Chapter 18.32

CRITICAL AREAS

18.32.000 Chapter Contents

Sections:

18.32.100 General Provisions - Purpose and Intent

It is the intent of this Chapter to implement the State of Washington Growth Management Act and its guidelines, the Countywide Planning Policies, and the Olympia Comprehensive Plan by ~~accomplishing the following~~:

A. ~~A.~~ Protecting critical areas, associated buffers, and their functions and values while allowing reasonable use of property by: directing activities not essential in such areas to other locations; providing for review of proposed uses and activities on properties containing critical areas or their buffers to achieve compliance with standards designed to minimize impacts to critical areas and associated buffers; and providing for mitigation of unavoidable impacts;~~Protecting critical areas and the functions they perform by regulating their development;~~

~~A.~~B. Establishing enforcement tools and processes designed to deter activities in violation of this chapter and provide for remedial action for unauthorized impacts to critical areas and their buffers;

~~B~~C. Maintaining groundwater recharge and preventing the contamination of groundwater resources;

~~C~~D. Minimizing damage due to landslides, seismic events, erosion or flooding;

~~D~~E. Protecting natural flood control and stormwater storage from alterations to drainage or stream flow patterns;

~~E~~F. Protecting wildlife habitat and species where possible throughout the City;

~~F~~G. Controlling siltation, protecting nutrient reserves and maintaining stream flows and stream quality for fish and marine shellfish;

~~G. Protecting areas with high potential for marine aquaculture activities from degradation by other types of uses;~~

H. Minimizing turbidity and pollution of wetlands, streams and fish-bearing waters and maintaining their associated wildlife habitat;

I. Protecting the general public against avoidable losses from:

1. Property damage and the cost of replacing public facilities,

2. Subsidizing public mitigation of avoidable impacts, and

3. The cost for public emergency rescue and relief operations;

J. Identifying and mapping critical areas so that this information is available to appraisers, planners, assessors, owners, and potential buyers and lessees of property;

K. Assisting property owners in developing their property consistent with this Chapter by promoting the use of innovative land use techniques; and

L. Achieving no overall net loss in acreage and functions of the City's remaining wetlands.

18.32.105 General Provisions - Critical Area Development Regulations

A. This Chapter shall constitute the City of Olympia development regulations for the following critical area categories:

1. General Provisions and standards which apply to the critical area categories are contained in OMC 18.32.100,

2. Critical Aquifer Recharge Areas are covered in Drinking Water (Wellhead) Protection Areas provisions ~~are~~ contained in OMC 18.32.200,

3. Important Habitats and Species provisions are contained in OMC 18.32.300,

4. Stream and ~~Important Riparian~~Priority Riparian Areas provisions are contained in OMC 18.32.400,

5. Wetlands ~~and Small Lakes~~ provisions are contained in OMC 18.32.500, and

6. ~~Landslide~~ Geological Hazard Areas provisions are contained in OMC 18.32.600.

B. The development regulations for Frequently Flooded Areas are contained in OMC 16.70.

C. The development regulations for Erosion Hazards Areas are contained in OMC 18.32.650-660 and OMC 13.16.

D. The development regulations for Drinking Water (Wellhead) Protection Areas are contained in OMC 18.32.200 and 18.40.080.

E. The development regulations for Marine Shorelines and Lake Shorelines as defined by the Shoreline Management Act are contained in OMC 14.08.

18.32.110 General Provisions - Application of Critical Area Regulations

A. ~~This Chapter contains general provisions~~ The city shall regulate all uses, activities, and development within critical areas and the corresponding buffers and setbacks. ~~which apply to all critical areas and their buffers.~~ Additional requirements specific to a particular critical area are found in the sections for that critical area category (e.g., Landslide Hazard Areas, Wetlands). Compliance is required for both the general provisions regulations and those contained within the particular critical area category.

B. The particular critical area category may include limitations on uses and activities which are specific to that critical area. Listing of various uses or activities within the critical area category does not authorize these if prohibited by another provision of the Olympia Municipal Code.

~~C. Developments which include or lie within three hundred (300) feet of a landslide hazard area, stream, or wetland, and a distance of up to one thousand (1,000) feet of an important habitat or species location depending upon the type of habitat, shall be subject to the provisions found herein.~~

~~D~~C. No action shall be undertaken by any person~~, which~~ that results in any alteration of a critical area or its buffer except in compliance with the requirements, purpose and intent of this Chapter.

~~E~~D. Each regulated use and activity requiring either an administrative review or permit shall obtain written authorization from the Department prior to undertaking the activity.

~~F~~E. Special reports shall be prepared pursuant to OMC Section 18.32.115~~(B)~~ prior to approval of development proposals in order to evaluate any potential adverse environmental impacts upon the critical area.

~~G~~F. Mitigation required by this Chapter shall be incorporated into the project except in cases where an alternative mitigation has been considered by the Department or the Hearing Examiner and found to be equal to or better than the requirements, and meets the purpose and intent of the Chapter.

~~H~~G. The Department may approve, approve with conditions or deny permits and approvals in order to carry out the purpose and intent of this Chapter.

~~I.~~H Approval of or exemption of a development proposal pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the procedural and substantive provisions of this Chapter.

I. These critical areas regulations shall be in addition to zoning and other regulations adopted by the City. Compliance with other regulations does not exempt the applicant from critical areas regulations. In the event of any conflict between these regulations and any other City regulations, those regulations which provide the greater protection to critical areas shall apply.

J. Any individual critical area adjoined by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any provision of this chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this chapter, that which provides more protection to the critical areas shall apply.

~~I.~~K. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, shoreline substantial development or conditional use permits, shoreline variances, the Washington State Department of Fish and Wildlife hydraulic project approval (HPA), Army Corps of Engineers Section 404 permits, and National Pollution Discharge Elimination System (NPDES) permits). The applicant is responsible for complying with these requirements, apart from the process established in this chapter.

18.32.111 General Provisions – Exemptions

The following activities and developments are exempt from the provisions of this chapter. All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. An exemption from this chapter is not an endorsement to degrade a critical area; ignore risk from natural hazards; or otherwise limit the ability of the Department to identify and abate such actions that may cause degradation to a critical area.

A. Operation, maintenance, or repair of existing public improvements, utilities, public or private roads, parks, trails, or drainage systems if the activity does not further alter or increase impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair, and no new clearing of native vegetation beyond routine pruning.

B. Development involving or near artificially created wetlands or streams intentionally created from non-wetland sites, including but not limited to grass-lined swales, irrigation and drainage ditches, detention facilities, and landscape features,

except wetlands, streams, or swales created as mitigation or that provide habitat for salmonids.

C. Normal maintenance and repair, reconstruction or remodeling, and additions to existing structures that do not increase the previously approved building footprint.

D. Development within the footprint of existing paved surfaces that were previously approved.

E. Educational and scientific research activities that do not require grading or placement of structures.

F. Passive recreation such as fishing, hiking or bird watching.

G. Removal by hand of invasive and noxious vegetation. Removal by hand does not include using mechanical equipment or the use of herbicides.

H. Non-commercial signs associated with critical areas, including interpretive signs, Critical Area boundary signs as provided in OMC 18.32.145, and survey markers.

18.32.112 General Provisions – Public Agency and Utility Exception

A. If the application of this Chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for an exception pursuant to this section.

B. An application for a public agency and utility exception shall be made to the City and shall include a critical area identification form; critical area report including mitigation plan, if necessary; and any other related project documents such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act. The Department shall prepare a recommendation to the Hearing Examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with the criteria in OMC 18.32.112(D).

C. The Hearing Examiner shall review the application and Department recommendation, and conduct a public hearing pursuant to the provisions of OMC 18.82. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the public agency and utility exception criteria in OMC 18.32.112(D).

D. The criteria for review and approval of public agency and utility exceptions follow:

1. There is no other practical alternative to the proposed development with less impact on the critical areas;

2. The application of this Chapter would unreasonably restrict the ability to provide utility services to the public;
3. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
4. The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and
5. The proposal is consistent with other applicable regulations and standards.

E. The burden of proof shall be on the applicant to provide sufficient information and bring forth evidence in support of the application.

18.32.115General Provisions - Applicant Requirements

The applicant requesting a critical areas review or approval for a development proposal on a site which includes or is near one or more critical areas shall submit a report containing 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 map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared; and

2. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations.

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. A description of reasonable efforts made to apply mitigation sequencing pursuant to OMC 18.32.135 to avoid, minimize, and mitigate impacts to critical areas;

H. Plans for adequate mitigation, as needed, pursuant to OMC 18.32.136.

~~A. Demonstrate that any proposed project submitted conforms to the purposes, standards and protection mechanisms of this Chapter; and~~
~~B. Include with the associated application a report which:~~
~~1. Identifies and characterizes critical areas on the development parcel, and critical areas located on adjacent parcels to the extent feasible;~~
~~2. Assesses the impact upon the critical areas both from activities outside the critical area and from any proposed alteration of the critical areas determined to be permitted under this Chapter, and~~
~~3. Proposes adequate protection mechanisms for the specific critical areas which may include but not be limited to avoidance, mitigation, monitoring and financial measures.~~

18.32.120 General Provisions - Application Form for Critical Areas Review

A. Applications to undertake a use or activity within a critical area or its buffer which requires review by the Department shall be made on forms furnished by the Department and include information identified in the City of Olympia Application Content Lists, as amended.

B. Any person seeking to determine whether a proposed activity or an area is subject to this Chapter may request a written determination from the Department. Such a request for determination shall contain plans, data and other information as may be specified by the Department.

C. Any person intending to apply for authorization to undertake a regulated use or activity within a critical area is encouraged to meet with the Department as early as possible during the project planning stage. Efforts put into pre-application consultations will help applicants create projects ~~which~~ that require less time to review and are more easily processed.

D. The Department may waive one or more of the reports of this Chapter:

1. If the information is contained in another form submitted to the City,

2. If the Department already has adequate information regarding the critical area, or

3. If the nature of the project and its impacts are generally known, or the impacts of the project have been mitigated.

18.32.125 General Provisions - Department Requirements

In evaluating a request for a development proposal on a site which includes or lies near a critical area as described in OMC 18.32.110~~(C)~~, the Department shall:

A. Confirm the nature and type of the critical areas by an on-site inspection and evaluate any special reports;

B. Request that an interdisciplinary team evaluate a project if conditions warrant;

C. Determine whether the development proposal is consistent with this Chapter~~,~~ by granting, denying or conditioning projects;

D. Make recommendations to the Hearing Examiner for projects requiring a Hearing Examiner review;

E. Determine whether proposed alterations to critical areas are allowed by the standards contained in this Chapter or are necessary to allow reasonable use of the property as outlined in OMC 18.66.040; and

F. Determine if any protection mechanisms, mitigation measures, monitoring plans, or financial surety measures are required to protect the public health, safety and welfare consistent with the purpose and intent of this Chapter, and if so, condition the permit or approval accordingly.

18.32.130 General Provisions - Hearing Examiner Role

A. Within all critical area categories, "a public project of significant importance" may be authorized only by the Hearing Examiner after a public hearing.

B. The Hearing Examiner shall review other uses and activities as listed in the particular critical area category.

C. Hearing Examiner approval may be conditioned upon the implementation of mitigating measures determined necessary to ensure adequate protection of the public, critical area category, and purpose and intent of this Chapter.

18.32.135 General Provisions - Mitigation ~~Priorities~~Sequencing and General Measures

A. ~~Mitigation shall be undertaken in the following order of preference:~~ Applicants shall demonstrate that all reasonable alternatives have been examined with the intent to avoid and minimize impacts to critical areas. When alteration to a critical area is proposed, the alteration shall be avoided, minimized, or compensated in the following 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 to avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment;

4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

5. Compensating for the impact by replacing, enhancing or providing substitute resources or environments;

6. Monitoring the impact and taking appropriate corrective measures.

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

B. Unavoidable impacts to critical areas often can and should be minimized by sensitive site design and deliberate actions during construction and implementation.

C. In addition to meeting the standards of the underlying zone, the Department may require the use of more restrictive mitigation techniques described as follows:

1. Limitation of building and development coverage;
2. Setbacks or buffers;
3. Size of lots and development sites;
4. Height limits;
5. Density limits;
6. Time limits;
7. Restoration of ground cover and vegetation;
8. Creation of critical area tracts;
9. Innovative design or construction methods;
10. Signing, fencing, and limitation of access;
11. Notice of conditions placed on the title of the property;
12. Provisions for access or rights-of-way;
13. Financial surety; and/or
14. Other measures for environmental protection.

18.32.136 General Provisions – Mitigation Plan Requirements

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

A. A written report identifying environmental goals and objectives of the mitigation proposed and including:

1. description of the anticipated impacts to the critical areas, the mitigating actions proposed and the purposes of the mitigation measures, including the site selection criteria; identification of mitigation goals; identification of resource functions; and dates for beginning and completion of site

mitigation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;

2. review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring, enhancing, or creating the type of critical area proposed; and

3. analysis of the likelihood of success of the mitigation project.

B. 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 Chapter have been met.

C. Written specifications and descriptions of the mitigation proposed, such as:

1. the proposed construction sequence, timing, and duration;

2. grading and excavation details;

3. erosion and sediment control features;

4. a planting plan specifying plant species, quantities, locations, size, spacing, and density; and

5. 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 final outcome.

D. A program for monitoring construction of the mitigation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years 1, 3, 5, and 7 after site construction), 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 mitigation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not less than five (5) years.

E. 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.

F. Financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented, including fulfillment of the mitigation project, monitoring program, and any contingency measures.

G. Each critical area in this Chapter may require additional mitigation plan information.

18.32.140 General Provisions - Critical Area Tracts

A. As a condition of a binding site plan, short plat, large lot subdivision, planned residential development, or subdivision, the applicant may be required to create a separate critical area tract or tracts containing critical areas or their buffers as defined by this Chapter.

B. Critical area tract or tracts shall be subject to either:

1. A conservation easement for the protection of native vegetation within a critical area and/or its buffer dedicated to the City or other appropriate public, nonprofit, or private entity (e.g., land trust) with a demonstrated record of land conservation and approved by the Department;

2. A deed restriction recorded on the Chapter of all lots containing a critical area tract or tracts created as a condition of the permit; or

3. Limiting conditions on the face of the recorded plat or binding site plan.

C. The deed restriction language shall be substantially similar to the following:

"Note: Before beginning and during the course of any grading, building construction, or other development activity~~,~~ on a lot or development site subject to this deed restriction, the common boundary between the area subject to the deed restriction and the area of development activity must be fenced or otherwise marked to the satisfaction of the Olympia Community Planning and Development Department."

D. Responsibility for maintaining the tracts shall be held by an entity approved by the Department, such as a homeowners' association, adjacent lot owners, the permit applicant or designee, or other appropriate entity.

E. A note substantially similar to the following shall appear on the face of all plats, short plats, planned residential developments, or other approved site plans containing separate critical area tracts, and shall be recorded on the title of all affected lots:

"Note: The _____ is responsible for maintenance and protection of the critical area tracts. Maintenance includes ensuring that no alterations occur and that all vegetation remains undisturbed unless the express written authorization of the Olympia Community Planning and Development Department has been received."

