



Orange County Sanitation District

# Ocean Monitoring Annual Report

Year 2013-2014

# **ANNUAL REPORT 2014**

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## **MARINE MONITORING**

**Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92728-8127  
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# Orange County Sanitation District

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Water District

March 13, 2015

Kurt V. Berchtold, Executive Officer

California Regional Water Quality Control Board

Santa Ana Region 8

3737 Main Street, Suite 500

Riverside, CA 92501-3339

SUBJECT: Board Order No. R8-2012-0035, NPDES Permit No. CA0110604

## 2013-14 Marine Monitoring Annual Report

Enclosed is the Orange County Sanitation District's 2013-14 Marine Monitoring Annual Report. This report focuses on the findings and conclusions for the monitoring period July 1, 2013 to June 30, 2014. Overall, the results of the monitoring program document that the disposal of our treated and disinfected effluent into coastal marine waters continues to protect the environment and human health.

The results of the 2013-14 monitoring effort showed only minor impacts to the benthic infauna community within and adjacent to the zone of initial dilution (ZID). Invertebrate and fish communities in the monitoring area were healthy with all sites classifying as reference condition. Permit-regulated sediment contaminants remained at or near background levels. The low levels of contaminants in fish tissues and the low incidents of external abnormalities and diseases in fish populations demonstrated that the outfall was not an epicenter of disease.

There were limited and minimal changes in the receiving water conditions. Plume-related changes in temperature, salinity, dissolved oxygen, pH, and transmissivity beyond the ZID were well within the range of natural variability, and compliance with numeric receiving water criteria was achieved over 97% of the time. Consequently, our ocean monitoring program continues to demonstrate that the coastal receiving water environment outside the ZID has not been degraded by the District's wastewater discharge. Finally, the low concentrations of bacteria in water contact zones, together with the limited distributions of ammonia, suggest that the wastewater discharge has had no discernible impact on human health and recreational use.





Kurt V. Berchtold

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March 13, 2015

Should you have questions regarding the information provided in this report, or wish to meet with District's staff to discuss any aspect of our ocean monitoring program, please feel free to contact me at (714) 593-7080. However, you may also contact Dr. Jeff Armstrong, the supervisor of our Ocean Monitoring section, who may be reached at (714) 593-7455 or at [jarmstrong@ocsd.com](mailto:jarmstrong@ocsd.com).

Edward M. Torres, P.E.

Director of Operations and Maintenance

ET:JA:ja

Enclosure

c: Jared Blumenfeld, U.S. EPA, Region IX



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March 13, 2015

## Certification Statement

The following certification satisfies Section A.10 and A.15 of the Orange County Sanitation District's Monitoring and Reporting Program No. R8-2012-0035, NPDES No. CA0110604, for the submittal of the attached OCSD Annual Report 2014 – Marine Monitoring.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for known violations.



Edward M. Torres, P.E.  
Director of Operations and Maintenance

3-9-15  
Date

JA:ja



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