



The Buenaventura Lakes (BVL) Stormwater Reuse Evaluation project focused on the feasibility of implementing stormwater reuse within BVL's master drainage system. This drainage network consists of a series of interconnected ponds that drain a large residential and former golf course development. The drainage system has a history of flooding problems and outfalls in two locations to Boggy Creek and Bass Slough. These water features ultimately discharge into East Lake Toho and Lake Toho, respectively, two impaired Lakes.

A wastewater treatment plant associated with the development was planned to go offline leaving two large wetland storage areas and subsurface sewer piping unused. The reuse concept evaluated the possibility pumping excess stormwater from the BVL stormwater pond system into the wetland storage areas where it could then be collected and transported out to the subdivisions for irrigation purposes. The evaluation demonstrated that the project concept could be successful in providing an alternate source of irrigation water to the development. Additional benefits would be quicker flood stage relief in the pond system for overall flood reduction, as well as the reduction of pollutant loads leaving the subdivision into the Boggy Creek and Bass Slough receiving waters.

As the prime consultant for the project, Inwood was responsible for providing stormwater analysis, preparing a hydrologic mass balance model, and making recommendations for a conceptual design implementation.

