area within question.

For T&E salmonid species, the following objectives are relevant to PFC:

- Protect and restore the distribution, diversity, and complexity of watersheds, marine environments, and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.
- Protect and restore spatial and temporal connectivity within and between watersheds and along marine shorelines. Lateral, longitudinal, and drainage network connections include flood plains, wetlands, upslope areas, headwater tributaries, and intact refugia. Provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riverine-dependent species.
- Protect and restore the physical integrity of the aquatic system, including shorelines, beaches, banks, marine near-shore habitats, and bottom configurations.
- Protect and restore timing, volume, and distribution of large woody debris (LWD) recruitment by protecting trees in riverine and marine habitat conservation areas.
- Protect and restore the water quality necessary to support healthy aquatic and wetland ecosystems. Attain water quality within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riverine communities.
- Protect and restore 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.
- Protect and restore in-stream flows including natural range of flow variability sufficient to create and sustain riverine, aquatic, and wetland habitats, retain patterns of sediment, nutrient, and wood routing, and optimize the essential features of designated critical habitat. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows should be maintained, where optimum, and restored, where not optimum.
- Protect and restore the timing, variability, and duration of flood plain inundation and water table elevation in meadows and wetlands.
- Protect and restore the species composition and structural diversity of plant communities in riverine areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.
- Protect and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate species.
- Protect and restore marine shoreline conditions to support T&E species.

For those shoreline areas that affect T&E species, the ecological functions and processes necessary to support those species are of special importance. Applicable master programs shall include measures to protect and restore those functions necessary to attain properly functioning condition for T&E species.

(d) Preferred uses.

RCW 90.58.020 states:

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to, parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. Alterations of the natural condition of the shorelines and shorelands of the state shall be recognized by the department. Shorelines and shorelands of the state shall be appropriately classified and these classifications shall be revised when circumstances warrant regardless of whether the change in circumstances occurs through man-made causes or natural causes.

Consistent with this policy, these guidelines use the terms "water-dependent," "water-related," and "water-enjoyment," as defined in WAC 173-26-030, 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, local governments should, when determining allowable uses and resolving use conflicts on shorelines within their jurisdiction, apply the following preferences and priorities in the order listed below, starting with (i) of this subsection.

- (i) Reserve appropriate areas for protecting and restoring properly functioning condition for T&E species and ecological functions to control pollution and prevent damage to the natural environment and public health.
- (ii) Reserve shoreline areas for water-dependent uses and establish policies and regulations so that water-dependent development is consistent with comprehensive ecological protection and restoration objectives. Harbor areas and areas that are generally considered navigable for commercial purposes should be reserved for water-dependent and water-related uses unless the local governments can demonstrate that adequate shoreline is reserved for future water-dependent and water-related 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 water-related and water-enjoyment uses that are compatible with water-dependent uses and 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 either water-oriented uses are inappropriate or where nonwater-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.

Local conditions and environmental constraints may result in lower priority uses being accommodated. For example, an undeveloped shoreline may not be an appropriate site for a water-dependent use, such as a cargo facility, but may accommodate a recreational trail (water-enjoyment) of a lower priority.

For shorelines of statewide significance, apply the preferences as indicated in WAC 173-26-350(2).

(e) Cumulative impacts.

Some types of shoreline developments do not cause measurable ecological harm as individual development projects but can cause significant ecological impacts when considered together with similar projects on a specific shoreline. Examples may include a group of residential bulkheads that, taken together, disrupt sediment drift, cause erosion down-current, and cause loss of forage fish habitat, and incremental construction of impervious surfaces, which prevent water infiltration and retention, exacerbate flooding, and cause stream bed scouring.

Cumulative impacts due to incremental development can also cause significant damage to habitat. Therefore, shoreline master programs must not allow classes of actions that, when considered cumulatively, cause significant ecological impact to shoreline functions or would hinder or prevent the attainment or maintenance of properly functioning condition for T&E species.

The method to accomplish this requirement is to identify potential ecological impacts that could occur from the maximum amount and extent of development allowed by the master program and establish master program provisions and/or mitigation requirements to address the maximum possible ecological impact, as described in WAC 173-26-300 (3)(d)(iii).

In areas where degradation has already occurred, such requirements may be part of restoration of functions that contribute to properly functioning condition.

(f) Environmental impact mitigation.

Because the Shoreline Management Act recognizes both the appropriate use and environmental protection of the state's shorelines, situations may arise in which otherwise allowable development must include measures to mitigate environmental impacts and implement the Shoreline Management Act's environmental protection objectives. Rules implementing Washington's State Environmental Policy Act of 1971, chapter 43.21C RCW, also address environmental impact mitigation in WAC

197-11-660 and define mitigation in WAC 197-11-768. Where these guidelines call for mitigation or mitigation sequencing, shoreline master programs shall include provisions for providing environmental impact mitigation. This may be done by prescribing specific mitigation actions for specific uses as called for in WAC 173-26-340 (2)(a), by requiring conditional use permits as described in WAC 173-26-340 (2)(b), and/or by implementing a plan for comprehensive environmental mitigation.

To this end, master programs shall indicate that, where required, mitigation measures shall be applied in the sequence defined in WAC 173-26-020. In determining appropriate mitigation measures, avoidance of impacts by means such as relocating or redesigning the proposed development shall be applied first. Lower priority measures shall be applied only after higher priority measures are demonstrated to be not feasible or not applicable.

(g) Assurance of development compliance.

(i) Letters of exemption.

A mechanism must be established to ensure that new development meets the conditions and objectives of these guidelines, even if the development is exempt from the requirement to obtain a shoreline permit. Therefore, local governments shall require that development normally exempted from the requirement to obtain a shoreline permit not be undertaken without a letter of exemption from the applicable local government if the proposed development is any of the following:

- Waterward of the ordinary high-water mark or bank full width, whichever applies, including any form of stream channel modification.
- Shoreline stabilization, including the construction, addition to, or repair of residential bulkheads.
- Development associated with the construction of or addition to a single-family residence.
- Clearing and grading.
- Road construction when a shoreline permit is not required.

The letters of exemption shall describe conditions, requirements, or limitations placed upon the proposed development where necessary to ensure that the development does not cause significant ecological impacts or contribute to potential adverse cumulative impacts. Projects to improve fish or wildlife habitat or fish passage that meet the criteria of RCW 90.58.147 do not require a letter of exemption.

(ii) Compliance assurance mechanism.

Master programs must include a mechanism for assuring that the completed development meets the conditions and mitigation requirements of the permit or letter of exemption, the master program, and the act. Such a mechanism may include a performance bond or expressed enforcement conditions or penalties. In the case of a bond, the bond shall not be released before a final inspection indicates the bond conditions have been met. Bonding

requirements for projects by local governments and state agencies are limited by RCW 36.32.590.

Local governments participating in the program must perform a final inspection of all development permitted or conditioned with a letter of exemption and take measures to ensure correction of conditions not in compliance. Local governments shall send results of final inspections, including descriptions of noncompliant conditions and violations, to the department. (See chapter 173-27 WAC for permit enforcement provisions.)

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

(a) Process overview.

Figure 4 below illustrates 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.

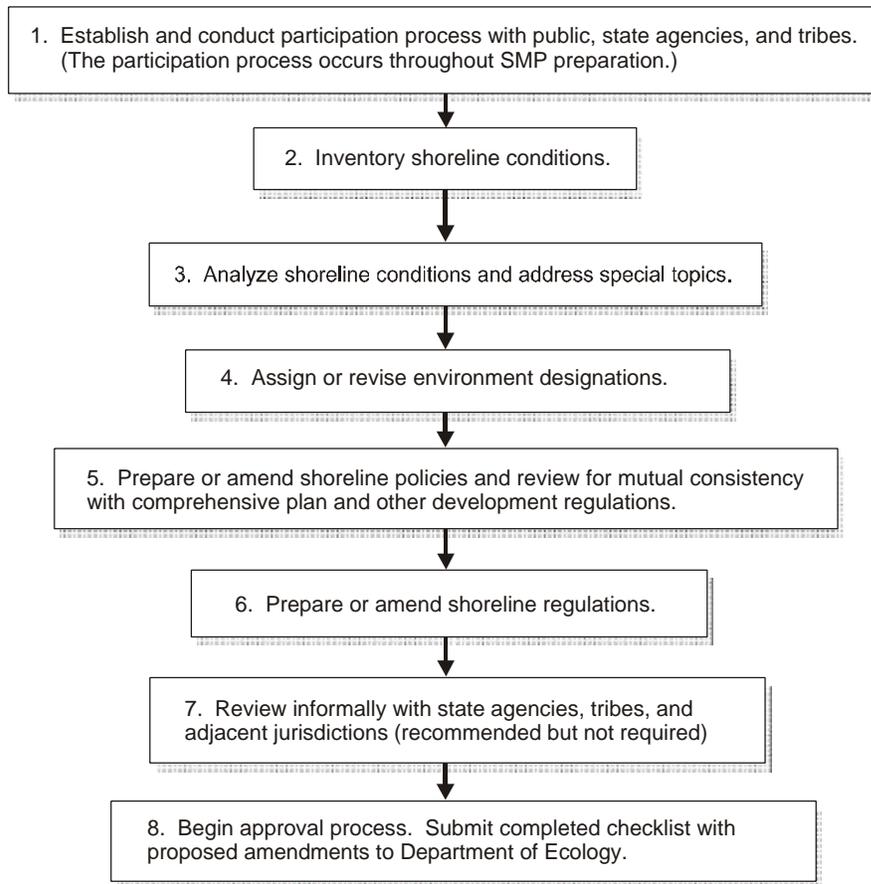


Figure 4. Steps in preparing comprehensive shoreline master program amendments. (This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

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. The department will send completed checklists to other resource agencies and affected Indian tribes reviewing the master program.

(b) Participation process.

Establish a public and intergovernmental participation process.

(i) Public participation.

RCW 90.58.130 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.

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. If a local committee or other group is appointed to advise the amendment process, local governments shall ensure that that body represents the full range of interests of all citizens within the local jurisdiction.

(ii) Communication with state agencies.

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

(iii) Communication with affected Indian tribes.

Prior to undertaking substantial work, local governments shall notify affected Indian tribes to identify tribal interests, relevant tribal efforts, available

information and methods for coordination and input. Contact the individual tribes or coordinating bodies, such as the Northwest Indian Fisheries Commission, for a list of affected Indian tribes to be notified.

(c) Inventory shoreline conditions.

Gather and incorporate all pertinent and available information, existing inventory data and materials from state agencies, affected Indian tribes, watershed management planning, and other appropriate sources. Ensure that, whenever possible, inventory methods and protocols are consistent with those of neighboring jurisdictions and state efforts. Map inventory information at an appropriate scale.

Part IV of this chapter requires that several shoreline issues, such as critical area protection, vegetation management, and shoreline stabilization, be addressed on a comprehensive basis to achieve properly functioning condition. To accomplish this requires an inventory that is sufficiently comprehensive to characterize the shoreline ecosystems and sufficiently detailed to provide baseline information for monitoring and adaptive management.

The preferred method for local governments to accomplish a detailed, comprehensive inventory of ecological conditions is to participate in an interjurisdictional statewide, regional, or watershed-based inventory that, at a minimum, meets the requirements of this section. If such an inventory is being conducted to improve resource management efforts, local governments preparing master program amendments should work with the applicable state agencies and affected Indian tribes to determine the level of detail, methodology, and cooperative steps necessary to provide a baseline for monitoring purposes.

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.

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.

Collect and analyze 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.

- (ii) Critical areas, including wetlands, aquifer recharge areas, fish and wildlife conservation areas, geologically hazardous areas, and frequently flooded areas, as required by RCW 36.70A.170. See also WAC 173-26-320 (2) and (3).
- (iii) Degraded areas and sites with potential for ecological restoration.
- (iv) Areas of special interest, such as priority habitats, rapidly developing waterfronts, clean-up 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 bank full width limits, 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 and develop strategies to collect this information.
- (ix) If the shoreline is rapidly developing or subject to substantial human changes such as clearing and grading, past and current records or historical aerial photographs may be necessary to identify cumulative impacts, such as bulkhead construction, intrusive development on priority habitats, and conversion of harbor areas to 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.

For those shorelines that affect T&E species, the inventory information shall establish baseline conditions for the items listed below:

Natural:

Physical:

- Location and extent of populations of T&E species
- Drift cells
- Direction of littoral drift (primary)
- Sediment accretion areas (marine and riverine)
- Sediment transport zones (marine and riverine)
- Erosional zones and "feeder" bluffs
- Geological hazard areas
- Wave energy or fetch
- Intertidal substrate description
- Shallow subtidal (-10 feet MLLW) substrate description
- Channel migration zones
- Pool/riffle ratios
- Flood plains
- Ground water upwellings or springs
- Hydric soils

Biological:

Forage fish spawning and holding areas
Shellfish areas (both certified and uncertified)
Eelgrass beds
Algae and kelp beds
Spit berm vegetation (gravelly and sandy soils)
Condition of riverine vegetation (native and nonnative) age and width
Submerged and emergent vegetation
Wetlands (associated and isolated), including salt marsh areas
Salmon and bull trout spawning, rearing, feeding, and migration areas
Location, condition, and species diversity of marine riparian vegetation

Altered Conditions:

Land use:

Zoning density (units per acre)
Single-family residences and appurtenant structures
Agricultural structures and practices
Aquacultural practices
Industrial complexes, outfalls, and appurtenant structures
Commercial buildings and appurtenant structures
Bulkheads and shore hardening, including levees and dikes
Filled and dredged areas
Docks, piers, and other over-water structures
Storm water outfalls
Sewer outfalls
Roads, railroad facilities, and bridges within shoreline jurisdiction
Extent of impermeable surfaces
Identified contaminated sediments
Tide gates, ditches, diversions, culverts, and barriers to wildlife migration
Utilities
Shoreline designations
Land use overlays
Development within channel migration zones

For those items inventoried for protection and restoration of habitat for T&E species, document the information at a scale sufficiently detailed to be able to identify changing conditions over time. Washington state resource agencies have inventory information available for most items. Contact the department for access to inventory records.

