Southern California Bight 2013 Regional Monitoring Program: Volume VIII. Contaminant Impact Assessment Synthesis Report

Bight '13 Contaminant Impact Assessment Planning Committee

BACKGROUND

The Southern California Bight, the bend in the coastline that extends from Point Conception north of Santa Barbara past the United States-Mexico International Border (Figure 1), is a unique and valuable ecological resource. The Bight is a complex ecosystem where cold nutrient-rich waters from the north mix with warm subtropical waters from the south creating a productive ecosystem supporting forests of Giant kelp and abundant marine life (Hickey 1993). Home to over 2,000 species of fish or invertebrates, the Bight represents the beginning or end of more species ranges than anywhere else along the western coast of North America (Dailey et al. 1993).

With a population exceeding 22 million people, the Bight is also a repository for a variety of waste discharges (Figure 1.) The effluents from 18 sewage treatment plants, as well as untreated discharges from thousands of miles of urban storm drains, all wind up in the coastal waters of the Bight (Schiff et al. 2001). Environmental managers have been working hard to reduce the pollutant inputs for decades. For most traditional pollutants such as trace metals, inputs today are a fraction of what they were 30 years ago (Lyon and Stein 2009). However, legacy inputs remain and new, unmanaged chemicals are being discharged every day.

Working together, environmental managers initiated an integrated collaborative monitoring program designed to understand and protect the unique Bight ecosystems (Schiff et al. 2015). This collaboration first occurred in 1994 and was reprised four times since, approximately every five years. This document summarizes the findings from Contaminant Impact Assessment of the 2013 Southern California Bight Regional Monitoring Program (Bight '13). Forty-one organizations (Appendix A), including both the regulated agencies that discharge to the Bight and the State or Federal regulatory agencies that oversee them, joined forces to answer three basic questions:

- 1. What is the extent and magnitude of environmental impact in the Southern California Bight?
- 2. How does the extent and magnitude of environmental impact vary among habitats?
- 3. What are the trends in the extent of environmental impact?

Full Text

http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/973_B13CIASynthesisReport.pdf