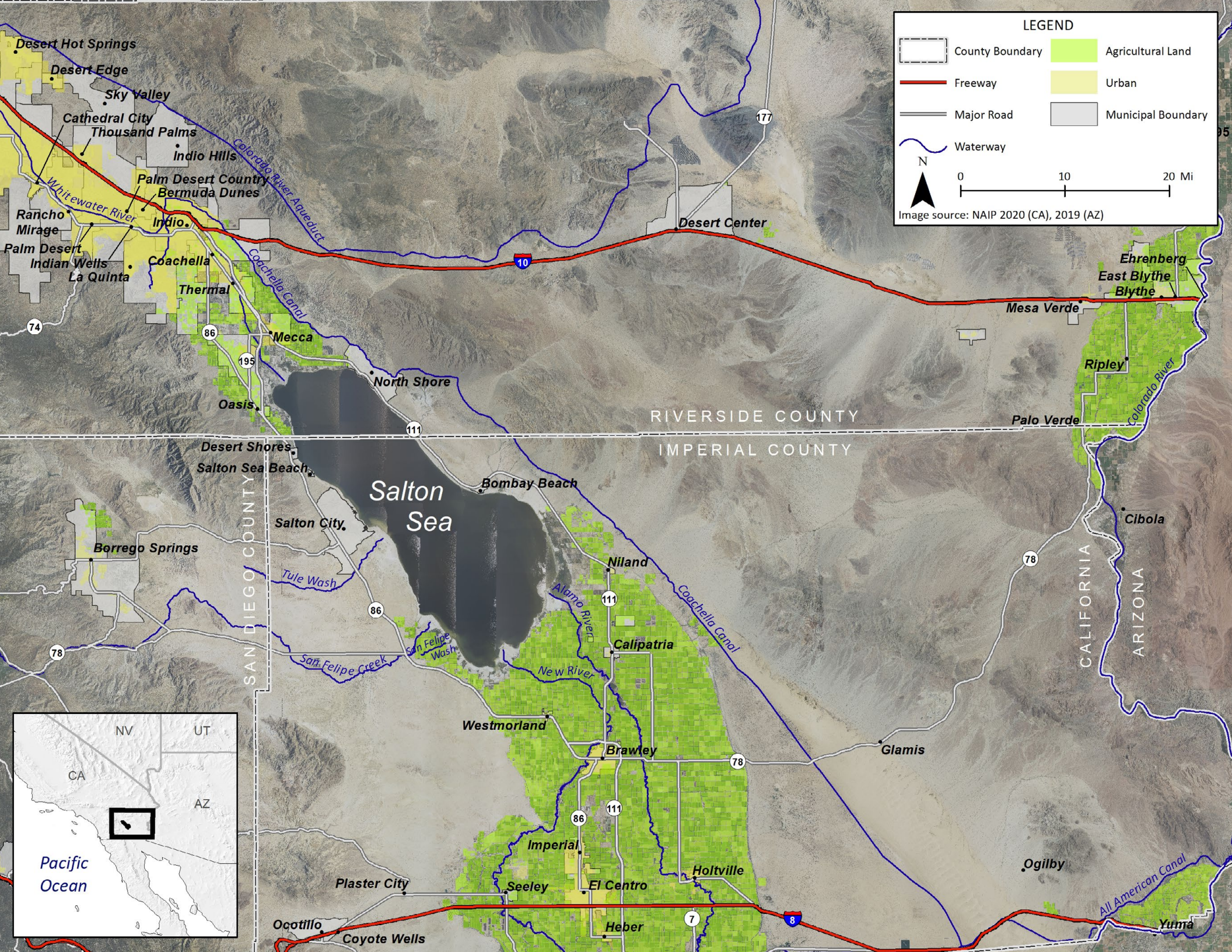
CALIFORNIA NATURAL RESOURCES AGENCY

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Annual Report on the Salton Sea Management Program



March 2025


LEGEND
County Boundary
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Urban
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Image source: NAIP 2020 (CA), 2019 (AZ)
Desert Hot Springs
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Bermuda Dunes
Rancho Mirage
Palm Desert
Indian Wells
La Quinta
Indio
Coachella
Thermal
Mecca
Oasis
North Shore
Desert Center
Ehrenberg
East Blythe
Blythe
Mesa Verde
Ripley
Palo Verde
Colorado River
Colorado River Aqueduct
Whitewater River
Coachella Canal
RIVERSIDE COUNTY
IMPERIAL COUNTY
SAN DIEGO COUNTY
CALIFORNIA
ARIZONA
Salton Sea
Desert Shores
Salton Sea Beach
Bombay Beach
Salton City
Borrego Springs
Tule Wash
San Felipe Wash
San Felipe Creek
Niland
Alamo River
New River
Calipatria
Cibola
Westmorland
Brawley
Glamis
Imperial
Holtville
Plaster City
Seeley
El Centro
Ogilby
All American Canal
Yuma
Ocotillo
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Pacific Ocean
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CALIFORNIA NATURAL RESOURCES AGENCY

Annual Report on the Salton Sea Management Program

March 2025

Prepared for:

CALIFORNIA Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

State Water Resources Control Board
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DEPARTMENT OF WATER RESOURCES · STATE OF CALIFORNIA

CALIFORNIA DEPARTMENT OF FISH & WILDLIFE

CALIFORNIA NATURAL RESOURCES AGENCY

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Cover photo:
SSMP staff setting fish sampling nets at the Salton Sea.



Executive Summary

The State's Salton Sea restoration and management efforts continued to show significant, demonstrable progress in 2024 – achieving key milestones and accelerating the pace of critical project delivery functions. With new federal funding, the Salton Sea Management Program (SSMP) broke ground to expand what was already the largest restoration project in the Sea's history, and further expansion is being initiated to suppress dust and restore habitat on up to 9,000 acres at the south end of the Sea. In other areas along the Sea, over 1,300 acres—spanning roughly five miles of shoreline—now host native vegetation recently planted to suppress dust over the coming decades.



This past year was also the single largest year for Salton Sea restoration and management funding in the State's history. In the fall of 2024, the U.S. Bureau of Reclamation (Reclamation) committed $175 million to accelerate construction of restoration projects at the Sea, in addition to $70 million previously committed, for a total of $245 million in federal funding. California voters also passed the Climate Bond (Proposition 4) in November 2024, which included $160 million for Salton Sea restoration and management projects, as well as additional funding up to $10 million to create the new Salton Sea Conservancy, which will focus on the long-term operation and maintenance of the State's restoration projects.

Over the past year, the SSMP Team has worked to ensure that this historic level of funding can be implemented efficiently by completing critical planning milestones, securing essential permit approvals, and filling key leadership positions. This includes the SSMP's efforts to secure a permit from the U.S. Army Corps of Engineers (USACE) and a corresponding National Environmental Policy Act (NEPA) document that collectively provide expedited pathways for SSMP restoration projects to meet federal environmental permitting requirements. Additionally, the SSMP Team finalized a programmatic land access agreement with Reclamation to

expedite access to land owned by Reclamation for expedited implementation of SSMP projects in 2024.

As we move forward, continued partnership with tribal governments and community groups will be critical to continue shaping our efforts at the Sea. To affirm our program's commitment to partnership, we released a long-planned report on community needs in 2024. This report incorporates input received directly from Salton Sea community members—with the goal of providing information the SSMP and other organizations in the region can use to implement multi-benefit projects that advance both restoration projects and broader objectives essential to community wellbeing.

This annual report provides updates on the SSMP's activities in 2024, including updates on the planning and implementation of SSMP projects, as well as community engagement and partnerships critical to the SSMP's success. While we share substantial progress in this annual report, we recognize that significant work remains ahead, and we must continue to accelerate and broaden our work at the Sea.

U.S. Senator Alex Padilla shakes hands with Thomas Tortez, council chairman of the Torres Martinez Desert Cahuilla Indian Tribe, after speaking at a groundbreaking ceremony for the Species Conservation Habitat Project Expansion at the Salton Sea in October 2024.



Project Delivery

Work continued in 2024 on the Species Conservation Habitat (SCH) Project with the groundbreaking of the first expansion area. Key milestones on the original 4,100-acre SCH footprint were achieved, including testing major components and early wetting at the East and Center Ponds of approximately 180 acres. Ongoing in 2024 was further development of the Visitor Observation Area and work on the water quality monitoring and operations system. The SSMP Team made intentional scheduling modifications for filling the constructed SCH ponds with water to allow for equipment access and use of onsite soils to expand the SCH Project. Commissioning of up to 2,000 acres of the SCH Project is expected in the summer of 2025 while new construction of an additional approximately 4,500 acres is planned to begin in spring 2025.

In September 2024, Reclamation committed $170 million to the SSMP and made an additional commitment of $5 million in January 2025, which was the last of the remaining federal funding installments, to accelerate dust suppression and aquatic habitat projects at the Sea. In total, SSMP received a total of $245 million in funding commitments from Reclamation between 2023 and 2025 that will be used to expand the SCH. This funding was released in connection with recent conservation actions adopted by Imperial Irrigation District in 2023 and 2024 and the 2022

Commitment to Support Salton Sea Management Related to Water Conservation in the Lower Colorado River Basin Agreement (hereafter, the Salton Sea Commitments Agreement). In 2023, the first two installments, $70 million in total, were committed by Reclamation to the State to begin the initial nearly 750-acre expansion of the SCH Project referred to as the East Pond 1 expansion. The additional $175 million commitment will fund the expansion of the Center and West Ponds, adding another approximately 4,500 acres to the SCH Project.

Vegetation enhancement work at the Clubhouse, Tule Wash, and West Bombay Beach sites continued at a rapid pace. The Clubhouse site was completed with a combination of grass bales, stormwater spreading features, drip irrigation, and seeding/planting implemented on the entire 399-acre project area. Four groundwater wells have been drilled at the Clubhouse site (two deep and two shallow) to provide a local source of water for irrigation. Work is actively proceeding at the Tule Wash vegetation enhancement site, where bales and planting have been developed over 903 acres. Bales and stormwater spreading features have been implemented on an additional 258 acres. Access roads and pads for groundwater wells have been constructed throughout the project area. Work continues on the remaining 314 acres of the project area. In 2024, a new water source was identified at the West Bombay Beach site, and additional planting will be completed in 2025.

Key land access milestones were achieved in 2024. Reclamation signed their NEPA decision document, which allows for the programmatic land access agreement to be finalized and used for future projects on Reclamation land. Furthermore, IID and the SSMP Team recorded an amendment to expand the SCH easement to include the expansion of the SCH Project. The SSMP Team also entered into a number of other access permits with IID including four Temporary Entry Permits, three Special Use Permits, and three Encroachment Permits. Land access continues to be a foundational need to enable restoration project implementation. The SSMP Team continues to work with other partners, such as Coachella Valley Water District, Bureau of Land Management, and Torres Martinez Tribe, for Temporary Encroachment Permits and access for surveys.

Partnerships

Partnerships with communities, tribal governments, interested parties, and local, state, and federal agencies are crucial to achieving the goals of the SSMP. In 2024, the State, Reclamation, IID, and other parties to the Salton Sea Commitments Agreement met quarterly with partners at a principal level to continue forward momentum of the commitments described in the agreement, along with additional Salton Sea partners. This series of meetings was led by CNRA Secretary Wade Crowfoot and Reclamation Commissioner, Camille Calimlim Touton.

Members of the SSMP Team continued to work closely with community organizations; tribal governments; local, state, and federal agencies; and other interested parties. The SSMP Team is working with partners to pursue available funding sources; develop projects; share data; improve community engagement, outreach, and involvement; and streamline planning and approval processes. In addition, the SSMP Team is collaborating with partners to develop land access, water availability, and public access opportunities as key elements for the success of the SSMP.

Planning

In 2024, the SSMP Team continued its planning activities on three main fronts and completed multiple key planning and regulatory compliance documents. These three main fronts included (1) completing the Environmental Assessment (EA) for the Phase 1: 10-Year Plan that was developed by six federal agencies, providing comprehensive NEPA compliance, (2) signing a Programmatic Agreement for compliance with Section 106 of the National Historic Preservation Act (NHPA), and (3) implementing a Clean Water Act permitting structure for all Phase 1 projects. In 2024, the previously completed Biological Opinion for Section 7 compliance was used.

Work continued to advance long-range planning at the Salton Sea, beyond the activities being undertaken to complete the 29,800-acre target

for Phase 1: 10-Year Plan projects. In 2024, the SSMP finalized its Long-Range Plan (LRP). This plan continues to serve as foundational information for the aquatic ecosystem restoration feasibility study being led by USACE, which will identify the final set of long-range restoration alternatives for analysis in 2025, and will also develop initial alternative concepts for early implementation.

