

DESCRIPTION

Tomales Bay, a 28-km² bay on the west coast of Marin County, is one of the major estuaries on the Pacific Coast of California, supporting abundant wildlife, including marine mammals and migratory wildfowl. It is a very popular recreation area for kayaking, fishing, hiking, and sightseeing, and the Bay is one of four commercial oyster-growing areas in the State. Tomales Bay Ecological Reserve is located in the Bay.

The Bay receives Nonpoint Source (NPS) inputs from tributaries and runoff along the east and west shorelines. NPS inputs include runoff from animal waste (dairies and rangelands), failing septic systems, erosion of streambanks and roads, storm drains, and boating activities. Identified water quality impacts include seasonal closure of shellfish beds, high bacterial counts in several swimming areas along tributaries to the Bay, sedimentation of the estuary, and elevated mercury levels in fish.



Tomales Bluff and Mouth of Tomales Bay

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For more photos, visit: www.californiacoastline.org.

REASON FOR CCA IDENTIFICATION

Tomales Bay is a 2002 303(d)-listed **impaired waterbody that flows into a Marine Protected Area** (Tomales Bay Ecological Reserve), and was also one of the original 25 CCAs identified in 1995 as an **impaired waterbody that flows into a bay**.

POLLUTED RUNOFF CONDITIONS

	Top 5 Runoff Pollutants of Concern					Efforts to Address Pollutants (See next page)
	<u>2002 303(d)-Listed Pollutants</u> TMDL Priority (& Proposed Completion if available)				<u>Other Pollutant of Concern</u>	
Selected Coastal Zone Waterbodies	<u>Mercury</u>	<u>Nutrients</u>	<u>Pathogens</u>	<u>Sediment</u>	?	
Tomales Bay ▲	▲ Medium	▲ Medium	▲ High (2004)	▲ Medium		a, b, c, d, e, f, g, h
Lagunitas Creek ■		■ Low	■ Low	■ Medium		a, b, c, f, h
Walker Creek ●	● Medium	● Medium		● Medium		a, b, c, f
Olema Creek ◆						
Other waterbodies □						a, b, c, d
Potential Sources of Pollutants in Coastal Waterbodies						
Agriculture		▲ ■ ●	▲ ■	▲ ■ ●		a, b, c, d, f
➤ Intensive Animal Feeding Operations			▲			a, b, c, d, f
Urban Areas						
➤ Septic			▲			a, c, g
➤ Urban Runoff/ Storm Sewers		■	■	■		a, c, h
Marinas & Boating						a, c, d, e
Hydromodification						c, h
➤ Upstream Impoundment				▲		c, h

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Potential Sources of Pollutants, continued	<u>Mercury</u>	<u>Nutrients</u>	<u>Pathogens</u>	<u>Sediment</u>	?	Efforts to Address Pollutants
Resource Extraction						
➤ Surface Mining	•					
➤ Mine Tailings	▲ •					

