

Water Quality Report Card

Dissolved Copper in Shelter Island Yacht Basin

Regional Water Board: San Diego, Region 9

Beneficial Uses Affected: MAR, WILD

Implemented Through: Investigative Order

Effective Date: February 8, 2006

Attainment Date: 2022

STATUS Improvement Needed

Pollutant Type: Nonpoint Source

Pollutant Source: Copper Based Paints
Underwater Hull Cleaning

Water Quality Improvement Strategy

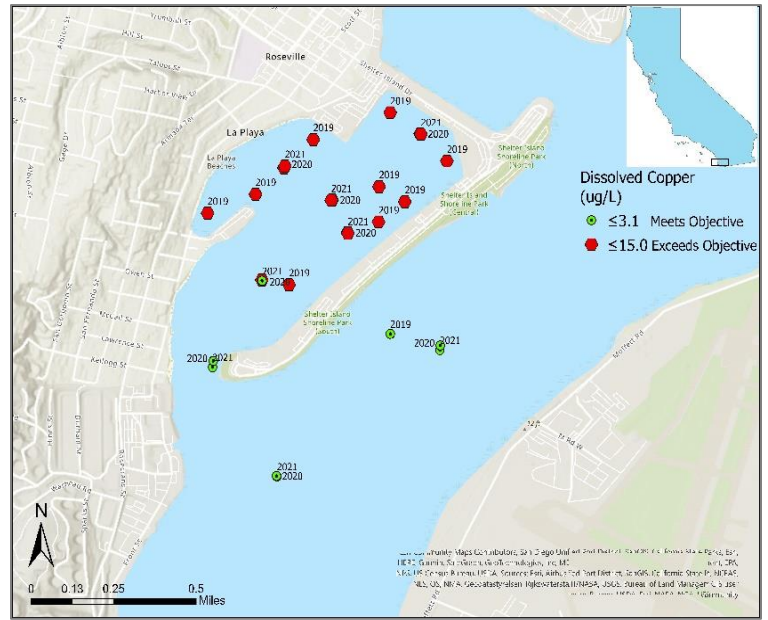
The Shelter Island Yacht Basin (SIYB) is a popular recreational marina at the north end of San Diego Bay. The copper from antifouling paints on vessels at SIYB has resulted in elevated dissolved copper concentrations through continuous passive leaching. The San Diego Water Board (Board) designated SIYB as an impaired waterbody on the Clean Water Act Section 303(d) list in 1996 due to elevated levels of dissolved copper. The [SIYB Total Maximum Daily Load \(TMDL\) for Copper](#) was adopted by the Board in February 2005 and approved by USEPA in February 2006.

Under San Diego Unified Port District leadership, the SIYB marinas, boat owners, and hull cleaners have implemented a variety of copper reduction best management practices (BMPs) including converting from traditional copper-based boat hull coatings to “alternative” hull coatings with no or low-leach copper paints. The TMDL requires a final copper load reduction of 76% from the baseline of 2100 kg/year by 2022. Original loading calculations were based solely on passive copper leach rates, not considering the possibility that hull cleaning could accelerate copper loss from boat hulls. This calculation may need to be reconsidered. Annual reductions and loads are based on number of boats converted to non-copper paint and a passive leach rate.

Water Quality Outcomes

- The first two targets for annual load reduction, 10% by 2012 and 40% by 2017, were met.

Shelter Island Yacht Basin, San Diego



- The annual target was exceeded in 2020 and 2021 with 48% and 45% reductions respectively.
- Despite the BMP efforts, dissolved copper concentrations, within the basin continue to exceed water quality objectives.
- The Port of San Diego will continue implementing efforts to reduce copper loads; an emphasis will be placed on evaluating the water quality impacts from in-water hull cleaning.

Water Quality

