

Critical Areas

Definition, Protection & Best Practices

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Your partner in building safe, resilient, sustainable Kitsap County communities



Overview

Critical Areas are often difficult to identify and can require review from a technical expert. Kitsap County provides <u>critical area</u> <u>maps</u> as a helpful (but not always exact) resource, but many critical areas in Kitsap County remain unmapped. It is important to consult with DCD prior to design or development to avoid expensive corrections and delays.

This includes any development:

- In or next to water or wet areas, even if periodically wet.
- On or next to moderate or greater slopes.
- Located on an aquifer.
- In an area within a floodplain.
- In an area that shows land movement, slide, or erosion.

Photo by Eli Owens



What is a critical area?

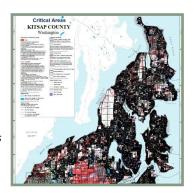
Critical areas are lands with natural features that support certain unique, fragile, or valuable resource areas.

Lands designated by Kitsap County as critical include:

- Wetlands
- Fish and Wildlife Habitat Conservation Areas
- Streams
- Geologically Hazardous Areas
- Frequently Flooded Areas
- Critical Aquifer Recharge Areas

Critical area maps are available at the back of this brochure under Helpful Links.

All maps are an indication of potential critical areas and are for informational purposes only. Ground-truthing or field verification is required.



Kitsap County Code Title 19 <u>Critical Areas Ordinance</u> (CAO) is intended to protect critical areas and is mandated by the Washington State Growth Management Act. This ordinance is periodically reviewed and updated with best available science, as required by law. The CAO limits and conditions land uses or development and establishes review procedures, buffer requirements, and mitigation requirements.

The Kitsap County Code (KCC) protects critical areas and their buffers in order to protect public health, safety, and welfare.

Buffers are areas adjacent to critical areas which are also restricted from development.

When development is proposed near water, wetlands, slopes, streams, or wildlife habitat, an applicant may be required to provide additional information from a qualified consultant or licensed professional.

DCD provides lists of professional service providers but is unable, by law, to recommend consultants or professionals.

Protecting People, Property, and Communities

Protecting critical areas does not just benefit the natural environment- it also protects Kitsap County residents and property. For example, critical areas protections help to:

- Protect water quality and water quantity for people, fish, and wildlife.
- Reduce conflicts between wildlife, humans, and property/infrastructure.
- Protect people and property from impacts caused by flooding.
- Protect people and property from dangerous geological conditions, such as landslides, erosion, tsunamis, and liquefaction.
- Maintain and protect resources essential to specific industries, such as fisheries, timber, recreation, and tourism.
- Protect resources essential to cultural identity and quality of life.
- Prevent disproportionate impacts from environmental degradation on overburdened communities.



Wetlands



Wetlands involve unique combinations of hydrology, soil types, and water-tolerant plants; these characteristics can be naturally occurring and even manmade. They have a variety of appearances ranging from a marsh with sedges to a field without exposed water. They can be periodic and subject to seasonal influences.

There are four different categories of wetlands that can only be determined by the vegetation, soil type, hydrology, or saturated soils. A site investigation conducted by a wetland specialist can determine if and where there are wetlands on the property, and if so, categorize the type of wetland that is present.

In addition to a 15-ft building setback (ie, a 'no-build' setback), wetland buffers can vary, ranging from 25 to 300 ft, depending on:

- Wetland category (I, II, III, or IV).
- Land use intensity.
- Wetland functions, such as habitat and water quality.

Wetland buffers shall not be disturbed and shall maintain <u>no net loss</u> of ecological function. If disturbed or altered, mitigation is required, which can be complex, expensive, and time-consuming.

If a proposed development is found to be within an identified wetland or its largest potential buffer, a Wetland Delineation and Mitigation Report will be required. A Single-Family Wetland Certification may be submitted in lieu of a full report for single family projects if the project is outside of all wetland buffers.

Fish and Wildlife Habitat Conservation Areas & Streams

Fish and Wildlife Conservation Areas involve priority species and habitats and also include riparian habitats along flowing rivers and streams.

Development in these areas may require a Habitat Management Plan, prepared by a qualified biologist, which identifies how development impacts to wildlife or habitat are going to be mitigated.



The riparian habitats found along streams and creeks have buffers from



50 to 150 ft, which are dependent on stream classification. Streams can be seasonal or perennial, and many streams (including seasonal streams) provide habitat for fish species, including salmon.

Depending on waterbody flow and size, portions of larger freshwater rivers, streams, and lakes, as well as marine shorelines and wetlands (eg, saltwater estuaries) are regulated

under KCC Title 22 Shoreline Master Program (SMP). Shoreline buffers range from 50 to 200 ft.

Buffers are to remain in natural vegetative cover, which can limit development and uses.

In addition, structures and impervious surfaces must be kept outside the 15-ft building setback that extends beyond the buffer.



Geologically Hazardous Areas

Geologically hazardous areas are highly susceptible to erosion, landslides, earthquakes, or other geological events. The severity depends on slope, soil type, geological material, and hydrological conditions.