The Salton Sea Monitoring Implementation Plan (MIP) was developed in collaboration with the SSMP Science Committee and multiple working groups in 2022. In 2024, the first Annual Workplan was released, and the SSMP Team began outreach to solicit information from partners to develop the 2025 Annual Workplan. The Annual Workplan serves as a look ahead and planning guide as well as an index for monitoring and research projects occurring at the Sea. This Annual Workplan will help foster collaboration and information sharing.

Community Engagement and Transparency

The SSMP Team continued to place a strong focus on community engagement throughout 2024. The SSMP Team continues to improve and actively maintain a program that enables consistent lines of open communication to serve and engage the frontline communities of the Salton Sea region, creating opportunities for community members to share concerns, provide input, and contribute to the delivery of projects that improve conditions for communities around the Salton Sea.

As major milestones were completed at the SCH Project in 2024, the State hosted numerous tours of the project sites with agency and community partners. This included a multi-agency and partner tour during the Groundbreaking Ceremony for the SCH Expansion, held in October. Public bus tours for the SCH and vegetation enhancement projects sites were also held in October 2024. Many working tours with partner agencies, tribes, elected officials, Nongovernmental Organizations (NGOs), and Community-Based Organizations (CBOs) were conducted throughout the year. As mentioned above, we also released a report on broader community needs.

The SSMP Community Engagement Committee and its subcommittees serve as the center of and primary venue for planning engagement activities and identifying the best outreach and involvement strategies for SSMP public events. The Community Engagement Committee consists of representatives from CBOs, interested parties, local leaders, governmental agencies, and tribal governments. It also enlists leaders of local community groups and NGOs to help guide SSMP engagement efforts, reach community members through varying communications channels, and increase community engagement in SSMP planning activities.

In December 2024, the SSMP completed its Community Outreach and Engagement Plan, in coordination with the Community Engagement Committee. This plan outlines the approach and roadmap for outreach and engagement with frontline communities around the Salton Sea and the broader Coachella and Imperial Valley region.

Throughout the year, the SSMP Team presented updates during multiple existing non-SSMP led events, including regional city council meetings and a California Water Commission board meeting, and presentations are expected to continue into 2025. These presentations provided a succinct overview of the progress the SSMP Team has been making to improve conditions and restore ecological value at the Salton Sea.

The Project Tracker tool is another effort leading to greater transparency for the SSMP. Debuted in March 2024, the Project Tracker is a comprehensive database and dashboard that clearly shows progress towards the program goals, project phases, and acreage targets by activity and category. Fact sheets are also downloadable in English and Spanish. The Project Tracker is expected to be updated twice a year. The Project Tracker is accessible through the CNRA Salton Sea website on its "Projects" tab.

Next Steps

In 2024, the SSMP Team further advanced its planning efforts to meet the State Water Resources Control Board's 29,800-acre restoration target. This involved assessing land availability, water needs, and environmental factors around the expected exposed lakebed. Through this process, key planned projects include the 3,200-acre Alamo River aquatic habitat, an 800-acre North Lake Wetlands expansion, and a 560-acre Bombay Beach Wetland expansion. Additional vegetation projects cover 8,340 acres. In total, 34,430 acres have been identified, which provide some flexibility as the State moves closer toward implementation. Slower-than-expected shoreline recession and wetland growth on exposed lakebed are key factors in project identification and implementation timing.

Major next steps to be accomplished in 2025 related to specific projects are summarized below.

The SSMP will complete construction of the first 750-acre expansion area of SCH and then commission the original East Pond and expansion East Pond 1 together for nearly 2,000 acres of functioning habitat in 2025. The SSMP Team will also begin construction of the expansion of SCH's Center and West Ponds, up to 4,500 additional acres, using the federal funding delivered under the Salton Sea Commitments Agreement. Work will continue on SCH operations and maintenance (O&M) facilities, the SCH Visitor Observation Area, and maintenance access.

Greater Yellowlegs.



All vegetation enhancement sites on Reclamation land are expected to be planted in 2025 across the three sites at Clubhouse, Tule Wash, and West Bombay Beach. Access roads across the approximately five-mile-long Tule Wash site will be expanded and completed for ease of initial bale placement, planting, and irrigation activities. Work is planned to begin on IID land adjacent to the existing Clubhouse and Tule Wash vegetation enhancement project sites; these sites encompass an additional 382 acres. The SSMP envisions using the same approach as used on the nearby Reclamation parcels. The SSMP Team will take advantage of newly built access roads to these sites and the new groundwater wells for irrigation.

The SSMP Team will complete design of the Bombay Beach Wetland Project in 2025 in partnership with Audubon California, and then secure a contractor to initiate construction. The SSMP will take the lead on constructing the project in close coordination with Audubon and expects it to go into construction in late 2025 or early 2026.

The Kane Spring San Felipe Fan project has been further developed in 2024 and the SSMP Team plans to secure a contractor for design and construction in 2025. The project envisions a multiple-benefit project that provides dust control, as well as habitat for shorebirds and pupfish connectivity, on 4,072 acres. The full project scope will be developed in 2025 in collaboration with IID and Reclamation. Several public meetings will be scheduled to seek feedback upon completion of initial design concepts by the SSMP Team. Further design work is envisioned to support a progressive design-build contract to implement this project in 2025.

The SSMP Team will continue to support the Salton Sea Authority (SSA) and Riverside County as they lead efforts to plan and construct the North Lake Pilot Demonstration Project, located at the northern end of the Salton Sea, in Riverside County near the unincorporated community of North Shore. Significant site evaluations and studies were completed in 2024 that have led to changes in design, and work will continue to complete design in 2025.

Imperial County plans to complete California Environmental Quality Act (CEQA) compliance for the Desert Shores Channel Restoration Project. SSA and Imperial County are leading this project and will continue to work with the project management firm that was hired in 2023 to advance project design and provide opportunities for robust public input opportunities in 2024. A contract was awarded to Nicklaus Engineering, Inc., to conduct groundwater availability and geotechnical data collection, which began in January 2025.

In 2025, the SSMP Team intends to use the recently completed federal permit streamlining actions (EA for the Phase 1: 10-Year Plan) to expedite projects planned for construction. The next phases of planning (beyond the Phase 1: 10-Year Plan) will be conducted by USACE through their Early Implementation Increment Plan and Feasibility Study. Coordination and planning with USACE and SSA began in 2023 and will continue until 2029.

The SSMP Team encourages the public, community partners, tribal governments, and other interested parties to get involved in our planning and project implementation efforts through a number of venues. These include the following:

- Attend workshops and committee meetings: Most meetings are open to the public and are accessible virtually. Updates on future meetings are provided through newsletters, flyers, and announcements via both traditional and social media.
- Communicate via email: Interested individuals can reach out by email at cnra-saltonsea@resources.ca.gov.
- Receive website updates and newsletters: Information on current and future updates is provided on the SSMP website: https://saltonsea.ca.gov/. Interested individuals may also sign up to receive regular email updates about the SSMP.

1 Introduction and Purpose

The future of the Salton Sea (Sea) remains a central focus of the Newsom Administration (Administration), with an emphasis on implementing projects on the ground that benefit the communities and wildlife that depend on the Sea. Efforts to address the drought in the Colorado River Basin over the last two years have provided critical resources to accelerate project delivery at the Sea. This work is driven by the Salton Sea Management Program (SSMP)—led by the California Natural Resources Agency (CNRA) in collaboration with the California Department of Water Resources (DWR) and the California Department of Fish and Wildlife (CDFW). Together these agencies are known as the SSMP Team. The SSMP Team worked closely with local, state, Tribal, and federal partners to advance projects in 2024. By strengthening relationships with local partners and continuing to build project experience, the SSMP Team will work to further accelerate project delivery in 2025 and beyond.



The SSMP Team remains focused on the following four goals:

1. Drive implementation of the SSMP's Phase 1: 10-Year Plan, which aims to improve conditions around the Sea by constructing 29,800 acres of projects to suppress dust from exposed lakebed for local communities and create habitat for fish and birds;
2. Work with the U.S. Army Corps of Engineers (USACE) and the Salton Sea Authority (SSA) to develop and complete the *Imperial Streams and Salton Sea Ecosystem Restoration Feasibility Study* (hereafter, Feasibility Study) to identify actions for long-term restoration of the Sea;
3. Continue to strengthen partnerships with the federal government, local governments and non-profits, tribal governments, and communities to deliver projects and institutionalize community

Report Goals

This report highlights project planning and implementation activities during 2024 to meet the requirements of State Water Resources Control Board Order WR 2017-0134. The primary focus is on work completed in 2024 and specific plans for projects from 2025 to 2028, the growing capacity of the SSMP Team to meet future goals, and ongoing engagement with regional partners and local communities. This report also includes an update on the funding status of the program.

engagement within and across SSMP projects; and

4. Continue to add capacity and expertise to the SSMP Team to enable the State to deliver projects on an expanded scale.

1.1 Notable Highlights Since the 2024 Annual Report

Below are notable highlights that have occurred since the 2024 Annual Report:

- U.S. Bureau of Reclamation committed $175 million, on top of the $70 million committed in 2023, to accelerate implementation of projects at the Salton Sea as part of the Commitment to Support Salton Sea Management Related to Water Conservation in the Lower Colorado River Basin Agreement. The parties to the Salton Sea Commitments Agreement - the State, U.S. Bureau of Reclamation (Reclamation), Imperial Irrigation District (IID), and Coachella Valley Water District (CVWD) - met with partners quarterly at a principal level throughout 2024 to continue momentum on the commitments from the December 2022 agreement. CNRA Secretary Wade Crowfoot and Reclamation Commissioner Camille Calimlim Touton led this series of meetings.

- On November 27, 2024, the SSMP received a permit from USACE that establishes a framework for the SSMP to efficiently scale up its Phase 1: 10-Year Plan projects. This permit, the framework (letter of permission (LOP) procedures), and the corresponding National Environmental Policy Act (NEPA) document collectively provide expedited pathways for the restoration projects to meet federal environmental permitting standards.

- On October 4, 2024, USACE approved increasing the scope, schedule, and budget of the Feasibility Study, due to the substantial engineering data necessary to address the complex issues associated with the Salton Sea study area. This also included the approval of the Early Implementation Increment Plan to analyze two projects to provide benefits to communities and the ecology of the Salton Sea sooner than the Feasibility Study would have allowed.

- In March 2024, the final version of the Long-Range Plan (LRP) was released along with a response to comments compiled during the development of the Plan. This information has been transmitted to USACE to inform the development of the next phase of the Feasibility Study.

- The Species Conservation Habitat (SCH) Project expanded from a 4,100-acre project to approximately a 4,850-acre project in 2024 with the 750-acre East Pond 1 expansion site. The SSMP Team continues to pursue additional expansion of the SCH Project's Center and West Ponds to add approximately 4,500 acres to the project with federal funding. The ponds east of the New River are planned to be filled and operational in 2025.

- Vegetation enhancement projects comprising of bale placement, furrows, drip irrigation lines, and planting and seeding were implemented at the Clubhouse and Tule Wash sites; 691 acres were completed, and 258 acres of interim dust suppression were implemented. Completed project areas include planting and irrigation zones. Interim dust suppression refers to the placement of bales and furrows where additional planting and irrigation is still to be added. Planting and irrigation at the three sites at Clubhouse, Tule Wash, and West Bombay Beach are expected to be completed in 2025.

- In 2024, two production wells were completed, providing groundwater flows sufficient to meet vegetation water needs. Additionally, six monitoring wells were installed to assess the aquifer's response to groundwater pumping. Monitoring results indicated that groundwater usage from the production wells did not impact aquifer yield. The construction of 12 additional monitoring wells and three production wells began in 2024 and is expected to be completed in 2025.

- In 2024, critical geotechnical reports, technical reports, and site assessments were completed to inform the development of

the North Lake Pilot Demonstration Project (Pilot Project). This flurry of activity was able to occur after gaining site access in 2023. As a result of the newly acquired technical information, the Pilot Project's conceptual design has been updated to reflect a new vision for the project focusing more on wetland stabilization and enhancement. The SSMP team is supporting the SSA and Riverside County, who are leads for the project, and aim to have project design completed in 2025.

