

## CRITICAL AREAS

- Wetlands
- Areas with a critical recharging effect on aquifers
- Fish and wildlife habitat conservation areas
- Frequently flooded areas or floodplains
- Geologically hazardous areas

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### WHY PROTECT CRITICAL AREAS?

As Island County continues to grow, the impact of that growth on the natural environment becomes more apparent. Attractive natural areas and the recreational opportunities made available by fish, wildlife, clean water and open spaces play a large role in enhancing the quality of life in Island County.

The intent of the critical area regulations is to manage development in sensitive or hazardous areas while recognizing that development will affect the environment. Current critical area regulations include Chapters 17.02, 17.02A and 11.02 Island County Code (ICC). The ordinance seeks to minimize the impacts of development by preserving key environmental features, natural systems and resources while increasing predictability; and allowing for reasonable economic use of properties. Critical areas include wetlands, critical aquifer recharge areas, fish and wildlife habitat areas including streams, frequently flooded areas, and geologically hazardous areas.

It is important to note that some critical areas include a regulated buffer area within which certain forms of development are restricted or require special development permits and environmental studies. In other cases a biological site assessment or habitat management plan may be required.

This Development Information Bulletin (DIB) briefly describes each type of critical area. More detailed information may be found in separate DIBs for each Critical Area.

**WETLANDS** - Island County's surface water resources include all streams, wetlands, lakes and marine waters of Puget Sound. The quality and quantity of these waters is important for public health, fish and wildlife habitat, recreational and commercial pursuits such as shellfish harvesting, fishing and tourism. A system of freshwater and saltwater wetlands stretching throughout the county also plays a vital role in filtering, thus cleaning water. Wetlands also slow water during rainstorms thus preventing erosion, and they provide floodwater storage.



Wetlands have been regulated in Island County since 1984. No clearing, grading, filling, construction, roads, or other alteration may occur in wetlands or their buffers without first obtaining appropriate permits. In July of 2008 a revised set of wetland regulations were implemented, which regulates wetlands and their associated buffers based on the type of wetland (e.g. estuarine, ponded, forested, etc.), the quality of habitat and degree of slope surrounding the wetland and the intensity of land use being proposed.

Many wetlands within the County have been mapped and efforts are ongoing to continually update those maps. These maps serve to notify both the property owner and the County of the

potential existence of a wetland. An area must have specific characteristics of soils, vegetation, and hydrology in order to be classified as a wetland. However, whether mapped or not, actual conditions on the ground determine whether or not an area is a wetland.

For more information on wetlands, see DIB #508.

**AREAS WITH A CRITICAL AQUIFER RECHARGING AFFECT FOR POTABLE WATER** - Groundwater constitutes more than 80% of the water used by Island County residents. It originates in aquifers (saturated geologic formations located beneath the ground's surface). Aquifers are generally recharged by surface water and precipitation that slowly infiltrates into the ground and eventually reaches the aquifer. Places where water moves through the ground to replenish aquifers are known as "aquifer recharge areas."

Quality and quantity of groundwater in an aquifer is closely linked to the aquifer's recharge area. Most of the County provides recharge to one or more aquifers. In order to protect potable groundwater from contamination, aquifer recharge areas and the waters that flow through them must be protected from degradation and contamination. Some aquifers are more vulnerable to contamination due to their shallow depth, topography, and overlying geology such as porous soils and fissures.

In 1991 Island County was designated in its entirety as a Critical Aquifer Recharge Area. Groundwater use and quality are regulated by the Island County Health Department.

**FISH AND WILDLIFE HABITAT CONSERVATION AREAS** - Protection and restoration of fish and wildlife habitat conservation areas and other habitat is key to preserving the biological diversity of Island County and the Puget Sound region. As development changes the face of the landscape, habitat critical to some species is often lost or degraded. These losses can be reduced through land regulations that address critical habitat issues, as well as through acquisition or preservation of habitat conservation areas.



Many types of regulated habitat areas, including nest sites, streams, and locations of endangered plant species are mapped. However, a complete inventory of existing or historic habitat types in Island County does not exist. Much of the information comes from a variety of sources and is specific to certain wildlife species or plant communities.

Fish and Wildlife Habitat Conservation Areas include:

- Areas with endangered, threatened, and sensitive species listed by the federal or state government.
- Streams.
- Commercial and recreational shellfish beds.
- Kelp and eelgrass beds.
- Herring and smelt spawning areas.
- State preserves and conservation areas.
- Species and Habitats of local importance.

For more information on streams, see DIB #509. More information on protected species can be found in DIB #510.

**FREQUENTLY FLOODED AREAS OR FLOODPLAINS** - Frequently flooded areas are lands inundated with water during periods of high rainfall, extreme high tides or strong coastal winds. They typically lie adjacent to streams, lakes and coastlines. During intense storms, properties located in frequently flooded areas are prone to severe damage. Development in these areas may be hazardous not only to the property owner, but may also aggravate flood conditions on neighboring lands and compound damage to the natural environment.

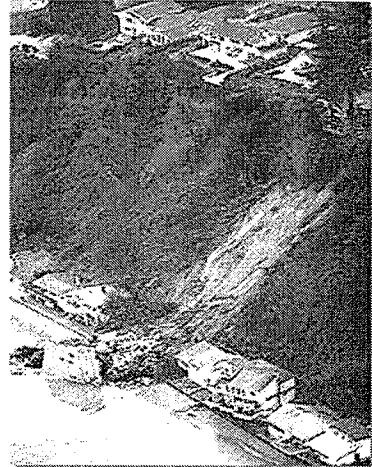
Island County is not as prone to catastrophic flooding as other counties in the Puget Sound region due to a lack of major river systems, a high proportion of embayments which soften wave velocities, and the presence of steep bluffs along much of the shoreline. Despite this, some coastal and riparian flooding occurs, and localized flooding from drainage problems occur every year.



