Westport SMP Update – Draft Approved by City Council
SMP Appendix 2: Critical Areas Regulations

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1 GENERAL PROVISIONS

1.01 PURPOSE

A. The purpose of this Appendix is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property, as required within the shoreline jurisdiction under the SMA.

B. This Appendix protects environmentally sensitive resources within the shoreline jurisdiction of the city by establishing minimum standards for development of properties that contain or border environmentally sensitive features and thereby protecting the public health, safety, and welfare. These standards serve to preclude land uses and developments in the shoreline jurisdiction which are incompatible with critical areas by:

1. Protecting the public from personal injury, loss of life, or property damage due to flooding, erosion, landslides, seismic events, tsunamis, or soil subsidence;
2. Avoiding public expenditures to address improper use or improper management of critical areas;
3. Preventing degradation of the natural environment;
4. Protecting unique, fragile, and valuable elements of the environment;
5. Including BAS in developing policies and development regulations to protect the functions and values of critical areas;
6. Giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries;
7. Protecting the local renewable resources that the city's economy is heavily dependent on through conservation and protective measures;
8. Alerting property owners, potential buyers or lessees, and others to the existence of and the development limitations of critical areas; and
9. Providing city officials with sufficient information to protect critical areas when approving, conditioning, or denying public or private development proposals.

C. This Appendix is intended to protect critical areas in accordance with the SMA and through the application of the best available science (BAS), and in consultation with state and federal agencies and other qualified professionals.

D. This Appendix will be administered with flexibility and attention to site-specific characteristics. It is not the intent of the city to make property unusable or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community.

1.02 ADMINISTRATIVE PROCEDURES

A. The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the SMP. This shall include, but not be limited to, timing, appeals, exemptions, variances, and fees associated with applications covered by this Appendix.

1.03 APPLICABILITY

A. This Appendix establishes regulations for the protection of all properties that contain or are adjacent to critical areas within the shoreline jurisdiction as defined by the SMA.

B. Critical areas regulated by this Appendix include:

1. Wetlands as designated in SMP Appendix 2: Chapter 2 – Wetlands;
2. Critical aquifer recharge areas as designated in SMP Appendix 2: Chapter 3 – Critical Aquifer Recharge Areas;
3. Frequently flooded areas as designated in SMP Appendix 2: Chapter 4 – Frequently Flooded Areas;
4. Geologically hazardous areas as designated in SMP Appendix 2: Chapter 5 – Geologically Hazardous Areas; and
5. Fish and wildlife habitat conservation areas as designated in SMP Appendix 2: Chapter 6 – Fish and Wildlife Habitat Conservation Areas; and
6. Critical saltwater habitat areas as designated in SMP Appendix 2: Chapter 7 – Critical Saltwater Habitats.

C. All areas within the city's shoreline jurisdiction meeting the definition of one or more critical areas, regardless of any formal identification, are designated critical areas and are subject to the provisions of this Appendix.

D. Properties classified as critical areas are those so designated on the resource maps referenced in this Appendix, or by separate studies, which indicate that all or portions of a particular area or specific site are environmentally sensitive or critical areas. A site-specific analysis prepared by a qualified professional that indicates that any element regulated by this Appendix is present will result in the classification of a property as an environmentally sensitive critical area.

E. Land uses or developments in the shoreline jurisdiction proposed on or adjacent to sites which are critical areas shall comply with the provisions of this Appendix. Adjacency shall be determined by BAS.

F. Critical area buffers located outside of the shoreline jurisdiction are regulated under WMC Chapter 15.34: Critical Areas Ordinance.

1.04 BEST AVAILABLE SCIENCE

A. Critical area reports and decisions to alter critical areas shall rely on BAS to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat. Herrera Environmental Consultants prepared a Summary of Best Available Science report (Herrera, 2015) for the city, which included a synthesis of BAS current as of the date of the final report.

B. BAS is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or a team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through 365-195-925.

C. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area, leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the city shall:

   1. Take a precautionary or a no-risk approach that strictly limits development activities until the uncertainty is sufficiently resolved; and

2. Require an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area.

1.05 ALLOWED ACTIVITIES

A. Critical Area Report. Activities allowed under this Appendix shall have been reviewed and permitted or approved by the city or other agency with jurisdiction, but do not require submittal of a separate critical area identification form or critical area report, unless such submittal was required previously for the underlying permit. The Shoreline Administrator may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this Appendix to protect critical areas.

B. Required Use of BMPs. All allowed activities shall be conducted using the BMPs, adopted pursuant to the applicable city stormwater management programs and regulations, that result in the least amount of impact to the critical areas. BMPs shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The city shall observe the use of BMPs to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. Allowed Activities. The following activities are allowed, while a shoreline permit may still be required:

1. Permit Requests Subsequent to Previous Critical Area Review. Development permits and approvals that involve both SMP permit approvals and construction approvals if all of the following conditions have been met:

   a. The provisions of this Appendix have been previously addressed as part of another approval;

   b. There have been no material changes in the potential impact to the critical area or buffer since the prior review;

   c. There is no new information available that is applicable to any critical area review of the site or particular critical area;

d. The permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit or approval; and

e. Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;

2. Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement, provided that restoration of structures substantially damaged by fire, flood, or act of nature must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion;

3. Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased stormwater; subject to the following:

   a. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the right-of-way improvement, including disturbed areas;

   b. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance; and

   c. All impacts shall be fully mitigated;

4. Minor Utility Projects. Utility projects which have minor or short-duration impacts to critical areas, as determined by the Shoreline Administrator in accordance with the criteria below, and which do not significantly impact the function or values of a critical area, if such projects are constructed with BMPs and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:

   a. There is no practical alternative to the proposed activity with less impact on critical areas;

b. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and

c. The activity involves disturbance of an area less than 75 square feet;

5. Public and Private Pedestrian Trails. Public and private pedestrian trails, except in wetlands, fish and wildlife habitat conservation areas, or their buffers, subject to the following:

   a. The trail surface shall meet all other requirements including water quality standards set forth in the applicable city stormwater management programs and regulations;

   b. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and

   c. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report;

   d. All impacts are fully mitigated;

6. Select Vegetation Removal Activities. The following vegetation removal activities, provided that no vegetation shall be removed from a critical area or its buffer without approval from the Shoreline Administrator:

   a. The removal of the following vegetation with hand labor and light equipment:

      1) Invasive and noxious weeds;

      2) English Ivy (Hedera helix);

      3) Himalayan blackberry (Rubus discolor, R. procerus); and

      4) Evergreen blackberry (Rubus laciniatus).

   b. The removal of trees from critical areas and buffers that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property, provided that:

      1) The applicant submits a report from a certified arborist, registered landscape architect, or professional forester, or other professional that is approved by the Director, that documents the hazard and provides a replanting schedule for the replacement trees;

2) Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags;

3) All vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease or pest transmittal to other healthy vegetation;

4) The landowner shall replace any trees that are removed with new trees at a ratio of two replacement trees for each tree removed (2:1) within one year in accordance with an approved restoration plan. Replacement trees may be planted at a nearby location if it can be determined that planting in the same location would create a new hazard or potentially damage the critical area. Replacement trees shall be species that are native and indigenous to the site and a minimum of one inch in diameter-at-breast height for deciduous trees and a minimum of six feet in height for evergreen trees as measured from the top of the root ball;

5) If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods or removal that will minimize impacts; and

6) Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner prior to receiving written approval from city. Within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this Appendix.

c. Measures to control a fire or halt the spread of disease or damaging insects conducted or directed by a governmental agency consistent with the state Forest Practices Act; Chapter 76.09 RCW, provided that the removed vegetation shall be replaced in-kind or with similar native species within one year in accordance with an approved restoration plan;

d. Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited; and

e. The removal of vegetation with hand labor and light equipment from a critical area or its buffer to the minimum extent necessary to provide access to established utilities, including water, sewer, power, cable, and drainage facilities, for maintenance and repair activities;

7. Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, as approved by the city, provided that their use shall be restricted in accordance with WDFW Management Recommendations and the regulations of the Washington State Department of Agriculture and the EPA;
8. Minor Site Investigative Work. Work necessary for SMP permit submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and
9. Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers.

1.06 CRITICAL AREA PROJECT REVIEW PROCESS

A. General Requirements

1. As part of this review, the city shall:
   a. Verify the information submitted by the applicant;
   b. Evaluate the project area and vicinity for critical areas;
   c. Determine whether the proposed project is likely to impact the functions or values of critical areas; and
   d. Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.
2. If the proposed project is within, adjacent to, or is likely to impact a critical area, the city shall:
   a. Require a critical area report from the applicant that has been prepared by a qualified professional;

b. Review and evaluate the critical area report;

c. Determine whether the development proposal conforms to the purposes and performance standards of this Appendix, including the review criteria in SMP Appendix 2: Section 1.08(B);

d. Assess the potential impacts to the critical area and determine if they can be avoided or minimized; and

e. Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this Appendix.

B. Critical Area Pre-Application Consultation

Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this Appendix may conduct a consultation meeting with the Shoreline Administrator prior to submitting an application for development or other approval. Critical area pre-application consultation meetings are strongly encouraged. At this meeting, the Shoreline Administrator shall discuss the requirements of this Appendix; provide critical area maps, scientific information, and other source materials; outline the review process; and work with the activity proponent to identify any potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements.

C. Critical Area Identification Form

1. Submittal. Prior to the city's consideration of any proposed activity not found to be exempt under SMP Section 7.04.04 or allowed pursuant to SMP Appendix 2: Section 1.05, the applicant shall submit to the Shoreline Administrator a complete critical area identification form provided by the city.

2. Site Inspection. Upon receipt of a project application and a critical area identification form, the Shoreline Administrator shall conduct a site inspection to review critical area conditions on site. The Shoreline Administrator shall notify the property owner of the inspection prior to the site visit. The property owner shall provide reasonable access to the site for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

3. Critical Area Identification Form Review Process. The Shoreline Administrator shall review the critical area identification form, conduct a site inspection, and review other information available pertaining to the site and the proposal and make a determination as to whether any critical areas may be affected by the proposal and if a more detailed critical area report shall be submitted.

    a. Decision Indicators. The Shoreline Administrator may use the following indicators to assist in determining the need for a critical area report:

        1) Indication of a critical area on the city critical areas maps that may be impacted by the proposed activity;

        2) Information and scientific opinions from appropriate agencies, including but not limited to Ecology, WDFW, and WDNR;

        3) Documentation, from a scientific or other reasonable source, of the possible presence of a critical area; or

        4) A finding by a qualified professional or a reasonable belief by the Shoreline Administrator that a critical area may exist on or adjacent to the site of the proposed activity.

