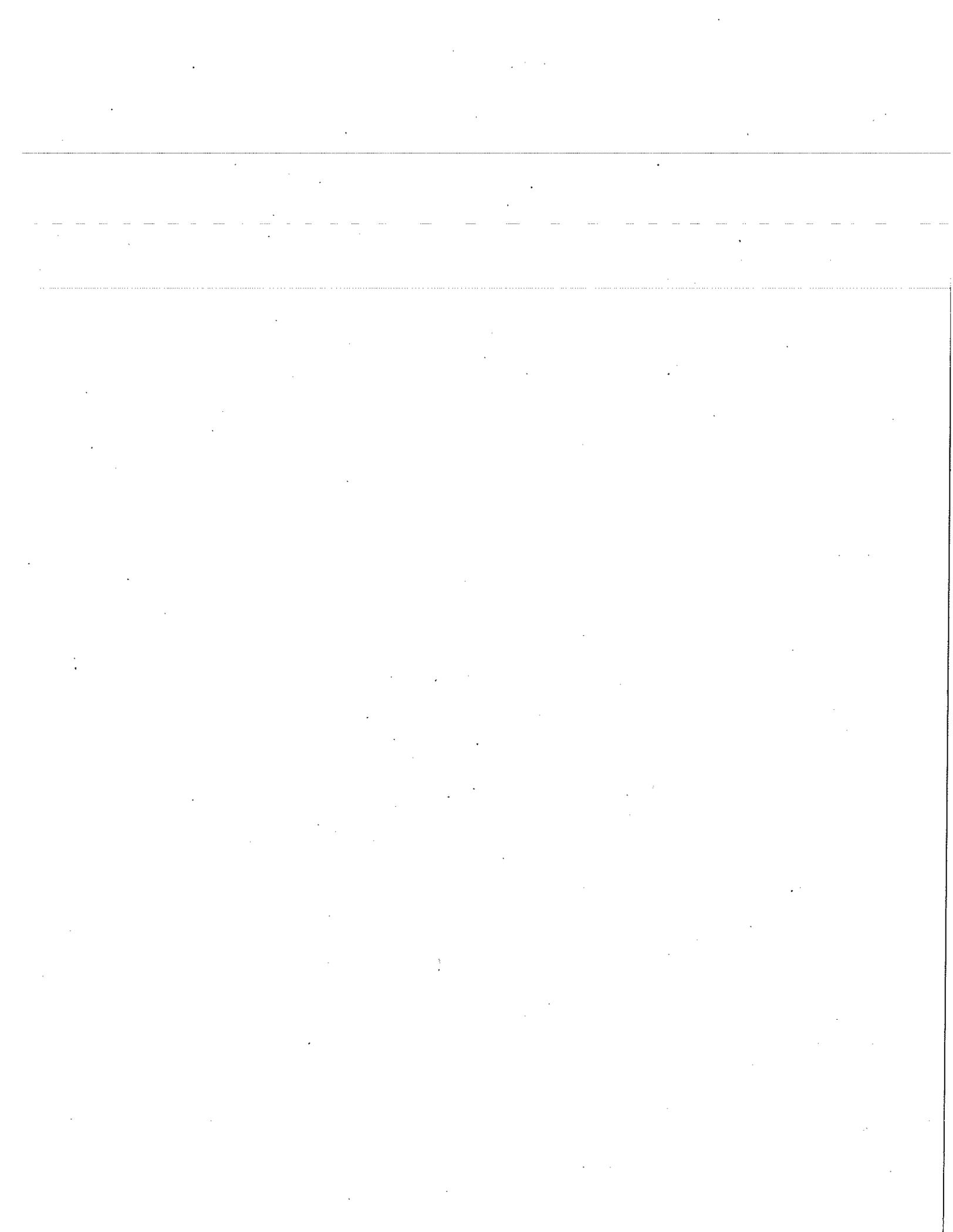

APPENDIX B
CRITICAL AREAS REGULATIONS



CRITICAL AREAS REGULATION

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1. Introduction.

1.1 Purpose.

All new uses and development activities proposed for shoreline areas in the City of Woodland must comply with the provisions of the Washington State Shoreline Management Act (RCW 90.58), the Washington Administrative Code (WAC 173-26 and 173-27), the updated Woodland Shoreline Master Program, and the Woodland Municipal Code. In addition, it is important to note that in many instances, shoreline areas under the jurisdiction of the Shoreline Management Act (SMA) also involve critical areas, which are subject to protection under the provisions of the Washington State Growth Management Act (GMA). In those instances where the requirements of both the SMA and the GMA apply, the courts have ruled that the provisions of the SMA must prevail. As a result, any new use or development activity proposed for an area under the jurisdiction of the Shoreline Management Act that also involves one or more of the protected critical areas must also comply with the following regulations in this Appendix B. For new uses and development activities outside of shoreline jurisdiction that involve critical areas, please refer to Chapter 15.08 of the Woodland Municipal Code (WMC).

