Chapter 16.20
GEOLOGICALLY HAZARDOUS AREAS

Sections:

16.20.010 Short title.
16.20.020 Intent.
16.20.030 Definitions.
16.20.040 Designation of geologically hazardous areas.
16.20.045 Designation of specific hazard areas.
16.20.047 Exempt uses and activities.
16.20.050 Critical area report for geologically hazardous areas.
16.20.055 Alterations of geologically hazardous areas — Performance standards — General requirements.
16.20.057 Performance standards — Specific hazards.
16.20.060 Appeals.
16.20.070 Violation — Penalty.
16.20.080 Severability.

16.20.010 Short title.
This chapter shall be known and may be cited as the “geologically hazardous areas ordinance” of the city of Tumwater.
(1282, Added, 08/20/1991)

16.20.020 Intent.
It is the declared policy of the city of Tumwater to encourage land uses that are compatible with underlying geological conditions through the use of appropriate engineering, design and construction practices. It is also recognized that at times even the best of efforts to properly design and apply technology will not adequately reduce the risks of geological hazards. In these instances, areas of extreme geological instability are to be avoided as sites for development and placement of structures.
(1282, Added, 08/20/1991)

16.20.030 Definitions.
A. “Slope” means an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.
B. “Site” means any lot, tract, parcel, large lot holding, either owned or leased, and any contiguous combination thereof, intended to be developed.
C. “Landslide area” means those areas susceptible due to combinations of bedrock, soil, slope gradient, slope aspect, hydrology, and other identified factors.
(1282, Added, 08/20/1991)

16.20.040 Designation of geologically hazardous areas.
Geologically hazardous areas include areas determined to be susceptible to erosion, sliding, earthquake, or other geological events pursuant to TMC 16.20.045. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area.
A. Erosion hazard;
B. Landslide hazard;
C. Seismic hazard;
D. Volcanic hazard;
E. Tsunami hazard; and
F. Other geological events including mass wasting, debris flows, rock falls, and differential settlement.
(O2004-019, Amended, 05/17/2005; 1282, Added, 08/20/1991)

16.20.045 Designation of specific hazard areas.

A. Erosion Hazard Areas. 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.

B. Landslide Hazard Areas. Landslide hazard areas are areas potentially susceptible to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible to landslides because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:

1. Areas of historic failures such as:
   a. Those areas delineated by the U.S. Department of Agriculture’s Natural Resources Conservation Service as having “severe” limitation for building site development;
   b. Those areas mapped by the Department of Ecology (Coastal Zone Atlas) or the Department of Natural Resources (slope stability mapping) as unstable (“U” or class 3), unstable old slides (“UOS” or class 4), or unstable recent slides (“URS” or class 5);
   c. Areas designated as quaternary slump, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Department of Natural Resources.

2. Areas with all three of the following characteristics:
   a. Slopes steeper than fifteen percent; and
   b. Hillsides that have intersecting geologic contact with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
   c. Springs or ground water seepage.

3. Areas that have shown movement during the Holocene epoch (from ten thousand years ago to present) or that are underlain or covered by mass wastage debris of that epoch.

4. Slopes that are parallel or sub parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials.

5. Slopes having gradients steeper than eighty percent subject to rock fall during seismic shaking.

6. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by wave action.

7. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.

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

C. Seismic Hazard Areas. 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. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:

1. The magnitude of the earthquake;
2. The distance from the source of an earthquake;
3. The type of thickness of geologic materials at the surface; and
4. The type of subsurface geologic structure.

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

D. Volcanic Hazard Areas. Volcanic hazard areas are subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.
(O2004-019, Added, 05/17/2005)
16.20.047 Exempt uses and activities.

A. Activities within the improved right-of-way including but not limited to construction of new utility facilities or improvements or upgrades to existing utility facilities that take place within existing improved right-of-way or existing impervious surface.

B. Operation, Maintenance or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, 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. Operation and maintenance includes vegetation management performed in accordance with best management practices that is part of ongoing maintenance of structures, infrastructure, or utilities; provided, that such management actions are part of a regular ongoing maintenance, do not expand further into the critical area, are not the result of an expansion of the structure or utility; and do not directly impact endangered species.

C. Minor Utility Projects. Utility projects which have minor or short duration impacts to critical areas, as determined by the community development director in accordance with the criteria below, and which do not significantly impact the functions or values of a critical area(s); provided, that such projects are constructed with best management practices as defined in TMC 16.28.030(C). Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:

1. There is no practical alternative to the proposed activity with less impact on critical areas;
2. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and
3. The activity involves disturbance of no more than seventy-five square feet.

D. Emergencies. Those activities necessary to prevent an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use all reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Within thirty days, the community development director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the community development director determines that the action taken was beyond the scope of an allowed emergency action, then inspection and remedial action would be required. If remedial action is required and not completed, then enforcement provisions would apply.

E. The community development director may allow the following activities within other geologically hazardous areas if the activity will not increase the risk of hazard:

1. Construction of new buildings with less than two thousand five hundred square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
2. Additions to existing residences that are two hundred fifty square feet or less; and
3. Installation of fences.

(O2011-002, Amended, 03/01/2011; O2004-019, Added, 05/17/2005)

16.20.050 Critical area report for geologically hazardous areas.

A critical areas report for geologically hazardous areas shall be prepared as part of any development permit application by a geotechnical engineer or geologist, licensed in the state of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems.

A. The project area of the proposed activity and all geologically hazardous areas within two hundred feet of the project area shall be addressed in a critical areas report for geologically hazardous areas. A critical areas report for a geologically hazardous area shall contain an assessment of the geological hazards including the following:

1. Site and construction plans showing:
a. The type and extent of geologic hazard areas, and any other critical areas and buffers on, adjacent to, or within two hundred feet of the proposal;
   b. Proposed development, including location of existing and proposed structures, fill, storage of materials, drainage facilities, with dimensions indicating distances to the floodplain;
   c. Topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and
   d. Clearing limits.

2. Assessment of geotechnical characteristics, including:
   a. An assessment of the geologic characteristics and engineering properties of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties;
   b. A review of the site history regarding landslides, erosion, and prior grading (soils analysis shall be accomplished in accordance with accepted soil engineering practices);
   c. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
   d. A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and
   e. A description of the vulnerability of the site to seismic and other geologic events.

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

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

B. Incorporation of Previous Study. Where a valid geotechnical report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report if approved in advance by the community development director. The applicant shall submit a critical area report detailing any changed environmental conditions associated with the site.

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

D. Critical area reports for geologically hazardous areas must meet the requirements of this section. Critical area reports for two or more types of critical areas must meet the additional report requirements for each type of relevant type of critical area as specified herein:

1. Erosion and Landslide Areas. The technical information for an erosion hazard or landslide hazard area(s) shall include the following information:
   a. A copy of the site plan for the proposal showing:
      i. The height of slope, slope gradient, and cross-section of the project area;
      ii. The location of springs, seeps, or other surface expressions of ground water on or within two hundred feet of the project area or that have potential to be affected by the proposal; and
      iii. The location and description of surface water runoff features.
   b. Hazards Analysis. The hazards analysis component of the critical areas report shall specifically include:
      i. A description of the extent and type of vegetative cover;
      ii. A description of subsurface conditions based on data from site-specific explorations;
      iii. Descriptions of surface and ground water conditions, public and private sewage and disposal systems, fills and excavations, and all structural improvements;
iv. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
v. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one-hundred-year storm event;
vi. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;
vii. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
viii. Recommendations for building siting limitations; and
ix. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

c. Geotechnical Engineering Report. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:
i. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations and estimates of settlement performance;
ii. Recommendations for drainage and sub drainage improvements;
iii. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
iv. Mitigation and adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.
d. Erosion and Sediment Control Plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan is required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in the Drainage Design and Erosion Control Manual for Thurston Region, Washington.
e. Drainage Plan. The technical information shall include a drainage plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with the Drainage Design and Erosion Control Manual for Thurston Region, Washington.
f. Mitigation Plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability.
g. Monitoring Surface Waters. If there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the city.

E. Seismic Hazard Areas. A critical area report for a seismic hazard area shall also meet the following requirements:
1. The site map shall show all known and mapped faults within two hundred feet of the project area or that have potential to be affected by the proposal;
2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site, such as forces generated and fault displacement; and
3. A geotechnical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented.

F. Volcanic Hazard Areas. A critical area report for a volcanic hazard area shall also meet the following requirements:
1. Site Plan. The site plan shall show all areas within two hundred feet of the project area that have potential to be affected by pyroclastic flows, lahars, or mud and debris flows derived from volcanic events;
2. Hazards Analysis. The hazards analysis shall include a complete discussion of the potential impacts of volcanic activity on the site; and

3. Emergency Management Plan. The emergency management plan shall include plans for emergency building exit routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.

G. Tsunami Hazard Areas. A critical area report for a tsunami hazard area shall also meet the following requirements:

1. Site Plan. The site plan shall show all areas within two hundred feet of the project area that have the potential to be inundated by wave action derived from a seismic event;

2. Hazards Analysis. The hazards analysis shall include a complete discussion of the potential impacts of the tsunami hazard on the site; and

3. Emergency Management Plan. The emergency management plan shall include plans for emergency training, notification of local emergency management officials, and an emergency warning system.

(Amended during 2011 reformat; O2011-002, Amended, 03/01/2011; O2004-019, Amended, 05/17/2005; 1282, Added, 08/20/1991)

16.20.055 Alterations of geologically hazardous areas – Performance standards – General requirements.

A. Permitted alterations of geologically hazardous areas or associated buffers will only be allowed for activities that:

1. Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;

2. Will not adversely impact other critical areas;

3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and

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

(O2004-019, Added, 05/17/2005)

16.20.057 Performance standards – Specific hazards.

A. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the standards of this chapter and the specific following requirements:

1. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer is discretionary and shall be determined by the community development director to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of the critical area report prepared in accordance with TMC 16.20.050.

   a. The minimum buffer shall be equal to the height of the slope or fifty feet, whichever is greater.

   b. The buffer may be reduced to a minimum of ten feet when a qualified professional demonstrates to the community development director’s satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses and the critical area.

   c. The buffer may be increased where the community development director determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

2. Alterations of an erosion or landslide area and/or buffer may only occur for activities for which a hazards analysis is submitted as part of a critical areas report that determines that:

   a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;

   b. The development will not decrease slope stability on adjacent properties; and

   c. Such alterations will not adversely impact other critical areas.

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

a. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the state building code adopted by the city;

b. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

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

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

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

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

g. Development shall be designed to minimize impervious lot coverage.

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

5. Clearing shall be allowed only from May 1 to October 31 of each year; provided, that the city may extend or shorten the time period on a case-by-case basis depending on actual weather conditions. Timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the Washington State Department of Natural Resources and a landclearing permit issued by the city.

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

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

a. Conveyed via continuous storm pipe down slope to a point where there are no erosion hazard areas downstream from the discharge;

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

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

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

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

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

9. On site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.
B. Volcanic and Tsunami Hazard Areas. Activities on sites containing areas susceptible to inundation due to volcanic or tsunami hazards shall require an evacuation and emergency management plan.
(O2011-002, Amended, 03/01/2011; O2004-019, Added, 05/17/2005)

16.20.060 Appeals.

If, in the opinion of the building official, geologically hazardous areas, as described in TMC 16.20.050, represent a severe risk which cannot be successfully ameliorated by structural design, the affected site or portion thereof may be declared unbuildable. Appeals of the building official are as provided for in TMC Title 15.
(O2010-017, Amended, 12/21/2010; 1282, Added, 08/20/1991)

16.20.070 Violation – Penalty.

A. Remedies Not Exclusive. Each violation of the provisions of this chapter shall be a separate offense and will subject the violator to civil and/or criminal penalties. In the case of a continuing violation, each day’s continuance shall be a separate and distinct offense. The mayor of the city of Tumwater, through his or her designee(s) has authority to enforce this chapter against any violation or threatened violation thereof through issuance of administrative orders, penalty notices, levying of fines and/or the institution of actions at law or in equity including injunctive relief, in order to ensure that no uses are made of a regulated wetland or their buffers which are inconsistent with this chapter or an applicable wetlands protection program. In addition, the city attorney is authorized to commence criminal prosecution for violations under this chapter. Recourse to any single remedy will not preclude recourse to other legal remedies available.

B. Enforcement Actions. Enforcement of the provisions of this chapter is delegated to the director of community development. If the director of community development or his or her designee determines that any development action is not in compliance with approved development plans, or is in violation of this chapter, the director or designee may:

1. Issue a cease and desist order to halt such activity. The order shall become effective immediately upon receipt by the person to whom it is issued, and/or to his/her agent on site. The order shall set forth the following terms and conditions:
   a. A description of the specific nature, extent and time of violation and the damage or potential damage; and
   b. The specific corrective action to be taken within a given time, and the penalties for failure to comply.

2. Issue a restoration order for complete or partial restoration of the critical area by the owner and/or the person responsible for the violation within a given time, and the penalties for failure to comply.

3. Issue a civil penalty notice.

4. Request that the city attorney commence a criminal prosecution, and seek any civil or equitable relief to enjoin any act or practices and to abate any conditions which constitute or will constitute a violation of this chapter.

C. Civil Penalties.

1. Content. The notice of civil penalty shall include the following information:
   a. The name and address of the person responsible for the violation; and
   b. The street address or a description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring; and
   c. A description of the violation and a reference to the provision(s) of the city of Tumwater code section that has been violated; and
   d. The required corrective action and a date and time by which the correction must be completed; and
   e. Notice of an opportunity for an appeal hearing before the hearing examiner; and
f. A statement indicating that no monetary penalty will be assessed if the director or his or her designee approves the completed, required corrective action at least forty-eight hours prior to the end date for compliance in the restoration order; and

g. A statement that a monetary penalty in an amount per day for each violation as specified herein will be assessed against the person whom the notice of civil penalty is directed.

2. Service of Notice. The director or his or her designee shall serve the notice of civil penalty upon the person to whom it is directed, either personally or by mailing by both regular mail and certified mail, a copy of the notice of civil penalty to such person at their last known address. If the person to whom it is directed cannot after due diligence be personally served within Thurston County and if an address for mailed service cannot after due diligence be ascertained, notice shall be served by posting a copy of the notice conspicuously on the affected property or structure. Proof of service shall be made by a written declaration under penalty of perjury executed by the person effecting the service, declaring the time and date of service, the manner by which the service was made, and if by posting the facts showing that due diligence was used in attempting to serve the person personally or by mail.

D. Monetary Penalties. The maximum monetary penalty for each separate violation per day or portion thereof shall be as follows:

1. First day of each violation – $100.00;
2. Second day of each violation – $200.00;
3. Third day of each violation – $300.00;
4. Fourth day of each violation – $400.00;
5. Each additional day of each violation beyond four days – $500.00 per day.

E. Collection of Monetary Penalty. The monetary penalty constitutes a personal obligation of the person to whom the notice of civil penalty is directed. The city is authorized to take appropriate action to collect the monetary penalty.

F. Criminal Penalties. Any person, firm, or corporation who knowingly violates or knowingly fails to comply with any term or provision of this chapter shall be charged with a misdemeanor. Each day a violation occurs shall be a separate offense. In the event of a continuing violation or failure to comply, the second and subsequent days shall constitute a gross misdemeanor. Continuing violation shall mean a violation which is committed within one year of the initial violation, and which arises out of the same facts as the initial violation.

G. Appeal of Administrative Orders and Penalties. Any person issued a cease and desist order, restoration order and/or incurring a civil penalty may appeal the same by filing, in writing within ten days of receipt of the order/penalty notice, a notice of appeal and paying the appeal fee. The appeal must set forth in a concise statement: (1) the reason for the appeal, (2) the name and address of the appellant and his/her interest(s) in the property or proposed development affected by such order/penalty, (3) must contain a reference to the specific code section(s) that support the appellant’s argument, (4) must specify the reason(s) why the appellant believes the order or penalty to be erroneous, and (5) must specify the relief sought. The appellant will have the burden of proof to show the order or penalty is erroneous. Upon receipt of the appeal notice by the city clerk, the city clerk will schedule a hearing before the hearing examiner, who is authorized to remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered, or not known and not reasonably capable of being known in setting the original penalty. The hearing examiner’s powers on appeal are set forth in TMC Chapter 2.58. Any person appealing the issuance of an administrative order or civil penalty notice shall abide by the terms of that order or notice during the pendency of an appeal to the hearing examiner. The hearing examiner’s decision may be further appealed according to the provisions of TMC Chapter 2.58.

16.20.080 Severability.

If any section, paragraph, subsection, clause or phrase of this chapter is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of the chapter.

(1282, Added, 08/20/1991)
Chapter 16.24

AQUIFER PROTECTION STANDARDS

Sections:

16.24.010 Short title.
16.24.040 Approval required.
16.24.050 Aquifer protection standards.

16.24.010 Short title.
This chapter shall be known and may be cited as the “aquifer protection standards ordinance” of the city of Tumwater.
(1281, Added, 08/20/1991)

It is the declared policy of the city of Tumwater to conserve and protect the underground waters and aquifers over which the city rests. Any development which occurs within the city will be designed to eliminate chemical and biological contaminants from entering underground waters and aquifers which are now, or in the future, likely to be used as a potable drinking water source.
(1281, Added, 08/20/1991)

A. “Aquifer” means a saturated geologic formation which will yield a sufficient quantity of water to serve as a private or public water supply.
B. “Contaminants” means hazardous substance(s) which, if released in sufficient quantity, would impair a component of the environment as a useful resource.
C. “Facility” means all structures, contiguous land, appurtenances, and other improvements on or in the land.
D. “Groundwater” means all water found beneath the ground surface, including the slowly moving subsurface water present in aquifers and vadose zones.
E. “Hazardous substance(s)” means any material, either singularly or in combination, which may pose a present or potential hazard to human health or to the quality of the drinking water supply (now or in the future) in the aquifer system underlying the city of Tumwater when improperly used, stored, transported, or disposed of or otherwise mismanaged, including those materials identified as a hazardous waste in 40 C.F.R. 261, as amended, or defined as a hazardous substance in 40 C.F.R. 302, as amended, WAC 173-360-120, as amended. Hazardous substances shall include petroleum products and by-products, including crude oil or any fraction thereof such as gasoline, diesel, and waste oil which is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit, 14.7 pounds per square inch absolute).
F. “Release” means any spilling, leaking, emitting, discharging, escaping, leaching or disposing of hazardous substance(s) from a facility or activity into or onto soil, air, water, groundwater, or other materials.
G. “Release detection” means a method or methods of determining whether a release or discharge of a hazardous substance has occurred from a regulated facility into the environment.
(1281, Added, 08/20/1991)
16.24.040 Approval required.
No person, corporation, or other legal entity shall engage in the construction of regulated facility/facilities contained in this chapter without having received approval by the city through the environmental review process and/or applicable discretionary permit(s) and construction permit(s). (1281, Added, 08/20/1991)

16.24.050 Aquifer protection standards.
The following aquifer protection techniques will be applied on a city-wide basis for development construction; provided, that such development may also be subject to the requirements of TMC Chapter 16.26:

A. Stormwater Retention Facilities. New stormwater retention facilities shall be designed and constructed in accordance with the requirements of the Drainage Design and Erosion Control Manual for the Thurston Region.

