

San Diego Regional Water Board Staff Technical Report on San Diego Bay Sediment Pollutants: Evaluation of Contemporary Ambient Sediment Concentrations to Inform Water Quality Management

***Helps provide a bay-wide understanding of sediment quality to help
preserve and restore healthy conditions***

Overview: The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) staff, has produced a technical report titled "[San Diego Bay Sediment Pollutants: Evaluation of Contemporary Ambient Concentrations to Inform Water Quality Management](#)." The report was developed to provide staff and the public information on sediment conditions in San Diego Bay in locations that have presumed lower levels of historic or current anthropogenic impacts due to their distance from known pollutant sources. This will better help assess bay-wide condition for key beneficial uses impacted by sediment contamination, such as fish and shellfish consumption as well as habitats and ecosystems.

The technical report uses monitoring results of bay surficial sediments collected over the last three cycles (2008, 2013, 2018) of San Diego Bay's Regional Harbor Monitoring Program (RHMP) and the Southern California BIGHT program (BIGHT), and a 2014 supplemental special study.

Random sampling helps show bay condition

Pollutant monitoring efforts are often targeted, which means they focus data collection on areas of known historical contamination or near permitted discharge locations (e.g., storm drain outfalls). This type of targeted sampling can lead to a biased assessment of waterbody condition by only focusing on locations with known or suspected contamination. In contrast, monitoring programs such as the RHMP and BIGHT use randomly selected stations throughout waterbodies to reduce sampling bias and gain a better overall picture of water or sediment quality. This approach has two other advantages. It provides context for evaluating data from known or suspected contaminated areas in a waterbody and also allows for better comparison of overall conditions between waterbodies.

However, to conduct the evaluation of contemporary ambient sediment conditions for the report, San Diego Water Board staff eliminated known contaminated areas and point-source discharge locations from the randomly selected sample sites from the RCMP/BIGHT surveys and 2014 special study. San Diego Water Board staff then used multiple statistical approaches to evaluate the levels of total polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), cadmium, copper, lead, mercury, zinc, and organochlorine pesticides (e.g. dieldrin) in the remaining sites.

How does this relate to water quality management in San Diego Bay?

The technical report provides information on what pollutant levels are in areas of the bay away from known historic or current anthropogenic pollutant sources. The technical report is not a regulatory or policy document: It does not define or set cleanup levels for pollutants, determine where current discharges are causing impacts, or identify contaminated sites. However, because it provides information on pollutants in sediment around the bay, the report’s findings are a tool to inform multiple management objectives, such as voluntary and mandated cleanup assessments and actions related to protecting the health of people and wildlife in the Bay.

Figure: View of San Diego Bay looking towards downtown San Diego.



A copy of the report and more information can be found on the San Diego Water Board’s San Diego Bay website:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/sdbay_strategy/

The San Diego Water Board is a state agency responsible for implementing provisions of the federal Clean Water Act and the California Water Code to protect the quality of water in the ocean, streams, bays, and underground aquifers. The Basin Plan designates beneficial uses for waterbodies within the region and establishes water quality objectives and implementation plans to protect those beneficial uses.

(This Fact Sheet was last updated January 2024)