The City finds that critical areas provide a variety of valuable biological and physical functions that benefit the City and its residents. Critical areas may also pose a threat to human safety and public and/or private property. The purpose of these regulations includes, but is not limited to, the following:

- A. Protect the public health, safety, and welfare by preventing adverse impacts of development;
- B. Preserve and protect critical areas by regulating development within and adjacent to critical areas;
- C. Mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas;
- D. Prevent adverse cumulative impacts to wetlands, streams, shoreline environments, and fish and wildlife habitat;
- E. Protect the public and public resources and facilities from injury, loss of life, property damage, or financial loss due to flooding, erosion, landslides, soils subsidence, or steep slope failure;
- F. Protect groundwater recharge capacity to the greatest extent practicable;
- G. To strive for no net loss of the functions and values of wetlands within shoreline jurisdiction by requiring compensatory mitigation for unavoidable wetland impacts;

- H. To designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values using the most current, accurate, and complete scientific and technical information available, while also allowing for reasonable use of private property.

1.2 Permits

No separate critical areas permit is required for a development proposal that requires a shoreline permit or Shoreline Letter of Exemption (SLE). All applicable critical areas requirements in Appendix B shall be incorporated into a Shoreline Substantial Development Permit (SSDP), Shoreline Conditional Use Permit (SCUP), Shoreline Variance, or SLE as applicable, and the applicable shoreline permit shall be obtained prior to undertaking any development activity regulated by the SMP.

1.3 Protection.

Any action taken pursuant to these regulations shall result in an equivalent or greater function of the critical area. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.

1.4 Use of Best Available Information.

Critical area reports or decisions to alter critical areas shall rely on the most current, accurate, and complete scientific and technical information available to protect the functions and values of critical areas.

2. Definitions.

Definitions for Appendix B are located in Chapter 2 of this Shoreline Master Program.

3. Applicability and Exemptions.

3.1 Applicability.

- A. All development proposals within the City of Woodland's shoreline jurisdiction, whether public or private, shall comply with these regulations, whether or not a permit or authorization is required. For the purposes of these regulations, development proposals shall include, but are not limited to the following:
1. Any project or development that requires a federally issued permit;
 2. Any project or development that requires compliance with the Washington State Shoreline Management Act (RCW 90.58) or Growth Management Act (RCW 36.70A);
 3. Alteration of a wetland or riparian habitat area as defined herein, including:
 - a. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
 - b. The dumping, discharging, or filling with any material, including discharges of storm water and domestic, commercial, or industrial wastewater;
 - c. The draining, flooding, or disturbing of the water level, duration of inundation, or water table;
 - d. The driving of pilings;
 - e. The placing of obstructions;
 - f. The construction, reconstruction, demolition, or expansion of any structure;
 - g. Significant vegetation removal, provided that these activities are not part of a forest practice governed under Chapter 76.09 RCW and its rules;
 - h. Other uses or development that results in an ecological impact to the physical, chemical, or biological characteristics of wetlands; or
 - i. Activities reducing the functions of buffers;
 4. Any project or development that requires a permit under the adopted building code;

5. Any development or use that requires approvals under existing or subsequently adopted Woodland codes and/or ordinances (e.g., subdivision, zoning, conditional use, etc.).

3.2 Exemptions.

- A. Critical Areas Exemptions. The following development, activities, and associated uses shall be exempt from the requirements of the critical areas regulations; however, the critical areas exemptions do not include exemptions from the provisions of the Shoreline Master Program and are not exemptions from substantial development permits provided under WAC 173-27-040.
 1. Installation, construction, or replacement of utility lines in improved right-of-way, not including electric substations.
 2. The removal or control of noxious weeds not involving chemical application, excavation, mechanical weed control with the use of hand-held tools.
 3. Regular landscape maintenance of ornamental ground cover or other vegetation in a critical area or buffer area, through replanting, trimming, or continued mowing, that was disturbed prior to the effective date of this Shoreline Master Program; provided, that no further disturbance is created.
 4. Maintenance of intentionally created artificial wetlands or surface water systems including irrigation and drainage ditches, grass-lined swales and canals, detention facilities, farm ponds, and landscape or ornamental amenities. Wetlands, natural streams, natural streams that are channelized, lakes or ponds created as mitigation for approved land use activities or that provide critical habitat are not exempt and shall be regulated according to the mitigation plan.
 5. Minimal site investigative work required by the City, state or a federal agency, or any other applicant such as surveys, soil logs, percolation tests, and other related activities, provided that impacts on environmentally critical areas are minimized and disturbed areas are restored to the pre-existing level of function and value within one year after tests are concluded.
 6. Passive recreational uses, sport fishing or hunting, scientific or educational study, or similar minimum impact activities.

