

DESCRIPTION

Upper Newport Bay receives freshwater drainages from an area totaling 49 square miles. The watershed contains a diverse mix of development in its lower reach, and to the north it is an undeveloped ecological reserve, one of the highest quality remaining wetland areas in Southern California. The wetland provides valuable habitat for a diverse array of migratory and resident birds, fish, and other species. The watershed, estuarine, and marine habitats are also used for municipal water supply, water recreation, commercial and sport fishing, wildlife habitat, fish spawning, and shellfish habitat and harvesting. Above mean high water (MHW) is the Upper Newport Bay Ecological Reserve, and Upper Newport Bay State Marine Park is below MHW.

Nonpoint source problems are caused by urban development introducing new sources of toxic substances (including different pesticides and metals associated with human habitation). In addition, land use contributes to dry weather runoff and increased storm runoff and erosion. Increased runoff also contributes to the delivery of pesticides (including those which have been banned but are currently found throughout the drainages). Identified water quality impacts include possible health threats to human and wildlife health, contamination in fish populations (both sport fish and forage fish), impaired recreational opportunities, and increased sedimentation of the estuary.



Balboa Peninsula and Newport Bay

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REASON FOR CCA IDENTIFICATION

Newport Bay and San Diego Creek are 2002 303(d)-listed **impaired waterbodies that flow into a Marine Protected Area** (Upper Newport Bay State Marine Park).

POLLUTED RUNOFF CONDITIONS

	Top 5 Runoff Pollutants of Concern					Efforts to Address Pollutants (See next page)
	2002 303(d)-Listed Pollutants TMDL Priority (& Proposed Completion if available)			Other Pollutants ¹		
Selected Coastal Zone Waterbodies	Metals	Pesticides	Fecal Coliform	Selenium & Organochlorines	Sediment	
Upper Newport Bay ▲		▲ High (2003)		▲	▲	
San Diego Creek, Reach 1 ■		■ High (2003)	■ Low	■	■	
Bonita Creek ●						
Santa Ana-Delhi Channel ◆						
Other Waterbodies □						
Potential Sources of Pollutants in Coastal Waterbodies						
Agriculture		▲		▲■	▲■	
Urban Areas				▲■	▲■	c-q
➤ Urban Runoff/ Storm Sewers	▲		■	▲■	▲■	

Upper Newport Bay CCA

Potential Sources of Pollutants, continued	Metals	Pesticides	Fecal Coliform	Selenium & Organochlorines	Sediment	Efforts to Address Pollutants
➤ Other Urban Runoff			■			
➤ Construction				▲ ■	▲ ■	
➤ Land Development				▲ ■	▲ ■	
Wetlands & Riparian Areas						a-f, k, l, o
Unspecified Nonpoint Source		▲				
Unknown Nonpoint Source		■		▲ ■	▲ ■	

¹Information on selenium, organochlorines, and sediment as pollutants of concern is from the Regional Water Quality Control Board.