- In 2024, the SSMP closely coordinated with Tribes in the region to provide multiple project tours of the SCH and Vegetation Enhancement Sites. The SSMP closely coordinated with the Torres Martinez Desert Cahuilla Indians Tribe via regular meetings. These meetings led to the development of the SSMP's first Tribal contract to allow the SSMP to compensate the Tribe for services. This effort has led to tribal monitoring at project sites, access to Torres Martinez sites for surveys, and collaboration on interpretive panels for the SCH Visitor Observation Area. The Agua Caliente Band of Cahuilla Indians is also participating in interpretive panel development. Coordination with Torres Martinez made it possible for collection of water quality samples by the Water Board and CDFW staff on the north side of the Sea for the first time in several years.
- In 2024, the SSMP filled seven key vacancies (five at CDFW and two at DWR), bolstering organizational capacity to deliver on its commitments. Most of these positions are based in the Salton Sea Region.

1.2 Updates for State Water Resources Control Board Order WR 2017-0134

Table 1 provides an overview of the reporting requirements defined in the State Water Resources Control Board Order WR 2017-0134 (Order). This 2025 Annual Report on the Salton Sea Management Program goes beyond the requirements in the Order and provides an update on the extensive range of management, planning, permitting, and construction activities intended to support the delivery of future SSMP milestones. The Order also requires an update on environmental conditions at the Sea. This information is summarized in Appendix A of the report.

1.3 Report Organization

This report follows the general outline of the previous annual reports. Chapter 2 provides project delivery updates, including summarizing land access status and project status for both SSMP and non-SSMP projects. Chapter 3 describes updates on partnerships across the region to facilitate the development of projects, including federal, state, and local agencies, tribal governments, and other nongovernmental organizations (NGOs). Chapter 4 presents community engagement information as well as details regarding the Salton Sea Partners. Chapter 5 describes planning activities at various levels, such as program planning, environmental planning, and funding to support the future implementation of the Phase 1: 10-Year Plan projects. Chapter 6 describes the near-term next steps for 2025 to 2027 and project delivery and planning for meeting the longer-term targets of the State Water Resources Control Board Order WR 2017-0134. Chapter 7 contains the references. Appendix A contains a summary of data describing existing environmental conditions at the Sea, including inflows, water elevation, and salinity, and a summary of recent bird and fish surveys. Appendix B provides a detailed breakdown of the funding available and sources for the SSMP.

Table 1. Activities Identified in State Water Resources Control Board Order WR 2017-0134

Item	Reporting Requirement	SSMP Activity
(i)	Completed projects and milestones achieved in the prior year.	The following are key accomplishments in 2024: • Completed major construction features and structures at the SCH site, with intentional schedule modifications Completed major construction features and structures at the SCH site, with intentional schedule modifications for filling habitat ponds to allow construction of an adjacent habitat site (termed the SCH Expansion project). Construction of the East Pond 1 Expansion began and will add nearly 750 acres to the existing 4,100-acre project. Federal funding was secured for the remaining SCH expansion, estimated to be an additional approximately 4,500 acres. • Completion of the vegetation establishment at the Clubhouse site; demonstrated successful growth of native vegetation from plants and seed. A local water source was identified for plant establishment at West Bombay Beach and planting is expected to conclude in 2025. • Drilling of groundwater wells at the Clubhouse site that will provide a local source of water for plant germination and establishment. • Improvements to access at the Tule Wash project site, allowing the project to implement dust control more efficiently and install groundwater wells. • Deployment of an additional two air quality monitoring transects. One transect was deployed at the Clubhouse A site and one at Tule Wash in 2024. The program now operates a total of 21 real-time air quality monitoring stations. • Completion of geotechnical investigations report, 2024 marshbird surveys, drain water quality technical report, aquatic delineation report, emergent wetlands water needs report, and revision of conceptual design for the North Lake Pilot Demonstration Project. • Release of the final Long-Range Plan (LRP) and Salton Sea Community Needs Report. • Development of the second Monitoring Implementation Plan (MIP) Annual Working Plan for 2025. • Hired seven staff for the SSMP, increasing organizational capacity as further described in Section 5.7. • Secured final federal funding commitments of $170 million in 2024 and $5 million in early 2025 to accelerate project implementation. • National Environmental Policy Act (NEPA) Environmental Assessment (EA) completed, and accompanying permit procedures (USACE) and programmatic land access (Reclamation) issued.

Table 1. Activities Identified in State Water Resources Control Board Order WR 2017-0134 (Contd.)

Item	Reporting Requirement	SSMP Activity
(ii)	Amount of acreage of completed work that provides dust suppression and habitat creation, broken down by habitat type.	**Vegetation Enhancement Projects:** 691 acres completed on the Clubhouse and Tule Wash Project sites. **Habitat Projects:** 180 acres in East and Center Pond were filled within the SCH footprint. **Interim Dust Suppression Projects:** Projects reducing dust emissions implemented on an additional 258 acres at the Tule Wash site. A total of 1,599 acres of interim dust suppression are in place to date. A total of 347 acres of habitat and 1,302 acres of dust suppression through vegetation enhancement projects have been completed to date.
(iii)	Upcoming projects to be completed and milestones to be achieved prior to the next annual progress report.	The following are key activities planned in 2025: • Fill SCH East Pond and East Pond 1 Expansion and begin construction of the SCH Center and West Ponds expansion. • Complete final design and specifications and contract for construction of the Bombay Beach Wetland Enhancement Project, in partnership with Audubon California. • Support the Salton Sea Authority and Riverside County with completing the final design and specifications for the North Lake Pilot Demonstration Project. • Coordinate with SSA and Imperial County to advance the Desert Shores Channel Restoration Project. • Share beta version of the Salton Sea ArcGIS Community Hub Site with interested parties to receive feedback and guidance in its development. Release website to the public by the end of 2025. • Update the SSMP website. • Complete 1,709 acres of Vegetation Enhancement at Clubhouse, Tule Wash, and West Bombay Beach on Reclamation parcels. • Initiate Vegetation Enhancement work on IID Parcels at the Clubhouse and Tule Wash sites. • Use available funding to secure a progressive design-build contract for the Kane Spring Project and determine contracting method for the North Lake Wetlands Project. • Re-initiate the Natural Resources Conservation Service (NRCS) Watershed Planning Process for the development of the Mundo and Travertine Projects. • Finish the 2025 MIP annual workplan and begin development of the MIP annual workplan for 2026.

Table 1. Activities Identified in State Water Resources Control Board Order WR 2017-0134 (Contd.)

Item	Reporting Requirement	SSMP Activity
(iv)	Status of financial resources and permits that have not been secured for future projects.	**Financial resources:** Development of the NRCS Watershed Plan using work done for the SSMP 10-Year Plan EA would release federal funding through the U.S. Department of Agriculture (USDA) Watershed Planning assistance in fiscal year 2025-2026 or 2026-2027. The SSMP received $245 million from Reclamation between 2023 and 2025 that will be used to expand the SCH. Proposition 4, known as the Climate Bond, passed in November 2024, and it includes $160 million for SSMP projects. Funding is contingent on appropriation through the State's budget process. **Permits:** NEPA coverage for the projects in the program was completed in 2024 and includes the Letter of Permission (LOP) Procedures to comply with Clean Water Act Section 404. Other permits will be assessed on a project-by-project basis, but for projects that qualify, the State will seek to use the Restoration General Order for 401 certification. The Bombay Beach Wetlands Enhancement Project has been approved by CDFW as a pilot project for the newly effective (Jan 1, 2025) Restoration Management Permit procedures.
(v)	Any anticipated departures from the dates and acreages identified in Condition 24 of the State Water Board Order.	Completed acreage has been lower than the State Water Resources Control Board (SWRCB) annual and cumulative targets for 2019-2024, although additional project acres are planned to be initiated in 2025 with the completion of the NEPA and LOP procedures noted above.
(vi)	Progress toward development of the Long-Range Plan (LRP) described in Condition 26.	The public draft of the LRP was released by the SSMP Team in December 2022 in compliance with Condition 26. The appendices, including Air Quality Modeling, were released in February 2023. After the conclusion of a 45-day comment period on March 17, 2023, the SSMP compiled and reviewed the comments and released the Final LRP in April 2024. Concepts recommended for further evaluation in the LRP were moved forward into the Feasibility Study for further analysis as part of the study's planning framework.
(vii)	Should an annual milestone shortfall exceed 20 percent of a year's annual obligation, the report will also include a plan that will cure the deficiency within 12 months.	The State's vision for future project delivery to meet the annual obligations is described throughout this report and is summarized in Chapter 6.

2 Salton Sea Management Program Project Delivery

Since CNRA's last report to the State Water Board in March 2024, the SSMP Team (1) continues to work actively to expand land access agreements with different landowners to meet project targets for future years and (2) has moved forward on a variety of aquatic habitat, wetland, dust suppression, and vegetation projects. These projects include work on the SCH project expansions, plans to protect and expand emergent wetland habitat, and active construction on dust suppression projects at sites in areas distant from surface water sources. Field surveys or design work that will set the stage for additional construction over the next several years have been carried out at several other smaller projects, such as the North Lake Pilot Demonstration Project, the Bombay Beach Wetland Enhancement Project, and the North Lake Wetlands Project. New projects, such as the Kane Spring and North Lake Wetlands Projects, have been identified for surveys and geotechnical surveying to inform design. An overview of all active SSMP projects in progress has been provided in this chapter.

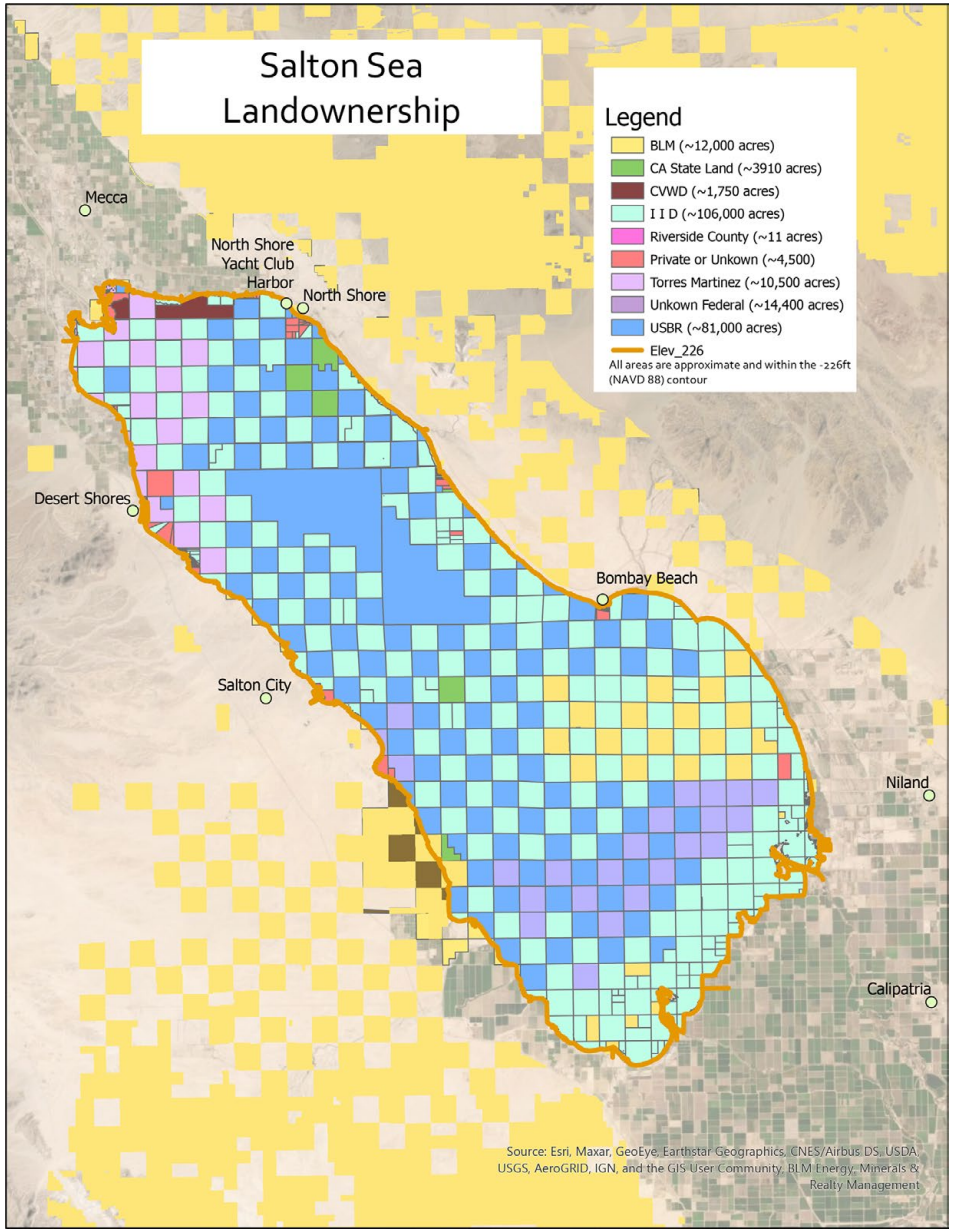


2.1 Land Access

Land around the Salton Sea is owned by local, state, tribal, and federal entities – all with differing processes and procedures for land access. There are also a significant number of private landowners on affected parcels. Therefore, a single template cannot be applied across the board to streamline the processes and procedures. A breakdown of ownership on the roughly 235,000 acres of land around and under the Sea shows the following major landowners: IID (106,000 acres); Reclamation (82,000 acres); U.S. Bureau of Land Management (BLM) (12,000 acres); and the Torres Martinez Desert Cahuilla Indians (10,500 acres) (**Figure 1**). Of the remaining 25,000 acres, only 3,900 acres are owned by the State and the rest is owned by other entities. Most of the State-owned land is currently under water and thus is not amenable to habitat or dust suppression project development.

