

SALTON SEA MONITORING IMPLEMENTATION PLAN

Executive Summary

Monitoring of the Salton Sea ecosystem is critical for informed decision-making and the success of mitigation and habitat restoration projects aimed at reducing the amount of exposed playa, suppressing dust emissions from exposed playa, and creating habitat for key wildlife species. The *Salton Sea Monitoring Implementation Plan* (MIP) builds on the 2013 *Salton Sea Ecosystem Monitoring and Assessment Plan* (MAP) with the goals to (1) identify and prioritize monitoring activities that will measure current and future conditions within the Salton Sea ecosystem; (2) establish milestones against which data gathered during long-term monitoring can be compared; (3) establish methods for measuring and reporting these metrics; (4) identify and prioritize filling of existing data gaps; and (5) describe a framework to store, manage, and make monitoring data publicly available in a timely manner.

The MIP provides a framework for tracking the status and trends of the land, water, air, and biota of the Salton Sea, as well as local communities and their engagement with Salton Sea Management Program activities. Priority is given to information necessary to inform management needs. The landscape covered includes the Salton Sea's open water (pelagic) zone, nearshore zone, shoreline, playa, fringing wetlands and riparian corridors, halophytic scrub, created impoundments, and agricultural drains near the playa and shore. Key indicators include the extent of playa and vegetation, inflow and water levels of the Salton Sea and groundwater, water quality (salinity, dissolved oxygen, temperature, nutrients, and contaminants such as selenium), air quality (particulate matter, hydrogen sulfide), aquatic life (plankton, fish), birds (especially waterbirds and shorebirds), and special-status wildlife species such as desert pupfish (*Cyprinodon macularius*) and Yuma Ridgway's rail (*Rallus obsoletus yumanensis*).

The MIP is intended to support a collaborative monitoring enterprise among current and potential partners. Because the Salton Sea is a rapidly changing ecosystem, the MIP will be a living document to adapt flexibly to dynamic conditions and evolving management needs. Each year, an annual study plan will be developed that tiers off the MIP. The annual study plan will define the following year's monitoring activities, coordinate efforts among implementing partners, and refine sampling methods and/or locations as appropriate. Every five years, the MIP will be reviewed and updated, if needed.