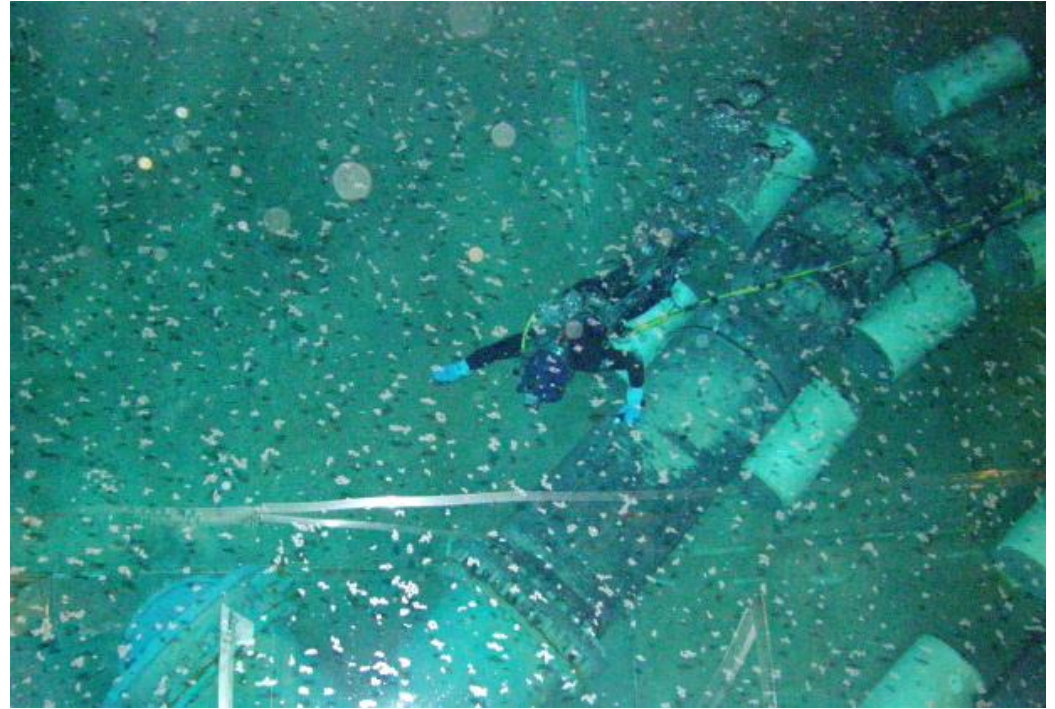




**PROJECT PROFILE**

# Ortega Reservoir

Leakage Investigation | Montecito, CA



**CLIENT**

Collins, Collins, Muir + Stewart, LLP

**BACKGROUND**

Built in the 1950s, Ortega Reservoir is a 21 million-gallon concrete-lined reservoir that is owned by the U.S. Bureau of Reclamation and operated by two local water districts. Circa 2004, an aluminum-framed cover was installed over the approximately four-acre reservoir.

This large reservoir began to experience a moderate amount of leakage after the structure was covered with an aluminum-framed roof. WJE was asked to investigate the leakage and assess the best way to mitigate the leakage.



**SOLUTION**

WJE engineers quickly determined the most likely source of the leakage, helped direct an underwater survey of the reservoir, polled other water districts to assess what methods they use to address leakage, discussed the problem with a number of reputable manufacturers of repair products, designed a repair that would address the leakage, designed an alternate repair that could also be used, and worked with a cost estimator to develop a budget for the two designs. As the project devolved into litigation, WJE provided consulting and expert witness services, including demonstrating why designs proposed by others were unrealistic, infeasible, and simply not constructible.