Because of this limited landownership, the SSMP must enter into a land access agreement(s) for each project site before project design can be finalized, any necessary water rights or use agreements can be applied for or entered into, and implementation can begin. Varied landownership also impacts project timelines and increases costs for project delivery. Each project site may span multiple parcels under different ownership,

Figure 1. Landownership around the Salton Sea.



so multiple land-use agreements may be required for access to and implementation of a single project. This presents a significant challenge for the SSMP. Without complete and expeditious cooperation from the landowners, the SSMP will continue to experience delays in project delivery.

Recognizing the critical role of land access in timely project delivery, as part of the December 2022 Salton Sea Commitment Agreement to address the long-running drought on the Colorado River, the Department of Interior, IID, and Coachella Valley Water District (CVWD) agreed to establish programmatic land access agreements to enable state agencies to implement projects. During 2023, the SSMP Team developed and finalized a programmatic land access agreement with Reclamation that now can be used with the completion of the Phase 1 NEPA Environmental Assessment (EA) to expedite access to Reclamation lands for Phase 1 projects. The SSMP continues to pursue programmatic land access with IID. IID and the SSMP Team recorded an amendment to expand the SCH easement to accommodate the expansion of the SCH Project. The SSMP Team also entered into a number of other access permits with IID including four Temporary Entry Permits, three Special Use Permits, and three Encroachment Permits.

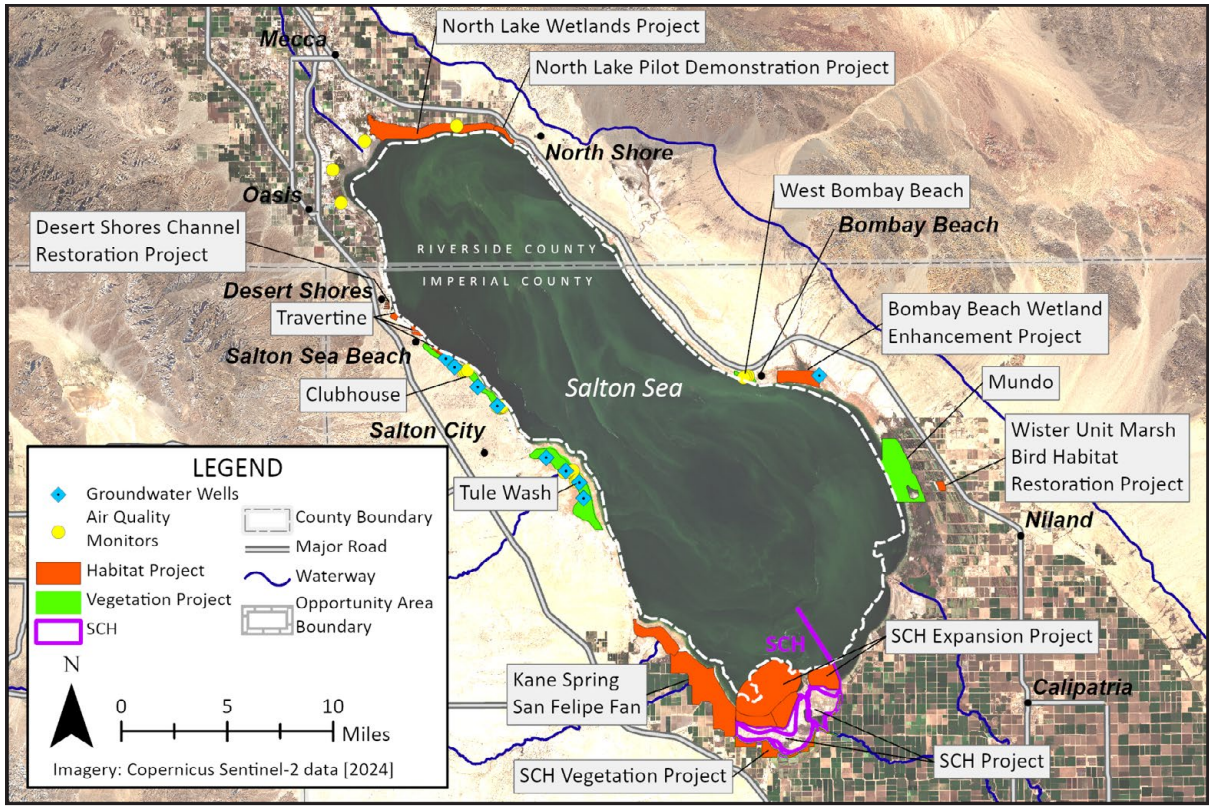
2.2 SSMP Project Updates

Projects in progress at the Salton Sea are shown in **Figure 2**, illustrating the wide range of activities currently being undertaken by the SSMP Team and its partners to implement projects at the Sea and its surrounding communities. The SSMP Team has undertaken active public outreach to identify these future projects for development at the Sea.

2.2.1 Species Conservation Habitat Project

Implementation of the SCH Project, via a design-build contract, was initiated in 2021 and is nearing completion. The SCH Project will restore approximately 4,100 acres of shallow- and deep-water habitat lost as a result of the Salton Sea's increasing salinity and receding shoreline. It

Figure 2. Projects in progress and potential future projects under consideration at the Salton Sea. The Opportunity Area boundary indicates the portion of the Sea covered by the NEPA EA for the Phase 1: 10-Year Plan (described further in Chapter 5).



is the SSMP's first large-scale project, and when completed it will create a network of ponds and wetlands to provide important fish and bird habitat while suppressing dust emissions to protect regional air quality as the Salton Sea continues to recede.

The SCH Project is the first of many projects the SSMP Team will implement as part of the Phase 1: 10-Year Plan. It was chosen as the first large-scale project in part because water-balance models show that, as the Sea recedes, the southern end of the Sea will experience some of the earliest lakebed exposure given its shallow bathymetry. For this reason, the expansion of the SCH was prioritized for federal funding to address near-term impacts of recently adopted conservations.

Figure 3 presents a schematic overview of the SCH Project. The SCH will create deep-water habitat to support the fish-eating birds of the Pacific Flyway that the Salton Sea can no longer support. The marine environment created will be achieved by mixing brackish water from the New River and hypersaline water from the Salton Sea. The targeted salinity is between 20 and 40 parts per thousand (ppt or grams per liter [g/L] of salt), which will not only support fish for the birds to forage on but also the endangered Desert Pupfish. The ponds will be up to 10 feet deep to provide refuge for the fish from predators and strong temperature variations. The water from the New River will be fed by gravity to the mixing basins, and the Salton Sea water will be actively pumped. Once the water is mixed to achieve the required salinity, the water will then flow into the sedimentation basins, which are designed to remove 75 percent of the suspended solids. Once the targeted salinity and suspended solid concentrations are achieved, the water will be distributed to the different ponds via outflow structures. The water in the SCH has an average residence time of 90 days to prevent water quality issues that are harmful to wildlife.

The SCH's flood buffer zone helps the SCH withstand the risk of flooding in major storm events, including a 100-year flood in the New River and seasonal flash flooding. The flood buffer zone is a 600-acre area able to store flood water and convey it to the Sea. The project is engineered to contain or pass flow as necessary to prevent the breaching of its levees. The SCH also provides islands for birds to rest, feed, and nest. The islands are specifically designed to provide safety for

Figure 3. Salton Sea Species Conservation Habitat project overview and schematic.

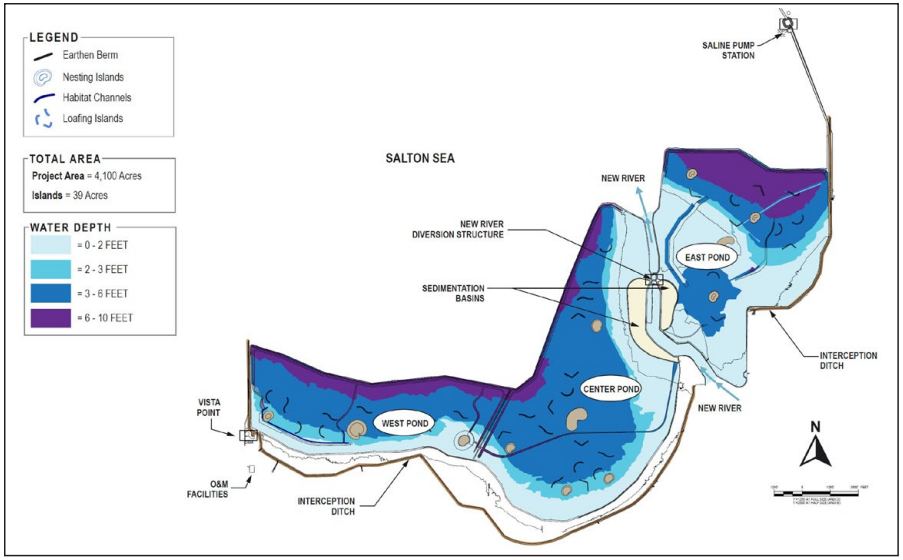


Figure 4. SCH pump system testing.



Figure 5. SCH East Pond, looking south.



birds from land predators and high winds. The substrate on the islands was specifically chosen to be suitable for ground nesting birds.

Once completed, the SCH will provide a variety of water depths and habitat opportunities for all the bird guilds that used to call the Salton Sea home.

In 2024, work completed on this project included the following tasks:

- Tested 90 percent of components in the overall SCH Project. **Figure 4** shows pump system testing.
- Watered up early-works in East Pond (**Figure 5**) and Center Pond for a total of 180 acres.1
- Issued a change order and design of SCH East Pond 1.
- Began construction on the SCH East Pond 1 (**Figure 6** and **Figure 7**); and
- Performed maintenance on the West Interceptor Ditch.

1 Each early work pond was created to accept water from the sedimentation basin as the system is tested. The shape and placement allow for minimization of the material moved to create the temporary pond and allows the water to flow to the Interception Ditch with the shortest route possible.



In Memory

Edmond Sayegh

February 21, 1961 – February 17, 2025

Edmond Sayegh of MWH Constructors was the Department of Water Resources owner's representative on the Salton Sea Species Conservation Habitat project. His contributions, insights, and dedication to the project were valued by everyone that worked with him. His lasting legacy will be carried on through the completion of the SCH and SCH Expansion.

A working group with representatives from CDFW, DWR, U.S. Fish and Wildlife Service (USFWS), Agua Caliente Band of Cahuilla Indians, and Torres Martinez Desert Cahuilla Indians began meeting to design interpretive panels that include biological, cultural, and archeological information. Interpretive panels will be placed at the SCH Visitor Observation Area.