(d) Analyze shoreline issues of concern.

To implement policies of the Shoreline Management Act and ensure properly functioning condition for listed T&E species, analyze shoreline conditions based on information gathered in (c) of this subsection and address special topics. Before establishing specific master program provisions, local governments shall perform analysis and planning tasks necessary to ensure effective shoreline management provisions, addressing the topics below, where applicable.

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

Prepare a characterization of shoreline ecological systems. These systems include riverine, lacustrine, marine and wetland systems as listed in WAC 173-26-020. The characterization consists of three steps:

(A) Identify which of the ecosystem-wide processes and ecological functions listed in WAC 173-26-020 apply within shoreline jurisdiction and

identify which have been significantly altered and which may be missing or significantly impacted;

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

Local governments shall ensure that master program provisions protect the shoreline processes within the subject jurisdiction that are critical to creating and sustaining properly functioning condition and other ecological functions. To achieve this, the level of resource protection must account for risks to the environment and cumulative impacts from development allowed by the master program. Local governments shall use this analysis to prepare master program provisions as described in WAC 173-26-300 (3)(g), to protect and to contribute to the restoration of the ecosystem-wide processes and individual ecological functions on a comprehensive basis over time. This does not necessarily require that each development or action on the shoreline individually improve ecological functions, provided PFC for T&E species is not degraded.

For shoreline areas that affect T&E species, the ecosystem characterization shall include an identification of those functions and processes limiting the sustainability and recovery of those species. This analysis should be done for discrete reaches or shoreline segments of differing characteristics. It shall be sufficiently detailed to determine the current performance of shoreline functions relative to properly functioning condition for T&E species. The

analysis shall identify those master program provisions necessary to attain properly functioning condition. Local governments shall use scientific and technical information and should consult with department technical assistance materials and work with federal, state, and local resource agency teams and affected Indian tribes when analyzing ecological conditions and their implications for priority species' survival.

(ii) Shoreline use analysis and priorities.

Conduct an analysis to determine the future demand for shoreline space and the methods to resolve potential use conflicts. Characterize current shoreline use patterns and projected trends to ensure a balance of uses consistent with chapter 90.58 RCW and WAC 173-26-300 (2)(d).

If the jurisdiction includes a harbor area or urban waterfront with intensive uses or significant development issues, work with the Washington state department of natural resources and port authorities to ensure consistency with harbor area statutes and regulations. Identify measures and strategies to encourage appropriate use of these shoreline areas while pursuing opportunities for ecological restoration.

(iii) Cumulative impacts.

At a minimum, local governments, with the assistance of state agencies, should project the ultimate allowed full build-out condition for existing and proposed master program provisions being considered. This assessment should include potential impacts due to all development, including current conditions and those uses not requiring a shoreline permit. Master programs should address cumulative adverse impacts caused by incremental development, such as residential bulkheads, residential piers, or runoff from newly developed properties, and shall include master program provisions as described in WAC 173-26-300 (3)(g), to assess, minimize, and mitigate cumulative impacts.

For shorelines that affect priority species, local governments shall prepare a biological evaluation of the full build-out condition allowed by the master program. The full build-out condition assumes the maximum impact of development permitted by the proposed master program. Where projected cumulative impacts are found to adversely affect ecological functions, adjust master program provisions to achieve the objectives stated in WAC 173-26-300 (2)(c), (d), and (e). Where projected cumulative impacts are found to adversely affect T&E species populations, master program provisions shall be adjusted so that there will be no cumulative significant ecological impacts to PFC at full build-out. At a minimum, the biological evaluation shall address the following:

- Impacts of shoreline stabilization and impacts to the near-shore habitat and critical aquatic habitats.
- Residential development.

- Over-water structures, including residential docks, and impacts to the near-shore habitat and critical aquatic habitats.
- Vegetation conservation and impacts to shoreline stability, water quality, and aquatic habitats.
- Control of exotic species.
- Water quality and quantity, including storm water runoff, discharges, hydrographic response, and pollutant levels.
- Impacts of forest and agricultural practices.

Cumulative impact analysis shall incorporate scientific and technical information. Local governments should consult with technical assistance materials for addressing cumulative impacts produced by the department.

(iv) Shorelines of statewide significance.

If the area contains shorelines of statewide significance, undertake the steps outlined in WAC 173-26-350.

(v) Public access.

Identify public access needs and opportunities within the jurisdiction and explore actions to enhance shoreline recreation facilities, as described in WAC 173-26-320(4).

(vi) Enforcement and coordination with other regulatory programs.

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

(vii) Water quality and quantity.

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

(viii) Vegetation conservation.

Identify how existing shoreline vegetation provides ecological functions and determine methods to ensure protection of those functions. Identify important ecological functions that have been degraded through loss of vegetation and feasible means to restore those functions. 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) Ecological restoration.

Where restoration of the shoreline is necessary for protection and restoration efforts for T&E species or management of priority species or habitats, local governments shall base restoration requirements on comprehensive restoration planning, using scientific and technical information that identifies specific sites, preferred methods, implementation incentives, requirements, and projects.

(x) Special area planning.

If the jurisdiction includes complex shoreline ecological issues, changing uses, or other unique features, the local government is encouraged to undertake special area planning. Special area planning 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.

(e) 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, including those necessary to maintain properly functioning condition for T&E species.

Review the environment designations for mutual consistency with comprehensive plan land use designations as indicated in WAC 173-26-310(3).

In determining the boundaries and classifications of environment designations, adhere to the priorities in WAC 173-26-300 (2)(d).

In accordance with WAC 173-26-310, environment designation policies and regulations shall identify and protect ecologically intact shorelines that are largely free of human influence, prevent further loss of ecological functions on a comprehensive basis, and identify urban areas suitable for water-dependent uses and ecological rehabilitation.

In the master program environment designation provisions and boundaries, identify the areas where structural shoreline stabilization measures generally will be prohibited or greatly restricted to avoid damage to natural shoreline functions, those areas where restoration of natural shoreline processes will be encouraged or required,

and those areas where shoreline stabilization may be appropriate because of the potential for property damage or the needs of water-dependent uses.

(f) Establish shoreline policies.

Address all of the elements listed in RCW 90.58.100(2). Review 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). If the shorelines affect T&E species, include a policy in the master program calling for properly functioning condition for the T&E species and review the comprehensive plan for consistency.

(g) Prepare shoreline regulations.

Prepare shoreline regulations based on the analyses described in this section and consistent 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 stringent shoreline master program provisions should be to avoid irreparable damage 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 sufficiently restrictive to ensure that the resource is protected. Shorelines that affect T&E species shall be afforded special consideration to maintain or contribute to the restoration of properly functioning condition.

The regulations shall be sufficient to address cumulative impacts as described in WAC 173-26-300 (2)(e) and (3)(d)(iii).

(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 173-26-300 (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. The checklist will include a monitoring and adaptive management program described in WAC 173-26-300 (2)(b).

NEW SECTION

WAC 173-26-310 Environment designation system.

(1) Applicability.

This section applies to the establishment of environment designation boundaries and provisions as described in WAC 173-26-290 (1)(d).

(2) Basic requirements for environment designation classification and provisions.

Master programs shall contain a system to classify shoreline areas into specific environment designations. This classification system shall be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through comprehensive plans. Each master program's classification system shall be consistent with that described in WAC 173-26-310 (4) and (5) unless there is a compelling reason, based on the act and this chapter, to the contrary and the alternative proposed provides equal or better implementation of the act, particularly with respect to protection of T&E species.

An up-to-date and accurate map of the shoreline area delineating the environment designations and their boundaries shall be prepared and maintained in the local government office that administers shoreline permits. If it is not feasible to accurately designate individual parcels on a map, the master program text shall include a clear basis for identifying the boundaries, physical features, explicit criteria, or "common" boundary descriptions to accurately define and distinguish the environments on the ground.

To facilitate consistency with land use planning, local governments planning under chapter 36.70A RCW are encouraged to illustrate shoreline designations on the comprehensive plan Future Land Use Map as described in WAC 365-195-300 (2)(d).

The map should clearly illustrate what environment designations apply to all lands in Shoreline Management Act jurisdictional limits including flood plains, river deltas, and associated wetlands.

The master program should also make it clear that in the event of a mapping error, the jurisdiction will rely upon common boundary descriptions and the criteria contained in chapter 173-22 WAC pertaining to wetlands, as amended, rather than the incorrect or outdated map.

The map and the master program should note that all areas within shoreline jurisdiction that are not mapped and/or designated are automatically assigned a "rural conservancy" designation, or "urban conservancy" designation if within a municipality or urban growth area, until the shoreline can be redesignated through a master program amendment.

The following diagram summarizes the components of the environment designation provisions.

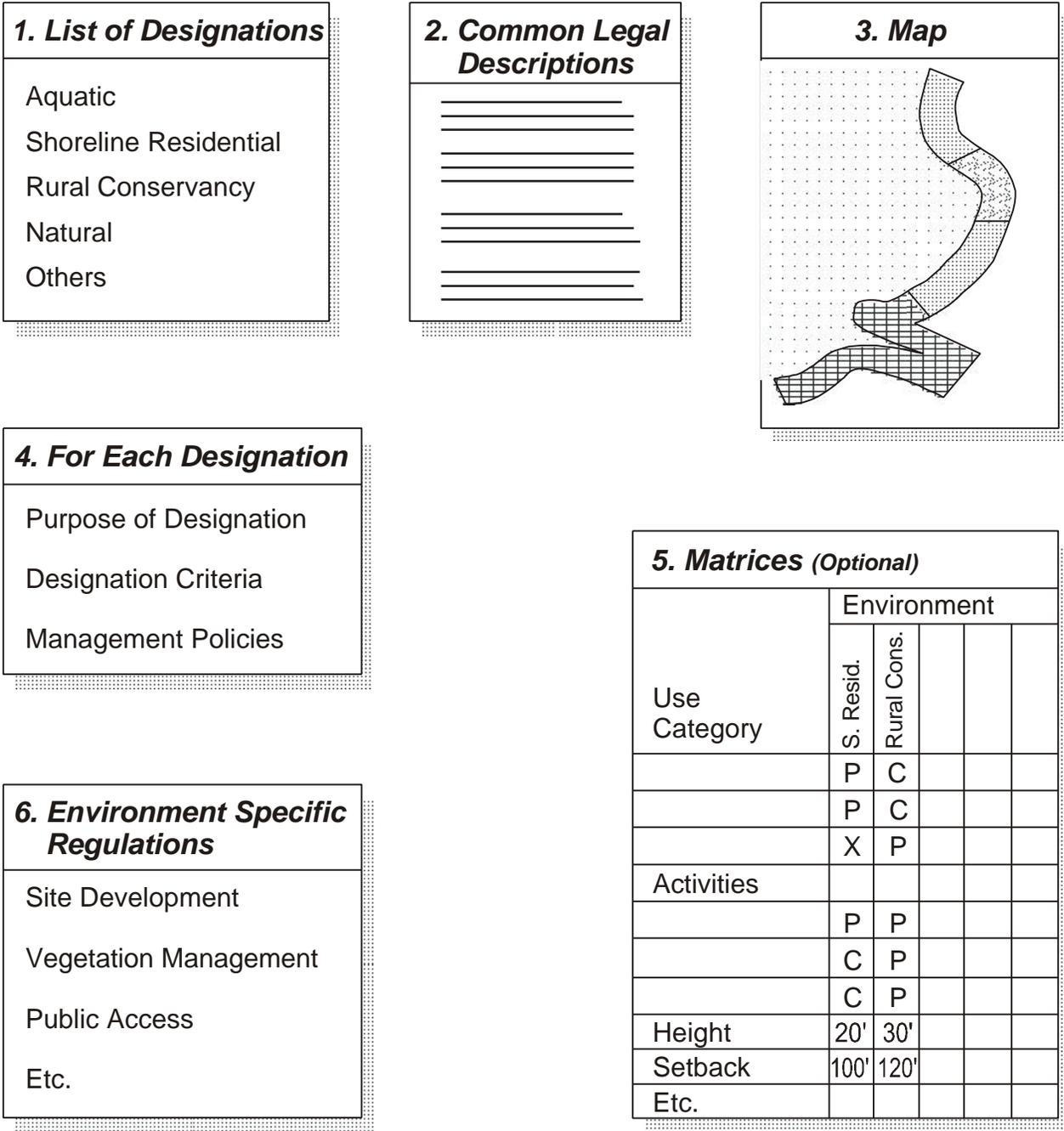


Figure 5. Diagram summarizing the components of the environment designation provisions. (This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

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

(a) Purpose statement.

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

(b) Classification criteria.

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

(c) Management policies.

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

(d) Regulations.

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

- (i) Regulations to maintain or restore properly functioning condition for T&E species relevant to each designation;
- (ii) Preferred shoreline use requirements;
- (iii) Types of shoreline uses permitted, conditionally permitted, and prohibited;
- (iv) Building or structure height and bulk limits, setbacks, maximum density or minimum frontage requirements, and site development standards; and
- (v) Native vegetation conservation, shoreline stabilization, parking, signs, public access, and other topics not covered in general use regulations.

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

As noted in WAC 173-26-290 (2)(a), RCW 90.58.340 requires that policies for lands adjacent to the shorelines be consistent with the Shoreline Management Act, implementing rules, and the applicable master program. Conversely, local comprehensive plans constitute the underlying framework within which master program provisions should fit. The Growth Management Act, where applicable, designates shoreline master program policies as an element of the comprehensive plan and requires that all elements be internally consistent. Chapter 36.70A RCW also requires development regulations to be consistent with the comprehensive plan.

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

(a) Provisions not precluding one another.

