

Olympia’s Critical Areas—Overview

In 2014, Olympia adopted an updated Comprehensive Plan that included a vision for our natural environment:

Olympia’s unique natural setting will continue to make Washington State’s capital city great. By working closely with surrounding governments we can successfully preserve, protect and restore the natural heritage we share.

As a result of this cooperative effort, Olympia will enjoy a dense tree canopy that will beautify our downtown and neighborhoods, and improve the health, environmental quality and economy of our city. Though our population will increase, our air and water will be cleaner and wildlife habitat will be preserved to maintain a biologically healthy diversity of species. Salmon will return and spawn in the streams where they were born. Seals, sea lions, orcas, and otters will roam the waters of southern Puget Sound.

This vision is in keeping with what we know about the benefits of protecting natural areas; they perform different and vital functions to enhance our environment and protect us from hazards. By designating and protecting critical areas, we protect our water quality, protect and enhance wildlife habitat, help capture, filter, and slow stormwater runoff, prevent soil erosion, and help recharge our aquifers.

Protecting critical areas also contributes to social and economic benefits. Open space provides recreation and stewardship opportunities for residents and visitors, while protecting habitat for local wildlife can contribute significantly to maintaining our local culture and historical identity.

Comprehensive Plan Goals & Policies

The following goals and policies in the Comprehensive Plan Natural Environment Chapter provide the primary basis for development regulations that require the designation and protection of critical areas in Olympia:

Goal 1: Natural resources and processes are conserved and protected by Olympia’s planning, regulatory, and management activities.

PN1. Administer development regulations which protect environmentally sensitive areas, drainage basins, and wellhead areas.

PN2. Coordinate critical areas ordinances and storm water management requirements regionally based on the best scientific information available.

PN3. Limit development in areas that are environmentally sensitive, such as steep slopes and wetlands. Direct development and redevelopment to less-sensitive areas.

PN1.4 Conserve and restore natural systems, such as wetlands and stands of mature trees, to contribute to solving environmental issues.

PN1.6 Establish regulations and design standards for new developments that will minimize impacts to stormwater runoff, environmentally sensitive areas, wildlife habitat, and trees.

PN1.12 Require development to mitigate impacts and avoid future costs, by incorporating timely measures, such as the clean-up of prior contamination as new development and redevelopment occurs

Critical Areas Ordinance

Chapter 18.32 in the Olympia Municipal Code is the “Critical Areas Ordinance” (CAO). This chapter encompasses development regulations that have been adopted to implement the State of Washington Growth Management Act and its guidelines, the Countywide Planning Policies, and the Olympia Comprehensive Plan by protecting critical areas and the functions they perform.

Drinking Water (Wellhead) Protection Areas (OMC 18.32.205)

Our community’s drinking water comes from underground aquifers. Drinking Water (Wellhead) Protection Areas include the surface and subsurface area surrounding a well or well field that supplies our public water. Protection areas are identified as areas surrounding the well or well field where there are instances in which contaminants are reasonably likely to move toward and reach the well within six months, and one, five, and ten years.

Regulations for new development and land uses in Wellhead Protection Areas prohibit uses that may result in groundwater contaminants, require regular monitoring of ground water where storm water runoff is being infiltrated, and place limits on the kinds of chemicals or application amounts that can be applied to the soil.

The most recent update in 2009 resulted in revisions to the Wellhead Protection Area maps based on new science and modeling techniques.

Important Habitats and Species (OMC 18.32.305)

In many cases, important habitat and species are protected when other types of critical areas are preserved, such as wetlands and streams and stream buffers; however, not all important habitats where a species is known to occur coincides with other critical areas. Protection of habitat for the purpose of wildlife preservation currently extends only to species and their associated habitat if the species has been designated as endangered or threatened under the federal Endangered Species Act, and those designated as endangered, threatened, or sensitive by the State of Washington.

The CAO does not include a process for adding locally-important species and their habitat. City staff consults with the Washington State Department of Fish and Wildlife (WDFW) to receive data and technical guidance when there are development projects proposed for areas with known or suspected state-listed priority species and their associated habitat.

Regulations for new development and land uses are applied to within 1,000 feet of a designated important habitat. Each site requires a specific management plan to determine such things as what uses may or may not be appropriate in the area, where to establish a protective buffer, and special actions to protect against or minimize any adverse impacts on the important species.

Streams and Important Riparian Areas (OMC 18.32.405)

Within Olympia's 24-square-mile area there are nine major streams, four lakes, and six miles of marine shoreline. Development regulations for streams and important riparian areas are intended to ensure these waters remain clear, cool, and clean as they move from upland areas to the Puget Sound.

Restrictions on what kinds of activities can occur in a stream or within a stream's riparian area (the vegetated area located along the stream banks) are intended to control soil eroding into the water, protect nutrients, maintain adequate flows, provide a source of large woody debris, preserve natural flood storage capacities, and protect fish and wildlife habitat. Clearing vegetation, changing the topography, and paving are all examples of prohibited activities within a stream riparian area.

Streams are grouped into categories based on a Washington State Department of Natural Resources Water Typing System. Heavily based on the presence of fish, this typing system assists in determining the extent of riparian area to be preserved or restored as a buffer. Buffers help protect the stream and its riparian area by ensuring

there is adequate distance between the stream and any nearby activities that may adversely impact the stream. Important riparian areas are identified as specific locations in the code, and the buffers are dependent on the location.