B. Facilities with Underground Tanks/Underground Storage Vaults. All new underground storage facilities used or to be used for the underground storage of hazardous materials shall be designed and constructed so as to:
   1. Prevent releases due to corrosion or structural failure for the operational life of the tank or vault;
   2. Be cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance;
   3. Use material in the construction or lining of the tank which is compatible with the substance to be stored;
   4. Provide for release detection method(s); and
   5. Have double walls or single walls with liners.

C. Facilities with Aboveground Tanks/New Aboveground Tanks.
   1. No new aboveground storage facility or part thereof shall be fabricated, constructed, installed, used, or maintained in any manner which may allow the release of a hazardous material to the ground, groundwaters, or surface waters;
   2. No new aboveground tank or part thereof shall be fabricated, constructed, installed, used, or maintained without having constructed around and under it an impervious containment area enclosing or underlying the tank or part thereof. Impervious containment will be equal to the volume of the tank to avoid an overflow of the containment area.

D. Modification of Performance Standards. Projects which are located outside of the aquifer protection zone district (TMC Title 18) may be granted reductions in the above-specified performance standards by the submittal and approval of an aquifer protection plan. This plan will outline how the project proposal will effectively protect the aquifer from releases of contaminants. The aquifer protection plan will be made a part of the environmental review as outlined in the city’s environmental policy code (TMC Chapter 16.04), if applicable, and be a condition of approval for any discretionary permits or construction permits. (O97-028, Amended, 04/21/1998; O97-008, Amended, 11/05/1996; 1281, Added, 08/20/1991)

A. Violation of the provisions of this chapter or failure to comply with any of the requirements shall constitute a misdemeanor. Each day such violation continues shall be considered a separate, distinct offense.

B. Any person who commits, participates in, assists or maintains such violation may be found guilty of a separate offense.

C. In addition, any violation of the provisions of this chapter is declared to be a public nuisance and may be abated through proceedings for injunctive or similar relief in superior court or other court of competent jurisdiction.

D. Upon determination that a violation of the provisions of this chapter has occurred, the building official shall withhold issuance of building permits and/or certificates of occupancy for the
affected property until corrective action is taken by the responsible party. However, if mitigating circumstances exist and reasonable commitments for corrective action are made, the building official may issue building permits and/or the certificates of occupancy.
(O2011-007, Amended, 07/19/2011; 1281, Added, 08/20/1991)


If any section, paragraph, subsection, clause or phrase of this chapter is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of the chapter.
(1281, Added, 08/20/1991)
Chapter 16.26

WELLHEAD PROTECTION

Sections:

16.26.010 Purpose.
16.26.030 Methodology used.
16.26.050 New and expanding uses involving hazardous materials requiring utilization of all known, available and reasonable technologies.
16.26.070 Amendment to wellhead protection map.

16.26.010 Purpose.

The purpose of this chapter is to meet the requirements of Section 1428 of the 1986 Amendments to the Federal Safe Drinking Water Act, as adopted and implemented by RCW 43.20.050, 70.119A.060, and 70.119A.080 and Chapter 246-290 WAC, which require the city to develop and implement a wellhead protection program to identify risks of contamination potentially impacting city wells, and to reduce or eliminate those risks.

(O97-028, Added, 04/21/1998)


A. “AKART” is an acronym for “all known, available and reasonable methods of prevention, control and treatment.” AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or treatment discharge of pollutants. AKART may include, but not be limited to, pollution prevention plan development and implementation, engineering solutions, and practices deemed necessary to prevent release. In determining whether a technology is considered AKART, consideration is given to its technical and economical feasibility. The concept of AKART applies to both point and nonpoint sources of pollution. The term “best management practices” typically applied to nonpoint source pollution controls is considered a subset of the AKART requirement.

B. “Animal unit” is defined as one thousand pounds of live weight of any given livestock species or any combination of livestock species. Animal equivalents are calculated for each livestock and poultry sector according to estimated rates of manure production for each species. For additional information, refer to the U.S. Department of Agriculture Natural Resource Conservation Service Animal Waste Field Handbook.

C. “Aquifer” means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

D. “Capture zone” means an area in which groundwater is calculated to travel to a pumping well. Capture zones are usually defined according to the time that it takes for water within a particular zone to travel to a well. Calculated capture zones usually only approximate actual capture zones as a result of assumptions required to conduct the calculation.

E. “Contaminant” means any chemical, physical, biological or radiological substance that does not occur naturally in groundwater in the northern Thurston County groundwater management area (GWMA), or that occurs at concentrations greater than those naturally occurring in the vicinity of the facility.
F. “Development” means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations.

G. “Facility” means something that is built or installed to perform some particular function and includes structures, containment areas and storage areas associated with the facility.

H. “Groundwater” means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water.

I. “Hazardous material” means anything defined as a hazardous substance in WAC 173-340-200 or as a hazardous material under the fire code as adopted by TMC Chapter 15.16.

J. “MPCs” means reasonable methods of prevention and control. Examples of MPCs include, but are not limited to, pollution prevention plan development and implementation, routine maintenance, secondary containment, and measures to eliminate contaminant pathways to the source water.

K. “Pollution prevention plan” means a site-specific plan that addresses the avoidance of unplanned chemical release in the air, water or land. It is based on deliberate waste management planning, site design, and operational practices.

L. “Release” means any intentional or unintentional entry of any hazardous material into the environment.

M. “Well” or “wellhead” means and includes any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of an excavation is for the location, diversion, artificial recharge, or withdrawal of ground water.

N. “Wellhead protection area (WHPA)” means the surface or subsurface area surrounding a municipal water well or wellfield through which contaminants are reasonably likely to move toward and reach such water well or wellfield within six months, one year, five years and ten years. WHPAs are areas that are defined for the purpose of water resource management. WHPAs generally include areas identified as capture zones and may include additional areas to account for uncertainties in the delineation of the capture zones.

(O2010-017, Amended, 12/21/2010; O2000-004, Amended, 07/18/2000; O99-001, Amended, 04/20/1999; O97-028, Added, 04/21/1998)

**16.26.030 Methodology used.**

A computer software program called QuickFlow™ was used in delineating wellhead protection areas (WHPAs), depicted on the documents available for inspection in the city’s community development department, for drinking water supply wells of the city of Tumwater (city of Tumwater wellhead protection plan, 1997; letter report to the city of Tumwater, February 3, 1998). Groundwater level data from the United States Geological Survey (1994), water levels of lakes and streams, as well as aquifer data contained in technical reports were used to calibrate the model.

One-, five- and ten-year capture zones were modeled and delineated using the city’s 1992 annual production plus five percent to account for growth, which is approximately equivalent to 1997 annual consumption. Average annualized pumping rates of wells were prorated according to actual well capacity in 1994. Modeling delineated four discrete ten-year capture zones: the Palermo Well Field; the Port Wells; the Bush Middle School Wells; and the Trails End Well.

Six-month capture zones were also delineated, using the same approach described above, but with different pumping rates. Projected annual demand for the year 2010 (city of Tumwater, comprehensive water system plan) was used, and the loss of one of the major well fields was assumed. Pumping rates for remaining wells were calculated based on peak six-month production rates. Pumping rates of wells were prorated according to their 1997 capacity.

Water level data were collected between September 1995 and March 1996 to verify groundwater flow directions. The modeled capture zones for the Port of Olympia (Port) and Bush Middle School Wells were consistent with the new water level data. However, the modeled capture zones delineated for the Trails End and Palermo Wells required adjustment to be consistent with the new data. The modeled capture zones of the Trails End and Palermo Wells were rotated around the pumping centers and adjusted to orient them with groundwater flow directions indicated by the new data.
The capture zones were delineated using data that have some uncertainty and/or seasonal variability, and therefore they only approximate the actual capture zones. To account for potential differences between actual and modeled capture zones, wellhead protection areas larger than the modeled capture zones are described in documents available for inspection in the city’s community development department to provide an acceptable margin of protection. These safety margins were delineated by rotating the ten-year capture zones ten degrees in each direction. The points of rotation for the respective ten-year capture zones were selected as: the center of the Palermo Well Field; Well 11 for the Port Wells; the center of the Bush Middle School Wells; and the Trails End Well. The rotation did not include rotating the six month capture zones because the protective assumptions of those zones precluded the need for expansion to account for modeling uncertainty.

The resulting ten-year wellhead protection areas were divided into one-, five-, and ten-year zones by lines that are tangential to the most up-gradient reach of the respective capture zones, and perpendicular to the edge of the 10-year WHPA. The six-month WHPA is defined by the boundaries of the six-month modeled capture zone.

(O2011-002, Amended, 03/01/2011; O97-028, Added, 04/21/1998)


New development, and expansion or enlargement of existing facilities or uses, of the type described below are prohibited within the designated wellhead protection areas as described in documents available for inspection in the city’s community development department (which includes an overview map, a section map and a document identifying survey points on the wellhead protection area boundaries). Provided however; (1) expansion or enlargement of any facilities associated with the below described land uses which in no way increases the risk of groundwater contamination shall not be prohibited by this section (example: development or expansion of retail food service in conjunction with an existing gas station or construction or expansion of an office facility used in conjunction with an existing automobile wrecking yard); (2) development that is required by other federal, state or local government regulations to protect groundwater shall not be prohibited by this section; and (3) properly permitted and operating on-site septic systems shall not be prohibited.

Where the land uses prohibited in this section are listed as permitted, accessory or conditional uses in TMC Title 18 – Zoning, this section shall control and the uses shall be prohibited.

An existing use or proposed use is deemed to be within the applicable wellhead protection area if any portion of the facility (whether existing or proposed) touches or extends into the applicable wellhead protection area. The mere encroachment of the wellhead protection area on a land tract upon which such facility is located or proposed to be located shall not prohibit otherwise authorized development on the portion of the tract outside the wellhead protection area.

A. The following uses are prohibited within the designated six-month and one-year wellhead protection areas, as described in documents available for inspection in the city’s community development department:

1. Land spreading disposal facilities (as defined by Chapter 173-304 WAC – disposal above agronomic rates);
2. Agricultural operations including stockyards and feedlots involving the raising or keeping of farm animals;
3. Gas stations, petroleum products refinement, reprocessing, and storage (except underground storage of heating oil or agricultural fueling in quantities less than one thousand one hundred gallons for consumptive use on the parcel where stored, and aboveground storage for emergency utility purposes), and liquid petroleum products pipelines (SIC Codes 517, 554, 598 and 461);
4. Automobile wrecking yards;
5. Wood waste landfills (as defined by WAC 173-304-100); and
6. Dry cleaners, excluding drop-off only facilities (SIC Code 721).

B. The following uses are prohibited within the designated six-month, one-, five- and ten-year wellhead protection areas as depicted on the wellhead protection map available for inspection in the city’s community development department:

1. Landfills (municipal sanitary solid waste and hazardous waste);
2. Hazardous waste transfer, storage and disposal facilities;
3. Wood and wood products preserving (SIC Code 2491); and

(O2011-002, Amended, 03/01/2011; O2002-023, Amended, 12/03/2002; O2000-004, Amended, 07/18/2000; O97-028, Added, 04/21/1998)

16.26.050 New and expanding uses involving hazardous materials requiring utilization of all known, available and reasonable technologies.

For new development, and expansion or enlargement of existing facilities or uses, of the type described in subsections A through C of this section which are within the designated six-month, and one-, five- and ten-year wellhead protection areas (other than those described in TMC 16.26.040), and which use, store, handle or dispose of hazardous materials above the minimum quantities listed below at any time, the applicant shall submit documentation which demonstrates that all known available and reasonable technologies (AKART) will be used to prevent impact to the groundwater. The community development director shall review this documentation to determine whether the proposal shall be approved, denied, or approved with conditions, to ensure adequate protection of groundwater. In the case of expansion or enlargement of existing facilities, the requirement to demonstrate that AKART will be used applies only to the expanded or enlarged portion of the facility, and does not apply to the previously existing facility.

An existing use or proposed use is deemed to be within the applicable wellhead protection area if any portion of the facility (whether existing or proposed) touches or extends into the applicable wellhead protection area. The mere encroachment of the wellhead protection area on a land tract upon which such facility is located or proposed to be located shall not prohibit otherwise authorized development on the portion of the tract outside the wellhead protection area.

A. Types of chemical substances regulated in Table 8001.15-a,b,c,d of the International Fire Code, and as subsequently amended. Minimum cumulative quantity: one hundred sixty pounds (or the equivalent of twenty gallons).

B. Facilities or uses using cleaning substances for janitorial use or retail sale in the same packaging and concentrations as products packaged for use by the general public. Chlorinated solvents and nonchlorinated 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 A of this section. Minimum cumulative quantity: eight hundred pounds (or the equivalent of one hundred gallons), not to exceed fifty-five gallons for any single package.

C. Businesses that use, store, handle or dispose of chemicals listed in WAC 173-303-9903 as “P” chemicals. Minimum quantity: none. Each application that includes a “P” chemical will be reviewed by the community development director to determine if the applicant shall be required to submit documentation which demonstrates that AKART will be used to prevent impact to the groundwater.

(O2011-002, Amended, 03/01/2011; O2000-004, Amended, 07/18/2000; O97-028, Added, 04/21/1998)


The following shall apply to existing uses located within the designated wellhead protection areas as described in documents available for inspection in the city’s community development department (which includes an overview map, a section map and a document identifying survey points on the wellhead protection area boundaries).

A. For any existing use identified by the pollution source inventory in an area within an approved wellhead protection plan, within the one-, five-, and ten-year time of travel zones which uses, stores, handles or disposes of hazardous materials above the minimum quantity thresholds listed in TMC 16.26.050(A) through (C), the owner, upon request of the city’s water resources program manager, shall submit a pollution prevention plan that will ensure adequate protection of the source water supply. The program manager, in consultation with the water purveyor in which the use
is located, shall review this plan to determine whether the plan shall be approved, or approved with conditions to ensure adequate protection of the source water supply.

Notwithstanding the minimum thresholds listed in TMC 16.26.050(A) through (C), the city’s water resources program manager, at his/her discretion, for good cause and with reasonable expectation of risk to ground water, may require pollution prevention plans and MPCs (methods of prevention and control) on any use proposed within the one-, five-, and ten-year time of travel zones.

B. For any existing agricultural use located within the designated one-, five-, and ten-year time of travel zones, the owner, upon the request of the city’s water resources program manager, at his/her discretion, for good cause and with reasonable expectation of risk to ground water, and with consultation with the Thurston Conservation District, shall develop and implement a farm conservation plan in conformance with the U.S. Natural Resources Conservation Service Field Office Technical Guide and obtain approval of the Thurston Conservation District Board of Supervisors. For purposes of this section, only those activities in an approved farm plan related to ground water protection must be implemented. However, nothing in this section relieves an agricultural operation from meeting the requirements of other jurisdictions.

(O2011-002, Amended, 03/01/2011; O2000-004, Added, 07/18/2000)


For an existing nonconforming use which would be prohibited as a new use in a wellhead protection area, as set forth in TMC 16.26.040, such use shall be deemed abandoned if it has been discontinued for a period of six months or more, and may not be resumed.

(O2002-023, Added, 12/03/2002)


A. Prohibited uses located within the city’s boundaries as of the date the ordinance codified in this chapter becomes effective, and as identified in TMC 16.26.040(A), shall not be allowed in currently identified wellhead protection areas after December 31, 2015. Where land uses prohibited under this section are listed as permitted, accessory, or conditional uses in TMC Title 18 – Zoning, this section shall control and the uses shall be prohibited.

B. Once a prohibited use ceases and is removed from a wellhead protection area under this section, resuming the use is prohibited, regardless of the period of nonuse following cessation.

C. Closure of a facility, which is the location of a prohibited use under this section, shall be conducted in conformance with all applicable federal, state, and local laws and regulations, and in conformance with the closure requirements of the city’s water resources program.

(O2003-005, Added, 12/02/2003)


The wellhead protection areas established for any municipal well shall only regulate development pursuant to TMC 16.26.040 and 16.26.050 after water production has been implemented. In addition thereto, at such time as any municipal well is abandoned for groundwater production, the otherwise applicable regulation shall no longer regulate development.

(O97-028, Added, 04/21/1998)

16.26.070 Amendment to wellhead protection map.

It is anticipated that subsequent to the effective date of the ordinance codified in this chapter, new municipal wells will be installed, existing wells may be redeveloped, or new information may become available that may result in the need to amend the wellhead protection map from time to time.

A. When a determination has been made to proceed with the establishment of a new municipal water supply production well or to increase the pumping capacity of an existing production well, the public works director shall notify the community development director of the need to amend the city’s wellhead protection area map to take into account the establishment of a new well or wells, or the redevelopment of an existing well or wells.
B. When sufficient new information is made available through citizens’ or other jurisdictions’ studies, or from other sources, to warrant a reevaluation of the wellhead protection area map, and at periodic intervals, but not less frequently than required by law, then the public works director shall notify the community development director of the need for possible amendments to the wellhead protection area map.