The comprehensive plan provisions and shoreline environment designation provisions should not preclude one another. To meet this criteria, the provisions of both the comprehensive plan and the master program must be able to be met. The comprehensive plan and the master program should make specific provisions for resolving any apparent inconsistency. For example, a local comprehensive plan may identify a large tract of land with a stream corridor running through it as suitable for a new residential development. The comprehensive plan and the master program may be consistent even if the stream is designated "natural," because these two objectives could be achieved in a number of ways: Development could be restricted to two hundred feet landward of the ordinary high-water mark or the stream corridor could be dedicated as a passive park and trail system. Further, when considered together and applied to any one piece of property, the master program use policies and regulations and the local zoning or other use regulations should not conflict in a manner that all viable uses of the property are precluded. For example, if the property is designated as within the shoreline residential environment, it should not be zoned exclusively for industrial use.

(b) Use compatibility.

Land use policies and regulations should protect preferred shoreline uses from being impacted by incompatible uses. The intent is to prevent water-oriented uses, especially water-dependent uses, from being restricted on shoreline areas because of impacts to nearby nonwater-oriented uses. To be consistent, master programs, comprehensive plans, and development regulations should prevent new uses that are not compatible with preferred uses from locating where they may restrict preferred uses or development. For example, new residential development should not be allowed near shoreline heavy industrial areas unless the impacts can be mitigated through design standards applied to the new residential development.

(c) Sufficient infrastructure.

Infrastructure and services provided in the comprehensive plan should be sufficient to support allowed shoreline uses. Shoreline uses shall not be allowed where the comprehensive plan does not provide sufficient roads, utilities, and other services to support them. For example, high-density residential development and industrial uses shall not be allowed unless the comprehensive plan makes provision for needed infrastructure and services at appropriate locations. However, supporting infrastructure is not a justification for more intense development if that development causes significant ecological impact to habitat for T&E species.

In delineating environment designations, local governments shall ensure that existing shoreline ecological functions and properly functioning condition for T&E species can be protected and degraded shoreline ecological functions restored with the proposed pattern and intensity of urban growth. Infrastructure plans must also be mutually consistent with shoreline designations. Where they do exist, utility services routed through shoreline areas shall not be a sole justification for more intense development.

(4) Recommended environment designation classifications.

The recommended classification system consists of six basic environments: "High-intensity," "shoreline residential," "urban conservancy," "rural conservancy," "natural," and "aquatic." Local governments shall assign all shoreline areas an environment designation consistent with WAC 173-26-310 (4) and (5). For the purposes of WAC 173-26-310 (4) and (5), a proposed master program environment designation system is consistent with recommended designations if a given shoreline segment with the characteristics described in WAC 173-26-310 (5)(a) through (f) is assigned an environment designation with purpose, management policies, and standards to implement those policies consistent with the corresponding environment designation in WAC 173-26-310 (4)(a) through (f). For example, shoreline areas meeting the criteria in WAC 173-26-310 (5)(d) should be assigned an environment designation with purpose and management policies of the "high-intensity" environment.

Local governments may establish different designations, provided they are consistent with this chapter. For example, a local government wishing to differentiate between "conservancy" shorelines used for park purposes and those for habitat restoration might establish "conservancy-park" and "conservancy-habitat" designations, each with separate purposes, criteria, policies, and use provisions. Or, a local government may wish to set site-specific standards for pier and dock construction in more sensitive aquatic areas and restrict aquaculture in harbor areas by establishing "aquatic-conservancy" and "aquatic-harbor" environments, each with different allowable uses and development standards.

Local governments may use "parallel environments" where appropriate. Parallel environments divide shorelands into different sections generally running parallel to the shoreline or along a physical feature such as a bluff or railroad right of way. Such environments may be useful, for example, to accommodate both resource protection near the shoreline and development opportunities further from the shoreline. Where parallel environments occur, development allowed in one must not preclude the maintenance or restoration of ecological functions or properly functioning condition for T&E species.

Local governments may retain their current environment designations provided they demonstrate that existing environment designation provisions are consistent with this chapter.

(a) "Natural" environment.

(i) Purpose.

The purpose of the "natural" environment is to protect and restore 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 restrictions on the intensities and types of uses permitted to maintain the ecological functions and ecosystem-wide processes.

(ii) Management policies.

- (A) Any use that would substantially degrade the ecological functions, particularly PFC for T&E species, or natural character of the shoreline area shall be prohibited.
- (B) The following new uses shall not be allowed in the "natural" environment:
 - Residences (except as noted below).
 - Commercial uses.
 - Industrial uses.
 - Agriculture that involves tilling the earth or clearing of native plant communities.
 - Nonwater-oriented recreation.
 - Roads, utility corridors, and parking areas that can be located outside of "natural" designated shorelines.

However, limited single-family residential development may be allowed as a conditional use within the "natural" environment if such shoreline master program provisions result in an equal or greater level of ecological functions and properly functioning condition.

- (C) Commercial forestry may be allowed as a conditional use in the "natural" environment provided it meets the conditions of the State Forest Practices Act and its implementing rules.
- (D) 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.
- (E) Do not allow new development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions or maintain PFC for T&E species. Do not allow the subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions. That is, each new property parcel must be able to support its intended development without significant ecological impacts to the shoreline or to the vegetation necessary to maintain ecological functions.

(b) "Rural conservancy" environment.

(i) Purpose.

The purpose of the "rural conservancy" environment is to protect, conserve, and restore ecological functions, existing natural resources, and valuable historic and cultural areas in order to achieve ecological protection, sustain resource use, achieve natural flood plain processes, and provide recreational opportunities. Examples of uses that are appropriate in a "rural conservancy" environment include low-impact outdoor recreation uses, timber harvesting on

a sustained-yield basis, agricultural uses, aquaculture, low-intensity residential development consistent with the local comprehensive plan's rural element and chapter 36.70A RCW, and other related low-intensity uses.

(ii) Management policies.

- (A) Uses in the "rural conservancy" environment should be limited to those which are nonconsumptive (i.e., do not deplete over time) of the shoreline area's physical and biological resources and uses of a nonpermanent nature that do not substantially degrade ecological functions, PFC for T&E species, or the rural or natural character of the shoreline area. Shoreline habitat restoration and environmental enhancement are preferred uses.

Except as noted below, commercial and industrial uses should not be allowed. Agricultural practices, commercial forestry, and aquaculture when consistent with provisions of this chapter may be allowed. Nonconsumptive, water-oriented commercial and industrial uses may be permitted in the limited instances where those uses have located in the past or at unique sites in rural communities that possess shoreline conditions and services to support the development.

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

- (B) Developments and uses that would substantially degrade or permanently deplete the physical or biological resources of the area or that preclude maintenance or attainment of properly functioning condition shall not be allowed.
- (C) Construction of new structural shoreline stabilization and flood control works shall not be allowed except where there is a documented need to protect an existing structure or ecological functions and mitigation is applied, consistent with WAC 173-26-330. New development shall be designed and located to preclude the need for such work.
- (D) For jurisdictions planning under the Growth Management Act, new residential development in the "rural conservancy" environment shall be consistent with the comprehensive plan rural element and with RCW 36.70A.070(5). Residential development standards shall prevent significant cumulative adverse impacts to the shoreline environment, including those that prevent properly functioning condition for T&E species. If existing development does not conform to rural element provisions, then the master program should address nonconforming uses in ways that restore ecological functions over time.

For jurisdictions not planning under the Growth Management Act, development shall be limited to a maximum of ten percent total impervious surface area within the lot or parcel lying in shoreline jurisdiction, unless an alternative standard is developed based on scientific information that meets the provisions of this chapter and protects shoreline ecological functions and properly functioning condition.

Master programs for jurisdictions not planning under the Growth Management Act may allow greater lot coverage to allow development of lots legally created prior to the adoption of a master program prepared under these guidelines. In these instances, master programs shall require that lot coverage is minimized, that impacts are mitigated according to the mitigation sequence defined in WAC 173-26-020, and that development of lots created after the adoption of a master program prepared under these guidelines does not exceed ten percent impervious surface area within shoreline jurisdiction.

(E) New shoreline stabilization, flood control measures, vegetation removal, and other shoreline modifications shall be designed and managed to ensure that the natural shoreline functions are protected and restored over time. Shoreline ecological restoration should be required of new development or redevelopment where the shoreline ecological functions have been degraded.

(c) "Aquatic" environment.

(i) Purpose.

The purpose of the "aquatic" environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark by managing uses and ensuring that properly functioning condition and shoreline ecological functions are protected and restored over time.

(ii) Management policies.

- (A) Provisions for the "aquatic" environment shall be directed towards maintaining and restoring PFC for T&E species.
- (B) Allow new over-water structures only for water-dependent uses or public access that will not preclude attainment of PFC for T&E species or ecological restoration.
- (C) The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
- (D) 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.

- (E) All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
- (F) Uses that cause significant ecological impacts to critical saltwater and freshwater habitats shall not be allowed. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts shall be mitigated according to the sequence defined in WAC 173-26-020.
- (G) Shoreline uses and modifications shall be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

(d) "High-intensity" environment.

(i) Purpose.

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

(ii) Management policies.

- (A) In regulating uses in the "high-intensity" environment, first priority shall be given to water-dependent uses. Second priority should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should not be allowed except as part of mixed-use developments or existing developed areas supporting water-dependent uses. Nonwater-oriented uses may also be allowed in limited situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline. Such specific situations should be identified in shoreline use analysis or special area planning, as described in WAC 173-26-300 (3)(d).

If an analysis of water-dependent use needs as described in WAC 173-26-300 (3)(d) demonstrates the needs of existing and envisioned water-dependent uses for the planning period are met, then provisions allowing for a mix of water-dependent and nonwater-dependent uses may be established. If those shoreline areas also provide ecological functions, particularly properly functioning condition for T&E species, apply standards to prevent significant ecological impacts to those functions.

- (B) Full utilization of existing urban areas should be achieved before further expansion of intensive development is allowed, provided that as development occurs, ecological functions are maintained or restored. Reasonable long-range projections of regional economic need should guide the amount of shoreline designated "high-intensity." However,

nonwater-oriented uses shall not be considered when determining full utilization of urban waterfronts.

- (C) New development should protect and restore shoreline ecological functions, with particular emphasis on the attainment of properly functioning condition for T&E species. Where applicable, new development shall include environmental cleanup and restoration of the shoreline in accordance with state and federal requirements.
- (D) Where feasible, visual and physical public access should be required as provided for in WAC 173-26-320 (4)(d).
- (E) Aesthetic objectives should be actively implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers. Local governments may implement this guideline by adopting a master program policy for aesthetic objectives and implementing the policy through other development regulations, such as sign or design review ordinances.

(e) "Urban conservancy" environment.

(i) Purpose.

The purpose of the "urban conservancy" environment is to protect and restore ecological functions, including properly functioning condition for T&E species and ecological functions in urban and developed settings, while allowing a variety of water-oriented uses.

(ii) Management policies.

- (A) During development and redevelopment, efforts shall be taken to restore PFC for T&E species and other ecological functions. Shoreline restoration and public access should be required of all nonwater-dependent development on previously developed shorelines.
- (B) Standards shall be established for shoreline stabilization measures, vegetation conservation as described in WAC 173-26-320(5), water quality, and shoreline modifications within the "urban conservancy" designation to ensure that new development maintains and contributes to the restoration of ecological functions and properly functioning condition for T&E species.
- (C) Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
- (D) Water-oriented uses should be given priority over nonwater-oriented uses. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.

(f) "Shoreline residential" environment.

(i) Purpose.

The purpose of the "shoreline residential" environment is to accommodate residential development and appurtenant structures that are consistent with this chapter and the protection and restoration of ecological functions and PFC for T&E species. An additional purpose is to provide appropriate public access and recreational uses.

(ii) Management policies.

(A) Development should be permitted only in those shoreline areas where adequate setbacks or buffers are possible to protect ecological functions, where there are adequate access, water, sewage disposal, and utilities systems and public services available, and the environment can support the proposed use in a manner which protects or restores the ecological functions.

(B) Densities or minimum frontage width standards in the "shoreline residential" environment shall be set 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.

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

(C) Development standards for setbacks or buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be established to protect and, where significant ecological degradation has occurred, contribute to the restoration of properly functioning condition and other ecological functions over time.

(D) Multifamily and multilot residential and recreational developments should provide public access and joint use for community recreational facilities.

(E) Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.

(F) Commercial development should be limited to water-oriented uses.