18.32.145 General Provisions - Signs and Fencing

A. Permanent fences with signs or other access limiting features may be required on the perimeter of critical area buffers of hazardous or sensitive critical areas. Signs and fences must be maintained by the property owner in perpetuity.

B. The perimeter between the critical area buffer and those areas to be disturbed pursuant to a permit or authorization shall be marked in the field, and inspected by the ~~Director~~Department prior to the commencement of permitted activities. This temporary marking shall be maintained throughout the duration of the permit.

C. Any sign shall be made of wood or metal and attached to a wood or metal post or another material of equal durability and posted at an interval of one per lot or every fifty feet, whichever is less, with the following or with alternative language approved by the ~~Director~~Department:

"(Critical Area)

Protected by Law

Contact City of Olympia Community Planning & Development

for Information"

D. The fence shall be visually open and constructed to allow animal passage.

18.32.150 General Provisions - Notice on Title

A. The property owner shall record a notice approved by the ~~Director~~Department with the Thurston County Auditor.

B. This notice will provide notice in the ~~pubic~~ public record of the presence of a critical area or its buffer, the application of this Chapter to the property, and limitations on uses and activities within or affecting this area.

18.32.155 General Provisions - Authorized Activity Time Period

A. Authorization to undertake regulated activities within critical areas or their buffers shall be valid for a period of twelve (12) months from the date of issue unless a longer or shorter period is specified by the Department upon issuance of the permit.

B. For all administrative permits, an extension of an original permit may be granted upon written request to the Department by the original permit holder or the successor in title.

C. Prior to the granting of an extension, the Department may require updated studies and/or additional hearings if, in its judgment, the original intent of the permit would be altered or enlarged by the renewal, if the circumstances relevant to the review and issuance of the original permit have changed substantially, or if the applicant failed to abide by the terms of the original permit.

18.32.160 General Provisions - Application of Multiple Development Regulations

A. In those cases where there are differences in the degree of environmental protection imposed by this Chapter and that of other city ordinances or state or federal laws, the more restrictive shall prevail.

B. Where two or more critical areas overlap, the requirements of the more restrictive critical area shall apply.

C. When a critical area is also defined by OMC 14.08 as a shoreline, all applicable regulations shall apply.

18.32.165 General Provisions - Emergency Actions

A. Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer.

B. The person or agency responsible for the emergency action shall undertake good faith efforts to notify the Department prior to taking action and shall report to the Department ~~as soon as possible following commencement of the emergency activity, but in no case more than~~within ~~five~~ one (~~5~~1) working day~~s~~ after commencement.

C. Within thirty (30) days, the Department will determine if the action taken was within the scope of the emergency actions allowed in this subsection.

D. If the Department determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions ~~of~~ contained in OMC 18.73 and 4.44 shall apply.

E. Within thirty (30) days of the decision in 18.32.165.C, the person or agency undertaking the action shall:

1. Submit all required applications and reports as would be required for a critical areas review. This application packet shall be reviewed in accordance with the review procedures contained within this Chapter; and

2. Fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and mitigation plan.

F. Restoration and/or mitigation activities must be initiated within and completed in a timely manner. Seasonal delays (such as not working in fish-bearing streams during spawning season) are acceptable.

18.32.170 General Provisions - Critical Area Maps

A. The Department shall maintain a set of critical area maps for each critical area category (e.g., landslide hazard area, wetlands).

B. The boundaries of those critical areas shall be ~~those~~ as defined in this Chapter.

C. Additions or corrections to those critical area maps shall be made as necessary when additional site specific information is available.

D. ~~In the event that~~If there is a conflict between a boundary on the map and the criteria set forth in this Chapter, the criteria shall control.

E. Omission of a site from a critical area map does not and shall not exempt that site from complying with otherwise applicable provisions of this Chapter.

18.32.175 General Provisions - Unauthorized Alterations and Enforcement

A. When a critical area or its buffer has been altered in violation of this Chapter, 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 Chapter.

B. When a stop work order is issued by the City, the affected development work shall remain stopped until a restoration plan is prepared and approved by the City. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in Subsection (C). The Department may, at the violator’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum Performance Standards for Restoration

1. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, 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:

a. The historic structural and functional values shall be restored, including water quality and habitat functions;

b. The historic soil types and configuration shall be replicated;

c. 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

d. Information demonstrating compliance with the mitigation plan requirements for a particular critical area shall be submitted to the Department

2. 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:

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

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

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

D. Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this Chapter shall be guilty of a misdemeanor and subject to penalties pursuant to OMC 18.73.

18.32.200 Drinking Water (Wellhead) Protection Areas - Purpose and Intent

~~In order to~~Protection of groundwater and related critical aquifer recharge areas is necessary to prevent contamination of drinking water and to provide critical recharging effects on streams, lakes, and wetlands that provide critical fish and wildlife habitat. To protect the public health and safety, prevent the degradation of groundwater used for potable water, ~~and to~~ provide for regulations that prevent and control risks to the degradation of groundwater, and to prevent negative effects on streams, lakes, and wetlands, drinking water (wellhead) protection areas shall be subject to the standards described in OMC 18.32.205 through 18.32.240.

18.32.205 Drinking Water (Wellhead) Protection Areas - Applicability and Designation

A. "Drinking Water (Wellhead) Protection Area" shall include the surface and subsurface area surrounding a water well or well field supplying a public water supply system with over one thousand (1,000) connections through which contaminants are reasonably likely to move toward and reach such well or well field within six (6) months, and one (1), five (5), and ten (10) years; for which the water purveyor has adopted a wellhead protection plan; and which said plan has been either formally proposed by the City to the Washington Department of Health pursuant to WAC 246-290-135 (3) and WAC 246-290-100 (2) or approved by the Washington State Department of Health.

The periods of time (six months and one, five and ten years) for movement of a contaminant toward a drinking water well define "time-of-travel zones." These zones establish areas around a drinking water source within which these wellhead protection measures apply.

An Extended Capture Zone can be designated outside the ten year zone if it is determined that surface water flows within that zone will discharge into the Wellhead Protection Area. All of the capture zones are considered part of the Drinking Water (Wellhead) Protection Zone.

Maps adopted pursuant to WAC 246-290-135 (3) and WAC 246-290-100 (2) which are hereby adopted by reference as though fully set forth herein, shall constitute the Drinking Water (wellhead) Protection Areas. Three copies of these maps shall be kept on file in the office of the City Clerk.

18.32.210 Drinking Water (Wellhead) Protection Areas - Exempt Uses and Activities

The following activities shall be exempt from the review requirements of this critical area category:

A. Agriculture, existing and ongoing; except in conditions described in OMC 18.32.240;

B. Boundary line adjustments;

C. Building projects for individual, single family residences or duplexes connected to a sanitary sewer;

D. Conservation or preservation of soil, water, vegetation and wildlife in consultation with the Natural Resources Conservation Service, Washington Department of Fish and Wildlife, or other appropriate federal or state agency;

E. Grading permit for less than five hundred (500) cubic yards of material;

F. Installation, replacement, alteration or construction and operation in improved city road right-of-way of all water or electric facilities, lines, equipment or appurtenances but excluding substations and the application of chemical substances;

G. Installation, replacement, alteration or construction and operation in improved city road right-of-way of all natural gas, cable communications and telephone facilities, lines, pipes, mains, equipment or appurtenances, but excluding the application of chemical substances;

H. Location of boundary markers;

I. Passive noncommercial outdoor recreation activities that have no impact on aquifer recharge, such as bird watching or hiking;

J. Nondevelopment educational activities and scientific research;

K. Normal and routine maintenance or repair of existing utility structures or right-of-way, excluding the application of chemical substances; and

L. Site investigative work necessary for land use application submittals such as surveys, soil logs, percolation tests and other related activities.

18.32.215 Drinking Water (Wellhead) Protection Areas - Prohibited Uses and Activities

A. Expansion or development of the following uses shall be prohibited within a designated drinking water (wellhead) protection area:

1. Landfills (municipal sanitary solid waste and hazardous waste, demolition (inert) and wood waste);

2. Chemical/Hazardous waste reprocessing transfer, storage and disposal facilities;

3. Wood and wood products preserving/treating;

4. Chemical (including pesticides) manufacturing, processing, mixing, ~~manufacturing,~~ and storage;

5. Gas stations without attendant;

6. Pipelines - liquid petroleum projects or other hazardous liquid transmission;

7. Solid waste processing;

8. Electroplating, metal plating;

9. Manufacturing - electrical/electronic;

10. Petroleum products refining, reprocessing and related storage [except underground storage of heating oil or agricultural fueling in quantities less than one thousand one hundred (1,100) gallons for consumptive use on the parcel where stored];

11. Land spreading disposal facilities (as defined by WAC 173-304 and 173-308;

12. Cemeteries; and

13. Vehicle wrecking/junk/scrap/salvage yards.

B. Expansion or development of the following uses within the six (6) month and one (1) year time ~~-~~ of ~~-~~ travel zone of a designated drinking water (wellhead) protection area shall be prohibited:

1. Agriculture operations with over two hundred (200) animal units;

2. Gas stations with attendants~~,~~;

3. Confined animal feeding operations including, but not limited to dairies, stables, horse boarding/training, auction facilities, feedlots, poultry raising;

4. Funeral facilities and taxidermy (~~without~~ not connected to a sanitary sewer);

5. Maintenance/fueling facilities including but not limited to municipal, county, school district, transit, airports, railroads, buses;

6. Hazardous waste transfer and storage facilities, including radioactive wastes as defined in Chapter 43.200 RCW;

7. Fertilizer storage facilities;

8. Storage tanks, underground;

9. Solid waste handling, transferring, recycling;

10. Asphalt ~~plants~~/cement/~~-~~concrete plants;

11. Furniture staining/fabricating with hazardous materials;

12. Machine shops, metal finishing/fabricating.

13. Metal processing with etchers and chemicals;

~~13~~14. Wastewater reuse facilities/wastewater recycling satellite plant; and

~~14~~15. All other activities involving the use, handling, or storing of hazardous materials ~~of~~ or generating hazardous materials by the~~ir~~ activities or action in quantities exceeding the threshold in 18.32.235 (B).

18.32.220 Drinking Water (Wellhead) Protection Areas - Administratively Authorized Uses and Activities

A. All other uses and activities (~~i.e., t~~those not listed in OMC 18.32.210 Exempt~~ed~~ Uses and Activities, and OMC 18.32.215 Prohibited Uses and Activities) are subject to minimum mitigation standards as outlined in OMC 18.32.225 and further review by the Department in consultation with the Thurston County Health Officer. The Department shall determine whether the use or activity will ensure adequate protection of the source water supply, after a review of the hydrogeological reports, if required, as outlined in OMC 18.32.230.

B. Administrative approval may be conditioned upon the implementation of mitigating measures which the Department determines are needed to ensure adequate protection of the source water supply.

18.32.225 Drinking Water (Wellhead) Protection Areas - Minimum Mitigation Standards

A. Every application for a non-exempt development permit within a drinking water (wellhead) protection area shall meet these minimum standards for mitigation:

1. If the development proposal indicates the use, storage, handling or disposal of hazardous materials above the minimum quantity thresholds listed in OMC18.32.235, the applicant shall submit a hazardous materials management (spill) plan as outlined in OMC18.32.235.

2. Landscaping and irrigation plans that mitigate the leaching of soluble contaminants into groundwater. These plans shall meet the requirement of OMC 18.36 and in addition incorporate the following requirements:

a. Within the landscap~~e~~ing plans, the Agreement to Maintain Stormwater ~~Operations and Maintenance Agreement~~Facilities, and the Conditions,

Covenants and Restrictions regarding fertilizers, insert the following specific passage, "Only slow-release fertilizers shall be applied for the life of the development at a maximum amount of 4 lbs of nitrate as nitrogen annually and no more than 1 lb per application for every 1,000 square feet of turf grass. Only fertilizer formulas with a minimum of 50% water-insoluble form of nitrogen are permitted for use. Approved water-insoluble forms of nitrogen include sulfur-coated and/or polymer-coated fertilizers, isobutylidene diurea (IBDU), methylene urea and ureaform, and organic fertilizers registered with the Washington Department of Agriculture."

b. The total turf area of the development will be limited to 25% of the total regulated landscaped area. All additional plantings will include native and/or drought tolerant plants as listed in the Thurston County Common Sense Gardening Plant List or a similar list approved by the Washington Department of Agricultureabove department.

c. Irrigation systems shall be designed and managed to maximize efficient use of water. Lawns will not be watered more than a depth of 1 inch per week over the area of turf. An irrigation consultation will be required at the time the irrigation system is installed to determine precipitation application rates and system uniformity of system. Consultations will be conducted by an Irrigation Association Certified Landscape Irrigation auditor.

d. Integrated Pest Management Plans as required by Thurston County for any land use projects located within a City of Olympia delineated well head capture zone.

3. A well inventory report. Any existing wells shall be identified on a map, with an assessment of their condition, photographs and well logs (if available). Wells that are not being used for ongoing domestic water use, irrigation or monitoring will be decommissioned by the applicant following the procedures in WAC Chapter 173-160-381 WAC.

4. A gGrant to the Department permission to access the development for the purposes of:

a. Providing pollution prevention outreach to residents, employees, and contractors. Access Outreach may include but is not limited to: interpretive sign installation, model home displays, demonstration sites, conducting interviews and surveys, observing practices, and distributing informational materials.

b. Ensuring compliance with items described under this section OMC18.32.225, section A above.

c. The grant of access shall be included in the Stormwater Operations and Maintenance Agreement and the Conditions, Covenants, and Restrictions for the project.

B. A dedicated groundwater monitoring well ~~is~~ or wells may be required in situations where infiltration of stormwater is proposed~~,~~ or where other groundwater contamination risks or water quality or water level monitoring needs are identified by the Department. The wells will be installed and equipped with a dedicated pump and dedicated groundwater level pressure transducer and data logger by the applicant to C~~c~~ity standards. Within 60 days after installation, the developer must demonstrate to the satisfaction of the Department that installed equipment functions as intended, consistent with Chapter 6 of the Engineering Design and Development Standards for groundwater monitoring wells. The developer must submit a report to the Department within 60 days of well completion with detailed information about the well including location, name of drilling company, date drilled and completed, borehole log, well construction log, depth to groundwater, any water quality sample results, and copies of documents required by the Washington State Department of Ecology as related to the well. Once the well passes City inspection, it will become part of the City's groundwater monitoring network of wells, to be monitored as needed by the City.

C. The city may allow alternatives to the minimum mitigation standards described in this section in unique conditions and on a case-by-case basis when the applicant demonstrates that~~:~~ the proposed alternative mitigation measure(s) will be adequate to protect the drinking water source.

