

# Water Quality Report Card

## Dissolved Copper in Marina del Rey Harbor

<b>Regional Water Board:</b>	Los Angeles, Region 4
<b>Beneficial Uses Affected:</b>	COMM, MAR, REC-1, SHELL, WILD
<b>Implemented Through:</b>	MS4 and other NPDES Permits, CalTrans Stormwater Permit
<b>Effective Date:</b>	Oct 16, 2015
<b>Attainment Date:</b>	Mar 24, 2024

<b>STATUS</b>	<b>Conditions Improving</b>
<b>Pollutant Type:</b>	Nonpoint Source
<b>Pollutant Source:</b>	Anti-fouling Paint

### Water Quality Improvement Strategy

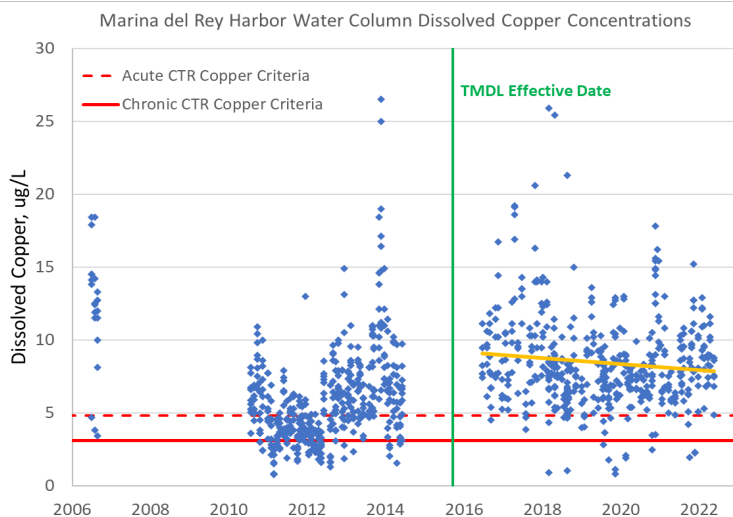
Marina del Rey Harbor is located approximately 15 miles southwest of downtown Los Angeles. Developed in the early 1960s, Marina del Rey Harbor is one of the largest artificial small-craft harbors in the United States, consisting of a main channel, 3 back basins (D, E and F) and 5 front basins (A, B, C, G, and H). The harbor is on the USEPA Clean Water Act 303(d) list due to elevated dissolved copper concentrations. The main source of copper to the water column is antifouling paint (AFP) from boats. AFPs discharge copper to the water column through in-water hull cleaning events and passive leaching while boats are in harbor. The water column dissolved copper impairment is being addressed by the 2014 [Marina del Rey Harbor Toxic Pollutants TMDL](#). Responsible parties are the County of Los Angeles, individual anchorages, and persons owning boats in the Marina. The TMDL specified that compliance with the load allocations may be demonstrated by meeting water column numeric targets, demonstrating 85% of boats are using copper free paint, or 100% of boats are using hull paint with 85% less copper.

### TMDL Waste Load Allocations/Load Allocations

The numeric targets for dissolved copper in the water column are set equivalent to the California Toxics Rule CTR saltwater criteria for the protection of aquatic life.

Parameter	Current Loading from AFP	TMDL Allocation	Required Reduction
Dissolved Copper	3609kg/year	547 kg/year	85%

### Water Quality



### Marina del Rey Harbor Watershed Map



### Water Quality Outcomes

- Water column dissolved copper concentrations have increased overall since 2006. However, data collected since 2016 show more recent water concentrations trending downward (as seen with the yellow trend line in the graph). Most samples remain above the chronic and acute water quality standards.
- In 2014, the California Department of Pesticide Regulations lowered the allowable leach rate in California Registered AFPs to 9.5  $\mu\text{g}/\text{cm}^2/\text{day}$  with the expectation of lowering water column concentrations. The revised standard is not expected to be low enough to ensure attainment in Marina del Rey Harbor and other similar waterbodies.
- LA County has developed a Hull Cleaning Training and Certification Program to reduce the inputs from in-water hull cleaning events and is working with marinas, boatyards, and owners to advocate for usage of no leach and lower leach rate paints.
- The responsible parties have formed a stakeholder working group to develop outreach programs focused on encouraging boat owners to switch to low- or non-copper hull paint.