4. Decision on Identification Form.

    a. No Critical Areas Present. If after a site visit the Shoreline Administrator's analysis indicates that the project area is not within or adjacent to a critical area or buffer and that the proposed activity is unlikely to degrade the functions or values of a critical area, then the Shoreline Administrator shall rule that the critical area review is complete. The Shoreline Administrator shall note on the identification form the reasons that no further review is required. A summary of this information shall be included in any decision on the underlying permit.

    b. Critical Areas Present, But No Impact – Waiver. If the Shoreline Administrator determines there are critical areas within or adjacent to the project area, but the BAS shows that the proposed activity is unlikely to degrade the functions or values of the critical area, the Shoreline Administrator may waive the requirement for a critical area report. The Shoreline Administrator may consult with a qualified professional to provide subject matter expertise in making this determination. A waiver may be granted if there is substantial evidence that all of the following requirements will be met:

1) There will be no alteration of the critical area or buffer;

2) The development proposal will not impact the critical area in a manner contrary to the purpose, intent, and requirements of this Appendix; and

3) The proposal is consistent with other applicable regulations and standards.

A summary of this analysis and the findings shall be included in any decision on the underlying permit.

c. Critical Areas May Be Affected by Proposal. If the Shoreline Administrator determines that a critical area or areas may be affected by the proposal, then the Shoreline Administrator shall notify the applicant that a critical area report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed in the report.

5. Shoreline Administrator's Determination Subject to Reconsideration. A determination regarding the apparent absence of one or more critical areas by the Shoreline Administrator is not an expert certification regarding the presence of critical areas and the determination is subject to possible reconsideration and reopening if new information is received.

   If the applicant wants greater assurance of the accuracy of the critical area review determination, the applicant may choose to hire a qualified professional to provide such assurances.

D. Public Notice of Initial Determination

The city shall notify the public of proposals in accordance with SMP Section 7.03.

1. If the Shoreline Administrator determines that no critical area report is necessary, the city shall state the reasons for this determination in the notice of application issued by the city for the proposal.
2. If the Shoreline Administrator determines that the proposed project is unlikely to impact critical areas on the site and the project has been granted a waiver from the requirement to complete a critical area report, then a summary of the analysis and findings for this decision shall be stated in the notice of application for the proposal.
3. If the Shoreline Administrator determines that critical areas may be affected by the proposal and a critical area report is required, public notice of the application shall

include a description of the critical area that might be affected and state that a critical area report is required.

1.07 CRITICAL AREA REPORT

A. Critical Area Report – Requirements

1. Preparation by Qualified Professional. If required by the Shoreline Administrator in accordance with SMP Appendix 2: Section 1.06(C), the applicant shall submit a critical area report prepared by a qualified professional as defined herein.
2. Incorporating of Best Available Science. The critical area report shall use scientifically valid methods and studies in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Appendix.
3. Minimum Report Contents. At a minimum, the report shall contain the following:
    a. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
    b. A copy of the site plan for the development proposal including:
        1) A vicinity map;
        2) A map to scale depicting delineated and surveyed critical areas, required buffers including buffers for off-site critical areas that extend onto the project site, the development proposal, any areas to be cleared and areas of proposed impacts to critical areas and/or buffers (include square footage estimates); and
        3) A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project;
    c. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

d. Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;

e. A statement specifying the accuracy of the report, and all assumptions made and relied upon;

f. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

g. An analysis of site development alternatives including a no development alternative;

h. A description of reasonable efforts made to apply mitigation sequencing pursuant to SMP Appendix 2: Section 1.07(D) to avoid, minimize, and mitigate impacts to critical areas;

i. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with SMP Appendix 2: Section 1.07(E), including, but not limited to:

   1) The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and

   2) The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;

j. A discussion of the performance standards applicable to the critical area and proposed activity;

k. Financial guarantees to ensure compliance; and

l. Any additional information required for the critical area as specified in the corresponding chapter of this Appendix.

4. Unless otherwise provided, a critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Shoreline Administrator.

B. Critical Area Report – Modifications to Requirements

1. Limitations to Study Area. The Shoreline Administrator may limit the required geographic area of the critical area report as appropriate if:

a. The applicant, with assistance from the city, cannot obtain permission to access properties adjacent to the project area; or

b. The proposed activity will affect only a limited part of the subject site.

2. Modifications to Required Contents. The applicant may consult with the Shoreline Administrator prior to or during preparation of the critical area report to obtain city approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to address the potential critical area impacts and required mitigation adequately.

3. Additional Information Requirements. The Shoreline Administrator may require additional information to be included in the critical area report when determined to be necessary to the review of the proposed activity in accordance with this Appendix. Additional information that may be required, includes, but is not limited to:

a. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

b. Grading and drainage plans; and

c. Information specific to the type, location, and nature of the critical area.

C. Mitigation Requirements

1. The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this Appendix, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal shall be mitigated using BAS in accordance with an approved critical area report and SEPA documents, to result in no net loss of critical area functions and values.

2. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

3. Mitigation shall not be implemented until after city approval of a critical area report, which includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved critical area report.

D. Mitigation Sequencing

Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time at the time of the initiation of the project;
4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;
5. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
6. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
7. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

E. Mitigation Plan Requirements

When mitigation is required, the applicant shall comply with SMP Section 4.03 and submit for approval by city a mitigation plan as part of the critical area report. The mitigation plan shall include:

1. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

a. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;

b. A review of the BAS supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and

c. An analysis of the likelihood of success of the compensation project.

2. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this Appendix have been met.

3. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

   a. The proposed construction sequence, timing, and duration;

   b. Grading and excavation details;

   c. Erosion and sediment control features;

   d. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

   e. Measures to protect and maintain plants until established.

   These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated outcome.

4. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document

milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

5. Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

6. Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with SMP Appendix 2: Section 1.10(F).

F. Innovative Mitigation

1. The city may encourage, facilitate, and approve innovative mitigation projects that are based on the BAS. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this Section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:
   a. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;
   b. The group demonstrates the organizational and fiscal capability to act cooperatively;
   c. The group demonstrates that long-term management of the habitat area will be provided; and
   d. There is a clear potential for success of the proposed mitigation at the identified mitigation site.
2. Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.

1.08 DETERMINATION PROCESS

A. Determination

The Shoreline Administrator shall make a determination as to whether the proposed activity and mitigation, if any, is consistent with the provisions of this Appendix. The Shoreline Administrator's determination shall be based on the criteria of SMP Appendix 2: Section 1.08(B).

B. Review Criteria

1. Any alteration to a critical area, unless otherwise provided for in this Appendix, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:
    a. The proposal minimizes the impact on critical areas in accordance with SMP Appendix 2: Section 1.07(D);
    b. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
    c. The proposal is consistent with the general purposes of this Appendix and the public interest;
    d. Any alterations permitted to the critical area are mitigated in accordance with SMP Appendix 2: Section 1.07(C);
    e. The proposal protects the critical area functions and values consistent with the BAS and results in no net loss of critical area functions and values; and
    f. The proposal is consistent with other applicable regulations and standards.
2. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this Appendix.
3. Except as provided for by this Appendix, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in SMP Appendix 2: Section 1.07(D) shall be denied.

C. Favorable Determination

1. If the Shoreline Administrator determines the proposed activity meets the criteria in SMP Appendix 2: Section 1.08(B) and complies with the applicable provisions of this Appendix, the Shoreline Administrator shall prepare a written notice of

determination and identify any required conditions of approval. The notice of determination and conditions of approval shall be included in the project file and be considered in the next phase of the city's review of the proposed activity in accordance with any other applicable codes or regulations.

2. Any conditions of approval included in a notice of determination shall be attached to the underlying shoreline permit or approval. Any subsequent changes to the conditions of approval shall void the previous determination pending re-review of the proposal and conditions of approval by the Shoreline Administrator.
3. A favorable determination should not be construed as endorsement or approval of any underlying shoreline permit or approval.

D. Unfavorable Determination

1. If the Shoreline Administrator determines that a proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the criteria in SMP Appendix 2: Section 1.08(B) and the provisions of this Appendix, the Shoreline Administrator shall prepare written notice of the determination that includes findings of noncompliance. No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the provisions of this Appendix.
2. Following notice of determination that the proposed activity does not meet the review criteria and/or does not comply with the applicable provisions of this Appendix, the applicant may request consideration of a revised critical area report. If the revision is found to be substantial and relevant to the critical area review, the Shoreline Administrator may reopen the critical area review and make a new determination based on the revised report.

E. Completion of the Critical Area Review

1. The city's determination regarding critical areas pursuant to this Appendix shall be final concurrent with the final decision to approve, condition, or deny the shoreline development proposal or other activity involved.

F. Appeals

1. Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this Appendix may be appealed according to the appeal procedure the appeal procedure for the permit or approval involved.

1.09 UNAUTHORIZED ALTERATIONS AND ENFORCEMENT

A. Unauthorized Critical Area Alterations and Enforcement

1. When a critical area or its buffer has been altered in violation of this Appendix, all ongoing development work shall stop and the critical area shall be restored. The city shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Appendix.
2. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by city. Such a plan shall be prepared by a qualified professional using BAS and shall describe how the actions proposed meet the minimum requirements described in SMP Appendix 2: Section 1.09(A)(3). The Shoreline Administrator shall seek expert advice in determining the adequacy of the plan at the violator's expense. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.
3. Minimum Performance Standards for Restoration
    a. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, habitat conservation areas and critical saltwater habitats, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:
        1) The historic structural and functional values shall be restored, including water quality and habitat functions;
        2) The historic soil types and configuration shall be replicated;
        3) The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes,

and densities. The historic functions and values should be replicated at the location of the alteration; and

4) Information demonstrating compliance with the requirements in SMP Appendix 2: Section 1.07(E) shall be submitted to the Shoreline Administrator.

b. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

1) The hazard shall be reduced to a level equal to, or less than, the pre-development hazard;

2) Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

3) The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

4. Site Investigations. The Shoreline Administrator is authorized to make site inspections and take such actions as are necessary to enforce this Appendix. The Shoreline Administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

5. Penalties. Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this Appendix shall be penalized under the provisions of SMP Section 7.08.02.