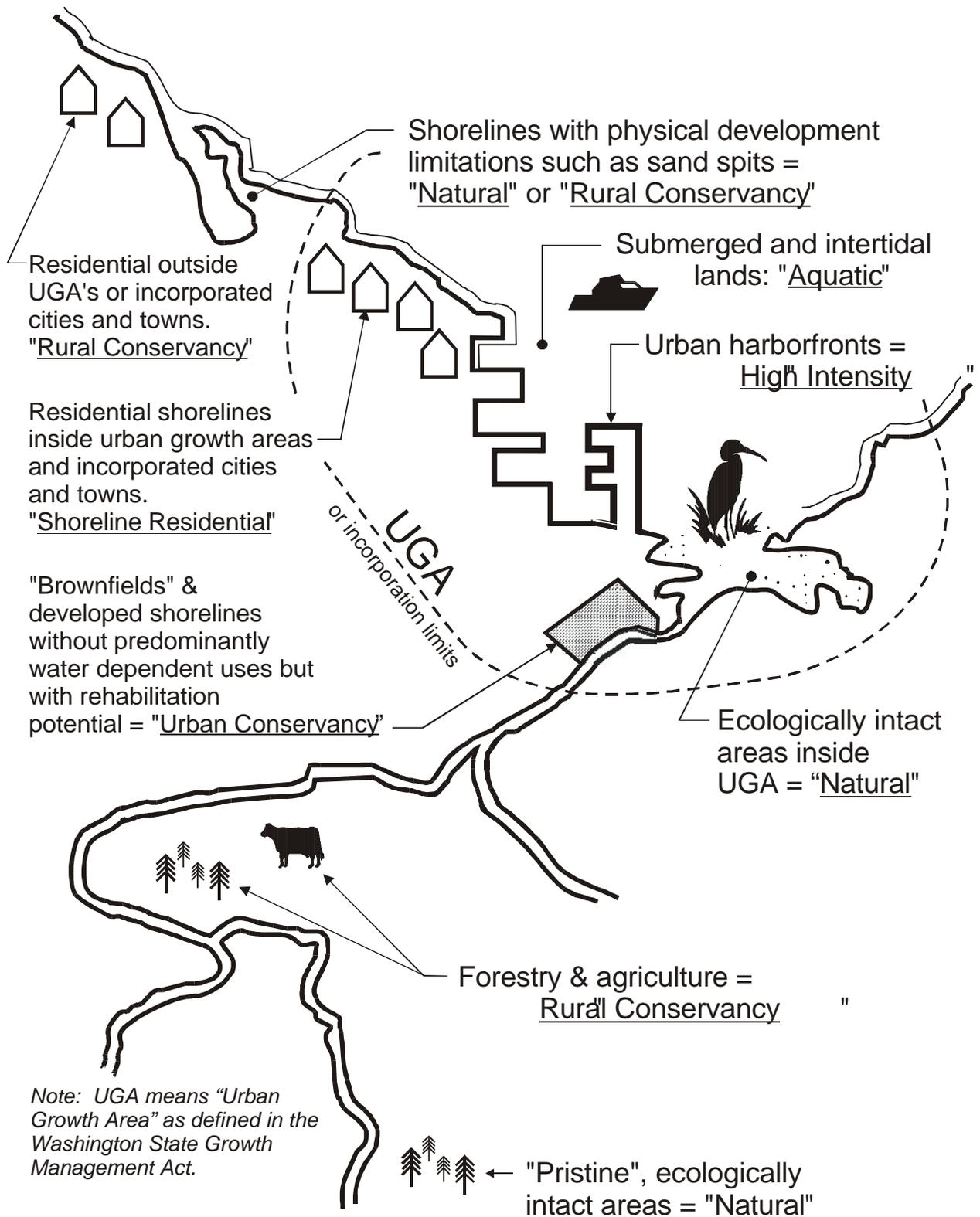


Figure 6. Schematic illustration of typical environment designations.
 (This is for illustration purposes only and does not supplement or add to the language in the chapter text.)

(5) Criteria for assigning environment designation boundaries.

Local governments shall assign shoreline environment designations (environments) to all shoreline areas consistent with the criteria in (a) through (f) of this subsection.

(a) "Natural" environment criteria.

Assign a "natural" environment designation to shoreline areas if any of the following characteristics apply:

- (i) The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;
- (ii) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest;
- (iii) The shoreline is unable to support new development or uses without significant ecological impacts to ecological functions or risk to human safety; or
- (iv) The shoreline is especially sensitive to human disturbance and important for the conservation and recovery of T&E species.

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

Local governments are encouraged to designate parallel environments as "natural" in order to achieve a higher level of protection for T&E species. For example, an undisturbed area between a shoreline and a roadway may be designated as "natural" even if the area landward of the roadway is no longer ecologically intact.

(b) "Rural conservancy" environment criteria.

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

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

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

Lands designated as "mineral resource lands" pursuant to RCW 36.70A.170 and WAC 365-190-070 may be assigned a subdesignation of "rural conservancy" environment that allows mineral extraction, provided the provisions for that designation conform to WAC 173-26-340 (3)(h) and this chapter and protect ecological functions.

(c) "Aquatic" environment criteria.

Assign an "aquatic" environment designation to lands waterward of the ordinary high-water mark. Additionally, local governments may assign an "aquatic" environment designation to wetlands.

(d) "High-intensity" environment criteria.

Assign a "high-intensity" environment designation to shoreline areas within incorporated municipalities, urban growth areas, and industrial or commercial "rural areas of more intense development," as described by RCW 36.70A.070, if they currently support or are suitable and planned for high-intensity water-dependent uses related to commerce, transportation, or navigation.

(e) "Urban conservancy" environment criteria.

Assign an "urban conservancy" environment designation to shoreline areas appropriate and planned for development that are not generally suitable for water-dependent uses and that lie in incorporated municipalities, urban growth areas, or commercial or industrial "rural areas of more intense development" if any of the following characteristics apply:

- (i) They are 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;
- (ii) They are flood plains or other areas that should not be more intensively developed;
- (iii) They have potential for ecological restoration;
- (iv) They retain important ecological functions, even though partially developed;
or
- (v) They have the potential for development that incorporates ecological restoration. Lands designated as "mineral resource lands" pursuant to RCW 36.70A.170 and WAC 365-190-070 may be assigned a subdesignation of "urban conservancy" environment that allows mineral extraction, provided the provisions for that designation conform to WAC 173-26-340 (3)(h) and this chapter and protect ecological functions.

(f) "Shoreline residential" environment criteria.

Assign a "shoreline residential" environment designation to shoreline areas inside urban growth areas, as defined in RCW 36.70A.110, incorporated municipalities, "rural areas of more intense development," or "master planned resorts," as described in RCW 36.70A.360, if they are predominantly single-family or multifamily residential development or are planned and platted for residential development.

NEW SECTION

WAC 173-26-320 General master program provisions.

(1) Archaeological and historic resources.

(a) Applicability.

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

(b) Principles.

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

(c) Standards.

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

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

(2) Critical areas.

(a) Applicability.

The provisions of this section shall apply to all critical areas, as defined by chapter 36.70A RCW that lie within shoreline jurisdiction. Implementation of RCW 90.58.020 includes the management of critical areas in the shoreline in order to protect human health and safety and the state's natural resources. RCW 36.70A.030 defines critical areas as stated below:

(5) "Critical areas" include the following areas and ecosystems:

(a) Wetlands;

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

See WAC 365-190-080 for further definition of critical area categories and management policies.

(b) Principles.

Local master programs shall implement the following principles:

- (i) Protect against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life. Promote and enhance the public interest by protecting and restoring ecological functions and ecosystem-wide processes. Take necessary measures to help attain the protection and restoration of T&E species.
- (ii) In addressing issues related to critical areas, use scientific and technical information, as described in WAC 173-26-300 (2)(a), and include best available science, as provided for in chapter 36.70A RCW. When science is lacking, base decisions related to the protection of T&E species on an approach that minimizes risk to those species and places the highest priority on their protection and restoration.
- (iii) Where necessary for the protection of the ecological functions of a critical area, including properly functioning condition for T&E species, review provisions outside the designated critical area pursuant to RCW 90.58.340.
- (iv) In protecting and restoring critical areas within shoreline jurisdiction, integrate the full spectrum of planning and regulatory measures, including the comprehensive plan, interlocal watershed plans, local development regulations, and state, tribal, and federal programs. For shoreline areas affecting T&E species, make full use of such provisions to maintain or achieve properly functioning condition.
- (v) The objective of shoreline management provisions for critical areas shall be the protection of existing ecological functions and ecosystem-wide processes and restoration of degraded areas to upgrade ecological functions and ecosystem-wide processes. Appropriate systems to address this goal include a littoral drift cell for marine waters or a watershed sub-basin for freshwaters. Local governments should accomplish this on a comprehensive basis, as described in WAC 173-26-300 (3)(d)(i), (e), (f) and (g).
- (vi) Promote human uses and values, such as aesthetic values, provided they do not adversely impact ecological functions.
- (vii) Implement, where applicable and consistent with the objectives of the Shoreline Management Act, the minimum guidelines in WAC 365-190-080.

(c) Standards.

Shoreline master programs shall adhere to the following standards, unless it is demonstrated through scientific and technical information and best available science that an alternative approach provides better resource protection. Provisions for frequently flooded areas are included in WAC 173-26-320(3). When preparing master program provisions for critical areas, local governments shall include best available science, as defined in RCW 36.70A.172(1), and use scientific and technical information, as provided for in WAC 173-26-300 (2)(a).

(i) Wetlands.

(A) Wetland use regulations.

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

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

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

(B) Wetland rating or categorization.

Wetlands shall be categorized based on the rarity, irreplaceability, or sensitivity to disturbance of a wetland and the functions the wetland

provides. Local governments should either use the Washington State Wetland Rating System, Eastern or Western Washington version as appropriate, or they should develop their own regionally specific, scientifically based method for categorizing wetlands. Wetlands should be categorized to reflect differences in wetland quality and function in order to tailor protection standards appropriately. Higher quality/functioning wetlands should receive higher levels of protection. Wetland classifications, together with protective standards, for the specific classifications shall be sufficient to protect or restore ecological functions and PFC for T&E species. A wetland categorization method is not a substitute for a function assessment method, where detailed information on wetland functions is needed.

(C) Alterations to wetlands.

Master program provisions addressing alterations to wetlands shall be consistent with the policy of no net loss of wetland area and functions, wetland rating, scientific and technical information, and the mitigation priority sequence defined in WAC 173-26-020.

(D) Buffers.

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

(E) Mitigation.

Master programs shall contain wetland mitigation requirements that are consistent with the definition of mitigation in WAC 173-26-020 and which are based on the wetland rating.

(F) Compensatory mitigation.

Compensatory mitigation shall be allowed only after mitigation sequencing is applied.

Requirements for compensatory mitigation must include provisions for:

- (I) Mitigation replacement ratios or a similar method of addressing the following:
 - The risk of failure of the compensatory mitigation action;
 - The length of time it will take the compensatory mitigation action to adequately replace the impacted wetland functions; and

- The gain or loss of the type, quality and quantity of the ecological functions of the compensation wetland as compared with the impacted wetland.
- (II) Establishment of performance standards for evaluating the success of compensatory mitigation actions;
- (III) Establishment of long-term monitoring and reporting procedures to determine if performance standards are met; and
- (IV) Establishment of long-term protection and management of compensatory mitigation sites.

Unless it is demonstrated that a higher level of ecological functions contributing to PFC for T&E species would result from an alternate approach, compensatory mitigation for ecological functions necessary for PFC for T&E species must be either in kind and on-site, or in kind and within the same stream reach or drift cell. Compensatory mitigation for functions necessary for PFC for T&E species must be in place, with an approved performance monitoring program, prior to the authorized impacts occurring.

Credits from a state certified mitigation bank may be used to compensate for unavoidable impacts, in accordance with chapter 90.84 RCW and chapter 173-700 WAC, provided that the provisions of this section, compensatory mitigation are met.

(ii) Geologically hazardous areas.

Restrict new development in geologically hazardous areas. Consult minimum guidelines for geologically hazardous areas, WAC 365-190-080(4).

Do not allow new development or the creation of new lots that would cause foreseeable risk from geological conditions to people or ecological functions during the life of the development. Allow development on or adjacent to a geologically hazardous area only if the results of a geotechnical report indicate that such development is safe and will not require shoreline stabilization or channel modification. Allowable development must incorporate adequate drainage control to prevent erosion or significant ecological impacts.

Do not allow new development that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed water-dependent uses where no alternative locations are available and significant ecological impacts are mitigated. The stabilization measures shall conform to WAC 173-26-330.

(iii) Critical saltwater habitats and shorelands associated with marine waters and estuaries.

(A) Applicability.

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

(B) Principles.

Master programs shall implement saltwater habitat management planning to protect and restore critical saltwater habitats and properly functioning condition for T&E species by establishing coordinated master program policies and regulations. Local governments shall review relevant comprehensive plan policies and development regulations for shorelands and adjacent lands to achieve consistency as directed in RCW 90.58.340. The management planning shall incorporate the participation of state resource agencies and affected Indian tribes and serve as the basis for master program provisions. Local governments should base management planning on information provided by state resource agencies and affected Indian tribes unless they demonstrate that they possess more accurate and reliable information.

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

- Available inventory and collection of necessary data regarding physical characteristics of the habitat, including upland conditions, and any information on species population trends;
- Terrestrial and aquatic vegetation;
- The level of human activity in such areas, including the presence of roads and level of recreational types (passive or active recreation may be appropriate for certain areas and habitats);
- Restoration potential;
- Tributaries and small streams flowing into marine waters;
- Dock and bulkhead construction, including an inventory of bulkheads serving no protective purpose;
- Conditions and ecological functions in the near-shore area;

- Uses surrounding the critical saltwater habitat areas that may negatively impact those areas, including permanent or occasional upland, beach, or over-water uses; and
- An analysis of what data gaps exist and a strategy for gaining this information.

The management planning shall address the following, where applicable:

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

Local governments, in conjunction with state resource agencies and affected Indian tribes, shall classify critical saltwater habitats and protect and restore seasonal ranges and habitat elements with which federal- and state-listed endangered, threatened, and priority species have a primary association.

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

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

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

(C) Standards.

Docks, bulkheads, bridges, fill, floats, jetties, utility crossings, and other human-made structures shall not intrude into or over critical saltwater habitats except as a conditional use for a water-dependent use or ecological restoration and when all of the conditions below are met:

- PFC for T&E species is protected or restored as determined in consultation with natural resource agencies and affected Indian tribes. The proponent of a structure over critical saltwater habitat must demonstrate that there will be no loss of ecological functions provided by the habitat and no threat to human health or safety upon completion of the project. The analysis demonstrating no loss must account for potential cumulative impacts and risks to the environment resulting from the proposed action;
- The public's need for such an action or structure is clearly demonstrated and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020;
- Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible;
- The project is designed to minimize its impacts on critical saltwater habitats and the environment;
- Significant ecological impacts will be mitigated through the mitigation sequence described in WAC 173-26-020; and
- The project is consistent with the state's interest in resource protection and species recovery.

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

(iv) Critical freshwater habitats, including riverine corridors and other freshwater fish and wildlife conservation areas.

(A) Applicability.

The following applies to master program provisions and shoreline management activities within shoreline jurisdiction affecting critical freshwater habitats, including streams, rivers, wetlands, and lakes, their associated channel migration zones, and flood plains.

(B) Principles.