4. Administration.

4.1 Critical Area Reports—Requirements.

- A. Prepared by Qualified Professional. The applicant shall submit a critical area report prepared by a qualified professional.
- B. Best Available Information. The critical area report shall use the most current, accurate, and complete scientific and technical information available in the analysis of critical area data and field reconnaissance. All scientific sources shall be referenced. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with this Program.
- C. Minimum Report Contents. A critical area report shall contain, at a minimum:
 - 1. A copy of the site plan, including identified critical areas, buffers, development proposal(s), limits of any proposed clearing, and a stormwater management plan;
 - 2. The date the report was prepared;
 - 3. The name(s) and qualifications of the person(s) preparing the report;
 - 4. The dates and documentation of any fieldwork performed on the site;
 - 5. Identification and characterization of all critical areas and buffers;
 - 6. A statement specifying the accuracy of the report and all assumptions;
 - 7. An analysis of development alternatives;
 - 8. An assessment of the probable cumulative impacts to critical areas resulting from the proposed development;
 - 9. A description of reasonable efforts made to apply mitigation sequencing to avoid, minimize, and mitigate impacts to critical areas;
 - 10. Plans for mitigation to offset any impacts including, but not limited to:
 - a. Impacts of any proposed development within or adjacent to a critical area or buffer;
 - b. Impacts of any proposed alteration of a critical area or buffer by the proposed project;

11. A discussion of the performance standards and/or criteria in these Critical Areas Regulations applicable to the critical area and proposed activity;
12. Financial guarantees to ensure compliance; and
13. Any additional information required for the specific critical area as required by the corresponding regulations.

4.2 Critical Area Report—Modifications.

- A. **Study Area—Limitations.** The Director of Public Works (Director) may modify the geographic area required to be addressed in the critical area report if:
 1. Permission to access adjacent properties cannot be obtained. If critical areas are potentially present in such areas, observations from off-site or using digital resources may be used to assess the conditions; or
 2. Only a limited portion of the site will be affected by the activity.
- B. **Required Contents—Modifications.** The Director may modify the required contents of the critical area report if, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and mitigation.
- C. **Additional Information.** The Director may require additional information to be included with the critical area report when deemed necessary to the review of the proposed project.

4.3 Mitigation Requirements.

- A. The applicant shall avoid all impacts that degrade the functions and values of a critical area(s). Compensatory mitigation will be required for unavoidable alteration to a critical area or buffer resulting from a development proposal, in accordance with this Program.
- B. Mitigation shall be in-kind and on-site, when possible, and shall be sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard.
- C. No mitigation shall be implemented until after the City has approved the applicable shoreline permit or SLE that includes a mitigation plan. All mitigation shall be in accordance with the provisions of this Program and approved critical area report.

4.4 Mitigation Sequencing.

- A- Applicants shall demonstrate that all reasonable efforts have been made to avoid or minimize impacts to critical areas. When alteration to a critical area is proposed, such alteration shall be mitigated in the following order of preference:
1. Avoid the impacts altogether by not taking an action or parts of an action.
 2. Minimize impacts by limiting the degree or magnitude of the action or its implementation, by using appropriate technology, or by taking steps such as project redesign, relocation, or timing to avoid or reduce impacts.
 3. Repair, rehabilitate, or restore the affected environment (wetlands, critical aquifer recharge areas, frequently flooded areas, habitat conservation areas) to historical conditions or conditions existing prior to project initiation.
 4. Minimize or eliminate the hazard by restoring or stabilizing the hazard area through engineered or other approved methods.
 5. Reduce or eliminate the impact or hazard over time by preservation and maintenance operations during the life of the action.
 6. Compensate for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, or habitat conservation areas by replacing, enhancing, or providing like resources or environments.
 7. Monitor the mitigation and provide remedial action when necessary.

4.5 Mitigation Plan Requirements.

When compensatory mitigation is required, the applicant shall submit a mitigation plan as part of a critical area report. The plan shall include:

- A. Environmental Goals and Objectives. The mitigation plan shall include a written report that identifies the environmental goals and objectives of the proposed compensation, including:
1. A description of the anticipated impacts to the critical area(s) and the proposed mitigation actions. Compensation measures shall include site-selection criteria, compensation goals, identification of resource functions, and projected dates for beginning and completion of site construction and compensation activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
 2. A review of the most current, accurate, and complete scientific and technical information available supporting the proposed mitigation;

3. A narrative of the author's experience to date in restoring or creating the type of critical area proposed; and
 4. An analysis of the likelihood of success of the compensation project.
- B. Performance Standards. The mitigation plan shall include specific criteria that are measurable for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and that the requirements of this Program have been met.
- C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the proposed mitigation, including, but not limited to:
1. Grading and excavation details;
 2. Erosion- and sediment-control measures;
 3. Planting plans showing plant species, locations, quantities, sizes, spacing, and density;
 4. Proposed construction timing, sequence, and duration;
 5. Measures to protect and maintain plants until established; and
 6. Detailed site diagrams, topographic maps showing slopes in two-foot intervals, final grade elevations, and any other appropriate drawings.
- D. Monitoring Program. A mitigation-monitoring program shall be included with any mitigation plan. The report shall document site performance in relation to performance standards and contingency actions implemented to compensate for mitigation shortfalls. The site shall be monitored for a period to establish that performance standards have been met, and not for a period of less than five years.
- E. Contingency Plan. The mitigation plan shall include a contingency plan that identifies potential courses of action, and any corrective measures to be taken if monitoring indicates that project performance standards are not being met.
- F. Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented.

