Unincorporated Snohomish County

Lynnwood

Brier

Woodinville

Kirkland

Landslide-Prone Deposits

Interbedded impermeable and granular deposits on slopes >15%, or known landslide deposits

Known Landslides (City of Bothell, 2002 & 2011)

50' Contour (City of Bothell, 2012)

Planning Area Boundary Line

Bothell City Limits (2015)

Landslide-prone deposits are defined by the Bothell Critical Areas Ordinance (BMC 14.04) as those areas subject to severe risks of landslides, including either of the following:

A. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain by mass wastage debris from that epoch; or

B. Any area with a combination of:
   1. Slopes steeper than 15%; and
   2. Impermeable soils, such as silt and clay, frequently interbedded with granular soils, such as sand and gravel; and
   3. Springs or groundwater seepage.

Locations of existing landslides (Criterion A) have been compiled from records at the City of Bothell and outlined localities mapped by J. P. Minard (Geologic Map of the Kirkland Quadrangle, USGS MF-1543, and Geologic Map of the Bothell Quadrangle, USGS MF-11747). Hillslope gradients (Criterion B.1) were identified by analyzing a ground-surface digital elevation model, created from contour and survey point data received from the City of Bothell. The presence of impermeable soil (Criterion B.2) is inferred from current (2002) geologic mapping data and includes those geologic units that commonly display this property over the map area. Because the presence or absence of spring or groundwater seepage (Criterion B.3) cannot be consistently determined from available data sources, it has not been included as a factor in delineating the identified areas on this map. Isolated areas less than about 10 acres in size that might meet these criteria are generally not identified by the geologic map data used in preparing this map, and so any associated landslide-prone deposits are not identified here. Other sloping areas that do not meet these criteria may nonetheless be subject to local landsliding because of unusual site-specific factors or human activity.

This map has been prepared from a combination of high-quality digital elevation data and best-available geologic information, developed at the University of Washington in 2002 from existing geologic information and compiled at a scale of 1:24,000 (1" = 2000'). Elevation contours are from City of Bothell topographic survey; datum is mean sea level. The map outlines the boundaries of geologic deposits that meet the critical-area definition of the City of Bothell (BMC 14.04) but does not assure either the presence or the absence of that critical area, or its associated geologic hazard, at any given location.

This map should be used only as a general guide for delineating areas prone to the designated geologic hazard. They have been approximated solely from review of past studies, aerial photos, and limited field observations. On-site verification of their existence and boundaries has not occurred for all. This map is not officially adopted but is provided solely for the purpose of alerting owners and prospective owners that a critical area may in fact exist upon properties in the approximated areas depicted. Additional such areas that have not been mapped may in fact exist and not be depicted here.

This map is also not a substitute for site-specific investigation to assess the potential for hazards that could potentially affect any development project. Because the geologic data used in preparing this map originated from regional studies, this map cannot be used to determine the presence or absence of a geologic hazard beneath any specific locality. This determination, and specification of any appropriate remedial actions, requires a site-specific geotechnical investigation performed by a qualified practitioner.

N W E S

0 0.25 0.5 0.75 1 Miles

The City of Bothell delivers this data (map) in as-is condition. GIS data (maps) are produced by the City of Bothell for internal purposes. No representation or guarantee is made concerning the accuracy, currency, or completeness of the information provided.

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*Imagine Bothell...*Comprehensive Plan
2015 Periodic Plan and Code Update

Figure NE-1
Natural Environment
Landslide Prone Deposits

City of Bothell™