C. Prior to the adoption of such amendments, notice of a public hearing regarding such proposed amendments shall be given by publication and by mail to the property owner(s) of record within the proposed new wellhead protection areas.

D. In the event the wellhead protection area extends into the jurisdiction of Thurston County or Olympia, said affected jurisdiction shall be notified and requested to amend their wellhead protection regulations as appropriate prior to the adoption of such amendments, including timely notification to affected property owners.

(02011-002, Amended, 03/01/2011; O2000-004, Amended, 07/18/2000; O97-028, Added, 04/21/1998)


Any person believed to be aggrieved by the application of the provisions of this chapter may appeal the matter to the Tumwater hearing examiner. Such appeals are governed by TMC Chapter 2.58. Appeals challenging wellhead protection area determinations in conjunction with the establishment of wellhead protection areas must be supported by technical evidence provided through competent and credible expert testimony using the methodology set forth in TMC 16.26.030 or an equivalent methodology deemed equally protective by the hearing examiner. The hearing examiner shall give substantial weight to the technical reports and information used by the city in establishing the particular wellhead protection area alleged to be improper.

(O97-028, Added, 04/21/1998)


A. Violation of the provisions of this chapter or failure to comply with any of its requirements shall constitute a misdemeanor. Each day such violation continues shall be considered a separate, distinct offense.

B. Any person who commits, participates in, assists or maintains such violation may be found guilty of a separate offense.

C. In addition, any violation of the provisions of this chapter is declared to be a public nuisance and may be abated through proceedings for injunctive or similar relief in superior court or other court of competent jurisdiction.

(O2011-007, Amended, 07/19/2011; O97-028, Added, 04/21/1998)
Chapter 16.28

WETLAND PROTECTION STANDARDS

Sections:

16.28.010 Short title.
16.28.020 Intent.
16.28.030 Definitions.
16.28.040 Abrogation and greater restrictions.
16.28.050 Interpretation.
16.28.060 Applicability.
16.28.070 Maps and inventory.
16.28.080 Determination of regulatory wetland boundary.
16.28.090 Wetlands rating system.
16.28.095 Small wetland standards.
16.28.100 Regulated activities.
16.28.110 Allowed activities.
16.28.115 Exceptions – Public agency and utility.
16.28.120 Permit requirements, compliance.
16.28.130 Wetland permits, extensions.
16.28.140 Permit applications, requirements.
16.28.150 Permit processing.
16.28.160 Standards for permit decisions.
16.28.170 Wetland buffers.
16.28.180 Avoiding wetland impacts.
16.28.190 Reasonable use exception.
16.28.210 Acting on the application.
16.28.220 Compensating for wetlands impacts.
16.28.230 Mitigation plans.
16.28.240 Appeals.
16.28.250 Modification of wetland permits.
16.28.260 Resubmittal of denied permit applications.
16.28.270 Temporary emergency permit.
16.28.280 Enforcement.
16.28.290 Existing legal nonconforming structures, uses, and activities.
16.28.300 Judicial review.
16.28.310 Amendments.
16.28.320 Severability.
16.28.330 Nonregulatory incentive program.

16.28.010 Short title.

This chapter shall be known and may be cited as the “wetland protection standards ordinance” of the city of Tumwater.
(1278, Added, 08/20/1991)

16.28.020 Intent.

It is the declared policy of the city of Tumwater to require site planning to avoid or minimize damage to wetlands wherever possible; to require that activities not dependent upon a wetland location be located at upland sites; and to achieve no net loss of wetlands by requiring restoration or enhancement of degraded wetlands or creation of new wetlands to offset losses that are unavoidable.
(1278, Added, 08/20/1991)
16.28.030 Definitions.

For the purposes of this chapter, the following definitions shall apply:

A. “Applicant” means a person who files an application for any permit subject to this chapter and who is either the owner of the land on which that proposed activity would be located, a contract vendee, a lessee of the land, the person who would actually control and direct the proposed activity, or the authorized agent of such a person.

B. “Best available science” means current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through 365-195-925. Sources of best available science are included in “Citations of Recommended Sources of Best Available Science for Designation and Protecting Critical Areas” published by the State Office of Community, Trade and Economic Development, as written or hereafter amended.

C. “Best management practices” means conservation practices or systems of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment; and
2. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of wetlands.

D. “Bog” means a wetland that is dominated by organic soils, low nutrients and low pH (between 3.5 and 5.0). Plants growing in these sensitive wetlands are specifically adapted to such conditions and are not commonly found elsewhere. Bogs provide habitat for unique species of plants and animals.

E. “Compensation project” means actions necessary to replace project-induced wetland and/or wetland buffer losses, including land acquisition, planning, engineering, construction, monitoring and contingency actions.

F. “Compensatory mitigation” means replacing project-induced wetland losses or impacts, and includes, but is not limited to, the following:

1. “Restoration” means actions performed to reestablish wetland functional characteristics and processes which have been lost by alterations, activities, or catastrophic events within an area which no longer meets the definition of a wetland.
2. “Creation” means actions performed to intentionally establish a wetland at a site where it did not formerly exist.
3. “Enhancement” means actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.
4. “Preservation” means actions taken to ensure the permanent protection of existing wetlands.

G. “Buildable area” means an area outside of wetlands and wetland buffers.


I. “Emergent wetland” means a regulated wetland with at least thirty percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

J. “Essential habitat” means habitat necessary for the survival of federally listed threatened, endangered and sensitive species and state listed priority species.

K. “Exotic” means any species of plants or animals that are foreign to the planning area.

L. “Existing and ongoing agriculture” includes those activities conducted on lands defined in RCW 84.34.020(2), and those activities involved in the production of crops or livestock. Activities which bring an area into agricultural use are not part of an ongoing operation. An operation ceases to be ongoing when the area on which it is conducted is converted to a nonagricultural use or has lain idle for more than five years.

M. “Extraordinary hardship” means strict application of this chapter and/or programs adopted to implement this chapter by the city when these actions would prevent all reasonable economic use of the parcel.

N. “Forested wetland” means a regulated wetland with at least twenty percent of the surface area covered by woody vegetation greater than twenty feet in height that is at least partially rooted within the wetland.
O. “Functions,” “beneficial functions,” or “functions and values” means the beneficial roles served by wetlands including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, historical and archaeological and aesthetic value protection, and recreation. These beneficial roles are not listed in order of priority.

P. “High-intensity land use” includes land uses which are associated with high levels of human disturbance or substantial wetland habitat impacts including, but not limited to: commercial, industrial, institutional, residential densities of one or more units per acre, new agricultural uses (high-intensity processing such as dairies, nurseries and green houses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), high-intensity recreation (golf courses, ball fields) and hobby farms.

Q. “Hydric soil” means a soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper stratum. The presence of hydric soil shall be determined following the methods described in the Washington State Wetland Identification Manual (Ecology Publication No. 94-96) as currently adopted and hereafter amended for the delineation of wetlands that is adopted in accordance with applicable state law.

R. “Hydrophytic vegetation” means macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the Washington State Wetland Identification Manual (Ecology Publication No. 94-96) as currently adopted and hereafter amended.

S. “In-kind compensation” means to replace wetlands with substitute wetlands whose characteristics closely approximate those destroyed or degraded by a regulated activity. It does not mean replacement within the same wetlands rating category.

T. “Isolated wetlands” means those regulated wetlands which:
1. Are outside of and not contiguous to any one-hundred-year floodplain of a lake, river, or stream; and
2. Have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

U. “Low-intensity land use” includes land uses which are associated with low levels of human disturbance or low wetland habitat impacts, including, but not limited to, passive recreation, open space, or forest management land uses.

V. “Mitigation” includes avoiding, minimizing or compensating for adverse wetland impacts. Mitigation, in the following order of preference, is defined as:
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 to the conditions existing at the time of the initiation of the project;
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 the compensation project and taking appropriate corrective measures. Mitigation for individual actions may include a combination of the above measures.

W. “Moderate-intensity land use” means land uses which are associated with moderate levels of human disturbance or substantial habitat impacts including, but not limited to, not more than one residential dwelling unit per acre, moderate-intensity open space (parks), and moderate agricultural uses (orchards, hay fields), and paved trails.

X. “Native vegetation” means plant species which are indigenous to the area in question.

Y. “Off-site compensation” means to replace wetlands away from the site on which a wetland has been impacted by a regulated activity.
Z. “On-site compensation” means to replace wetlands at or adjacent to the site on which a wetland has been impacted by a regulated activity.

AA. “Out-of-kind compensation” means to replace wetlands with substitute wetlands whose characteristics do not closely approximate those destroyed or degraded by a regulated activity. It does not refer to replacement out of the wetland rating category.

BB. “Practicable alternative” means an alternative that is available and capable of being carried out after taking into consideration costs, existing technology, and logistics in light of overall project purposes, and having less impacts to regulated wetlands.

CC. “Priority habitats” means a habitat type or elements with unique or significant value to one or more species as classified by the Washington State Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional state, or a specific structural element.

DD. “Priority species” are those species that are of concern due to their population status and their sensitivity to habitat manipulation. Priority species include those which are state-listed endangered, threatened and sensitive species.

EE. “Regulated wetlands” means those areas that are inundated or saturated by surface 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. Regulated wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands created as mitigation and wetland modified for approved land use activities shall be considered as regulated wetlands. All category I wetlands shall be considered regulated wetlands. Regulated 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. The applicant shall bear the burden of proving that the site was not previously a wetland. For identifying and delineating a regulated wetland, the city shall consider the Washington State Wetland Identification Manual (Ecology Publication No. 94-96) as currently adopted and hereafter amended.

FF. “Regulated activities” means any of the following activities which are directly undertaken or originate in a regulated wetland or its buffer:
1. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
2. The dumping, discharging, or filling with any material;
3. The draining, flooding, or disturbing of the water level or water table;
4. The driving of pilings;
5. The placing of obstructions;
6. The construction, reconstruction, demolition, or expansion of any structure;
7. The destruction or alteration of wetlands vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland, provided that these activities are not part of a forest practice governed under Chapter 76.09 RCW and its rules; or
8. Activities that result in a significant change of water temperature, a significant change of physical or chemical characteristics of wetlands water sources, including quantity, or the introduction of pollutants.

GG. “Repair or maintenance” means an activity that restores the character, scope, size and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter additional regulated wetlands are not included in this definition.

HH. “Scrub-shrub wetland” means a regulated wetland with at least thirty percent of its surface area covered by woody vegetation less than twenty feet in height as the uppermost strata.

II. “Serviceable” means presently usable.
JJ. “Unavoidable and necessary impacts” are impacts to regulated wetlands that remain after a person proposing to alter regulated wetlands has demonstrated that no practicable alternative exists for the proposed project.

KK. “Water-dependent” means requiring the use of surface water that would be essential to fulfill the purpose of the proposed project.

LL. “Wetlands” means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation 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 conversion of wetlands. Washington State Wetland Identification Manual (Ecology Publication No. 94-96) as currently adopted and hereafter amended shall be used for identifying and delineating a wetland.

MM. “Wetland buffers” or “wetland buffer zones” is an area that surrounds and mitigates the adverse impacts to the functions and values of a regulated wetland.

NN. “Wetland rating system” is defined in TMC 16.28.090.

OO. “Wetland permit” means any permit issued, conditioned or denied specifically to implement this chapter.

PP. “Wetland edge” means the boundary of a wetland as delineated based on the definitions contained in this chapter.

QQ. “Wetland mosaic” means a patchwork of wetlands that is considered one unit where each patch of wetland is less than one acre; each patch is less than one hundred feet on average; and the areas delineated as vegetated wetland are more than fifty percent of the total area of the wetlands and uplands together.

(16.28.040 Abrogation and greater restrictions.

It is not intended that this chapter repeal, abrogate, or impair any existing regulations, easements, covenants, or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

(1278, Added, 08/20/1991)

16.28.050 Interpretation.

The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter.

(1278, Added, 08/20/1991)

16.28.060 Applicability.

A. When any provision of any other chapter of the city of Tumwater conflicts with this chapter, that which provides more protection of wetlands and wetland buffers shall apply unless specifically provided otherwise in this chapter.

B. The city is authorized to adopt written procedures for the purpose of carrying out the provisions of this chapter. The city of Tumwater shall not grant any approval or permission to conduct a regulated activity in a wetland or wetland buffer prior to fulfilling the requirements of this chapter. Such permits and approvals include but are not limited to the following:

Building permit; conditional use permit; franchise right-of-way construction permit; binding site plan; grading; land clearing permit; planned unit development; right-of-way permit; shoreline substantial development permit; shoreline variance; shoreline conditional use permit; shoreline
environmental redesignation; variance; zoning code amendment; rezone; land division; or any subsequently adopted permit or required approval not expressly exempted by this chapter.
(1278, Added, 08/20/1991)

16.28.070 Maps and inventory.
This chapter shall apply to all lots or parcels on which wetlands and/or wetland buffers are located within the city of Tumwater. The approximate location and extent of wetlands is displayed on the Thurston County Wetlands Inventory. The Thurston County Wetlands Inventory is to be used as a guide to the general location or extent of wetlands. Wetlands not shown on the Thurston County Wetlands Inventory are presumed to exist in the city of Tumwater and are protected under all the provisions of this chapter. In the event that any of the wetland designations shown on the maps conflict with the criteria set forth in this chapter, the criteria shall control.
(Amended during 2011 reformat; O96-008, Amended, 11/05/1996; 1278, Added, 08/20/1991)

16.28.080 Determination of regulatory wetland boundary.
A. The exact location of the wetland boundary shall be determined by the applicant through the performance of a field investigation applying the wetland definition provided in TMC 16.28.030. A qualified wetlands professional shall perform wetland delineations using the Washington State Wetland Identification Manual (Ecology Publication No. 94-96) as currently adopted and hereafter amended. The applicant is required under TMC 16.28.140(C) to show the location of the wetland boundary on a scaled drawing as a part of the permit application.
B. The city, when requested by the applicant, may waive the delineation of boundary requirement for the applicant and, in lieu of delineation by the applicant, perform the delineation. The city shall consult with qualified professional scientists and technical experts or other experts as needed to perform the delineation. The applicant may be required to reimburse the city for costs incurred for this service including administration costs.
C. Where the city performs a wetland delineation at the request of the applicant, such delineation shall be considered a final determination.
D. Where the applicant has provided a delineation of the wetland boundary, the city shall verify the accuracy of, and may render adjustments to, the boundary delineation. In the event the adjusted boundary delineation is contested by the applicant, the city shall, at the applicant’s expense, obtain expert services to render a final delineation.
(O2005-023, Amended, 09/06/2005; O2004-019, Amended, 05/17/2005; O96-008, Amended, 11/05/1996; 1278, Added, 08/20/1991)

16.28.090 Wetlands rating system.
The following Washington State rating system for Western Washington is hereby adopted as the rating system for the city of Tumwater. Wetlands buffer widths, replacement ratios and avoidance criteria shall be based on these rating systems.
A. Washington State Four-Tier Wetlands Rating System.
1. Category I Criteria.
   a. Relatively undisturbed estuarine wetlands larger than one acre.
   b. Wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as high-quality wetlands.
   c. Bogs larger than one-half acre.
   d. Mature and old growth forested wetlands larger than one acre.
   e. Wetlands in coastal lagoons.
   f. Wetlands that perform many functions well (wetland scoring seventy points or more out of one hundred) on the questions related to functions.
Category I wetlands are those that:
   a. Represent a unique or rare wetland type; or
   b. Are more sensitive to disturbance than most wetlands; or
c. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
d. Provide a high level of functions.

2. Category II Criteria.
a. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;
b. A wetland identified by the state Department of Natural Resources as containing “sensitive” plant species;
c. A bog between one-fourth and one-half acre in size;
d. Wetlands with a moderately high level of functions (wetlands scoring between fifty-one and sixty-nine points out of one hundred) on the questions related to functions.

a. Wetland with a moderate level of functions (scores between thirty and fifty points).

4. Category IV Criteria.
a. Category IV wetlands have the lowest levels of functions (scores less than thirty points) and are often heavily disturbed.

B. Wetland rating categories shall be applied as the regulated wetland exists on the date of adoption of the rating system by the city; as the regulated wetland may naturally change in accordance with permitted activities. Wetland rating categories shall not be altered to recognize illegal modifications.

(O2004-019, Amended, 05/17/2005; 1278, Added, 08/20/1991)

16.28.095 Small wetland standards.
Small wetlands of four thousand square feet or less may or may not provide wetland functions that require protection. The following standards apply to regulating wetlands of four thousand square feet or less:

A. Wetlands of less than one thousand square feet are exempt when the applicant can show the following:
1. The wetland is not associated with a riparian corridor;
2. The wetland is not part of a wetland mosaic;
3. The wetland does not contain habitat identified as essential for local populations of priority species identified by the Washington State Department of Fish and Wildlife; and

B. For wetlands between one thousand and four thousand square feet, the wetland should be rated to establish the category and evaluate functions. Type III and IV wetlands may be disturbed or eliminated subject to all of the following criteria:
1. The wetland is not associated with a riparian corridor;
2. The wetland is not part of a wetland mosaic;
3. The wetland does not score twenty points or more in the wetland rating score;
4. The wetland does not contain habitat identified as essential for local populations of priority species identified by the Washington State Department of Fish and Wildlife; and
5. Impacts allowed under this provision shall be fully mitigated as required in TMC 16.28.220.

