



United States Department of the Interior

Geological Survey
Cascades Volcano Observatory
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April 13, 2011

Project Proposal for New Wireless Tower

The U.S. Geological Survey Cascades Volcano Observatory (USGS/CVO) is proposing to install a new wireless tower in the vicinity of the non-historic building that serves as the Xanterra employee bunkhouse within Crater Lake National Park. The project requires an Environmental Assessment, and the USGS is seeking input as we begin this process. We are seeking general comments and concerns about issues that should be considered regarding the potential impacts of this project. We welcome comments during the time period of April 13, 2011, through May 13, 2011. A map showing the proposed location is included with this letter.

Crater Lake is a potentially active volcano. Before volcanoes erupt they provide warning signs including swarms of small earthquakes, release of volcanic gases, and swelling of the volcanic edifice. Such warning signs are often subtle and the period of warning can be as short as days before eruptive activity commences. Monitoring volcanoes requires sensitive instruments to be placed on the volcano, data from which need to be transmitted to a volcano observatory for scientific analysis. Currently the USGS operates three seismic and four continuously recording GPS (CGPS) stations in the Park. Typically, monitoring data are transmitted via radios, phone lines, and Internet from instruments installed on a volcano to scientific facilities for processing and analysis. Unfortunately, the park's data communication infrastructure cannot support the additional requirements needed to telemeter the volcanic monitoring data out of the Park to the USGS/CVO in Vancouver, Wash. Thus all data are stored on a computer in the Park and must be manually downloaded by USGS/CVO staff once every three to six months.

The installation and operation of the tower will provide the necessary infrastructure to enable scientists from the USGS/CVO to remotely monitor, analyze and interpret all seismic activity within the Park from USGS/CVO in real time on a 24 hours, 7 days a week basis. Additionally the tower will permit all data to be routed out of the Park through a reliable and secure data communications link independent of the Park's limited communications link.

The tower will be located approximately 50 feet west of the non-historic park service building that currently serves as the Xanterra employee bunkhouse. The site is located in a previously disturbed area with existing utilities nearby and is outside of the historic Rim Village Area. The USGS has worked with the Park to identify a location where the tower will not be visible from the rim of the caldera or from the historic Crater Lake Lodge. The tower will be a 60-foot tall monopole and painted brown to blend in with the surrounding trees. It will support a three foot diameter enclosed fiberglass antenna that will transmit all monitoring data out of the park.

We appreciate any comments or suggestions you have as we begin the environmental assessment process. Please send comments to:

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Comments and specific project questions should be directed to the Benjamin Pauk at (360) 993-8992 or bpauk@usgs.gov. Additionally, you may review project information and submit comments at the Planning, Environment, and Public Comment website at <http://parkplanning.nps.gov>.

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