1. The alternative mitigation measure(s) must be based on the best available science; and

~~1~~2. The project ~~has been~~must be evaluated by a Hydrogeological Report as described in OMC 18.32.230, if required by the Department.~~; and~~

~~2. Based upon the Hydrogeological Report and the best available science the proposed alternative mitigation measures will be adequate to protect the drinking water source.~~

18.32.230 Drinking Water (Wellhead) Protection Areas - Hydrogeological Report

A. If the ~~d~~Department determines that where risks from on-site activities within a drinking water protection area are not well known, or where site specific assessment is necessary to determine mitigation levels above the minimum standards outlined in OMC 18.32.225, a ~~h~~Hydrogeological ~~r~~Report shall be required. This report shall identify the proposed development plan and the risks associated with on-site activities which may degrade the groundwater within a designated wellhead protection area.

B. This report shall be prepared, signed, and dated by a ~~state~~ licensed geologist or hydrogeologist, consistent with Chapter 18.220 RCW.

C. A Hydrogeological Report shall contain:

1. Information sources;

2. Geologic setting, including well logs or borings;

3. Background water quality;

4. Groundwater elevations;

5. Location and depth of perched water tables and water-bearing aquifers;

6. Recharge potential of ~~facility~~ site soils~~(permeability/transmissivity)~~;

7. Groundwater flow direction and gradient;

8. Available data on wells located within 1/4 mile of the site;

9. Available data on ~~any~~ springs within 1/4 mile of the site;

10. Permanent and seasonal surface water body locations and recharge potential;

11. Any proposed monitoring or sampling schedules;

12. Analysis of the possible effects on the groundwater resource ~~of~~ by the proposed project including the storage or use of any hazardous materials;

13. Discussion of potential mitigation measures, should it be determined that the proposed project will have an adverse impact on groundwater resources;

14. Information required under Washington Department of Ecology Publication 05-10-028, as amended; and

15. Any other information as required by the Department.

18.32.235 Drinking Water (Wellhead) Protection Areas - Existing Uses

A. The Department in consultation with the Thurston County Health Officer shall request that an owner of any existing use which is located within a designated drinking water protection area, which uses, stores, handles or disposes of hazardous materials above the minimum cumulative quantities listed within this section submit a hazardous materials management (spill) plan that will ensure adequate protection of the aquifer and any domestic water supply. This plan shall be reviewed and updated as needed, and conditions under this plan shall be met on an ongoing basis.

Hazardous materials management (spill) plans shall include, at a minimum, the following:

1. A brief description of business activities and a list and map of the locations, amounts, and types of hazardous materials, hazardous waste and petroleum products~~,~~ used or stored on site;

2. A description of inspection procedures for hazardous material storage areas and containers and the minimum inspection intervals. An inspection logbook shall be maintained for periodic review by the county;

3. Provision of an appropriate spill kit with adequate spill supplies and protective clothing;

4. Detailed spill cleanup and emergency response procedures identifying how the applicant will satisfy the requirements of the Dangerous Waste Regulations, Chapter 173-303 WAC, in the event that hazardous material is released into the ground, ground water, or surface water;

5. Procedures to report spills immediately to the Department of Ecology and the Environmental Health Division of the Thurston County Public Health and Social Services Department, in that order;

6. A list of emergency phone numbers (e.g., the local fire district and ambulance);

7. Procedures to ensure that all employees with access to locations where hazardous materials are used or stored receive adequate spill training. A training logbook shall be maintained for periodic review by the county;

8. A map showing the locations of all floor drains and any hazardous material and petroleum product transfer areas; and

9. Additional information determined by the approval authority to be necessary to demonstrate that the use or activity will not have an adverse impact on ground water quality.

10. Liquid, soluble, or leachable hazardous materials, shall be stored in a secondary contaminant device or system that will effectively prevent discharge on-site. ~~(See Chapter 15.54 and 17.21 RCW regarding pesticide storage.) (Refer to Chapter 14.32 TCC, International Fire Code, regarding seismic standards).~~

B. Any existing use ~~which~~ that uses, stores, handles or disposes of ~~hazardour~~ hazardous materials above these minimum cumulative quantities will meet requirements described in OMC 18.32.235(~~-~~A) above:

1. Chemical substances that are ignitable, corrosive, reactive or toxic, consistent with WAC 173-303-090, as amended, except as provided for below. Minimum cumulative quantity: 160 pounds or the equivalent of 20 gallons.

2. Cleaning substances for janitorial use or retail sale in the same size, packaging and concentrations as a product packaged for use by the general public. Chlorinated solvents and non-chlorinated solvents which are derived from petroleum or coal tar will not be considered a cleaning substance under this subsection, but rather a chemical substance under subsection (B)(1) of this section. Minimum cumulative quantity: eight hundred (800) pounds [or the equivalent one hundred (100) gallons], not to exceed fifty-five (55) gallons for any single package.

3. Businesses which use, store, handle or dispose of chemicals listed in WAC 173-303-9903 as "P" chemicals. Minimum cumulative quantity: two and two tenths (2.2) pounds.

18.32.240 Drinking Water (Wellhead) Protection Areas - Farm Conservation Plan

A. The Department, upon request of the Thurston County Health Officer, or based upon good cause and with reasonable expectations of risk to groundwater, shall request that the owner of an existing agricultural use located within a designated drinking water protection area develop and implement a ~~f~~Farm ~~c~~Conservation ~~p~~Plan.

B. Where a ~~f~~Farm ~~c~~Conservation ~~p~~Plan has been requested, such plan shall be prepared in conformance with the Natural Resources Conservation Service - Field Office Technical Guide. The Department may solicit advice from the Thurston Conservation District with regard to consistency of a ~~f~~Farm ~~c~~Conservation ~~p~~Plan with the Technical Guide. Only those portions of the Farm Conservation Plan which are related to groundwater protection must be implemented to comply with this standard.

C. The Farm Conservation Plan shall include the following:

1. A resource inventory which includes livestock types/numbers, soil types, surface water and groundwater issues and location of wells~~,~~;

2. A~~n approved~~ management plan for manure storage on site, or manure export off-site;

3. Adequate setbacks from surface water and wells~~,~~;

4. Heavy use protection in confinement areas~~,~~; and

5. A management plan that addresses if and when fertilizers, manure, pesticides and/or herbicides may be applied.

18.32.300 Important Habitats and Species - Purpose and Intent

In order to preserve and protect important habitats and ~~important~~ species which are known to occur in Thurston County and which may be found within the City of Olympia, and which are not already protected by another critical area category, appropriate protection ~~shall be provided on lands which lie within one thousand (1,000) feet~~ of an important habitat or species location shall be subject to the standards in OMC 18.32.305 through OMC 18.32.330. Protection in lake and marine shorelines is regulated under the City of Olympia Shoreline Master Program, OMC 14.08.

18.32.305 Important Habitats and Species - Applicability and Definition

"Important habitats and species" are habitats or species known to occur within Thurston County and which may be found within the City of Olympia and which are not receiving habitat protection by another critical area category (e.g. Streams, Wetlands, or Landslide Hazard Areas) in this Chapter and:

A. Are designated as endangered or threatened species identified under the Endangered Species Act; or

B. Are state priority species identified on the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) List and their habitats of primary association. (Consult the state WDFW for the current PHS list);~~state designated endangered, threatened, or sensitive species identified by the Washington Department of Fish and Wildlife and the habitat primarily associated with those species.~~; or

C. Are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.

D. Small lakes, defined as naturally existing bodies of standing water less than twenty acres in size that exist on a year-round basis in a depression of land or expanded part of a stream and not defined as "Shorelines of the State" by RCW 90.58 (Shoreline Management Act), are considered an “important habitat.” This term does not apply to constructed ponds.

~~**18.32.310Important Habitats and Species - Exempt, Prohibited, Administratively Authorized Uses, and Hearing Examiner Authorized Uses and Activities**~~
~~Within one thousand (1,000) feet of an important habitat or important species location there are no specific limitations on uses and activities, except those imposed by the Department based upon its review of the Important Habitat and Species Management Plan provided in OMC 18.32.330.~~

18.32.315Important Habitats and Species - Authority

A. No development shall be allowed in an important habitat and species area where local, state or federally endangered, threatened or sensitive species have a primary association without approval from the Department and/or the Washington Department of Fish and Wildlife (WDFW). ~~The Department may restrict the uses and activities of a development proposal which lie within one thousand (1,000) feet of an important habitat or species location.~~

B. The minimum performance standards ~~which will~~that apply to a development proposal shall be those ~~contained within~~provided by the Washington Department of Fish & Wildlife’s Management Recommendations for Washington’s Priority Habitat and Species ~~Management Recommendations~~ (1991), as amended, and the requirements in OMC 18.32.115, except as modified on the basis of ~~the~~ an Important Habitat and Species Management Plan described in OMC 18.32.330.

18.32.320Important Habitats and Species - Buffers

The Department shall establish buffers for the habitat or species on a case-by-case basis, in consultation with the WDFW or others with expertise, based on the critical area

report outlined in OMC 18.32.115 and the WDFW management recommendations for Washington's priority habitats and species, if available. The buffers shall reflect the sensitivity of the specific habitat(s) and/or species to be protected. ~~Buffers shall be established on a case-by-case basis as described in an Important Habitats and Species Management Plan per OMC 18.32.325 and 18.32.330~~

~~**18.32.325Important Habitats and Species - Special Reports**~~

~~When a development proposal lies within one thousand (1,000) feet of an important habitats and species location an Important Habitats and Species Management Plan shall be submitted by the applicant, provided the Department may waive the submittal when consultation with the Washington Department of Fish and Wildlife staff indicates that such a plan is not needed.~~

18.32.330Important Habitats and Species - Management Plan

When a development proposal lies within an important habitats and/or species location, an Important Habitats and Species Management Plan shall be submitted by the applicant, provided the Department may waive the submittal when consultation with the Washington Department of Fish and Wildlife staff indicates that such a plan is not needed.

An Important Habitats and Species Management Plan shall:

A. Identify how the development impacts from the proposed project will be mitigated, using guidance provided in WAC -365-190-130 (3). ~~The Washington Department of Wildlife Priority Habitat and Species Management Recommendations (1991), as amended, shall be the basis for this plan.~~

B. Be prepared by a person who demonstrates sufficient experience and education as a wildlife biologist, habitat management consultant or botanist.

C. Contain, but not be limited to:

1. A description of the nature, density and intensity of the proposed development in sufficient detail to allow analysis of such land use change upon the important species and its habitat;

2. An analysis of the effect of the proposed development, activity or land use change upon the important species and its habitat, based upon Washington Department of Fish and Wildlife management guidelines;

3. A mitigation plan by the applicant which shall explain how any adverse impacts to the important species or its habitat created by the development will be minimized or avoided, such as:

a. Establishment of buffer zones;

b. Preservation of important plants and trees;

c. Limitation of access;

d. Seasonal restriction of construction and other activities; and

e. Provisions for periodic review of the plan.

and

4. A map(s) to-scale, showing:

a. The location of the proposed development site, to include a boundary survey;

b. The relationship of the site to surrounding topographic features;

c. The nature and density of the proposed development or land use change;

d. Proposed building locations and arrangements;

e. Existing structures and landscape features including the name and location of all streams, ponds and other bodies of water;

f. The extent and location of the important species habitat;

g. A legend with: Title, scale and north arrows, and date, including revision dates if applicable.

18.32.400 Streams and ~~Important Riparian~~Priority Riparian Areas - Purpose and Intent

In order to preserve the natural functions of streams and "~~important riparian~~priority riparian areas" by controlling siltation, minimizing turbidity, protecting nutrient reserves, maintaining stream flows, providing a source of large woody debris, preserving natural flood storage capacities, protecting fish bearing waters, preserving overhanging vegetation, providing groundwater recharge, and protecting the wildlife habitat associated with streams and intact riparian areas of marine and lake shorelines, all areas within three hundred (300) feet of such waters shall be subject to the standards in OMC 18.32.405 through OMC 18.32.445. (Note: Further information regarding development along marine shorelines, lakes over 20 acres in size, and streams can be found in OMC 14.08 Shoreline Master Program).

18.32.405 Streams and ~~Important Riparian~~Priority Riparian Areas - Applicability and Definition

A. "Streams" means an area where surface waters flow sufficiently to produce a defined channel or bed, i.e., an area which demonstrates clear evidence of the passage of water including but not limited to bedrock channels, gravel beds, sand and silt beds and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses unless they are used to convey streams naturally occurring prior to construction.

B. "~~Important Riparian~~Priority Riparian Areas" means those marine and lake shorelines, as measured from the ordinary high water mark, in the following locations:

1. The eastern shore of Budd Inlet from the southern property line of Priest Point Park northward to the city limits;

2. The western shore of Budd Inlet (in the Port Lagoon) from 4th Avenue NW northward to the extension of Jackson Avenue NW, but not including the BNSF railroad causeway and trestle or their western or eastern shores, West Bay Drive NW, Olympic Way NW, and parcels west of the rights-of-ways of West Bay Drive NW and Olympic Way NW;

3. The western shore of Budd Inlet (north of West Bay Drive) from the extension of 24th Avenue NW northward to the city limits, being approximately six hundred and fifty (650) feet from the end of the fill to the city limits;

4. The eastern shore of Capitol Lake (in the Middle Basin) from the extension of 13th Avenue SE (Olmsted Brothers Axis) southward to the right of way of Interstate 5;

5. The eastern shore of Capitol Lake (in the South Basin) from the right of way of Interstate 5 southward to the city limits; and

6. The western shore of Capitol Lake (in Percival Cove) from the intersection of Lakeridge Drive SW and Deschutes Parkway SW westward to the mouth of Percival Creek (a point due north of the terminus of Evergreen Park Court SW).

18.32.410 Streams and ~~Important Riparian~~Priority Riparian Areas - Typing System

Streams are grouped into categories according to the Washington Department of Natural Resources Water Typing System. The criteria, definitions and methods for determining the water type of a stream are found in WAC 222-16-030. ~~and 031 and the Stream Type Conversion Table below.~~

~~**STREAM TYPE CONVERSION TABLE**~~

~~Stream Typing (per WAC 222-16-031)~~	~~Stream Typing (per WAC 222-16-030)~~
~~Type 1 stream~~	~~Type "S"~~
~~Type 2 stream~~	~~Type "F"~~
~~Type 3 stream~~	~~Type "F"~~
~~Type 4 stream~~	~~Type "Np"~~
~~Type 5 stream~~	~~Type "Ns"~~

A. "Type ~~1~~ S streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-030 ~~and 031~~, as a Type ~~1~~ S Water ~~and those inventoried as "Shorelines of the State" under the Shoreline Master~~

~~Program for the Thurston Region (1990), TCC 19.04, pursuant to RCW Chapter 90.58~~. Type ~~1~~ S streams contain ~~salmonid~~ fish habitat.

B. "Type ~~2~~ F streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-030 ~~and 031~~, as a Type ~~2~~ F Water. Type ~~2~~ F streams contain ~~salmonid~~ fish habitat.

~~C. "Type 3 streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-030 and 031, as a Type 3 Water. Type 3 streams contain salmonid fish habitat.~~

~~D~~C. "Type ~~4~~ Np streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-030 ~~and 031~~, as a Type ~~4~~ Np Water. Type ~~4~~ Np streams do not contain ~~salmonid~~ fish habitat.