(O2004-019, Added, 05/17/2005)

16.28.100 Regulated activities.
A permit shall be obtained from the city prior to undertaking the following activities in a regulated wetland or its buffer unless authorized by TMC 16.28.110:

A. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
B. The dumping, discharging, or filling with any material;
C. The draining, flooding, or disturbing of the water level or water table;
D. The driving of pilings;
E. The placing of obstructions;
F. The construction, reconstruction, demolition, or expansion of any structure;
G. The destruction or alteration of wetlands vegetation through clearing, harvesting, or intentional burning, that would alter the character of a regulated wetland, provided that these activities are not part of a forest practice governed under Chapter 76.09 RCW and its rules; or
H. Activities that result in a significant change of water temperature, a significant change of physical or chemical characteristics of wetlands water sources, including quantity, or the introduction of pollutants.
(1278, Added, 08/20/1991)

16.28.110 Allowed activities.
The following uses which require no specific permit shall be allowed within a wetland or wetland buffer to the extent that they are not prohibited by any other chapter or law and provided they are conducted using best management practices, except where such activities result in the conversion of a regulated wetland or wetland buffer to a use to which it was not previously subjected and provided further that forest practices and conversions shall be governed by Chapter 76.09 RCW and its rules:
A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland;
B. Outdoor recreational activities, including fishing, birdwatching, hiking, boating, horseback riding, swimming, canoeing, and bicycling;
C. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources;
D. The maintenance of drainage ditches to original specifications;
E. Education, scientific research, and use of nature trails;
F. Navigation aids and boundary markers;
G. Minimal soil disturbance for site investigative work necessary for land use application submittals such as surveys, soil logs, percolation tests and other related activities. In every case, wetland impacts shall be minimized and disturbed areas shall be immediately restored; and
H. The following uses which require no specific permit under this chapter can occur within wetlands and/or wetland buffers after review by the community development department; provided, that wetland impacts are minimized and that disturbed areas are immediately restored, or where no feasible alternative location exists:
   1. Normal maintenance, repair, or operation of existing serviceable structures, utilities, facilities, or improved areas. Maintenance and repair does not include any modification that changes the character, scope, or size of the original structure, facility, or improved area and does not include the construction of a maintenance road; and
   2. Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification of, addition to or replacement; provided, that restoration of the structures substantially damaged by fire, flood, or act of nature must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion; and
   3. Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increase stormwater; subject to the following:
      a. Retention and replanting of native vegetation shall occur wherever possible along the right-of-way improvement and resulting disturbance.
   4. Operation, Maintenance or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, 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. Operation and maintenance includes vegetation management performed in accordance with best management practices that is part of ongoing maintenance of structures, infrastructure, or utilities; provided, that such management actions are part of a regular ongoing maintenance, do not expand further into the critical area, are not the result of an expansion of the structure or utility; and do not directly impact endangered species.

5. Minor Utility Projects. Utility projects which have minor or short duration impacts to critical areas, as determined by the community development director in accordance with the criteria below, and which do not significantly impact the functions or values of a critical area(s), provided that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:
   a. There is no practical alternative to the proposed activity with less impact on critical areas;
   b. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility;
   c. The activity involves disturbance of no more than seventy-five square feet.

6. Emergencies. Those activities necessary to prevent an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use all reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Within thirty days, the community development director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the community development director determines that the action taken was beyond the scope of an allowed emergency action, then inspection and remedial action would be required. If remedial action is required and not completed, then enforcement provisions would apply.

(O2011-002, Amended, 03/01/2011; O2004-019, Amended, 05/17/2005; 1278, Added, 08/20/1991)

16.28.115 Exceptions – Public agency and utility.
   A. If the application of this title would prohibit a development proposal by a public agency or public utility, or a private entity installing public utilities that are in compliance with the comprehensive utility plans of Tumwater and are approved by Tumwater, the agency or utility may apply for an exception pursuant to this section.
   B. Exception Request and Review Process. 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 (Chapter 43.21C RCW). The community development director 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 public agency and utility exception review criteria in subsection D of this section.
   C. Hearing Examiner Review. The hearing examiner shall review the application and the community development director’s recommendation, and conduct a public hearing. 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 subsection D of this section.
   D. Public Agency and Utility Review Criteria. 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 critical areas;
      2. The application of this title 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 other applicable regulations and standards.

E. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

(O2011-002, Amended, 03/01/2011; O2006-026, Amended, 04/03/2007; O2004-019, Added, 05/17/2005)

16.28.120 Permit requirements, compliance.

Except as specifically provided in TMC 16.28.110, no regulated activity shall occur or be permitted to occur within a regulated wetland or wetland buffer without a written permit from the city of Tumwater. Any alteration approved by such written permit shall comply fully with the requirements and purposes of this chapter, other applicable regulations, and any terms or conditions of said permit. All activities that are not exempt or permitted shall be prohibited.

(1278, Added, 08/20/1991)

16.28.130 Wetland permits, extensions.

A. Application for a wetland permit to conduct any regulated activity not specifically authorized by TMC 16.28.110 within a wetland or wetland buffer shall be made to the city on forms furnished by that office. Permits shall normally be valid for a period of three years from the date of issue and shall expire at the end of that time unless a longer or shorter period is specified by the city upon issuance of the permit.

B. An extension of an original permit may be granted upon written request to the city by the original permit holder or the successor in title. Prior to the granting of an extension, the city shall require updated studies and/or additional hearings if, in its judgment, the original intent of the permit is 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.

(1278, Added, 08/20/1991)

16.28.140 Permit applications, requirements.

A. Request for Determination of Applicability. Any person seeking to determine whether a proposed activity or an area is subject to this chapter may request in writing a determination from the city. Such a request for determination shall contain plans, data, and other information as may be specified by the city.

B. Prepermit Consultations. Any person intending to apply for a wetland permit is strongly encouraged, but not required, to meet with the city during the earliest possible stages of project planning in order to discuss wetland impact avoidance and minimization, and compensation before large commitments have been made to a particular project design.

C. Information Requirements. Unless the city waives one or more of the following information requirements, applications for a wetland permit under this chapter shall include:

1. A description and maps overlaid on an aerial photograph at a scale no smaller than one inch equals four hundred feet showing the entire parcel of land owned by the applicant and the exact boundary pursuant to TMC 16.28.080 of the wetland on the parcel;

2. A description of the vegetative cover of the wetland and adjacent area including dominant species;

3. A site plan for the proposed activity overlaid on an aerial photograph at a scale no smaller than one inch equals four hundred feet showing the location, dimensions of all existing and proposed structures, roads, sewage treatment facilities, and installations within the wetland and its buffer on the subject parcel;

4. The exact sites and specifications for all regulated activities;
5. Existing ground contours of the site within the wetland and its buffer at contour intervals of no greater than two feet;
6. Plan view and typical cross-sectional views of that portion of the wetland located on the site and its buffer drawn to scale;
7. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing wetlands;
8. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions;
9. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs;
10. Specific means to mitigate any potential adverse environmental impacts of the applicant’s proposal. The city may require additional information, including, but not limited to, an assessment of wetland functional characteristics, including a discussion of the methodology used; documentation of the ecological, aesthetic, economic, or other values of the wetland; a study of flood erosion, or other hazards at the site and the effect of any protective measures that might be taken to reduce such hazards; and any other information deemed necessary to verify compliance with the provisions of this chapter or to evaluate the proposed use in terms of the purposes of this chapter. The city shall maintain and make available to the public, all information applicable in their possession to any wetland and its buffer located within the city.

D. Filing Fees. At the time of an application or request for letter of delineation, the applicant shall pay a filing fee as provided for by resolution.

E. Notification.

1. Upon receipt of the completed permit application, the city shall notify the individuals and agencies, including federal and state agencies, having jurisdiction over or an interest in the matter to provide such individuals and agencies an opportunity to comment. This will include Department of Ecology’s wetlands section on all class I wetland permits.
2. The city shall establish a mailing list of all interested persons and agencies who wish to be notified of such applications.

F. Notice on Title.

1. The owner of any property which includes a field verified wetland or wetland buffer pursuant to TMC 16.28.080 on which a development proposal is submitted shall file for record with the Thurston County auditor a notice approved by the city in a form substantially as set forth in subsection G of this section. Such notice shall provide notice in the public record of the presence of a wetland or wetland buffer, the application of this chapter to the property, and that limitations on actions in or affecting such wetlands and their buffers may exist.
2. The applicant shall submit proof that the notice has been filed for record before the city of Tumwater shall approve any development proposal for such site.

G. Form of Notice.

WETLAND AND/OR WETLAND BUFFER NOTICE

Legal Description:

Parcel No.:

Present Owner:

NOTICE: This property contains wetlands or their buffers as defined by City of Tumwater Ordinance. The property was the subject of a development proposal for (type of permit) application #__________ filed on (date). Restrictions on use or alteration of the wetlands or their buffers may exist due to natural conditions of the property and resulting regulations. Review of such application has provided information on the location of wetlands or
wetland buffers and restrictions on their use through setback areas. A copy of the plan showing such setback areas is attached hereto.

Signature of Owner

STATE OF WASHINGTON )
) ss.
COUNTY OF THURSTON )

On this day personally appeared before me _____________ to me known to be the individual(s) described in and who executed the foregoing instrument, and acknowledged that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this _____ day of ______, 20__. 

Notary Public in and for the State of Washington.

Residing at _____________________.

My commission expires _____________.

(O2004-019, Amended, 05/17/2005; 1278, Added, 08/20/1991)

16.28.150 Permit processing.

A. Consolidation. The city shall, to the extent practicable and feasible, consolidate the processing of wetlands related aspects of other city of Tumwater regulatory programs which affect activities in wetlands, such as subdividing, clearing and grading, floodplain, and environmentally sensitive chapter, etc., with the wetland permit process established herein so as to provide a timely and coordinated permit process.

B. Completeness of Application. After receipt of the permit application, the city shall notify the applicant as to the completeness of the application in accordance with the procedures outlined in TMC Chapter 14.02. An application shall not be deemed complete until and unless all information necessary to evaluate the proposed activity, its impacts, and its compliance with the provisions of the chapter have been provided to the satisfaction of the city. Such determination of completeness shall not be construed as approval or denial of the permit application.

(O96-008, Amended, 11/05/1996; 1278, Added, 08/20/1991)

16.28.160 Standards for permit decisions.

A. A permit shall only be granted if the permit, as conditioned, is consistent with the provisions of this chapter. Additionally, permits shall only be granted if:

1. A proposed action avoids adverse impacts to regulated wetlands or their buffers or takes affirmative and appropriate measures to minimize and compensate for unavoidable impacts;
2. The proposed activity results in no net loss of wetland functions and/or values; or
3. Denial of a permit would cause an extraordinary hardship on the applicant.

B. Wetland permits shall not be effective and no activity thereunder shall be allowed during the time provided to file a permit appeal.

(1278, Added, 08/20/1991)

16.28.170 Wetland buffers.

A. Standard Buffer Zone Widths. Wetland buffer zones shall be required for all regulated activities adjacent to regulated wetlands. Any wetland created, restored or enhanced as compensation for approved wetland alterations shall also include the standard buffer required for the category of
the created, restored, or enhanced wetland. All buffers shall be measured from the wetland boundary as surveyed in the field pursuant to the requirements of TMC 16.28.080. The width of the wetland buffer zone shall be determined according to wetland category, the functions and special characteristics of the wetland, and the proposed land use. Natural heritage wetlands, bogs, and forested wetlands shall have the buffers shown in the table below independent of points scored for habitat in the rating system.

**Table 1: Category I Wetland Buffer Widths**

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use (Apply Most Protective)</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Heritage Wetlands</td>
<td>Low – 125 ft Moderate – 190 ft High – 250 ft</td>
<td>No additional discharges of surface water. No septic systems within 300 ft. Restore degraded parts of buffer.</td>
</tr>
<tr>
<td>Bogs</td>
<td>Low – 125 ft Moderate – 190 ft High – 250 ft</td>
<td>No additional surface discharges. Restore degraded parts of buffer.</td>
</tr>
<tr>
<td>Forested</td>
<td>Buffer size to be based on score for habitat functions or water quality functions.</td>
<td>If forested wetland scores high for habitat, need to maintain connectivity to other natural areas. Restore degraded parts of buffer.</td>
</tr>
<tr>
<td>High level of function for habitat (score for habitat 31 – 36 pts.)</td>
<td>Low – 150 ft Moderate – 225 ft High – 300 ft</td>
<td>Maintain connectivity to other natural areas. Restore degraded parts of buffer.</td>
</tr>
<tr>
<td>High level of function for habitat (score for habitat 30 pts.)</td>
<td>Low – 140 ft Moderate – 215 ft High – 280 ft</td>
<td></td>
</tr>
<tr>
<td>High level of function for habitat (score for habitat 29 pts.)</td>
<td>Low – 130 ft Moderate – 195 ft High – 260 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 28 pts.)</td>
<td>Low – 120 ft Moderate – 180 ft High – 240 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 27 pts.)</td>
<td>Low – 110 ft Moderate – 165 ft High – 220 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 26 pts.)</td>
<td>Low – 100 ft Moderate – 150 ft High – 200 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 25 pts.)</td>
<td>Low – 90 ft Moderate – 135 ft High – 180 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 24 pts.)</td>
<td>Low – 80 ft Moderate – 120 ft High – 160 ft</td>
<td></td>
</tr>
<tr>
<td>Moderate level of function for habitat (score for habitat 23 pts.)</td>
<td>Low – 70 ft Moderate – 105 ft High – 140 ft</td>
<td></td>
</tr>
</tbody>
</table>
### Table 1: Category I Wetland Buffer Widths (Continued)

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use (Apply Most Protective)</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
</table>
| Moderate level of function for habitat (score for habitat 22 pts.) | Low – 60 ft  
Moderate – 90 ft  
High – 120 ft |                                |
| High level of function for water quality improvement (24 – 32 pts.) and low for habitat (less than 21 pts.) | Low – 50 ft  
Moderate – 75 ft  
High – 100 ft | No additional discharges of untreated runoff. |
| Not meeting any of the above criteria. | Low – 50 ft  
Moderate – 75 ft  
High – 100 ft |                                |

### Table 2: Category II Wetland Buffer Widths

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use (Apply Most Protective)</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
</table>
| High level of function for habitat (score for habitat 31 – 36 pts.) | Low – 150 ft  
Moderate – 225 ft  
High – 300 ft | Maintain connectivity to other natural areas. |
| High level of function for habitat (score for habitat 30 pts.) | Low – 140 ft  
Moderate – 215 ft  
High – 280 ft |                                |
| High level of function for habitat (score for habitat 29 pts.) | Low – 130 ft  
Moderate – 195 ft  
High – 260 ft |                                |
| Moderate level of function for habitat (score for habitat 28 pts.) | Low – 120 ft  
Moderate – 180 ft  
High – 240 ft |                                |
| Moderate level of function for habitat (score for habitat 27 pts.) | Low – 110 ft  
Moderate – 165 ft  
High – 220 ft |                                |
| Moderate level of function for habitat (score for habitat 26 pts.) | Low – 100 ft  
Moderate – 150 ft  
High – 200 ft |                                |
| Moderate level of function for habitat (score for habitat 25 pts.) | Low – 90 ft  
Moderate – 135 ft  
High – 180 ft |                                |
| Moderate level of function for habitat (score for habitat 24 pts.) | Low – 80 ft  
Moderate – 120 ft  
High – 160 ft |                                |
| Moderate level of function for habitat (score for habitat 23 pts.) | Low – 70 ft  
Moderate – 105 ft  
High – 140 ft |                                |
| Moderate level of function for habitat (score for habitat 22 pts.) | Low – 60 ft  
Moderate – 90 ft  
High – 120 ft |                                |
Table 2: Category II Wetland Buffer Widths (Continued)

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use (Apply Most Protective)</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level of function for water quality improvement and low for habitat (score for water quality 24 – 32 pts.; habitat less than 21 pts.)</td>
<td>Low – 50 ft Moderate – 75 ft High – 100 ft</td>
<td>No additional discharges of untreated runoff.</td>
</tr>
<tr>
<td>Not meeting above criteria</td>
<td>Low – 50 ft Moderate – 75 ft High – 100 ft</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Category III Wetland Buffer Widths

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate level of function for habitat (score for habitat 20 – 28 pts.)</td>
<td>Low – 75 ft Moderate – 110 ft High – 150 ft</td>
<td></td>
</tr>
<tr>
<td>Not meeting above criteria</td>
<td>Low – 40 ft Moderate – 60 ft High – 80 ft</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Category IV Wetland Buffer Widths

<table>
<thead>
<tr>
<th>Wetland Characteristics</th>
<th>Buffer Widths by Impact of Land Use</th>
<th>Other Measures Recommended for Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score for functions less than 30 pts.</td>
<td>Low – 25 ft Moderate – 40 ft High – 50 ft</td>
<td></td>
</tr>
</tbody>
</table>

B. Increased Wetland Buffers Zone Width.

1. The recommended buffer widths are based on the assumption that the buffer is vegetated with a native plant community appropriate for the region or performs similar functions. If the existing buffer is not vegetated, sparsely vegetated, or vegetated with species that are not native that do perform needed functions, the buffer should either be planted with appropriate species or widened to ensure proper functioning of the buffer.

2. If the buffer for a wetland is based on the score for its ability to improve water quality rather than habitat or other criteria, then the buffer should be increased by fifty percent if the slope is greater than thirty percent.

C. Buffer Width Reduction. The buffer widths recommended for land uses with high-intensity impacts to wetlands can be reduced to those widths recommended for moderate-intensity impacts under the following conditions:

1. For wetlands that score moderate or high for habitat (twenty points or more), the width of the buffer around the wetland can be reduced if both the following criteria are met:

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

   b. Measures to minimize the impacts of different land uses on wetlands, such as the examples summarized in Table 5, are applied.
2. For wetlands that score less than twenty points for habitat, the buffer width can be reduced to that required for moderate land use impacts if measures to minimize impacts of different land uses on wetlands, such as the examples summarized in Table 5, are applied.

