

Executive Summary

This Annual Report discusses the Permittees' Permit compliance activities for the period of July 1, 2014 to June 30, 2015, the fifth year of the Permit. It includes a description of all activities conducted during the reporting period and the efforts made to improve water quality throughout Ventura County by the Permittees. The purpose of this Annual Report is to both show compliance with NPDES Permit No. CAS004002/Order No. 10-108 (Permit), and meet the reporting requirement which requires 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 Report also serves as a way 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 Ventura Countywide Permittees, who contributed the information and data regarding their programs, were instrumental in the preparation of this Annual Report. The Permittees cooperate through the Ventura Countywide Stormwater Quality Management Program to ensure information and workloads are shared, economies of scale achieved, and an efficient and effective Program is realized. The Permittees through implementation of various comprehensive program elements have strived for improved water quality through compliance with all requirements of the Permit.

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.
- The Report of Waste Discharge (ROWD) for permit reissuance that characterizes the discharge, facilities and BMPs was submitted. The ROWD included the Program's goals and guiding principles for Permit reissuance, and recommendations of receiving water driven priorities, question driven monitoring, and the inclusion of a watershed management approach.
- Completed the Ventura Countywide Unified Storm Drain Mapping project, a single geodatabase which contains all available storm drain information from all of the Permittees. This project also included a Countywide GIS analysis to identify infiltration constraints per 2011 Technical Guidance Manual and mapping of the natural stream network.
- Initiated efforts to develop a countywide Stormwater Resource Plan by designating funding and drafting a scope of work, request for qualifications, and selecting consultant.
- Continued a Bacteria Marker Study to identify human, dog, and bird genetic host-specific markers in MS4 outfalls and background sites. No human markers were detected in random sampling of over 65 storm drains. This study will be continued to strengthen results and help the Program identify the controllable sources of indicator bacteria discharged from storm drains.
- Completely redesigned the Program's Permit required website, www.VCStormwater, improving accessibility to Program information, reports, comment letters, and monitoring data.
- The 2011 Technical Guidance Manual (TGM) was updated to correct minor errors and omissions and an errata version was distributed to the development community.
- Participation in SCCWRP's Bight '13 Microbiology Study including assessment of the extent of human fecal contamination from coastal drainages to the ocean.

- Public Outreach efforts made 11.8 million impressions through the Public Outreach program. Ten percent of those were made in Spanish.
- Organization and participation in the statewide Coastal Cleanup Day Event recruiting 2,800 volunteers to 20 different beaches and inland waterways countywide covering a distance of 33.6 miles. A total 8,500 pounds of trash were collected.
- In April 2015 the Program implemented the second phase of a pyrethroid study to identify pyrethroids in sediment above and below urbanized areas.
- Updated 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 outfall and receiving waters that will in turn prioritize Program activities.
- Seventeen Total Maximum Daily Load Implementation Plans, Monitoring Plans and Compliance Reports were submitted to the Regional Board.
- Active participation in Southern California Coastal Water Research Project, Stormwater Monitoring Coalition of Southern California, and California Stormwater Quality Association.

The Program sampled five rain events to comply with the three wet events required. Due to drought conditions, and equipment and laboratory issues only partial data sets for several sites/events during the 2014/15 wet season were produced. Aquatic toxicity samples were collected from all fourteen sites during the first wet event of the season, with none showing significant toxicity. Constituents frequently found at elevated levels at most related Mass Emission and Major Outfall stations include *E. coli*, fecal coliform, and aluminum. Constituents observed in isolated incidents outside of water quality objectives concurrently at one or more related Mass Emission and Major Outfall stations include cadmium, chromium, chloride, total dissolved solids, and bis(2-ethylhexyl)phthalate. Other constituents observed outside of water quality objectives at only Major Outfall stations include: MBAS, pH, perchlorate, ammonia as nitrogen, dissolved oxygen, dissolved copper, dissolved zinc, total selenium, pentachlorophenol, and several polycyclic aromatic hydrocarbons. The Program is using this information to identify pollutants of concern and direct efforts to reduce their discharge from the storm drain system.

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.

The Program uses California Stormwater Quality Association's (CASQA) six progressive outcome levels for effectiveness assessment which range from documenting efforts to measurably protecting receiving water quality. These show the Program is continually effective in the first two outcome levels of documenting efforts and raising awareness. As the Program continues, improvements in the outcome levels of changing behavior and reducing pollutant loads will be accurately measured and documented. The trends identified in the Water Quality Monitoring Section show real progress towards the Program's effectiveness at the ultimate goal - Outcome Level 6 improving and protecting receiving water quality.

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. Future program activities will be continuing the special studies to address the two pollutants of the highest priority, aluminum and *E. coli*.