

Executive Summary

This Annual Report discusses the Permittees' Permit compliance activities for the period of July 1, 2017 to June 30, 2018, the eighth year of the NPDES Permit No. CAS004002/Order No. 10-108 (Permit). It includes a description of all activities conducted during the reporting period, and the efforts to improve water quality throughout Ventura County by the Permittees. The purpose of this Annual Report is to show compliance with the Permit, and to meet the reporting requirement that an Annual Stormwater Report be submitted by December 15th of each year; in its entirety this Report also serves as the Receiving Water Limitations Report. Since the Permit did not require a Stormwater Management Plan this Annual Report also serves to clarify the Permit's requirements and the efforts put forth by the Permittees to meet them. Finally, program effectiveness assessment of the implementation of the Permit requirements are examined with potential areas for improvement identified.

The Permittees, who contributed the information and data regarding their programs, were instrumental in the preparation of this Annual Report. Cooperating through the Ventura Countywide Stormwater Quality Management Program (Program) the Permittees ensure information and workloads are shared, economies of scale achieved, and an efficient and effective Program is realized. Together through the implementation of various comprehensive program elements we have strived for improved water quality through compliance with all requirements of the Permit. Each program element has a subcommittee working to develop needed forms, protocols, and procedures to ensure future Permit compliance. The programs, methods, and this Annual Report are continually being refined to improve effectiveness, apply lessons learned, identify and address additional sources of stormwater pollutants, and therefore improve water quality.

Notable accomplishments made by the Permittees and the Program over this reporting period include:

- Water quality at beaches throughout Ventura County remained among the best in the state.
- Completed a new supplementary tool for updating the Stormwater Resource Plan (SRP). This tool allows stakeholders to submit new stormwater projects to be included in the SRP and automatically calculates quantitative and qualitative benefit scores.
- Continued to create and distribute communication tools to inform the highest levels of management about the potential programmatic and financial impacts of a new Permit.
- Adopted a new Ventura Countywide Stormwater Quality Management Program Mission Statement and created new Program brochure to effectively communicate to a wide range of community members, elected officials, and executive management our goals and accomplishments.
- Public Outreach efforts included 11 performances by the EcoHero Show, who brought his engaging and interactive eco-friendly song and dance to almost 5,000 elementary school age students. A total of 6.7 million impressions were made through the Public Outreach program, 11% percent of those in Spanish. A pre-sale rain barrel event was held selling a total of 294 50-gallon rain barrels. The cleanwatershed.org website was redesigned for improved mobile responsiveness, accessibility, content, look, and search engine capabilities.
- Coordinated the Ventura County Coastal Cleanup Day Event, as part of the California Coastal Cleanup Day, recruiting 3,313 volunteers to 26 different beaches and inland locations covering a distance of 44.5 miles. A total of 12,900 pounds of trash were collected, as well as 1,055 pounds of recyclables.
- Updated the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures to correct minor errata, update figures, and include information related to the Statewide Trash Amendment.

- Held a comprehensive all-day training workshop on current Ventura County stormwater quality post construction mitigation requirements to over 70 City and County planning, engineering, inspection, and operations and maintenance staff. The full training was recorded and posted online.
- Continued updating the Water Quality Index which distills the over 200 constituents monitored into an easy to communicate form and continued the comprehensive data analysis effort to prioritize pollutants of concern in outfalls and receiving waters that will in turn be used to prioritize Program activities.
- Continued data collection for the Bacteria Marker Study to identify human, dog, and bird genetic host-specific markers in MS4 outfalls and background sites. Additional samples are being collected to confirm previous results and help the Program identify the controllable sources of indicator bacteria.
- Eight Total Maximum Daily Load Implementation Plans, Monitoring Plans, and Compliance Reports were submitted to the Regional Board.
- Active participation in the Stormwater Monitoring Coalition of Southern California, California Stormwater Quality Association, and the Southern California Coastal Water Research Project and its Bight '18 Microbiology and Trash studies.
- Completed and submitted the Pyrethroid Insecticides Study 2012-2018 Final Report. In 2018, pyrethroids were not detected in any of the Study samples.
- Coordinated with the Los Angeles Regional Board Staff in post Thomas Fire water quality sample collection, analysis, and data sharing.

Ventura County has been subjected to increased environmental stresses in recent years. In addition to the ongoing severe drought, the Ventura River and Santa Clara River watersheds were heavily impacted by the Thomas Fire, the largest fire recorded in California history at that time. Areas that did not burn were subject to heavy ash deposition. Post-fire data showed higher concentrations for many constituents. Although higher constituent concentrations were observed, these concentrations were still below applicable water quality objectives (WQOs). Aquatic toxicity samples were collected from all fourteen sites during the first flush event. Several sites exhibited significant mortality. In general, sites that were in the areas directly impacted by the Thomas Fire (e.g. Ventura River Watershed) showed higher toxicity than those sites that were further away (e.g. Calleguas Creek Watershed).

Three wet weather events were sampled at each of the fourteen monitoring sites, however not all fourteen monitoring sites were able to be sampled during dry weather due to absence of flow. *E. coli* concentrations were found above WQOs at most sites during wet weather events and during dry weather events at sites with flow. Other constituents with concentrations above WQOs in dry weather include pH, chloride and total dissolved solids, dissolved oxygen (MO-FIL), dissolved copper (MO-VEN), total selenium (MO-SIM, MO-VEN), PAHs (MO-CAM), 4,4'-DDE (ME-CC). In wet weather, constituent concentrations above applicable WQOs were observed for total chlorine residual (ME-CC Event 1 only), total cyanide (ME-VR2, MO-FIL, MO-HUE), and MBAS (MO-CAM, MO-OXN Event 2 only). Biological assessments were performed in accordance with the current Bioassessment Workplan, and at the Principal Permittee's fixed (Integrator) sites at the three mass emission stations.

Continued in this Annual Report are the Performance Standards for specific Permit requirements identified in each section along with the Permittees' status on achieving that standard. Permit compliance cannot be directly inferred solely by these Performance Standards as the complete effort of the Permittees cannot be reflected through these discrete metrics. Rather, the information is more suitable for use by the Permittees to gage their efforts and identify areas of needed improvement.