4.6 Markers and Signs.

- A. Critical area boundaries shall be permanently delineated using iron or concrete markers in accordance with survey standards.

- B. The outer boundary of a critical area buffer on the development site shall be identified with brightly colored construction fencing and temporary signs prior to any site development or alteration. Permanent signs may be required by the Director upon completion of the project.

4.7 Notice on Title.

- A. Notice of the existence of a critical area and/or buffer on a site shall be recorded on the property title. The restriction shall state that limitations to development may exist due to the presence of a critical area and/or buffer.
- B. The applicant shall submit a copy of the recorded deed restriction prior to final project approval.

4.8 Setbacks.

- A. Unless otherwise allowed in this Program, buildings and other structures shall be set back a distance of fifteen (15) feet from the edges of all critical area buffers or critical area if no buffer is required.
- B. The following may be allowed in these 15-foot setback areas dependent upon shoreline environmental designation:
 - 1. Landscaping;
 - 2. Building overhangs not greater than eighteen inches; and/or
 - 3. Driveways and patios provided runoff does not affect the critical area.

5. Wetlands.

- A. Designating Wetlands. Wetlands are those areas, designated in accordance with the currently approved Federal Wetland Delineation Manual and applicable regional supplement, that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include, but are not limited to: swamps, marshes, bogs, ponds, and similar areas. All areas within the City's shoreline jurisdiction meeting the wetland designation criteria in the Federal Wetland Delineation Manual and applicable regional supplement, regardless of presence or absence of formal documented identification, are hereby designated critical areas and are subject to the provisions of this Program.
- B. Wetland Delineation: For identifying and delineating a wetland, the methodology shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements as provided in RCW 90.58.380 and WAC 173-22-035.
- C. Wetland Ratings. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-007), or as revised. This document contains the definitions and methods for determining whether the criteria below are met.

Category I. Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than 1 acre; (2) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (3) bogs; (4) mature and old-growth forested wetlands larger than 1 acre; (5) wetlands in coastal lagoons; (6) interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre; and (7) wetlands that perform many functions well (scoring 23 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (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 II. Category II wetlands are: (1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; (2) interdunal wetlands larger than 1 acre or those found in a mosaic of wetlands; or (3) wetlands with a moderately high level of functions (scoring between 20 and 22 points).

Category III. Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 16 and 19 points). Wetlands scoring between 16 and 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.

Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

- D. **Date of Rating.** Wetland rating categories shall be applied as the wetland exists on the date of the adoption of the rating system, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Illegal modifications to wetlands shall not result in changes to wetland rating categories.

5.2 Initial Project Review.

- A. Wetlands shall be identified and designated through a site assessment utilizing the definitions, methods, and standards as set forth in the Federal Wetland Delineation Manual and applicable regional supplement.
- B. A site visit shall be conducted by the Director or qualified designee to confirm the presence or absence of wetland indicators listed in the critical areas identification checklist (see Appendix F in this Program) or identified in the State Environmental Policy Act (SEPA) checklist. The site visit shall be used to determine whether a wetland or wetland buffer area are within two hundred feet of a proposed project or activity. A confirmation that a wetland is present or that the proposed project may impact a wetland or its buffer will then require a professional site assessment. The Director shall use the following map references to assist in making a determination: (1) National Wetland Inventory Map; and (2) any records of previously mapped wetlands.

5.3 Critical Area Report—Requirements for Wetlands.

In addition to the general critical area report requirements of Section 4.1 of this Appendix B, wetland critical area reports must meet the requirements of this Section. Critical area reports that include two or more types of critical areas must meet the report requirements for each type of critical area. If a wetland critical area report is required, it must be prepared by a qualified professional meeting the requirements defined in Chapter 2 of this Program, and the report shall meet the following requirements:

- A. **Area Addressed in Wetland Critical Area Report.** The following areas shall be addressed in a wetland critical area report:
1. The project area of the proposed activity;
 2. All wetlands and recommended buffers within three hundred (300) feet of the project area; and

3. All shoreline areas, water features, floodplains, and other critical areas and related buffers within two hundred feet of the project area.

