

Total Maximum Daily Load Progress Report	
Regional Water Board	Santa Ana, Region 8
Beneficial uses affected:	Upper Bay: BIOL, COMM, EST, MAR, REC-1, REC-2, RARE, SHELL, SPWN, WILD Lower Bay: COMM, MAR, NAV, RARE, REC-1, REC-2, SHELL SPWN, WILD
Pollutant(s) addressed:	Metals (Copper)
Implemented through:	TBD
Approval date:	TBD

### Newport Bay Metals TMDLs

**STATUS**

- Conditions Improving
- Data Inconclusive
- Improvement Needed**
- TMDL Achieved/Waterbody Delisted

#### TMDL Summary

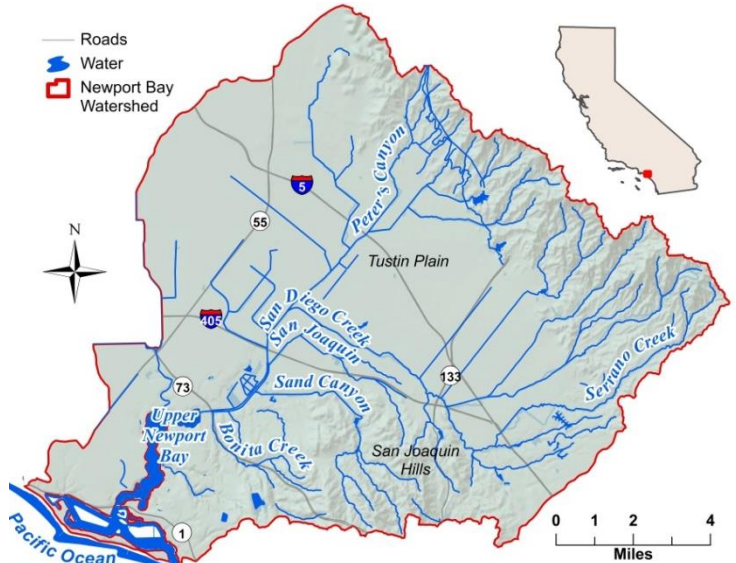
In June 2002, [TMDLs for metals in San Diego Creek and Newport Bay](#) were promulgated by [U.S. EPA, Region 9](#) as part of the [Toxics TMDLs](#). In 2010, under [CWA Section 303\(d\)](#), San Diego Creek was delisted for metals, but Upper and Lower Newport Bay remain listed for copper. Based on U.S. EPA's TMDLs, copper boat paints and tributary runoff are the major sources of dissolved copper to the Bay. Santa Ana Regional Water Quality Control Board (SARWQCB) staff conducted a metals impairment assessment in 2011, which showed that (1) dissolved copper is the only metal that exceeds the water quality criterion in both the Upper and Lower Bay, (2) sediment copper, zinc, and mercury exceed sediment guidelines in the Lower Bay, and (3) sediment toxicity is common throughout the Bay. Further studies showed that copper concentrations are higher in marinas compared to channels. SARWQCB Staff are developing a copper TMDL that will include an implementation plan focusing on (1) the reduction of copper from boat paints by conversion to nontoxic coatings and (2) compliance with TMDL requirements for copper in the tributaries. SARWQCB is also conducting studies to reevaluate Lower Bay impairment by metals in sediments.

#### TMDL Waste Load Allocations/Load Allocations<sup>a</sup>

Metal	Concentration Based Allocation for Dissolved Copper	
	Saltwater CTR Acute Criterion (µg/L)	Saltwater CTR Chronic Criterion (µg/L)
Copper	4.8	3.1

<sup>a</sup> WLAs/LAs for the Copper TMDL are currently in development. The TMDL will include both mass-based and concentration based allocations. Mass-based allocation categories will be similar to those in U.S. EPA, Region 9's [Metals TMDLs](#) (Table 5-7a, 2002).

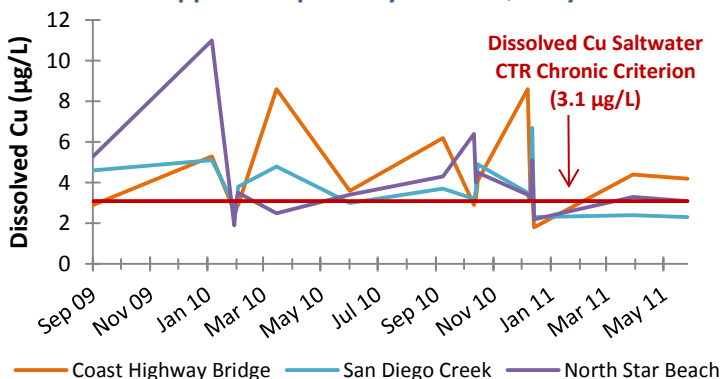
#### Newport Bay Watershed



#### Water Quality Outcomes

- Water quality data show that dissolved copper concentrations consistently exceed the Saltwater CTR Chronic Criterion.
- Copper concentrations are higher in marinas than in the channels; this supports the conclusion that boat paints are a major source of copper in [Newport Bay](#).
- Sediment copper, zinc, and mercury exceed sediment guidelines in parts of the Lower Bay; sediment toxicity is widespread in the Upper and Lower Bay.
- A technical staff report and Basin Plan amendment are in development.

#### Upper Newport Bay Water Quality



#### Lower Newport Bay Water Quality

