Erosion hazards areas include those areas greater than 15% slope and subject to a severe risk of erosion due to wind, rain, water, slope and other natural agents including those soil types and areas identified by the U.S. Department of Agriculture’s Natural Resource Conservation Service as having a “severe” or “very severe” rill and inter-rill erosion hazard. Another factor in evaluating erosion potential is infiltration potential. If sandy material is present at the ground surface, rain water can infiltrate and loosen material for removal by erosion. Therefore the areas of sandy material have also been added to this hazard map for consideration along with the slope and erodible soils subclass. Contributing factors not shown on the map include rainfall, areas of shallow groundwater, ground cover, wind, impervious surfaces, and changes to the ground surface. These factors and all the categories shown on the map should be used together to assess erosion potential. Individual areas less than 0.3 acres in size have been excluded.

EROSION HAZARD AREAS (MICC 19.16.010)

For all other areas, hazard is unknown or unquantified.

Supplemental Data

Infiltration Potential

- High - Coarse-grained deposits; e.g. gravel and clean sand
- Medium - Silty sandy deposits
- Low - Fine-grained deposits

Slope Class

- Slope 80+% - High
- Slope 40-79% - Medium
- Slope 15-39% - Low

GENERAL NOTES FOR GEOLOGICAL HAZARDS MAPS

This map is one of a suite of revised Geologic Hazard Maps for the City of Mercer Island. This suite includes maps showing Seismic Hazards, Landslide Hazards, and Erosion Hazards. Other geologic and/or natural hazards may exist and geologic events may occur on Mercer Island that are not specifically identified on these maps. Examples of geologic hazards and hazardous events that are not identified on these maps include, but are not limited to, tsunami and waves in Lake Washington.

These maps are for the sole use of the staff of the City of Mercer Island’s Development Services Group (DSG) for the purposes of permit application evaluation. These maps provide DSG staff a general assessment of known or suspected geologic hazard areas for which the City will require site review of proposed development. All areas have not been specifically evaluated for geologic hazards and there may be locations that are not correctly represented on these maps. It is the responsibility of individual property owners and map users to evaluate the risk associated with their specific property and all hazards. Geologic assessment of risk is complex or uncertain indicated by the City of Mercer Island by these maps.

The City of Mercer Island is using guidance provided by the State of Washington regarding the definition of geologically hazardous areas in accordance with WAC 365-60-001 and the Growth Management Act (Geographically Hazardous areas). By State definition, include areas susceptible to erosion, flooding, earthquakes, or other geologic events. They pose a threat to the health and safety of individuals, property, and the environment. These areas include commercial, residential, or industrial development is restricted in areas of significant hazard.

This new set of maps represents an update of the 2002 Geologic Hazard Map Series and is based on a review of 2007 Available Landslide models of Washington State Dept of Fish and Wildlife for Seattle and regional events, a new Geologic Risk of Mercer Island by Troost and Weller (2006), and a geologic database of Mercer Island compiled by Geology at the University of Washington. Information about data used for the maps, reference materials, and applicable laws and regulations for these maps is available at the City of Mercer Island’s website. A review of these maps is accompanied by a data file containing pertinent information about map construction. These data and maps are all available on the City of Mercer Island website.