Table 5: Measures to Minimize Impacts to Wetlands

<table>
<thead>
<tr>
<th>Examples of Disturbance</th>
<th>Examples of Measures to Minimize Impacts</th>
<th>Activities that Cause the Disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lights</td>
<td>Direct lights away from wetland.</td>
<td>Parking lots, warehouses, manufacturing, residential</td>
</tr>
<tr>
<td>Noise</td>
<td>Locate activity that generates noise away from wetland.</td>
<td>Manufacturing, residential</td>
</tr>
<tr>
<td>Toxic runoff*</td>
<td>Route all new runoff away from wetland. Establish covenants limiting use of pesticides within 150 ft of wetland. Apply integrated pest management.</td>
<td>Parking lots, roads, manufacturing, residential areas, application of agricultural pesticides, landscaping</td>
</tr>
<tr>
<td>Change in water regime</td>
<td>Infiltrate or treat, detain, and disperse new runoff into buffer.</td>
<td>Impermeable surfaces, lawns, tilling</td>
</tr>
<tr>
<td>Pets</td>
<td>Plant dense vegetation around buffer, such as rose, hawthorn, etc.</td>
<td>Residential areas</td>
</tr>
<tr>
<td>Human disturbance</td>
<td>Plant buffer with impenetrable natural vegetation appropriate for region.</td>
<td>Residential areas</td>
</tr>
<tr>
<td>Dust</td>
<td>Utilize best management practices to control dust.</td>
<td>Tilled fields</td>
</tr>
</tbody>
</table>

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

D. Standard Wetland Buffer Width Averaging. Standard wetland buffer zones may be modified by averaging buffer widths if it will improve the protection of wetland functions, or if it is the only way to allow for reasonable use of a parcel. Averaging cannot be used in conjunction with the provisions for reductions in buffer widths. Wetland buffer width averaging shall be allowed only where a qualified wetlands professional demonstrates all of the following:

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; and
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; and
3. The total area contained in the buffer area after averaging is not less than that which would be contained within the standard buffer; and
4. The buffer at its narrowest is never less than three-fourths of the standard width.

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

1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging; and
2. The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated in the critical area report; and
3. The total buffer area after averaging is equal to the area required without averaging; and
4. The buffer at its narrowest point is never less than three-fourths of the standard width.

F. Except as otherwise specified, wetland buffer zones shall be retained in their natural undisturbed condition. Where buffer disturbance has occurred during construction, revegetation with native vegetation may be required.
G. Permitted Uses in a Wetland Buffer Zone. Regulated activities shall not be allowed in a buffer zone except for the following:

1. Activities having minimal adverse impacts on buffers and no adverse impacts on regulated wetlands. These may include low-intensity, passive recreational activities such as pervious trails, nonpermanent wildlife watching blinds, short-term scientific or educational activities, and sports fishing or hunting.

2. With respect to category III and IV wetlands, surface level stormwater management facilities may be allowed in the outer twenty-five percent of the wetland buffer using best management practices; provided, that all of the following determinations are made by the community development director:
   a. No other location is feasible.
   b. The location of such facilities will not degrade the functions or values of the wetland.

3. Stormwater management facilities are not allowed in buffers of category I or II wetlands.

H. Signs and Fencing of Wetlands.

1. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the community development director prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent Signs. As a condition of any permit or authorization issued pursuant to these requirements, the community development director may require the applicant to install permanent signs along the boundary of a wetland or buffer. Permanent signs shall be made of an enamel coated metal face and attached to a metal post, or another untreated material of equal durability. Signs must be posted at an interval of one per lot or every fifty feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the community development director:

   Protected Wetland Area
   Do Not Disturb
   Contact Tumwater Community Development 754-4180
   Regarding Uses and Restrictions

3. Fencing. The community development director shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the community development director shall condition any permit or authorization issued pursuant to these regulations to require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland. The applicant will be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site. (O2011-002, Amended, 03/01/2011; O2004-019, Amended, 05/17/2005; O96-008, Amended, 11/05/1996; 1278, Added, 08/20/1991)

16.28.180 Avoiding wetland impacts.

A. Regulated activities shall not be authorized in a regulated wetland or wetland buffer except where it can be demonstrated that the impact is both unavoidable and necessary or that all reasonable economic uses are denied.

B. With respect to category I wetlands, an applicant must demonstrate that denial of the permit would impose an extraordinary hardship on the part of the applicant brought about by circumstances peculiar to the subject property.

C. With respect to category II and III wetlands, the following provisions shall apply:

1. For water-dependent activities, unavoidable and necessary impacts can be demonstrated where there are no practicable alternatives which would not involve a wetland or which would not

(16.28) 17
have less adverse impact on a wetland, and would not have other significant adverse environmental consequences;

2. Where non-water-dependent activities are proposed, it shall be presumed that adverse impacts are avoidable. This presumption may be rebutted upon a demonstration that:
   a. The basic project purpose cannot reasonably be accomplished utilizing one or more other sites in the general region that would avoid, or result in less, adverse impact on a regulated wetland;
   b. A reduction in the size, scope, configuration, or density of the project as proposed and all alternative designs of the project as proposed that would avoid, or result in less, adverse impact on a regulated wetland or its buffer will not accomplish the basic purpose of the project; and
   c. In cases where the applicant has rejected alternatives to the project as proposed due to constraints such as zoning, deficiencies of infrastructure, or parcel size, the applicant has made reasonable attempt to remove or accommodate such constraints.

D. With respect to category IV wetlands, unavoidable and necessary impacts can be demonstrated where the proposed activity is the only reasonable alternative which will accomplish the applicant’s objectives.

E. If the city determines that alteration of a wetland and/or wetland buffer is necessary and unavoidable, the city shall set forth in writing its findings with respect to each of the items listed in this section.

16.28.190 Reasonable use exception.

A. After it has been determined by the city pursuant to TMC 16.28.180 that losses of wetland and/or wetland buffer are necessary and unavoidable or that all reasonable economic use has been denied, an exception may be applied for pursuant to this section.

B. An application for a reasonable use exception shall be made to the city and shall include a critical area report and mitigation plan if necessary, and any other project related documents, such as permit applications to other agencies, special studies and environmental documents. The application must be submitted with payment of the necessary fee as established in the city’s fee resolution, as written or hereafter amended. The community development director 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 reasonable use exception criteria in subsection D of this section.

C. The hearing examiner shall review the application and conduct a public hearing. The hearing examiner shall approve, approve with conditions, or deny the request based on the proposal’s ability to comply with all the reasonable use exception criteria in subsection D of this section.

D. The criteria for review and approval of reasonable use exceptions are:
   1. The application of this title would deny all reasonable use of the property;
   2. No other reasonable use consistent with existing zoning of the property has less impact on the critical area;
   3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
   4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this title, or its predecessor;
   5. The proposal does not pose an unreasonable threat to public health, safety, or welfare on or off the development proposal site; and
   6. The proposal is consistent with other applicable regulations and standards.

E. If the city determines that alteration of a wetland and/or wetland buffer is necessary and unavoidable, the city shall set forth in writing its findings with respect to each of the items listed in this section.

16.28.210 Acting on the application.

A. Land Division Conditions for Wetland Permits.
   1. Sensitive Area Tracts/Easements. As a condition of any permit issued pursuant to this section, the permit holder shall be required to create a separate sensitive area tract(s)/easement(s)
containing the areas determined to be wetland and/or wetland buffer in field investigations performed pursuant to TMC 16.28.080. Sensitive area tracts/easements are legally created tracts/easements containing wetlands and their buffers that shall remain undeveloped as long as wetland functions and values are present. Loss of wetland functions due to human impacts will result in sensitive area tracts/easements being maintained.

a. Protection of Sensitive Area Tracts/Easements. The city shall require, as a condition of any permit issued pursuant to this section, that the sensitive area tract or tracts created pursuant to this section be protected by one of the following methods:
   i. The permit holder shall convey an irrevocable offer to dedicate to the city of Tumwater or other public or nonprofit entity specified by the city an easement for the protection of native vegetation within a wetland and/or its buffer; or
   ii. The permit holder shall establish and record a permanent and irrevocable deed restriction on the property title of all lots containing a sensitive area tract or tracts created as a condition of this permit. Such deed restriction(s) shall prohibit, as long as wetland function exists, the development, alteration, or disturbance of vegetation within the sensitive area except for purposes of habitat enhancement as part of an enhancement project which has received prior written approval from the city of Tumwater, and any other agency with jurisdiction over such activity.

2. The deed restriction shall also contain the following language:
   a. “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 City of Tumwater.”
   b. Regardless of the legal method of protection chosen by the city, responsibility for maintaining tracts shall be held by a property owner’s association, adjacent lot owners, the permit applicant or designee, or other appropriate entity as approved by the city.
   c. The following note shall appear on the face of all plats, short plats, PUDs, or other approved site plans containing separate sensitive area tracts/easements, and shall be recorded on the title of record for all affected lots:

   NOTE: All lots adjoining separate sensitive areas identified as Native Vegetation Protection Easements or protected by deed restriction are responsible for maintenance and protection. Maintenance includes insuring that no alterations occur within the separate tract and that all vegetation remains undisturbed unless the express written authorization of the City of Tumwater has been received.

The common boundary between a separate sensitive area tract/easement and the adjacent land must be permanently identified. This identification shall include permanent wood or metal signs on treated or metal posts.

Sign locations and size specifications shall be approved by the city. The city shall require permanent fencing of the sensitive area when there is a substantial likelihood of the presence of domestic grazing animals within the development proposal. The city shall also require as a permit condition that such fencing be provided if, subsequent to approval of the development proposal, domestic grazing animals are in fact introduced.

3. Additional Conditions.
   a. The location of the outer extent of the wetland buffer and the areas to be disturbed pursuant to an approved permit shall be marked in the field, and such field marking shall be approved by the city prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.
   b. The city may attach such additional conditions to the granting of a wetland permit as deemed necessary to assure the preservation and protection of affected wetlands and to assure compliance with the purposes and requirements of this chapter.

B. Bonding.

1. Performance Bonds. The city may require the applicant of a development proposal to post a cash performance bond or other security acceptable to the city in an amount and with surety
and conditions sufficient to fulfill the requirements of this section. In addition, the city may secure compliance with other conditions and limitations set forth in the permit. The amount and the conditions of the bond shall be consistent with the purposes of this chapter. In the event of a breach of any condition of any such bond, the city may institute an action in a court of competent jurisdiction upon such bond and prosecute the same to judgment and execution. The city shall release the bond upon determining that:

a. All activities, including any required compensatory mitigation, have been completed in compliance with the terms and conditions of the permit and the requirements of this chapter;

b. Upon the posting by the applicant of a maintenance bond.

Until such written release of the bond, the principal or surety cannot be terminated or canceled.

2. Maintenance Bonds. The city may require the holder of a wetland permit issued pursuant to this chapter to post a cash performance bond or other security acceptable to the city in an amount and with surety and conditions sufficient to guarantee that structures, improvements, and mitigation required by the permit or by this chapter perform satisfactorily for a minimum of two years after they have been completed. The city shall release the maintenance bond upon determining that performance standards established for evaluating the effectiveness and success of the structures, improvements, and/or compensatory mitigation have been satisfactorily met for the required period. For compensation projects, the performance standards shall be those contained in the mitigation plan developed and approved during the permit review process to TMC 16.28.220. The maintenance bond applicable to a compensation project shall not be released until the city determines that performance standards established for evaluating the effect and success of the project have been met.

C. Other Laws and Regulations. No permit granted pursuant to this chapter shall remove an applicant’s obligation to comply in all respects with the applicable provisions of any other federal, state, or local law or regulation, including but not limited to the acquisition of any other required permit or approval.

D. Suspension, Revocation. In addition to other penalties provided for elsewhere, the city may suspend or revoke a permit if it finds that the applicant or permittee has not complied with any or all of the conditions or limitations set forth in the permit, has exceeded the scope of work set forth in the permit, or has failed to undertake the project in the manner set forth in the approved application. (1278, Added, 08/20/1991)

16.28.220 Compensating for wetlands impacts.

A. As a condition of any permit allowing alteration of wetland and/or wetland buffers, or as an enforcement action pursuant to TMC 16.28.280, the city shall require that the applicant demonstrate that wetland impact avoidance is not possible and engage in the restoration, creation or enhancement of wetlands and their buffers in order to offset the impacts resulting from the applicant’s or violator’s actions. Mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Mitigation plans shall be consistent with the Washington State Department of Ecology “Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals,” 1994, as revised. The applicant shall develop a plan that provides for land acquisition, construction, maintenance and monitoring of replacement wetlands that recreate as nearly as possible the original wetlands in terms of acreage, function, geographic location and setting, and that are larger than the original wetlands. Compensatory mitigation shall be completed prior to wetland destruction, where possible. Mitigation shall result in no net loss of wetlands function and acreage and seeks a net resource gain in wetlands over present conditions with the exception of enforcement actions.

B. Mitigation actions shall address functions affected by the alteration in order to achieve functional equivalency or improvement, and shall provide similar wetland functions as those lost except when the lost wetland provides minimal functions as determined by a site specific function assessment and the proposed mitigation action(s) will provide equal or greater functions.

C. Mitigation actions that require compensation mitigation by replacing, enhancing, or substitution shall occur in the following order of preference:

1. Restoring wetlands on upland sites that were formerly wetlands.
2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.

3. Enhancing significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area meeting appropriate ratio requirements.

D. Mitigation actions shall be conducted within the same subdrainage basin and on the same site as the alteration except when all of the following apply:

1. There are no reasonable on site or in subdrainage basin opportunities or on site and in subdrainage basin opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site buffers or connectivity are inadequate;
2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
3. Off-site locations shall be in the same subdrainage basin and the same Water Resource Inventory Area (WRIA) unless:
   a. The impact is located near the boundary of a WRIA;
   b. Established regional or watershed goals for water quality, flood or conveyance, habitat or other wetland functions have been established and strongly justify location of mitigation at another site; or
   c. Credits from a state certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank’s certification.

E. Mitigation projects, where feasible, shall be completed prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora. The community development director may authorize a one-time temporary delay, up to one hundred twenty days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety and general welfare of the public. The request for temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the mitigation plan. The justification must be verified and approved by the city, and include a financial guarantee.

F. Surface Area Replacement Ratio. The following ratios apply to creation or restoration which is in-kind, on-site, timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from illegal alterations. The first number specifies the area of wetlands requiring replacement and the second specifies the area of wetlands altered:

<table>
<thead>
<tr>
<th>Category</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I</td>
<td>6:1</td>
</tr>
<tr>
<td>Category II</td>
<td>3:1</td>
</tr>
<tr>
<td>Category III</td>
<td>2:1</td>
</tr>
<tr>
<td>Category IV</td>
<td>1.5:1</td>
</tr>
</tbody>
</table>

1. Increased Replacement Ratio. The city may increase the ratios under any of the following circumstances:
   a. Uncertainty as to the probable success of the proposed restoration or creation;
   b. Significant period of time between destruction and replication of wetland functions;
   c. Projected losses in functional value; or
   d. The impact was unauthorized.
2. Decreased Replacement Ratio. The city may decrease these ratios for category II, III, and IV wetlands under the following circumstances:
   a. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions have a very high likelihood of success;
   b. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted;
   c. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

3. In all cases, a minimum acreage replacement ratio of one-to-one shall be required.

G. Wetlands Enhancement.
   1. Any applicant proposing to alter wetlands may propose to enhance existing significantly degraded wetlands in order to compensate for wetland losses. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions.

   2. A wetlands enhancement compensation project shall be determined pursuant to this section, provided that enhancement for one function and value will not degrade another function or value and that acreage replacement ratios shall, at a minimum, be doubled to recognize existing functional values. Only category III and IV wetlands are eligible for enhancement.

H. Wetland Type.
   1. In-kind compensation shall be provided except where the applicant can demonstrate that:
      a. The wetland system is already significantly degraded and out-of-kind replacement will result in a wetland with greater functional value;
      b. Scientific problems such as exotic vegetation and changes in watershed hydrology make implementation of in-kind compensation impossible;
      c. Out-of-kind replacement will best meet identified regional goals (e.g., replacement of historically diminished wetland types);
      d. Where out-of-kind replacement is accepted, greater acreage replacement ratios may be required to compensate for lost functional values.

I. Wetland Preservation as Mitigation. Impacts to wetlands may be mitigated by preservation of wetland areas, in a separate tract or easement when used in combination with other forms of mitigation such as creation, restoration, or enhancement at the preservation site or at a separate location. Preservation may also be used by itself, but more restrictions as outlined below will apply.

   1. Preservation as mitigation is acceptable when done in combination with restoration, creation, or enhancement providing that a minimum of one-to-one acreage replacement is provided by restoration or creation and the criteria below are met:
      a. The impact area is small, and impacts are to a category III or IV wetland;
      b. Preservation of a high-quality system occurs in the same water resource inventory area (WRIA) or watershed basin as the wetland impact;
      c. Preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation; and
      d. Mitigation ratios for preservation in combination with other forms of mitigation shall range from ten-to-one to twenty-to-one, as determined by the city, depending on the quality of the wetlands being mitigated and the quality of the wetlands being preserved.

J. Cooperative Restoration, Creation or Enhancement Projects.
   1. The city may encourage, facilitate, and approve cooperative projects wherein a single applicant or other organization with demonstrated capability may undertake a compensation project with funding from other applicants under the following circumstances:
      a. Restoration, creation or enhancement at a particular site may be scientifically difficult or impossible; or
      b. Creation of one or several larger wetlands may be preferable to many small wetlands.
2. Persons proposing cooperative compensation projects shall:
   a. Submit a joint permit application;
   b. Demonstrate compliance with all standards;
   c. Demonstrate the organizational and fiscal capability to act cooperatively; and
   d. Demonstrate that long-term management can and will be provided.

(O2011-002, Amended, 03/01/2011; O2004-019, Amended, 05/17/2005; 1278, Added, 08/20/1991)

16.28.230 Mitigation plans.

All wetland restoration, creation and/or enhancement projects required pursuant to this chapter either as a permit condition or as the result of an enforcement action shall follow a mitigation plan prepared by qualified wetland professionals approved by the city. The applicant or violator shall receive written approval of the mitigation plan by the city prior to commencement of any wetland restoration, creation or enhancement activity. Unless the city, in consultation with qualified wetland professionals, determines that based on the size and nature of the development proposal, the nature of the impacted wetland, and the degree of cumulative impacts on the wetland from other development proposals, that the scope and specific requirements of the mitigation plan may be reduced from what is listed below. The mitigation plan shall contain at least the following components:

A. Baseline Information. A written assessment and accompanying maps of the:
   1. Impacted wetland including, at a minimum, wetland delineation; existing wetland acreage; vegetative, faunal and hydrologic characteristics; soil and substrate conditions; topographic elevations; and
   2. Compensation site, if different from the impacted wetland site, including at a minimum: Existing acreage; vegetative faunal and hydrologic conditions; relationship within watershed and to existing water bodies; soil and substrate conditions, topographic elevations; existing and proposed adjacent site conditions; buffers; and ownership.

