

City of San Diego SBOO Oceanographic Monitoring Mooring

This project calls for the installation of two real-time oceanographic moorings the first system off of South Bay Ocean Outfall (SBOO) and a second mooring off of Point Loma Ocean Outfall (PLOO). The City of San Diego's Ocean Monitoring Program is conducted as a requirement of two NPDES regulatory permits issued by the San Diego Regional Water Board and U.S. Environmental Protection Agency for the Point Loma Wastewater Treatment Plant (PLWTP) and South Bay Water Reclamation Plant (SBWRP). In addition to mandatory core and regional monitoring requirements, these permits require the City to conduct additional studies or special projects to address emerging issues of concern to the City, federal and state regulators, and the public in order to develop a broader understanding of San Diego's coastal marine ecosystem and the behavior of wastewater discharged to Pacific Ocean via SBOO and PLOO. The use of advanced oceanographic moorings to monitor near-shore coastal water quality and to better understand the impacts of local ocean currents and tidal fluxes on effluent plume dynamics.

The new oceanographic moorings and real-time data collection systems funded by this project will be deployed and operated near the offshore discharge sites for the Point Loma and South Bay outfalls to enable the City's Ocean Monitoring Program to address the primary recommendations of the previous plume behavior studies for these areas, all of which are critical to maintaining the City's 301(h) modified permit for the PLWTP [Waiver] and to meeting the City's enhanced ocean monitoring objectives. The City's moorings will also be networked with SIO's existing Del Mar mooring to form a comprehensive state-of-the-art ocean observing system for the San Diego region. These mooring systems will also allow the City to conduct additional studies in collaboration with other wastewater discharge agencies and research institutions, and to provide enhanced oceanographic services for San Diego.

Development and implementation of this real-time ocean observing network is a critical component of the City's "Proposed Monitoring Program" included in the Point Loma NPDES Permit 301(h) Renewal Application submitted to USEPA and the San Diego Regional Water Board. Additionally, implementing the real-time mooring ability for the South Bay region was also cited by the City of Imperial Beach as a condition of their support for the City's Waiver and permit renewal strategy.