1.10 GENERAL CRITICAL AREA PROTECTIVE MEASURES

A. Critical Area Markers and Signs

1. Temporary markers. The outer perimeter of the critical area buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary "clearing limits" fencing in such a way as to ensure that unauthorized intrusion will not occur. The marking is subject to inspection by the Shoreline Administrator prior to the commencement of permitted activities. This

temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Fencing installed as part of a proposed activity or as required in SMP Appendix 2: Section 1.10(A)(1) shall be designed to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

3. Permanent signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Shoreline Administrator may require the applicant to install permanent signs along the boundary of a critical area or buffer.

   a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another non-treated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the Shoreline Administrator:

Protected Area

Do Not Disturb

Contact the city of Westport

Regarding Uses, Restrictions, and Opportunities for Stewardship

   b. The provisions of Subsection (a) may be modified as necessary to assure protection of sensitive features or wildlife.

B. Notice on Title

1. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall file a notice with the county records and elections division according to the direction of the city. The notice shall state the presence of the critical area or buffer on the property, the application of this Appendix to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall "run with the land."

2. This Notice on Title shall not be required for a development proposal by a public agency or public or private utility:
    a. Within a recorded easement or right-of-way;
    b. Where the agency or utility has been adjudicated the right to an easement or right-of-way; or
    c. On the site of a permanent public facility.
3. The applicant shall submit proof that the notice has been filed for public record before the city approves any SMP permit.

C. Native Growth Protection Areas

1. Unless otherwise required in this Appendix, native growth protection areas shall be used in development proposals in the shoreline jurisdiction for long subdivisions, short subdivisions, master plan developments, and binding site plans to delineate and protect those contiguous critical areas and buffers listed below:
    a. All landslide hazard areas and buffers;
    b. All wetlands and buffers;
    c. All habitat conservation areas; and
    d. All other lands to be protected from alterations as conditioned by project approval.
2. Native growth protection areas shall be recorded on all documents of title of record for all affected lots.
3. Native growth protection areas shall be designated on the face of the plat or in a recorded drawing in a format approved by the City Attorney. The designation shall include the following restrictions:
    a. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
    b. The right of the city to enforce the terms of the restriction.

D. Critical Area Tracts

1. Critical area tracts shall be used in development proposals in the shoreline jurisdiction for long subdivisions, short subdivisions, master plan developments, and binding site plans to delineate and protect those contiguous critical areas and buffers listed below that total 5,000 or more square feet:
    a. All landslide hazard areas and buffers;
    b. All wetlands and buffers;
    c. All habitat conservation areas; and
    d. All other lands to be protected from alterations as conditioned by project approval.
2. Critical area tracts shall be recorded on all documents of title of record for all affected lots.
3. Critical area tracts shall be designated on the face of the plat or recorded as a drawing in a format approved by the City Attorney. The designation shall include the following restriction:
    a. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
    b. The right of the city to enforce the terms of the restriction.
4. The city may require that any required critical area tract be dedicated to the city, held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity.

E. Building Setbacks

Unless otherwise provided, buildings and other structures shall be set back a distance of fifteen feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

1. Landscaping;

2. Uncovered decks;
3. Building overhangs, if such overhangs do not extend more than eighteen (18) inches into the setback area; and
4. Impervious ground surfaces, such as driveways and patios, if such improvements are subject to applicable city stormwater management programs and regulations.

F. Bonds to Ensure Mitigation, Maintenance, and Monitoring

1. When mitigation required pursuant to a development proposal is not completed prior to the city final permit approval, such as final plat approval or final building inspection, the city shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.
2. The bond shall be for 125% of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.
3. The bond shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the City Attorney.
4. Bonds or other security authorized by this Section shall remain in effect until the city determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the city for a minimum of five years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.
5. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.
6. Public development proposals shall be relieved from having to comply with the bonding requirements of this Section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.
7. Any failure to satisfy critical area requirements that were established by law or condition including, but not limited to, the failure to provide a monitoring report

within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default. The city may demand payment of any financial guarantees or require other action authorized by the city code or any other law.

8. Any funds recovered pursuant to this Section shall be used to complete the required mitigation.

G. Critical Area Inspections

1. Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

2 WETLANDS

2.01 PURPOSE

A. The purpose of this Section includes the following:

1. Recognize and protect the beneficial functions performed by many wetlands, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging ground water; stabilizing shorelines; storing storm and flood waters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, and retention and transformation of sediments, nutrients, and toxicants.
2. Regulate land use in the shoreline jurisdiction to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout the city's shoreline jurisdiction.
3. Establish review procedures for development proposals in and adjacent to wetlands.

2.02 WETLAND IDENTIFICATION AND DELINEATION

A. Identification of wetlands and delineation of their boundaries pursuant to this Section shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements. All areas within the shoreline jurisdiction of the city meeting the wetland designation criteria in that procedure are designated critical areas and are subject to the provisions of this Appendix. Wetland delineations are valid for five years; after such date, the city shall determine whether a revision or additional assessment is necessary.

2.03 WETLAND RATING

A. Wetlands shall be rated in accordance with *Washington State Wetland Rating System for Western Washington: 2014 Update*, 2014, Ecology Publication No. 14-06-029, as revised and approved by Ecology, which contains the definitions and methods for determining whether the criteria below are met.

1. Category I Wetlands. Category I wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. Category I wetlands are those wetlands of exceptional value in terms of protecting water quality, storing flood and storm water, and/or providing habitat for wildlife as indicated by their special characteristics and/or a total rating system score of 23 to 27 points or more on the Ecology rating forms. These wetland communities of infrequent occurrence often provide documented habitat for sensitive, threatened or endangered species, and/or have other attributes that are very difficult or impossible to replace if altered.
2. Category II Wetlands. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands have significant value based on their function as indicated by their special characteristic and/or a total rating system score of between 20 and 22 points on the Ecology rating forms. They do not meet the criteria for Category I rating but occur infrequently and have qualities that are difficult to replace if altered.
3. Category III Wetlands. Category III wetlands are 1) wetlands with a moderate level of functions (scores between 16-19 points), 2) can often be adequately replaced with a well-planned mitigation project, and 3) interdunal wetlands between 0.1 and 1 ac in size. Wetlands scoring between 16-19 points generally have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.
4. Category IV Wetlands. Category IV wetlands have the lowest levels of functions (scores fewer than 16 points) and are often heavily disturbed. These wetlands may be able to replaced and in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and need to be protected. They typically have vegetation of similar age and class, lack special habitat features, and/or are isolated or disconnected from other aquatic systems or high quality upland habitats.

B. Wetland rating categories shall not change due to illegal modifications made by the applicant or with the applicant's knowledge.

2.04 REGULATED ACTIVITIES

A. For any regulated activity, a critical areas report for wetlands as defined in SMP Appendix 2: Chapter 2.07 may be required by the Shoreline Administrator to support the requested activity.

B. The following activities are regulated if they occur in a regulated wetland or its buffer:

1. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
2. The dumping of, discharging of, or filling with any material.
3. The draining, flooding, or disturbing of the water level or water table.
4. Pile driving.
5. The placing of obstructions.
6. The construction, reconstruction, demolition, or expansion of any structure.
7. The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland.
8. Class IV - General Forest Practices" under the authority of the "1992 Washington State Forest Practices Act Rules and Regulations," WAC 222-12-030, or as thereafter amended.
9. Activities that result in:
    a. A significant change of water temperature;
    b. A significant change of physical or chemical characteristics of the sources of water to the wetland;
    c. A significant change in the quantity, timing, or duration of the water entering the wetland; or
    d. The introduction of pollutants.

C. The subdivision or short subdivision of land in wetlands and associated buffers are subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided for development; and
2. Land that is located partially within a wetland or its buffer may be subdivided for development provided that an accessible and contiguous portion of each new lot is:
   a. Located outside of the wetland and its buffer; and
   b. It meets the minimum lot size requirements of WMC Title 17: Zoning.

2.05 EXEMPTIONS AND ALLOWED USES IN WETLANDS

A. The following wetlands are exempt from the buffer provisions contained in this Section and the normal mitigation sequencing process in SMP Appendix 2: Section 2.08. These wetlands may be filled if impacts are fully mitigated based on provisions in SMP Appendix 2: Section 2.08. In order to verify the following conditions, a critical area report for wetlands meeting the requirements in SMP Appendix 2: Section 2.07 must be submitted.
   1. All isolated Category III and IV wetlands less than 1,000 square feet that:
      a. Are not associated with riparian areas or buffers;
      b. Are not part of a wetland mosaic; and
      c. Do not contain habitat identified as essential for local populations of priority species identified by the WDFW or species of local importance identified in SMP Appendix 2: Section 6.02.

B. The activities listed below are allowed in wetlands. These activities do not require submission of a critical area report, except where such activities result in a loss of the functions and values of a wetland or wetland buffer. These activities include:
   1. Conservation or preservation of soil, water, vegetation, fish, shellfish, and/or other wildlife that does not entail changing the structure or functions of the existing wetland.
   2. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

3. Drilling for utilities/utility corridors under a wetland, with entrance/exit portals located completely outside of the wetland buffer, if the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column will be disturbed.
4. Enhancement of a wetland through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and disposed of appropriately. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Re-vegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
5. Educational and scientific research activities.
6. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, if the maintenance or repair does not expand the footprint of the facility or improved right-of-way.

2.06 WETLAND BUFFERS

A. A wetland buffer that separates a wetland from a development is required. The purpose of the buffer is to mitigate adverse impacts of development activities and future use on the wetland. The width and character of buffers shall be as necessary to protect the identified functions and values of the wetland from impacts associated with the specific type and character of the proposed development activities and use of the property in accordance with the BAS.

B. The standard wetland buffer widths in SMP Appendix 2: Table 2-1: Wetland Buffer Requirements have been established in accordance with the BAS. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington state wetland rating system for western Washington.

1. The use of the standard buffer widths requires the implementation of the measures in SMP Appendix 2: Table 2-2: Required Measures to Minimize Impacts to Wetlands, where applicable, to minimize the impacts of the adjacent land uses.
2. If an applicant chooses not to apply the mitigation measures in SMP Appendix 2: Table 2-2: Required Measures to Minimize Impacts to Wetlands, then a 33 percent increase in the width of all buffers is required. For example, a 75-foot buffer with the mitigation measures would be a 100-foot buffer without them.
3. The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should be planted to create the appropriate plant community, or the buffer should be widened to ensure that adequate functions of the buffer are provided.
4. Additional buffer widths are added to the standard buffer widths. For example, a Category I wetland scoring 8 points for habitat function would require a buffer of 225 feet (75 feet (Standard Buffer) + 150 feet (Additional Buffer Width if Wetland Scores 8-9 Habitat Points)).

