

Chapter 18.32
CRITICAL AREAS

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18.32.400 Streams and Priority Riparian Areas – Purpose and Intent

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

18.32.405 Streams and Priority Riparian Areas – Applicability and Definition

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

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

1. The eastern shore of Budd Inlet from the southern property line of Priest Point Park northward to the city limits;
2. The western shore of Budd Inlet (in the Port Lagoon) from 4th Avenue NW northward to the extension of Jackson Avenue NW, but not including the BNSF railroad causeway and trestle or their western or eastern shores; West Bay Drive NW; Olympic Way NW; and parcels west of the rights-of-ways of West Bay Drive NW and Olympic Way NW;
3. The western shore of Budd Inlet (north of West Bay Drive) from the extension of 24th Avenue NW northward to the city limits, being approximately six hundred and fifty (650) feet from the end of the fill to the city limits;
4. The eastern shore of Capitol Lake (in the Middle Basin) from the extension of 13th Avenue SE (Olmsted Brothers Axis) southward to the right of way of Interstate 5;
5. The eastern shore of Capitol Lake (in the South Basin) from the right of way of Interstate 5 southward to the city limits; and
6. The western shore of Capitol Lake (in Percival Cove) from the intersection of Lakeridge Drive SW and Deschutes Parkway SW westward to the mouth of Percival Creek (a point due north of the terminus of Evergreen Park Court SW).

18.32.410 Streams and Priority Riparian Areas – Typing System

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

A. "Type S ~~watersstreams~~" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-031, as a Type S Water. Type S ~~watersstreams~~ contain fish habitat.

Commented [JP1]: Staff had proposed significant revisions to this section to address public comments and to help clarify when the SMP (which covers all marine waters and some lakes and streams) applies and when the CAO provisions apply. Ecology is recommending this section remain unchanged and offers later amendments to help provide that clarity.

Ecology rationale: The City's proposed revision appears to entirely alter the definition of "priority riparian areas" from certain marine and lake shorelines, all of which are Type S waters, to non-shoreline lakes which necessarily means lakes less than 20 acres in size.

Commented [JP2]: Ecology suggested leaving Type S waters in the Typing System section, which staff had proposed removing since Type S waters are subject to the SMP. Ecology suggested minor edits based on WAC 222-16-031. (Ecology recommendation #7)

- B. "Type F streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-031, as a Type F Water. Type F streams contain fish habitat.
- C. "Type Np streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-031, as a Type Np Water. Type Np streams do not contain fish habitat.
- D. "Type Ns streams" are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC 222-16-031, as a Type Ns Water. These streams are areas of perennial or intermittent seepage, and ponds and drainage ways having short periods of spring or storm runoff. Type Ns streams do not contain fish habitat.
- E. Waters having any of the following characteristics are presumed to have fish use:
 1. Stream segments having a defined channel of 2 feet or greater within the bankfull width in Western Washington, and having a gradient of 16 percent or less;
 2. Stream segments having a defined channel of 2 feet or greater within the bankfull width in Western Washington, and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size based on hydrographic boundaries;
 3. Ponds or impoundments having a surface area of less than 1 acre at seasonal low water and having an outlet to a fish stream;
 4. Ponds or impoundments having a surface area greater than 0.5 acre at seasonal low water.

18.32.435 Streams and Priority Riparian Areas – Buffers

- A. Buffers shall be required as set forth for each stream type or "priority riparian area." The required buffers shall be delineated, both on a site plan or plat and on the property, prior to approval of any regulated activity.
- B. The required buffer shall be extended to include any adjacent regulated wetland(s), landslide hazard areas and/or erosion hazard areas and required buffers.
- C. Stream buffers shall be based on the water type classification as established by the Department of Natural Resources Stream Typing Classification System and required by OMC 18.32.410. The table below includes detail differentiating stream types based on fish habitat presence, stream widths, and mass wasting potential:

Stream Type and Description	Buffer
Type S waters – Shorelines of the State	250 feet Refer to SMP 18.20.620, Table 6-3 for the Shoreline Setback and Vegetation Conservation Areas
Priority Riparian Areas	250 feet
Type F streams greater than 5 feet wide (bankfull width) that provide habitat for fish	250 feet
Type F streams less than 5 feet wide (bankfull width) that provide habitat for fish	200 feet
Type Np and Ns streams (no fish habitat) with high mass wasting potential	225 feet
Type Np and Ns streams (no fish habitat) without high mass wasting potential	150 feet

1. Stream buffers shall be measured on a horizontal plane, outward from the ordinary high water mark (OHWM) on each side of the stream. (See Figure 32-1).
2. For streams that occur within ravines (which are not designated as a landslide hazard area) and where the standard buffer extends onto a slope of 30% or greater that is at least 10 feet in height, the buffer shall extend a minimum of 25 feet beyond the top of the slope to protect the stream channel from sediment loading from mass

The Olympia Municipal Code is current through Ordinance 7250, passed September 15, 2020.

Commented [JP3]: Ecology suggests retaining Type S waters in the table, which staff had proposed deleting since shorelines of the state are governed by the SMP for setbacks and Vegetation Conservation Area width requirements.

Ecology recommendation: Retain the Type S water type in the table and add language referencing the SMP provision which establishes shoreline setbacks and vegetation conservation areas. The City could also consider making changes to references throughout OMC 18.32.400-435, replacing "streams" with "waters".

wasting events (e.g., landslides, earth/debris flows and slumps, and rock falls/earth topples) and reduce the risk to structures and human safety.

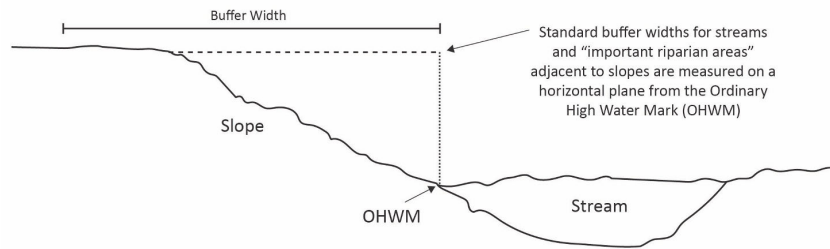


FIGURE 32-1

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

E. The stream or "priority riparian area" buffer widths contained in OMC 18.32.435 C presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the stream functions and values at the time of the proposed activity. If the vegetation and other buffer elements are inadequate, then the buffer shall be planted with a density and species composition commonly found in comparable but healthy riparian areas of Thurston County and as approved by the City of Olympia Urban Forester.

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

1. The existing buffer area is not a high functioning buffer but instead is currently providing reduced functions due to existing land uses or previous alterations;
2. Protection of the stream or "priority riparian area" buffer using a fence and sign have been provided, as described in OMC 18.32.145;
3. Topographic conditions of the site and the buffer are protective of the stream;
4. The intensity and type of the land uses adjacent to the buffer will minimize potential adverse impacts upon the stream and wildlife habitat; [e.g., publicly owned parks, designated open space areas in plats and binding site plans, or lands with a recorded conservation easement];
5. The site design and building layout will minimize potential adverse impacts upon the stream and wildlife habitat;
6. The smaller buffer will be adequate to protect the functions of the stream based on the best available science; and
7. Alternative mitigation measures as provided in "Land Use Planning for Salmon, Steelhead and Trout: A Land planner's guide to salmonid habitat protection and recovery," Washington Department of Fish and Wildlife, 2009, have been proposed by the applicant and approved by the Department.

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

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

18.32.510 Wetlands – Rating System

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

1. Category I wetlands are (1) relatively undisturbed estuarine wetlands larger than 1 acre; (2) wetlands with high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (3) bogs; (4) mature and old-growth forested wetlands larger than 1 acre; (5) wetlands in coastal lagoons; (6) interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre; and (7) wetlands that perform many functions well (scoring 23 points or more). These wetlands: (1) represent unique or rare wetland types; (2) are more sensitive to disturbance than most wetlands; (3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (4) provide a high level of functions.

