

# Polluted Urban Runoff on the Monterey Peninsula

## ***Urban Runoff Is the Largest Source of Water Pollution***

Urban runoff, or stormwater, is the largest source of water pollution in California and the United States.<sup>1</sup> Urban runoff carries toxics, oil, grease, bacteria, viruses and other pollutants and dumps them untreated into our local waterways. This pollution sickens water users, causes economic losses from beach closures, and contaminates shellfish beds and fish tissue. Silt and sediment carried by runoff fills in sensitive coastal habitats. Nutrients carried by runoff feed toxic algal blooms that recently killed dozens of sea lions and other marine mammals off the Central Coast.

## ***The Monterey Peninsula Is Not Immune from This Significant Problem***

Water quality testing conducted by the Monterey Bay National Marine Sanctuary has documented increasing levels of toxic metals such as copper, lead, and zinc at sites throughout the region, many of which far exceed state standards. Bacteria and sediment levels also have increased. As a result, tests show that areas of local polluted runoff are toxic to marine life.<sup>2</sup> For this reason, NOAA's National Marine Sanctuary Office



Polluted runoff flows into Bay at Lover's Point in Pacific Grove.  
*Monterey Bay National Marine Sanctuary*

found that "an essential part of protecting the [Monterey] sanctuary is reducing land-based pollution that flows into the sea."



Brown Sea Nettle floats off Pacific Grove.  
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## ***Solving a Major Threat to Our Economy and Our Waters***

## ***The Monterey Peninsula Is Home to a Magnificent and Sensitive Ocean Environment***

The Monterey Peninsula has among the most biologically rich and sensitive marine ecosystems in the world. The Peninsula is home to the nation's largest marine sanctuary, five of the 34 designated marine Areas of Special Biological Significance in California,<sup>3</sup> the California Sea Otter Game Refuge, the Big Creek Marine Resources Protection Act Ecological Reserve, and

other protected and special areas. The productivity and diversity of the ocean off the Monterey Peninsula attracts marine scientists from around the globe.

## ***The Monterey Peninsula's Coastal Waters Fuel Local Economies***

Tourism in Monterey County is a \$1.8 billion industry, with many people coming to admire and observe Monterey's magnificent marine environment. The Monterey Bay Aquarium, which highlights the abundance and diversity of life in Monterey's coastal waters, is among the most visited sites in California. The area



Sea otter naps off Monterey.  
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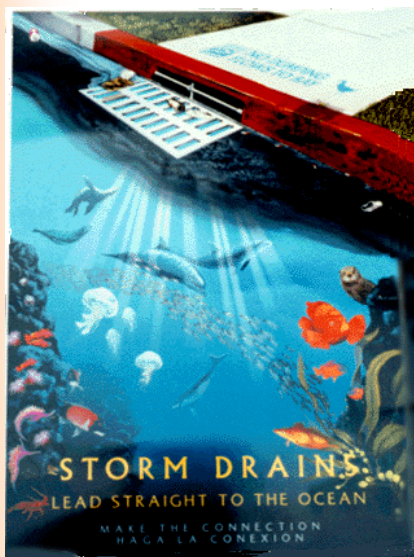
also has significant commercial kelp harvesting and other marine-dependent operations.<sup>4</sup>

### ***National and State Laws Require Controls on Polluted Runoff to Protect Our Waters***

The 1972 federal Clean Water Act has significantly reduced pollution from major dischargers, such as municipal treatment plants and industry point sources. In response to a growing recognition of the problems caused by land-based pollution, Congress specifically added stormwater control requirements to the Clean Water Act 17 years ago. Large cities complied first under “Phase I” of the stormwater requirements. Now, virtually all municipalities, including Monterey Peninsula communities, must apply for coverage under, and comply with, the “Phase II” stormwater General Permit.

Polluted urban runoff can be reduced through the use of “best management practices.” Many existing municipal practices, such as street sweeping, hazardous waste roundups, inspections, environmental education, and routing of

runoff to green areas can help meet these U.S. EPA stormwater requirements. Even the most expensive structural stormwater controls installed in new developments add less than one percent to the overall cost of the developments; and because these controls are highly effective at reducing or eliminating pollutants, they yield significant economic benefits.<sup>5</sup>



Poster Available from Monterey Bay National Marine Sanctuary

The Cities of Pacific Grove, Monterey, Seaside, Sand City, Del Rey Oaks, Marina, and Carmel-by-the-Sea, the County of Monterey, and the Pebble Beach Company submitted to the Central Coast Regional Water Board a “Monterey Regional Storm Water Management Program.”

This is a start, but more needs to be done. The Monterey region has a projected 21% growth rate this decade, which will bring significant increases in polluted urban runoff.<sup>6</sup> The time is now to work together to craft and implement a well-tailored management program that will control stormwater pollution and preserve our ocean wealth for ourselves and our future.

<sup>1</sup> State Water Resources Control Board, Water Quality Order No. 2003-0005 – DWQ, National Pollutant Discharge Elimination System General Permit No. CAS00000X, Waste Discharge Requirements for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems, at 1 (General Permit); United States EPA, *Report to Congress on the Phase II Storm Water Regulations* (Oct. 1999), I.3-I.6; 40 C.F.R. § 123.35(b); “National Urban Runoff Program” (US EPA, 1983), Chapter 7; *State of the Bay 1998, Executive Summary* (Santa Monica Bay Restoration Project, Mar. 17, 1998).

<sup>2</sup> See, e.g., <http://www.mbnms.nos.noaa.gov/monitoringnetwork/pdf/ff2003.pdf>.

<sup>3</sup> The Pacific Grove Marine Gardens Fish Refuge and Hopkins Marine Life Refuge ASBS, the Carmel Bay ASBS, Point Lobos Ecological Reserve ASBS, Julia Pfeiffer Burns Underwater Park ASBS, and the Ocean Area Surrounding the Mouth of Salmon Creek ASBS.

<sup>4</sup> Monterey County Convention & Visitors Bureau; *Economic Assessment of Seven Ocean-Dependent Activities* (CA Resources Agency, 1992).

<sup>5</sup> Horner, Richard R., *Fundamentals of Urban Runoff Management: Technical and Institutional Issues* (Aug. 1994); U.S. EPA, *Economic Benefits of Runoff Controls* at 1; Center for Watershed Protection, *The Economic Benefits of Better Site Design in Virginia* at 2.

<sup>6</sup> California Institute of Governments Projected Growth Rate for Monterey County, [http://www.cicg.org/publications/profiles/monterey\\_county.pdf](http://www.cicg.org/publications/profiles/monterey_county.pdf).