Westport SMP Update – Draft Approved by City Council
SMP Appendix 2: Critical Areas Regulations

SMP Appendix 2: Table 2-1: Wetland Buffer Requirements

Wetland Category	Standard Buffer Width (3-4 Habitat Points)	Additional Buffer Width if Wetland Scores 5 Habitat Points	Additional Buffer Width if Wetland Scores 6-7 Habitat Points	Additional Buffer Width if Wetland Scores 8-9 Habitat Points
Category I:				
Based on total score	75 feet	Add 30 feet	Add 90 feet	Add 150 feet
Bogs and Wetlands of High Conservation Value	190 feet			Add 35 feet
Coastal Lagoons	150 feet		Add 15 feet	Add 75 feet
Interdunal	(N/A)	N/A	N/A	225 feet
Forested	75 feet	Add 30 feet	Add 90 feet	Add 150 feet
Estuarine	150 feet (habitat scores not applicable)			
Category II:				
Based on score	75 feet	Add 30 feet	Add 90 feet	Add 150 feet
Interdunal Wetlands	110 feet		N/A	N/A
Estuarine Wetlands	110 feet		N/A	N/A
Category III:				
Based on score	60 feet	Add 45 feet	Add 105 feet	Add 165 feet
Interdunal wetlands	60 feet	N/A	N/A	N/A
Category IV (all)	40 feet (habitat scores not applicable)			

SMP Appendix 2: Table 2-2: Required Measures to Minimize Impacts to Wetlands

Disturbance	Required Measures to Minimize Impacts (1)
Lights	• Direct lights away from wetland
Noise	• Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source • For activities that generate relatively continuous, potentially

Disturbance	Required Measures to Minimize Impacts (1)
	disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	• Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 feet of wetland • Apply integrated pest management
Stormwater runoff	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer • Use Low Intensity Development techniques
Change in water regime	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	• Use privacy fencing or plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	• Use BMPs to control dust
Disruption of corridors or connections	• Maintain connections to offsite areas that are undisturbed • Restore corridors or connections to offsite habitats by replanting

Note:

(1) Measures are required, where applicable to a specific proposal

5. Increased Wetland Buffer Area Width. Buffer widths shall be increased on a case-by-case basis as determined by the Shoreline Administrator when a larger wetland buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to protection of the functions and values of the wetland. The documentation must include but not be limited to the following criteria:

   a. The wetland is used by a plant or animal species listed by the federal government or the state as endangered, threatened, candidate, sensitive,

monitored or documented priority species or habitats, or essential or outstanding habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees;

b. The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts; or

c. The adjacent land has minimal vegetative cover or slopes greater than 30 percent.

6. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

   a. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower-rated area;

   b. The buffer is increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical areas report from a qualified wetland professional;

   c. The total area of the buffer after averaging is equal to the area required without averaging; and

   d. The buffer at its narrowest point is never less than either ¾ of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

7. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

   a. There are no feasible alternatives to the proposed site design that could be accomplished without buffer averaging;

   b. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical areas report from a qualified wetland professional;

   c. The total buffer area after averaging is equal to the area required without averaging; and

d. The buffer at its narrowest point is never less than either ¾ of the required width or 75 feet for Category I and II, 50 feet for Category III, and 25 feet for Category IV, whichever is greater.

C. Measurement of Wetland Buffers. All wetland buffers shall be measured perpendicular from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers or included in buffer area calculations.

D. Buffers on Mitigation Sites. All mitigation sites shall have buffers consistent with the buffer requirements of this Section. Buffers shall be based on the expected or target category of the proposed wetland mitigation site.

E. Buffer Maintenance. Except as otherwise specified, or allowed in accordance with this Section, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive non-native weeds is required for the duration of the mitigation bond.

F. Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in SMP Appendix 2: Section 2.08.

G. Overlapping Critical Area Buffers. If buffers for two contiguous critical areas overlap, such as buffers for a shoreline and a wetland, the wider buffer applies.

H. Allowed Wetland Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this Section, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the wetland buffer and adjacent wetland:

1. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

2. Passive recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:

   a. Walkways and trails provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer 25% of the wetland

buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five feet in width for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable.

b. Wildlife-viewing structures.

3. Educational and scientific research activities.
4. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, if the maintenance or repair does not increase the footprint or use of the facility or right-of-way.
5. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.
6. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, if the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column is disturbed.
7. Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and disposed of properly. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
8. Stormwater management facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. They may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only, provided that:

   a. No other location is feasible; and

b. The location of such facilities will not degrade the functions or values of the wetland.

9. Non-Conforming Uses. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.

2.07 CRITICAL AREA REPORT FOR WETLANDS

A. Preparation by a Qualified Professional. A qualified professional shall prepare a wetland critical area report.

B. Minimum Standards for Wetland Reports. A wetland report consists of a written report and accompanying plan sheets:

1. In addition to the requirements of SMP Appendix 2: Section 1.07(A), a wetlands report shall include at a minimum:

a. Identification of all the local, state, and/or federal wetland-related permit(s) required for the project.

b. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.

c. A description of the methodologies used to conduct the wetland delineations, rating system forms, or impact analyses including references.

d. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off site of the project site, estimate conditions within 300 feet of the project boundaries using the best available information.

e. For each wetland identified on site and within 300 feet of the project site the following needs to provide:

1) The wetland rating, including a description of and score for each function, per Wetland Ratings (SMP Appendix 2: Section 2.03);

2) Required buffers; hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions);

3) Cowardin classification of vegetation communities;

4) Habitat elements;

5) Soil conditions based on site assessment and/or soil survey information;

6) Hydrologic information to the extent possible such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.); and

7) Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site.

f. A description of the proposed actions, including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey.

g. A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land-use activity.

h. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions.

i. An evaluation of the functions of the wetland and adjacent buffer that includes reference for the method used and data sheets.

2.08 MITIGATION REQUIREMENTS

A. Mitigation Sequencing. Before impacting any wetland or its buffer, an applicant shall demonstrate that the actions listed in SMP Appendix 2: Section 1.07(D) have been taken.

B. Requirements for Compensatory Mitigation:

1. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans--Version 1*, (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and

Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) (Publication #09-06-32, Olympia, WA, December 2009).

2. Mitigation ratios shall be consistent with SMP Appendix 2: Section 2.08(H).

C. Compensating for Lost or Affected Functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

1. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington state watershed assessment plan or protocol; or

2. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by the city, such as replacement of historically diminished wetland types.

D. Preference of Mitigation Actions. Mitigation for lost or diminished wetland and buffer functions shall rely on the types below in the following order of preference:

1. Restoration (re-establishment and rehabilitation) of wetlands:

   a. The goal of re-establishment is returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.

   b. The goal of rehabilitation is repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.

2. Creation (establishment) of wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of non-native species. Establishment results in a gain in wetland acres. This should be attempted only when there is an adequate source of water and it can be shown that the surface and subsurface hydrologic regime is conducive to the wetland community that is anticipated in the design.

   a. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of

a wetland and buffer upon demonstration by the applicant's qualified wetland scientist that:

1) The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;
2) The proposed mitigation site does not contain invasive plants or noxious weeds or that such vegetation will be completely eradicated at the site;
3) Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and
4) The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.

3. Enhancement of significantly degraded wetlands in combination with restoration or creation. Enhancement should be part of a mitigation package that includes replacing the altered area and meeting appropriate ratio requirements. Enhancement is undertaken for specified purposes such as water quality improvement, floodwater retention, or wildlife habitat. Enhancement alone will result in a loss of wetland acreage and is less effective at replacing the functions lost. Applicants proposing to enhance wetlands or associated buffers shall demonstrate:
   a. How the proposed enhancement will increase the wetland's/buffer's functions;
   b. How this increase in function will adequately compensate for the impacts; and
   c. How all other existing wetland functions at the mitigation site will be protected.
4. Preservation. Preservation of high quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement, if a minimum of 1:1 acreage replacement is provided by re-establishment or creation. Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being altered and the quality of the wetlands being preserved.
5. Preservation of high quality at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

a. The area proposed for preservation is of high quality. The following features may be indicative of high-quality sites:

   1) Category I or II wetland rating (using the wetland rating system for western Washington);

   2) Rare wetland type (for example, bogs, mature forested wetlands, estuarine wetlands);

   3) The presence of habitat for priority or locally important wildlife species; and

   4) Priority sites in an adopted watershed plan.

b. Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA listed species.

c. There is no net loss of habitat functions within the watershed or basin.

d. Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost.

e. Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by a land trust.

f. The impact area is small (generally <½ acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland).

g. All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

E. Location of Compensatory Mitigation. Compensatory mitigation actions shall be conducted within the same sub-drainage basin and on the site of the alteration except when all of SMP Appendix 2: Section 2.08(E)(1 – 4) below applies. In that case, mitigation may be allowed off-site within the subwatershed of the impact site. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank or advanced mitigation.

   1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for

wetland mitigation, buffer conditions and proposed widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate wildlife impacts (such as connectivity).

2. On-site mitigation would require elimination of high-quality upland habitat.
3. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.
4. Off-site locations shall be in the same sub-drainage basin unless:
    a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the city and strongly justify location of mitigation at another site; or
    b. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument.

F. Compensatory Mitigation Project Design. The design for the compensatory mitigation project needs to be appropriate for its location (i.e., position in the landscape). Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland refers to a compensation wetland (e.g., created or enhanced) that does not match the type of existing wetland that would be found in the geomorphic setting of the site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting). Likewise, it should not provide exaggerated morphology or require a berm or other engineered structures to hold back water. For example, excavating a permanently inundated pond in an existing seasonally saturated or inundated wetland is one example of an enhancement project that could result in an atypical wetland. Another example would be excavating depressions in an existing wetland on a slope, which would require the construction of berms to hold the water.

G. Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will disturb wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The Shoreline Administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the compensatory mitigation plan. The justification must be verified and approved by the city.

H. Wetland Mitigation Ratios:

SMP Appendix 2: Table 2-3: Wetland Mitigation Ratios[1]

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I:			
Bog, Natural Heritage site	Not Considered Possible	Case by case	Case by case
Mature Forested	6:1	12:1	24:1
Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

Interdunal wetlands are not an option for enhancement per *Wetlands in Washington State Appendix 8-C Volume 2 – Protecting and Managing Wetlands – Western Washington April 2005.*

[1] Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 1a, *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance--Version 1,* (Ecology Publication #06-06-011a, Olympia, WA, March 2006 or as revised). See also SMP Appendix 2: Section 2.08(D)(4) for more information on using preservation as compensation.

I. Compensatory Mitigation Plan. When a project involves wetland and/or buffer impacts, a compensatory mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:

1. Wetland Critical Area Report. A critical area report for wetlands must accompany or be included in the compensatory mitigation plan and include the minimum parameters described in Minimum Standards for Wetland Reports (SMP Appendix 2: Section 2.07(b)).