Many ecological functions, including PFC for T&E species, of riverine corridors depend both on the continuity of the natural environment along the length of the shoreline and on the conditions of the surrounding lands on either side of the river channel. Significant damage to the environment, such as a polluting outfall, vegetation loss, or imperviousness within the watershed, can destroy ecological functions downstream. Likewise, gradual destruction or loss of the vegetation along the corridor or extensive flood plain development can raise water temperatures and alter hydrographic conditions, thereby making the corridor uninhabitable for priority species and susceptible to catastrophic flooding, droughts, and landslides. These conditions can also threaten human health, safety, and property. Therefore, effective management of riverine corridors depends on:

- (I) Planning, protecting, and restoring the length of the corridor from river headwaters to the mouth; and
- (II) Conservatively regulating the uses within shoreline jurisdiction, the stream channel, associated channel migration zone, wetlands, and the flood plain. Water quality and hydrological processes also depend upon subsurface flows through the adjacent hyporheic zone, surface water run-off, and ground water in lands outside the flood plain. For this reason, comprehensive watershed efforts are the most effective approach to corridor management.

Recognizing that long stretches of riverine shorelines have been altered or degraded from their natural condition, effective riverine management usually requires a two-part strategy of:

- Preventing damage to riverine shoreline areas that retain their ecological functions; and
- Restoring degraded riverine shoreline areas whenever feasible. Redevelopment activities along shorelines provide opportunities to achieve setbacks and ecological restoration.

Local governments shall base master program provisions for critical freshwater conservation areas on a comprehensive approach, as described in WAC 173-26-300 (3)(d)(i), (e), (f) and (g). As part of this comprehensive approach, local governments shall integrate categories of master program provisions, including those for shoreline stabilization, fill, vegetation conservation, water quality, flood hazard reduction, and specific uses, to protect human health and safety and to protect and restore the corridor's ecological functions and ecosystem-wide processes.

Applicable master programs shall contain provisions to protect and restore hydrologic connections between water bodies, water courses, and associated wetlands. For example, master programs should require that dikes, roads, or other structures, when allowed, be constructed or refitted

to allow the unrestricted natural flow of water between dry or braided channels, associated wetlands, the main river channel, and associated water bodies. Incentives should be provided to restore water connections that have been impeded by previous development.

Master program provisions for riverine corridors shall, where applicable, be based on the information from comprehensive watershed management planning, as indicated in WAC 173-26-300 (3)(c) and (d).

A natural channel configuration with features such as pools, off-channel habitat, vegetation, and refugia is especially important to T&E species. These habitat features depend upon natural channel formation, natural flood plain function, and unrestricted channel movement within the channel migration zone. Therefore, applicable master programs shall include provisions that prevent restrictions to channel movement within the channel migration zone and that contribute to achieving more natural channel characteristics on a comprehensive basis over time.

(C) Standards.

New structures, flood control measures, structural shoreline stabilization measures, significant vegetation removal, reconfiguration of the channel bed and associated areas, and other new shoreline modifications that affect natural channel movement or natural flood plain function shall not be allowed within a stream's channel migration zone if they would adversely affect PFC for T&E species or cause significant ecological impacts. However, the following development and uses may be allowed:

- Protection and restoration actions that increase the ecosystem-wide processes or ecological functions toward more properly functioning condition.
- Forest practices in compliance with the Washington State Forest Practices Act and its implementing rules and RCW 90.58.150, where applicable.
- Existing and ongoing agricultural practices, provided that no new structures, flood control measures, or restrictions to channel movement occur and there is no clearing and grading within the channel migration zone.
- Bridges, utility lines, and other public utility and transportation structures where no other feasible alternative exists. Where such structures are allowed, mitigation shall be required that protects or restores impacted functions and processes in the affected portion of the watershed.
- Repair and maintenance of an existing legal use, provided that such actions do not create significant ecological impacts or adversely affect T&E species.

- Development on a previously altered site where it is demonstrated that the development restores ecological functions and processes of the applicable portion of the watershed to a more natural condition.
- Development consistent with special area planning as described in WAC 173-26-300 (3)(d)(x) for a riverine corridor that is directed toward protecting and restoring properly functioning condition for priority species and habitats on a comprehensive basis.
- Modifications or additions to an existing legal development, provided that channel migration is not further limited and that the new development includes appropriate ecological restoration of properly functioning condition.
- New development in incorporated municipalities and designated urban growth areas, as defined in chapter 36.70A RCW, where existing human-made structures prevent active channel movement. In this exception, the new development must not adversely affect hydrological conditions and must include where otherwise required under the provisions of this chapter appropriate restoration which contributes to the attainment of properly functioning condition.
- Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure increases PFC for T&E species associated with the river or stream. It is the intent of this provision to allow measures that protect property at the same time as restoring ecosystem-wide processes and PFC for T&E species where scientific and technical information demonstrate that this may be accomplished.

Do not allow the creation of new lots that would require development in the CMZ in order to achieve a viable use.

(3) Flood hazard reduction.

(a) Applicability.

The following provisions apply to actions taken to reduce flood damage or hazard and to uses, development, and shoreline modifications that may increase flood hazards. Flood hazard reduction measures may consist of nonstructural measures, such as setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and storm water management programs, and of structural measures, such as dikes, levees, revetments, floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program. Additional relevant critical area provisions are in WAC 173-26-320(2).

(b) Principles.

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

Structural flood hazard reduction measures, such as diking, even if effective in reducing inundation in a portion of the watershed, can intensify flooding elsewhere. Moreover, structural flood hazard reduction measures can damage ecological functions crucial to fish and wildlife species, bank stability, and water quality. Therefore, structural flood hazard reduction measures shall be avoided whenever possible. When necessary, they shall be accomplished in a manner to minimize change to shoreline ecological functions and ecosystem-wide processes. In such cases, set-back levees shall be preferred over levees located near the floodway.

Master programs shall implement the following principles:

- (i) Where feasible, give preference to nonstructural flood hazard reduction measures over structural measures. For example, setback or relocation of structures is generally preferred over new dikes or seawalls.
- (ii) Base shoreline master program flood hazard reduction provisions on applicable watershed management plans, comprehensive flood hazard management plans, and other comprehensive planning efforts, provided those measures are consistent with the Shoreline Management Act and this chapter.
- (iii) Integrate, when consistent with principles in this section, other regulations and programs associated with flood hazard reduction, including (if applicable):
 - Storm water management plans;
 - Flood plain regulations, as provided for in chapter 86.16 RCW;
 - Critical area ordinances and comprehensive plans, as provided in chapter 36.70A RCW; and the
 - National Flood Insurance Program.
- (iv) Protect and restore the ecological functions while reducing risk to human safety and property. When preparing master program provisions for flood hazard reduction measures, address the protection and restoration of ecological functions and ecosystem-wide processes on a comprehensive basis consistent with WAC 173-26-300 (3)(d)(i), (e), (f), and (g) and 173-26-320 (2)(iv).
- (v) Implement management efforts to return riverine corridors to more natural hydrological conditions that maintain properly functioning condition. Recognize that seasonal flooding is an essential natural process.

- (vi) When evaluating alternate flood control measures, consider the removal or relocation of structures in flood-prone areas.

(c) Standards.

Master programs shall implement the following standards within shoreline jurisdiction:

- (i) Do not allow new development that significantly or cumulatively increases flood hazard or that is inconsistent with a comprehensive flood hazard management plan adopted pursuant to chapter 86.12 RCW, provided the plan has been adopted after 1994 and approved by the department. Do not allow new development or new uses in shoreline jurisdiction, including the subdivision of land, that will require structural flood hazard reduction measures within the channel migration zone, except water-dependent uses in the "high-intensity" environment.
- (ii) Allow new structural flood hazard reduction measures in shoreline jurisdiction only when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development, that nonstructural measures are not feasible, that impacts to the existing shoreline functions and priority species and habitats can be successfully mitigated, and that vegetation conservation actions are undertaken consistent with WAC 173-26-320(5). In such cases, structural flood hazard reduction measures must be set back as far as feasible from the channel migration zone.

Structural flood hazard reduction measures shall be consistent with an adopted comprehensive flood hazard management plan approved by the department that evaluates cumulative impacts to the watershed system and effects on properly functioning condition for T&E species.

- (iii) Require that all new structural flood hazard reduction measures and improvements to existing structures that cause significant ecological impacts include measures to restore ecological functions.
- (iv) Place new structural flood hazard reduction measures landward of the floodway, channel migration zone, associated wetlands, and associated vegetation conservation areas, except for actions that increase ecological functions, such as wetland restoration or as noted below. Consult with Washington's department of fish and wildlife and affected Indian tribes with respect to ecological restoration measures.

Exception: Flood hazard reduction projects as described in this section may occur in a channel migration zone only if it is determined that no other alternative to reduce flood hazard to existing development is feasible. The need for structural improvements in the channel migration zone shall be documented through a geotechnical analysis. If the geotechnical analysis demonstrates a need for the structural measure, assess and mitigate impacts to priority species through a habitat evaluation and application of mitigation sequencing.

- (v) Require that new structural public flood hazard reduction measures, such as dikes and levees, dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant ecological impacts, degradation of properly functioning condition, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.
- (vi) Require that the removal of gravel for flood management purposes be phased out consistent with an adopted flood hazard reduction plan and with this chapter and allowed in the near term only after a biological and geomorphological study shows that extraction does not adversely impact priority species and priority habitats.
- (vii) Require shoreline permit applications for structural flood control projects to include the following information unless the proposed projects are consistent with standards set in a comprehensive flood hazard management plan:
 - (A) River channel hydraulics and floodway characteristics up and downstream from the project;
 - (B) Existing shoreline stabilization and flood protection works within the affected area;
 - (C) Physical, geological, and soil characteristics of the affected area;
 - (D) Biological resources and predicted impact to fish, vegetation, and animal habitat associated with shoreline ecological systems;
 - (E) Predicted impact upon shore and hydraulic processes, adjacent properties, and shoreline and water uses;
 - (F) Analysis of alternative flood protection measures, both structural and nonstructural;
 - (G) Within the local governments shoreline jurisdiction approximate percentage of the flood plain that is already uncoupled from the river corridor; and
 - (H) Approximate percentage of stream channel that is currently prevented from meandering within the local governments shoreline jurisdiction.

(4) Public access.

(a) Applicability.

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

(b) Principles.

Local master programs shall:

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

(c) Planning process to address public access.

Local governments should plan for an integrated shoreline area public access system that identifies specific public needs and opportunities to provide public access. Such a system can often be more effective and economical than applying uniform public access requirements to all development. This planning should be integrated with other relevant comprehensive plan elements, especially transportation and recreation.

Where a port district or other public entity has incorporated public access planning into its master plan through an open public process, that plan may serve as a portion of the local government's public access planning, provided it meets the provisions of this chapter. The planning may also justify more flexible off-site or special area public access provisions in the master program. Public participation requirements in WAC 173-26-300 (3)(b)(i) apply to public access planning.

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

(d) Standards.

Shoreline master programs shall implement the following standards:

- (i) Based on the public access planning described in (c) of this subsection, establish policies and regulations that protect and enhance both physical and visual public access. The master program shall address public access on public lands. The master program should seek to increase the amount and diversity of public access to the state's shorelines consistent with the natural shoreline character, property rights, public rights under the Public Trust Doctrine, and public safety.

- (ii) Require that shoreline development by public entities, including local governments, port districts, state agencies, and public utility districts, include public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment. Where public access planning as described in WAC 173-26-320 (4)(c) demonstrates that a more effective public access system can be achieved through alternate means, such as focusing public access at the most desirable locations, local governments may institute master program provisions for public access based on that approach in lieu of uniform site-by-site public access requirements.
- (iii) Provide standards for the dedication and improvement of public access in developments for water-enjoyment, water-related, and nonwater-dependent uses and for the subdivision of land into more than four parcels. In these cases, public access should be required except:
 - (A) Where the local government provides more effective public access through a public access planning process described in WAC 173-26-320 (4)(c); or
 - (B) Where it is demonstrated to be infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment.

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

(5) Shoreline vegetation conservation.

(a) Applicability.

Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or

restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species detrimental to PFC for T&E plant and animal species.

Unless otherwise stated, vegetation conservation does not include those activities covered under the Washington State Forest Practices Act, except for conversion to other uses and those activities over which local governments have authority.

As with all master program provisions, vegetation conservation provisions apply even to those shoreline uses and developments that are exempt from the requirement to obtain a permit. Like other master program provisions, vegetation conservation standards do not apply retroactively to existing uses and structures, such as existing agricultural practices. However, local master programs shall implement vegetation restoration objectives to help attain PFC for T&E species. Vegetation conservation for aquatic plants is covered in WAC 173-26-320 (2)(c)(iii).

(b) Principles.

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

Master programs shall include provisions to protect and restore vegetation needed to sustain the ecological functions and ecosystem-wide processes, to avoid adverse impacts to soil hydrology, and to reduce the hazard of slope failures or accelerated erosion.

In ecologically degraded areas, master program provisions shall contribute to the restoration of properly functioning condition and other ecological processes and functions provided by vegetation as development or redevelopment occurs. Master programs should be directed toward achieving the vegetation characteristics described in *Management Recommendations for Washington's Priority Habitats*, prepared by the Washington state department of fish and wildlife.

Local governments shall address properly functioning condition and other ecological functions and ecosystem-wide processes provided by vegetation as described in WAC 173-26-300 (3)(d)(i), (e), (f), and (g).

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

In establishing vegetation conservation regulations, local governments must use all available scientific and technical information, as described in WAC 173-26-300

(2)(a). At a minimum, local governments should consult shoreline management assistance materials provided by the department.

(c) Relationship of shoreline vegetation to ecological functions.

Current scientific evidence indicates that the length, width, and species composition of a shoreline vegetation community contribute substantively to the aquatic ecological functions. Likewise, the biota within the aquatic environment is essential to ecological functions of the adjacent upland vegetation.