~~E~~D. "Type ~~5~~ Ns streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-030 ~~and 031~~, as a Type ~~5~~ Ns Water. These streams are areas of perennial or intermittent seepage, and ponds and drainage ways having short periods of spring or storm runoff. Type ~~5~~ Ns streams do not contain ~~salmonid~~ fish habitat.

~~**18.32.415Streams and Important Riparian Areas - Prohibited Alterations**~~

~~The following alterations or commencement of the following activities shall be prohibited within a stream or "important riparian area" and its associated buffer; except as specified in 18.37.070, 18.32.420 Exempt Uses and Activities, 18.32.425 - Administratively Authorized Uses and Activities, or 18.32.430 Hearing Examiner Authorized Uses and Activities:~~

~~Any human action which changes the existing condition including, but not limited to:~~

~~A. Grading;~~
~~B. Dredging;~~
~~C. Channelizing;~~
~~D. Cutting;~~
~~E. Clearing;~~
~~F. Filling;~~
~~G. Paving;~~
~~H. Building of structures;~~
~~I. Demolition of structures;~~
~~J. Relocating or removing vegetation;~~
~~K. Introduction of invasive plant species;~~
~~L. Application of herbicides, pesticides, or any hazardous or toxic substance;~~
~~M. Discharging pollutants;~~
~~N. Grazing domestic animals;~~
~~O. Modifying for surface water management purposes; or~~
~~P. Any other human activity that changes the existing vegetation, hydrology, wildlife, or wildlife habitat.~~

18.32.420Streams and ~~Important Riparian~~Priority Riparian Areas - Exempt Uses and Activities

In addition to the exemptions in OMC 18.32.111, ~~The~~ the following activities shall be exempt from the review requirements of this Chapter:

A. Activities within an Improved Right-of-Way, except those activities that alter a stream or wetland, such as a bridge or culvert, or result in the transport of sediment or increased stormwater.

B. Forest Practices Class I, II, and III, as defined in and conducted pursuant to the provisions of RCW 76.09.050, as amended.

C. Construction and/or maintenance of a trail in the stream buffer, four (4) feet or less in width, not paved, and involving less than fifty (50) cubic yards of cut or fill.

~~D. Non-commercial Signs Associated with streams or "important riparian~~priority riparian ~~areas," including interpretive signs, Critical Area boundary signs, and survey markers.~~

~~E. Normal Maintenance or Repair.~~

~~F. Passive Recreation Activities.~~

18.32.425Streams and ~~Important Riparian~~Priority Riparian Areas - Administratively Authorized Uses and Activities

After evaluation and consideration of mitigation sequencing requirements in OMC 18.32.135, the Department may authorize the following uses and activities within a stream or "~~important riparian~~priority riparian area" or its buffer following guidelines in OMC 18.32.115 and OMC 18.32.125~~:~~ and provided that appropriate erosion control best management practices are implemented during construction (if applicable) and any areas cleared of vegetation are replanted with native species:

A. ~~Bank Stabilization.~~ Bank stabilization may be ~~an~~ allowed on a case-by-case basis when needed to protect the following:

1. An existing structure where relocation of the structure away from the channel is not feasible within the same parcel, or

2. The pier or foundation of ~~either~~ a railroad, road, or trail.

Bioengineering (the use of plant materials to stabilize eroding stream channels and banks) shall be employed when possible in lieu of designs which contain rip rap or concrete revetments.

B. Beach or ~~S~~shoreline ~~A~~access.

C. Dock/~~F~~float.

D. ~~Fencing.~~The Department shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Department shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence, as described in OMC 18.32.145 at the edge of the critical area or buffer, when fencing will prevent future impacts to the critical area.

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

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

E. ~~Forest Practices.~~ Forest practices may be allowed pursuant to the provisions of OMC 16.60 and RCW 76.09.050, as amended.

F. ~~Minor Enhancement.~~ Minor enhancement projects may be allowed for streams or stream buffers not associated with any other development proposal ~~in order~~ to enhance stream functions. Such enhancement shall be performed under the direct supervision of a fisheries biologist according to a plan approved by the department for the design, implementation, maintenance and monitoring of the project prepared by a civil engineer and a fisheries biologist with experience preparing riparian enhancement reports.

G. ~~Minor Restoration.~~ Minor restoration project may be allowed when the minor stream restoration project~~s~~ for fish habitat enhancement ~~when~~ is conducted by a public agency whose mandate includes such work and when the work is not associated with mitigation of a specific development proposal and does not ~~to~~ exceed twenty-five thousand ($25,000) dollars in cost. Such projects are limited to placement of rock weirs, log controls, spawning gravel and other specific salmonid habitat improvements and shall involve use of hand labor and light equipment only.

~~H. Nondevelopment Educational Activities and Scientific Research.~~

~~I. Noxious Weed Control.~~

~~J~~H. Road/~~S~~street - ~~E~~expansion of ~~E~~existing ~~C~~corridor and ~~N~~new ~~F~~facilities.

1. Crossings of streams shall be avoided to the extent possible;

2. Bridges or open bottom culverts shall be used for crossing of Type~~s 1 - 3~~S and F streams;

3. Crossings using culverts shall use super span or oversize culverts;

4. Crossings shall be constructed and installed between June 15th and September 15th;

5. Crossings shall not occur in salmonid spawning areas;

6. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative exists;

7. Crossings shall not diminish flood carrying capacity; and

8. Crossings shall serve multiple properties/purposes whenever possible.

~~K~~I. ~~Stormwater Facilities.~~ Stormwater facilities may be allowed ~~only~~ in ~~the outer half of~~ Type~~s 4~~ Np and ~~5~~ Ns stream buffers~~, and~~ only when:

1. The facility ~~does not exceed~~is located in the outer twenty-five (25) percent of the buffer on site; ~~and~~

2. The functions of the buffer and the stream are not significantly adversely impacted; and

3. Habitat for anadromous fish will not be adversely impacted.

~~L~~J. Stormwater retrofit facilities may be allowed in Types S, F, Np, and Ns stream buffers.

~~L~~K. Trail construction or maintenance of a trail located immediately adjacent to a stream or "~~important riparian~~priority riparian area," greater than four (4) feet wide, with a paved surface, and/or involving more than fifty (50) cubic yards of cut or fill, but only

when the Department determines that there are no practicable or reasonable alternatives.

1. Public and private trails and trail-related facilities such as picnic tables, benches, interpretive centers and signs, viewing platforms and campsites shall be allowed, but use of impervious surfaces shall be minimized.

2. Trail planning, construction, and maintenance shall adhere to the following additional criteria:

a. Trails and related facilities shall, to the extent feasible, be placed on previously disturbed areas such as: existing or abandoned levees, or road, railroad, or utility corridors; and

b. Trails and trail related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat.

~~M~~L. Utility lines may be allowed within streams or "~~important riparian~~priority riparian area" and their buffers when it is demonstrated that:

1. There are no practicable upland alternatives for the utility corridor;

2. The corridor alignment follows a path of least impact to the functions of the stream and buffer including maintaining and protecting the hydrologic and hydraulic functions of wetlands and streams;

3. The corridor avoids cutting trees greater than six (6) inches in diameter at breast height when possible; and

4. Any access to the corridor for maintenance is provided as much as possible at specific points rather than by parallel roads.

M. Emergency actions as provided in OMC 18.32.165.

18.32.430 Streams and ~~Important Riparian~~Priority Riparian Areas - Hearing Examiner Authorized Uses and Activities

~~After review~~As provided for in OMC 18.32.130, the Hearing Examiner may authorize the following uses and activities within a stream or "~~important riparian~~priority riparian area" or its buffer:

A. ~~Bank Stabilization. The Department may allow bank~~ Bank stabilization when the design is consistent with the ~~Integrated Streambank Protection Guidelines (2002), published by the Washington State Aquatic Habitat Guideline Program~~ Washington Department of Fish and Integrated Streambank Protection Guidelines (Cramer et al., 2002), as amended or revised.

B. ~~Stormwater Facilities. The Department may allow stormwater~~ Stormwater facilities in the outer half of Types ~~1, 2~~S and ~~3~~ F stream buffers subject to the performance standards in OMC 18.32.425(~~K~~I), and in the buffer of Types ~~4~~ Np and

~~5.~~ Ns streams provided that the facility will have a net positive benefit on the functions of the stream and its buffer~~.~~ and habitat for anadromous fish will not be adversely impacted.

C. Stream Relocation.

1. Streams which support salmonids shall not be relocated except as necessitated by public road projects which have been identified as a "public project of significant importance."

2. Streams may be relocated under a mitigation plan for the purpose of enhancement of in-stream resources and/or appropriate floodplain protection. Such relocations shall include:

a. The natural channel dimensions replicated, including substantially identical depth, width, length and gradient at the original location and the original horizontal alignment (meander lengths);

b. Bottom restored with identical or similar materials;

c. Bank and buffer configuration to as close as feasible to the original and/or natural conditions;

d. Channel, bank and buffer areas replanted with native vegetation which replicates the original in species, size and densities; and

e. Recreation of the original and/or natural habitat value.

3. An applicant must demonstrate, based on information provided by a civil engineer and a qualified biologist, that:

a. The equivalent base flood storage volume and function will be maintained;

b. There will be no adverse impact to groundwater;

c. There will be no increase in velocity;

d. There will be no interbasin transfer of water:

e. Performance standards as set out in the mitigation plan will be met;

f. The relocation conforms to other applicable laws; and

g. All work will be carried out under the direct supervision of a qualified biologist.

18.32.435 Streams and ~~Important Riparian~~Priority Riparian Areas - Buffers

A. Buffers shall be required as set forth for each stream type or “priority riparian area.” The required buffers shall be delineated, both on a site plan or plat and on the property, prior to approval of any regulated activity.

B. The required buffer shall be extended to include any adjacent regulated wetland(s), landslide hazard areas and/or erosion hazard areas and required buffers.

C. Stream buffers shall be based on the water type classification as established by the Department of Natural Resources Stream Typing Classification System and required by OMC 18.32.410. The table below includes detail differentiating stream types based on fish habitat presence, stream widths, and mass wasting potential.

Stream Type and Description	**Standard Buffer Width Range**
Type S – Shorelines of the State	200 feet – 250 feet
Type F streams greater than 5 feet wide (bankfull width) that provide habitat for fish	150 feet – 250 feet
Type F streams less than 5 feet wide (bankfull width) that provide habitat for fish	100 feet – 200 feet
Type Np and Ns streams (no fish habitat) draining to Type S or F streams or directly to Puget Sound with high mass wasting potential*	150 feet – 225 feet
Type Np and Ns streams (no fish habitat) draining to Type S or F streams or directly to Puget Sound	75 feet – 150 feet

***** Mass wasting is a general term for a variety of processes by which large masses of rock or earth material are moved downslope by gravity, either slowly or quickly. Mass wasting can take the form of landslides, earth/debris flows and slumps, and rock falls/earth topples.

1. Stream buffers shall be measured on a horizontal plane, outward from the ordinary high water mark (OHWM) on each side of the stream. (See Figure X)

2. For streams that occur within ravines (which are not designated as a landslide hazard area) and where the standard buffer extends onto a slope of 30% or greater that is at least 10 feet in height, the buffer shall extend a minimum of 25 feet beyond the top of the slope to protect the stream channel from sediment loading from mass wasting events (e.g., landslides, earth/debris flows and slumps, and rock falls/earth topples) and reduce the risk to structures and human safety.

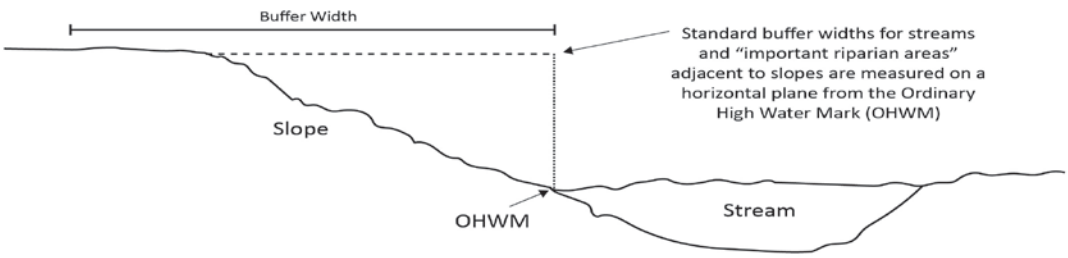


FIGURE X

~~A. For streams maintain the existing vegetation along both sides of a stream channel to whichever distance is greater:~~

~~1. In ravines greater than ten (10) feet in depth, the existing vegetation within the ravine and within a strip fifty (50) feet from the top of the slope (refer to Figure 3).~~

~~2. Where there is no ravine or where a ravine is less than ten (10) feet in depth, the existing vegetation on both sides of the stream for the distance set forth below for the applicable stream type, using the stream rating system in OMC 18.32.410 (refer to Figure 2):~~

~~a. Type 1 and 2 streams: 250 feet,~~

~~b. Type 3 streams: 200 feet,~~

~~c. Type 4 and 5 streams: 150 feet.~~

~~B~~D. Maintain a buffer of existing vegetation for "~~important~~ priority riparian areas~~:~~" as defined in OMC 18.32.405.

~~1. 250 feet along the eastern shore of Budd Inlet from the southern property line of Priest Point Park northward to the city limits;~~

~~2. 200 feet along the western shore of Budd Inlet (in the Port Lagoon) from 4th Avenue NW northward to the extension of Jackson Avenue NW, but not including the BNSF railroad causeway and trestle or their western or eastern shores, West Bay Drive NW, Olympic Way NW, and parcels west of the rights-of-ways of West Bay Drive NW and Olympic Way NW;~~

~~3. 150 feet along the western shore of Budd Inlet (north of West Bay Drive) from the extension of 24th Avenue NW northward to the city limits, being approximately six hundred and fifty (650) feet from the end of the fill to the city limits;~~

~~4. 250 feet along the eastern shore of Capitol Lake (in the Middle Basin) from the extension of 13th Avenue SE (Olmsted Brothers Axis) southward to the right of way of Interstate 5;~~

~~5. 250 feet along the eastern shore of Capitol Lake (in the South Basin) from the right of way of Interstate 5 southward to the city limits; and~~

~~6. 250 feet along the western shore of Capitol Lake (in Percival Cove) from the intersection of Lakeridge Drive SW and Deschutes Parkway SW westward to the mouth of Percival Creek (a point due north of the terminus of Evergreen Park Court SW).~~

~~C. All stream and "important riparian area" buffers shall be measured from the ordinary high water mark.~~

~~D~~E. The stream or "~~important riparian~~priority riparian area" buffer widths contained in OMC 18.32.435 ~~A~~ C ~~and B~~ presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the stream functions and values at the time of the proposed activity. If the vegetation and other buffer elements are inadequate, then the buffer shall be planted ~~to a density of four hundred (400) tree units per acre pursuant to OMC 16.60~~with native trees to a density common in the specific buffer area and ~~with~~ an understory of native plants commonly found in riparian areas of Thurston County.