MAJOR EFFORTS TO IMPLEMENT NPS MANAGEMENT MEASURES

a)	Pathogens in Tomales Bay, Total Maximum Daily Load, Final Project Report, March 12, 2004	http://www.swrcb.ca.gov/rwqcb2/tomalesbaypathogenstmdl.htm
	SF Bay Regional Water Quality Control Board	Farhad Ghodrati (510) 622-2331 fghodrati@waterboards.ca.gov
	➤ Total Maximum Daily Load (TMDL) implementation plan to reduce pathogens in Tomales Bay.	
b)	Implementation of Erosion Control and Agricultural Management Measures in Tomales Bay Watersheds	http://www.sonomamarinrcds.org/district-mc/info.html
	Marin Resource Conservation District	Nancy Scolari (415) 663-1170 marinrcd@svn.net
	➤ Variety of grant funded projects to reduce erosion, install fencing, other management practices on agricultural lands; includes outreach, education, technical assistance	
c)	Tomales Bay Watershed Stewardship Plan: A Framework for Action, July 2003	http://www.tomalesbaywatershed.org/stewardship.pdf
	Tomales Bay Watershed Council	Neysa King (415) 663-9092 tbwc@horizoncable.com
	➤ Watershed stewardship plan including outreach, education, implementation actions to address NPS pollution	
d)	Tomales Bay: Guidelines for Protection and Use (2001)	http://www.nps.gov/pore/
	Point Reyes National Seashore	Don Neubacher (415) 464-5100 Don_Neubacher@nps.gov
	➤ Guidelines for Park Service actions in Tomales Bay watershed	
e)	Gulf of the Farallones Marine Sanctuary Joint Management Plan Review Recommendations	http://farallones.noaa.gov/
	Gulf of the Farallones National Marine Sanctuary	Maria Brown (415) 561-6622 maria.brown@noaa.gov
	➤ Recommendations for management, including NPS measures	
f)	Tomales Bay Watershed Enhancement Program	
	Tomales Bay Agricultural Group/ University of California Cooperative Extension	Dave Lewis (707) 565-2621 djllewis@ucdavis.edu
	➤ Landowner-initiated project to address NPS pollution from dairies and rangelands, in cooperation with UC Cooperative Extension, Marin RCD, and NRCS. Implementation projects from fencing to streambank repair.	
g)	Protect Tomales Bay from Human Waste	http://www.co.marin.ca.us/depts/CD/main/index.cfm
	County of Marin, Community Development Agency	Philip Smith (415) 499-7338 psmith@co.marin.ca.us
	➤ Grant funded project to investigate on site disposal system status and needs for Tomales Bay; implement repairs and upgrades, including options for developing community systems	
h)	Marin County Stormwater Pollution Prevention Program (MCSTOPPP)	http://mcstoppp.org/
	Marin County	Liz Lewis (415) 499-7226 LizLewis@co.marin.ca.us
	➤ Action plan to address nonpoint source runoff, including equestrian facility technical assistance program	

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REGULATORY/PLANNING JURISDICTIONS

➤ Marin County Stormwater Pollution Prevention Program	http://mcstoppp.org/	Liz Lewis	(415) 499-7226	lizlewis@co.marin.ca.us
➤ Marin County, Community Development Dept.	http://www.co.marin.ca.us/depts/CD/main/index.cfm	Thomas Lai	(415) 499-6292	tlai@co.marin.ca.us
➤ Marin County Parks and Open Space District	http://www.co.marin.ca.us/depts/PK/main/	Ron Paolini	(415) 499-6390	rpaolini@co.marin.ca.us
➤ Calif. Coastal Commission, Water Quality Unit	http://www.coastal.ca.gov/nps/npsndx.html	Lisa Sniderman	(415) 904-5270	lsniderman@coastal.ca.gov
➤ San Francisco Bay Regional Water Quality Control Board	http://www.waterboards.ca.gov/sanfranciscobay/	Rebecca Tuden	(510) 622-5685	btuden@waterboards.ca.gov
➤ California Coastal Conservancy	http://www.coastalconservancy.ca.gov/	Karyn Gear	(510) 286-4171	kgear@scc.ca.gov
➤ Calif. Dept. of Fish & Game, Tomales Bay Ecological Reserve	http://www.dfg.ca.gov/mrd/index.html	Laura Rogers-Bennett	(707) 875-2035	rogersbennett@ucdavis.edu
➤ Calif. Dept. of Fish & Game, Region 3	http://www.dfg.ca.gov/	Tom Moore	(707) 875-4261	tmoore@dfg.ca.gov
➤ State Water Resources Control Board	http://www.waterboards.ca.gov/	Heidi Hall	(916) 323-2871	hhall@waterboards.ca.gov
➤ Calif. State Parks, North Bay District	http://www.parks.ca.gov/v/default.asp?page_id=470	David Boyd	(415) 898-4362	dboyd@parks.ca.gov
➤ California Dept. of Health Services	http://www.dhs.ca.gov/	Gregg Langlois	(510) 412-4635	glangloi@dhs.ca.gov
➤ Marin Resource Conservation District	http://www.sonomamarinrcds.org/district-mc/info.html	Nancy Scolari	(415) 663-1170	marinrcd@svn.net
➤ NOAA, Gulf of the Farallones National Marine Sanctuary	http://farallones.noaa.gov/	Maria Brown	(415) 561-6622	maria.brown@noaa.gov
➤ National Park Service, Point Reyes National Seashore	http://www.nps.gov/pore/	Sarah Allen	(415) 464-5187	sarah_allen@nps.gov