2. Compensatory Mitigation Report. The report must include a written report and plan sheets that must contain, at a minimum, the following elements. Full guidance can be found in Wetland Mitigation in *Washington State– Part 2: Developing Mitigation Plans (Version 1)* (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised).

    a. The written report must contain, at a minimum:

        1) The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the compensatory mitigation report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.

        2) Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.

        3) Description of the existing wetland and buffer areas proposed to be altered. Include acreage (or square footage), water regime, vegetation, soils, landscape position, surrounding lands uses, and functions. Also, describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based on Wetland Ratings found in SMP Appendix 2: Section 2.03.

        4) Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions: acreage (or square footage) of wetlands and uplands, water regime, sources of water, vegetation, soils, landscape position, surrounding land uses, and functions. Estimate future conditions in this location if the compensation actions are

not undertaken, such as how this site would progress through natural succession.

5) A description of the proposed actions for compensation of wetland and upland areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and categories of wetlands.

6) A description of the proposed mitigation construction activities and timing of activities.

7) A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs for remaining wetlands and compensatory mitigation wetlands.

8) A bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice per year for up to five years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring.

9) Proof of establishment of Notice on Title for the wetlands and buffers on the project site, including the compensatory mitigation areas.

b. The scaled plan sheets for the compensatory mitigation must contain, at a minimum:

1) Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions.

2) Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas that are proposed to be altered, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation.

3) Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored

compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.

4) Conditions expected from the proposed actions on site, including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future water regimes.

5) Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this Section.

6) A plant schedule for the compensation area, including all species by proposed community type and water regime, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, timing of installation.

7) Performance standards in terms of measurable standards reflective of years post-installation for upland and wetland communities, monitoring schedule, and maintenance schedule and actions by each biennium.

J. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

K. Protection of the Mitigation Site. The area where the mitigation occurred and any associated buffer shall be located in a critical area tract or a conservation easement.

L. Monitoring. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. If a scrub-shrub or forested vegetation community is proposed, monitoring may be required for ten years or more. The project mitigation plan shall include monitoring elements that ensure certainty of success for the project's natural resource values and functions. If the mitigation goals are not obtained within the initial five-year period, the applicant remains responsible for restoration of the natural resource values and functions until the mitigation goals agreed to in the mitigation plan are achieved.

M. Wetland Mitigation Banks.

1. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

a. The bank is certified under state rules;

b. The Shoreline Administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

c. The proposed use of credits is consistent with the terms and conditions of the certified bank instrument.

2. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the certified bank instrument.

3. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the certified bank instrument. In some cases, the service area of the bank may include portions of more than one adjacent drainage basin for specific wetland functions.

N. Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations.

O. Alternative Mitigation Plans. The Shoreline Administrator may approve alternative critical areas mitigation plans that are based on BAS, such as priority restoration plans that achieve restoration goals identified in the SMP and Restoration Plan. Alternative mitigation proposals must provide an equivalent or better level of protection of critical area functions and values than would be provided by the strict application of this Section.

The Shoreline Administrator shall consider the following for approval of an alternative mitigation proposal:

1. The proposal uses a watershed approach consistent with *Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington)* (Ecology Publication #09-06-32, Olympia, WA, December 2009).

2. Creation or enhancement of a larger system of natural areas and open space is preferable to the preservation of many individual habitat areas.

3. Mitigation according to Section E is not feasible due to site constraints such as parcel size, stream type, wetland category, or geologic hazards.

4. There is clear potential for success of the proposed mitigation at the proposed mitigation site.

5. The plan shall contain clear and measurable standards for achieving compliance with the specific provisions of the plan. A monitoring plan shall meet the provisions in SMP Appendix 2: Section 2.08(L) at a minimum.
6. The plan shall be reviewed and approved as part of overall approval of the proposed use.
7. A wetland of a different type is justified based on regional needs or functions and values; the replacement ratios may not be reduced or eliminated unless the reduction results in a preferred environmental alternative.
8. Mitigation guarantees shall meet the minimum requirements as outlined in SMP Appendix 2: Section 2.08(I)(2)(a)(8).
9. Qualified professionals in each of the critical areas addressed shall prepare the plan.
10. The city may consult with agencies with expertise and jurisdiction over the resources during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

3 CRITICAL AQUIFER RECHARGE AREAS

3.01 DESIGNATION, RATING AND MAPPING

A. Critical Aquifer Recharge Areas Designation

Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. These areas include the following:

1. Wellhead Protection Areas. Wellhead protection areas may be defined by the boundaries of the ten year time of ground water travel or boundaries established using alternate criteria approved by the WDOH in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
2. Sole Source Aquifers. Sole source aquifers are areas that have been designated by the EPA pursuant to the Federal Safe Water Drinking Act.
3. Susceptible Ground Water Management Areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to WAC 173-100.
4. Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090.
5. Moderately or Highly Vulnerable Aquifer Recharge Areas. Aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with Ecology guidelines.
6. Moderately or Highly Susceptible Aquifer Recharge Areas. Aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by Ecology.

B. Aquifer Recharge Area Susceptibility Ratings

1. Aquifer recharge areas shall be rated as having high, moderate, or low susceptibility based on soil permeability, geologic matrix, infiltration, and depth to water as determined by the criteria established by Ecology.

C. Mapping of Critical Aquifer Recharge Areas

1. The approximate location and extent of critical aquifer recharge areas are shown on the adopted critical areas maps.
2. The location and extent of Wellhead Protection areas are included in maps contained in the City's 2009 Wellhead Protection Plan.
3. These maps are to be used as a guide for the city, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

3.02 ALLOWED ACTIVITIES – CRITICAL AQUIFER RECHARGE AREAS

A. Activities Allowed in Critical Aquifer Recharge Areas

The following activities are allowed in critical aquifer recharge areas pursuant to SMP Appendix 2: Section 1.05(C) and do not require submission of a critical area report:

1. Construction of structures and improvements, including additions, resulting in less than five percent or 2,500 square feet, whichever is greater, total site impervious surface area that does not result in a change of use or increase the use of a hazardous substance.
2. Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than five percent total site impervious surface area that do not increase the use of a hazardous substance.
3. On-site domestic septic systems releasing less than 800 gallons of effluent per day.

3.03 ADDITIONAL REPORT REQUIREMENTS – CRITICAL AQUIFER RECHARGE AREAS

A. Critical Area Report – Additional Requirements for Critical Aquifer Recharge Areas

In addition to the general critical area report requirements of SMP Appendix 2: Section 1.07, critical area reports for critical aquifer recharge areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

1. Preparation by a Qualified Professional. An aquifer recharge area critical area report shall be prepared by a qualified professional.
2. Hydrogeologic Assessment. For all proposed activities to be located in a critical aquifer recharge area, a critical area report shall contain a level one hydrogeological assessment. A level two hydrogeologic assessment shall be required for any of the following proposed activities:
    a. Activities that result in five percent or more impervious site area;
    b. Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer;
    c. The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;
    d. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 800 gallons of effluent per day; or
    e. Any other activity determined by the Shoreline Administrator likely to have an adverse impact on ground water quality or quantity or on the recharge of the aquifer.
3. Level One Hydrogeologic Assessment. A level one hydrogeologic assessment shall include the following site- and proposal-related information at a minimum:
    a. Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all critical aquifer recharge areas located on site or immediately adjacent to the site, and permeability of the unsaturated zone;
    b. Ground water depth, flow direction, and gradient based on available information;

c. Currently available data on wells and springs within 1,500 feet of the project area;

d. Location of other critical areas, including surface waters, within 1,500 feet of the project area;

e. Available historic water quality data for the area to be affected by the proposed activity; and

f. BMPs proposed to be utilized.

4. Level Two Hydrogeologic Assessment. A level two hydrogeologic assessment shall include the following site- and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeological assessment:

   a. Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous five year period;

   b. Ground water monitoring plan provisions;

   c. Discussion of the effects of the proposed project on the ground water quality and quantity, including:

      1) Predictive evaluation of ground water withdrawal effects on nearby wells and surface water features; and

      2) Predictive evaluation of contaminant transport based on potential releases to ground water; and

   d. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.

3.04 PERFORMANCE STANDARDS – CRITICAL AQUIFER RECHARGE AREAS

A. Performance Standards – General Requirements

1. Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer and that the proposed activity will not adversely affect the recharging of the aquifer.

2. The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, and the Grays Harbor County Division of Environmental Health.
3. The proposed activity must be designed and constructed in accordance with the applicable city stormwater management programs and regulations.
4. New construction which relies on on-site septic systems shall not be allowed to exceed a density of one dwelling unit per acre, or an equivalent wastewater volume, except for the development of one dwelling on lots existing or vested by December 5, 1996, where the on-site septic system can comply with all environmental health department standards. For the purposes of this section, the sewage flow of one single-family dwelling equals one unit volume of sewage equals four hundred fifty gallons per day.

B. Performance Standards – Specific Uses

1. Storage Tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
   a. Underground Tanks. New underground storage facilities are not allowed within Critical Aquifer Recharge Areas. Any replacement of underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
      1) Prevent releases due to corrosion or structural failure for the operational life of the tank;
      2) Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
      3) Use material in the construction or lining of the tank that is compatible with the substance to be stored.
   b. Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

1) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
2) Have a primary containment area enclosing or underlying the tank or part thereof; and
3) A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

2. Vehicle Repair and Servicing
   a. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
   b. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by Ecology prior to commencement of the proposed activity.
3. Residential Use of Pesticides and Nutrients. Application of household pesticides, herbicides, and fertilizers shall not exceed times and rates specified on the packaging.
4. Use of Reclaimed Water for Surface Percolation or Direct Recharge. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by Ecology and WDOH.
   a. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in Chapter 90.46.080(1) and Chapter 90.46.010(10) RCW. Ecology may establish additional discharge limits in accordance with Chapter 90.46.080(2) RCW.
   b. Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.
5. State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations

SMP Appendix 2: Table 3-1: Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	Chapter 173-303-640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303 WAC
Hazardous Waste Generator *(Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)*	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (Washington State Department of Ecology, 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18 WAC

Activity	Statute – Regulation – Guidance
Wastewater Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington State Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture

3.05 PROHIBITED USES

A. Uses Prohibited From Critical Aquifer Recharge Areas

The following activities and uses are prohibited in critical aquifer recharge areas:

1. New underground storage tanks;
2. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills;
3. Underground Injection Wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;
4. Mining.
    a. Metals and hard rock mining; and
    b. Sand and gravel mining, prohibited from critical aquifer recharge areas determined to be highly susceptible or vulnerable;
5. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
6. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances; and
7. Other Prohibited Uses or Activities.
    a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;
    b. Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream; and

c. Activities that are not connected to an available sanitary sewer system, prohibited from critical aquifer recharge areas associated with sole source aquifers.

