

## July 7, 2004 Comprehensive Plan Land Use Element Geologically Hazardous Areas

Chapter 1, Overview – Major Issues – Page 60 (This is also where the map is located)

### **Geologically Hazardous Areas**

Although Island County is characterized by a gentler landscape than much of the mountainous and river-torn Puget Sound mainland, the islands have been and continue to be buffeted by geological and climatological forces. Vertical bluffs, ancient landslides, slopes with groundwater seepage or springs can be found in Island County. Careless development in such areas can lead to loss of life and property, both on-site and to other properties. The County regulates grading and construction on all slopes greater than ~~15~~40%.

The Growth Management Act establishes six different types of Geologically Hazardous Areas: Erosion Hazard Areas; Landslide Hazard Areas; Seismic Hazard Areas; Coal Mine Hazard Areas; Volcanic Hazard Areas; and Tsunami Hazard Areas. Varying levels of risk are associated with each type of hazard that help shape the appropriate regulatory framework that ensures the hazard area is protected from human impact and that humans are protected from the hazard.

In Island County, there are no identified Volcanic Hazard Areas and Coal Mine Hazard Areas. Regulatory and outreach programs need to be developed to address the remaining hazard areas as all four have been classified as known or suspected risks.

Chapter 3, Future Land Use – General Overlays and Critical Areas – Page 107

### **Geologically Hazardous Areas (Steep/Unstable Slopes) Overlay**

#### **Landslide Hazard Areas**

##### **Definition:**

Areas not suited to siting of commercial, residential, or industrial development consistent with public health or safety concerns due to their susceptibility to sliding or other slope failures, erosion, or other geological events.

##### **Designation Criteria:**

- A. Areas indicated within the Washington Department of Ecology's Coastal Zone Atlas of Island County, dated April, 1979 as having recent or historical slide activity and/or indicative of unstable slope conditions.
- B. Areas with slopes 40% or greater and with a vertical elevation change of at least ten feet, except areas of consolidated rock.

#### **Erosion Hazard Areas**

**Definition:**

Areas of slopes greater than 15 percent and with soils identified by the Natural Resources Conservation Service as having a “severe” or “very severe” rill and inter-rill erosion hazard.

**Designation Criteria:** All of Island County has been identified as an Erosion Hazard Area.

**Seismic Hazard Areas**

**Definition:**

Areas subject to severe risk of earthquake damage as a result of seismically induced ground shaking, differential settlement, slope failure, settlement, lateral spreading, mass wasting, surface faulting, or soil liquefaction.

**Designation Criteria:**

A. D1 Seismic Category as defined by the United States Geologic Survey

B. D2 Seismic Category as defined by the United States Geologic Survey

C. United States Geologic Survey defined fault lines

**Tsunami Hazard Areas**

**Definition:**

Coastal areas susceptible to flooding, inundation, debris impact, and/or mass wasting as the result of wave action generated by seismic events.

**Designation Criteria:**

**Volcanic Hazard Areas**

**Definition:**

Areas subject to lava flows, pyroclastic surges, mud flows, lahars, debris flows, debris avalanche, ash clouds, ash fall, lateral blast, ballistic debris, or flooding as a result of volcanic activity. No volcanic hazard areas were found in Island County and therefore there is no risk from this hazard.

**Designation Criteria:**

A. No Volcanic Hazard Areas have been identified in Island County.

**Coal Mine Hazard Areas**

**Definition:**

Areas in proximity to abandoned coal mines and associated underground mine workings. No coal mine hazard areas were found in Island County and therefore there is no risk from this hazard.

**Designation Criteria:**

A. No Coal Mine Hazard Areas have been identified in Island County.

Chapter 4, Goals and Policies – General Land Use Policies – Page 141

**Geologically Hazardous Areas (Steep/Unstable Slopes) Overlay**

**Landslide Hazard Areas**

**Goal:**

**To protect the public health, safety and welfare from threats resulting from incompatible development being sited on or near steep and/or unstable slopes.**

**Policies:**

- A. Minimize damage to life, health, property, and natural resources caused by geological processes.
  - 1. Require thorough geotechnical investigation of localized conditions during the review of proposed development within areas of steep/unstable slopes. The amount of information required will be proportionate to the severity of the geologic hazard and the susceptibility of the proposed development.
  - 2. Encourage, and where appropriate, require use of special engineering, site design, and modified construction practices.
  - 3. Prohibit activities and land uses which cause or exacerbate existing hazardous geological conditions.
- B. Maps, site-specific studies, and information collected by other agencies available for public review will be made readily accessible to potential and existing

landowners, interested citizens, and development interests to aid in the protection of these areas.

- C. Regulation of these areas will take into consideration the sensitivity of the area to disturbance, and the intensity and potential risks associated with a proposed land use.
- D. When a violation of the policies and regulations of this area is identified, the enforcement action and severity of any penalty will be proportional to the nature and circumstances of the violation and the damage or risk to private and public resources.
- E. Overlay policies and development regulations shall be implemented in addition to those associated with the underlying land use designation. When there is a conflict in policy statements or development regulations, the more restrictive shall apply.
- F. Steep and unstable slope regulations are contained in ICC 17.02.

### **Erosion Hazard Areas**

#### **Goal:**

**To protect the public health, safety, and welfare from threats from land disturbing activities in areas susceptible to erosion.**

#### **Policies:**

**A. All permits for land disturbing activities shall require application of Best Management Practices for erosion control.**

### **Seismic Hazard Areas**

#### **Goal:**

**To protect the public health, safety, and welfare from threats associated with seismic activities.**

#### **Policies:**

**A. Identify Seismic Design Categories and known fault lines in Island County.**

**B. In D1 Seismic Design Categories conform with International Residential Code requirements.**

**C. In D2 Seismic Design Categories conform with International Residential Code requirements.**

D. Within one-half (1/2) mile of known fault lines conform with International Residential Code requirements.

### **Tsunami Hazard Areas**

#### **Goal:**

**To protect the public health, safety, and welfare from threats associated with tsunami activities**

#### **Policies:**

- A. Identify areas susceptible to risk as a result of tsunami events.
- B. Prohibit the siting of critical public facilities in known tsunami hazard areas unless the siting of the facility can be shown to have a public benefit which outweighs the risk of siting in the hazard area.
- C. Ensure land use planning policies and development regulations are consistent with Hazard Mitigation Planning efforts.