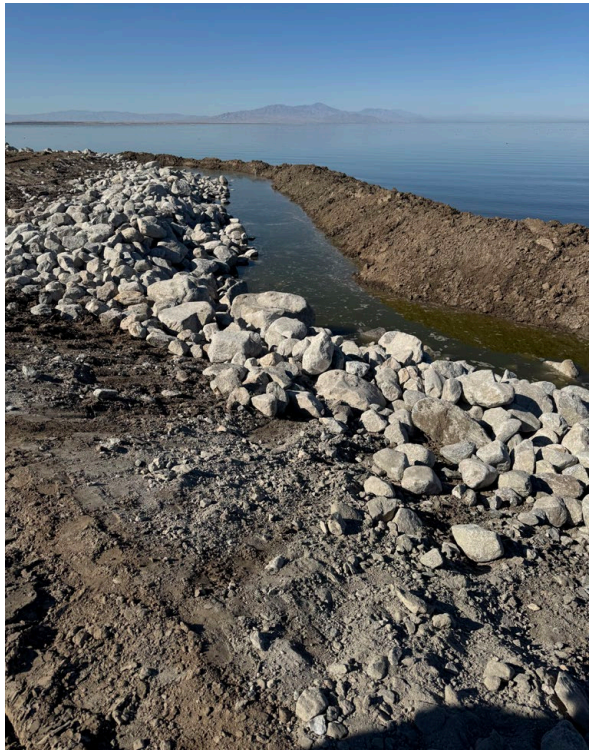
2.2.2 Vegetation Enhancement Projects as Part of the Dust Suppression Action Plan

The SSMP Team released the Dust Suppression Action Plan (DSAP) in July 2020 to accelerate priority SSMP projects that limit dust emissions and restore habitat at the Sea (CNRA, 2020). The DSAP identified up to 9,800 acres of project planning areas on exposed or soon-to-be exposed lakebed around the Sea, described potential dust suppression concepts, and outlined the steps needed to transition from concept to on-the-ground implementation. The DSAP was shaped by important input received from local communities, interested parties, and regulatory agencies.

Figure 6. Construction of the SCH Expansion East Pond 1 berm.



Figure 7. Riprap placement on the Sea-side of the SCH Expansion East Pond 1 berm.





In Memory

Aaron Jay Mari

January 31, 1962 – January 7, 2025

We would like to acknowledge the contributions of Aaron Mari and his company Sun Landscape to restoration work at the Salton Sea. Aaron was instrumental in the early success of planting at the Clubhouse and Tule Wash vegetation enhancement sites.

The goal of vegetation enhancement projects is to suppress dust from exposed lakebed areas around the Salton Sea through native vegetation establishment, enhancement of existing vegetation stands, and stabilization of the lakebed through physical means to allow seed germination and plant growth (collectively referred to as "vegetation enhancement"). These projects have been prioritized for emissive areas of the exposed lakebed where surface water supplies are extremely limited and other forms of aquatic habitat creation (such as ponds or wetlands) are generally not possible. Project implementation at the Salton Sea suggests that the water needs for vegetation establishment are roughly one-tenth of the water needs for aquatic habitat creation. As part of the DSAP, the SSMP identified emissive regions around the Sea and a set of potential measures to reduce dust emissions.

2.2.2.1 U.S. Bureau of Reclamation and SSMP Collaborative Projects: Clubhouse, Tule Wash, and West Bombay Beach

The SSMP Team obtained site access from Reclamation in 2020 to develop dust suppression projects as a high priority. Three sites with significant Reclamation-owned land, Clubhouse, Tule Wash, and West Bombay Beach (**Figure 2**), were prioritized. Two sites are located near the community of Salton City: Clubhouse (399 acres) and Tule Wash (1,217 acres). The Clubhouse and Tule Wash sites will be expanded in the next set of projects planned for implementation and as site access is finalized with IID. The West Bombay Beach site (93 acres) is located near the community of Bombay Beach. Collectively, these sites total 1,709 acres. The Clubhouse and Tule Wash sites were identified in the DSAP as high priority sites for dust suppression because of their emissivity potential and proximity to communities. The West Bombay Beach site was added due to its emissivity potential and proximity to the community of Bombay Beach.

After site-specific evaluation of project opportunities and constraints, the vegetation enhancement approach was selected for several reasons. Once the initial stands have been established, the plants stabilize the ground surface and thus create conditions for additional plant germination and growth. Similarly, while irrigation water is needed for initial establishment and growth, over time, these native species are expected to survive without additional

watering—a key consideration in the selected project sites. Finally, these stands are a natural solution to the problem of dust emissions from the lakebed; once projects are mature, they can be expected to continue to perform with limited human intervention.

The exposed lakebed of the Salton Sea is a challenging environment in which to grow vegetation. Projects are designed to address the following environmental constraints:

- Very limited rainfall (approximately 3 inches per year) or access to surface water resources. The surface water that is available is highly variable and may occur in the form of stormwater flows only a few times each year.
- Extremely high air temperatures, with daytime high temperatures exceeding 100o F over several months of the year.
- High salt content in project soils or even the presence of salt crusts from evaporated salts, which may limit plant germination success at many locations.
- High wind speeds and unstable soil conditions subject to wind erosion, limiting germination success or growth of small plants.

Additional practical constraints include site access and distance from public roads in many areas and recreational vehicle disturbance in more accessible areas.

The SSMP Team and its local contractors evaluate the conditions of each site to design and implement vegetation enhancement projects, carrying out some or all of the following activities:

1. Identify and/or develop access routes to sites and within sites to implement dust suppression.
2. Implement interim dust emission control. Large furrows and engineered roughness in the form of grass bale placement, both identified in the DSAP, have been used at project sites to reduce surface wind speeds, and thus saltation and dust emissions from exposed lakebed. This brings immediate dust suppression benefits and supports plant growth by reducing wind abrasion. The type of interim dust emission control is selected based on soil type, and roughening features are spaced and aligned to maximize dust suppression.
3. Identify minimally emissive project areas requiring limited or no additional intervention. Water and fertilizer are applied to enhance existing vegetation stands. Areas with mechanically stable salt crusts are identified, and no additional project work is required.
4. Develop irrigation and stormwater spreading features. Drip irrigation and/or trucked-in water are used to support seed germination and plant growth. Less water is planned to be applied as vegetation becomes established. Stormwater spreading features are implemented to capture natural sheet flow during storm events to support seed germination and plant growth.
5. Seed and/or plant project sites. Native shrub and tree species that are tolerant of the arid and saline conditions around the Sea are used. Seed was collected from existing mature plants in the field and sourced from seed suppliers in the region to develop a seed mix for direct site application. Nursery grown plants are also used for planting. Vegetation species include Iodine Bush, Big Saltbush, Saltgrass, Allscale, Honey Mesquite, Smoketree, etc.
6. Develop groundwater supply and water conveyance. Groundwater wells will provide a stable and local water supply. Initial testing is required to confirm that well yields are sustainable and that the water quality is adequate for plant growth.

The current focus of work on the Clubhouse, Tule Wash, and West Bombay Beach sites is immediate dust suppression, using grass bales and furrows, and longer-term vegetation enhancement to achieve 30 percent vegetative cover through installation of drip irrigation and seeding and planting with native species. In 2024, groundwater well installation remained a key focus to provide a reliable local water supply for vegetation enhancement sites.

The following work at vegetation enhancement projects was completed in 2024. The program is reporting completed acreage as (1) areas that have been planted or seeded and have irrigation, (2) areas that have been evaluated and contain heaved crusts, which are deemed non-emissive and cannot be planted on, and (3) existing stands of vegetation, which have been identified, fertilized, and given supplemental water to foster new growth.

In recent years, higher than normal precipitation during the planting seasons has affected these sites because of trafficability outside of the access roads. While the precipitation has been beneficial from the standpoint of plant growth and flushing salinity from surface soils, fieldwork was delayed. The SSMP Team continues to navigate these potential impacts in completing planting and irrigation over the remaining acreage.

Clubhouse (399 acres)

- Implementation was completed on all acres of the 399-acre project area with engineered roughness (i.e., grass bales), stormwater spreading features, drip irrigation, and seeding/planting (**Figure 8**). **Figure 9** shows recent site conditions and new plant growth at these formerly barren locations. In 2023, four groundwater wells were installed at the Clubhouse site (two deep and two shallow) to provide a moderately saline source (approximately 10-20 ppt salinity) of water for irrigation.
- Air quality and saltation monitoring at the Clubhouse C site shows a more than 95 percent reduction in saltation (a proxy for dust emissions) over three years of data collection (two transects with a total of six stations).
- Additional air quality monitoring transects (three stations) were deployed at the Clubhouse A site in 2024.

Figure 8. Layout of the vegetation enhancement project at the Clubhouse (CH) site, as implemented at the end of 2024.

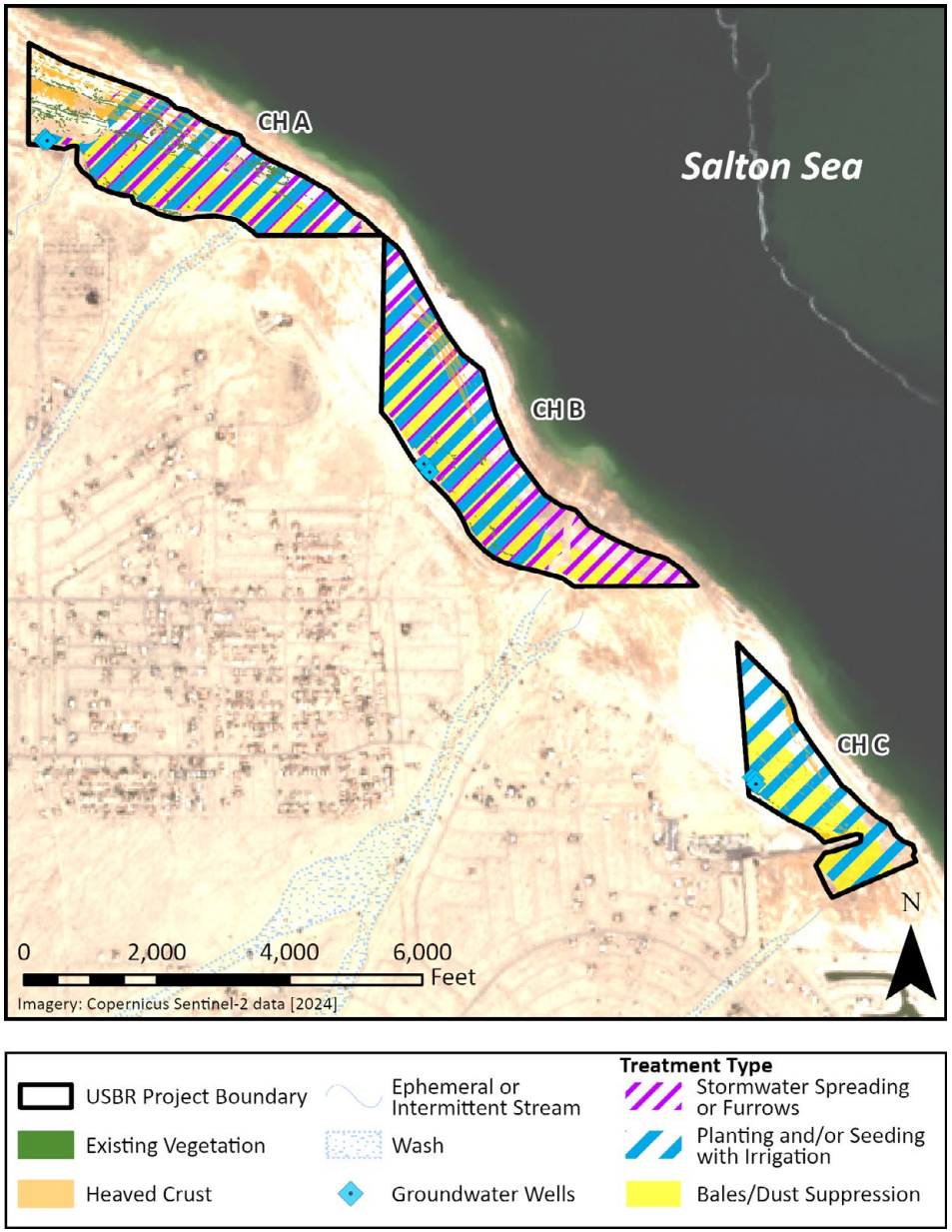


Figure 9. Site features and activities at the Clubhouse site. a) Site conditions at Clubhouse B. b) Plant delivery to Clubhouse B. c) Water tank and irrigation piping at Clubhouse B. d) Site conditions at Clubhouse C.



Tule Wash (1,217 acres)

- In 2024, 660 acres were completed (**Figure 10**) for a total of 903 acres at Tule Wash. Bales, planting, access roads, and well pads for groundwater wells have been developed on these acres.
- Bales and stormwater spreading features have been implemented on an additional 258 acres, providing an interim dust suppression benefit. These acres remain to be planted as the irrigation systems come online. **Figure 11** shows recent conditions at this site.
- Site work on an additional 314 acres will be implemented using similar methodologies in 2025.
- An air quality monitoring transect (three stations) was deployed at the Tule Wash site in 2023. An additional transect with two stations in areas without bales was added in 2024.