~~E. The Department may allow modification of the required stream buffer width by averaging buffer widths. Averaging of buffer widths, which can include the shifting the buffer from one side of the stream to the opposite bank, may be allowed in accordance with a Biological Assessment described in OMC 18.32.445 only if:~~

~~1. It will not reduce stream functions or values,~~

~~2. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;~~

~~3. The buffer width is not reduced by more than twenty-five percent (25%) of the required width; and~~

~~4. The stream buffer has been placed in a critical areas tract or a conservation easement.~~

F. The Department may reduce the required stream or "~~important riparian~~priority riparian area" buffer widths up to twenty five percent (25%) on a case-by-case basis in accordance with a Biological Assessment described in OMC 18.32.445 when it can be demonstrated that:

1. The existing buffer area is not a high functioning buffer but instead is currently providing reduced functions due to existing land uses or previous alterations ~~well-vegetated with native species, as described in OMC 18.32.435 D~~;

2. Protection of the stream or "~~important riparian~~priority riparian area" buffer using a fence and sign have been provided, as described in OMC 18.32.145;

3. Topographic conditions of the site and the buffer are protective of the stream;

4. The intensity and type of the land uses adjacent to the buffer will minimize potential adverse impacts upon the stream and wildlife habitat; [e.g., publicly owned parks, designated open space areas in plats and binding site plans, or lands with a recorded conservation easement];

5. The site design and building layout will minimize potential adverse impacts upon the stream and wildlife habitat; ~~and~~

6. The smaller buffer will be adequate to protect the functions of the stream based on the best available science~~.~~; and

7. Other types of mitigation measures as provided in “Land Use Planning for Salmon, Steelhead and Trout: A land planner’s guide to salmonid habitat protection and recovery,” Washington Department of Fish and Wildlife, 2009, have been considered.

~~G. The Department may vary from the provisions of OMC 18.32.435 B up to fifty percent (50%) for Type 5 streams which have no fish usage and which discharge directly into Puget Sound when:~~

~~1. A substantial buffer of native vegetation exists, or~~

~~2. The buffer has been replanted to a density of four hundred (400) tree units per acre pursuant to OMC 16.60 including an understory of native plants commonly found in riparian areas of Thurston County, and~~

~~3. Conservation measures have been taken to ensure the long-term protection of the stream buffer, such as those as described in OMC 18.32.435(F)(4).~~

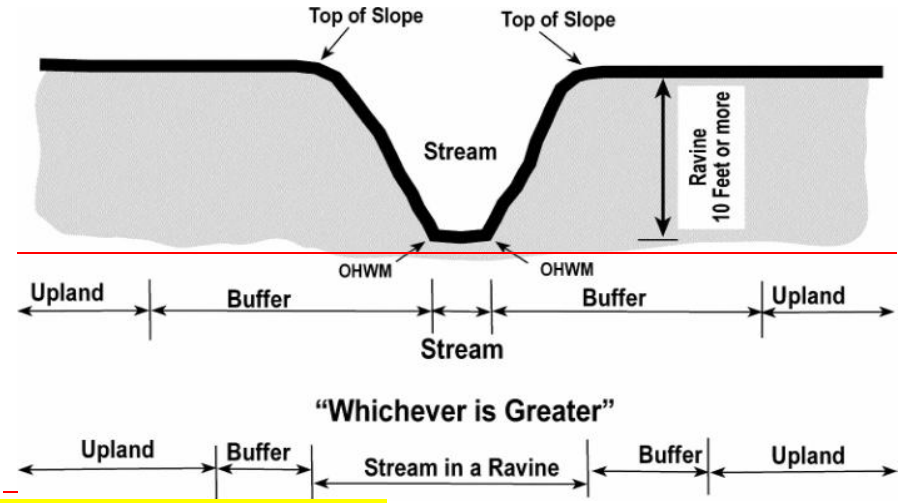
~~H. The Hearing Examiner may allow reductions greater than those described in OMC 18.32.435(F) & (G) to the required stream or "important riparian area" buffer width in unique conditions and on a case-by-case basis when it can be demonstrated that:~~

~~1. The provisions of the required stream or "important riparian area" have been evaluated by a Biological Assessment described in OMC 18.32.445, and~~

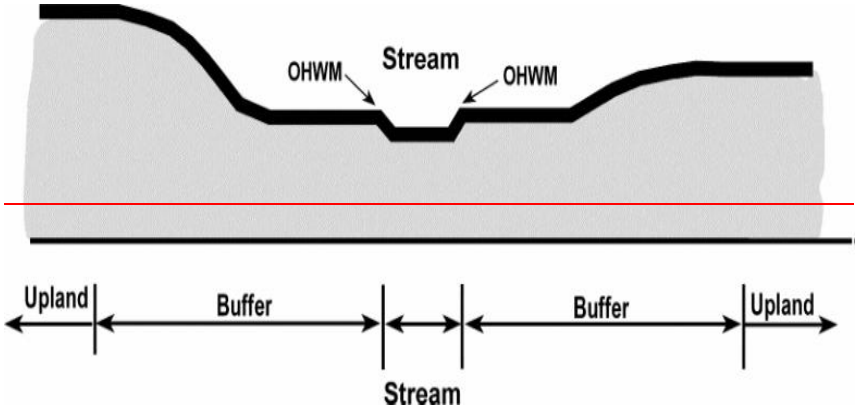
~~2. Based upon the Biological Assessment and the best available science the proposed stream buffer width will be adequate to protect the functions of the stream or "important riparian area."~~

~~I~~G. If a stream segment is removed from a culvert it will not be required to meet the stream buffer requirements of OMC 18.32.435. It shall comply with the purpose and intent of this title to the degree possible, as determined by the Department.

~~J~~H. The required stream buffer widths shall be increased when the Department determines that the recommended width is insufficient to prevent habitat degradation, ~~and~~ to protect the structure and functions of the stream and/or to protect habitat corridors between streams and other habitats.



Note: both these figures will be deleted. ~~**FIGURE 2**~~



~~FIGURE 3~~

18.32.440 Streams and ~~Important Riparian~~Priority Riparian Areas - Special Reports

A. Every application for development within a stream~~,~~ or "~~important riparian~~priority riparian area" or ~~their~~ its buffer shall include a drainage and erosion control plan and a grading plan.

B. For applications which propose a reduction of the buffer pursuant to OMC 18.32.435(F) ~~and (G)~~, or for uses and activities which require Hearing Examiner authorization in OMC 18.32.430, a Biological Assessment shall be submitted.

18.32.445 Streams and ~~Important Riparian~~Priority Riparian Areas - Biological Assessment

A. Depending upon the species of salmon, the preparation of a Biological Assessment shall follow the provisions of:

1. National Marine Fisheries Service, 1996. Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service, Environmental and Technical Services Division, Habitat Conservation Division, Portland, Oregon, or

2. U.S. Fish and Wildlife Service, 1998. A Framework to Assist in Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Bull Trout Subpopulation Watershed Scale (draft). Prepared by United States Fish and Wildlife Service (adapted from the National Marine Fisheries Service).

B. The Biological Assessment shall be prepared by a ~~person who has sufficient experience and education in fish biology, as determined by the Department~~qualified professional as defined in OMC 18.02.

18.32.500 Wetlands ~~and Small Lakes~~ - Purpose and Intent

In order to protect the natural function of wetlands ~~and "small lakes"~~ for floodwater storage, floodwater conveyance, sediment control, pollution control, surface water supply, aquifer recharge, wildlife habitat, and recreation, those lands with wetlands ~~and "small lakes"~~ or which lie within three hundred (300) feet of wetlands ~~and "small~~

~~lakes"~~ shall be subject to the standards in OMC 18.32.100(L) and OMC 18.32.505 through OMC 18.32.595.

18.32.505Wetlands ~~and Small Lakes~~ - Definition

~~A.~~ "Wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

~~B. "Small Lakes" means naturally existing bodies of standing water less than twenty acres in size, which exist on a year-round basis in a depression of land or expanded part of a stream and not defined as "Shorelines of the State" by RCW 90.58 (Shoreline Management Act). This term does not apply to constructed ponds.~~

18.32.510Wetlands ~~and Small Lakes~~ - Rating System

A. The Washington State Wetland Rating System for Western Washington (~~2004~~2014 update) as amended or revised, shall be used to determine if the wetland is a Category I, II, III or IV wetland. These documents contain the criteria, definitions and methods for determining if the criteria below are met.

1. Category I. Category I wetlands are: (1) relatively undisturbed estuarine wetlands larger than 1 acre; (2) wetlands with 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.

2. 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).

3. Category III. Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 16 and 19 points); (2) can often be adequately replaced with a well-planned mitigation project; and (3) interdunal wetlands between 0.1 and 1 acre. 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 wetland s.

4. 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.

~~1. Category I wetlands are those that 1) represent a rare wetland type; 2) are highly sensitive to disturbance; 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; 4) provide a very high level of functions; or are designated as high value wetlands of local significance.~~

~~2. Category II wetlands are those that 1) are sensitive to disturbance, 2) are difficult to replicate, 3) wetlands with a moderately high level of functions or are designated as wetlands of local significance. These 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 high level of protection.~~

~~3. Category III wetlands are wetlands with a moderate level of functions. These wetlands generally have been altered in some ways, or are smaller, less diverse and/or more isolated in the landscape than Category II wetlands. For the purpose of this chapter, all "small lakes" shall be considered to be Category III wetlands.~~

~~4. Category IV wetlands have the lowest levels of functions, and often have been heavily altered. These are wetlands where it may be possible to replace, and in some cases be able to improve. These wetlands do provide some important functions, and should to some degree be protected.~~

B. Wetland rating categories shall be applied as the wetland exists on the date of application. However, wetland ratings shall not recognize alterations resulting from illegal activities.

18.32.515Wetlands ~~and Small Lakes~~ - Small Wetlands

A. Wetlands ~~and "small lakes"~~ less than one thousand (1,000) square feet shall be exempt from the requirements of OMC 18.32.135.A; wetland buffers in OMC 18.32.535, compensation projects in OMC 18.32.545 and replacement ratios in OMC 18.32.550 provided that the wetland or pond:

1. Is an isolated Category III or IV wetland;

~~1~~2. Is not associated with a riparian corridor~~,~~;

~~2~~3. Is not part of a wetland mosaic~~,~~; and

~~3~~4. Does not contain habitat identified as essential for local populations of priority species identified by Washington Department of Fish and Wildlife.

B. Wetlands ~~and "small lakes"~~ between one thousand (1,000) and four thousand (4,000) square feet shall be exempt from the requirements of OMC 18.32.135.A, provided that the wetland ~~or small lake~~:

1. Is rated as a Category III or IV wetland,

2. Is not associated with a riparian corridor,

3. Is not part of a wetland mosaic,

4. Does not score ~~20~~ 5 points or greater for habitat in the Washington State Wetland Rating System for Western Washington (~~2004~~2014),

5. Does not contain habitat identified as essential for local populations of priority species identified by Washington Department of Fish and Wildlife, and

6. A wetland mitigation report is provided as required by OMC 18.32.590.

~~**18.32.518 Wetlands and Small Lakes - Prohibited Alterations**~~

~~The following alterations or commencement of the following activities are prohibited within a wetland and its associated buffer, except as specified in OMC 18.37.070, 18.32.520 - Exempt Uses and Activities, OMC 18.32.525 - Administratively Authorized Uses and Activities, or OMC 18.32.530 - Hearing Examiner Authorized Uses and Activities:~~

~~Any human action which changes the existing condition including but not limited to:~~

~~A. Grading;~~

~~B. Dredging;~~

~~C. Channelizing;~~

~~D. Cutting;~~

~~E. Clearing;~~

~~F. Filling;~~

~~G. Paving;~~

~~H. Building of structures;~~

~~I. Demolition of structures;~~

~~J. Relocating or removing vegetation;~~

~~K. Introduction of invasive plant species;~~

~~L. Application of herbicides, pesticides, or any hazardous or toxic substance;~~

~~M. Discharging pollutants;~~

~~N. Grazing domestic animals;~~

~~O. Modifying for surface water management purposes; or~~

~~P. Any other human activity that changes the existing vegetation, hydrology, wildlife, or wildlife habitat.~~

18.32.520Wetlands ~~and Small Lakes~~ - Exempt Uses and Activities

In addition to the exemptions in OMC 18.32.111, ~~The~~ the following activities shall be exempt from the review requirements of this Chapter:

A. Activities within an ~~i~~Improved ~~R~~right-of-~~W~~way, except those activities that alter a stream or wetland, such as a bridge or culvert, or result in the transport of sediment or increased stormwater.

B. Forest Practices Class I, II, and III, as defined in and conducted pursuant to the provisions of RCW 76.09.050, as amended.

C. Construction and/or maintenance of a trail in the wetland buffer, four (4) feet or less in width, not paved, and involving less than fifty (50) cubic yards of cut or fill.

~~D. Non-commercial Signs Associated with wetlands, including interpretive signs, Critical Area boundary signs, and survey markers.~~
~~E. Normal Maintenance or Repair.~~
~~F. Passive Recreation Activities.~~

18.32.525Wetlands ~~and Small Lakes~~ - Administratively Authorized Uses and Activities

The following uses and activities may be authorized within a wetland or its buffer after an evaluation by the Department following the provisions in OMC 18.32.115 and OMC 18.32.125.

A. Beach or ~~S~~shoreline ~~A~~access.

B. Dock/~~F~~float in Category III and IV ~~W~~wetlands only.

C. Compensation ~~M~~mitigation ~~S~~site in Category III and IV Wetlands only, and the buffer only of Category II ~~W~~wetlands.

D. ~~Fencing.~~If fencing is necessary to protect the functions and values and/or to prevent future impacts of the critical area, the Department shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence, as described in OMC 18.32.145, at the edge of the critical area or buffer.

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

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

E. ~~Forest Practices.~~ Forest practices may be allowed pursuant to the provisions of OMC 16.60 and RCW 76.09.050, as amended, in Category III and IV ~~W~~wetlands.

F. ~~Minor Enhancement.~~ Minor enhancement may be allowed of wetlands or wetland buffers not associated with any other development proposal in order to enhance wetland functions, as determined by the Department and any state agency or tribal entity with jurisdiction. Such enhancement shall be performed under a plan for the design, implementation, maintenance and monitoring of the project prepared by a ~~civil engineer and a fisheries biologist with experience preparing riparian enhancement reports, under the direct supervision of a wetland scientist~~qualified professional.

G. ~~Minor Restoration.~~ Minor ~~R~~restoration may be allowed but shall be limited to Category II, III and IV ~~W~~wetlands and the buffer of Category I ~~W~~wetlands.

~~H. Noxious Weed Control~~

~~I. Nondevelopment Educational Activities and Scientific Research~~

~~J~~H. Road/~~S~~street-~~E~~expansion of ~~E~~existing ~~C~~corridor and ~~N~~new ~~F~~facilities in Category III and IV ~~W~~wetlands only as follows:

1. Crossings of wetlands or other critical areas shall be avoided to the extent to the extent possible

2. Crossing of wetlands shall follow all applicable local, state and federal laws and the following criteria:

3. Bridge-type structures are required for new crossings of wetlands;

4. Crossings using culverts shall use super span or oversize culverts.

5. Crossings shall be constructed and installed during periods of time when there will be the least impact on the adjacent fish and wildlife habitat;

6. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;

7. Crossings shall not diminish flood carrying capacity;

8. Crossings shall provide for maintenance of culverts, bridges and utilities; and

9. Crossings shall serve multiple properties whenever possible.

~~K~~I. Stormwater Facilities may be allowed ~~only in the outer half of~~in Category III and IV wetland buffers ~~only, and~~ only when:

1. The facility ~~does not exceed~~ is located in the outer twenty-five (25) percent of the buffer on site; and

2. The location of such facilities will not degrade or have a significant, adverse impact on the functions or values of the wetland or buffer.