These areas are most hazardous along our marine shorelines, stream valleys, and steep slopes.

Three types identify geologically hazardous areas:

- Erosion
- Landslide
- Seismic areas

These hazard areas are categorized as "high" or "moderate" geologic hazard:

- High geologic hazards can include areas with slopes greater than or equal to 30 percent.
- Moderate geologic hazards include slopes ranging from 15 to under 30 percent.

Geologically hazardous areas have protective buffers. No clearing or grading is allowed within the buffer or critical area.





Photo by Eli Owens

Geologically Hazardous Area Buffers

The minimum setback from the toe of any slope greater than 15% is 40 ft.

The minimum setback from a *moderate geological hazard area* is also 40 ft (25 ft native vegetation buffer from the toe of the slope plus an additional 15 ft building and impervious surface setback).

The minimum setback from a *high geologic hazard area* is a distance equal to the height of the slope plus 1/3 height or 25 ft, whichever is greater.

If setbacks cannot be met or the development is within a potential hazard area, a **Geologic Assessment** must be completed by a licensed geologist or geotechnical engineer.

Frequently Flooded Areas

In contrast to other areas around Puget Sound, Kitsap County does not have a major river system, and the County does not experience the scale of flooding as some neighboring counties.

However, frequently flooded areas in Kitsap County are typically located in coastal areas and along streams and wetlands. Flood zones are subject to inundation by depth, velocity, intensity, and frequency of floodwaters during major storm events.

Development proposed within frequently flooded areas must mitigate for flood hazards and conform to the provisions of Kitsap County Code Title 15 Flood Hazard Areas. These development standards are reviewed and updated for compliance as part of the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP).





Critical Aquifer Recharge Areas

Potable water is an essential life-sustaining element. The majority of Kitsap County drinking water comes from groundwater supplies in aquifers. Regulated development is very important for shallow and deep water aquifer recharge.

As defined in Kitsap County Code Section $\underline{19.150.210}$, a critical aquifer recharge area means those areas with a critical recharging effect on aquifers used for potable water and is vulnerable to contamination or reduced recharge.

Critical aquifer recharge areas are split into two categories.

<u>Category I</u> critical aquifer recharge areas are areas where the potential for certain land use activities to negatively impact groundwater is high unless evaluated and subsequently conditioned during approval. Specified land uses are prohibited within Category I areas, unless a waiver is granted, which requires a **Hydrogeological Report.**

<u>Category II</u> critical aquifer recharge areas provide recharge water sources that are or will potentially become potable water supplies and are vulnerable to contamination based on the type of land use activity. They may also require a **Hydrogeological Report** and permit conditions.

Land use activities with a potential threat to groundwater quality include but are not limited to animal feedlots, commercial operations (such as gas stations, laundromats, and golf courses), industrial manufacturing, junk/wrecking yards, landfills, cemeteries, and mining. Residential development is not considered a threat to groundwater quality. A complete list can be found in KCC 19.600.620.

See the <u>Critical Aquifer Recharge Area Map</u> for reference.

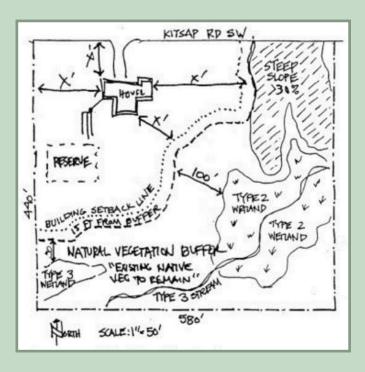
Protectina Critical Areas

The CAO emphasizes a sequence of steps during site development to protect critical areas. These include:

- Avoiding impacts to critical areas on the property.
- Minimizing impacts to critical areas that cannot be avoided as a result of development.
- Mitigating for the impacts which may occur to critical areas on the site.

If impacts are unavoidable, a mitigation plan to offset or remedy any such impacts is required. **Plans must be monitored for success for a minimum of five years.** A successful plan will result in <u>no net loss</u> of critical area ecological function.

A proposed site plan must show all known critical areas, buffers, and proposed structure setbacks. For more information, check out our_Building Site Plan Submission Guidelines and Information brochure.



Helpful Links

Live Chat and Staff Appointments - <u>Contact Us</u> (kitsapgov.com)

Parcel Search - Parcel Search (kitsapgov.com)

Critical Area Maps - https://www.kitsapgov.com/dcd/
DCD%20GIS%20Maps/Critical_Areas.pdf

Kitsap County Code - <u>Kitsap County Code</u> (<u>codepublishing.com</u>)

Shoreline Master Program - https://www.kitsapgov.com/dcd/Pages/SMP_review.aspx

Fish & Wildlife - https://wdfw.wa.gov/species-habitats/atrisk/phs/maps

Fish & Wildlife HPA - https://wdfw.wa.gov/licenses/environmental/hpa

FEMA - https://www.fema.gov/flood-maps

WA State Growth Management Act_

<u>GMA Laws and Rules - Washington State Department of</u> Commerce

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