



GEOTECHNICAL
ENGINEERING

STUDENT
ORGANIZATION

FIXING THE CRACK IN WANAPUM DAM

Rick Deschamps PhD, PE

Vice President

Nicholson Construction

11 / 6 / 2015

12:00 – 1:00 pm

3310 Yeh Student Center (Newmark Lab)



In February 2014 a fracture was discovered on the 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. 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 including: crack mapping, cement and chemical grouting, and installation of large tendon and bar anchors.