

DESCRIPTION

This Critical Coastal Area (CCA) watershed flows into Upper Newport Bay, in Orange County. The Upper Newport Bay State Marine Conservation Area protects a rare upland lagoon ecosystem within Newport Bay. Upper Newport Bay is the largest of the remaining natural estuaries in Southern California. These high-quality wetlands provide critical habitat for a diverse array of migratory and resident birds, fish, and other species. The wetlands are a major stopover for birds on the Pacific Flyway. On the bluffs surrounding the Bay is the Upper Newport Bay Nature Preserve and Ecological Reserve, with 1,000 acres of open space, administered by the Orange County Parks department.



Upper Newport Bay Nature Preserve and Ecological Reserve

(Photo courtesy of [Orange County Parks](#)).

Upper Newport Bay is surrounded by urban development in the cities of Irvine and Newport Beach. Nonpoint source pollution resulting from urban development in this watershed includes a variety of pesticides and metals, among other pollutants. In addition, land uses contribute to dry weather runoff and increased stormwater runoff, which may lead to erosion and increased transport of pollutants into waterways. Pesticides currently found throughout the drainages include those that have been previously banned. Identified water quality impacts of these pollutants include health threats to humans and wildlife, contamination in fish populations (both sport fish and forage fish), impaired recreational opportunities, and increased sedimentation of the estuary.

Waterbodies in this CCA that are listed as impaired on the current (2016) Clean Water Act 303(d) list are **Upper Newport Bay (Ecological Reserve)** (impaired by sedimentation/siltation, indicator bacteria, nutrients, copper, PCBs, chlordane, toxicity, DDT, and malathion); **San Diego Creek Reach 1** (impaired by nutrients, sedimentation/siltation, selenium, indicator bacteria, toxaphene, toxicity, benthic community effects, DDT, and malathion); and **Bonita Creek** (impaired by toxicity and benthic community effects). Potential sources of these pollutants, organized by **Source Category**, are listed as **Agriculture; Hydromodification** (channel erosion, and construction/land development); **Habitat Modification** (erosion/siltation); **Marinas and Recreational Boating**; and **Source Unknown**.

CRITERIA FOR CCA IDENTIFICATION

The Upper Newport Bay [Critical Coastal Area](#) (CCA) was identified in 2002 based on the criterion of a coastal watershed where an impaired waterbody on the 2002 Clean Water Act Section 303(d) list (Upper Newport Bay, and San Diego Creek) flows into a state Marine Managed Area (formerly Upper Newport Bay State Marine Park, now Upper Newport Bay State Marine Conservation Area).

This CCA also met the 2014 identification criterion of a coastal watershed where an impaired waterbody on the 2010 303(d) list (Upper Newport Bay) flows into a state-identified Principal Bay or Estuary (Newport Bay). See California Department of Fish and Wildlife's "[California's Living Marine Resources: A Status Report](#)" (2001) and associated [map of the Principal Bays and Estuaries of California](#).

In addition, this CCA met the 2014 CCA identification criterion of a coastal watershed where an impaired waterbody on the 2010 Clean Water Act 303(d) list (Upper Newport Bay (Ecological Reserve), San Diego Creek Reach 1, and Santa Ana Delhi Channel) is adjacent to a [California Marine Protected Area](#) (Upper Newport Bay State Marine Conservation Area).

ADDRESSING POLLUTANTS

Section 303(d) of the federal Clean Water Act requires states to make a [list of impaired waters](#) that are not attaining water quality standards, and to develop a [Total Maximum Daily Load \(TMDL\)](#) or similar approach to account for all sources of the pollutants that caused the water to be listed as impaired. TMDLs include allocations to both point and nonpoint sources (NPS) of the listed pollutants. The current (2016) 303(d) list of impaired waterbodies includes pollutants, potential pollutant sources, and year a TMDL was approved or is expected.

To address NPS pollutants, see [California's Nonpoint Source Management Measures](#) for guidance on selecting appropriate Management Measures, which consist of a suite of plans, practices, technologies, operating methods, or other measures that may be used to control NPS pollution.

Information for this factsheet was originally compiled by members of California's Critical Coastal Areas Statewide Committee in 2006. The factsheet was revised and updated in 2019 by the California Coastal Commission's Water Quality Program staff.

Funding for this project has been provided in part by the U.S. Environmental Protection Agency (U.S. EPA) pursuant to Assistance Agreement Nos. C9-79757514; C9-79757515; C9-79757517, and any amendments thereto which have been awarded to the Water Board for the implementation of California's NPS Program. The content of this document does not necessarily reflect the views and policies of the U.S. EPA or the Water Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.