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

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

The ability of vegetated areas to contribute to properly functioning condition and other critical ecological functions diminishes as the length and width of the vegetated area along shorelines is reduced. Many ecological functions will not be performed when shoreline vegetation is removed. The smaller the area of remaining vegetation, the greater the reduction of properly functioning condition and other critical functions.

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

For riverine shoreline environments where trees naturally grow, achieving the full suite of vegetation-related shoreline functions is related to a vegetated area of one mature site potential tree height in width, measured perpendicular from bank full width or outer edge of the channel migration zone. Absent a channel migration zone, bank full width is used as the reference point because it usually corresponds to the top of the bank nearest the stream or river channel that supports mature tree growth.

For marine shorelines where trees naturally grow, achieving the full suite of vegetation-related shoreline functions is related to approximately one half the height of a mature native tree measured from ordinary high-water mark.

Woody vegetation normally classed as trees may not be a natural component of plant communities in some environments, such as in arid climates and on coastal dunes. In these instances, the width of a vegetated area necessary to achieve the full suite of vegetation-related shoreline functions may not be related to vegetation height.

Local governments shall work with resource agencies and affected Indian tribes to identify ecological processes and functions important to the local aquatic and terrestrial ecology and conserve sufficient vegetation to protect, restore, and maintain them.

In addressing the restoration of degraded shorelines, local governments shall develop provisions to ensure that required vegetated areas are large enough to help attain properly functioning condition for T&E species and ecological benefits, even if they are not sufficiently wide to achieve all ecological functions.

(d) Standards.

Master programs shall implement the following requirements in shoreline jurisdiction.

- (i) Do not allow significant vegetation removal that would likely result in soil erosion or in the need for structural shoreline stabilization measures as described in WAC 173-26-330 (3)(a).
- (ii) Establish vegetation conservation standards that implement the principles in WAC 173-26-320 (5)(b) and (c). Methods to do this may include setback or buffer requirements, clearing and grading standards, native vegetation retention standards, environment designation standards, or other master program provisions.
- (iii) Additional vegetation conservation standards for specific uses are included in WAC 173-26-340(3).

- (iv) Notwithstanding other provisions of this chapter, for shorelines that affect T&E species, the following will apply.

Master programs shall include vegetation conservation provisions to provide the ecological functions necessary to the survival and recovery of T&E species. As part of the ecosystem characterization described in WAC 173-26-300 (3)(d)(i) and using scientific and technical information, local governments shall establish provisions to protect and restore vegetation-related functions affecting PFC. Local governments shall institute protective setbacks, buffers, standards for retention or restoration of native species, clearing restrictions, and/or other provisions to ensure that those functions are provided. At a minimum, local governments shall address the following functions unless they are shown to be not applicable for a particular shoreline: Natural channel stability, water quality, hydrographic response, large woody debris recruitment, water temperature (shading), nutrient and sediment filtering, and food production.

In the absence of more detailed or current scientific and technical information or specific ecological analysis of local conditions, master programs shall contain provisions to conserve the vegetation necessary to maintain or restore PFC for T&E species within the following vegetation conservation areas within shoreline jurisdiction, including all environment designations:

- For riverine shorelines where trees naturally grow: One site potential tree height measured perpendicular from the channel migration zone or, absent a channel migration zone, bank full width.
- For shorelines where trees do not naturally grow, such as arid areas: Sixty feet, measured perpendicularly, from the channel migration zone or bank full width for riverine shorelines without a channel migration zone.
- For marine and lacustrine shorelines where trees naturally grow: One-half site potential tree height or one hundred feet, whichever is greater, measured perpendicular from the ordinary high-water mark.

If conditions for tree blowdown occur, local governments should include a wider vegetation conservation area, if necessary, to reduce the probability of wind or erosion downing trees.

Master programs shall include provisions to implement the following minimum standards within the areas described above except as noted.

- In the "natural" environment or where criteria for the "natural" environment in WAC 173-26-310(5) apply, allow no significant vegetation removal that reduces PFC or hampers the achievement of PFC for T&E species. For activities conducted under the Washington State Forest Practices Act, conform to the provisions of that act.
- In the "rural conservancy" environment or where criteria for the "rural conservancy" environment in WAC 173-26-310(5) apply, allow no reduction in PFC resulting from vegetation removal. Allow no significant vegetation removal except as demonstrated to be necessary for an allowed development. Where possible, locate new development or clearing and

grading outside the vegetation conservation areas described above. If vegetation is removed as part of an allowed development, require restoration with native shoreline vegetation to provide at least an equal degree of PFC. The proponent for such development must demonstrate that the PFC is maintained or restored, taking into account the time lost for revegetation and risks to the environment. The intent of this provision is to allow limited development away from the shoreline if PFC is maintained or enhanced.

For activities conducted under the Washington State Forest Practices Act, conform to the provisions of that act.

- In the "high-intensity" environment or where criteria for the "high-intensity" environment in WAC 173-26-310(5) apply, allow no significant removal of existing native vegetation except for water-dependent uses. Require protection of existing native vegetation or restoration of degraded areas in portions of the site that are not occupied by structures necessary for the use. Because of the importance of shoreline vegetation to PFC, even in intensely developed urban settings, master programs shall implement the vegetation conservation principles described in (b) and (c) of this subsection through a restoration strategy based on the ecological characterization and analysis described in WAC 173-26-300 (3)(d)(i). The strategy shall give special emphasis to those functions necessary to PFC for T&E species within the particular reach of the shoreline.
- In the "urban conservancy" environment or where criteria for the "urban conservancy" environment in WAC 173-26-310(5) apply, require that new development for nonwater-dependent uses on degraded sites include the restoration of native shoreline vegetation. As a general rule, provide the maximum natural vegetation strip feasible along the shoreline. Mitigate impacts from water-dependent development according to the mitigation sequence described in WAC 173-26-020.
- In the "shoreline residential" environment or where criteria for the "shoreline residential" environment in WAC 173-26-310(5) apply, avoid or, if that is not possible, minimize significant vegetation removal as provided for in the provisions for residential areas, below.
- For properties within areas planned for residential development within the "rural conservancy," "urban conservancy," or "shoreline residential" environments, do not allow new development that will have significant ecological impacts to PFC for T&E species, and restrict significant vegetation removal to the minimum necessary to accommodate permitted primary residential structures. Where the dimensions of existing lots or parcels are not sufficient to accommodate permitted primary residential structures outside of the vegetation conservation area, apply the mitigation sequence in WAC 173-26-020 to minimize ecological impacts. Generally, this will mean placing the development away from the shoreline as far as possible, locating the development to avoid tree cutting, and modifying building dimensions to reduce vegetation removal. Do not allow the

removal of native vegetation for replacement with lawn or nonnative plant materials.

For shoreline properties with existing residential uses located within a vegetation conservation area, do not allow new development, building additions, or significant vegetation removal that would cause significant ecological impacts to PFC for T&E species. Reconstruction of or additions to buildings within an existing building footprint or paved area may be allowed. New development associated with existing residences may be allowed landward of an existing structure or if native vegetation is enhanced where vegetation has been degraded.

The minimum standards may be altered where it is demonstrated through scientific and technical information that certain vegetation functions are not important for properly functioning condition or where the functions are provided by other means. In these cases, the vegetation conservation provisions do not need to address this function. Local governments are encouraged to consult with technical assistance materials provided by the department in determining the extent of vegetation conservation provisions.

Development may be allowed within the minimum vegetation conservation areas described above, provided that vegetation-related ecological functions necessary for T&E species are not diminished and other provisions of this chapter are met.

The department will only approve vegetation conservation provisions if the department determines that the provisions will, over the long term, restore properly functioning condition.

- (v) For residential and other nonwater-dependent uses, do not allow the creation of lots that will require significant vegetation removal in order to be developed for the use allowed by the local government's development regulations. That is, make sure that each lot is large enough to allow development without significant vegetation removal that reduces properly functioning condition or other ecological functions.

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

(a) Applicability.

The following section applies to all development and uses in shoreline jurisdiction that affect water quality, as defined in WAC 173-26-020.

(b) Principles.

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

- (i) Prevent impacts to water quality and storm water quantity that significantly reduce properly functioning condition and other shoreline ecological functions, aesthetic qualities, or recreational opportunities.
- (ii) Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and storm water quantity, including public health, storm water, and water discharge standards. The regulations that are most protective of ecological functions shall apply.

(c) Standards.

- (i) Shoreline master programs shall include provisions to ensure that new development within shoreline jurisdiction does not cause significant ecological impacts by altering water quality, quantity, or flow characteristics.
- (ii) Shoreline master programs for jurisdictions with T&E species shall include a policy that land use and storm water run-off policies and regulations shall maintain or contribute to the attainment of PFC for those species, including ground water recharge and hydrological base flow considerations.
- (iii) Shoreline master programs shall also include standards to ensure that storm water outfalls do not adversely affect PFC.

NEW SECTION

WAC 173-26-330 Shoreline modifications.

(1) Applicability.

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

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

(2) Principles.

Master programs shall implement the following principles:

- (a) Allow structural shoreline modifications only where they are demonstrated to be necessary to support or protect a legally existing or allowed development and only when ecological functions will be protected, including ecological functions necessary for properly functioning condition.
- (b) Avoid significant ecological impacts of new shoreline modifications and limit shoreline modifications in number and extent.
- (c) Allow only shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.
- (d) Give preference to those types of shoreline modifications that have a lesser impact on ecological functions or contribute to the attainment of properly functioning condition or other ecological functions. For example, in normal circumstances, preference should be given to pile-supported piers, which allow normal water flow, rather than to piers constructed with fill, which alter the normal flow of water.
- (e) Where applicable, base provisions on scientific and technical information and a comprehensive analysis of drift cells for marine waters or reach conditions for riverine systems. Contact the department for available drift cell characterizations.
- (f) Enhance ecological functions while accommodating existing legally permitted uses. As shoreline modifications occur, incorporate all feasible measures to protect and restore ecological shoreline functions and ecosystem-wide processes. Apply conditions to development authorizations so that structural shoreline modifications for nonwater-dependent uses on degraded sites contribute to restoration of properly functioning condition and other ecological functions.

- (g) Avoid and reduce significant ecological impacts according to the mitigation sequence in WAC 173-26-020.
- (h) Prohibit the use of materials with toxic effects and do not allow construction and site development techniques that may affect PFC and other ecological functions.
- (i) Master program environment designation provisions and boundaries should identify the areas where structural shoreline stabilization measures are prohibited or greatly restricted to avoid harm to natural shoreline functions and those areas where restoration of natural shoreline processes are encouraged or required.
- (j) Conduct baseline and post-construction monitoring to assess the impacts of shoreline modifications and application of adaptive management instituted to reconcile problems.
- (k) Conduct monitoring and regulatory response activities as described in WAC 173-26-300 (2)(b) in order to identify and address negative trends or cumulative impacts due to shoreline modifications. The department will also examine impacts and trends specific to shoreline modifications and adopt guidelines to correct deficiencies in shoreline management practices.
- (l) Develop incentives for the use of innovative alternative approaches for shoreline modifications that help attain PFC.

(3) Provisions for specific shoreline modifications.

(a) Shoreline stabilization.

(i) Applicability.

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

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

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

- Vegetation enhancement;
- Upland drainage control;
- Biotechnical measures;
- Beach enhancement;
- Anchor trees;
- Gravel placement;

- Rock revetments;
- Gabions;
- Concrete groins;
- Retaining walls and bluff walls;
- Bulkheads; and
- Seawalls.

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

Shoreline armoring typically results in the following adverse effects:

- Beach starvation. Sediment supply to nearby beaches is cut off, leading to "starvation" of the beaches for the gravel, sand, and other fine-grained materials that typically constitute a beach.
- Habitat degradation. Vegetation that shades the upper beach or bank is eliminated, thus degrading the value of the shoreline for many ecological functions, including spawning habitat for salmonids and forage fish.
- Sediment impoundment. As a result of shoreline armoring, the sources of sediment on beaches (eroding "feeder" bluffs) are progressively lost and longshore transport is diminished. This leads to lowering of down-drift beaches, the narrowing of the high tide beach, and the coarsening of beach sediment. As beaches become more coarse, less prey for juvenile fish (including threatened Hood Canal chum and Puget Sound Chinook salmon) is produced. Sediment starvation may lead to accelerated erosion in down-drift areas. Also, as sediments become coarser, they become less suitable for forage fish. Forage fish provide food for bull trout and salmonids in the marine environment.
- Exacerbation of erosion. The hard face of shoreline armoring, particularly concrete bulkheads, reflects wave energy back onto the beach, exacerbating erosion.
- Bulkhead failure. In time, the substrate of the beach coarsens and scours down to bedrock or a hard clay. The footings of bulkheads are exposed, leading to undermining and failure. This process is exacerbated when the original cause of the erosion and "need" for the bulkhead was from upland water drainage problems.
- Ground water impacts. Erosion control structures often raise the water table on the landward side, which leads to higher pore pressures in the beach itself. In some cases, this may lead to accelerated erosion of sand-sized material from the beach.
- Hydraulic impacts. Shoreline armoring generally increases the reflectivity of the shoreline and redirects wave energy back onto the beach. This leads to scouring and lowering of the beach, to coarsening of the beach, and to ultimate failure of the structure.

- Loss of shoreline vegetation. Vegetation provides important "softer" erosion control functions. Vegetation is also critical in maintaining properly functioning condition for listed T&E species and other ecological functions.
- Loss of large woody debris. Changed hydraulic regimes and the loss of the high tide beach, along with the prevention of natural erosion of vegetated shorelines, lead to the loss of beached organic material. This material can increase heterogeneity, can serve as a stabilizing influence on natural shorelines, and is habitat for many aquatic-based organisms, which are, in turn, important prey for larger organisms, including young salmon.
- Restriction of channel movement and creation of side channels. Hardened shorelines along rivers slow the movement of channels, which, in turn, prevents the input of larger woody debris, gravels for spawning, and the creation of side channels important for juvenile salmon rearing, and can result in increased floods and scour.
- Loss of rearing habitat for juvenile salmonids. Hardened channels can decrease habitat.