Figure 10. Layout of the vegetation enhancement project at the Tule Wash (TW) site, as implemented at the end of 2024.

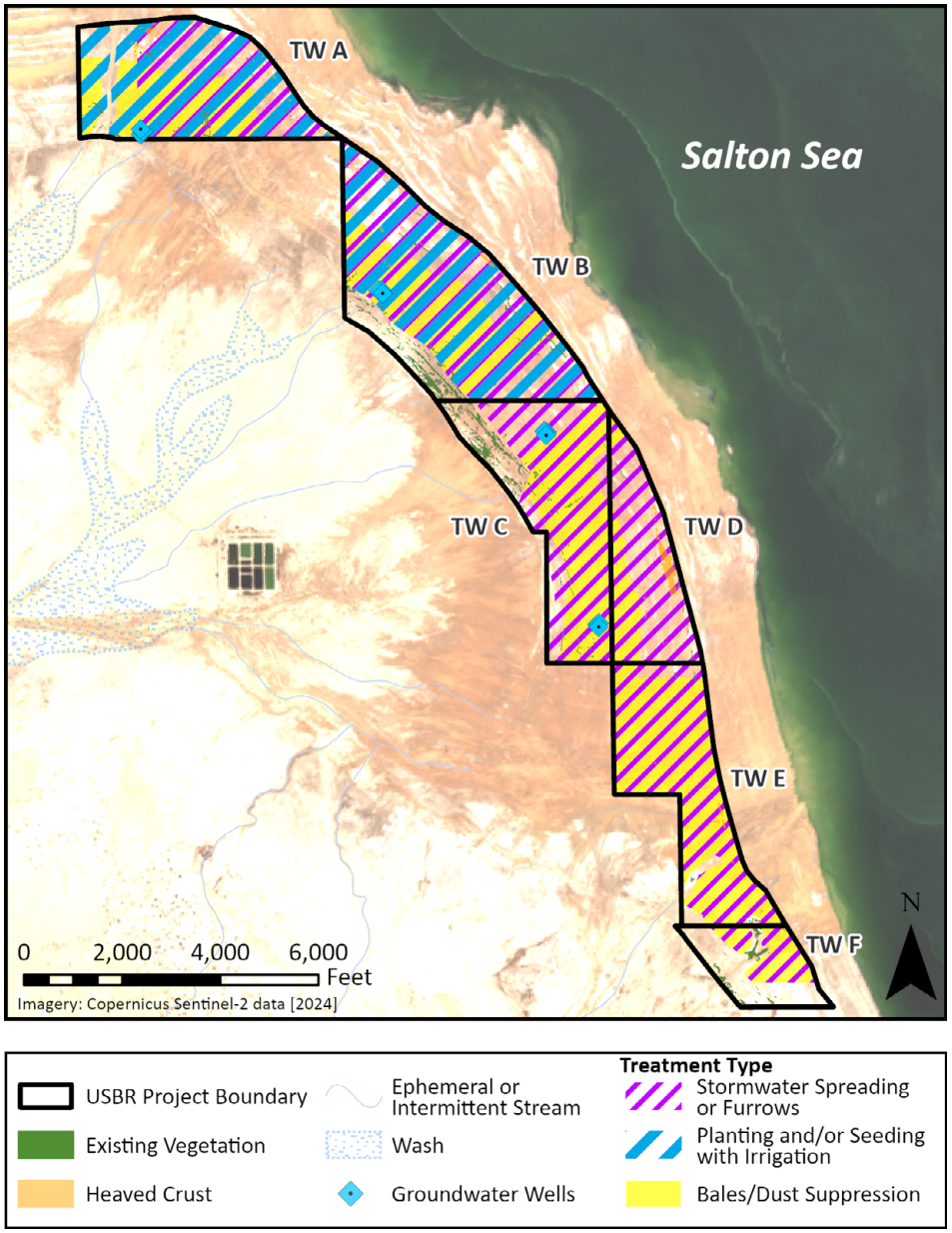


Figure 11. Site features and activities at the Tule Wash site. a) Seeding at Tule Wash D. b) Stormwater spreading furrow at Tule Wash B. c) Water tanks at Tule Wash A. d) Seeding at Tule Wash C.









West Bombay Beach (93 acres)

- 93 acres of stormwater spreading features and bales have been placed (**Figure 12**) providing immediate dust suppression benefits.
- An exploratory borehole was developed for a groundwater supply in 2023, but no water was found to a depth of 800 feet. Thus, additional water sources are being evaluated for long-term development at this site, and additional planting will be done when there is greater confidence in water supply.
- An air quality monitoring transect (three stations) was deployed at the site in 2023.
- In 2024, a planting trial was conducted at West Bombay Beach (**Figure 13**). Before the site was constructed, it had very little existing growth and a low surrounding seed bank. Additionally, the soil conditions at the site differed from other sites in that the soil had a higher clay content. Seeding in late 2022 showed very little viability with some applied water despite higher precipitation during this period, causing some concern about the survivability of native plant stands. In 2024, a planting trial began using rooted plants and seed and a temporary irrigation system. The results showed fair results (see **Figure 13**) and therefore, will be planted using the same methods from other successful vegetation enhancement sites. This work will occur in 2025, temporarily using a local water source for plant establishment.

The permits associated with the sites require monitoring and these will be documented each year as follows:

- Air quality monitoring using the sensor network currently deployed at all dust suppression sites (five transects of three stations, and one with two stations) and four additional sites on the North Lake to understand potential emissions from this region. A total of 21 air quality stations are currently operational, and the SSMP Team is currently working on a way to share the data online.

Figure 12. Layout of the vegetation enhancement project at the West Bombay Beach site.

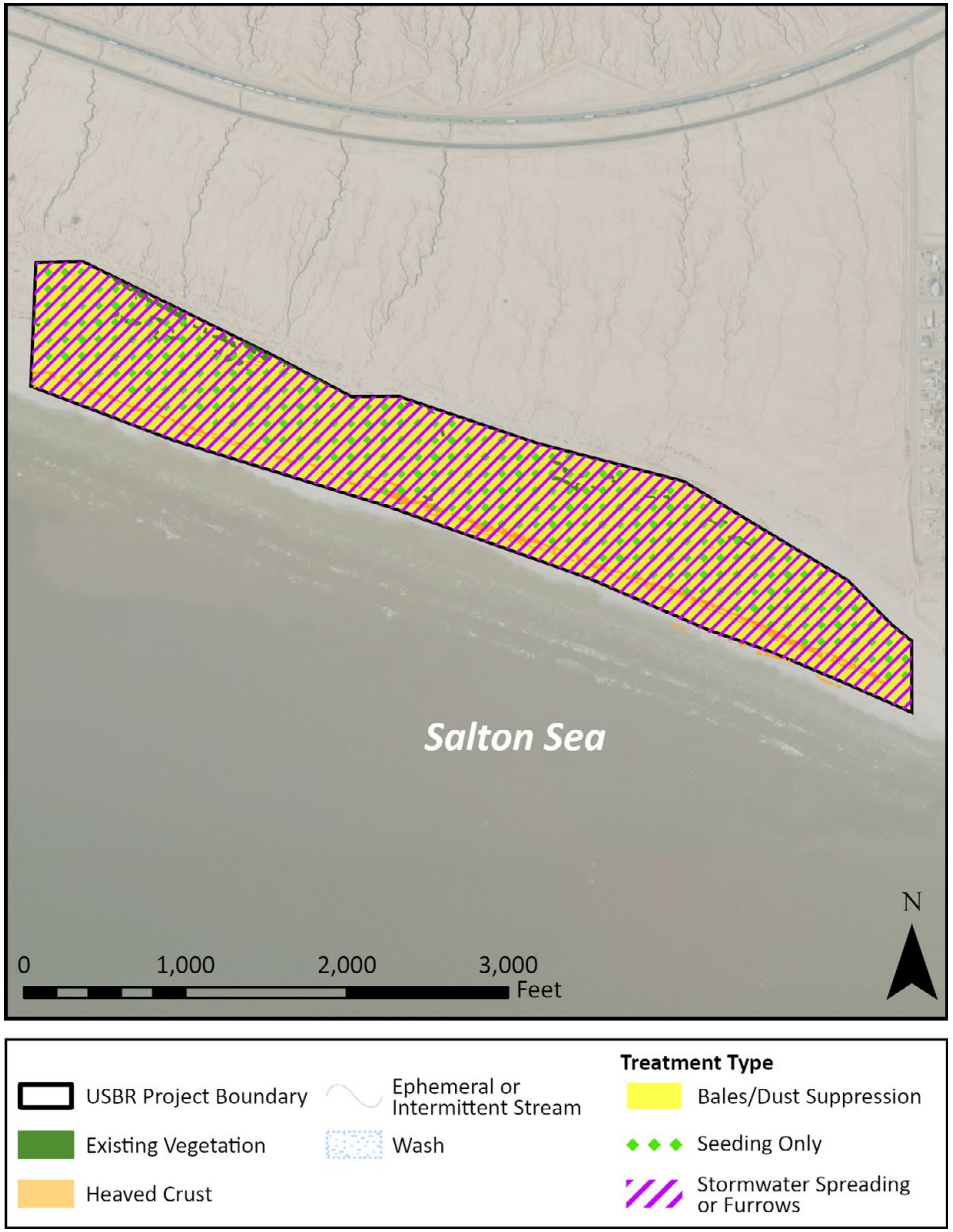


Figure 13. Site features and activities at the West Bombay Beach site. a) Pilot drip lines and plants. b) Water tank for pilot drip system. c) Irrigation pilot test area. d) Planting at irrigation pilot test area.









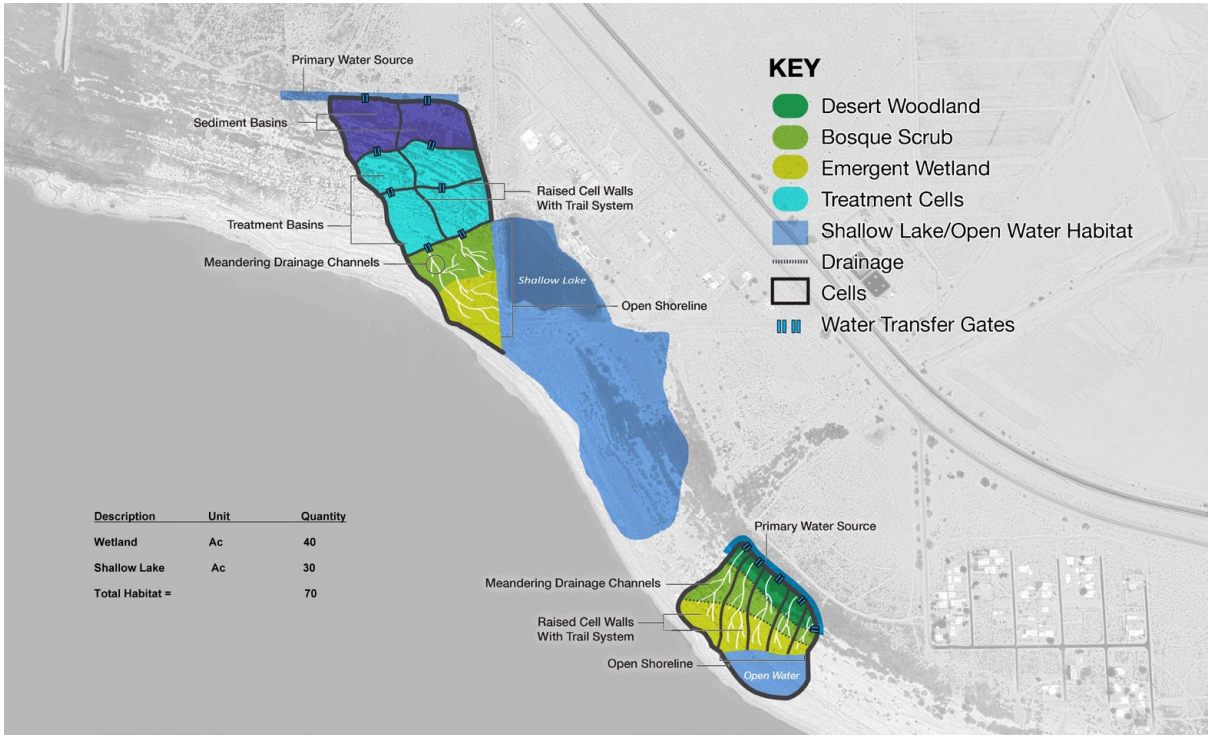
- Water quality impact reporting for the site under the Storm Water Pollution Prevention Plan (SWPPP).
- Monitoring of vegetation growth and achievement of target cover (30%), including status of invasive species, to be documented through ground and aerial observations.

