Title: U.S. Geological Survey Pacific Northwest Geologic Mapping Project

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Abstract:

The U.S. Geological Survey’s Pacific Northwest geologic mapping project is a long-term USGS effort that produces geologic maps and map compilations for the region. These maps and their supporting information aid assessments of resources (groundwater, mineral and aggregate, cultural heritage), natural hazards (earthquakes volcanism, landslides, floods), and ecosystems (habitat formation, evolution of aquatic and terrestrial systems). This wide purview results in a broad suite of activities focused on improving geologic understanding of the region in support of human uses, hazards, and ecosystems. A current focus area of the mapping project is the Columbia River Gorge, where detailed geologic mapping between Portland and the Deschutes River confluence is providing insights on the geologic history of the Columbia River and the Cascade Range, at timeframes ranging from tens of millions of years—responsible for establishing the overall topographic environments—to the modern-day processes responsible for the landforms and habitats that sustain modern cultures and ecosystems.