Structural shoreline stabilization often results in vegetation removal and damage to near-shore habitat and shoreline corridors. Therefore, master program shoreline stabilization provisions shall also be consistent with WAC 173-26-320(5), vegetation conservation, and WAC 173-26-320(2), critical areas.

The following standards, where applicable to residential bulkheads, implement RCW 90.58.100(6), which states:

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

RCW 90.58.020 includes the statement:

The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

Therefore, it is also necessary that master program regulations include provisions to ensure against ecological harm from the cumulative impacts of incremental development actions, including residential development.

As applied to shoreline stabilization measures, "normal repair" and "normal maintenance" include the patching, sealing, or refinishing of existing structures, the replenishment of sand or other material that has been washed away, and the replacement of less than twenty percent of the structure. Normal maintenance and normal repair are limited to those actions that are typically done on a periodic basis. Construction that causes significant ecological impacts is not considered normal maintenance and repair.

As applied to shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose.

Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

Local governments should consult with technical assistance materials provided by the department. Local governments are encouraged to offer incentives, such as expedient permitting, for removal of unnecessary shoreline stabilization measures and contribution to properly functioning condition for T&E species.

(ii) Standards.

Master programs shall implement the following standards:

- (A) New structural stabilization measures shall not be allowed except to protect or support an existing or approved development, for the restoration of ecological functions, or for hazardous substance remediation pursuant to chapter 70.105D RCW. This is to prevent speculative shoreline stabilization consistent with WAC 173-26-320(5).
- (B) New development shall, where feasible, be located and designed to eliminate the need for concurrent or future shoreline stabilization.
- (C) On shorelines where T&E species and their prey have a primary association, new nonwater-dependent development, including single-family residences, that includes structural shoreline stabilization shall not be allowed unless all of the conditions below apply:
 - The need to protect the development from destruction, within the next three years, due to erosion caused by natural processes, such as tidal action, currents, and waves, is demonstrated through a geotechnical report.
 - The erosion is not being caused by upland conditions, such as loss of vegetation and drainage.
 - Nonstructural measures as described in WAC 173-26-330 (3)(a)(i), such as placing the development further from the shoreline, planting

vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

- The structure will not cause significant ecological impacts to priority species, and critical habitats described in WAC 173-26-320 (2)(c)(iii) and (iv). This applies on the site, and within the drift cell or stream reach, whichever applies, as determined by the geotechnical and biological evaluations.

New water-dependent development requiring shoreline stabilization shall not cause adverse ecological impacts to PFC for T&E species. Where allowed, new shoreline stabilization for water-dependent development shall be conditioned with the requirement to help attain PFC for T&E species.

- (D) Do not allow shoreline stabilization for new development that would cause significant ecological impacts to adjacent or down-current properties and shoreline areas.
- (E) Do not allow the subdivision of land into parcels, or the creation of new lots, that will require shoreline stabilization for development to occur.
- (F) New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization will not be needed during the life of the structure, as demonstrated by a geotechnical analysis.
- (G) New or enlarged structural shoreline stabilization measures for an existing structure, including residences, should not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger within the next three years from shoreline erosion caused by tidal action, currents, or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization. The project design and analysis should also evaluate vegetation enhancement as a means of reducing undesirable erosion. If the geotechnical analysis demonstrates a need for shoreline stabilization, impacts to T&E species shall be assessed through a habitat evaluation and the project conditioned to maintain properly functioning condition and other ecological functions.
- (H) An existing shoreline stabilization structure shall not be replaced with a similar structure unless a geotechnical analysis demonstrates there is a need to protect preferred or priority structures identified in RCW 90.58.020 from erosion caused by currents, tidal action, or waves. The demonstration of need must identify the reason for erosion, the protective benefit that the shoreline stabilization measures will perform, and the minimum measures necessary to accomplish the protective function. The replacement structure shall be designed, located, sized, and constructed to minimize harm to ecological functions. Replacement

walls or bulkheads shall be located landward to the greatest extent possible unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. Where significant ecological impacts to critical saltwater habitats would occur by leaving the existing structure, remove it as part of the replacement measure. Soft shoreline stabilization that restores properly functioning condition or other ecological functions may be permitted waterward of the ordinary high-water mark.

- (I) Where structural shoreline stabilization measures are demonstrated to be necessary, as in the above provisions, limit the size of stabilization measures to the minimum necessary. Use measures designed to minimize harm to ecological functions and apply mitigation through mitigation sequencing. Mitigation shall address the functions lost. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
- (J) In the design of shoreline stabilization measures, use the habitat evaluation as a basis to maintain or restore, as much as possible, properly functioning condition for T&E species and the ecological functions of the shoreline. Require mitigation of adverse impacts to shoreline functions in accordance with the mitigation sequence defined in WAC 173-26-020. Include vegetation conservation, as described in WAC 173-26-320(5), as part of shoreline stabilization, where applicable.
- (K) Ensure that publicly financed or subsidized shoreline erosion control measures do not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. See public access provisions; WAC 173-26-320(4). Where feasible, incorporate ecological restoration and public access improvements into the project.
- (L) Mitigate new erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems. Where sediment conveyance systems cross jurisdictional boundaries, local governments should coordinate shoreline management efforts. If beach erosion is threatening existing development, local governments should adopt master program provisions for a beach management district or other institutional mechanism to provide comprehensive mitigation for the adverse impacts of erosion control measures.
- (M) For erosion or mass wasting due to upland conditions, see WAC 173-26-320 (2)(c)(ii).

(b) Piers and docks.

New piers and docks shall be allowed only for water-dependent uses or public access. Pier and dock construction shall be restricted to the minimum size necessary to meet the needs of the proposed water-dependent use. Water-related and water-enjoyment uses may be allowed as part of mixed-use development on over-water structures where they are clearly auxiliary to, and in support of, water-dependent uses, provided the minimum size requirement needed to meet the water-dependent use is not violated.

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

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

Piers and docks, including those accessory to single-family residences, shall be designed and constructed to avoid impacts to critical habitats consistent with WAC 173-26-320 (2)(c)(iii) and (iv)(B). Master program provisions for piers and docks shall prevent cumulative impacts to PFC consistent with WAC 173-26-300 (2)(e) and should require that structures be made of materials that have been approved by applicable state agencies.

(c) Fill.

Fills shall be located, designed, and constructed to protect shoreline ecological functions and specifically shall not adversely affect or preclude the attainment of PFC and hydrological and geomorphological processes, including channel migration.

Fills waterward of the ordinary high-water mark shall be allowed only when necessary to support a water-dependent use, public access, clean-up and disposal of contaminated sediments as part of an interagency environmental clean-up plan, mitigation action, environmental restoration, beach nourishment or enhancement project. Fills waterward of the ordinary high-water mark for any use except ecological restoration shall require a conditional use permit.

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

Breakwaters, jetties, groins, and weirs located waterward of the ordinary high-water mark shall be allowed only where necessary to support water-dependent uses, public access, shoreline stabilization or other specific public purpose. Breakwaters, jetties, groins, weirs, and similar structures shall require a conditional use permit, except for those structures installed to protect or restore ecological functions, such as large woody debris installed in streams. Such structures shall be designed to protect or

restore ecological functions, to protect critical areas, and to support the attainment of properly functioning condition and shall provide for mitigation according to the sequence defined in WAC 173-26-020.

(e) Beach and dunes management.

Washington's dunes and their associated beaches lie along the Pacific Ocean coast between Point Grenville and Cape Disappointment, and as shorelines of statewide significance shall be managed from a statewide perspective. Dunes and their beaches within shoreline jurisdiction shall be managed to conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal dunes. Dune modification shall not be allowed where it would cause significant ecological impacts to PFC for T&E species. Dunes and associated beaches should also be managed to reduce the hazard to human life and property from natural or human-induced actions associated with these areas.

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

"Dune modification" is the removal or addition of material to a dune, the reforming or reconfiguration of a dune, or the removal or addition of vegetation that will alter the dune's shape or sediment migration. Dune modification may be proposed for a number of purposes, including protection of property, flood and storm hazard reduction, erosion prevention, and ecological restoration.

Coastal dune modification shall be allowed only as a conditional use unless a jurisdiction-wide or regional plan for dune management addressing grading, revegetation, and monitoring, is carried out consistent with state and federal flood protection standards and approved by the local government and the department.

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

(f) Dredging and dredge material disposal.

Dredging and dredge material disposal shall be done in a manner which avoids significant ecological impacts.

New development shall be sited and designed to avoid the need for new and maintenance dredging where significant ecological impacts to properly functioning condition for T&E species result. Dredging for the purpose of establishing, expanding, or relocating navigation channels and basins should be allowed only when significant ecological impacts are minimized and when suitable mitigation is provided. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged and/or existing authorized location, depth, and width unless necessary to improve navigation.

Dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material shall not be allowed, except when the material is necessary for the restoration of properly functioning condition for T&E species, or restoration of other ecological functions on sites not associated with T&E species. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high-water mark. The project must be either associated with a MTCA or CERCLA habitat restoration project or, if approved through a shoreline conditional use permit, any other significant habitat enhancement project. Master programs should include provisions for uses of suitable dredge material that benefit shoreline resources. Where applicable, master programs should provide for the implementation of adopted regional interagency dredge material management plans or watershed management planning.

Disposal of dredge material into river channel migration zones or 100-year flood plains within shoreline jurisdiction but outside of harbor areas shall be discouraged and shall not be allowed in an area supporting priority species. In the limited instances where it is allowed, such disposal shall require a conditional use permit.

(g) Shoreline habitat and natural systems enhancement projects.

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

Master programs should include provisions fostering habitat and natural system enhancement projects. Such projects may include shoreline modification actions such as modification of vegetation, shoreline stabilization, dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline. Master program provisions shall assure that the projects address legitimate restoration needs and priorities.

NEW SECTION

WAC 173-26-340 Shoreline uses.

(1) Applicability.

The provisions in this section apply to uses and development within shoreline jurisdiction.

(2) General use provisions.

(a) Principles.

Shoreline master programs shall implement the following principles:

- (i) Establish a system of use and environment designation provisions consistent with WAC 173-26-310 that gives preference to those uses that are consistent with the control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon uses of the state's shoreline areas.
- (ii) Ensure that all shoreline master program provisions concerning proposed development of property are established, as necessary, to protect the public's health, safety, and welfare, as well as the land and its vegetation and wildlife, and to protect property rights while implementing the policies of the Shoreline Management Act.
- (iii) Reduce use conflicts by including provisions to prohibit or apply special conditions to those uses which are not consistent with the control of pollution and prevention of damage to the natural environment or are not unique to or dependent upon use of the state's shoreline. In implementing this provision, preference shall be given first to water-dependent uses, then to water-related uses and water-enjoyment uses.
- (iv) Establish regulations to mitigate existing and potential impacts affecting the attainment of PFC and other ecological functions.
- (v) Establish use provisions that preserve unique shorelines. Shoreline master programs shall establish use provisions that take advantage of shorelines with unique attributes or resources.
- (vi) Establish use provisions that encourage the restoration of ecological functions on degraded shorelines.
- (vii) Address the impacts from specific uses through the monitoring and adaptive management program described in WAC 173-26-300 (2)(b). As part of this program, the department will examine impacts and trends specific to different uses and adopt guidelines to correct deficiencies in shoreline management practices.

(b) Conditional uses.

Define the types of uses and development that require shoreline conditional use permits. Requirements for a conditional use permit may be used for a variety of purposes, including:

- To effectively address unanticipated uses not classified in the master program as described in WAC 173-27-030.
- To address cumulative impacts.
- To provide the opportunity to require environmental analysis or design modifications of a proposal that would otherwise be inconsistent with Shoreline Management Act policies.

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

If master programs permit the following types of uses and development, they shall require a conditional use permit:

- (i) Uses and development that may significantly impair or alter the public's use of the water areas of the state.
- (ii) Uses and development which, by their intrinsic nature, may have a significant ecological impact on shoreline ecological functions or shoreline resources depending on location, design, and site conditions, such as fill waterward of the ordinary high-water mark, disposal of dredge material within a river channel migration zone but outside a harbor area, Class IV general forest practices where shorelines are being converted or are expected to be converted to nonforest uses, breakwaters, jetties, groins, and weirs.
- (iii) Development in critical saltwater habitats.
- (iv) Other uses and development as identified by local governments.

Master programs shall contain provisions that assure that uses requiring a conditional use permit shall not be allowed if they would cause significant ecological impacts to properly functioning condition for T&E species.

(3) Standards.

Establish master program regulations to address the potential impacts and opportunities of specific shoreline uses that may occur in the jurisdiction.

(a) Agriculture.

Applicable master programs shall address new agricultural development that does not meet the definition of existing and ongoing agriculture.

RCW 90.58.030 (3)(e) defines substantial development for agricultural uses. New shoreline master program provisions do not apply retroactively to existing agricultural uses. Existing and ongoing agriculture includes, but is not limited to, the production of horticultural, viticultural, floricultural, livestock, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, or Christmas trees; the operation and maintenance of farm and stock ponds, drainage ditches, or irrigation systems;

normal crop rotation and crop change; and the normal maintenance and repair of existing structures, facilities, and lands currently under production or cultivation.

New development, clearing, and grading in support of agricultural uses shall be located and designed to avoid significant ecological impacts.

Applicable master programs shall include standards for setbacks, water quality protection, environmental impacts, and vegetation conservation, as described in WAC 173-26-320(5), for new agricultural development, clearing, and grading in shoreline jurisdiction.

Requirements for setbacks for new development shall be based on scientific and technical information and management practices adopted by the applicable state agencies necessary to preserve the functions and qualities of the shoreline environment. In riverine corridors with priority species, the regulations shall be sufficient to ensure no net loss of habitat viability. If the shoreline habitat has been degraded through development or agriculture practices, the master program shall include provisions that result in improved habitat over time.