J. Stormwater retrofit facilities may be allowed in Category I, II, III and IV wetland buffers provided the facility does not negatively impact the wetland's functions or values.

~~L~~K. Trail construction or maintenance of a trail greater than four (4) feet wide, with a paved surface, and/or involving more than fifty (50) cubic yards of cut or fill located in a Category II, III or IV wetland, but only when the department has determined that there are no practicable or reasonable alternatives:

1. Public and private trails and trail-related facilities, (such as picnic tables, benches, interpretive centers and signs and, viewing platforms and campsites) shall be allowed, but use of impervious surfaces shall be minimized.

2. Trail planning, construction and maintenance shall adhere to the following additional criteria:

a. Trails and related facilities shall, to the extent feasible, be placed on previously disturbed areas such as: existing or abandoned levees, or road, railroad, or utility corridors; and

b. Trails and trail related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat.

~~M~~L. Utility lines may be allowed within Category II, III and IV wetlands and their buffers when it is demonstrated that:

1. There are no practicable upland alternatives for the utility corridor;

2. The corridor alignment follows a path of least impact to the functions of the stream and buffer critical areas including maintaining and protecting the hydrologic and hydraulic functions of wetlands and streams;

3. The utility provider avoids cutting trees in the corridor greater than six (6) inches in diameter at breast height when possible; and

4. Any access to the corridor for maintenance is provided as much as possible at specific points rather than by parallel roads.

~~N~~M. Wildlife Blind.

N. Emergency actions as provided in OMC 18.32.165.

18.32.530Wetlands ~~and Small Lakes~~ - Hearing Examiner Authorized Uses and Activities

The following uses and activities may be authorized within a wetland or its buffer after a review by the Hearing Examiner as provided in OMC 18.32.130:~~.~~

A. Communication ~~T~~towers in the buffers of Category III and IV ~~W~~wetlands only.

B. Compensation ~~M~~mitigation ~~S~~site in Category II ~~W~~wetlands only.

C. Dock/~~F~~float in Category II ~~W~~wetlands only.

D. Road/~~S~~street only:

1. In Category II wetlands subject to the performance standards ~~for Road/Street - Expansion of Existing Corridor and New Facilities~~ in OMC 18.32.525(~~J~~H).

2. In Category I wetlands subject to the performance standards ~~for Road/Street - Expansion of Existing Corridor and New Facilities~~ in OMC 18.32.525(~~J~~H), and being processed as a "public project of significant importance."

E. Stormwater Facilities in Category III or IV wetlands only, and in the outer half only of a Category II standard wetland buffer, provided that if the placement of such a facility in a wetland results in elimination of an area's wetland status, then mitigation will be required to compensate for the loss of that wetland as provided in OMC 18.32.550.

F. Trail construction or maintenance of a trail greater than four (4) feet wide, with a paved surface, and/or involving more than fifty (50) cubic yards of cut or fill located in a Category I wetland, but only when the Hearing Examiner has determined that there are no practicable or reasonable alternatives. Trails shall be subject to the performance standards for ~~Trails~~ trails in OMC 18.32.525(~~L~~K).

G. Utility Facility only in Category I, II, III and IV wetlands.

18.32.535Wetlands ~~and Small Lakes~~ - Wetland Buffers

A. Wetland~~s~~ buffer areas shall be maintained between all regulated activities and wetlands to retain the wetland's~~'~~ natural functions and values. ~~The required width of the wetland buffer shall be determined as provided in the tables below.~~ Wetland buffers are based upon the rating of the wetland pursuant to OMC 18.32.~~585.~~575

B. The required width of the wetland buffer shall be determined as provided in the table below.

Table X: Wetland Buffer Widths

Wetland Characteristics	Wetland Buffer Width
Natural Heritage Wetlands	Not less than 250 feet
Bogs	Not less than 250 feet

Wetland Characteristics	Wetland Buffer Width
Estuarine - Category I	250 feet
Estuarine - Category II	150 feet
~~Habitat score: 31 pts and more~~	~~300 feet~~
~~Habitat score: 30 pts~~	~~280 feet~~
~~Habitat score: 29 pts~~	~~260 feet~~
~~Habitat score: 28 pts~~	~~240 feet~~
~~Habitat score: 27 pts~~	~~220 feet~~
~~Habitat score: 26 pts~~	~~200 feet~~
~~Habitat score: 25 pts~~	~~180 feet~~
~~Habitat score: 24 pts~~	~~160 feet~~
~~Habitat score: 23 pts~~	~~140 feet~~
~~Habitat score: 22 pts~~	~~120 feet~~
~~Habitat score: 21 pts~~	~~100 feet~~
~~Habitat score: 20 pts~~	~~100 feet~~
~~Habitat score: 19 pts~~	~~100 feet~~
Habitat score: 3 pts	100 feet
Habitat score: 4 pts	100 feet
Habitat score: 5 pts	140 feet
Habitat score: 6 pts	180 feet
Habitat score: 7 pts	220 feet
Habitat score: 8 pts	260 feet
Habitat score: 9 pts	300 feet
Water Quality Improvement Score: ~~24~~ 8 - ~~32~~ 9 pts, and Habitat score: ~~19~~ 4 pts or less	100 feet
Category I or II Wetland - Not meeting any of the above criteria	100 feet
Category III Wetland - Not meeting any of the above criteria	80 feet
Category IV Wetland - Score for all three wetland functions is less than ~~30~~ 16 pts	50 feet

C. All wetland buffers shall be measured from the wetland boundary.

D. The wetland buffer widths contained in OMC 18.32.535~~(B)~~Table X presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation and other buffer elements are inadequate, then the buffer shall be planted ~~to a density of four hundred (400) tree units per acre~~with native trees to a density common

in the specific buffer area and ~~pursuant to OMC 16.60 including~~ an understory of native plants commonly found in riparian areas of Thurston County.

E. 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.

F. The Department may allow modification of the required wetland buffer width by either allowing a reduction pursuant to OMC 18.32.535(G) or by allowing averaging of buffer widths when all of the following conditions are met:

1. 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,

2. 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,

3. The total area of the buffer after averaging is equal to the area required without averaging, and

4. The buffer at its narrowest point is never less than seventy five percent (75%) of the required width.

G. If buffer averaging has not been used, ~~T~~the Department may reduce the required wetland buffer widths by twenty five percent (25%) under the following conditions:

1. For wetlands that score ~~twenty~~ five (~~20~~5) points or more for the habitat functions, if both of the following criteria are met:

a. A relatively undisturbed, vegetated corridor at least one hundred (100) feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the priority habitat by legal protection such as a conservation easement.

b. Measures to minimize the impacts of different land uses on wetlands, such as those described on Table 8c-~~11~~8, Appendix 8-C, of Wetlands in Washington State - Volume 2: Guidance for Protecting and Managing Wetlands (2005) Ecology publication #05-06-008, as amended or revised, are applied. Examples of these measures include directing lighting away from wetland, locating noise generating activities away from the wetland, and densely planting the buffer to act as barrier to pets and human disturbance.

2. For wetlands that score ~~nineteen~~ four (~~19~~4) points or less for habitat function, apply the provisions of OMC 18.32.535(G)(1)(b).

~~H. The Hearing Examiner may allow:~~

~~1. Reductions to the required wetland buffer width greater than those described in OMC 18.32.535 G on a case-by-case basis when it can be demonstrated that:~~

~~a. The provisions of OMC 18.32.535(G) have been evaluated by a Wetland Mitigation Report described in OMC 18.32.590, and~~

~~b. The proposed wetland buffer width will protect the wetlands' functions and values based upon the Wetland Mitigation Report and the best available science.~~

~~2. Buffer averaging up to fifty percent (50%) of the required width, except for a Category IV wetland, when it can be demonstrated that:~~

~~a. It will not reduce wetland functions or values according to a Wetland Mitigation Report described in OMC 18.32.590;~~

~~b. Measures to minimize the impacts of different land uses on wetlands, such as those described on Table 8c-11, Appendix 8-C, of Wetlands in Washington State - Volume 2: Guidance for Protecting and Managing Wetlands (2005) Ecology publication #05-06-008, as amended or revised, are applied;~~

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

~~d. The wetland buffer has been placed in a critical areas tract or a conservation easement.~~

H. The Department or Hearing Examiner, as appropriate, shall require increased buffer widths in accordance with the recommendations of an experienced, qualified wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

1. A larger buffer is needed to protect other critical areas;

2. The buffer or adjacent uplands has a slope greater than fifteen percent (15%) or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland; or

3. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to project the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not

less than three (3) feet on center for shrubs and eight (8) feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of non-native plants when:

a. non-native or invasive plant species provide the dominant cover,
b. vegetation is lacking due to disturbance and wetland resources could be adversely affected, or
c. enhancement plantings in the buffer could significantly improve buffer functions.

18.32.540 Wetlands - 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:

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

1. 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.

2. 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.

B. 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. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the Department 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.

C. 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, flood water 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:

1. How the proposed enhancement will increase the wetland's/buffer's functions;

2. How this increase in function will adequately compensate for the impacts; and

3. How all other existing wetland functions at the mitigation site will be protected.

18.32.~~540~~545 Wetlands ~~and Small Lakes~~ - ~~Compensating for Loss or Affected Functions~~Wetland Mitigation Requirements

A. Property development that may result in the loss of wetlands ~~or "small lake"~~ or adversely affect wetland values and/or functions shall provide compensatory mitigation in accordance with the order of ~~priority~~ preference set forth in OMC 18.32.~~135~~540.

B. Compensatory mitigation shall provide functional equivalency or improvement of the wetland functions lost, except when either:

1. The lost wetland provides minimal functions as determined by a site specific function assessment, 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, such as replacement of historically diminished wetland types.

C. Compensatory mitigation actions shall be conducted on the site of the alteration except when all of the following apply:

1. There are no reasonable on-site or in sub-drainage basin opportunities (e.g., on-site options would require elimination of high-functioning upland habitat), or on-site and in sub-drainage basin opportunities 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 hydro geomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity); and

2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland.

D. Off-site compensatory mitigation shall be provided in the same drainage sub-basin unless:

1. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the department and strongly justify location of mitigation at another site in a different drainage sub-basin; or

2. Credits from a state-certified wetland mitigation bank are used as compensation and the use of credits is consistent with the terms of the bank's certification.

E. The design for the compensatory mitigation project shall 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 is 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). It should not provide exaggerated morphology or require a berm or other engineered structures to hold back water.

~~**18.32.545 Wetlands and Small Lakes - Compensation Projects**~~

~~A~~F. Any wetland compensation project prepared pursuant to this Chapter and approved by the Department shall become part of the approved development project.

~~B~~G. Critical area tracts or a conservation easement for any mitigation area created, restored or enhanced as a part of a wetland mitigation proposal will be required if necessary to provide a reasonable assurance that the mitigation or adverse impacts will not be lost after the completion of the project, or to provide a reasonable period of time for establishment of a functioning system. The ~~regulatory agency~~Department may accept a comparable use restriction such as, but not limited to, state or federal ownership.

~~C~~H. The person proposing a wetland compensation project shall demonstrate to the Department that sufficient expertise, supervisory capability and financial resources exist to carry out the proposed compensation project. The needed expertise, supervisory capability and financial resources will be commensurate with the proposed compensation. At minimum, the project applicant must provide a description of the personnel who will be involved in carrying out and supervising the project including academic degrees, areas of experience and work experience to date.

~~D. Compensation areas shall be determined according to function, acreage, type, location, time factors, ability to be self-sustaining and projected success. Wetland functions and values shall be determined by use of the Washington State Methods for Assessing Wetland Functions (1999), Ecology Publication #99-115 and 99-116, as amended. Multiple compensation projects may be proposed for one project in order to best achieve the goal of no net loss.~~

~~E~~I. A development project by a public entity, or a private development project with a wetland less than four thousand (4,000) square feet, may pay a fee to the Department to have the City construct a compensation project. Such a proposal shall be on a case by case basis, must have funds committed towards a project on property owned by the city, a public entity, or a nonprofit agency acceptable to the City and meet~~s~~ all other provisions of this Chapter.

~~F~~J. When loss or disturbance of wetland results from a violation of this Chapter or of any permit, order or approved mitigation plan ~~issued pursuant thereto~~, penalties provided in OMC 18.73 may be imposed.

18.32.550 Wetlands ~~and Small Lakes~~ - Replacement Ratios

A. The wetland replacement ratios shall be those described on Table 8c-11, Appendix 8-C, of Wetlands in Washington State - Volume2: Guidance for Protecting and Managing Wetlands (2005) Ecology publication #05-06-008, as amended or revised.

B. When the acreage required for compensatory mitigation is divided by the acreage of wetland adversely affected, the result is a number known variously as a replacement, compensation, or mitigation ratio. Compensatory mitigation ratios are used to help ensure that compensatory mitigation actions are adequate to offset unavoidable wetland impacts by requiring a greater amount of mitigation area than the area of impact.

18.32.555 Wetlands ~~and Small Lakes~~ - Increase and Reduction to Replacement Ratios

A. The Department may increase the wetland replacement ratios contained in OMC 18.32.550 under any of the following circumstances:

1. Uncertainty as to the probable success of the proposed restoration or creation;

2. Significant period of time between destruction and replication of wetland functions;

3. Projected losses in functional value; or

4. The wetland impact was unauthorized.

B. The Department may decrease the wetland replacement ratios for Category II, III, and IV wetlands contained in OMC 18.32.550 to not less than a 1 to 1 acreage replacement ratio when a qualified wetlands specialist can document that:

1. The proposed mitigation actions have a very high likelihood of success, and either

2. The proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted, or

3. The proposed mitigation actions which are to be conducted in advance of the wetland impact have been shown to be successful.

~~**18.32.560Wetlands and Small Lakes - Type and Location of Compensation Mitigation**~~

~~A. Compensatory mitigation actions shall be conducted on the site of the alteration except when all of the following apply:~~

~~1. There are no reasonable on-site or in drainage of sub-basin opportunities (e.g., on-site options would require elimination of high-functioning upland habitat), or on-site and in sub-drainage basin opportunities 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 hydro-geomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity); and~~

~~2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland.~~

~~B. Off-site compensatory mitigation shall be provided in the same drainage sub-basin unless:~~

~~1. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the department and strongly justify location of mitigation at another site in a different drainage sub-basin; or~~

~~2. Credits from a state-certified wetland mitigation bank are used as compensation and the use of credits is consistent with the terms of the bank's certification.~~

~~C. The design for the compensatory mitigation project shall 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 is 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). It should not provide exaggerated morphology or require a berm or other engineered structures to hold back water.~~

18.32.565Wetlands ~~and Small Lakes~~ - Mitigation Timing

A. Where feasible, compensatory projects shall be completed prior to activities that will permanently disturb wetlands, and immediately after activities that will temporarily disturb wetlands.

