

EXECUTIVE OFFICER SUMMARY REPORT
September 8, 2010

ITEM: 17

SUBJECT: Informational Item: Implementation of the Shelter Island Yacht Basin (SIYB) Copper TMDL (Wayne Chiu)

PURPOSE: To provide the San Diego Water Board with an update on the status of SIYB Total Maximum Daily Load (TMDL) implementation and recommend an approach to ensure reductions in copper loading rates are attained in compliance with the adopted schedule.

PUBLIC NOTICE: This item was listed in the September 9, 2010 Board Meeting agenda notice that was mailed to the San Diego Water Board's agenda mail list of interested persons.

DISCUSSION: SIYB is a popular recreational marina located in the north end of San Diego Bay. The hull bottoms of recreational vessels (boats) moored in SIYB are typically painted with copper-based antifouling paints (AFPs) to prevent buildup of marine fouling organisms on the boat hull. The copper in AFPs is designed to leach into the receiving water environment to prevent marine organism fouling. However at relatively low levels, copper is toxic to a variety of aquatic organisms, not just fouling organisms, and is persistent in the environment. The copper-based AFPs on the boat hulls passively leach 93 percent of the total annual copper load directly into the water column. An additional 5 percent of the total annual copper load is discharged during the underwater cleaning of boat hulls coated with copper-based AFPs. The high density of boats moored in SIYB combined with reduced tidal flushing has resulted in elevated levels of dissolved copper that exceed numeric water quality objectives for dissolved copper, and Basin Plan narrative water quality objectives for toxicity and pesticides. These exceedances threaten wildlife and marine habitat beneficial uses. Due to high concentrations of dissolved copper in SIYB waters, the San Diego Water Board, in 1996, placed SIYB on the Clean Water Act Section 303(d) List of Water Quality Limited Segments.

The San Diego Water Board developed the SIYB TMDL to address this water quality impairment in SIYB. The TMDL was adopted as an amendment to the Basin Plan on February 9, 2005 and became effective on December 2, 2005. The TMDL requires a 76 percent copper loading reduction in five stages within 17 years of the effective date. Stage 2 requires the first 10 percent increment of the total copper load reduction to be attained by December 1, 2012. The San Diego Unified Port District (Port District), the SIYB marina owners/operators, persons owning boats moored in SIYB, and SIYB underwater hull cleaners are the designated parties responsible for the majority (98 percent) of the dissolved copper discharges to SIYB.

The effective and timely implementation of the TMDL is an ongoing concern of the San Diego Water Board. The Port District has taken a leadership role in coordinating the implementation of the SIYB TMDL, and in applying for and obtaining grant funding for several important projects integral to the TMDL implementation. The Port District has also made good progress in working closely with SIYB marina owners/operators and other stakeholders to develop a TMDL Implementation Plan and Monitoring Plan. The Implementation Plan proposes to attain the required copper load reductions by converting boat hulls to alternative anti-fouling paints with little or no copper. Based on the Port District's efforts, the San Diego Water Board believes the compliance schedule will be met and has not used its regulatory authority to implement the SIYB TMDL by regulating the SIYB marinas under waste discharge requirements (WDRs), conditional waivers of WDRs, or waste discharge prohibitions. The San Diego Water Board will revisit this issue in the future if the situation warrants it.

The San Diego Water Board is currently working towards establishing a program for the Port District to submit reports to the Board on a regular basis on the progress being made to implement the TMDL and achieve the required copper load reductions. The San Diego Water Board staff expects to formalize this program in the near future and will provide periodic progress reports back to the Board once the Port District's reporting program is underway.

**SUPPORTING
DOCUMENTS:**

None

RECOMMENDATION:

Informational Item Only