4 FREQUENTLY FLOODED AREAS

4.01 APPLICABILITY

A. All development within the designated frequently flooded areas shall be managed in accordance with WMC Chapter 15. The critical areas provisions related to the flood damage prevention of Ordinance No. 844, dated 1989 and Ordinance No. 1441, dated 2008 (WMC 15.12) and the flood hazard management provisions of SMP Section 4.06 are hereby incorporated by reference.

5 GEOLOGICALLY HAZARDOUS AREAS

5.01 PURPOSE

A. Geologically hazardous areas are characterized by lot slope, soil type, geologic material, and ground water which may combine to create problems with slope stability, erosion and water quality during and after construction or during natural events such as tsunamis, earthquakes or excessive rain-storms. The following regulations, in combination with the performance standards for development, will guide development in geologically hazardous areas. The purpose of these regulations is to maintain the natural integrity of hazardous areas and their buffers in order to protect adjacent lands from the impacts of landslides, subsidence, excessive erosion, and seismic events, and to safeguard the public from these threats to life or property. Construction in geologically hazardous areas should be avoided when the potential risk to public health and safety cannot be reduced to a level comparable to the risk if the site were stable.

5.02 DESIGNATION, CLASSIFICATION, AND MAPPING – GEOLOGICALLY HAZARDOUS AREAS

A. Designation of Geologically Hazardous Areas

1. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use.
2. The entire city is susceptible to widespread and damaging effects of Cascadia event seismic and tsunami hazards. Aside from the Cascadia event scenario, the city is prone to four primary geological hazards. Areas in the city susceptible to one or more of these four primary geological hazards, which do not consider the extreme effects of a Cascadia event, shall be designated as a geologically hazardous area:
    a. Erosion hazard;
    b. Landslide hazard;

c. Seismic hazard;

d. Tsunami hazard.

B. Designation of Specific Hazard Areas

1. Erosion Hazard Areas. Erosion hazard areas are those areas identified by the following:

   a. Any area containing soil or soil complexes described or mapped within the USDA/Soil Conservation Service Soil Survey for Grays Harbor County as having a severe to very severe erosion hazard potential;

   b. Areas susceptible to wind erosion (aeolian erosion) identified as having soil types of Dunelands, Netarts, fine sand, and Westport fine sand;

   c. Areas subject to wave erosion identified as those properties within shorelands associated with the Pacific Ocean and Grays Harbor.

2. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include the following:

   a. Areas of historic failures, such as:

      1) Those areas delineated by the USDA's Natural Resources Conservation Service as having a "severe" limitation for building site development;

      2) Those areas mapped by Ecology (Coastal Zone Atlas) or WDNR (slope stability mapping) as unstable (U or class 3), unstable old slides (UOS or class 4), or unstable recent slides (URS or class 5);

      3) Areas designated as landslides on maps published by the USGS or WDNR; or

      4) Areas mapped in the *Landslide and Liquefaction Maps for the Ocean Shores and Westport Peninsulas, Grays Harbor County, Washington: Effects on Tsunami Inundation Zones of a Cascadia Subduction Zone Earthquake* by the Washington Division of Geology and Earth Resources Report of Investigations.

   b. Areas with all three of the following characteristics:

1) Slopes steeper than 15%;
2) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
3) Springs or ground water seepage.

c. Areas potentially unstable because of rapid stormwater runoff, soil saturation, and undercutting by wave action; or

d. Any area with a slope of 40% or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least ten feet of vertical relief.

3. Seismic Hazard Areas. While a Cascadia event would likely cause expansive and extreme damage to the entire area, a non-Cascadia event would affect particular identified seismic hazard areas, which can be addressed through protective regulatory measures to safeguard the public. Seismic hazard areas are areas subject to severe risk of damage because of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:

   a. The magnitude of an earthquake;
   b. The distance from the source of an earthquake;
   c. The type of thickness of geologic materials at the surface; and
   d. The type of subsurface geologic structure.

   Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.

4. Tsunami Hazard Areas. While a Cascadia event would likely cause expansive and extreme damage to the entire area, a non-Cascadia event would affect particular identified tsunami hazard areas, which can be addressed through protective regulatory measures to safeguard the public. Tsunami hazard areas are coastal

areas susceptible to flooding and inundation as the result of excessive wave action derived from seismic or other geologic events.

5. Based on a review of BAS, the city has concluded that no areas of the city require regulation for protection from mine hazards or volcanic hazards.

C. Mapping of Geologically Hazardous Areas

1. The approximate location and extent of geologically hazardous areas are shown on the adopted critical area maps. The adopted critical areas maps include:
   a. Coastal Zone Atlas (for marine bluff hazards);
   b. U.S. Geological Survey landslide hazard and seismic hazard maps;
   c. WDNR seismic hazard maps for Western Washington, including Liquefaction Susceptibility Map of Grays Harbor County, Washington;
   d. WDNR slope stability maps;
   e. National Oceanic and Atmospheric Administration tsunami hazard maps;
   f. FEMA flood insurance maps;
   g. Landslide and Liquefaction Maps for the Ocean Shores and Westport Peninsulas, Grays Harbor County, Washington;
   h. Tsunami Hazard Map of the Southern Washington Coast by WDNR; and
   i. Locally adopted maps.
2. These maps are to be used as a guide for the city, project applicants, and property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

5.03 ALLOWED ACTIVITIES – GEOLOGICALLY HAZARDOUS AREAS

A. Activities Allowed in Geologically Hazardous Areas

The following activities are allowed in geologically hazardous areas pursuant to SMP Appendix 2: Section 1.05 and do not require submission of a critical area report:

1. Erosion and Landslide Hazard Areas. Except as otherwise provided for in this Appendix, only those activities approved and permitted consistent with an approved

critical area report in accordance with this Appendix shall be allowed in erosion or landslide hazard areas.

2. Seismic Hazard Areas. The following activities are allowed within seismic hazard areas pursuant to WMC 15.34.120 and do not require submission of a critical area report:
   a. Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
   b. Additions to existing single-story residences that are 250 square feet or less; and
   c. Installation of fences.
3. Tsunami Hazard Areas. The following activities are allowed within tsunami hazard areas pursuant to WMC 15.34.120 and do not require submission of a critical area report:
   a. Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
   b. Additions to existing residences that are two hundred fifty square feet or less;
   c. Installation of fences; and
   d. Construction that does not require a permit from the city, such as patios, fire pits, or small sheds.

5.04 CRITICAL AREA REPORT REQUIREMENTS – GEOLOGICALLY HAZARDOUS AREAS

A. Critical Area Report – Additional Requirements for Geologically Hazardous Areas

1. Preparation by a Qualified Professional. A critical areas report for a geologically hazardous area shall be prepared by a qualified professional.
2. Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for geologically hazardous areas:
   a. The project area of the proposed activity; and

b. All geologically hazardous areas within 200 feet of the project area or that have potential to be affected by the proposal;

3. Geological Hazards Assessment. A critical area report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:

   a. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:

      1) The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, within 200 feet of, or that are likely to impact the proposal;

      2) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

      3) The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and

      4) Clearing limits;

   b. Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

      1) A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

      2) A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

      3) A description of the vulnerability of the site to seismic and other geologic events;

c. Analysis of Proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and

d. Minimum Buffer and Building Setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

4. Incorporation of Previous Study. Where a valid critical areas report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site.

5. Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity.

B. Critical Area Report – Additional Technical Information Requirements for Specific Hazards

In addition to the general critical area report requirements of SMP Appendix 2: Section 1.07(A) and SMP Appendix 2: Section 5.04(A), critical area reports for geologically hazardous areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

1. Erosion and Landslide Hazard Areas. In addition to the basic critical area report requirements, the technical information for an erosion hazard or landslide hazard area shall include the following information at a minimum:

a. Site Plan. The critical area report shall include a copy of the site plan for the proposal showing:

1) The height of slope, slope gradient, and cross-section of the project area;
2) The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have potential to be affected by the proposal; and
3) The location and description of surface water runoff features;

b. Hazards Analysis. The hazards analysis component of the critical areas report shall specifically include:

1) A description of the extent and type of vegetative cover;
2) A description of subsurface conditions based on data from site-specific explorations;
3) Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;
4) An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
5) An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;
6) Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;
7) A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
8) Recommendations for building siting limitations; and
9) An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;

c. Geotechnical Engineering Report. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

1) Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;

2) Recommendations for drainage and subdrainage improvements;

3) Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

4) Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate;

d. Erosion and Sediment Control Plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in the applicable city stormwater management programs and regulations;

e. Drainage Plan. The technical information shall include a drainage plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with the applicable city stormwater management programs and regulations. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area;

f. Mitigation Plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability; and

g. Monitoring Surface Waters. If the Shoreline Administrator determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the

site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the city.

2. Seismic Hazard Areas. In addition to the basic report requirements, a critical area report for a seismic hazard area shall also meet the following requirements:
   a. The site map shall show all known and mapped faults within 200 feet of the project area or that have potential to be affected by the proposal.
   b. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).
   c. A geotechnical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented.
3. Tsunami Hazard Areas. In addition to the basic report requirements, a critical area report for a tsunami hazard area shall also meet the following requirements:
   a. Site Plan. The site plan shall show all areas within 200 feet of the project area that have potential to be inundated by wave action derived from a seismic event;
   b. Hazards Analysis. The hazards analysis shall include a complete discussion of the potential impacts of the tsunami hazard on the site; and
   c. Emergency Management Plan. The emergency management plan shall include plans for emergency building exit routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.
4. All Structures within 200 feet of winter marram grass line of the Pacific Ocean or OHWM of Grays Harbor. All structures that are within two hundred feet of the winter marram grass line of the Pacific Ocean and/or OHWM of Grays Harbor shall require a technical analysis performed by a qualified professional in shoreline erosion.
   a. The analysis shall include estimation of historic rate or character of erosion, the potential for future erosion, risks of erosion to proposed development on the

property and to the entire littoral system on the peninsula and measures to mitigate such risks.

b. The analysis shall also consider the impact of alternative methods of erosion management on public and private property in the vicinity and on the natural resource values of the site and vicinity.

c. The analysis shall be based on consideration of the BAS information applicable to the subject of wave erosion in the city and appropriate methods to achieve necessary protection.

d. Development in erosion hazard areas shall not be authorized unless measures to address any identified erosion hazard are incorporated in the plans for the project and the identified impacts of the measures to property and resources in the vicinity are minimized and mitigated.