B. In all cases compensatory projects shall be completed within one year after use or occupancy of the activity or development which was conditioned upon such compensation.

C. Construction of compensation projects shall be timed to reduce impacts to existing flora, fauna and fisheries.

D. The Department may authorize a one-time delay not to exceed twelve (12) months in the construction or installation of the compensatory mitigation. A written request shall be prepared by a qualified wetland professional and include the rationale

for the delay. In granting a delay the Department must determine that it will not be injurious to the health, safety, and general welfare of the public.

18.32.570Wetlands ~~and Small Lakes~~ - ~~Wetland~~ Mitigation Banks and In-lieu Fee

A. The city may approve mitigation banking or in-lieu fee mitigation as a form of compensatory mitigation for wetland and habitat conservation area impacts when the provisions of this chapter require mitigation and the use of a mitigation bank/in-lieu fee program will provide equivalent or greater replacement of critical area functions and values when compared to conventional permittee-responsible mitigation.

B. Mitigation banks and in-lieu fee programs shall only be used when it can be demonstrated that they provide significant ecological benefits including long-term conservation of critical areas, important species, and habitats or habitat linkages, and when they are documented to provide a viable alternative to the piecemeal mitigation for individual project impacts to achieve ecosystem-based conservation goals.

C. Mitigation banks and in-lieu fee programs shall not be used unless they are certified in accordance with applicable federal and state mitigation rules and expressly authorized through city legislative action.

~~A. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:~~
~~1. The bank is certified under Chapter 173-700 WAC;~~
~~2. The Department determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and~~
~~3. The proposed use of credits is consistent with the terms and conditions of the bank's certification.~~
~~B. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.~~
~~C. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, the service area of the bank may include portions of more than one adjacent drainage basin for specific wetland functions.~~

18.32.575Wetlands ~~and Small Lakes~~ - Special Reports

Every application for development ~~that~~ proposed to be located within or adjacent to a regulated wetland or its buffer shall include the following special reports:

A. Wetland boundary delineation,

B. Wetland rating report (if the wetland is unrated),

C. Wetland mitigation report, and

D. Wetland compensatory mitigation plan (if the application includes wetland replacement).

18.32.580Wetlands ~~and Small Lakes~~ - Wetland Boundary Delineation

A. A wetland boundary delineation report shall establish the exact location of a wetland's boundary based on a field investigation by a qualified professional. ~~applying the~~ Identification of wetlands and delineation of their boundaries shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplements (WAC 173-22-035).~~Washington State Wetlands Identification and Delineation Manual, (1997) Ecology Publication #96-94, as amended or revised.~~ Wetland data sheets shall be included in wetland reports.

B. ~~The boundary delineation shall be prepared by a wetland biologist with experience preparing wetland reports, such as an individual certified by the Society of Wetland Scientists.~~Wetland delineations are valid for 5 years.

C. The wetland boundary, wetland buffer, and any critical area tract shall be identified on all grading, landscaping, site, utility or other development plans submitted on the project.

~~**18.32.585Wetlands and Small Lakes - Wetland Rating Report**~~

~~A. A wetland rating report shall categorize the wetland (e.g., I, II, III, or IV) based on the Washington State Wetland Rating System for Western Washington (2004) as amended or revised.~~

~~B. The applicant may elect to pay a fee to the Department in lieu of submitting the wetland rating report. The Department will hire a qualified individual or firm to prepare the wetlands rating report.~~

~~C. The Department will determine the wetland category and required buffer width.~~

~~**18.32.587Wetlands and Ponds - Wetland Rating Report**~~

~~A. The Washington State Wetland Rating System for Western Washington (2004) as amended or revised, shall be used to determine if the wetland is a Category I, II, III or IV wetland.~~

~~B. A wetland rating report shall categorize the wetland (e.g., I, II, III, or IV) based on the Washington State Wetland Rating System for Western Washington (2004 as amended or revised.~~

~~C. The applicant may elect to pay a fee (See OMC 4.) to the Olympia Community Planning and Development Department in lieu of submitting the wetland rating report. The Olympia Community Planning and Development Department will hire a consultant from a list of qualified individuals or firms to prepare the wetlands rating report.~~

~~D. The Department will determine the wetland category and required buffer width based on the wetlands rating report~~

18.32.590Wetlands ~~and Small Lakes~~ - Wetland Mitigation Report

A. A Wetland Mitigation Report shall include an evaluation of the functions and values of the wetland.

B. It shall be prepared by a wetland biologist with expertise in preparing wetlands reports.

C. The report ~~may~~ shall include the wetland boundary delineation and the wetland rating.

D. The report shall include a list of the mitigation measures proposed, based ~~up~~on OMC 18.32.135.

E. It shall include a to-scale map with conditions as appropriate to the site. Use OMC 18.32.595 (~~D~~C) as guidance for those features to be included on this map.

F. The applicant may elect to pay a fee to the Department in lieu of submitting the wetland rating report. The fee shall be sufficient to cover the cost to the Department to hire a qualified individual or firm to prepare the wetlands rating report, which will determine the wetland category and required buffer width.

18.32.595Wetlands ~~and Small Lakes~~ - Wetland Compensation Mitigation ~~Report~~Plan

A. The Wetland Compensation Mitigation ~~Report~~ Plan must meet the general guidelines in OMC 18.32.136 in addition to the following specific guidelines. The Plan shall be prepared by a wetland biologist with experience preparing wetland reports, such as an individual certified by the Society of Wetland Scientists.~~must include a written report and map with the following elements.~~ Full guidance can be found in the Guidance on Wetland Mitigation in Washington State - Part 2: Guidelines for Developing Wetland Mitigation Plans and Proposals, (2004) - Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10; Ecology Publication #04-06-013b, as amended or revised; and Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) – Ecology Publication No. 09-06-32.

~~B. The report shall be prepared by a wetland biologist with experience preparing wetland reports, such as an individual certified by the Society of Wetland Scientists.~~

~~C~~B. The written report must contain:

1. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the 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 the existing wetland and buffer areas proposed to be impacted including: acreages (or square footage) based on professional surveys of the delineations; Cowardin classifications including dominant vegetation community types (for upland and wetland habitats); hydro geomorphic classification of wetland(s) on and adjacent to the site; the results of a functional assessment for the entire wetland and the portions proposed to be impacted; wetland rating based upon OMC 18.32.~~-~~585;

3. An assessment of the potential changes in wetland hydroperiod from the proposed project and how the design has been modified to avoid, minimize, or reduce adverse impacts to the wetland hydroperiod;

4. An assessment of existing conditions in the zone of the proposed compensation, including: vegetation community structure and composition, existing hydroperiod, existing soil conditions, existing habitat functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?);

5. A description of the proposed actions to compensate for the wetland and upland areas affected by the project. Describe future vegetation community types for years one (1), three (3), five (5), ten (10), and twenty five (25) post-installation including the succession of vegetation community types and dominants expected. Describe the successional sequence of expected changes in hydroperiod for the compensation site(s) for the same time periods as vegetation success. Describe the change in habitat characteristics expected over the same twenty five (25) year time period;

6. The field data collected to document existing conditions and on which future condition assumptions are based for hydroperiod (e.g., existing hydroperiod based on piezometer data, staff/crest gage data, hydrologic modeling, visual observations, etc.) and soils (e.g., soil pit data - hand dug or mechanically trenched, and soil boring data. Do not rely upon soil survey data for establishing existing conditions.);

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. The estimated total cost for the bond for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice/year for up to five (5) years, annual monitoring field work and reporting, and contingency actions for a maximum of the total required number of years for monitoring. The estimate shall be in sufficient detail to permit issuance of a bond to guarantee performance of the work; and

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

~~D~~C. The map must contain:

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 impacted, 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. Proposed conditions expected from the proposed actions on site including future hydro geomorphic types, vegetation community types by dominant species (wetland and upland), and future hydrologic 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 Title;

6. A plant schedule for the compensatory area including all species by proposed community type and hydrologic 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; and

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

18.32.600~~Landslide~~ Geological Hazard Areas - Purpose and Intent

In order to minimize damage to health and property due to landslide, erosion, seismic hazard or other naturally occurring events; control erosion, siltation, and stream health which affect fish and shellfish resources; and safeguard the public from hazards associated with landslides, mud flows and rock fall, ~~landslide~~ geological hazard areas shall be subject to the standards described in OMC 18.32.605 through OMC 18.32.~~645~~660.

18.32.603 Geological Hazard Areas – Mapping

A. The approximate location and extent of geologically hazardous areas are shown on the following maps:

1. U.S. Geological Survey landslide hazard, seismic hazard, and volcano hazard maps;

2. Washington State Department of Natural Resources seismic hazard maps for Western Washington;

3. Washington State Department of Natural Resources slope stability maps;

4. Federal Emergency Management Administration flood insurance maps; and

5. Locally available maps.

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

18.32.605 Geologic Hazard Areas – Alterations

A. Alterations of geological hazard areas or associated buffers may occur only for activities that meet the following criteria:

1. Will not increase the existing threat of the geological hazard to adjacent properties;

2. Will not decrease the factor of safety within the landslide area below the limits of 1.5 for static conditions and 1.1 for dynamic conditions. Analysis of dynamic (seismic) conditions shall be based on a minimum horizontal acceleration as established by the current version of the Washington State Building Code.

3. Will not adversely impact other critical areas;

4. 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

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

The department may condition or deny proposals as appropriate to achieve these criteria. Conditions may include limitations of proposed uses, modification of density, alteration of site layout, and other appropriate changes to the proposal.

B. Public emergency, health, and safety facilities, and public utilities, shall not be sited within geologically hazardous areas, or in areas that could be affected by geologic hazards, such as landslide run out zones, unless there is no other practicable alternative.

18.32.~~605~~610 Landslide Hazard Areas - Applicability and Definition

A. "Landslide Hazard Area" means those areas which are potentially subject to risk of mass movement due to a combination of geologic, topographic and hydrologic factors; and where the vertical height is ten (10) feet or more. The following areas are considered to be subject to landslide hazards:

1. Steep slopes of forty (40) percent or greater (refer to Figure 6);

2. Slopes of fifteen (15) percent or greater, with:

a. Impermeable subsurface material (typically silt and clay), frequently interbedded with granular soils (predominantly sand and gravel), and

b. Springs or seeping groundwater during the wet season (November to February) ~~(Refer to Figure 7)~~.

3. Any areas located on a landslide feature which has shown movement during the past ten thousand years or which is underlain by mass wastage debris from that period of time.

B. Not included in the definition of "Landslide Hazard Area" are those man-made steep slopes which were created in conformance with accepted construction standards or which meet the requirement of 18.32.640(C).

~~**18.32.610 Landslide Hazard Areas - Prohibited Alterations**~~

~~The following alterations or commencement of the following activities shall be prohibited within a landslide hazard area and its associated buffer; except as specified in OMC 18.37.070, 18.32.415 - Exempt Uses and Activities, OMC 18.32.420 - Administratively Authorized Uses and Activities, or OMC 18.32.425 - Hearing Examiner Authorized Uses and Activities:~~

~~Any human action which changes the existing condition including but are not limited to:~~

~~A. Grading;~~

~~B. Dredging;~~

~~C. Channelizing;~~

~~D. Cutting;~~

~~E. Clearing;~~

~~F. Filling;~~

~~G. Paving;~~

~~H. Building of structures;~~

~~I. Demolition of structures;~~

~~J. Relocating or removing vegetation;~~

~~K. Introduction of invasive plant species;~~

~~L. Application of herbicides, pesticides, or any hazardous or toxic substance;~~

~~M. Discharging pollutants;~~

~~N. Grazing domestic animals;~~

~~O. Modifying for surface water management purposes; or~~

~~P. Any other human activity that changes the existing vegetation, hydrology, wildlife, or wildlife habitat.~~

18.32.615Landslide Hazard Areas - Exempt Uses and Activities

In addition to the exemptions in OMC 18.32.111, ~~The~~ the following activities shall be exempt from the review requirements of this Chapter~~:~~ provided that appropriate erosion control best management practices are implemented during construction (if applicable) and any areas cleared of vegetation are replanted with native species:

A. Activities within an ~~I~~improved ~~R~~right-of-~~W~~way, except those activities that alter a stream or wetland, such as a bridge or culvert, or result in the transport of sediment or increased stormwater.

B. Fencing.

C. Forest Practices Class I, II, and III, as defined in and conducted pursuant to the provisions of RCW 76.09.050, as amended.

D. Construction and/or maintenance of a trail in the stream buffer, four (4) feet or less in width, not paved, and involving less than fifty (50) cubic yards of cut or fill.

~~E. Non-commercial Signs Associated with Streams, including interpretive signs, Critical Area boundary signs, and survey markers.~~

~~F. Normal Maintenance or Repair.~~

~~G. Passive Recreation Activities.~~

H. Wildlife ~~N~~nesting ~~S~~structure.

18.32.620Landslide Hazard Areas - Administratively Authorized Uses and Activities

The Department may, after evaluation, authorize the following uses and activities within a landslide hazard area or its buffer:

A. Beach or ~~S~~shoreline ~~A~~access.

B. Existing ~~S~~structure - ~~R~~remodel and ~~R~~replacement.

C. Forest ~~P~~practices, pursuant to the provisions of OMC 16.60 and RCW 76.09.050, as amended.

~~D. Nondevelopment educational activities and scientific research.~~

~~E. Noxious Weed Control.~~

~~F~~D. Restoration/~~R~~revegetation of ~~S~~site.

~~G~~E. Site ~~i~~investigation.

~~H~~F. ~~Slope Stabilization. The Department may allow the e~~Elimination of a landslide hazard area less than twenty (20) feet in height to stabilize a slope. ~~subject to the provision of the IBC~~.

~~I~~G. ~~Stormwater Facilities. The Department may allow s~~Stormwater facilities only in the outer half of the buffer at the toe of the slope, and only if the applicant demonstrates:

1. No practicable alternative exists;

2. The facility does not exceed twenty-five (25) percent of the buffer on site; and

3. The stability of the landslide hazard area will not be adversely impacted.

~~J~~H. Trail construction or maintenance of a trail located immediately adjacent to a stream, greater than four (4) feet wide, with a paved surface, and/or involving more than fifty (50) cubic yards of cut or fill, but only when the Department determines that there are no practicable or reasonable alternatives.

1. Public and private trails and trail-related facilities such as picnic tables, benches, interpretive centers and signs, viewing platforms and campsites shall be allowed, but use of impervious surfaces shall be minimized.

2. Trail planning, construction, and maintenance shall adhere to the following additional criteria:

a. Trails and related facilities shall, to the extent feasible, be placed on previously disturbed areas such as: existing or abandoned levees, or road, railroad, or utility corridors; and

b. Trails and trail related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat.