B. Environmental Goals and Objectives. A written report shall be provided identifying goals and objectives describing:
   1. The purposes of the compensation measures including a description of site selection criteria, identification of compensation goals; identification of target evaluation species and resource functions, dates for beginning and completion, and a complete description of the structure and functional relationships sought in the new wetland. The goals and objectives shall be related to the functions and values of the original wetland or if out-of-kind, the type of wetland to be emulated; and
   2. A review of the available literature and/or experience to date in restoring or creating the type of wetland proposed shall be provided. An analysis of the likelihood of success of the compensation project at duplicating the original wetland shall be provided based on the experiences of comparable projects, if any. An analysis of the likelihood or persistence of the created or restored wetland shall be provided based on such factors as surface and ground water supply and flow patterns, dynamics of the wetland ecosystem; sediment or pollutant influx and/or erosion, periodic flooding and drought, etc., presence of invasive flora or fauna, potential human or animal disturbance, and previous comparable projects, if any.

C. Performance Standards. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.

D. Detailed Construction Plans. Written specifications and descriptions of compensation techniques shall be provided including the proposed construction sequence, grading and excavation details, erosion and sediment control features needed for wetland construction and long-term survival, a planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagules, or seeds; water and nutrient requirements for planting; where appropriate, measures to protect plants from predation; specification of substrate stockpiling techniques and planting instructions; descriptions of water control structures and water-level maintenance practices needed to achieve the necessary hydrocycle/hydroporperiod characteristics, etc. 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. The plan shall provide for elevations which are appropriate for the desired habitat type(s) and which provide sufficient tidal prism and circulation data.

E. Monitoring Program. A program outlining the approach for monitoring construction of the compensation project and for assessing a completed project shall be provided. Monitoring may include, but is not limited to:

1. Establishing vegetation plots to track changes in plant species composition and density over time;
2. Using photo stations to evaluate vegetation community response;
3. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, heavy metals);
4. Measuring base flow rates and stormwater runoff to model and evaluate water quality predictions, if appropriate;
5. Measuring sedimentation rates, if applicable; and
6. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity.

A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

F. Contingency Plan. Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

G. Permit Conditions. Any compensation project prepared pursuant to this section and approved by the city shall become part of the application for the permit.

H. Performance Bonds and Demonstration of Competence. A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects. In addition, bonds ensuring the fulfillment of the compensation project, monitoring program, and any contingency measure shall be posted pursuant to TMC 16.28.210 in the amount of one hundred twenty percent of the expected cost of compensation.

I. Regulatory authorities are encouraged to consult with and solicit comments of any federal, state, regional, or local agency, including tribes, having special expertise with respect to any environmental impact prior to approving a mitigation proposal which includes wetlands compensation. The compensation project proponents should provide sufficient information on plan design and implementation in order for such agencies to comment on the overall adequacy of the mitigation proposal.

J. Compensatory mitigation is not required for regulated activities as follows:

1. For which a permit has been obtained for activities that occur only in the buffer or expanded buffer and which have no adverse impacts to regulated wetlands; or
2. Allowed activities pursuant to TMC 16.28.110 provided such activities utilize best management practices to protect the functions and values of regulated wetlands.

(1278, Added, 08/20/1991)

16.28.240 Appeals.

Any administrative decision made in the administration of this chapter is appealable to the city hearing examiner and subsequently to the city council as per provisions of TMC 2.58.090(D) and 2.58.150. Appeal fees are established by city council resolution.

(1278, Added, 08/20/1991)
16.28.250 Modification of wetland permits.
A wetland permit holder may request and the city may approve modification of a previously issued wetland permit.
(1278, Added, 08/20/1991)

16.28.260 Resubmittal of denied permit applications.
A wetland permit application which has been denied may be modified and resubmitted.
(1278, Added, 08/20/1991)

16.28.270 Temporary emergency permit.
A. Notwithstanding the provisions of this chapter or any other laws to the contrary, the city may issue a temporary emergency wetlands permit if:
   1. The city determines that an unacceptable threat to life or severe loss of property will occur if an emergency permit is not granted; and
   2. The anticipated threat or loss may occur before a permit can be issued or modified under the procedures otherwise required by this act and other applicable laws.
B. Any emergency permit granted shall incorporate, to the greatest extent practicable and feasible but not inconsistent with the emergency situation, the standards and criteria required for nonemergency activities under this chapter and shall:
   1. Be limited in duration to the time required to complete the authorized emergency activity, not to exceed ninety days; and
   2. Require, within this ninety-day period, the restoration of any wetland altered as a result of the emergency activity, except that if more than the ninety days from the issuance of the emergency permit is required to complete restoration, the emergency permit may be extended to complete this restoration.
C. The emergency permit may be terminated at any time without process upon a determination by the city that the action was not or is no longer necessary to protect human health or the environment.
(1278, Added, 08/20/1991)

16.28.280 Enforcement.
The city shall have authority to enforce this chapter, any rule or regulation adopted, and any permit or order issued pursuant to this chapter, against any violation or threatened violation thereof. The city is authorized to issue violation notices and administrative orders, levy fines, and/or institute legal actions in court. Recourse to any single remedy shall not preclude recourse to any of the other remedies. Each violation of this chapter, or any rule or regulation adopted, or any permit condition, or order issued pursuant to this chapter, shall be a separate offense, and, in the case of continuing violations, each day’s continuance shall be deemed to be a separate and distinct offense. All costs, fees, and expenses in connection with enforcement actions may be recovered as damages against the violator.
A. Enforcement actions shall include:
      a. The city may bring appropriate actions at law or equity, including actions for injunctive relief, to ensure that no uses are made of a regulated wetland or its buffers which are inconsistent with this chapter or an applicable wetlands protection program.
      b. The city may serve upon a person a cease and desist order if an activity being undertaken on regulated wetlands or its buffer is in violation of this chapter. Whenever any person violates this chapter or any permit issued to implement this chapter, the city may issue an order reasonably appropriate to cease such violation and to mitigate any environmental damage resulting therefrom.
         i. Content of Order. The order shall set forth and contain:
            (A) A description of the specific nature, extent, and time of violation and the damage or potential damage;
(B) A notice that the violation or the potential violation cease and desist or, in appropriate cases, the specific corrective action to be taken within a given time. A civil penalty may be issued with the order;

(C) Effective Date. The cease and desist order issued under this section shall become effective immediately upon receipt by the person to whom the order is directed; and

(D) Compliance. Failure to comply with the terms of a cease and desist order can result in enforcement actions including, but not limited to, the issuance of a civil penalty.

B. Any person who undertakes any activity within a regulated wetland or its buffer without first obtaining a permit required by this chapter, except as allowed in TMC 16.28.110, or any person who violates one or more conditions of any permit required by this chapter or of any order issued pursuant to subsection (A)(1)(b) of this section shall incur a penalty allowed per violation. In the case of a continuing violation, each permit violation and each day of activity without a required permit shall be a separate and distinct violation. The penalty shall constitute a misdemeanor.

C. Aiding or Abetting. Any person who, through an act of commission or omission procures, aids or abets in the violation shall be considered to have committed a violation for the purposes of the penalty.

D. Notice of Penalty. Civil penalties imposed under this section shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department and/or the city or from both jointly. The notice shall describe the violation, approximate the date(s) of violation, and shall order the acts constituting the violation to cease and desist, or, in appropriate cases, require necessary corrective action within a specific time.

E. Application for Remission or Mitigation. Any person incurring a civil penalty may apply in writing within thirty days of receipt of the penalty to the city for remission or mitigation of such penalty. Upon receipt of the application, the city may remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered in setting the original penalty.

F. Orders and civil penalties issued pursuant to this subsection may be appealed as provided for in TMC 16.28.240.

G. Criminal penalties may be imposed on any person who willfully or negligently violates this chapter or who knowingly makes a false statement, representation, or certification in any application, record or other document filed or required to be maintained under this chapter or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device, record or methodology required to be maintained pursuant to this chapter or pursuant to a wetland permit.

(16.28) 26

16.28.290 Existing legal nonconforming structures, uses, and activities.

A regulated structure, use or activity that legally existed or was approved prior to the passage of this chapter but which is not in conformity with the provisions of this chapter may be continued subject to the following:

A. No such structure, use or activity shall be expanded, changed, enlarged or altered in any way that increases the extent of its nonconformity without a permit issued pursuant to the provisions of this chapter;

B. Except for cases of discontinuance as part of normal agricultural practices, if a nonconforming activity is discontinued for twelve consecutive months, any resumption of the activity shall conform to this chapter;

C. If a nonconforming structure, use or activity is destroyed by human activities or an act of God, it shall not be resumed except in conformity with the provisions of this chapter;

D. Structures, uses or activities or adjunct thereof that are or become nuisances shall not be entitled to continue as nonconforming activities.

(1278, Added, 08/20/1991)
16.28.300 Judicial review.
Any decision or order issued by the city pursuant to this chapter, including decisions concerning
denial, approval, or conditional approval of a wetland permit, may be appealed to the city hearing
examiner, according to the provisions of TMC 16.28.240 and TMC Chapter 2.58.
Judicial review, following exhaustion of administrative remedies, is commenced according to the
provisions of Chapter 36.70C RCW, as written or hereafter amended.
(O2005-023, Amended, 09/06/2005; 1278, Added, 08/20/1991)

16.28.310 Amendments.
These regulations and the National Wetlands Inventory or subsequent Thurston County
Wetlands Inventory may from time to time be amended in accordance with the procedures and
requirements in the general statutes and as new information concerning wetland location, soils,
hydrology, flooding, or wetland plants and wildlife become available.
(1278, Added, 08/20/1991)

16.28.320 Severability.
If any clause, sentence, paragraph, section or part of this chapter or the application thereof to any
person or circumstances shall be adjudged by any court of competent jurisdiction to be invalid, such
order or judgement shall be confined in its operation to the controversy in which it was rendered and
shall not affect or invalidate the remainder of any part thereof to any other person or circumstances
and to this end the provisions of each clause, sentence, paragraph, section or part of this chapter are
declared to be severable.
(1278, Added, 08/20/1991)

16.28.330 Nonregulatory incentive program.
Reserved.
(1278, Added, 08/20/1991)
Chapter 16.32

FISH AND WILDLIFE HABITAT PROTECTION

Sections:

16.32.010 Short title.
16.32.020 Purpose.
16.32.030 Definitions.
16.32.040 Approval required.
16.32.045 Qualified professional habitat biologist.
16.32.050 Habitats defined and protected.
16.32.055 Habitats and species of local importance – Listing and delisting important habitats and species.
16.32.060 Habitat areas – Buffers.
16.32.065 Riparian habitat areas – Buffers.
16.32.070 Habitat areas – Allowed uses and activities.
16.32.090 Habitat areas – Protection plan.
16.32.095 Existing legal nonconforming structures, uses, and activities.
16.32.097 Reasonable use exception.
16.32.098 Exceptions – Public agency and utility.
16.32.100 Violation – Penalty.
16.32.110 Severability.

16.32.010 Short title.

This chapter shall be known and may be cited as the “fish and wildlife habitat protection ordinance” of the city of Tumwater.

(1283, Added, 08/20/1991)

16.32.020 Purpose.

It is the policy of the city of Tumwater that the preservation of fish and wildlife habitat is critical to the protection of suitable environments for animal species and in providing a natural beauty and healthy quality of life for Tumwater and its citizens. The conservation of habitat means active land management for maintaining species within their preferred habitats and accustomed geographic distribution. In this way, isolated subpopulations are not created which are more susceptible to predation, dislocation and inadequate food supplies. Habitat protection does not require that all individuals of all species are protected, but does demand that land use planning be sensitive to the priority of saving and protecting animal-rich environments.

(1283, Added, 08/20/1991)

16.32.030 Definitions.

A. “Allowed uses and activities” means any authorized land use or activity allowed alone or in conjunction with another use.

B. “Anadromous fish” means fish that spawn and rear in freshwater and mature in the marine (salt water) environment.

C. “Areas with which endangered, threatened and sensitive species have a primary association” are defined as seasonal ranges and habitats with which federal- and state-listed endangered, threatened and sensitive species have a primary association and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

D. “Buffer” is defined as an area of land used or created for the purpose of insulating or separating a structure or land use from a fish and/or wildlife habitat area in such a manner as to reduce or mitigate any adverse impacts of the developed area.
E. “Lakes, ponds, streams, and rivers planted with game fish” are defined to include game fish planted in these water bodies under the auspices of a federal, state, local, or tribal program or which support priority fish species as identified by the Department of Wildlife.

F. “Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish and wildlife habitat” are defined as naturally occurring ponds not including ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds (of less than three years’ duration) and landscape amenities. However, naturally occurring ponds may include those artificial ponds intentionally created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority.

G. “Nonconforming use or structure” means a building or use, lawfully existing on the effective date of the ordinance codified in this chapter, which does not conform with the regulations of TMC Chapter 16.32.

H. “Priority habitat, local” or “local priority habitat” means a seasonal range or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of high relative density or species richness, breeding habitat, winter range and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, talus and wetlands.

I. “Priority habitat, state” or “state priority habitat” means a seasonal range or habitat element, so identified by the Washington State Department of Wildlife, with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of high relative diversity or species richness, breeding habitat, winter range and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration.

J. “Priority species, local” or “local priority species” means those species that may not be endangered or threatened from a statewide perspective, but are of local concern due to their population status or their sensitivity to habitat manipulation and have been designated as such.

K. “Priority species, state” or “state priority species” means those species that are so identified by the Washington State Department of Wildlife due to their population status and their sensitivity to habitat manipulation. Priority species include those which are state-listed endangered, threatened and sensitive species.

L. “Residential density” means the permissible number of dwelling units that may be developed on a specific amount of land area measured in number of dwelling units per acre.

M. “Qualified professional” means a person with experience and training in the applicable critical area. A qualified professional for habitats must have obtained a B.S. or B.A. or equivalent degree in biology, and at least two years of work experience related to the subject species or habitat.

N. “Riparian habitat” means areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife.

O. “Sensitive species” means wildlife species native to the state of Washington that are vulnerable or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats.

P. “Site” means any lot, tract, parcel, large lot holding, either owned or leased, intended to be developed.

Q. “Species” means any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

R. “Species, endangered” means any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

S. “Species, threatened” means any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without
Title 16

cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

T. “Waters of the state” are defined in WAC Title 222, the Forest Practice Rules and Regulations; further defined as the classification system established in WAC 222-16-030 and 222-16-031 as exists now or hereafter amended.

(O2008-011, Amended, 09/02/2008; O2006-026, Amended, 04/03/2007; O2004-019, Amended, 05/17/2005; 1283, Added, 08/20/1991)

16.32.040 Approval required.

No person, corporation, or other legal entity shall engage in construction on a site which supports a protected fish and wildlife habitat area as defined by this chapter without having received approval for proper protection or mitigation by the city through the environmental review process and/or applicable discretionary permit(s) and construction permit(s).

(O2005-023, Amended, 09/06/2005; O2004-019, Added, 05/17/2005)

16.32.045 Qualified professional habitat biologist.

It is expected that applications will require a qualified professional pursuant to TMC 16.32.030(M) to provide the information necessary to fulfill the requirements of this chapter. It shall be the responsibility of the applicant to acquire the services of a qualified professional.

(O2005-023, Amended, 09/06/2005; O2004-019, Added, 05/17/2005)

16.32.050 Habitats defined and protected.

The following habitats are defined and protected:

A. The following fish and wildlife habitat areas are to be protected within the city of Tumwater:
   1. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association. The U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Department of Fish and Wildlife should be consulted as appropriate;
   2. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish and wildlife habitats, including artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities;
   3. Lakes, ponds, streams, and rivers with naturally occurring populations, and waters planted with game fish planted by a governmental or tribal entity;
   4. Waters of the state as classified in Chapter 222-16 WAC;
   5. Areas of rare plant species and high quality ecosystems as identified by the Washington State Department of Natural Resources through the Natural Heritage Program.
B. Endangered, threatened, and sensitive habitats and species as identified by the Washington State Department of Fish and Wildlife and the habitat primarily associated with those species.
C. Locally significant habitats and species that have been designated as per the criteria in TMC 16.32.055.
D. All areas within Tumwater meeting one or more of the criteria in subsections A, B and C of this section are subject to the provisions of this title and shall be managed consistent with the best available science, such as the “Washington State Department of Fish and Wildlife’s Management Recommendations for Priority Habitat and Species” as written or hereafter amended.

(O2006-026, Amended, 04/03/2007; O2004-019, Amended, 05/17/2005; 1283, Added, 08/20/1991)

16.32.055 Habitats and species of local importance – Listing and delisting important habitats and species.

A. Locally significant species are those which are not state listed as threatened, endangered or sensitive, but which live in Tumwater, and the species is of special importance to the citizens of Tumwater for cultural or historical reasons, or the city is a critically significant portion of their range.
Tumwater is a critically significant portion of the range of a species when any of the following conditions apply:

1. The species would be extirpated from the state of Washington if it is eliminated from Tumwater; or
2. The species’ population would be divided into nonviable populations if it is eliminated from Tumwater, where the isolated populations are critical to the survival of the species; or
3. The species is listed as a state monitor or candidate species and Tumwater is a significant portion of the range of the species and significant reduction or elimination of the species from Tumwater would result in changing the status of the species to that of state endangered, threatened, or sensitive.

B. Locally significant habitats are those habitats in which significant species live, or which are of special importance to the citizens of Tumwater because they have been determined to contribute to the variety of habitats or diversity of species.

