



Critical Area Functions

What are critical areas?

Critical areas are portions of the landscape afforded special protection because they provide unique environmental functions that are difficult, if not impossible, to replace and to ensure public health, safety and welfare.

The City of Bellevue regulates six types of critical areas in its Land Use Code (LUC) 20.25H.025.

- Streams and riparian areas
- Wetlands
- Habitats for species of local importance
- Geological hazard areas
- Flood hazard areas
- Shorelines



If you have questions or need additional information, please contact the Land Use Desk in the Development Services Center at 425-452-4188 or landusereview@bellevuewa.gov.

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How are critical areas protected?

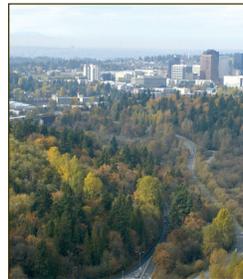
Critical Areas Ordinance.

The city protects critical areas through its 2006 Critical Areas Ordinance (CAO)—contained in LUC 20.25H—by prohibiting disturbance or modifications to critical areas unless specifically allowed in the code and requiring buffers and building setbacks.

Other regulations.

Critical areas are also often regulated by federal and state government agencies because their communal functions contribute to the larger state and national environment.

- Wetlands, streams, and shorelines are regulated by the U.S. Army Corps of Engineers and Washington State Department of Ecology.
- Particular habitats and species are regulated by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Washington Department of Fish and Wildlife.
- Development within floodplains is regulated by the Federal Emergency Management Agency (FEMA).



Shared benefit, shared responsibility.

Because we all benefit from the functions provided by critical areas, we all bear a collective responsibility to act in the interest of our community, not just in the interest of our particular project or property.

→ Refer to other handouts in this series for more information about site planning and permitting with critical areas.

Why protect critical areas?

We all live downstream.

As cities grow, watersheds lose vegetation, gain concrete and asphalt, and wash more water and more pollutants downstream. Growth strains the ability of critical areas to provide important functions like water quality, flood reduction, and slope stability, while making those functions even more important. This strain has a cumulative effect, building up over time, and reducing the ability of the remaining critical areas to sustain themselves.

We all benefit from critical area functions.

Functions are the ecological benefits and services that critical areas and their buffers naturally provide. See reverse for a description of each critical area and its functions.

Streams and Riparian Areas (LUC 20.25H.075)



Streams are classified into four types, based on their flow and capacity to support fish. Artificial channels (e.g., ditches) are generally not protected, unless they are used by salmonids or convey a stream that previously occurred naturally in that location.

A healthy stream needs healthy riparian areas along its banks and floodplain. Riparian vegetation provides shade, which protects water quality; retains soil, which prevents erosion that can affect salmon spawning and feeding areas; holds back flood flows; and provides wildlife habitat and the large woody debris that stores sediments, slows flood velocities, and creates good fish habitat.

Wetlands (LUC 20.25H.095)



Wetlands include the vegetated edges of ponds and areas commonly called swamps, marshes, and bogs. Frequently, their water is only visible in the spring. Wetlands are classified into four categories, based on a combination of habitat, water quality, and flood-flow-reduction functions.

Wetlands provide rearing and foraging habitats for fish and wildlife and food chain support for downstream waters. Wetlands provide natural water quality improvement; flood-flow reduction and storage; shoreline erosion protection; and opportunities for passive recreation. Many urban wetlands are heavily disturbed, but still provide valuable water quality treatment and flood-flow reduction.

Habitats for Species of Local Importance (LUC 20.25H.150)



Species of local importance are specifically recognized local populations of native species that are at risk of being lost from Bellevue—western pond turtle, Oregon spotted frog, western toad, Chinook salmon, bull trout, coho salmon, river lamprey, bald eagle, peregrine falcon, common loon, pileated woodpecker, Vaux’s swift, merlin, western grebe, great blue heron, osprey, green heron, red-tailed hawk, western big-eared bat, Keen’s myotis (bat), long-legged myotis (bat), and long-eared myotis (bat)—and whose presence can be an indicator of environmental health.

Habitats for these species provide the food, water, nesting/rearing, and cover necessary to support their populations. Protected habitats include naturally occurring ponds under 20 acres, concentrations of dead trees, caves and roosting structures, and large stands of conifers.

Geological Hazard Areas (LUC 20.25H.120)



Geological hazard areas—landslide hazard areas, steep slopes, and coal mine hazard areas—are areas susceptible to erosion, sliding, earthquake, or other geological events. Because of their conditions, these areas pose a threat to health and safety when development is sited too close.

Geological hazard areas are regulated mainly for these safety reasons but also for their habitat values. Several of Bellevue’s large blocks of forest are on steep slopes, providing wildlife habitat and important movement corridors. Steep slopes can also be conduits for groundwater draining from hillsides to form the headwaters of wetlands and streams.

Flood Hazard Areas (LUC 20.25H.175)



Flood hazard areas are those subject to 100-year floods (identified on FEMA Flood Insurance Rate Maps). These areas are designated to protect development from flooding and to protect the inherent functions of floodplains. Undeveloped floodplains store water and slow the downstream delivery of flood flows, reducing the impacts of a flood and recharging wetlands, streams and underground aquifers. Floodplain development reduces the floodplain’s water storage capacity and puts valued property and infrastructure in the path of floodwaters. Runoff from impervious surfaces changes flood size and frequency and can degrade water quality.

Shorelines (LUC 20.25E.017)



Specifically designated large water bodies termed “shorelines of the state” and their associated wetlands, floodplains, and all lands within 200 feet of the water’s edge are regulated as shorelines. Bellevue’s “shorelines of the state” include Lake Washington (and Mercer Slough up to Interstate 405), Lake Sammamish, Lower Kelsey Creek, and Phantom Lake.

Undeveloped shorelines reduce wave energy, preventing erosion. Shoreline vegetation feeds aquatic food chains and shades shallow waters. Trees supply large wood that creates fish habitat and the erosion of shoreline bluffs supplies the sediment that forms beaches, spits, and lagoons.