

Fact Sheet Region 7

Colorado River Basin Regional Water Quality Control Board

Overview

The Colorado River Basin Region covers approximately 19,900 square miles in the southeastern corner of California, the most arid area of the state. The region includes all of Imperial County and portions of San Bernardino, Riverside and San Diego Counties. The region is divided into three watersheds: the Lower Colorado River, Salton Sea Transboundary and Desert Aquifers. The Desert Aquifers Watershed has little surface water and hundreds of aquifers. The majority of the region's surface waters are in the Imperial Valley and East Colorado River Basin planning areas; consequently, the Surface Water Ambient Monitoring Program (SWAMP) is focused there.

The Salton Sea Transboundary Watershed, encompassing the Coachella and Imperial Valleys, is the priority watershed for the Colorado River Basin, containing five of six 303 (d)-listed impaired surface water bodies in the region. Water from the Colorado River has created an irrigated agricultural ecosystem throughout this watershed. Wildlife and aquatic species are dependent on habitat created and maintained

through the discharge of agricultural return flows. Major water bodies in the watershed include the Salton Sea, Alamo River, New River, Imperial Valley Agricultural Drains, and Coachella Valley Storm Channel. The beneficial uses for this region include domestic, municipal, agricultural and industrial supply; power generation; recreation; aquaculture; wildlife habitat and preservation of aquatic life.



Regional Facts

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Almost 19,900 square miles in size
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368 square miles of lakes, ponds,
and reservoirs
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Approximately 14,700 miles of rivers
and streams
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Annual area rainfall ranges from
3 to 4 inches
.....



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Vision and Goals for Monitoring

The main goal of the Colorado River Basin Region SWAMP program is not to focus on known problem areas or on a few select sites, but rather to monitor all waters within the region and determine if beneficial uses are being protected throughout.

The primary objectives of the program are:

- To characterize the overall health of all water bodies within the Region
- To evaluate the effectiveness, or lack thereof, of implemented management practices intended to improve water quality.
- To provide support and coordinate with other Regional programs in those instances where priorities overlap.
- To collaborate and share information with outside agencies, engaging in mutually beneficial monitoring efforts and other useful endeavors.

Program Activity

Since 2003, the Colorado River Basin SWAMP program has monitored water quality at over 100 monitoring stations located along the Colorado, New, Alamo and Whitewater Rivers, their tributaries, and even the country of Mexico. Water samples are collected bi-annually (spring and fall) by SWAMP field crews. In addition to collecting

a multitude of water samples, the field crews also collect and record various field measurements at each site. Analyses performed on the water samples include, but are not limited to: Toxicity, trace metals, organo-chlorine and organo-phosphate pesticides, nutrients, bacteria, and volatile organic compounds.

Collaborative Efforts

Regionwide GIS Mapping System

The Colorado River Basin Region SWAMP is involved in a joint effort with the Southern California Coastal Water Research Project (SCCWRP) and Cal- State Northridge (CSUN) to develop a regionwide GIS mapping system. This mapping effort will be ongoing, and it will identify all perennial streams and depressional wetlands situated within the boundaries of the Colorado River Basin Region. The project will provide a comprehensive overview of all the region's waters that will form the basis from which all other SWAMP activities will build from. The project will also assist other regional programs by providing a critical reference needed to perform a multitude of tasks related to water quality.

Legacy Pesticides in the Tissues of Fish

Although legacy pesticides are no longer used commercially, traces of these contaminants can linger in the environment for decades as they bio accumulate in the



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bodily tissues of fish and wildlife, and these pesticides are still being detected in our region. In 2011, SWAMP collaborated internally with its TMDL unit to collect several fish specimens from the New and Alamo Rivers and their tributaries. The purpose of the study was to determine the extent to which these pesticides are accumulating in the tissues of fish. Based on the need for additional data, the 2011 study was essentially continued in 2012 by SWAMP, in order to complement the 2011 study. The information gleaned from both studies will be shared with the Office of Environmental Health Hazard Assessment (OEHHA) to develop fish consumption advisories to protect public health. It will also be used to evaluate which remediation actions, if any, are necessary to mitigate the impacts of legacy pesticides to water quality and wildlife.

Bio-assessment Studies on Perennial

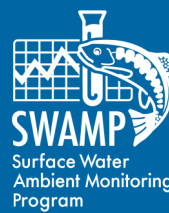
For the first time since the Colorado River Basin Region SWAMP program was implemented, the program will be conducting bio assessment studies on perennial streams located in the western half of the region (Snow Creek, Pipes Canyon, Andreas Creek, Tahquitz Falls, Horsethief Creek, Thousand Palms Preserve, and sites within Anza Borrego) in collaboration with the Department of Fish and

Game. These studies will evaluate and characterize the overall health of these waters, both biologically and chemically. These are the more pristine waters found within the region, and it is imperative to preserve and protect these valuable ecological assets for the public.

Pyrethroid Contamination of Surface Waters

The Department of Pesticides Regulation (DPR) began an assessment of pyrethroid contamination of surface waters and bed sediments in the Imperial Valley in fall 2004. Subsequently, this pesticide family was incorporated under SWAMP, and our pyrethroid monitoring is continuing as we head into 2013 with 29 sites being sampled. This monitoring will complement the DPR study.

For More Information on SWAMP in the Colorado River Basin Region, Please Contact:



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*The methods used to obtain the "Regional Facts" statistics can be found at: [Calculations for Regional Facts](#)