THE SALTON SEA: IN SEARCH OF A SUSTAINABLE FUTURE

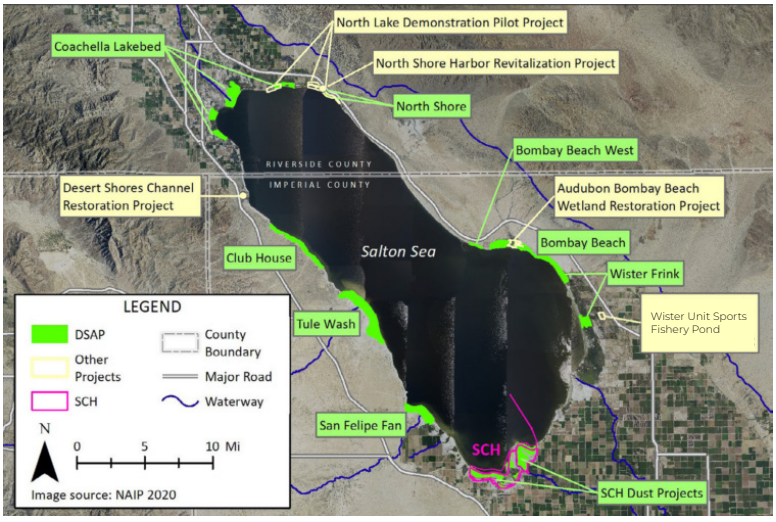
San Diego County Water Authority

The Salton Sea is the largest lake in California, covering about 375 square miles of Imperial and Riverside counties. It is in the Salton Basin, which from the earliest documented history has periodically filled with water, most notably ancient Lake Cahuilla. In its current form, the Salton Sea was created by accident when a dike gave way and the Colorado River flooded the basin in 1905.

Since then, the sea has been fed mainly by agricultural runoff from the New and Alamo rivers (which start in Mexico and flow through the Imperial Valley) and the Whitewater River in the Coachella Valley.

THE QSA

In 2003, the landmark Quantification Settlement Agreement (QSA) was signed, consisting of some 30 agreements that would enable California to live within its 4.4 million-acre-foot apportionment of the Colorado River and support the U.S. Bureau of Reclamation in the management of the river. As part of the QSA, a rigorous environmental process was followed, which led to the development of QSA-related legislation designed to mitigate the distinct impacts of the QSA on the Salton Sea and establish a path forward for the state to undertake Salton Sea restoration.



FULFILLING A MITIGATION PROMISE

Under the QSA-related legislation, a QSA Joint Powers Authority (QSA JPA) was formed made up of the Water Authority, the Imperial Irrigation District (IID) and the Coachella Valley Water District (CVWD) as partnering water agencies, and the State of California. As part of the legislation, the three water agencies were to pay up to $133 million in 2003 dollars, or $287 million in nominal dollars. The Water Authority was responsible for approximately 40 percent of those costs. Any mitigation expenses above $133 million were assigned to the State of California. Additionally, the Water Authority, IID, and CVWD agreed to pay $30 million in 2003 dollars ($67 million in nominal dollars) as seed money to jumpstart a state-led separate restoration program.

To date, the water agencies have met all of their mitigation obligations, which from 2003 to 2017 included providing bucket-for-bucket mitigation water to address salinity levels at the sea, the placement of six air monitoring stations around the sea, and construction of a 950-acre managed marsh near the sea, among other projects.

Since 2018, the effort has shifted to a robust on-the-ground air quality program that targets the areas of playa exposure tested to be most emissive. The projects are largely focused on surface roughening and vegetation enhancement to prevent fugitive dust but have also included the development of groundwater projects that can cover playa and create habitat.

The efforts of the QSA JPA are complementary of the state's restoration program, known as the Salton Sea Management Program (SSMP).

SSMP

The SSMP is progressing under the leadership of the California Natural Resources Agency (CNRA). As part of a 2017 stipulated order, which the Water Authority helped draft, the CNRA is to address 30,000 acres of exposed playa through 2027 with half of the projects to address habitat and half air quality. In response to that stipulated order, CNRA implemented the SSMP, starting with a Phase 1: 10-Year Plan to meet the 30,000 acre-target. With more than $600 million in funding for the SSMP, awarded primarily through state water bonds, CNRA is moving forward with a series of projects, most notably the Species Conservation Habitat (SCH). The SCH is a proof-of-concept project consisting of a series of water ponds that will maintain fish life, provide a food source for birds, and address exposed playa. Portions of the SCH opened at the end of 2023, with more sections planned to open in 2024. When complete, the SCH will total more than 4,000 acres. However, CNRA, with additional federal funding, is already working on plans to expand the project.

As CNRA progresses on Phase 1 projects, it also has begun planning for projects that would address the long-term restoration of the sea under a concept of a smaller but sustainable Salton Sea.

FUTURE ISSUES

Prolonged drought on the Colorado River has created new concerns for the Salton Sea as discussions turn to development of the post-2026 set of guidelines that will manage river operations well into the future. The Water Authority, together with its QSA partners, has made the point Basin-wide that environmental considerations, most importantly, the Salton Sea, must be a key component of the new guidelines, because the sea is a critical part of the Colorado River system.

MORE INFO