United States Department of the Interior

U. S. GEOLOGICAL SURVEY
John W. Powell Federal Building
12201 Sunrise Valley Drive
Reston, VA 20192

PEER REVIEW PLAN

Date: July 30, 2005

Source Center: Seattle Field Office, Earthquake Hazards Team
University of Washington
Department of Earth & Space Sciences
Seattle, WA 98195
and
Earth Surface Processes Team
345 Middlefield Road
Menlo Park, CA 98025

Preliminary Title: Southeast Extension of the Southern Whidbey Island Fault, Washington: Implications for Earthquake Hazards

Subject and Purpose: This scientific research paper documents the work done by the USGS to determine the extension of the Southern Whidbey Island fault to the southeast of its current known location. A combination of aeromagnetic data, lidar images, detailed geologic field investigations, and trenching studies at 4 sites allow the interpretation that the Southern Whidbey Island fault strikes across northern King County and southern Snohomish County. The work reported shows that the fault is a complex zone of deformation, widening from a few kilometers on Whidbey Island to perhaps as much as 20 or more kilometers in King and Snohomish counties. The primary data to be used in the paper is summarized in USGS Open-File Report 2005-1136 and USGS Open-File Report 2004-1240.

Two of the USGS trenches were dug on the site of a proposed wastewater treatment plant, known as Brightwater. The trenching showed that two and possibly three earthquakes have occurred on a strand of the Southern Whidbey Island fault that cuts through the northeastern end of the proposed plant site. As a result of the USGS work, King County Wastewater Treatment Division issued a supplemental Environmental Impact Statement to address seismic issues raised by the new observations. Snohomish County, the location of the plant site, has used the new USGS observations as a partial basis for new seismic siting requirements for wastewater treatment plants. Private citizen groups have cited the USGS work as reason to do more exploratory investigations at the proposed plant site.

Agency Contact: peer_review_agenda@usgs.gov

This product is potentially "Influential Scientific Information" in the sense of OMB's Final

Information Quality Bulletin for Peer Review unless the box below is checked.

This product is considered a "Highly Influential Scientific Assessment" in the sense of OMB's Final information Quality Bulletin for Peer Review: X

What is the timing of the peer review; will deferrals be considered?

November 2006.

Deferrals are not anticipated at this time.

Will alternative procedures be applied? Yes ___ No _X_

How will the review be conducted? Panel ___ Individual letters _X_ An alternative procedure

Will there be opportunities for the public to comment on the product and if so, how and when?

Yes, after the peer review and publication process. The intended outlet for this report is a scientific peer-reviewed journal. Written correspondence with the journal regarding the scientific findings within the product is encouraged.

Yes _X__ No __ _

Written correspondence _X_
Oral presentation to peer reviewers ___

Before peer review ___
During peer review ___
After peer review _X_

Will significant and relevant comments from the public be provided to the peer reviewers before they conduct their review? Yes ___ No _X_

What is the anticipated number of reviewers? 3 or fewer ___
4-10 _X_
>10 ___

What are the primary disciplines or expertise needed in the peer review?

Geophysics, paleoseismology, seismology, regional tectonics, Puget Sound glacial stratigraphy

Reviewers will be selected by USGS _X_ A designated outside organization ___

Will the public be asked to nominate potential peer reviewers? Yes ___No _X_

Will scientific or professional societies be asked to nominate peer reviewers?
Yes ___ No __X_

(However, this paper will be submitted to a scientific journal where additional independent peer reviewers will be selected.)