5.05 PERFORMANCE STANDARDS – GEOLOGICALLY HAZARDOUS AREAS

A. Performance Standards – General Requirements

1. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:

   a. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;

   b. Will not adversely impact other critical areas;

   c. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions; and

   d. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.

2. Critical Facilities Prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

B. Performance Standards – Specific Hazards

1. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the standards of SMP Appendix 2: Section 5.05(A) and the specific following requirements:

a. Buffer Requirement. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the Shoreline Administrator to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.

   1) Minimum Buffer. The minimum buffer shall be equal to the height of the slope or 50 feet, whichever is greater;

   2) Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a qualified professional demonstrates to the Shoreline Administrator's satisfaction that the reduction will adequately protect the proposed development, adjacent developments, and uses and the subject critical area.;

   3) Increased Buffer. The buffer may be increased where the Shoreline Administrator determines a larger buffer is necessary to prevent risk of damage to proposed and existing development;

b. Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and certifies that:

   1) The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;

   2) The development will not decrease slope stability on adjacent properties; and

   3) Such alterations will not adversely impact other critical areas;

c. Design Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this Appendix. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

   1) The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for

dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the Uniform Building Code;

2) Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

3) Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;

4) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

5) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;

6) The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and

7) Development shall be designed to minimize impervious lot coverage;

d. Vegetation Retention. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;

e. Seasonal Restriction. Clearing shall be allowed only from May 1 to October 1 of each year provided that the city may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the city or WDNR;

f. Utility Lines and Pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density polyethylene pipe with fuse-welded joints, or similar product that is technically equal or superior;

g. Point Discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

1) Conveyed via continuous storm pipe downslope to a point where there are no erosion hazards areas downstream from the discharge;

2) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or

3) Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;

h. Subdivisions. The division of land in landslide hazard areas and associated buffers is subject to the following:

1) Land that is located wholly within a landslide hazard area or its buffer may not be subdivided for development. Land that is located partially within a landslide hazard area or its buffer may be divided if each resulting lot has sufficient buildable area outside of, and will not affect, the landslide hazard or its buffer;

2) Access roads and utilities may be permitted within the landslide hazard area and associated buffers if the city determines that no other feasible alternative exists; and

i. Prohibited Development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

2. Seismic Hazard Areas. Activities proposed to be located in seismic hazard areas shall meet the standards of SMP Appendix 2: Section 5.05(A). All engineering plans submitted for a location within a mapped high liquefaction zone shall carry a stamp indicating the plans are being made in a high liquefaction zone.

3. Tsunami Hazard Areas. Activities on sites containing areas susceptible to inundation due to tsunamis hazards shall require an evacuation and emergency management plan. All engineering plans submitted for a location within a mapped tsunami zone

shall carry a stamp indicating the plans are being made in a tsunami zone. The city may use the performance standards for coastal high hazard areas as guidance in reviewing new structures proposed in tsunami hazard areas.

6 FISH AND WILDLIFE CONSERVATION HABITAT AREAS

6.01 PURPOSE

A. The city shall manage development and subsequent uses in fish and wildlife habitat conservation areas to maintain species in suitable habitats within their natural geographic distribution and to prevent isolated subpopulations.

6.02 DESIGNATION AND MAPPING

A. Designation of Fish and Wildlife Habitat Conservation Areas

1. Fish and wildlife habitat conservation areas include:

   a. Areas with which State or Federally Designated Endangered, Threatened, and Sensitive Species have a Primary Association

      1) Federally designated endangered and threatened species are those fish and wildlife species identified by the USFWS and the NMFS that are in danger of extinction or threatened to become endangered. The USFWS and the NMFS should be consulted for current listing status.

      2) State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state identified by WDFW that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The WDFW maintains the most current listing and they should be consulted for current listing status.

      3) This Subsection shall not apply to hair seals and sea lions that are threatening to damage or are damaging commercial fishing gear being utilized in a lawful

manner or when said mammals are damaging or threatening to damage commercial fish being lawfully taken with commercial gear.

b. State Priority Habitats and Areas Associated with State Priority Species. Priority habitats and species are considered priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the WDFW.

c. Commercial and Recreational Shellfish Areas. These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW.

d. Kelp and Eelgrass Beds and Herring and Smelt Spawning Areas. Kelp and eelgrass beds have been identified and mapped by WDNR in some areas. Herring and smelt spawning times and locations are outlined in WAC 220-660-310 and WAC 220-660-330.

e. Naturally Occurring Ponds under Twenty Acres. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

f. Waters of the State. Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031 (or WAC 222-16-030 depending on classification used).

g. State Natural Area Preserves and Natural Resource Conservation Areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by WDNR.

h. Areas of Rare Plant Species and High Quality Ecosystems. Areas of rare plant species and high quality ecosystems are identified by WDNR through the Natural Heritage Program.

i. Land Useful or Essential for Preserving Connections Between Habitat Blocks and Open Spaces.

2. All areas within the city meeting one or more of these criteria, regardless of any formal identification, are hereby-designated critical areas, are subject to the provisions of this Appendix, and shall be managed consistent with the BAS, such as WDFW's Management Recommendations for Priority Habitat and Species.

3. Mapping. The approximate location and extent of habitat conservation areas are shown on the critical area maps adopted by the city, as most recently updated. The following critical area maps are hereby adopted:

   a. WDFW Priority Habitat and Species maps;

   b. Ecology Washington State Coastal Atlas;

   c. WDNR, Official Water Type Reference maps, as amended;

   d. WDNR ShoreZone Inventory;

   e. WDNR Natural Heritage Program mapping data;

   f. WDOH Annual Inventory of Shellfish Harvest Areas;

   g. Anadromous and resident salmonid distribution maps contained in the Habitat Limiting Factors reports published by the Washington Conservation Commission;

   h. WDNR State Natural Area Preserves and Natural Resource Conservation Area maps; and

   i. City official habitat maps.

   These maps are to be used as a guide for the city, project applicants, and property owners and should be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

6.03 ADDITIONAL REPORT REQUIREMENTS – HABITAT CONSERVATION AREAS

A. Critical Area Report – Additional Requirements for Habitat Conservation Areas

In addition to the general critical area report requirements of SMP Appendix 2: Section 1.07(A), critical area reports for habitat conservation areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

1. Preparation by a Qualified Professional. A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat.
2. Areas Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for habitat conservation areas:
    a. The project area of the proposed activity;
    b. All habitat conservation areas and recommended buffers within 300 feet of the project area; and
    c. All shoreline areas, floodplains, other critical areas, and related buffers within 300 feet of the project area.
3. Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:
    a. Detailed description of vegetation on and adjacent to the project area and its associated buffer;
    b. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
    c. A discussion of any federal, state, or local special management recommendations, including WDFW habitat management recommendations,

that have been developed for species or habitats located on or adjacent to the project area;

d. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

e. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with SMP Appendix 2: Section 1.07(D); and

f. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

4. Additional Information May Be Required. When appropriate due to the type of habitat or species present or the project area conditions, the Shoreline Administrator may also require the habitat management plan to include:

   a. An evaluation by an independent qualified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;

   b. A request for consultation with WDFW or the local Native American Indian Tribe or other appropriate agency; and

   c. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

6.04 PERFORMANCE STANDARDS

A. Performance Standards – General Requirements

1. Alterations. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this Appendix.

2. Non-indigenous Species. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

3. Mitigation and Contiguous Corridors. Mitigation sites shall be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

4. Approvals of Activities. The Shoreline Administrator shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on BAS and may include, but are not limited to, the following:

    a. Establishment of buffer zones;

    b. Preservation of critically important vegetation and/or habitat features such as snags and downed wood;

    c. Limitation of access to the habitat area, including fencing to deter unauthorized access;

    d. Seasonal restriction of construction activities;

    e. Establishment of a duration and timetable for periodic review of mitigation activities; and

    f. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

5. Mitigation and Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

6. Approvals and the Best Available Science. Any approval of alterations or impacts to a habitat conservation area shall be supported by the BAS.

7. Buffers.

a. Establishment of Buffers. The Shoreline Administrator shall require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by WDFW. Habitat conservation areas and their buffers shall be preserved in perpetuity through the use of native growth protection areas and critical area tracts in accordance with SMP Appendix 2: Section 1.10(C) and SMP Appendix 2: Section 1.10(D).

b. Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

c. Habitat Buffer Averaging. The Shoreline Administrator may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the BAS, and the management recommendations issued by WDFW, only if:

1) It will not reduce stream or habitat functions;

2) It will not adversely affect salmonid habitat;

3) It will provide additional natural resource protection, such as buffer enhancement;

4) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

5) The buffer area width is not reduced by more than 25% in any location.

8. Signs and Fencing of Habitat Conservation Areas.

a. Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that unauthorized intrusion will not occur and verified by the Shoreline Administrator prior to the commencement of permitted activities. This

temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

b. Permanent Signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Shoreline Administrator may require that applicant to install permanent signs along the boundary of a habitat conservation area or buffer.

1) Permanent signs shall be made of a metal face and attached to a metal post or another material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Shoreline Administrator:

Habitat Conservation Area

Do Not Disturb

Contact the City of Westport

Regarding Uses and Restriction

2) The provisions of SMP Appendix 2: Section 6.04(A)(8)(b)(1) may be modified by the Shoreline Administrator as necessary to assure protection of sensitive features or wildlife.

c. Fencing.

1) The Shoreline Administrator shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Shoreline Administrator shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

2) The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on site.

3) Fencing installed as part of a proposed activity or as required in this Subsection shall be design so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts.

9. Subdivisions. The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

    a. Land that is located wholly within a habitat conservation area or its buffer may not be subdivided for development.

    b. Land that is located partially within a habitat conservation area or its buffer may be divided if the developable portion of each new lot and its access is located outside of the habitat conservation area or its buffer and meets the minimum lot size requirements of WDC Title 17: Zoning.

    c. Access roads and utilities serving the proposed may be permitted within the habitat conservation area and associated buffers only if the city determines that no other feasible alternative exist and when consistent with this Appendix.

B. Performance Standards – Specific Habitats

1. Endangered, Threatened, and Sensitive Species.

    a. No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by WDFW or applicable state or federal agency.

    b. Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the city. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with WDFW for animal species, WDNR for plant species, and other appropriate federal or state agencies.

    c. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a qualified professional shall develop a habitat management plan. Activities are adjacent to bald eagle sites when they are within 800 feet or within one half mile and in a shoreline foraging area. The city shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the habitat management plan by WDFW.

