



STRATEGIC WATER QUALITY ASSESSMENT APPROACH FOR SAN DIEGO BAY

San Diego Bay held significance for the region's earliest inhabitants, attracted explorers, and helped establish our modern society. Today it is a backdrop to social and recreational activities like sailing, running waterside trails, and enjoying waterfront restaurants. It supports a regional economy through tourism and trade and plays a critical role in military readiness. Healthy water is vital for all this activity. Water in which we once dumped sewage and toxic waste are now beaches where children swim, fishing areas for fresh seafood, and habitats that support an array of wildlife.

WHAT: The San Diego Water Board has developed a Strategic Water Quality Assessment Approach for San Diego Bay to ensure these uses remain protected and to identify areas that need help.

WHY: In the past, assessments of the Bay's health were based on limited monitoring data associated with pollutants from isolated permits or cleanup activities. The Water Board's new water quality assessment approach is centered on information needed to determine if the Bay's waters are healthy for swimming, fish and shellfish are safe to consume, and habitats are flourishing.

The Water Board identified assessment needs for each of these key uses by asking what is needed to understand the conditions, stressors, sources of pollution, and performance of management actions. This determined not only what to monitor (including where and how frequently) but also how to analyze the data to answer these questions. The Strategic Approach is a guide of best practices for assessing water quality of San Diego Bay.

SHOULD WE EAT THE FISH?

Fishing the piers and jetties of San Diego Bay is a pastime for some and a livelihood for others. As water quality changes, so does the health of fish and shellfish for human consumption.

How do we know if fish and shellfish are safe to eat?

By asking this question, we identified what to monitor and how often to assess. For fishing that looks like:

CONDITIONS

Fish and shellfish tissue from four ecoregions every five years to see if there are levels of contaminants that pose a risk to human health if consumed.

STRESSORS IMPACTING CONDITIONS

PCBs, metals (mercury), pesticides, and emerging contaminants of concern in fish and shellfish tissue from four ecoregions every five years.

SOURCES OF STRESSORS

Levels of contaminants of concern in sediment samples from four ecoregions every five years.

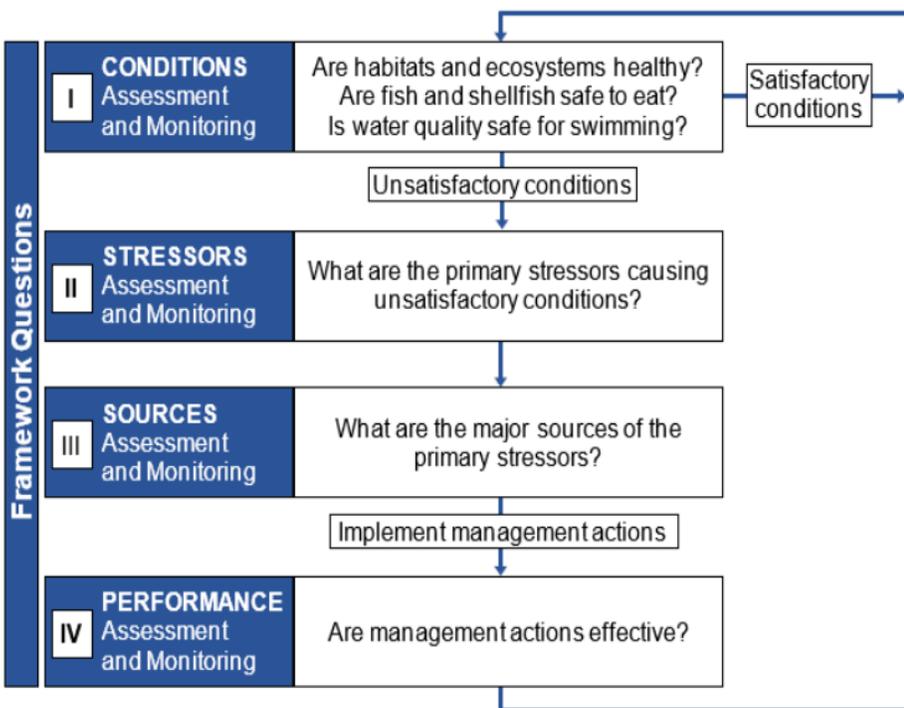
PERFORMANCE OF MANAGEMENT ACTIONS

Review sediment conditions after management actions that relate to contaminants of concern, then fish and shellfish tissue conditions every five years.

Advancing a Healthy Waters Strategy for San Diego Bay

The mission of the Water Board is to preserve, enhance, and restore the quality of California's water resources for the protection of the environment, public health, and all beneficial uses of water. The Water Board's vision for monitoring and assessment is to produce information that supports the protection and restoration of water quality resources, communicates resource conditions, and provides information to evaluate success.

To carry forth the vision, the Strategic Water Quality Assessment Approach for San Diego Bay is based on the Board's 2012 "[A Framework for Monitoring and Assessment in the San Diego Region](#)" which was developed as a systematic, water body-focused approach to identify conditions, stressors and sources that impact the conditions, and the performance of the Board's programs. It provides structure for collecting information so proactive, data-driven decisions can be made. See the insert for the Framework's cycle of conditions assessment and monitoring questions.



This assessment approach also fulfills a goal of the Water Board's 2015 [Strategy for a Healthy San Diego Bay](#)—a seven-step guide for protecting and restoring the Bay. The Board, in step 1, identified recreation, fish and shellfish consumption, and habitat and ecosystem health as the most critical water-quality dependent uses for human and wildlife health for the Bay.

As we moved to step 2, assessing the conditions of those key uses, much of the information needed was not available. Monitoring data was limited, and in some cases, monitoring methods or guidelines

needed to be developed. This new assessment approach for San Diego Bay is a response that will improve our ability to answer these important questions about the Bay's waters.

The Assessment Approach Will Inform the Water Board's Efforts to Protect and Restore the Bay

The Board's vision is to apply this approach within its monitoring, permitting, and other regulatory programs where applicable and to collaborate with other groups that conduct monitoring programs in San Diego Bay. The approach is designed to be adaptive—whether to short-term changes in best practices or long-term trend adjustment. It will be periodically reviewed and adjusted as needed to achieve an outcomes-based regulatory approach to healthy water in San Diego Bay.

**This approach will ultimately produce information to answer the question:
Are the waters of San Diego Bay healthy?**