Agricultural lands within jurisdiction of the Shoreline Management Act which are enrolled in set-aside programs administered by the Natural Resources Conservation Service or the Farm Services Administration of the United States Department of Agriculture, or any other federal, state, or local agency, are considered to remain existing and ongoing agriculture for purposes of the Shoreline Management Act and this rule. This provision is intended to ensure that master program provisions do not prevent agriculture from being resumed after the period of the set-aside program.

(b) Aquaculture.

Aquaculture is the culture or farming of food fish, shellfish, or other aquatic plants and animals. This activity is of statewide interest. Properly managed, it can result in long-term over short-term benefit and can protect the resources and ecology of the shoreline. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area.

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

Aquaculture shall not be permitted in areas where it would significantly degrade ecological functions over the long term, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses. Aquacultural facilities shall be designed and located so as not to spread disease to native aquatic life, establish new nonnative species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline. Impacts to ecological

functions shall be mitigated according to the mitigation sequence described in WAC 173-26-020.

(c) Boating facilities.

For the purposes of this chapter, "boating facilities" excludes docks serving four or fewer single-family residences. Shoreline master programs shall contain provisions to address potential impacts while providing the boating public recreational opportunities on waters of the state.

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

- (i) Provisions to ensure that boating facilities are located only at sites with suitable environmental conditions, shoreline configuration, access, and neighboring uses and where significant ecological impacts to PFC for T&E can be avoided.
- (ii) Provisions that assure that facilities meet health, safety, and welfare requirements. Master programs may reference other regulations to accomplish this requirement.
- (iii) Regulations to avoid, or if that is not possible, to mitigate visual and significant ecological impacts.
- (iv) Provisions for public access in new marinas, particularly where water-enjoyment uses are associated with the marina, in accordance with WAC 173-26-320(4).
- (v) Regulations to limit the impacts from boaters living in their vessels (live-aboards).
- (vi) Regulations reducing the impacts of parking.
- (vii) Regulations restricting or mitigating the impacts of covered moorage.
- (viii) Regulations to protect the rights of navigation.
- (ix) Regulations restricting vessels from permanently mooring on waters of the state unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

(d) Commercial development.

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

Require that public access and ecological restoration be considered for all water-dependent commercial development. Require that public access and ecological restoration be a condition of all nonwater-dependent commercial development unless such improvements are demonstrated to be infeasible or inappropriate. Refer to WAC 173-26-220(4) for public access provisions.

Master programs shall exclude nonwater-oriented commercial uses from locating on the shoreline unless they provide public access and ecological restoration and they meet at least one of the following criteria:

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

Nonwater-oriented commercial development may be allowed if the site is physically separated from the shoreline by another property or public right of way.

New nonwater-dependent commercial development shall be required to protect existing shoreline vegetation contributing to ecological functions. Where shoreline vegetation has been removed or degraded, nonwater-dependent commercial development shall contribute to the restoration of ecological functions provided by vegetation.

Nonwater-dependent commercial uses should not be allowed over water except in existing structures or in the limited instances where they are auxiliary to and in support of water-dependent uses and provided the size of the over-water construction is not expanded for nonwater-dependent uses.

New water-dependent commercial development shall mitigate impacts to shoreline vegetation according to WAC 173-26-300 (2)(f).

(e) Forest practices.

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

Forest practice conversions and other Class IV-General forest practices where there is a likelihood of conversion to nonforest uses shall avoid significant ecological impacts to the shoreline environment and maintain the ecological quality of the watershed hydrologic system. Master programs shall establish provisions to ensure that all such timber removal is consistent with the master program environment designation provisions and the provisions of this chapter. Applicable shoreline master programs shall contain provisions to ensure that when forest lands are converted to another use, including a residential use, significant vegetation removal, grading, and development, except for low-intensity uses and public access that protect or restore ecological functions, are not allowed within the vegetation conservation area as defined in WAC 173-26-320 (5)(d)(iv) or within shoreline jurisdiction, whichever is less.

Master programs shall implement the provisions of RCW 90.58.150 regarding selective removal of timber harvest on shorelines of statewide significance. Exceptions to this standard shall be by conditional use permit only.

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

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

(f) Industry.

Regional and statewide needs for water-dependent and water-related industrial facilities should be carefully considered in establishing master program environment designations, use provisions, and space allocations for industrial uses and supporting facilities.

Industrial development shall not be located or designed in a manner that causes significant ecological impacts to the ecological functions or properly functioning condition for T&E species. Particular scrutiny shall be given to ecological functions necessary to support priority species.

New industrial development shall incorporate public access to the water except when such access causes significant interference with operations or hazards to life or property, as provided in WAC 173-26-320(4). Industrial development and redevelopment shall, where feasible, incorporate environmental cleanup and restoration of the shoreline area. New nonwater-oriented industrial development--that is, industrial development that is neither water-dependent nor water-related--should only be allowed on shorelines that are not navigable for commercial transport and shall include ecological restoration of the shoreline and, where feasible, public access. In such cases, no new structural shoreline stabilization measures should be permitted, except to protect or restore ecological functions or public access.

Additions or modifications to existing nonwater-dependent development may be allowed on shorelines navigable for commercial transport, provided restoration and public access are provided where feasible.

New nonwater-dependent industrial development shall be required to protect existing shoreline vegetation contributing to ecological functions. Where shoreline vegetation has been removed or degraded, nonwater-dependent development shall contribute to the restoration of ecological functions provided by vegetation consistent with WAC 173-26-320(5).

New water-dependent development shall mitigate impacts to shoreline vegetation.

(g) In-stream structures.

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

(h) Mining.

Mining is the removal of sand, gravel, soil, minerals, and other earth materials for commercial and other uses. Mining alters the natural character, resources, and ecology of shorelines of the state and may adversely impact critical shoreline resources. Activities associated with mining, including processing and transportation,

also have the potential to adversely impact shoreline resources. Master programs shall include policies and regulations that assure:

- (i) Mining and associated activities are not allowed where such uses would result in short-term or long-term significant ecological impacts to shoreline ecological functions or ecosystem-wide processes.
- (ii) Where mining and associated activities are allowed, they must be conducted in a manner that is consistent with the policies of the environment designation in which they are located, impacts to fish and wildlife habitat shall be avoided, and all disturbed areas must be restored upon completion of mining. Destruction of critical habitat for T&E or priority species is prohibited.
- (iii) Surface mining shall be conducted in conformance with the Washington State Surface Mining Reclamation Act, chapter 78.44 RCW.
- (iv) Surface mine reclamation plans shall provide for subsequent use of the property that is consistent with the policies of the environment designation in which they are located and shall assure that ecological functions of the shoreline are restored.
- (v) Removal of sand and gravel resources from a location waterward of the ordinary high-water mark of a river shall be prohibited unless:
 - (A) A hydrogeological study, conducted by a qualified professional and approved by appropriate state agencies, demonstrates that removal of specific quantities at specific locations will not significantly alter the natural processes of gravel transportation for the river system as a whole; and
 - (B) A biological study, conducted by a qualified professional and approved by appropriate state agencies, demonstrates that removal will not significantly degrade habitat values for priority species or damage other ecological functions.

Removal of sand and gravel from a location waterward of the channel migration zone shall require a conditional use permit.

In locations where gravel removal has been allowed in the past, any future authorization to continue shall be based on studies as required above, and no further authorization shall be granted except in conformance with this provision.

(i) Recreational development.

Provision shall be made in master programs for the public to enjoy the waters of the state. Master program provisions shall ensure that shoreline recreational facilities, now and in the future, can reasonably tolerate, during peak use periods, a balance of active and passive uses without causing significant ecological impacts.

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

For all jurisdictions planning under the Growth Management Act, master program recreation policies shall be consistent with growth projections and level-of-service standards established by the applicable comprehensive plan. Private recreational development shall not be a substitute for publicly owned, publicly accessible recreational facilities on the shorelines. Recreational development should provide for a spectrum of recreational needs and opportunities. Where possible, shoreline recreational facilities should be linked to other recreational attractions by pedestrian and bicycle trails. Master program recreation provisions shall be consistent with public access and environmental protection provisions of this chapter.

Master program provisions shall give preference to water-dependent recreation as a first priority and water-enjoyment and water-related recreational uses as a second priority. Nonwater-oriented recreational uses should be discouraged on the shoreline and, where allowed, shall include public access and ecological protection and restoration.

The impacts of recreational developments, including water-dependent facilities such as marinas and swimming beaches, and nonwater-oriented uses shall be mitigated. Nonwater-dependent recreational uses shall be located away from the water unless their significant ecological impacts can be avoided. Nonwater-recreational uses, such as beach driving, shall be restricted where necessary to maintain PFC for T&E species, including protecting forage fish habitat.

(j) Residential development.

Single-family residences are a priority use when consistent with control of pollution and prevention of damage to the natural environment. However, residential uses can cause significant damage to the shoreline area through cumulative impacts from shoreline bulkheading, storm water runoff, septic system failure, eelgrass damage, introduction of pollutants, and vegetation removal. Residential development includes single-family and multifamily development and the creation of new residential lots through land division or conversion from another use. Master programs shall include shoreline setbacks, density regulations, bulkhead restrictions, vegetation conservation requirements, and, where applicable, on-site sewage system standards for residential uses, including single-family residences and appurtenant structures and uses, in accordance with the provisions of this chapter. Master programs may provide the above standards either by direct language within the master program or by specific reference to the applicable development regulations. New residential development, including appurtenant structures and uses, shall be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect property. (See RCW 90.58.100(6).)

New over-water residences, including floating homes, are not a preferred use and shall be prohibited.

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

If piers, docks, breakwaters, jetties, groins, and weirs are allowed in residential development, local governments should consult the department technical assistance materials and afford the best possible protection to priority species and shoreline processes.

Local governments shall not allow residential development of a scale and location that will cause significant ecological impacts to the ecological functions performed by vegetation and PFC for T&E species. Limit significant vegetation removal to the minimum necessary to accommodate permitted primary residential structures. Where the dimensions of existing legally created lots are not sufficient to accommodate development of a permitted use without significant vegetation removal, apply the mitigation sequence defined in WAC 173-26-020 to address adverse impacts to vegetation.

Master programs shall include standards for the creation of new residential lots through land division or conversion from another use that accomplish the following:

- (i) Prevent significant vegetation removal, development within the CMZ, and significant ecological impacts to properly functioning condition and other ecological functions. That is, all residential lots resulting from such platting or subdivision must be large enough or configured in a way that a residence may be developed without causing significant ecological impacts to properly functioning condition and other ecological functions. For example, master programs shall prevent the creation of new residential lots that will require structural shoreline stabilization or deviation from vegetation conservation or water quality standards.

When land is converted to residential use from agriculture, forestry, or other less intensive land use, ensure that the resulting lots are sufficient in size and configuration to allow protection of ecological functions or, if vegetation supporting ecological functions has been removed, the restoration of ecological functions.

- (ii) Prevent the need for new shoreline stabilization measures that would cause significant ecological impacts.
- (iii) Implement the provisions of WAC 173-26-310 and 173-26-320.

(k) Transportation and parking.

Establish and implement master program policies and regulations to provide safe, reasonable, and adequate circulation systems to shorelines.

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

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

Plan, locate, and design proposed transportation and parking facilities where routes will have the least possible adverse effect on unique or fragile shoreline features and existing ecological functions or on existing or future water-dependent uses. Where other options are available and feasible, new roads or road expansions shall not be built within shoreline jurisdiction.

Parking facilities in shorelines are not a preferred use and shall be allowed only as necessary to support a preferred use. Shoreline master programs shall include policies and regulations to minimize the environmental and visual impacts of parking facilities.

Restoration of shoreline ecological functions shall be a condition of new and expanded nonwater-dependent transportation and parking facilities where they affect PFC for T&E species.

(I) Utilities.

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

All utility facilities shall be designed and located to minimize harm to properly functioning condition and shoreline functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.

Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, that are nonwater-oriented shall not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available. In such cases, significant ecological impacts to properly functioning condition shall be avoided.

Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located to cause minimum harm to the shoreline and shall be located outside of the shoreline area where feasible. Utilities should be located in existing rights of way and corridors whenever possible.

Development of pipelines and cables on tidelands, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance or that cause significant ecological impacts shall be discouraged. When permitted, those facilities shall include adequate provisions to protect against significant ecological impacts.

Restoration of ecological functions shall be a condition of new and expanded nonwater-dependent utility facilities where they may affect PFC for T&E species.

NEW SECTION

WAC 173-26-350 Shorelines of statewide significance.

(1) Applicability.

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

(2) Principles.

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

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

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

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

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

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

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

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

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

(a) Statewide interest.

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

(b) Preserving resources for future generations.

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

(c) Priority uses.

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

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

(d) Resources of statewide importance.

Establish development standards that:

- (i) Ensure the long-term protection and restoration of functions supporting properly functioning condition and ecological resources of statewide importance, such as anadromous fish habitats, forage fish spawning and rearing areas, shellfish beds, and unique environments. Standards shall consider incremental and cumulative impacts of permitted development and include provisions to improve the functions of shoreline ecosystems as a whole.
- (ii) Provide for the shoreline needs of water-oriented uses and other shoreline economic resources of statewide importance.
- (iii) Provide for the right of the public to use, access, and enjoy public shoreline resources of statewide importance.

(e) Comprehensive plan consistency.

Assure that other local comprehensive plan provisions are consistent with and support as a high priority the policies for shorelines of statewide significance. Specifically, shoreline master programs shall include policies that incorporate the priorities and optimum implementation directives of chapter 90.58 RCW into comprehensive plan provisions and implementing development regulations. Where necessary for the survival and recovery of T&E species, ensure that comprehensive plan policies and other development regulations are consistent with master program provisions to protect and restore ecological functions necessary for properly functioning condition.

**PART V
OCEAN MANAGEMENT**

NEW SECTION

The following section of the Washington Administrative Code is recodified as follows:

Old WAC Number	New WAC Number
173-16-064	173-26-360