MAJOR EFFORTS TO IMPLEMENT NPS MANAGEMENT MEASURES

a) Upper Newport Bay Ecosystem Restoration Project				http://www.spl.usace.army.mil/newportbay/uppernewportbay.htm
Orange County	Susan Brodeur	(714) 834-5486	Susan.Brodeur@rdmd.ocgov.com	
➤ The project will deepen two sediment basins in the upper bay; includes an ongoing maintenance-dredging program, and enhancements to several existing wetlands and tidal channels and the creation of a least tern nesting island.				
b) Serrano Creek Stabilization and Restoration Project				http://www.willdan.com/Services_Flood.asp?ProjectID=41
Orange County; Serrano Creek Conservancy; and City of Lake Forest	Eileen Takata Matt Rayl	(714) 834-4786 (949) 768-5921	Eileen.takata@pfrd.ocgov.com mattrayl@hotmail.com	
➤ Restore about 1.1 miles of Serrano Creek in City of Lake Forest through installation of several creek stabilization features coupled with riparian restoration; designed to balance flood management, habitat, and recreation objectives.				
c) Newport Bay/San Diego Creek Watershed Management Plan				http://www.ocwatersheds.com/watersheds/pdfs/Newport_Bay_Watershed_Plan_04-12-15.pdf
Orange County, and U.S. Army Corps of Engineers	Eileen Takata Krista Sloniowski	(714) 834-4786 (213) 452-3802	Eileen.takata@pfrd.ocgov.com Krista.P.Sloniowski@spl01.usace.army.mil	
➤ Framework for how to achieve effective watershed management, leading to a sustainable urban environment; includes wetland protection, education, water conservation, regulation, stormwater management, economics, etc.				
d) Special Area Management Plan for San Diego Creek Watershed				http://www.spl.usace.army.mil/samp/sandiegocreeksamp.htm
U.S. Army Corps of Engineers	Corice Farrar	(213) 452-3296	Corice.J.Farrar@usace.army.mil	
➤ Plan will describe an approach and set of actions to preserve, enhance, and restore aquatic resources, while allowing reasonable economic development and construction and maintenance of public infrastructure facilities.				
e) Newport Bay Naturalists and Friends				www.newportbay.org
		(949) 640-6746	info@newportbay.org	
➤ Mission is to restore and preserve the native habitat of the Bay and surroundings; educate the public about the ecological value of the Bay; achieve good water quality, healthy native flora and fauna, and compatible public use.				
f) Orange County CoastKeeper				www.coastkeeper.org
	Garry Brown	(949) 723-5424	coastkeeper1@earthlink.net	

Upper Newport Bay CCA

➤ Mission is to protect and preserve Orange County's marine habitats and watersheds through education, advocacy, restoration, and enforcement.			
g)	Dry Weather Diversions, Storm Drain Inlet Modifications, and Circulation Study		http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm
City of Newport Beach	David Kiff	(949) 644-3002	DKiff@city.newport-beach.ca.us
➤ Clean Beaches Initiative grant study at Newport Bay to divert or treat urban runoff.			
h)	Divert Urban Runoff at Newport Bay Beaches and Ocean Beach		http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm
City of Newport Beach	David Kiff	(949) 644-3002	DKiff@city.newport-beach.ca.us
➤ Grant for storm drain to sewer diversions.			
i)	Regional Brine Line		http://www.valleywater.org/
Santa Clara Valley Water District		(408) 265-2600	pio@valleywater.org
➤ The purpose of the RBL is to construct a pipeline that will collect non-sewage brine discharges, permanent dewatering discharges and other brines and connect them to the ocean for disposal.			
j)	Selenium Removal Pilot Project		http://www.irwd.com/
Irvine Ranch Water District		(949) 453-5500	webmaster@irwd.com
➤ Tested an anoxic biofiltration process using laboratory cylinders and "mesocosms" to remove selenium from surface water in San Diego Creek; now constructing a full scale in situ version to treat water from Peters Canyon Wash.			
k)	Working At the Watershed Level Science & Stewardship Program & ERF High School Clubs		http://earthresource.org/
Earth Resource Foundation		(949) 645-5163	info@earthresource.org
➤ Modules on understanding importance of a healthy watershed, urban refuse collection, data collection, source identification, and bioassessment. Program enhances the teachers' opportunity to involve students in science.			
l)	Big Canyon Creek Restoration Project		http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm
City of Newport Beach	David Kiff	(949) 644-3002	DKiff@city.newport-beach.ca.us
➤ Improving the water quality of Big Canyon Creek as it enters Upper Newport Bay; remove exotic species and replace with native, non-invasive species; create effective riparian, wetlands, coastal sage scrub, and other habitat.			
m)	Newport Bay Fecal Coliform Source Identification and Management Plan		http://www.ocwatersheds.com/
County of Orange, Watershed and Coastal Resources Division	Larry McKenney		larry.mckenney@pfrd.ocgov.com
➤ Activities to determine extent that urban and natural sources of fecal coliform contribute to bacterial quality problems throughout the Bay; and development of a source management plan to address source inputs.			
n)	Newport Bay Nutrient Total Maximum Daily Load (TMDL) Dissolved Oxygen and Algae Distribution Study		http://www.ocwatersheds.com/
County of Orange, Watershed and Coastal Resources Division	Larry McKenney		larry.mckenney@pfrd.ocgov.com
➤ Two investigations of the Newport Bay Nutrient TMDL Regional Monitoring Program: 1) monitor dissolved oxygen levels continuously; and 2) collect remote sensing data of Bay to document extent of algae growth.			