C. The process for listing or delisting an important habitat or species in Tumwater shall be an amendment to this section. This action may be initiated by request of the State Department of Fish and Wildlife, the Squaxin Island Tribe, or city staff. Any such request shall be in writing and shall include:

1. The common and scientific names for species under consideration;
2. Habitat location on a map (scale one to twenty-four thousand);
3. The reasons for the request, including:
   a. Declining or increasing population,
   b. Sensitivity to habitat manipulation;
4. Habitat management recommendations, including potential uses and restrictions of the habitat areas, seasonally sensitive areas, and other guidelines necessary for the protection of the nominated species;
5. Other supporting documentation, including an analysis which weighs the nonenvironmental impacts of the proposal, addressing economics and land use, against the benefits of the proposed listing;
6. The written request and supporting data may be evaluated by a qualified wildlife biologist or equivalent professional selected by the city;
7. In addition to the above, the city shall consider the following factors when evaluating the request:
   a. The specificity and scientific validity of the information about the nominated species needs and behaviors;
   b. The sufficiency of habitat areas currently available to sustain the species over time; and
   c. The versatility of the proposed habitat area to sustain species other than the one being nominated for local species of importance designation.

(02006-026, Added, 04/03/2007)

16.32.060 Habitat areas – Buffers.

To retain and protect adequate urban wildlife habitats, buffers will be established on a case-by-case basis to be defined by a habitat protection plan prepared by a qualified professional. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington State Department of Fish and Wildlife. If management recommendations are not available, the consultant shall use best available science to delineate buffers for Department of Fish and Wildlife review.

(O2004-019, Amended, 05/17/2005; 1283, Added, 08/20/1991)
16.32.065 Riparian habitat areas – Buffers.

Recommended riparian habitat area widths are shown in the table below. A riparian habitat shall have the width recommended, unless a greater width is required pursuant to subsection A of this section, or a lesser width is allowed pursuant to subsection B of this section. Widths shall be measured outward in each direction, from the ordinary high water mark or the top of the bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions. Such functions include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian habitat to other habitats.

A. Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths as shown in Table 1 shall be increased as follows:

1. When the community development director determines, using best available science, that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
2. When the one-hundred-year floodplain exceeds the recommended riparian habitat area width, the riparian habitat area shall be extended to the outer edge of the one-hundred-year floodplain;
3. When the habitat area is within a channel migration zone, the riparian habitat area width shall be as recommended in Table 1, or the distance of the channel migration zone, whichever is greater;
4. When the habitat area is in an area of high blowdown potential, the riparian habitat area width shall be expanded an additional fifty feet on the windward side;
5. When the habitat area is within an erosion or landslide hazard area or buffer, the riparian habitat area width shall be as recommended in Table 1, or the distance of the erosion or landslide area, whichever is greater.

B. Riparian Habitat Area Width Averaging. In degraded areas along type 1 through 3 streams where forest cover has been removed, the community development director may reduce the width of riparian habitat areas twenty-five percent in exchange for habitat restoration if:

1. It is determined that the reduction in habitat width, coupled with the proposed restoration, would result in better stream/riparian habitat functions than the standard riparian habitat area without such restoration. This determination shall be made in consultation with Washington State Department of Fish and Wildlife based on a comparative analysis of the existing and enhanced riparian habitat submitted by the applicant. This comparative analysis, prepared by a qualified biologist, shall address stream habitat, water quality and all riparian habitat functions (i.e., large woody debris recruitment; stream shading/leaf litter inputs; filtration of sediments and pollution; nutrient regulation; erosion control/bank stabilization; regulation of stream flow/moderation of stormwater impacts; providing cover, refuge, foraging and breeding habitat for wildlife; wildlife travel corridors; and micro-climate effects); and

<table>
<thead>
<tr>
<th>Stream Type</th>
<th>Recommended RHA Widths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 and 2; or shorelines of the state, or shorelines of statewide significance</td>
<td>250 feet</td>
</tr>
<tr>
<td>Type 3; or other perennial or fish bearing streams, 5 – 20 feet wide</td>
<td>200 feet</td>
</tr>
<tr>
<td>Type 3; or other perennial or fish bearing streams, &lt; 5 feet wide</td>
<td>100 feet</td>
</tr>
<tr>
<td>Type 4 and 5</td>
<td>50 feet</td>
</tr>
</tbody>
</table>
2. The degradation was not caused while the property was in the applicant’s ownership or within the previous seven years, whichever is greater. This does not apply to habitat damage from lawful land use prior to June 17, 2005; and

3. The applicant submits a performance surety consistent with standards in this section. This does not apply to projects performed by a public agency.

   a. Surety. Applicants for proposals involving restoration of degraded wildlife habitat areas or installation of vegetative filter strips as a condition of permit approval shall submit to the city a performance bond approved by the city in the amount equal to one hundred twenty-five percent of the cost to purchase and install the plants and other materials used in those components of the project. Prior to making a demand under the bond, the community development department shall notify the applicant in writing and give them at least thirty days to replace the materials. The community development department shall accept the enhancement/restoration project if the plantings have survived for five years following installation.

4. Components of restoration projects that qualify for riparian habitat area width reduction include, but are not limited to:

   a. Planting field grown conifer trees at least two feet in height within the riparian habitat area of a type 1 through 3 stream or a type 4 stream draining to a type 1 through 3 stream that lacks sufficient conifer trees to shade the stream and/or provide eventual sources of large woody debris. The trees shall be planted between October 1 and April 1. The applicant shall provide a watering plan indicating how the trees will be watered during the first two years following planting to ensure survival.

   b. Replacing invasive or nonnative plant species with native vegetation that occurs in the riparian corridor.

   c. Replacing rip-rap, concrete, tires or similar armoring along a type 1 through 3 stream with more productive habitat; for example, anchored logs or some appropriate form of “bioengineering” consistent with the latest edition of the Washington State Department of Fish and Wildlife’s Integrated Stream Bank Protection Guidelines as written or hereafter amended.

   d. Planting appropriate vegetation to increase root density along stream banks that are eroding or are vulnerable to erosion, as determined by the approval authority. Such vegetation shall be planted between October 1 and April 1. The applicant shall provide a watering plan indicating how the plants will be watered during the first two years following planting to ensure survival.

   e. Where the stream is vulnerable to pollution and/or sedimentation from existing uses, installing an approved vegetative filter strip along the outer twenty-five to fifty feet of the riparian habitat area, to significantly mitigate sediment and pollution from adjacent upland development. The applicant shall provide a watering and maintenance plan that ensures long-term survival and effective performance.

   f. Off channel habitat restoration or enhancement.

   g. Installing rot free, conifer tree trunks with root balls (e.g., red cedar, Douglas fir, or other trees slow to decompose), and/or large rocks in the streambed in appropriate locations of reaches of type 1 through 3 streams that lack such structure, as determined by the approval authority in consultation with the Washington State Department of Fish and Wildlife. The approval authority may require review of the proposed project by a qualified engineer to assure that it will function as intended without posing undue risks for structures or property.

Logs placed in streams between sixteen and thirty-two feet wide shall be at least twenty-two inches in diameter. Trees placed in streams wider than thirty-two feet shall be at least twenty-six inches in diameter.

Large woody debris shall not be installed in the following locations unless it is anchored:

   i. Channels that have a history of and high potential for debris torrents and other mass wasting activity;

   ii. Immediately above culverts or bridges;

   iii. Confined channels where the width of the valley floor is less than twice the bankfull width (Source: Forest Practices Board Manual, Section 26, “Guidelines for Large Woody Debris Placement Strategies”); or
iv. In streams with significant upstream inputs of logs (e.g., the Deschutes River) in areas that are prone to log jams that threaten structures or roads.

(For guidance on tree selection and placement, see the Forest Practices Board Manual, dated August 2001 or as hereafter amended, Section 26, “Guidelines for Large Woody Debris Placement Strategies.”)

h. Removal of roads within the riparian habitat area and revegetation of the former road beds with appropriate native vegetation. Soil amendment may be required to facilitate plant growth and drainage in compacted roadbeds.

i. Removal of structures within the riparian habitat area and revegetation of the building site with appropriate native vegetation. Soil amendment may be required on the compacted building site to enable plant survival and to facilitate drainage.

j. Removal or replacement of inadequate culverts or other barriers to fish migration.

C. Isolated Riparian Areas. If topographic breaks (e.g., bluffs) or a legally established road, railroad or other lineal facility or barrier (not including logging roads) functionally isolates a portion of the riparian area, the approval authority may allow the riparian habitat area width to be reduced to the minimum extent needed to exclude the isolated area established prior to the effective date of these regulations if:

1. It does not perform any biological, geological or hydrological functions related to the undisturbed portions of the riparian habitat area or stream; and
2. It does not provide protection of the riparian habitat area.

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

E. Alternative Mitigation for Riparian Habitat Areas. The performance standards set forth in this subsection may be modified at the city’s discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected subdrainage basin as a result of alternative mitigation measures.

(Amended during 2011 reformat; O2011-002, Amended, 03/01/2011; O2006-026, Amended, 04/03/2007; O2004-019, Added, 05/17/2005)

16.32.070 Habitat areas – Allowed uses and activities.

The following activities may be permitted within a riparian habitat area, pond, lake, water of the state, or associated buffer when the activity complies with the provisions set forth in the city of Tumwater shoreline regulations and wetland protection standards, if applicable, and subject to the standards of this section. The standards that provide the most protection to protected habitat and species shall apply.

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

1. Grading is allowed only during the dry season, which is typically regarded as beginning on May 1 and ending on October 31 of each year. This period may be extended or shortened by the community development director on a case-by-case basis, determined by weather conditions, soil types and topography.
2. Filling or modification of a wetland or wetland buffer is permitted only if it is conducted as part of an approved wetland alteration.
3. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, any soil disturbed shall be redistributed to other areas of the project area.
4. The moisture holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.
5. Erosion and sediment control that meets or exceeds the standards set forth in the Drainage Design and Control Manual for the Thurston Region, as exists now or hereafter amended, shall be provided.

B. Fish hatcheries, associated appurtenances, and related interpretive centers are permitted in accordance with an approved critical area report that demonstrates the following:
1. Natural shoreline processes will be maintained. The project will not result in increased beach erosion or alterations to, or loss of, shoreline substrate within one-fourth mile of the project area.

2. The aquaculture facilities will not degrade fish or wildlife habitat conservation areas or associated wetlands.

3. Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat as a result of the proposed aquaculture facilities.

C. Vegetation management within an authorized lake management district and with a vegetation management plan approved by the city is permitted in accordance with an approved critical area report that demonstrates the following:

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

2. The vegetation management will not degrade fish or wildlife habitat conservation areas or associated wetlands.

3. A minimum of forty percent of the native vegetation must be retained within the area proposed for treatment.

4. Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat as a result of the proposed vegetation management activities.

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

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

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

3. Adequate mitigation measures ensure that there is no net loss of the functions or values of riparian habitat as a result of the proposed shoreline erosion control measures.

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

E. Stream Bank Stabilization. Stream bank stabilization to protect new structures from future channel migration is not permitted except when such stabilization is achieved through bioengineering or soft armoring techniques in accordance with an approved critical area report. An engineered plan and mitigation plan are also required.

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

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

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

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

G. Docks. Repair and maintenance of an existing dock or pier may be permitted in accordance with an approved critical area report subject to the following:

1. There is no increase of shade for predator species or eelgrass;

2. There is no expansion in over water coverage;

3. There is no new spanning of waters between three and thirteen feet deep;

4. There is no increase in the size and number of pilings; and

5. There is no use of toxic materials (such as creosote) that come in contact with the water.

   a. New docks on lakes and ponds may be allowed, provided there is no use of toxic materials and in accordance with an approved critical area report.
H. Roads, Trails, Bridges, and Rights-of-Way. Construction of trails, roadways, roadway expansions and minor road bridging may be permitted in accordance with an approved critical area report subject to the following standards:
1. There is no other feasible alternative route with less impact on the environment;
2. The crossing minimizes interruption of downstream movement of wood and gravel;
3. Roads in riparian habitat areas or their buffers shall not run parallel to the water body;
4. Trails should be located on the outer edge of the riparian area or buffer, except for viewing platforms, designated access points and crossings. Trails can also be located within the riparian area or buffer to provide controlled public access for viewing wildlife and other recreational activities, provided they are located and designed to minimize impacts on the riparian habitat;
5. Crossings, where necessary, shall only occur as near to perpendicular with the water body as possible;
6. Mitigation for impacts is provided pursuant to a mitigation plan of an approved critical area report;
7. Stream crossing structures (bridges and culverts) are designed according to the Washington State Department of Fish and Wildlife “Fish Passage Design at Road Culverts,” 2003, as written or hereafter amended, and the National Marine Fisheries Service “Guidelines for Salmonid Passage at Stream Crossings,” 2000; and
8. Trails and associated viewing platforms shall not be made of continuous impervious materials.
I. Utility Facilities. New utility lines and facilities may be permitted to cross watercourses in accordance with an approved critical area report, if they comply with the following standards:
1. Fish and wildlife habitat areas shall be avoided to the maximum extent possible;
2. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the water body and channel migration zone, where feasible;
3. The utilities shall cross at an angle less than thirty degrees of the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible;
4. Crossings shall be contained within the footprint of an existing road or utility crossing where possible;
5. The utility route shall avoid paralleling the stream or following a down-valley course near the channel; and
6. The utility installation shall not increase or decrease the natural rate of shore migration or channel migration.
J. Public Flood Protection Measures. New public flood protection measures and expansion of existing ones may be permitted, subject to review and approval of a critical area report and the approval of a federal biological assessment by the federal agency responsible for reviewing actions related to a federally listed species.
K. Instream Structures. Instream structures, such as, but not limited to, high flow bypasses, sediment ponds, instream ponds, retention and detention facilities, tide gates, dams, and weirs, shall be allowed only as part of an approved watershed basin restoration project approved by the city and upon acquisition of any required state or federal permits. The structure shall be designed to avoid modifying flows and water quality in ways that may adversely affect habitat conservation areas.
L. Stormwater Conveyance Facilities. Conveyance structures may be permitted in accordance with an approved critical area report subject to the following standards:
1. No other feasible alternatives with less impact exist;
2. Mitigation for impacts is provided;
3. Stormwater conveyance facilities shall incorporate fish habitat features; and
4. Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds to retard erosion, filter out sediments, and shade the water.
M. On-Site Sewage Systems and Wells. New on-site sewage systems and individual wells may be permitted in accordance with an approved critical area report only if accessory to an approved residential structure for which it is not feasible to connect to a public sanitary sewer system. Repairs
to failing on-site sewage systems associated with an existing structure shall be accomplished by utilizing one of the following methods that result in the least impact:

1. Connection to an available public sanitary sewer system;
2. Replacement with a new on-site sewage system located in a portion of the site that has already been disturbed by development and is located landward as far as possible, provided the proposed sewage system is in compliance with Thurston County health department regulations; or
3. Repair to the existing on-site septic system.

N. Activities within the improved right-of-way including but not limited to construction of new utility facilities or improvements or upgrades to existing utility facilities that take place within existing improved right-of-way or existing impervious surface.

O. Operation, Maintenance or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, 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. Operation and maintenance includes vegetation management performed in accordance with best management practices that is part of ongoing maintenance of structures, infrastructure, or utilities; provided, that such management actions are part of a regular ongoing maintenance, do not expand further into the critical area, are not the result of an expansion of the structure or utility; and do not directly impact endangered species.

P. Minor Utility Projects. Utility projects which have minor or short duration impacts to critical areas, as determined by the community development director in accordance with the criteria below, and which do not significantly impact the functions or values of a critical area(s); provided, that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:

1. There is no practical alternative to the proposed activity with less impact on critical areas;
2. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility;
3. The activity involves disturbance of no more than seventy-five square feet.

Q. Emergencies. Those activities necessary to prevent an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use all reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Within thirty days, the community development director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the community development director determines that the action taken was beyond the scope of an allowed emergency action, then inspection and remedial action would be required. If remedial action is required and not completed, then enforcement provisions would apply.


16.32.090 Habitat areas – Protection plan.

When a protected habitat is located on a site to be developed, a habitat protection plan will be submitted by the permit applicant. The habitat protection plan shall contain the following information as a minimum and will be subsequently used as part of the environmental review process and is a condition of approval for discretionary permit(s) and/or construction permits:

A report which contains:

A. 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 protected fish or wildlife habitat.
B. The applicant’s analysis of the effect of the proposed development, activity or land use change upon the fish and/or wildlife species.

C. A plan by the applicant which shall explain how he will mitigate any adverse impacts to protected fish or wildlife habitats created by the proposed development.

A map(s) prepared at an easily readable scale, showing:
1. The location of the proposed development site.
2. The relationship of the development to the adjacent habitat area.
3. The nature and density of the proposed development or land use change.

D. Proposed building locations and arrangements.

E. A legend which includes:
1. A complete and accurate legal description as prescribed by the development application form. The description shall include the total acreage of the parcel;
2. Title, scale and north arrows; and
3. Date, including revision dates if applicable.

F. Existing structures and landscape features including the name and location of all watercourses, ponds and other bodies of water.

Possible mitigation measures may include, but are not limited to:
1. Establishment of buffer zones;
2. Buffer zone enhancement by planting indigenous plant species;
3. Preservation of critically important plants and trees;
4. Limitation of access to habitat area; and
5. Seasonal restriction of construction activities.

(O2006-026, Amended, 04/03/2007; 1283, Added, 08/20/1991)

16.32.095 Existing legal nonconforming structures, uses, and activities.

A regulated structure, use or activity that legally existed or was approved prior to the passage of this chapter but which is not in conformity with the provisions of this chapter may be continued subject to the following:

A. No such structure, use or activity shall be expanded, changed, enlarged or altered in any way that increases the amount of impervious surface without a permit issued pursuant to the provisions of this chapter.

B. Structures, uses and activities may be utilized, improved, and/or reconstructed if it can be demonstrated by a qualified professional using best available science that no net loss of ecological function of the riparian area or buffer will occur. No such nonconforming structure, use or activity may be enlarged, increased, extended, or moved in any way to occupy a greater amount of land than occupied such use prior to the adoption of this chapter except as provided in subsection C of this section.