2. Category II wetlands are (1) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre; (2) interdunal wetlands larger than 1 acre or those found in a mosaic of wetlands; or (3) wetlands with a moderately high level of functions (scoring ~~between 20 to~~ 22 points).

3. Category III wetlands are: (1) wetlands with a moderate level of functions (scoring between 16 and 19 points); (2) can often be adequately replaced with a well-planned mitigation project; and (3) interdunal wetlands between 0.1 and 1 acre. Wetlands scoring between 16 and 19 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

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

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

18.32.535 Wetlands – Wetland Buffers

A. Wetland buffer areas shall be maintained between all regulated activities and wetlands to retain the wetland's natural functions and values. Wetland buffers are based upon the rating of the wetland pursuant to OMC 18.32.575.

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

Table 32-1: Wetland Buffer Widths

Wetland Characteristics	Wetland Buffer Width
Natural Heritage Wetlands	Not less than 250 feet
Wetlands of High Conservation Value and Bogs	Not less than 250 feet
Estuarine - Category I	250 feet
Estuarine - Category II	150 feet
Habitat score: 3 pts	100 80 feet
Habitat score: 4 pts	100 feet
Habitat score: 5 pts	140 feet

The Olympia Municipal Code is current through Ordinance 7250, passed September 15, 2020.

Commented [JP4]: Per Gap Analysis Report – Table 3, Item 2

Wetland Characteristics	Wetland Buffer Width
Habitat score: 6 pts	180 feet
Habitat score: 7 pts	220 feet
Habitat score: 8 pts	260 feet
Habitat score: 9 pts	300 feet
Water Quality Improvement Score: 8 - 9 pts, and Habitat score: 4 pts or less	100 feet
Category I or II Wetland - Not meeting any of the above criteria	100 feet
Category III Wetland - Not meeting any of the above criteria	80 feet
Category IV Wetland - Score for all three wetland functions is less than 16 pts	50 feet

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

D. The wetland buffer widths contained in OMC 18.32.535 Table 32-1 presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation and other buffer elements are inadequate, then the buffer shall be planted with native trees to a density common in the specific buffer area and an understory of native plants commonly found in riparian areas of Thurston County.

E. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

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

1. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower rated area,
2. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion,
3. The total area of the buffer after averaging is equal to the area required without averaging, and
4. The buffer at its narrowest point is never less than seventy five percent (75%) of the required width.

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

1. For wetlands that score ~~five (5)~~six (6) points or more for the habitat functions, if both of the following criteria are met:
 - a. A relatively undisturbed, vegetated corridor at least one hundred (100) feet wide is protected between the wetland and any other priority habitats as defined by the Washington State Department of Fish and Wildlife. The corridor must be protected for the entire distance between the wetland and the priority habitat by legal protection such as a conservation easement.
 - b. Measures to minimize the impacts of different land uses on wetlands, such as those described ~~on Table 8e8, Appendix 8-C, of Wetlands in Washington State—Volume 2: Guidance for Protecting and Managing Wetlands (2005) Ecology publication #05-06-008 in Wetland Guidance for CAO Updates, Western Washington (2016) Ecology publication #16-06-001,~~ as amended or revised, are applied. Examples of these measures include directing lighting away from wetland, locating noise generating

Commented [JP5]: Edits in this subsection are adjusted to meet Ecology's 2018 guidance

activities away from the wetland, and densely planting the buffer to act as barrier to pets and human disturbance.

2. For wetlands that score ~~four (4)~~ five (5) points or less for habitat function, apply the provisions of OMC 18.32.535(G)(1)(b).

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

1. A larger buffer is needed to protect other critical areas;
2. The buffer or adjacent uplands has a slope greater than fifteen percent (15%) or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland; or
3. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than three (3) feet on center for shrubs and eight (8) feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of non-native plants when:
 - a. non-native or invasive plant species provide the dominant cover,
 - b. vegetation is lacking due to disturbance and wetland resources could be adversely affected, or
 - c. enhancement plantings in the buffer could significantly improve buffer functions.