~~K~~I. ~~Utility Line.~~ Utility lines may be allowed within landslide hazard areas when it can be determined that:

1. There are no practicable alternatives for the utility corridor,

2. The corridor alignment follows a path of least impact to the landslide hazard areas critical areas including maintaining and protecting and retaining the slope stability of streams in ravines and landslide hazard areas;

3. The corridor avoids cutting trees greater than six (6) inches in diameter at breast height when possible; and

4. Any access to the corridor for maintenance is provided as much as possible at specific points rather than by parallel roads.

18.32.625Landslide Hazard Areas - Hearing Examiner Authorized Uses and Activities

The Hearing Examiner may, after review, authorize the following uses and activities within a landslide hazard area or its buffer:

A. Road/Street - Expansion of Existing Corridor and New Facilities.

1. Crossings of landslide hazard areas or other critical areas shall be avoided to the extent possible.

2. Crossings shall serve multiple properties/purposes, whenever possible.

B. Utility Facility.

Refer to the performance standards for Utility Line in OMC 18.32.~~625(K)~~620(I).

C. Elimination of a Landslide Hazard Area.

When the landslide hazard area has a vertical dimension greater than twenty (20) feet in height and the landslide hazard could be eliminated through site grading.

D. Other uses and activities.

Other uses and activities may be allowed within a landslide hazard area on a case-by-case basis when it can be demonstrated that:

1. A Geotechnical Report described in OMC 18.32.640 has been provided, and

2. The applicant has demonstrated to the Examiner's satisfaction that legally enforceable commitments, such as bonds, letters of credit, and/or covenants, guarantee the use of development practices that will render the development as safe as if it were not located in a landslide hazard area.

18.32.630Landslide Hazard Areas - Buffers

A. In order to minimize damage to personal health and property due to landslides, a buffer of undisturbed vegetation as provided in this Section shall be maintained between all regulated activities and landslide hazard areas. Development must maximize the retention of existing vegetation and retains all vegetation outside of the developed building area. Vegetation, in the form of ground cover, shrubs or trees, assists in stabilizing the ground surface. Damage to existing vegetation through removal or disturbance can have significant impacts on slope stability. Any removal of vegetation, therefore, must be minimized in steep slope areas. Where removal of vegetation cannot be avoided in order to accommodate a permitted development or to stabilize a slope, an acceptable plan to fully revegetate and restabilize affected areas must be provided.

B. The minimum required buffer width is the greater amount of the following distances measured from the edges of the landslide hazard area ~~(except for Subsection B.4 below)~~:

1. The minimum distance recommended by the engineering geologist or geotechnical engineer;~~From all sides of the landslide hazard area limits: the distance recommended by the engineering geologist or geotechnical engineer;~~

2. At the top of the landslide hazard area: a distance of one-third (1/3) the height of the slope or 50 feet, whichever is greater~~,~~;

3. At the bottom of the landslide hazard area a distance of one-half (1/2) the height of the slope or 50 feet, whichever is greater; or

4. Fifty (50) feet in all directions from a seep~~; or~~.

5. ~~The minimum distance recommended by the engineering geologist or geotechnical engineer (Refer to Figures 6 and 7).~~

C. All landslide hazard area buffers shall be measured from the landslide hazard area as located in the field.

D. The landslide hazard area, its buffer, and any critical area tract shall be identified on all grading, landscaping, site, utility or other development plans submitted on the project.

E. The Department may reduce the required landslide hazard areas buffer widths except buffers recommended pursuant to OMC 18.32.630 B ~~5~~1, up to fifty (50) percent on a case-by-case basis when supported by a Geotechnical Report including the following:

1. Buffer width reduction is supported by a Geotechnical Report described in OMC 18.32.640 ~~that evaluates the criteria in OMC 18.32.630(E)~~;

2. The existing buffer area is well-vegetated;

3. The protection of the landslide hazard area buffer using a fence and sign have been evaluated, as described in OMC 18.32.145;

4. Topographic conditions of the site and the buffer have been evaluated;

5. The intensity and type of the land uses adjacent to the buffer have been evaluated with respect to minimizing potential adverse impacts upon the landslide hazard area; [e.g. publicly owned parks, designated open space areas in plats and binding site plans, or lands with a recorded conservation easement];

6. The site has been evaluated with respect to its site design and building layout to minimize potential risks with landslide hazard areas; and

7. A smaller buffer will be adequate to protect property from the landslide hazard based on the best available science.

F. The Hearing Examiner may allow reductions greater than those described in OMC 18.32.630(E) to the required landslide hazard area buffer width on a case-by-case basis when it can be demonstrated that:

1. The provisions of OMC 18.32.630(E) have been evaluated by a Geotechnical Report described in OMC 18.32.640, and

2. Based upon the Geotechnical Report and the best available science it is demonstrated that the proposed landslide hazard area buffer width will be adequate to protect personal health and property from a landslide from this site.

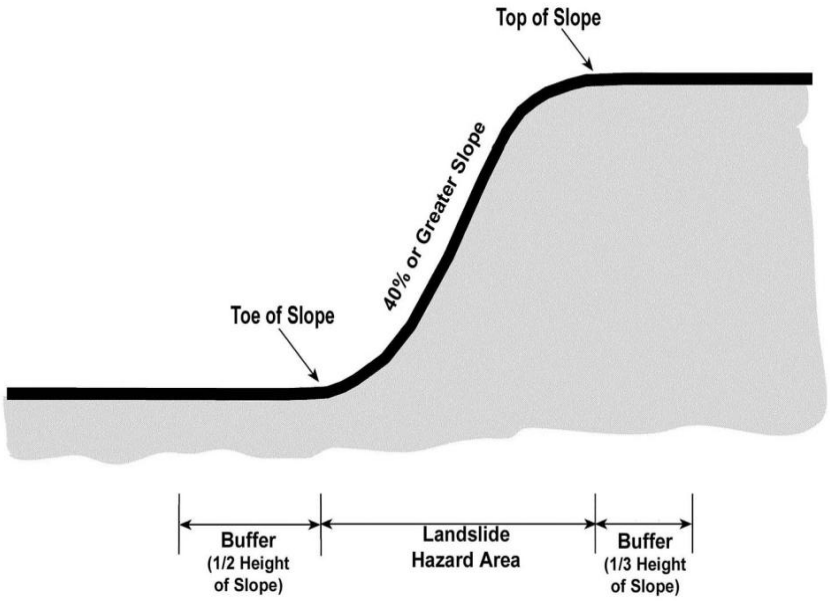
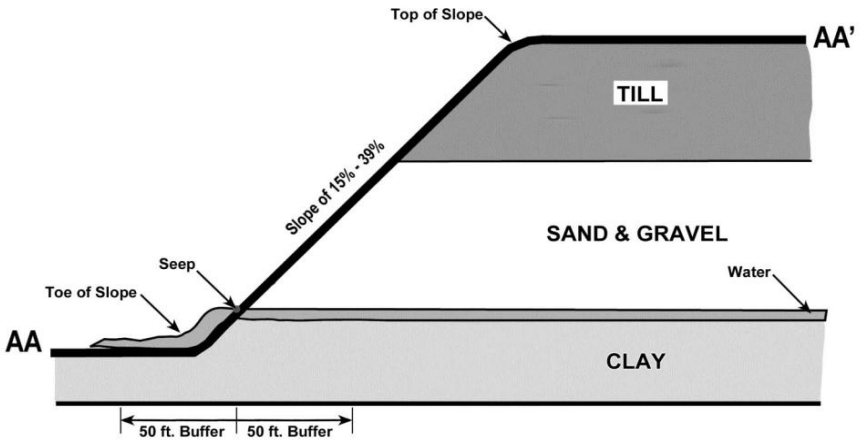
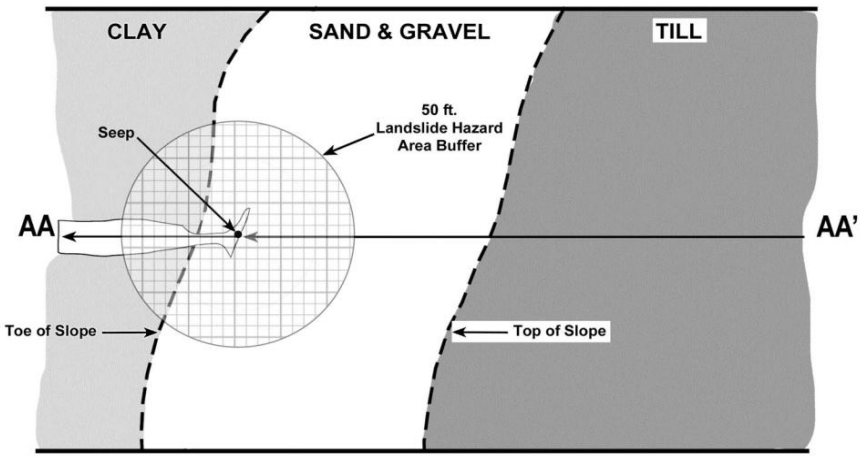


FIGURE 6





~~FIGURE 7~~

18.32.635Landslide Hazard Areas - Special Reports

A. Every application for development within a landslide hazard area or its buffer shall provide the following special reports:

1. Drainage and erosion control plan;

2. Grading plan;

3. Geotechnical Report, and

4. Landscape Plan.

B. The Department may waive the submittal of any or all of these special reports when:

1. The proposal increases the impervious surfaces within the subject parcel or parcels by less than ten (10) percent,

2. The removal of vegetation is minimal and is not likely to cause erosion or slope instability,

3. Less than fifty (50) cubic yards of material is excavated upslope from the steep slope,

4. The surface water flow is directed away from the face of the steep slope, or

5. The proposed project or activity will not substantially affect the natural integrity of the steep slope.

18.32.640 Landslide Hazard Areas - Geotechnical Report

A. The Geotechnical Report shall be prepared and sealed by either an engineering geologist as defined by RCW 18.220, as amended, or a ~~geotechnical~~ licensed engineer as defined by RCW 18.~~220~~43, as amended and~~.~~ in accordance with the Washington State Geologist Licensing Board's "Guidelines for Preparing Engineering Geologist Reports in Washington, 2006."

B. The Geotechnical Report shall indicate if:

1. A potential landslide hazard is either present or highly likely; or

2. A potential landslide hazard is present or that it is highly unlikely; or

3. Available information to evaluate a potential landslide hazard is inadequate.

C. Any area in which the Geotechnical Report investigation indicates a potential landslide hazard shall not be subject to development unless the report demonstrates one of the following:

1. The site specific subsurface conditions indicate that the proposed development is not located in a landslide hazard area or its buffer; or

2. The proposed development has been designed so that the risk on the site and to adjacent property have been eliminated or mitigated to such a degree that the site is determined to be safe;

3. Development practices are proposed that would render the development as safe as if it were not located in a landslide hazard area, or

4. The proposed development activity is so minor as not to pose a threat to the public health, safety, and welfare.

D. The Geotechnical Report shall be submitted for review by the Department and shall include:

1. A detailed review of the field investigations, published data and references, data and conclusions from past geological assessments, or geotechnical

investigations of the site, site-specific measurements, tests, investigations, or studies,

2. A determination of potential landslide hazard area conditions on the site, and its immediate vicinity, which may affect development on the site,

3. Consideration of the run-out hazard to the proposed development posed by debris from a landslide starting upslope (whether part of the subject property or on a neighboring property) and/or the impacts of landslide run-out on down slope properties, and

4. Results, conclusions and recommendations including supporting analysis and calculations and a list of mitigation measures necessary in order to safely construct or develop within the landslide hazard area.

18.32.645Landslide Hazard Areas - Covenant

A. The Department may require a covenant between the owner(s) of the property and the City when development is to occur within a landslide hazard area. The covenant shall be signed by the owner(s) of the site and notarized prior to issuance of any permit by the City. The covenant shall not be required where the permit or approval is for work done by the City. The covenant shall include:

1. A legal description of the property;

2. A description of the property condition making this subsection applicable;

3. A statement that the owner(s) of the property understands and accepts the responsibility for the risks associated with development on the property given the described condition, and agrees to inform future purchasers and other successors and assignees that the property is located within a landslide hazard area, of the risks associated with development thereon, of any conditions or prohibitions on development imposed by the City, and of any features in this design which will require maintenance or modification to address anticipated soils changes;

4. The application date, type, and number of the permit or approval for which the covenant is required; and

~~1.~~ 5. A statement waiving the right of the owner(s), the owner's heirs, successors and assigns to assert any claim against the City for any loss or damage to people or property either on- or off-site resulting from soil movement by reason of or arising out of issuance of the permit or approval by the City for the development on the property, except only for such losses that may directly result from the sole negligence of the City.

B. The covenant shall be filed by the Department with the Thurston County Auditor, at the expense of the owner, so as to become part of the Thurston County real property records.

18.32.650 Erosion Hazard Areas – Description

Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter- rill erosion hazard. Erosion hazard areas are also those areas impacted by shore land and/or stream bank erosion and those areas within a river's channel migration zone.

18.32.655 Erosion Hazard Areas - Protection Measures.

A. Before approving any development under this subsection, the Department may require the applicant to submit any or all of the following information in addition to a critical areas report:

1. A geotechnical report prepared by a geotechnical engineer or engineering geologist licensed in the state that describes how the proposed development will impact or be impacted by each of the following on the subject property and nearby properties:

a. Slope stability, landslide hazard, and sloughing;

b. Seismic hazards;

c. Groundwater;

d. Seeps, springs and other surface waters; and

e. Existing vegetation.

2. A site plan, in two-foot contours, that identifies the type and extent of geologically hazardous areas on site and off site that are likely to impact or be impacted by the proposal.

3. Recommended foundation design and optimal location for roadway improvements.

4. Recommended methods for mitigating identified impacts and a description of how these mitigating measures may impact adjacent properties.

5. Any other information the city determines is reasonably necessary to evaluate the proposal.

B. If the city approves any development under this section, it may, among other appropriate conditions, impose the following conditions of approval:

1. The recommendations of the geotechnical report are followed;

2. A geotechnical engineer or engineering geologist is present on site during all development activities. As an alternative, the city may require minimal site visits by the geotechnical engineer or engineering geologist to establish proper methods, techniques and adherence to plan drawings;

3. Trees, shrubs and groundcover are retained except where necessary for approved development activities on the subject property;

4. Additional vegetation is planted in disturbed areas; and

5. Submit a letter by the geotechnical engineer or engineering geologist stating that they have reviewed the project plan drawings and in their opinion the plans and specifications meet the intent of the geotechnical report.

18.32.660 Seismic Hazard Areas - Description

Seismic hazard areas are areas subject to severe risk of damage as a result 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.

18.32.665 Seismic Hazard Areas – Alterations

Alterations to seismic hazard areas may be allowed only as follows:

A. The evaluation of site-specific subsurface conditions shows that the proposed development site is not located in a seismic hazard area; or

B. Mitigation based on the best available engineering and geotechnical practices shall be implemented which either eliminates or minimizes the risk of damage, death, or injury resulting from seismically induced settlement or soil liquefaction. Mitigation shall be consistent with the requirements of OMC 18.32.135 and shall be approved by the Department.