B. Narrative. The report narrative must include each of the following:

1. Location information (legal description, parcel number and address);
 2. List of all property owners;
 3. Site characteristics, including topography, total acreage, delineated wetland acreage, other water bodies, vegetation, soil types, etc., and distances to and sizes of other off-site wetlands and water bodies within one-quarter mile of the subject wetland;
 4. Identification of the wetland's rating as defined in these regulations;
 5. Analysis of functions and values of existing wetlands, including flood control, water quality, aquifer recharge, fish and wildlife habitat, and hydrologic characteristics;
 6. A complete description of the proposed project and its potential impacts to wetlands and buffers and, if applicable, adjacent off-site wetlands and buffers, including construction impacts;
 7. Discussion of project alternatives, including total avoidance of impacts to wetland areas;
 8. If mitigation for wetland impacts is proposed, a description and analysis of that mitigation;
 9. A wetland buffer recommendation and rationale for the buffer size determination;
 10. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.; and
 11. A list of management practices that will be used to protect and maintain the quality of the wetland and/or covenants and restrictions that will be used in managing the wetland.
- C. Vicinity map drawn to scale and including a north arrow, public roads, and other known landmarks in the vicinity.
- D. National Wetlands Inventory Map (U.S. Fish and Wildlife Service) and/or a Cowlitz County wetland inventory map identifying wetlands on or adjacent to the site.
- E. Site Map. This map must be drawn to a usable scale, one inch equals one hundred feet or better, and must include a north arrow and all of the following requirements:

1. Site boundary/property lines and dimensions;
 2. Wetland boundaries based upon a wetland specialist's delineation, and depicting sample points and differing wetland types if any;
 3. Recommended wetland buffer boundary;
 4. Buffers for off-site critical areas that extend onto the project site;
 5. Internal property lines such as rights-of-way, easements, etc.;
 6. Existing physical features of the site, including buildings and other structures, fences, roads, utilities, parking lots, water bodies, etc.;
 7. The development proposal, including grading and clearing limits; and
 8. Topographic contours at five-foot intervals.
- F. An on-site wetland delineation performed by a qualified expert. The wetland boundaries shall be staked and flagged. The report shall include photos documenting the wetland boundaries have been staked and flagged.
- G. Additional Information. When appropriate, the Director may also require the critical area report to include an evaluation by the State Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

5.4 Activities in Wetlands—General Requirements.

- A. Activities within wetland or wetland buffer areas may be permitted only if the applicant can show that the proposed activity will not degrade the functions and values of the wetland and/or other critical areas.
- B. Activities and uses shall be prohibited within wetlands and wetland buffer areas except as permitted in this Program.
- C. Category I Wetlands. Alteration of Category I wetlands and their buffers is prohibited unless the alteration would improve habitat to threatened or endangered species that use the wetland and/or its buffer. This habitat improvement must be demonstrated in the wetland critical areas report and the mitigation plan, if any.
- D. Category II and III Wetlands. The following standards shall apply to activities within Category II and III wetlands and wetland buffers:
 1. Water-dependent activities may be allowed when no practical alternatives having less adverse impact on the wetland are available and appropriate mitigation measures are proposed; and

2. Nonwater-dependent activities are prohibited unless:

- a. All alternative designs of the proposed project to avoid adverse impacts to the wetland or wetland buffer are not feasible and appropriate mitigation measures are proposed.
- b. Category IV Wetlands. Activities and uses may be permitted in Category IV wetlands that result in unavoidable impacts in accordance with an approved critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative available.

5.5 Wetland Buffers.

- A. Measurement of Wetland Buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. Buffer widths shall be determined according to wetland category, habitat score and/or water quality score, and intensity of the proposed land use. The buffer of a created, restored, or enhanced wetland shall be in conformance with the expected category of the wetland upon maturity.
- B. Standard Buffer Widths. The standard buffer width is intended to protect the wetland functions and values in relation to the project intensity at the time of the proposed activity. Wetland buffer widths assume a naturally vegetated state; wider buffers or a revegetation plan may be needed if buffer is unvegetated or sparsely vegetated. Required buffer widths are as follows:

Table B-1. Wetland Buffers

Wetland Category	Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use
Category I	Bogs and Wetlands of High Conservation Value	Low - 125 feet Moderate - 190 feet High - 250 feet
	High level of function for habitat (score for habitat 8-9 points)	Low - 150 feet Moderate - 225 feet High - 300 feet
	Moderate level of function for habitat (score for habitat 5-7 points)	Low - 75 feet Moderate - 110 feet High - 150 feet
	High level of function for water quality improvement (8-9 points) and low for habitat (<5 points)	Low - 50 feet Moderate - 75 feet High - 100 feet
	Not meeting any of the above characteristics	Low - 50 feet Moderate - 75 feet High - 100 feet
Category II	High level of function for habitat (score for habitat 8-9 points)	Low - 150 feet Moderate - 225 feet High - 300 feet

