

## THE ASCE PITTSBURGH SECTION GEO-INSTITUTE CHAPTER PRESENTS

## November 2015 Dinner Meeting Fixing the Crack in Wanapum Dam

Presented By: Rick Deschamps, Nicholson Construction Company.

Wanapum Dam is located on the Columbia River in Washington State and was completed in 1963. It has a spillway that is 820 feet long and a hydroelectric capacity of 1.092 Megawatts. In February, 2014 a discovered on the fracture was upstream side of Wanapum Dam's concrete spillway. The fracture ran the length of one 65-foot-wide monolith and was open two inches at its widest spot. The owner lowered the reservoir behind the dam to reduce the load and



this reduced the crack opening width. A subsequent investigation showed that the primary cause of the fracture in the dam's spillway was a mathematical error made in the pre-construction design.

The presentation will provide an overview of the investigation and repair work undertaken to the remediate the dam. This effort included: crack mapping, cement and chemical grouting, installation of large tendon and bar anchors from the dam crest and spillway, and installation of bar anchors below water with the use of divers.

Attendance at this technical presentation qualifies participants for 1.0 PDH

## DINNER RESERVATIONS ARE REQUIRED PLEASE RSVP ON OR BEFORE Friday, November 13, 2015

Reservations made and not honored will be invoiced.

Cancellations must be received by the RSVP deadline in order to qualify for a refund.

Date: THURSDAYNOVEMBER 19, 2015 Cost: \$30 ASCE Pittsburgh Section Members

Place: Cefalo's

428 Washington Ave Carnegie, PA 15106

Time: 6:00 PM Social Hour

7:00 PM Dinner 8:00 PM Presentation

> PLEASE RSVP ON OR BEFORE Friday, November 13, 2015 by contacting Ms. Sarah Missenda at sjersey@gmail.com; or by registering online at http://www.asce-pgh.org/.

\$35 Non-members

Free Students