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JOINT ONLINE SEMINAR  
FEBRUARY 10, 2021  
5:30 PM TO 7:00 PM

# FEBRUARY 10, 2021

## Accommodating Ancient Landslide Movement with a Compressible Inclusion

**A Presentation by Tom Westover, P.E., MBA, Senior Associate Engineer, Cornforth Consultants, Inc.**

### Times:

- 5:30 pm to 6:10 pm Welcome, Networking and Announcements
- 6:10 pm to 7:00 pm Presentation

During original construction of open reservoirs at the Washington Park site in the 1890's, the Portland Water Bureau discovered a large ancient landslide. The landslide initially moved at several inches per week, but was mitigated down to about 1/8-inch per year. A project to improve the reliability and protection for the City of Portland's water supply is currently in progress, where the reservoir will be replaced with a gravity-fed buried 12.4-million gallon concrete tank. The reservoir will be isolated from continued landslide movements using an innovative compressible inclusion. The design required integration of behavior of the landslide, compressible inclusion, foundations, and irregularly-shaped reservoir structure under complex seismic and hydrodynamic loading. This presentation will discuss the history of the landslide, the current improvement project, the foundation design and soil-structure interaction model, and the performance of the landslide during construction. The design philosophy and mechanics of the compressible inclusion will be described, along with an overview of the seismic response and soil-structure interaction. [More](#)



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