Upper Newport Bay CCA

o)	Newport Coast Watershed Program: Assessment, Management and Restoration	http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm		
	City of Newport Beach	David Kiff	(949) 644-3002	DKiff@city.newport-beach.ca.us
➤ Complete watershed assessments (survey, hydrologic/hydraulic, biological/ecological, water quality and sedimentation), prepare restoration recommendations, and implement stabilization and restoration projects.				
p)	Assessment of Food Web Transfer of Organochlorine Compounds and Metals in Fishes Newport Bay, California	http://www.sccwrp.org/		
	Southern California Coastal Water Research Project	Eric Stein	(714) 372-9233	erics@sccwrp.org
➤ Identify fish species that could be used as surrogates for assessing ambient water quality relative to wildlife protection and human health concerns; examine food-web interactions of DDTs, PCBs and trace metals in fish.				
q)	Storm Drain Inlet Modifications and Implement Circulation Measures	http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm		
	City of Newport Beach	David Kiff	(949) 644-3002	DKiff@city.newport-beach.ca.us
➤ Source abatement at Newport Bay.				

REGULATORY/PLANNING JURISDICTIONS

➤ City of Newport Beach, Public Works Dept.	http://www.city.newport-beach.ca.us/Pubworks/pwmain.htm	Robert Stein	(949) 644-3322	RStein@city.newport-beach.ca.us
➤ County of Orange, Watershed & Coastal Resources Division	http://www.ocwatersheds.com/	Larry McKenney	(714) 834-5067	Larry.McKenney@pfrd.ocgov.com
➤ County Task Force, Southern California Wetland Recovery Project	http://www.sccwrp.org/taskforce_orange.htm	Greg Gauthier	(805) 892-4858	ggauthier@sccwrp.org
➤ Calif. Coastal Commission, Water Quality Unit	http://www.coastal.ca.gov/nps/npsndx.html	Tracy Duffey	(805) 585-1809	tduffey@coastal.ca.gov
➤ Santa Ana Regional Water Quality Control Board, Coastal Planning	http://www.waterboards.ca.gov/santaana/	Wanda Marquiz-Smith	(909) 782-4468	wmarquis-smith@waterboards.ca.gov
➤ State Water Resources Control Board, State Water Quality Protection Areas	http://www.swrcb.ca.gov/plnspols/oplans/asbs.html	Connie Anderson	(916) 341-5280	csanderson@waterboards.ca.gov
➤ California Coastal Conservancy	http://www.coastalconservancy.ca.gov/	Mary Small	(510) 286-4181	msmall@scc.ca.gov
➤ Calif. Dept. of Fish & Game, Marine Region	http://www.dfg.ca.gov/mrd/	John Ugoretz	(831) 649-2893	jugoretz@dfg.ca.gov
➤ Calif. Dept. of Fish & Game	http://www.dfg.ca.gov/	Brian Shelton	(949) 640-9958	bshelton@dfg.ca.gov
➤ Calif. State Parks, Orange Coast District	www.parks.ca.gov/default.asp?page_id=644	David Pryor	(949) 497-1421	pryor@fea.net
➤ US Fish & Wildlife Service	http://www.fws.gov/	Jack Fancher	(760) 431-9440	jack_fancher@fws.gov
➤ NOAA Fisheries	http://www.nmfs.noaa.gov/	Robert Hoffman	(562) 980-4043	bob.hoffman@noaa.gov