2.2.3 North Lake Pilot Demonstration Project

The SSMP Team continues to support the SSA and Riverside County in their efforts to lead the planning and construction of the North Lake Pilot Demonstration Project, located at the northern end of the Salton Sea in Riverside County near the unincorporated community of North Shore (**Figure 14**). Significant progress was made in 2024 after receiving site access for testing purposes in 2023. Geotechnical investigations that began in 2023 were completed, and an associated report of the data was developed in April 2024. The results indicated that the site has high seepage potential and seismic vulnerability, which collectively also increase the site's susceptibility to liquefaction. Also in 2024, more studies were conducted to evaluate the water supply and water quality of available agricultural drain flow, the seasonal variability of each, and the impact on water supply from emergent wetland habitat located downstream of the drains.

As a result of new data and other information, the North Lake Pilot Demonstration Project conceptual design was revised in August 2024. The project, originally envisioned to create an approximately 160-acre lake, is now revised to encompass an approximately 70-acre project area including at least 40 acres of wetlands and a shallow lake of up to 30 acres. The project retains the goals to create habitat for fish and birds, suppress dust, and provide recreational opportunities near the North Shore Beach and Yacht Club Community Center. This project is funded by a $19.25 million Proposition 68 funding agreement that was executed in 2021 between the SSMP and SSA.

Figure 14. 2024 updated conceptual rendering of the North Lake Pilot Demonstration Project (Source: Dudek Engineering).



Based on the current schedule, groundbreaking for this project is anticipated to be in 2026.

Next steps in developing this project include the following:

- Groundwater exploration to evaluate the feasibility of this water source to supplement agricultural drain water.
- Refinement of the conceptual design based on water supply information, completion of the Basis of Design report, and start of formal project plans and specifications.

- Community meetings to share updates and solicit feedback and comments during the design process.

2.2.4 Desert Shores Channel Restoration Project

This project consists of a marina with five boat channels (or "fingers") adjacent to the Imperial County community of Desert Shores, a residential development in the northeast quadrant of the Salton Sea region. Due to the receding shoreline, the marina has become disconnected from the greater Salton Sea. With active community engagement and in partnership with Imperial County, the State, and Reclamation, SSA is leading efforts, which are under way, to mitigate the impacts of this decline. The Desert Shores Channel Restoration Project would refill the five fingers and in so doing, restore habitat value and mitigate the adverse impacts of potentially emissive playa. Supported by a $1.25 million grant from Reclamation to SSA, the project continues to advance with the committed support of the SSMP Team in collaboration with SSA and Imperial County. Funded by the grant, SSA has also engaged a consultant to manage initial phases of the project including outreach to communities, and an engineering firm to gather technical data and advance the project towards design and implementation.

Key next steps for this project include the following tasks:

- Collect geotechnical and water availability data in 2025 to inform the design
- Start the design process

2.2.5 North Lake Wetlands Project

During 2024, the SSMP Team continued work on the North Lake Project conceptual design, which is covered by the NEPA EA developed for the Phase 1: 10-Year Plan. The conceptual design focuses on maintaining existing wetlands, including habitat for Yuma Ridgway's Rail and California Black Rail, at either their current size and condition or equivalent value. The project's design objective is to stabilize these emergent wetlands and use excess agricultural drain water (above consumptive use of the wetlands) on adjacent areas of the exposed lakebed. This water will be used to create compatible and water efficient dust control and habitat over a significantly larger area and may include the creation of ponds for additional habitat area. Shallow saline water dust control areas may be integrated with the adjacent North Lake Pilot Demonstration Project. In 2025, additional site assessments will be performed, and project design will commence. Based on the availability of funding, this project may be prioritized for a progressive design build contract that could go out for bid by late 2025 to early 2026.

Figure 15 presents the 1,966-acre North Lake Wetlands project boundary. Notably, a small portion of the project site has yet to be exposed and is currently inundated with water. Of the area that is exposed, much of the area is covered with wetland habitat. Wetland areas have naturally formed where agricultural drains reach the exposed lakebed, as shown in **Figure 15**. An aquatic resource delineation (ARD) was completed for the North Lake Wetlands project area in December 2023 and March 2024. Halophytic plant species dominated the project area in general, occurring both within and outside of wetlands. Dominant plants throughout the project area include iodine bush (*Allenrolfea occidentalis*, FACW) and tamarisk (Tamarix sp., FAC). Wetland mapping undertaken as part of the ARD is illustrated by the purple areas in **Figure 15**.

Next steps in developing this project include the following tasks:

- Refinement of the conceptual design informed by site reconnaissance, surveys, and other activities, such as modeling studies to help design saline ponds.
- Continued collaboration with tribes and local partners at the North Lake, including integration with the North Lake Pilot Demonstration Project.

2.2.6 Kane Spring San Felipe Fan Project

The Kane Spring San Felipe Fan project is located at the southwestern corner of the Sea and encompasses a total of 4,072 acres (3,206 acres

Figure 15. Area covered with wetland habitat at the North Lake Wetlands Project.



at Kane Spring and 866 acres at San Felipe Fan). Prior to 2024, the project concept for Kane Spring (originally called the Trifolium Extension Multi-Benefit Project) was developed by IID as a part of its Salton Sea Air Quality Mitigation Program (SSAQMP), in collaboration with Reclamation. The 866-acre San Felipe Fan project was previously described as an SSMP vegetation enhancement project in prior editions of the SSMP Annual Report. In the first quarter of 2024, the Kane Spring Project transitioned to the State's SSMP program and planning began on the joint Kane Spring and San Felipe Fan Project.

The goal of the project is to enhance and improve water use efficiency of drain water on the exposed lakebed to stabilize and manage wetland habitat while minimizing impacts on the existing biological resources at the site. The multi-benefit project will implement vegetation-based dust control and water-based dust control measures, which will also provide additional shoreline bird habitat. Water use efficiency will be improved by the rerouting of relatively fresh drain water, which currently flows to the Sea, for use on both current and future exposed lakebed.

Current project objectives include the following:

- Connect multiple drains for pupfish connectivity; maintain and possibly expand existing pupfish habitat.
- Create connectivity to the SCH West Interception Ditch to convey water from the drains near SCH toward the Kane Spring project site.
- Maintain existing wetlands, including habitat for Yuma Ridgway's Rail and/or California Black Rail, at either their current size and condition or equivalent value.
- Stabilize these emergent wetlands by removing excess drain water (above consumptive use of the wetland) and using this water more efficiently on adjacent areas of the exposed lakebed. This water will be used to create more compatible and/or water efficient dust control and habitat over a significantly larger area and may include the creation of ponds for additional habitat area.

- Implement vegetation enhancement projects to stabilize the exposed lakebed.

Future project phases may expand and transition dust control and habitat seaward on the exposed lakebed as the Sea recedes. The potential for seaward expansion is approximately 5,000 acres (7.8 square miles) by 2047. This could include additional saline ponds or wetlands located downslope of the additional proposed project features.

The project is currently in the conceptual design phase. The target date for sending the project out to bid is late 2025. In 2025, the following project activities are planned:

- Land and water access agreements;
- Geotechnical, biological, and cultural surveys;
- State and federal permitting;
- Development of procurement documents; and
- Public outreach.

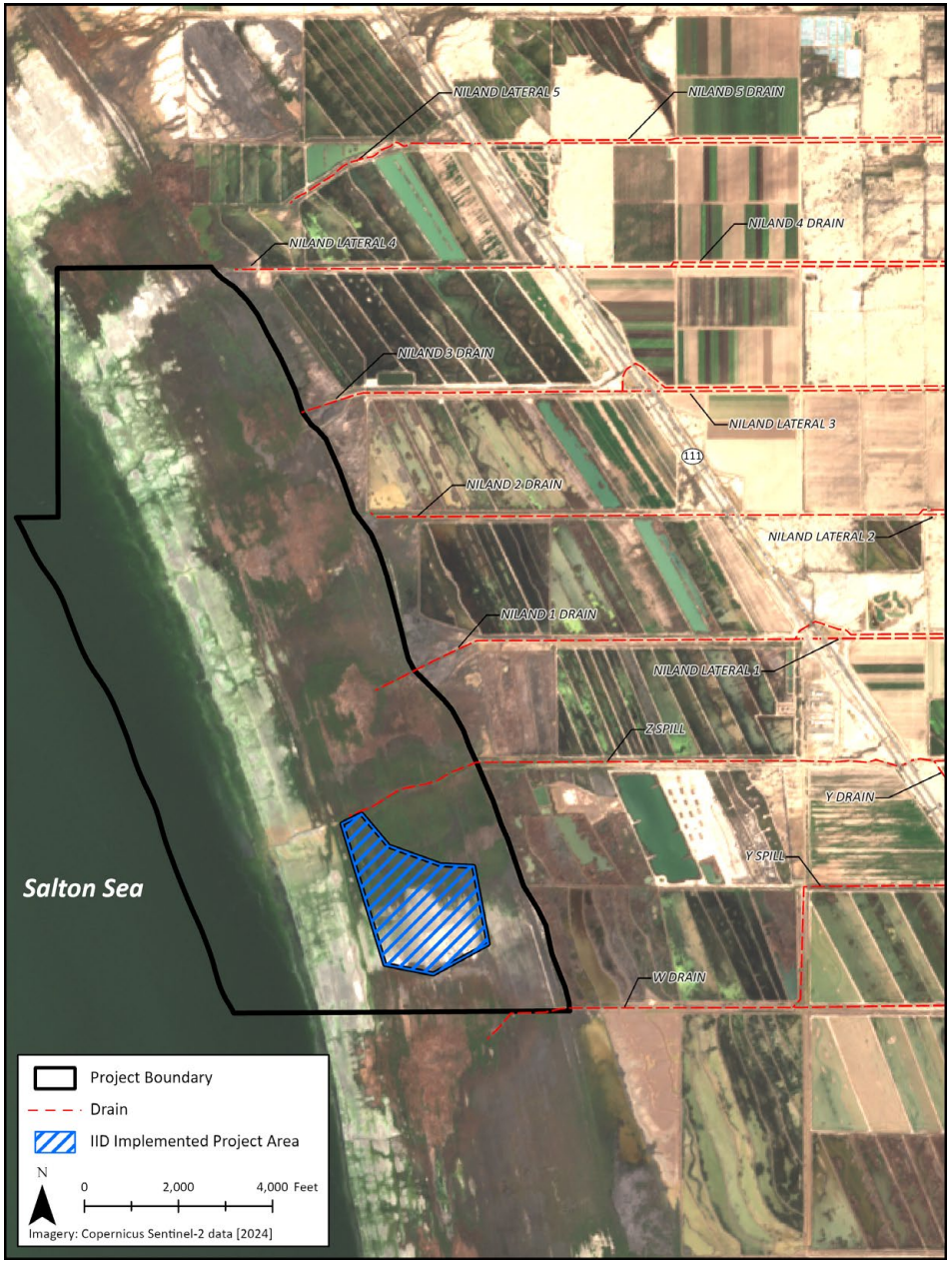
2.2.7 Mundo and Travertine Projects

Two project areas identified for Natural Resource Conservation Service (NRCS) partnership are Mundo and Travertine (**Figure 2**). As further discussed below in Section 3.9, the NRCS is partnering with the SSMP to provide funding for project implementation at the Sea. The NRCS-led activities began in 2024 and identified specific projects and the budget for planning and implementation that will be available to the SSMP from 2025 to 2026. The funding can be applied to projects on tribal lands and non-federally owned lands.

2.2.7.1 Mundo Project

The 2,354-acre Mundo Project is located approximately 10 miles southeast of the community of Bombay Beach (**Figure 16**). Landowners within the project site are BLM, IID, and the State of California. The SSMP would use all lands within the project site,

Figure 16. The Mundo Project site.



although NRCS funding would only be applied to the non-federal lands portion of the site. The Mundo site has areas of heavy vegetation cover due to flow from agricultural drains onto exposed lakebed. Restoration activities planned at the site include vegetation enhancement and enhancement of existing wetlands. Seaward portions of the project site are not expected to be exposed until 2026.