Wetland Category	Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use
	Moderate level of function for habitat (score for habitat 5-7 points)	Low - 75 feet Moderate - 110 feet High - 150 feet
	High level of function for water quality improvement and low for habitat (score for water quality 8-9 points; habitat <5 points)	Low - 50 feet Moderate - 75 feet High - 100 feet
	Not meeting above characteristics	Low - 50 feet Moderate - 75 feet High - 100 feet
Category III	High level of function for habitat (score for habitat 8-9 points)	Low - 150 feet Moderate - 225 feet High - 300 feet
	Moderate level of function for habitat (score for habitat 5-7 points)	Low - 75 feet Moderate - 110 feet High - 150 feet
	Not meeting above characteristic	Low - 40 feet Moderate - 60 feet High - 80 feet
Category IV	Score for all 3 basic functions is less than 16 points	Low - 25 feet Moderate - 40 feet High - 50 feet

C. Increased Wetland Buffer Widths. The Director shall require increased buffer widths when recommendations by a qualified professional biologist and the most current, accurate, and complete scientific and technical information available indicate that increased buffer widths are necessary to protect the wetland. An increase in buffer width will be required if any of the following criteria is met:

1. An increased buffer area is necessary to protect other critical areas within the same project area;
2. The buffer area or adjacent uplands have a slope greater than fifteen percent or the buffer is susceptible to erosion where standard erosion controls will not prevent adverse impacts to the wetland; or
3. The buffer is insufficiently vegetated. Where an increased buffer is recommended due to insufficient vegetation cover, a vegetation planting plan may be implemented as an alternative to the increased buffer width. A vegetation planting plan shall not result in a decrease in the buffer area. The vegetation planting plan shall include measures for monitoring and maintenance of the vegetated area.

D. **Reduced Width Based on Modification of Land Use Intensity.** The buffer widths recommended for proposed land uses with high-intensity impacts to wetlands can be reduced to those recommended for moderate-intensity impacts under the following conditions, and only after submittal of a critical areas report prepared by a qualified professional that provides clear justification for the reduced buffer:

1. For wetlands that score moderate or high for habitat (5 points or more for the habitat functions), the width of the buffer can be reduced if both of the following criteria are met:
 - a. A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and any other priority habitats as defined by the Washington Department of Fish and Wildlife ("relatively undisturbed" and "vegetated corridor" are defined in questions H 2.1 and H 2.2.1 of the Washington State Wetland Rating System for Western Washington— Revised). The corridor must be continuous with both the wetland and the priority habitat and be protected for the entire distance between the wetland and the priority habitat by some type of legal protection such as a conservation easement.
 - b. All applicable measures to minimize the impacts of adjacent land uses on wetlands, such as the examples summarized in Table B-2, are applied.

Table B-2. Examples of Measures to Minimize Intensity of Impacts to Wetlands from Adjacent Land Use

(This is not a complete list of measures.)

Examples of Disturbance	Activities and Uses that Cause Disturbances	Examples of Measures to Minimize Impacts
Lights	Parking lots Warehouses Manufacturing Residential	Direct lights away from wetland
Noise	Manufacturing Residential	Locate activity that generates noise away from wetland
Toxic runoff*	Parking lots Roads Manufacturing	Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered
	Residential areas	Establish covenants limiting use of pesticides within 150 feet of wetland
	Application of agricultural pesticides Landscaping	Apply integrated pest management
Stormwater runoff	Parking lots	Retrofit stormwater detention and treatment for roads and existing adjacent development

Examples of Disturbance	Activities and Uses that Cause Disturbances	Examples of Measures to Minimize Impacts
	Roads Manufacturing Residential areas Commercial Landscaping	Prevent channelized flow from lawns that directly enters the buffer
Change in water regime	Impermeable surfaces Lawns Tilling	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	Residential areas	Use privacy fencing; 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
Dust	Tilled fields	Use best management practices to control dust

* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.

2. For wetlands that score fewer than 5 points for habitat, the buffer width can be reduced to that required for moderate land-use impacts by applying all applicable measures to minimize the impacts of the proposed land uses (see examples in Table B-2).
 3. The minimum buffer width at its narrowest point shall not be less than the low-intensity land use buffer widths listed in Table B-1.
- E. Averaging of Buffer Widths. The Director may allow for the standard buffer width to be averaged in accordance with an approved critical area report on a case-by-case basis. Averaging of buffer widths shall be allowed only when a qualified wetlands professional demonstrates that:
1. Averaging will not reduce wetland functions or values;
 2. The wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places due to varying wetland quality;
 3. A maximum of twenty-five percent (25%) of the total required buffer area on the site (after all reductions are applied) may be averaged;
 4. The total area of the averaged buffer is not less than would be contained if there were no buffer averaging;
 5. The buffer width at its narrowest point is never less than $\frac{1}{4}$ of the required width according to Table B-1 or 25 feet, whichever is wider; and