2. Anadromous Fish

   a. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

      1) Activities shall be timed to occur only during the allowable work window as designated by WDFW for the applicable species;

      2) An alternative alignment or location for the activity is not feasible;

      3) The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

      4) Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report, and

      5) Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.

   b. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be if allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

   c. Fills, when authorized by the SMP, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

3. Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in SMP Appendix 2: Chapter 2. If non-wetlands habitat and wetlands are present at the same location, the provisions of this Chapter or SMP Appendix 2: Chapter 2, whichever provides greater protection to the habitat, applies.

4. Riparian Habitat Areas. Unless otherwise allowed in this Appendix, all structures and activities shall be located outside of the riparian habitat area.

a. Establishment of Riparian Habitat Areas. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other and that are located adjacent to perennial or intermittent streams, seeps, and springs.

b. Riparian Habitat Area Widths. Recommended riparian habitat area widths are shown in the table below. A riparian habitat area shall have the width recommended, unless a greater width is required pursuant to SMP Appendix 2: Section 6.04(B)(4)(c), or a lesser width is allowed pursuant to SMP Appendix 2: Section 6.04(B)(4)(d). Widths shall be measured outward in each direction, on the horizontal plane, from the OHWM, or from the top of bank, if the OHWM cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

SMP Appendix 2: Table 6-1: Riparian Habitat Area Buffers

Riparian Habitat Areas	
Stream type	**Recommended Riparian Habitat Areas widths**
Type S Water. All waters, as inventoried as "shorelines of the state" under the jurisdiction of the SMA, except associated wetlands.	See SMP Section 4.04.02
Type F-A Water. Segments of natural waters other than Type S waters, which are greater than ten feet in width.	150 feet
Type F-B Water. Segments of natural waters other than Type S waters, which are less	100 feet

Riparian Habitat Areas	
Stream type	**Recommended Riparian Habitat Areas widths**
than ten feet in width.	
Type Np Water. Segments of natural waters that are perennial nonfish habitat streams	75 feet
Type Np Water. Segments of natural waters within defined channels that are seasonal, nonfish habitat streams	50 feet

c. Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths shall be increased, as follows:

1) When the Shoreline Administrator determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;

2) When the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;

3) When the habitat area is in an area of high blowdown potential, the riparian habitat area width shall be expanded an additional 50 feet on the windward side; or

4) When the habitat area is within an erosion or landslide hazard area, or buffer, the riparian habitat area width shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.

d. Riparian Habitat Area Width Averaging. The Shoreline Administrator may allow the recommended riparian habitat area width to be reduced in accordance with a critical area report only if:

1) The width reduction will not reduce stream or habitat functions, including those of nonfish habitat;
2) The width reduction will not degrade the habitat, including habitat for anadromous fish;
3) The proposal will provide additional habitat protection;
4) The total area contained in the riparian habitat area of each stream on the development proposal site is not decreased;
5) The recommended riparian habitat area width is not reduced by more than 25% in any one location;
6) The width reduction will not be located within another critical area or associated buffer; and
7) The reduced riparian habitat area width is supported by the BAS.

e. Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same sub-drainage basin as the habitat impacted.

f. Alternative Mitigation for Riparian Habitat Areas. The performance standards set forth in this Subsection may be modified at the city's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected sub-drainage basin because of alternative mitigation measures.

5. Aquatic Habitat. The following specific activities may be permitted within a riparian habitat area, pond, water of the state, and marine habitat or associated buffer when the activity complies with the provisions set forth in the SMP and subject to the standards of this Subsection. The standards that provide the most protection to protected habitat and species shall apply.

a. Clearing and Grading. When clearing and grading is permitted as part of an authorized activity or as otherwise allowed in these standards, the following shall apply:

1) Grading is allowed only during the dry season, which is typically regarded as beginning on May 1 and ending on October 1 of each year, if the city may

extend or shorten the dry season on a case-by-case basis, determined on actual weather conditions.

2) Filling or modification of a wetland or wetland buffer is permitted only if it is conducted as part of an approved wetland alteration.

3) The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, any soil disturbed shall be redistributed to other areas of the project area.

4) The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.

5) Erosion and sediment control that meets or exceeds the standards set forth in the applicable city stormwater management programs and regulations, shall be provided.

b. Shoreline Erosion Control Measures. New, replacement, or substantially improved shoreline erosion control measures may be permitted in accordance with an approved critical area report that demonstrates the following:

1) Natural shoreline processes will be maintained. The project will not result in increased beach erosion or alterations to, or loss of, shoreline substrate within one-quarter mile of the project area;

2) The shoreline erosion control measures will not degrade fish or wildlife habitat conservation areas or associated wetlands; and

3) Mitigation sequencing is followed and adequate mitigation measures ensure that there is no net loss of the functions or values of intertidal habitat or riparian habitat as a result of the proposed shoreline erosion control measures.

4) The proposed shoreline erosion control measures do not result in alteration of intertidal migration corridors.

c. Streambank Stabilization. Streambank stabilization to protect new structures from future channel migration is not permitted except when such stabilization is achieved through bioengineering or soft armoring techniques in accordance with an approved critical area report.

d. Launching Ramps – Public or Private. Launching ramps may be permitted in accordance with an approved critical area report that has demonstrated the following:

   1) The project will not result in increased beach erosion or alterations to, or loss of, shoreline substrate within one-quarter mile of the site;

   2) The ramp will not adversely impact critical fish or wildlife habitat areas or associated wetlands;

   3) Adequate mitigation measures ensure that there is no net loss of the functions or values of intertidal habitat or riparian habitat as a result of the ramp; and

   4) No alteration of intertidal migration corridors will occur because of the ramp.

e. Roads, Trails, Bridges, and Rights-of-Way. Construction of trails, roadways, and minor road bridging, less than or equal to 30 feet wide, may be permitted in accordance with an approved critical area report subject to the following standards:

   1) There is no other feasible alternative route with less impact on the environment;

   2) The crossing minimizes interruption of downstream movement of wood and gravel;

   3) Roads in riparian habitat areas or their buffers shall not run parallel to the water body;

   4) Trails shall be located on the outer edge of the riparian area or buffer, except for limited viewing platforms and crossings;

   5) Crossings, where necessary, shall only occur as near to perpendicular with the water body as possible;

   6) Mitigation for impacts is provided pursuant to a mitigation plan of an approved critical area report;

   7) Road bridges are designed according to WDFW Fish Passage Design at Road Culverts, 1999, and the NMFS Guidelines for Salmonid Passage at Stream Crossings, 2000; and

8) Trails and associated viewing platforms shall not be made of continuous impervious materials.

f. Utility Facilities. New utility lines and facilities may be permitted to cross watercourses in accordance with an approved critical area report, if they comply with the following standards:

1) Fish and wildlife habitat areas shall be avoided to the maximum extent possible;

2) Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body, where feasible;

3) The utilities shall cross at an angle greater than 60 degrees to the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible;

4) Crossings shall be contained within the footprint of an existing road or utility crossing where possible;

5) The utility route shall avoid paralleling the stream or following a down-valley course near the channel; and

6) The utility installation shall not increase or decrease the natural rate of shore migration or channel migration.

g. Public Flood Protection Measures. New public flood protection measures and expansion of existing ones may be permitted, subject to the city's review and approval of a critical area report and the approval of a Federal Biological Assessment by the federal agency responsible for reviewing actions related to a federally listed species.

h. Instream Structures. Instream structures, such as, but not limited to, high flow bypasses, sediment ponds, instream ponds, retention and detention facilities, tide gates, dams, and weirs, shall be allowed only as part of an approved watershed basin restoration project approved by the city and upon acquisition of any required state or federal permits. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect habitat conservation areas.

i. Stormwater Conveyance Facilities. Conveyance structures may be permitted in accordance with an approved critical area report subject to the following standards:

1) No other feasible alternatives with less impact exist;

2) Mitigation for impacts is provided;

3) Stormwater conveyance facilities shall incorporate fish habitat features; and

4) Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.

j. On-Site Sewage Systems and Wells

1) New on-site sewage systems and individual wells may be permitted in accordance with an approved critical area report only if accessory to an approved residential structure, for which it is not feasible to connect to a public sanitary sewer system.

2) Repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by utilizing one of the following methods that result in the least impact:

a) Connection to an available public sanitary sewer system;

b) Replacement with a new on-site sewage system located in a portion of the site that has already been disturbed by development and is located landward as far as possible, provided the proposed sewage system is in compliance with the Grays Harbor County Public Health and Social Services Department; or

c) Repair to the existing on-site septic system.

7 CRITICAL SALTWATER HABITATS

7.01 CRITICAL SALTWATER HABITATS DESIGNATION

Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sandlance; subsistence, commercial and recreational shellfish beds; mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association. Critical saltwater habitats require a higher level of protection due to the important ecological functions they provide.

Where inventory of critical saltwater habitat has not been completed, over water and nearshore developments in marine and estuarine waters shall be required to complete a habitat assessment of 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 WAC 173-26-221(2)(c)(iii)(C).

7.02 STANDARDS FOR PROTECTION OF CRITICAL SALTWATER HABITATS

A. Critical saltwater habitats shall be protected and restored.

B. The management of shorelands as well as submerged areas shall be integrated by the city, as ecological functions of marine shorelands can affect the viability of critical saltwater habitats.

C. The city should include state resource agencies, the Port of Grays Harbor, Grays Harbor County, and affected tribes in critical saltwater habitat planning efforts and determine which habitats and species are of local importance.

D. The city shall protect kelp and eelgrass beds, forage fish spawning and holding areas, and priority species habitat identified by WDNR's aquatic resources division, WDFW, Ecology, and affected tribes as critical saltwater habitats.

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

F. The inclusion of commercial aquaculture in the critical saltwater habitat definition does not limit its regulation as a use.

7.03 REQUIREMENTS

A. Docks, piers, bulkheads, bridges, fill, floats, jetties, utility crossing, and other structures shall not intrude into or over critical saltwater habitats except when the conditions below are met:

1. Public need is clearly demonstrated and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020;
2. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in unreasonable or disproportionate cost to accomplish the same general purpose;
3. The project, and any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat;
4. The project is consistent with the state's interest in resource protection and species recovery; and
5. The project is within the Westport Marina in the Westhaven Cove and mitigation is provided as required by the permitting agencies to provide no net loss.

B. Private, noncommercial docks for individual residential or joint use (community use) may be permitted if it is infeasible to avoid impacts by an alternative alignment or location and the project including any required mitigation will result in no net loss of ecological functions associated with the critical saltwater habitat.

C. Until an inventory of critical saltwater habitat has been done, the SMP shall condition all over water and nearshore developments in marine and estuarine waters with the requirement for an inventory of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions.

1. The methods and extent of the inventory shall be consistent with accepted research methodology.
2. At a minimum, the city should consult with Ecology technical assistance materials for guidance.