

Region 4

Los Angeles Regional Water Quality Control Board

Overview

With more than 10 million residents, the Los Angeles Region is the most densely populated region in the state. Agriculture and open space exist alongside urban, residential, commercial and industrial areas. Open spaces in northern Los Angeles County are steadily giving way to residential communities. The Los Angeles Regional Board regulates over 1,000 point source discharges of wastewater.

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The region has designated 10 wa-
tershed management areas (WMA):
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- Los Angeles River Watershed
- San Gabriel River Watershed
- Santa Monica Bay WMA
- Los Cerritos Channel and Alamitos Bay WMA
- Dominguez Cannel WMA
- Santa Clara River Watershed
- Ventura River Watershed
- Calleguas Creek Watershed
- Miscellaneous Ventura Coastal WMA
- Channel Islands WMA

The Los Angeles and San Gabriel River watersheds are heavily urbanized in their lower stretches but retain largely undeveloped open space areas in their upper portions. The Santa Monica Bay Watershed contains a mixture of urbanized and more rural areas, all of which drain into Santa Monica Bay, a designated waterbody under the National Estuary Program. The Santa Clara River, Ventura River and Calleguas Creek watersheds contain many small urban centers, but also support large areas of agriculture. The Dominguez Channel Watershed is a heavily urbanized and industrialized area, which drains into Los Angeles Harbor which, in combination with



Regional Facts

Approximately 4,500 square miles in size, including offshore islands

117 miles of coastline

20 square miles of lakes, ponds, and reservoirs

Almost 5,800 miles of rivers and streams



Updated 2018



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Long Beach Harbor, forms the largest industrial port on the West Coast. The Los Angeles Region encompasses all of the coastal watersheds of Los Angeles and Ventura counties, along with small portions of Kern and Santa Barbara counties and the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina and San Clemente). The region also includes all coastal waters within three miles of the continental and island coastlines. Most of the precipitation in the Los Angeles Region occurs during just a few major storms each year, averaging from about 15 inches annually in Ventura County to almost 40 inches in certain mountainous areas. Average rainfall is slightly lower in Los Angeles County, but varies widely between the valleys and the mountains.

Vision and Goals for Monitoring

The goal of the Los Angeles Regional Surface Water Ambient Monitoring Program (SWAMP) is to monitor all waters throughout the Los Angeles Region and identify those with degraded water quality (so that we can focus on improving water quality in those areas) and those with high water quality (so that we can ensure that we maintain high quality in those areas). The two main objectives of the regional SWAMP are to:

- Assess whether beneficial uses in the region's inland, estuarine and coastal waters are being protected.
- Assess whether water quality conditions are getting better or worse over time.

The regional monitoring priorities to meet the objectives include plans to:

- Assess wadeable streams via triad approach: health of biological community (bioassessment), water column toxicity and water chemistry (conventional pollutants, trace metals, trace organics).
- Assess overall condition of large watersheds (Santa Clara River, Los Angeles River, San Gabriel River, Ventura River, Calleguas Creek, and Santa Monica Bay creeks).
- Assess bioaccumulation of pollutants in fish in lakes/reservoirs and coastal waters.



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Program Activity

The region's recent monitoring and assessment accomplishments include:

- Monitoring of fish tissue contamination (mercury, DDT, PCBs and other organics) in additional lakes and reservoirs throughout the region after consultation with Office of Environmental Health Hazard Assessment (OEHHA) staff to provide data required for the development of fish advisories/fish consumption guidelines. As a result, those advisories/ guidelines have been issued for Castaic Lagoon, Castaic Lake, Magic Johnson Lakes, Pyramid Lake, and Lake Piru.
- The San Gabriel River regional monitoring program (since 2005) and the Los Angeles River watershed monitoring program (since 2007) in collaboration with other interested stakeholders to evaluate whether it is safe to swim or whether it is safe to eat seafood, and to assess the health of biological communities. Annual reports of both programs are available to the public.
- A series of special studies on chemicals of emerging concerns (CECs) in collaboration with Southern California Coastal Water Research Project to examine the occurrence and fate of CECs in Los Angeles and San Gabriel River watersheds, in freshwater sediments from

the Santa Clara River and in estuarine sediments from across Southern California. In vitro bioassays and non-targeted chemical analysis were developed and used to screen for bioactivity in water and sediment samples.

Collaborative Efforts

Regional Board staff is collaborating with the Southern California Stormwater Monitoring Coalition to assess the health of inland watersheds throughout Southern California. This monitoring program monitors biological communities (stream macroinvertebrates, algae), water column toxicity and water chemistry (nutrients, pesticides). The monitoring program completed its fifth year of sampling in 2013. Interpretive reports are produced by the Southern California Coastal Water Research Project (SCCWRP) that administers the program. After the monitoring program completed its first five-year effort in 2013, some revisions were made to the monitoring program, and a second five-year effort is underway. The Los Angeles Regional Board continues to collaborate with and provide funding for this regional monitoring program.

As part of the SWAMP 2017-2020 master contract, Regional Board staff is collaborating with researchers at SCCWRP in the following studies:





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- Evaluation of biological response in fish to assess urban river water quality in the Los Angeles Region.
- Identification of cyanotoxins and their sources in waterbodies within the Los Angeles Region.
- Examination of prevalence of antibiotic resistance genes in receiving waters within the Los Angeles Region.
- Assessing vulnerability of stream biological communities to drought and climate change effects.

Regional Board also continues to participate in and support the Bight Regional Monitoring Program led by SCCWRP with over 100 participation organizations that assesses the condition of marine ecosystems in Southern California Bight. The Bight '13 program was completed most recently. Planning for the Bight '18 program is underway.

For More Information on SWAMP in the Los Angeles Region, Please Contact:



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*The methods used to obtain the "Regional Facts" statistics can be found at: Calculations for Regional Facts