6. Wetland buffer width averaging and buffer width reduction provisions cannot be combined. The two separate provisions may be used to adjust buffers on the same wetland in different areas, but cannot be used in the same location on a wetland.
- F. **Buffer Conditions Shall Be Maintained.** Wetland buffers in their natural state shall not be altered and shall be maintained in an undisturbed condition except as allowed in this Program. Planting of native plants and control of non-native invasive plants using hand tools is allowed.
- G. **Buffers for Mitigation Wetlands.** Any wetland that is created, restored, or enhanced as compensation for approved regulated wetland alterations shall have the standard buffer required for the category of the created, restored, or enhanced wetland.
- H. **Altered Wetland and/or Buffer Areas.** Wetlands or buffer areas that have been altered and have lost ecological functions and values are encouraged to be restored in order to replace these lost functions. Prior to the issuance of a development permit that is proposed adjacent to degraded wetlands or buffers, the property owner may agree to undertake restoration activities or authorize such activities to occur (including access to the property), through an approved legal device such as a conservation program or restoration effort, or by legal agreement with restoration agencies or groups.
- I. **Functionally Isolated Buffer Areas.** Areas that are functionally separated from a wetland and do not protect the wetland from adverse impacts due to pre-existing roads, structures, or vertical separation shall be excluded from buffers otherwise required by this Program on a case-by-case basis subject to a critical area report and review as determined by the Director.
- J. **Use of Buffer Areas.** The following uses may be permitted within a required wetland buffer unless otherwise prohibited:
1. **Conservation and Restoration Activities.** Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.
 2. **Passive Recreation.** Passive recreation in accordance with an approved critical area report. Such activities include but are not limited to:
 - a. Walking paths or trails (no motorized use) located in the outer twenty-five (25) percent of the buffer area. Trails shall be placed on existing road grades, utility corridors, or any other previously disturbed area outside of the buffer, unless demonstrated that no other feasible location exist, and may need to be enhanced with screening. When demonstrated that there is no feasible location outside of the buffer, trails or paths may be placed within the outer 25% of a wetland buffer area shall be planned to minimize removal of

vegetation (trees, shrubs, etc.) and important wildlife habitat. Trail widths shall not be wider than three (3) feet for private trail and ten (10) feet for public use or publicly owned trails. Trail surfaces shall be composed of natural materials (e.g., gravel, rock, bark), and permanent surfacing materials (asphalt or concrete) shall require a variance. No construction or surfacing materials shall significantly alter the existing drainage or negatively affect the wetland or buffer area; and

- b. Wildlife viewing structures, platforms, interpretive areas, picnic areas, benches, and associated activities shall be designed and located to minimize disturbance to wildlife habitat and/or wetland and/or buffer values or functions;
 - c. Access to fishing areas.
3. Hazard Tree Removal. When a tree within a wetland buffer poses a threat to human life or property, the Director may allow the falling of such a danger or hazard tree subject to the following criteria:
- a. Tree removal shall be the minimum necessary to balance the protection of the wetland or buffer area with the protection of life or property; and
 - b. For every hazard tree removed, a minimum of two trees shall be planted as mitigation.
4. Stormwater Management Facilities. Stormwater management facilities such as bioswales or retention ponds may be allowed within the outer twenty-five (25) percent of the required buffer area for Category III and IV wetlands only, provided that:
- a. No other location is feasible;
 - b. Locating such facilities within the buffer area will not degrade the wetland values or functions or alter the hydroperiod of the wetland or adversely affect water quality; and
 - c. Compensatory mitigation shall be included for all losses of wetland function as a result of the stormwater management facility.

5.6 Signing and Fencing Wetlands.

- A. Temporary Markers. The perimeter of a wetland or buffer area and the limit of the wetland or buffer area to be disturbed pursuant to an approved permit shall be marked in the field in such a way as to discourage unauthorized disturbance of the wetland or buffer area. Temporary marking shall be maintained throughout the permitted activity and shall not be removed until final inspections are completed

and approved permanent signs, if required, are in place. The location of temporary markers shall be shown on all site plans and final plats associated with the proposal. Temporary markers shall be composed of one-half inch galvanized pipe or equivalent monument, at least eighteen inches long, and shall show above the surface or surrounding vegetation at least five inches. Temporary markers shall be spaced no more than fifty feet apart or as determined by the Director.

- B. Permanent Signs. The Director may require the applicant to install permanent signs along the boundary of wetlands or buffer areas as a condition of any permit.
- C. Temporary Fencing. High-visibility construction fencing shall be installed at the outer edge of wetland buffers prior to and remain in place during the proposed activity to prevent access and to protect the wetland and buffer. The Director may waive this requirement if an alternative to fencing that achieves the same objective is proposed and approved.
- D. Permanent Fencing. The Director may require the wetland and/or buffer area to be fenced for any proposed project. If required, permanent fencing shall be installed at the applicant's expense.

