

UNDERGROUND LUNCH & LEARN

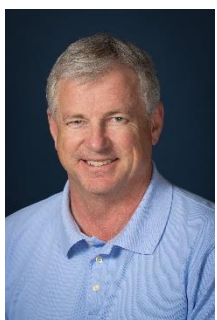
Beach Interceptor Tunnel Stabilization, Laguna Beach California

As part of its wastewater collection and conveyance network, the South Coast Water District operates the Beach Interceptor Sewer Tunnel in South Laguna. A pipeline within the tunnel conveys, on average, 4.7 million L/d (1.25 million gal/d) of wastewater.

Put into service in 1954, the tunnel follows beneath the cliffs fronted by 3.2 km (2 mi) of popular beaches and topped by some of the most desirable and expensive homes along the California coastline. A tunnel and pipeline collapse would have a catastrophic impact to the sensitive coastal environment and the public. Constructed when the area was sparsely populated, the tunnel and sewer have operated in relative obscurity while residential development has completely occupied the surface above.

Since first constructed the tunnel has experienced rock falls and failure of timber support. Additional timber supports and gunite have been installed and in 2007 emergency repairs were made to a 400-foot interval of the tunnel. Full rehabilitation of the tunnel is under way with construction scheduled for completion in 2022.

NOVEMBER 7, 12-1 P.M. BROWN HALL W250



Dave holds Bachelor of Science and Master of Engineering Degrees from the Colorado School of Mines, and is a Registered Professional Engineer in multiple states. He has written and presented numerous tunneling articles and has served as Chairman of ASCE's Underground Technology Research Council. During his 37 years in the tunneling industry

he has been responsible for the investigation, design, construction, and rehabilitation of tunnels, underground structures, and infrastructure for water resource, hydroelectric power plants, transit systems, scientific facilities, pipelines, and mines in North America and overseas. He has completed and supervised conceptual studies, geotechnical site investigations, detailed engineering designs, and construction engineering for numerous soft ground and hard rock underground projects. His support of NEPA permitting and FERC licensing efforts for underground projects has included completion of technical studies, alternatives analysis, development of construction budgets and contingencies, and participation in public hearings