The Federal Emergency Management Agency (FEMA) has identified areas throughout Island County that are susceptible to 100-year flood events, known as 100-year floodplains. Other areas inventoried include V-Zones, which are places along the shoreline susceptible to damage from high velocity waves. Areas depicted on FEMA's National Flood Insurance Program maps as V-Zones and 100 year floodplains are designated frequently flooded areas. Other areas of frequent flooding may be designated as more information becomes available.

See DIB #519 for more information on frequently flooded areas.

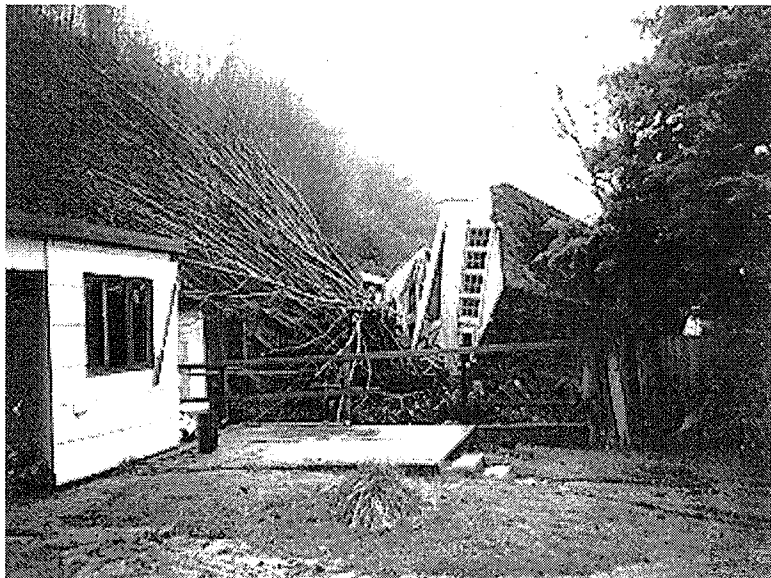
**GEOLOGICALLY HAZARDOUS AREAS** - The primary purpose of the geologically hazardous area designation is to promote public health, safety and general welfare by minimizing hazards associated with development on or adjacent to steep slopes, bluffs, or geologically hazardous areas. In many cases, these areas may be extremely desirable for development because of their scenic views and beach access, but their development may endanger people, property, public welfare and surface water resources. For these reasons, areas that may be geologically unstable must be designated as critical areas. Reasons for controlling land-use activities within or near geologic hazardous areas include:



- protecting the public from personal injury and death;
- preventing damage or loss of property;
- avoiding higher engineering and equipment costs associated with construction in unstable areas;
- avoiding public or private expenditures spent on repair to property in unstable areas; and
- avoiding damage to critical facilities such as drinking water supplies, highways, and utilities.

Development activities can aggravate potential problems. For example, uncontrolled clearing and grading activities within erosion and landslide hazard areas increase the potential for slope failures and excessive erosion. Buildings, septic systems and drainage facilities may increase slope instability by overloading or saturating slopes.

In some cases the risk from development near geologic hazards can be reduced or mitigated to acceptable levels by engineering design, modified construction practices, drainage, and erosion control. In areas where these measures are not sufficient to reduce the risk from geologic hazards, building or disturbance is best avoided.



For more information, see DIB #520 (Steep Slopes) and #511 (Geologically Hazardous Areas).

### **How can I find out if I have a Critical Area on my property?**

Some Critical Areas in Island County are mapped. However, many do not appear on any maps. If an area meets the criteria for a regulated Critical Area, it is regulated whether or not it is shown on County maps.

You may call or visit to ask if any Critical Areas are mapped on your property (be sure to have your parcel number at hand). Other information, such as aerial photographs and the Island County Soil Survey, are also useful sources of information in approximating the location of Critical Areas. The County also maintains property-specific information. Staff can help you review and interpret these materials and can tell you if any site-specific information is available.

For determinations specific to wetlands, the Island County Wetland Identification Guide can be used as a tool to aid property owners. The Wetland ID Guide was developed as a non-technical handbook for landowners proposing residential development and includes instructions on how to evaluate hydrology, soils and vegetation.

The Planning and Community Development Department has also developed a process whereby a property owner may apply for a Preliminary Critical Area Determination (PCAD) to be made for their property. The application process requires the submittal of a completed wetland Field Indicators Worksheet (see Wetland ID Guide) and a fee. The applicant is then provided a written determination regarding the presence/absence of critical areas on their property. Some critical areas (e.g. wetlands) cannot be thoroughly delineated through this process, but the PCAD should provide the applicant with basic information needed to manage their property and/or plan for development.

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*IMPORTANT NOTE - "Development Information Bulletins" (DIBs) are intended to assist the general public in understanding the effect of codes and regulations. DIBs are not complete statements of the laws and rules and should not be used as a substitute for them. If conflicts and questions arise, the code and regulations are the final authority. Because these regulations may be revised or amended at any time, consult Island County staff to be sure you understand all current requirements before beginning any work. It is the responsibility of the applicant to ensure that the project meets requirements of all current codes and regulations.*

### **ISLAND COUNTY PLANNING AND COMMUNITY DEVELOPMENT**

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