5.7 Stormwater Management.

The following stormwater management standards are required for development in or near wetlands:

- A. New developments shall utilize best management practices to minimize stormwater quantity and quality impacts to wetlands, both during and following construction.
- B. Stormwater runoff from new development shall not significantly change the rate of flow or the hydroperiod, which is the seasonal period and duration of water saturation or inundation, nor decrease the water quality of wetlands.
- C. Authorized modifications of wetlands or buffer areas for construction of discharge from drainage facilities shall not adversely affect wetland hydrologic functions.
- D. Developments that handle, store, dispose of, transport, or generate substances or wastes defined as "dangerous" or "extremely dangerous" wastes under WAC 173-303 (regardless of quantity) shall not allow direct precipitation or stormwater runoff to contact such substances where stored on-site.
- E. The Washington State Department of Ecology's Stormwater Manual shall be the standard reference when implementing a stormwater management plan unless the Director authorizes an alternative approach.

5.8 Wetland Mitigation.

A. Mitigation Sequencing. As a condition of any shoreline permit allowing for the alteration of wetlands, the applicant will engage in the restoration, creation, or enhancement of wetlands in order to offset the impacts resulting from the alteration. An appropriate mitigation plan shall be developed by a qualified professional, and shall be approved by the Director. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas prior to rectifying the impact. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized or compensated for in the following order of priority:

1. Avoid the impact completely by not taking certain action or parts of the action;
2. Minimize impacts by reducing the magnitude of the action or by avoiding or reducing impacts;
3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment;
4. Reduce or eliminate the impact over time by preservation, restoration and maintenance;
5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments;
6. Monitor the impacted area and the compensation project and take appropriate corrective measures.

B. Mitigation Ratios. Any wetland that is degraded as a result of a permitted or non-permitted activity shall restoration, creation, and/or enhancement at an area equal to or greater than the wetland area that was altered in order to compensate for losses to wetland acreage or functions according to the following ratios:

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
Category I: Mature Forested	6:1	12:1	24:1
Category I: 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

- C. **Wetland Enhancement.** Applicants proposing to enhance wetlands using the ratios provided in Subsection B, shall also present an enhancement program designed by a qualified professional with experience in wetland enhancement. If any of the following conditions exists, acreage ratios may be increased by up to one hundred percent (i.e. a ratio of 8:1 may become 16:1) at the recommendation of a qualified professional and approval of the Director:
1. High degree of uncertainty as to the probable success of the proposed enhancement;
 2. Significant (greater than twelve months) period of time between impact and enhancement of wetland functions; and/or
 3. Projected losses in functional value and other uses, such as recreation, scientific research and education, are relatively high.
- D. **Decreased Replacement Ratio.** The replacement ratio for any type of wetland mitigation may be decreased only under the following circumstances:
1. Scientifically supported evidence that demonstrates that no net loss of wetland function or value would result under the decreased ratio; and
 2. In all cases a minimum ratio of 1:1 shall be required.
- E. **In-Kind/Out-of-Kind Mitigation.** In-kind mitigation shall be provided except where the applicant can demonstrate that either:
1. The wetland system was already degraded prior to any activity, and out-of-kind replacement will result in a wetland with greater functions and values; or
 2. Technical problems such as exotic vegetation and changes in watershed hydrology make implementation of in-kind mitigation infeasible.
- F. **On-Site/Off-Site Mitigation.** On-site mitigation shall be provided except where the applicant can demonstrate that:
1. The hydrology and ecosystem of the original wetland will not be damaged by the loss of the on-site wetland; and
 2. On-site mitigation is not scientifically feasible due to problems with hydrology, soils, or factors such as other potentially adverse impacts from surrounding land uses or on-site mitigation would require elimination of or result in adverse impacts to high-quality upland habitat; and
 3. Existing functional values at the site of the proposed off-site mitigation are significantly greater than the lost on-site wetland functional and values; and

4. One of the following applies:
 - a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or
 - b. Credits from a state-certified wetland mitigation bank are used as mitigation, and the use of credits is consistent with the terms of the bank's certification under Chapter 173-700 WAC.
- G. Timing of Mitigation. Mitigation shall be completed prior to activities that will impact wetlands where feasible. Bonding or other financial guarantee is required if mitigation projects cannot be completed prior to project completion. Mitigation projects shall be timed to reduce impacts to existing wildlife or vegetation. If wetland mitigation is not completed within one year of wetland impacts, mitigation ratios will be increased to offset temporal losses.
- H. Mitigation Plans. In addition to compliance with Section 4.5 of these regulations, All wetland restoration, creation and/or enhancement projects required pursuant to this Program either as a permit condition or as the result of an enforcement action shall follow a mitigation plan approved by the City and 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). The applicant or violator must receive written approval by the Director for the mitigation plan prior to the commencement of any wetland restoration, creation, or enhancement activity.