C. Structures, uses and activities may be expanded, altered, and/or relocated (including impervious surface) if it can be demonstrated by a qualified professional using best available science that impacts to the critical area can be reduced over current levels.

D. A nonconforming use or structure may be changed to another nonconforming use or structure subject to the standards in subsections (D)(1) and (2) of this section. If a change in zone designation is granted, an existing nonconforming structure shall be allowed to continue subject to the following standards in subsections (D)(1) and (2) of this section:
1. The development is twenty-five feet or more from the ordinary high water mark of the shoreline; and
2. No net loss of ecological function of the riparian area or buffer occurs.

E. Structures, uses or activities that are or become nuisances shall not be entitled to continue as nonconforming activities.

(O2008-011, Amended, 09/02/2008; O2006-026, Amended, 04/03/2007; O2004-019, Added, 05/17/2005)
16.32.097 Reasonable use exception.
   A. After it has been determined by the city that losses of fish and wildlife habitat are necessary and unavoidable or that all reasonable economic use has been denied, an exception may be applied for pursuant to this section.
   B. An application for a reasonable use exception shall be made to the city and shall include a critical area report and mitigation plan if necessary, and any other project related documents, such as permit applications to other agencies, special studies and environmental documents. The application must be submitted with payment of the necessary fee as established in the city’s fee resolution, as written or hereafter amended. The community development director 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 reasonable use exception criteria in subsection D of this section.
   C. The hearing examiner shall review the application and conduct a public hearing. The hearing examiner shall approve, approve with conditions, or deny the request based on the proposal’s ability to comply with all the reasonable use exception criteria in subsection D of this section.
   D. Criteria for review and approval of reasonable use exceptions follow:
      1. The application of this title would deny all reasonable use of the property;
      2. No other reasonable use consistent with existing zoning of the property has less impact on the critical area;
      3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;
      4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this title, or its predecessor;
      5. The proposal does not pose an unreasonable threat to public health, safety, or welfare on or off the development proposal site;
      6. The proposal is consistent with other applicable regulations and standards.

(O2011-002, Amended, 03/01/2011; O2005-023, Amended, 09/06/2005; 2004-019, Added, 05/17/2005)

16.32.098 Exceptions – Public agency and utility.
   A. If the application of this title would prohibit a development proposal by a public agency or public utility, or a private entity installing public utilities that are in compliance with the comprehensive utility plans of Tumwater and are approved by Tumwater, the agency or utility or private entity may apply for an exception pursuant to this section.
   B. Exception Request and Review Process. 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 (Chapter 43.21C RCW). The community development director 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 public agency and utility exception review criteria in subsection D of this section.
   C. Hearing Examiner Review. The hearing examiner shall review the application and the community development director’s recommendation, and conduct a public hearing. 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 subsection D of this section.
   D. Public Agency and Utility Review Criteria. 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 critical areas;
      2. The application of this title would be 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 other applicable regulations and standards.

E. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

(O2011-002, Amended, 03/01/2011; O2006-026, Added, 04/03/2007)

16.32.100 Violation – Penalty.

A. Remedies Not Exclusive. Each violation of the provisions of this chapter shall be a separate offense and will subject the violator to civil and/or criminal penalties. In the case of a continuing violation, each day’s continuance shall be a separate and distinct offense. The mayor of the city of Tumwater, through his or her designee(s), has authority to enforce this chapter against any violation or threatened violation thereof through issue of administrative orders, penalty notices, levying fines and/or the institution of actions at law or in equity including injunctive relief, in order to ensure that no uses are made of regulated wetlands or their buffers which are inconsistent with this chapter or an applicable wetlands protection program. In addition, the city attorney is authorized to commence criminal prosecution for violations under this chapter. Recourse to any single remedy will not preclude recourse to other legal remedies available.

B. Enforcement Actions. Enforcement of the provisions of this chapter is delegated to the director of community development. If the director of community development or his or her designee determines that any development action is not in compliance with approved development plans, or is in violation of this chapter, the director or designee may:

1. Issue a cease and desist order to halt such activity. The order shall become effective immediately upon receipt by the person to whom it is issued, and/or to his/her agent on site. The order shall set forth the following terms and conditions:
   a. A description of the specific nature, extent and time of violation and the damage or potential damage; and
   b. The specific corrective action to be taken within a given time, and the penalties for failure to comply.

2. Issue a restoration order for complete or partial restoration of the critical area by the owner and/or the person responsible for the violation within a given time, and the penalties for failure to comply.

3. Issue a civil penalty notice.

4. Request that the city attorney commence a criminal prosecution, and seek any civil or equitable relief to enjoin any act or practices and to abate any conditions which constitute or will constitute a violation of this chapter.

C. Civil Penalties.

1. Content. The notice of civil penalty shall include the following information:
   a. The name and address of the person responsible for the violation; and
   b. The street address or a description sufficient for identification of the building, structure, premises, or land upon or within which the violation has occurred or is occurring; and
   c. A description of the violation and a reference to the provision(s) of the city of Tumwater code section that has been violated; and
   d. The required corrective action and a date and time by which the correction must be completed; and
   e. Notice of an opportunity for an appeal hearing before the hearing examiner; and
   f. A statement indicating that no monetary penalty will be assessed if the director or his or her designee approves the completed, required corrective action at least forty-eight hours prior to the end date for compliance in the restoration order; and
   g. A statement that a monetary penalty in an amount per day for each violation as specified herein will be assessed against the person whom the notice of civil penalty is directed.

2. Service of Notice. The director or his or her designee shall serve the notice of civil penalty upon the person to whom it is directed, either personally or by mailing by both regular mail and certified mail, a copy of the notice of civil penalty to such person at their last known address. If
the person to whom it is directed cannot after due diligence be personally served within Thurston County and if an address for mailed service cannot after due diligence be ascertained, notice shall be served by posting a copy of the notice conspicuously on the affected property or structure. Proof of service shall be made by a written declaration under penalty of perjury executed by the person effecting the service, declaring the time and date of service, the manner by which the service was made, and if by posting, the facts showing that due diligence was used in attempting to serve the person personally or by mail.

D. Monetary Penalties. The maximum monetary penalty for each separate violation per day or portion thereof shall be as follows:
1. First day of each violation – $100.00;
2. Second day of each violation – $200.00;
3. Third day of each violation – $300.00;
4. Fourth day of each violation – $400.00;
5. Each additional day of each violation beyond four days – $500.00 per day.

E. Collection of Monetary Penalty. The monetary penalty constitutes a personal obligation of the person to whom the notice of civil penalty is directed. The city is authorized to take appropriate action to collect the monetary penalty.

F. Criminal Penalties. Any person, firm, or corporation who knowingly violates or knowingly fails to comply with any term or provision of this chapter shall be charged with a misdemeanor. Each day a violation occurs shall be a separate offense. In the event of a continuing violation or failure to comply, the second and subsequent days shall constitute a gross misdemeanor. Continuing violation shall mean a violation which is committed within one year of the initial violation, and which arises out of the same facts as the initial violation.

G. Appeal of Administrative Orders and Penalties. Any person issued a cease and desist order, restoration order and/or incurring a civil penalty may appeal the same by filing, in writing, within ten days of receipt of the order/penalty notice, a notice of appeal and paying the appeal fee. The appeal must set forth in a concise statement: (1) the reason for the appeal, (2) the name and address of the appellant and his/her interest(s) in the property or proposed development affected by such order/penalty, (3) must contain a reference to the specific code section(s) that support the appellant’s argument, (4) must specify the reason(s) why the appellant believes the order or penalty to be erroneous, and (5) must specify the relief sought. The appellant will have the burden of proof to show the order or penalty is erroneous. Upon receipt of the appeal notice by the community development office, the director or designee will schedule a hearing before the hearing examiner, who is authorized to remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered, or not known and not reasonably capable of being known in setting the original penalty. The hearing examiner’s powers on appeal are set forth in TMC Chapter 2.58. Any person appealing the issuance of an administrative order or civil penalty notice shall abide by the terms of that order or notice during the pendency of an appeal to the hearing examiner. The hearing examiner’s decision may be further appealed according to the provisions of TMC Chapter 2.58.

(16.32.110, Severability.
If any section, paragraph, subsection, clause or phrase of this chapter is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of the chapter.

(1283, Added, 08/20/1991)
Chapter 18.38

FP FLOODPLAIN OVERLAY

Sections:

18.38.010 Purpose.
18.38.020 Areas of special flood hazard.
18.38.030 Districts established.
18.38.040 Use of other base flood data.
18.38.050 Floodway subdistrict – Permitted uses.
18.38.055 One-hundred-year floodplain subdistrict – Permitted uses.
18.38.060 Five-hundred-year floodplain subdistrict.
18.38.070 Standards – Generally.
18.38.080 Standards – Fill.
18.38.090 Standards – Structures.
18.38.100 Standards – Utilities.
18.38.110 Repealed.
18.38.120 Standards – Storage of materials and equipment.
18.38.130 Standards – Additional.

18.38.010 Purpose.

It is the purpose of the floodplain (FP) overlay zone district to promote the public health, safety and general welfare, and to minimize flood losses by provisions designed to:

A. Restrict or prohibit uses which are dangerous to human health, safety or property in times of flood, or cause increased flood heights or velocities;
B. Require that uses vulnerable to floods, including public facilities which serve such uses, be provided with flood protection at the time of initial construction;
C. Alert individuals as much as possible of lands which are unsuited for intended purposes because of flood hazard; and
D. Encourage conservation of lands prone to flooding for their recreational, agricultural, educational and wildlife values, and to protect those lands from damage due to soil erosion.

(O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.020 Areas of special flood hazard.


(O2012-018, Amended, 09/18/2012; O2007-004, Amended, 09/04/2007; O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.030 Districts established.

The floodplain district shall apply to all areas of the city and urban growth area which are subject to flooding, as defined on the most recent edition of the Federal Emergency Management Agency Flood Insurance Rate Map and Flood Boundary and Floodway Map and shall be indicated on the zoning map. This district is further divided into three subdistricts called the floodway, the one-hundred-year floodplain, and the five-hundred-year floodplain. Each of these subdistricts are described in this chapter as to their definition and function. These subdistricts are overlay districts.
that shall always apply in addition to another zoning district. Where regulations conflict, the more stringent shall apply.

(O2000-024, Amended, 02/06/2001; O2000-004, Amended, 07/18/2000; O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.040 Use of other base flood data.

When base flood elevation data has not been provided in accordance with TMC 18.38.030, any base flood elevation and floodway data available from a federal, state or other source shall be obtained and utilized in order to apply the floodplain zoning district and administer the requirements related to flood hazard and floodway areas.

(O95-035, Amended, 12/19/1995; 1199, Amended, 07/18/1989; 883, Added, 05/06/1984)

18.38.050 Floodway subdistrict – Permitted uses.

A. The following open space uses shall be permitted, subject to the requirements of the zoning district in which the land is located; and provided, that no storage of materials or equipment or other development or substantial improvement, including structures, fill and support facilities, shall be allowed:

1. Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, forestry, sod farming, and wild crops harvesting; and
2. Private and public recreational uses such as picnic grounds, wildlife and nature preserves, fishing areas, biking and horseback riding trails, and golf course greenways.

B. The following uses shall be permitted, provided the requirements listed in subsection A of this section shall not apply:

1. Utility support facilities as defined in TMC 18.04.637 and fish hatchery appurtenances in accordance with all applicable local, state, or federal regulations and the following requirements:
   a. Any permitted structure shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of floodwater.
   b. Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow.
   c. So far as practicable, structures shall be placed approximately on the same flood flow lines as those of adjoining structures.
   d. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
   e. Any new construction in floodways shall not cause any measurable rise in base flood elevation.
   f. All new and replacement water supply systems shall be floodproofed and designed to eliminate infiltration of floodwaters into the system.
   g. New and replacement sanitary sewer systems shall be floodproofed and designed to eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
   h. Floodproofing and sealing measures must be taken to ensure that toxic or hazardous substances are not displaced or released into the floodwaters.
   i. Such facilities shall not be allowed unless it can be demonstrated that there are no other practicable alternatives.
   j. To the extent possible, the aboveground impact of these types of facilities and appurtenances, especially when placed in open space areas, shall be minimized as to height and mass.

2. Protection, rehabilitation, restoration and reconstruction of existing sites, buildings, structures and objects significant in American and Washington prehistory, history, architecture, archaeology or culture.

(O2007-004, Amended, 09/04/2007; O2000-024, Amended, 02/06/2001; O2000-017, Amended, 09/19/2000; O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)
18.38.055 One-hundred-year floodplain subdistrict – Permitted uses.

The following uses shall be permitted, subject to the requirements of the zoning district in which the land is located:

A. Agricultural and aquacultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, fish hatcheries and related appurtenances and interpretive centers, forestry, sod farming, and wild crop harvesting.
This page left blank intentionally.
B. Private and public recreational uses such as parks, picnic grounds, wildlife and nature preserves, fishing areas, biking and horseback riding trails, and golf course greenways and appurtenances.

C. Support facilities in accordance with all applicable local, state, or federal regulations and the requirements listed in TMC 18.38.050(B)(1)(a) through (i).

D. Protection, rehabilitation, restoration and reconstruction of existing sites, buildings, structures and objects significant in American and Washington prehistory, history, architecture, archaeology or culture.

E. In accordance with 44 C.F.R. 60.3, recreational vehicles placed on sites within the one-hundred-year floodplain shall be on the site for fewer than one hundred eighty consecutive days or be ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions. (O2007-004, Amended, 09/04/2007; O2000-024, Added, 02/06/2001)

18.38.060 Five-hundred-year floodplain subdistrict.

A. Permitted Uses. Permitted uses in the five-hundred-year floodplain subdistrict are all uses permitted in the underlying zoning district, provided all structures are elevated at least two feet above the base flood elevation unless otherwise specified hereinafter.

B. Development Proposals. All development proposals submitted pursuant to any local ordinance or state or federal statute shall be examined to determine whether all building sites proposed will be reasonably safe from flooding. The city shall require the following:

1. That as a part of any subdivision creating five or more lots, or any development comprising five or more acres, that base flood elevation data be an essential element of application, and

2. That all such proposals be consistent with the need to minimize flood damage.

C. Structures.

1. All new construction and substantial improvements to existing residential structures shall have the lowest floor (including basement) elevated at least two feet above the base flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, unless they are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must meet or exceed the following minimum criteria:

   a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
   
   b. The bottom of all openings shall be no higher than one foot above grade.
   
   c. Openings may be equipped with screens, louvers or other coverings or devices provided that they permit the automatic entry or exit of floodwaters.

2. All new construction and substantial improvements to nonresidential construction shall:

   a. Have the lowest floor (including basement) elevated at least two feet above the base flood elevation; or
   
   b. Together with attendant utility and sanitary facilities, be completely floodproofed to at or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. Designs and methods for meeting this requirement must be certified by a registered professional engineer or architect;
   
   c. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (C)(1) of this section. (O2007-004, Amended, 09/04/2007; O2000-024, Amended, 02/06/2001; O95-035, Amended, 12/19/1995; 1199, Amended, 07/18/1989; 1157, Amended, 06/21/1988; 883, Added, 05/06/1984)
18.38.070 Standards – Generally.

The standards set out in TMC 18.38.080 through 18.38.130 shall apply in the five-hundred-year floodplain subdistrict.

(O2000-024, Amended, 02/06/2001; O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.080 Standards – Fill.

A. Any fill or materials proposed to be deposited must be shown to have a beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose, as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions of the proposed fill or other materials.

B. Such fill or other materials shall be protected against erosions by rip rap, vegetative cover, or bulk heading.

C. Structures may be allowed to be constructed on fill if the first floor or basement floor is two feet above the base flood elevation. The fill shall be no lower than two feet above the base flood elevation at least fifteen feet beyond the limits of any structure or building erected thereon.

D. No fill may be allowed which, acting above or in concert with other conditions, may increase flood hazards to other property.

(O95-035, Amended, 12/19/1995; 1157, Amended, 06/21/1988; 883, Added, 05/06/1984)

18.38.090 Standards – Structures.

A. Structures shall not be constructed for human habitation unless they can be designed as to have the habitable portion of the structure above the designated base flood elevation and the foundation constructed in such a manner as to withstand such inundation.

B. Any permitted structure shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of floodwater.

1. Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow.

2. So far as practicable, structures shall be placed approximately on the same flood flow lines as those of adjoining structures.

C. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.100 Standards – Utilities.

A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

B. New and replacement sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Construction of new support facilities may be allowed within the five-hundred-year floodplain subdistrict if no alternative site is available. Any facilities constructed within the five-hundred-year floodplain subdistrict shall have the lowest floor elevated a minimum of two feet above the level of the base flood elevation of the site. Additionally, floodproofing and sealing measures must be taken to ensure that toxic or hazardous substances are not displaced or released into the floodwaters. To the extent possible, access routes shall be elevated to or above the level of the base floodplain.

(O2000-024, Amended, 02/06/2001; O95-035, Amended, 12/19/1995; 1199, Amended, 07/18/1989; 883, Added, 05/06/1984)

18.38.110 Repealed.

(O2005-011, Amended, 07/05/2005; O2000-024, Amended, 02/06/2001; O95-035, Amended, 12/19/1995; 1199, Amended, 07/18/1989; 1157, Amended, 06/21/1988; 883, Added, 05/06/1984)
18.38.120 Standards – Storage of materials and equipment.
   A. Storage or processing of materials that are buoyant, flammable, explosive or could be
   injurious to human, animal or plant life in time of flooding, is prohibited.
   B. Storage of other materials or equipment may be allowed if not subject to major damage by
   floods and if firmly anchored to prevent flotation, or shall be readily removed from the area within
   the limited time available after flood warning.
   (O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)

18.38.130 Standards – Additional.
   The floodproofing standards contained in the U.S. Army Corps of Engineers publication entitled
   “Flood-Proofing Regulations,” EP 1165-2-314, dated June 1972, shall be employed within the
   floodplain overlay district where floodproofing is required.
   (O2000-024, Amended, 02/06/2001; O95-035, Amended, 12/19/1995; 883, Added, 05/06/1984)