Some types of land uses or activities that are determined to be less impactful or that are done with accompanying restoration work may be approved by City staff or the Hearing Examiner within a stream buffer. Examples include trail building, environmental restoration, and improvements to stabilize stream banks.

Wetlands and Small Lakes (OMC 18.32.510)

Naturally functioning wetlands provide an extensive array of benefits. Sometimes called swamps, marshes, or bogs, wetlands serve as catchments for floodwater, they control erosion, capture pollution, recharge our aquifers, provide rich wildlife habitat, and are areas to recreate. For purposes of the CAO, “wetlands” do not include intentionally created wetlands, including drainage ditches, swales, canals, or stormwater detention ponds. Small lakes are lakes that naturally exist and are less than 20 acres in size.

The presence of a wetland, its condition and habitat value, and its size are determined by applying the Washington State Department of Ecology’s Washington State Wetland Rating System for Western Washington. Similar to streams, the rating assigned to a wetland helps determine the protective buffer distance and the allowed uses or activities within that wetland or buffer.

Activities like dredging, removing vegetation, dumping pollutants, or building structures are examples of prohibited activities in wetlands, small lakes, and their buffers. If damage is done to a wetland, the City can require that damage be mitigated through restoration or work off-site to enhance or develop another wetland.

Some types of land uses or activities that are determined to be less impactful or that are accompanied by restoration work may be allowed by City staff or the Hearing Examiner with a smaller buffer or to take place within the wetland or buffer. Examples of activities that may be approved include construction of trails, bridge crossings, and stormwater ponds.

Landslide Hazard Areas (OMC 18.32.605)

Landslide Hazard areas are slightly different than the other critical areas. Where regulations for other critical areas are primarily intended to protect the ecological function of that area, landslide hazard areas are designated to minimize damage to

health and property and safeguard the public from landslides, mud flows, and rock fall. That is in addition to controlling soil erosion, siltation, and protecting stream health.

Landslide hazard areas are identified primarily by the steepness of a slope (almost always 40% or greater) and the underlying soil type. Manmade slopes that have been structurally engineered and approved are not included as landslide hazard areas.

The steepness of the slope, height of the slope, and other conditions present in the soil (such as natural seeps and soil types) are what determine the buffer for a landslide hazard area. Examples of prohibited uses within a landslide hazard areas and its buffer include steepening the soil grade, building structures, removing vegetation (including trees), or paving.

Like streams and wetlands, City staff and the Hearing Examiner may approve some types of uses within the landslide hazard area or its buffer. Examples include trail construction, some forms of slope stabilization, road crossings, and the installation of utilities.

City staff and the Hearing Examiner may also approve reductions to the required buffer or allow for a new development project in a landslide hazard area if the applicant can demonstrate through a scientific analysis and/or an engineered design solution that their project will not increase the likelihood of a landslide event. In other words, they need to demonstrate that they are lowering the risk of a landslide more so than if the slope was left in its existing condition.

Frequently Flooded Areas

Chapter 16.70 in the Olympia Municipal Code encompasses development regulations to prevent flood damage in “flood hazard areas,” or those areas:

subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base (OMC 16.70.010).

The intent of these regulations is to either minimize development in flood hazard areas, or ensure that when development occurs, it meets minimum building standards to greatly minimize or eliminate the damage or loss incurred by flooding.

The Federal Emergency Management Agency (FEMA) establishes the minimum building standards, which we then adopt and enforce through our development

regulations. Examples include raising a structure's base elevation by a foot or more, or using special construction materials to floodproof a lower level. New development is required to meet these standards; however, existing buildings are incentivized to be brought up to a greater level of flood protection through greatly reduced flood insurance rates.

The Federal Insurance Administration establishes flood hazard areas in Olympia through a scientific and engineering report and accompanying Flood Insurance Rate Map. The most recent versions of both are dated October 16, 2012, and are adopted in OMC 16.70 by reference.

On behalf of FEMA, the Washington State Department of Ecology will periodically audit the City to ensure our development regulations and enforcement of those regulations complies with their standards.

Shoreline Master Program

The State Shoreline Management Act (SMA) requires that the City of Olympia administer a local Shoreline Master Program (SMP) containing locally tailored shoreline management goals and policies, regulations, environmental designations, and maps to manage shoreline development that are consistent with the SMA.

The shorelines addressed by Olympia's SMP include riverine shorelines along Percival Creek and Black Lake Drainage Ditch, lake shorelines including Capitol Lake, Chambers Lake, Grass Lake, Ken Lake and Ward Lake, and marine shorelines along Budd Inlet. The shoreline is inclusive of the aquatic areas and the upland areas within 200 feet of the shoreline edge.

The SMP process for managing shorelines differs slightly from the more traditional critical areas planning process in that the emphasis is on protecting the shoreline through the management of how they are used. New in the most recent required update to our SMP is to ensure no net loss of shoreline ecological functions and processes and a plan to restore shorelines that have been impaired or degraded.

The SMP includes critical areas provisions from OMC 18.32 and provisions from OMC 16.70, which are adopted by reference. The separate sections of code are in alignment and applied in conjunction with one another when a project site includes a shoreline, and is within a designated critical area and a flood hazard area. If there are conflicts or unclear distinctions between the SMP and critical areas, those requirements most consistent with the SMA are applied.