

VII. Critical Areas and Topography

Background

Critical areas are lands with natural hazards or lands that support certain unique, fragile or valuable resource areas. The King County Code protects critical areas as well as their buffers in order to protect public health and safety and to promote environmental health. The following descriptions of critical areas within the demonstration area should be considered general. A property-specific critical area review would be required to conclusively determine the presence or lack of critical areas. For more information on the Critical Areas Ordinance see the Department of Development and Environmental Services [website](#).

Coal Mine Hazards

No coal mine hazards are present in the demonstration area.

Erosion Hazard Areas

The [Critical Areas Ordinance \(CAO\) User Manual](#) defines erosion hazard areas as those thought to be underlain by soils that are subject to severe erosion when exposed. Within the demonstration area, a narrow band of mapped erosion hazard area extends from south of Maplewood Heights Park at a southeast angle to the Renton Fish and Game Club property. Less than a mile long and 300 feet wide, this roughly 25 acre section of erosion hazard area affects mostly small properties.

Along the southern edge of the demonstration area, running along the slope to the Cedar River, is a larger stretch of erosion hazard area. A portion of this area runs along 154th Place SE and the eastern edge of the Renton Fish and Game Club.

Flood Hazard Areas

There are no flood hazard areas within the demonstration area. Those related to the Cedar River are just outside the southern boundary at the lower elevation.

Landslide Hazards

Landslide hazards are defined by the CAO User Manual as including a variety of geological features that together present hazards to development both above and below the landslide. For the demonstration area, a landslide hazard area is along the southern boundary at the elevation change. The largest extent of this area within the demonstration area is along 154th Place SE.

Seismic Hazard Areas

The closest mapped seismic hazard areas are to the south of the demonstration area, extending south from the Cedar River. None have been mapped within the demonstration area.

Critical Aquifer Recharge Areas

The CAO User Manual defines critical aquifer recharge areas as those that overlie significant groundwater resources and are particularly susceptible to ground water contamination should pollutants be released on the surface or in the shallow subsurface.

Running from the Renton Fish and Game Club property to the southern edge of the Liberty Annexation Area, roughly 25% of the demonstration area has been mapped as a Category II critical aquifer recharge area. Category II areas include those have: 1) a medium susceptibility to ground water contamination and are located in a sole source aquifer or a wellhead protection area or 2) are highly susceptible to ground water contamination and are not located in a sole source aquifer or wellhead protection area. The demonstration area is not located in a sole source aquifer.

Wetlands

Wetlands within the CAO, as defined by the User's Manual, are non-aquatic areas that are inundated or saturated by ground water at a frequency and duration sufficient to support, and under normal circumstances supports, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands are rated and then categorized into one of four categories. Category I wetlands 1) represent a unique or rare wetland type, or 2) are more sensitive to disturbances than most other wetlands, or 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.

Cemetery Pond, located across from the Briarwood shopping center, is the only Category I wetland within the demonstration area. The majority of the pond is located on King County-owned properties, although it extends onto several adjacent private properties. Aside from being classified as a unique/outstanding wetland, this wetland has open water in near equal proportion to vegetative cover. In December 2008, King County, the Four Creek Unincorporated Area Council, and two community groups (Community Alliance to Reach out and Engage (CARE) and the Stewardship of Wetland Areas by Neighbors) signed an [agreement](#) for improvements and stewardship of Cemetery Pond.

In the eastern part of the demonstration area, near the intersection of SE 136th Street and 175th Avenue SE, is an additional wetland that was included within the [National Wetland Inventory](#) (NWI) and is not classified in the King County wetland inventory.

Aquatic Areas

Aside from the mapped wetland near the Briarwood shopping center, the only other bodies of water in the demonstration area are small, unnamed streams that flow into the Cedar River to the south and May Creek to the north.

Wildlife Habitat Conservation Areas

No wildlife habitat networks have been mapped for the demonstration area.

Topography

The demonstration area is located on the east Renton plateau, an elevated area above the Cedar River and May Valley. The demonstration area slopes from north to south, lowering from a maximum height of 520 feet in the northwest corner to 320 feet at the southern boundary. At the southern edge of the demonstration area, the elevation

descends rapidly down to 100 feet along the Cedar River. This lower elevation extends into the southwest corner of the demonstration area along 154th Place SE.

The slope to May Valley is far less steep and occurs north of the demonstration area. Only about the northern quarter of the demonstration area is part of the May Creek basin, although this portion does include the wetland across from the Briarwood shopping center. The remainder of the demonstration area is part of the Lower Cedar River Basin.

There are no significant changes in elevation to the east or west of the demonstration area.