2.2.7.1 Travertine Project

The 297-acre Travertine Project is located near the community of Salton Sea Beach, along the western shore of the Salton Sea (**Figure 17**). Landowners within the project site are IID and Torres-Martinez. The Travertine site is primarily unvegetated, with scattered areas of iodine bush scrub and tamarisk. Vegetation enhancement is the planned restoration activity at the site. Seaward portions of the project site are not expected to be exposed until 2026.

2.2.8 SCH Expansion Project

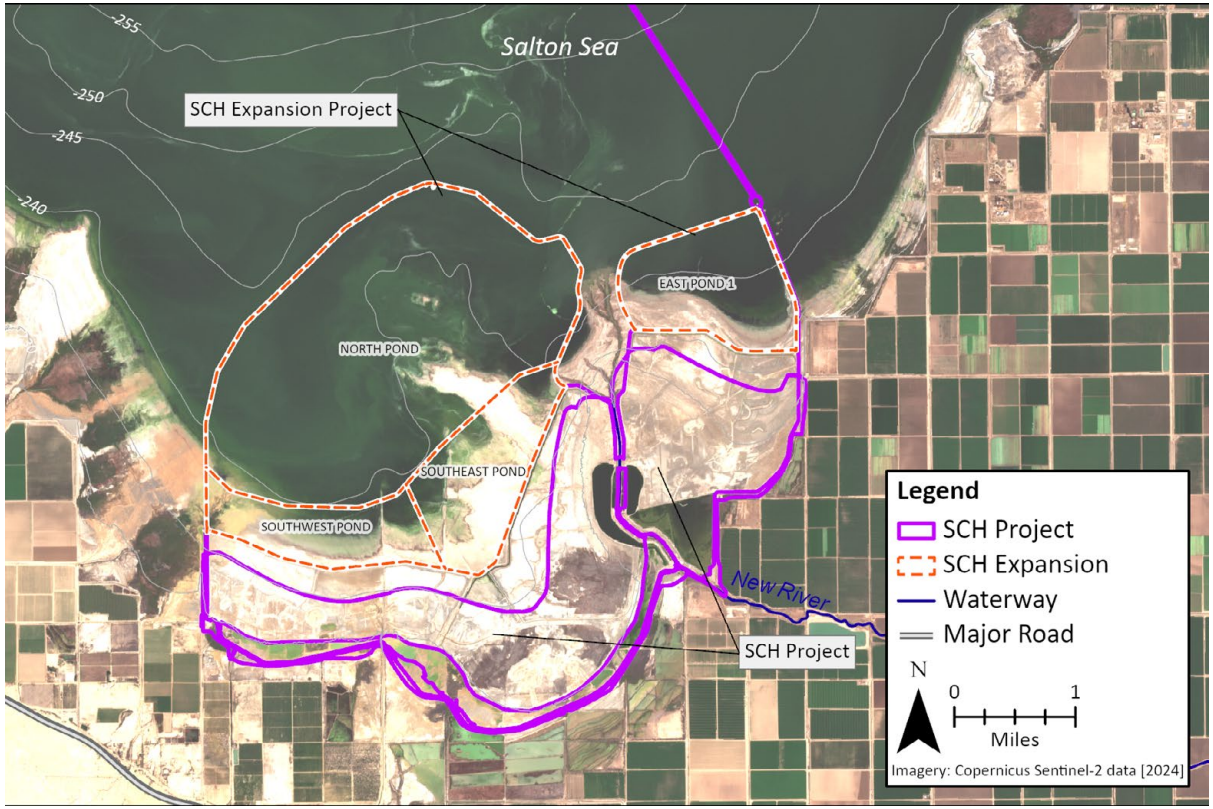
The goal of this project is to create aquatic habitat downstream and adjacent to the SCH Project within the Aquatic Habitat Opportunity Area described in the NEPA EA. Portions of this area are underwater but are expected to become exposed as the Sea recedes. Construction of additional berms will provide additional aquatic pond habitat using the existing water conveyance, pumping facilities, and diversion infrastructure constructed for the SCH Project.

The $70 million commitment in funding from Reclamation was used to begin the initial expansion of the SCH Project to accelerate dust suppression and aquatic habitat projects at the Sea. Construction of East Pond 1 began in 2024 and is scheduled to be completed by summer 2025. The funding for East Pond 1 is a portion of the $245 million in federal funding commitments in the 2022 Salton Sea Commitments Agreement for the SSMP. Of the remaining $175 million, the SSMP received a $170 million commitment in September 2024 and the final $5 million commitment in January 2025. Funding was released in connection with IID's actions to conserve water in 2023 and 2024.

Figure 17. The Travertine Project site.



Figure 18. SCH Expansion Project location with possible pond boundaries.



In 2025, the SSMP Team will work with the Design-Build entity to progress the design of the next phase of an approximately 4,500-acre expansion of the Center and West Ponds (**Figure 18**). Construction is expected to begin in the second quarter of 2025. The SSMP Team intentionally made schedule modifications for filling constructed habitat ponds at the SCH Project to allow equipment access for expansion. Commissioning of portions of the SCH Project will be aligned with the construction of additional ponds in the expanded project area.

2.2.9 Bombay Beach Wetland Enhancement Project

The SSMP Team has been coordinating with Audubon California to advance the first phase of the Bombay Beach Wetland Enhancement Project, which aims to stabilize, preserve, and enhance an existing emergent wetland on over 564 acres adjacent to the community of Bombay Beach. As the Sea's elevation has declined, water from a confluence of surface water flow and groundwater discharges has created wetlands along the exposed lakebed providing habitat for waterbirds, including shorebirds and secretive marshbirds, and endangered desert pupfish. However, under natural conditions, these habitats tend to drain and dry out. Tamarisk, a non-native shrub, has invaded the upslope areas, consuming large amounts of the available water and degrading the habitat quality. An opportunity exists to stabilize and enhance these existing habitat areas and to divert and disperse water for additional aquatic and wetland habitat creation. The project is included in the SSMP Phase 1: 10-Year Plan EA for NEPA coverage. Reclamation has provided funding to Audubon for the design of this project, and the SSMP Team will lead the effort to secure additional funds to finalize project design and construct the project. This project is an example of a partnership project, with Audubon and the SSMP Team working together to finalize project design and secure funding for implementation.

In December 2022, the Audubon project became the first SSMP project to receive a CEQA statutory exemption for restoration projects. The exemption for CDFW's concurrence is posted on the CDFW website as provided by Public Resources Code section 21080.56.

In 2024, regular design and principal meetings were held to develop a 30 percent design and a path towards a 65 percent design. The SSMP Team provided consistent feedback on the design of the project's habitat creation features, their placement in the project, and the design of the maintenance and monitoring access roads to and within the project footprint. In late 2024, due to limited funding availability, a decision was made to transition project leadership from Audubon to the SSMP. The SSMP is now responsible for finalizing the design and permitting in coordination with Audubon. Project design is planned to be finalized in 2025 and construction estimated to begin in late 2025 to early 2026.

Audubon is working with the SSMP and landowners to evaluate opportunities to integrate public access components into the project, using existing maintenance and monitoring roads as a means to provide pedestrian access. Audubon, the State, IID, and Reclamation have been meeting to understand what the community would like to see through outreach conducted by Audubon and how it can best fit into the project. In 2024, the SSMP and Audubon co-hosted a hybrid meeting in the community of Bombay Beach to share 30 percent design updates and a public access component prioritizing access near the community of Bombay Beach. The meeting was well-received, and the team received feedback from the community. In the future, an expansion could be considered as the Sea recedes.

Snowy Egrets and Great Egret at the West Interception Ditch.



With the SSMP now leading design and project implementation, important steps are expected in 2025 as follows:

- Continue to advance and finalize land access and water agreements between the State, Reclamation, and IID.
- Finalize all permitting
- Complete 100 percent design.
- Secure additional grant funding for construction.
- Go to bid and construction before the end of 2025.

2.2.10 Imperial Wildlife Area Wister Unit Marsh Bird Habitat Restoration Project

A bird habitat restoration project is proposed for development at the Wister Unit of the Imperial Wildlife Area with an estimated 150 acres. The area has historically been operated for waterfowl and other wildlife. The area has a series of reservoirs and ponds that gravity flow from east to west and are managed by the CDFW. The project envisions ponds that may support wetland species, such as Yuma Ridgway's Rail, California Black Rail, other secretive marshbirds and other avian species. An opportunity may also exist to include a desert

pupfish pond. The project may include invasive species removal, walking trails, interpretive signs, and a viewing platform to support recreational use of the marsh. Further land access is not required at this site because this is part of an existing CDFW wildlife area.

Two of the project components are as follows:

- Wetland Restoration – Unit Y16: This area was historically operated as waterfowl ponds but has been fallowed due to an overgrowth of invasive vegetation associated with berm renovation needed to address chronic berm leakage. Restoration of this area would enhance habitat quality to support waterfowl and marshbirds that are being displaced as the Salton Sea shoreline recedes. In addition, the inclusion of a walkway or path would provide additional opportunities for public engagement and recreation.
- Wister Unit - Invasive Vegetation Removal: Invasive species line most drains and ponds in the area and consume a disproportionately large amount of water, thereby reducing the amount of water available downstream to enter the Salton Sea and/or future projects. Removal of invasive tamarisk and phragmites will result in an increase in both habitat quality and water availability.

Next steps expected to occur in 2025 include the following tasks:

- Pre-project assessment work, including, but not limited to, surveys, approvals, and contracting.
- Clearing the site of tamarisk.
- Moving conceptual design to final design.
- Initial preparation of the site for construction.

2.2.11 SCH Vegetation Project

This vegetation project is envisioned to cover 537 acres south of the current footprint of the SCH project and to serve as a buffer between the SCH Project and the agricultural lands and duck clubs south of SCH. The proposed project includes the development of wetland and upland vegetated habitat across the project area, with vegetation type dependent on the elevation of individual parcels, and the water source and quantity available. Design and collaboration between IID, USFWS, and the SSMP Team will continue in 2025.

Next steps in developing this project include the following tasks:

- Formalization of water and land use agreements with IID.
- Progression of the design.

2.3 Non-SSMP Project Updates

Additional major restoration work, largely independent of SSMP Team staff or resources, continues to be performed by partner organizations while also benefiting the Salton Sea environment. Two key projects are noted below.

2.3.1 Quantification Settlement Agreement Mitigation Implemented by IID

As part of the Quantification Settlement Agreement (QSA) water transfer, IID is required to implement environmental mitigation for QSA environmental impacts. Important projects related to this include Managed Marsh (marsh habitat creation), burrowing owl conservation, desert pupfish refugium and monitoring, and the Salton Sea Air Quality Mitigation Program (SSAQMP). The habitat goals for the Managed Marsh include 959 acres of aquatic habitat, including 341 acres of non-emergent vegetation and 618 acres of open water/emergent vegetation. In November 2022, IID informed the QSA Joint Power Authority (JPA) that they had completed the Managed Marsh Mitigation as required in the QSA. Although IID will continue to perform operation and maintenance on the Managed Marsh, it was determined by the JPA in March 2023 that this particular mitigation measure was complete.

Other mitigation measures are still being conducted and are in various stages of completion, such as the burrowing owl conservation program, which includes periodic population studies and pre-inspection surveys to mark potential burrows before operation, and maintenance or construction activities within IID's irrigation and drainage system. The desert pupfish refugium was built in 2010 and stocked in 2015. Ongoing monitoring of pupfish use of direct-to-sea drains occurs annually. A pupfish connectivity plan was drafted by IID in 2023 for review by the Habitat Conservation Program Implementation Team. The pupfish connectivity plan was reviewed in 2024, with comments provided by CDFW and USFWS. Development of the draft pupfish connectivity plan is still in progress.

The SSAQMP is a comprehensive science-based adaptive approach to address air quality mitigation requirements associated with the QSA water transfer. The SSAQMP includes mapping playa exposure, modeling wind conditions, and estimating annual emissions. Data from the annual emissions monitoring program is used to recommend proactive dust control projects on areas that have the potential to become emissive. Since 2016, IID has implemented over 2,400 acres of surface roughening and vegetation enhancement projects around the Salton Sea on high priority exposed lakebed. One deep groundwater well and six shallow groundwater wells have been developed for the future establishment of vegetation near Salton City and Bombay Beach. Remote sensing, ground-based sensors, and imaging are used to monitor and adaptively manage implemented projects. Annual reports and data from the SSAQMP are shared with the Imperial County Air Pollution Control District (ICAPCD), South Coast Air Quality Management District (South Coast AQMD), and SSMP.

Additional information about QSA environmental mitigation can be found at www.iid.com/water/library/qsa-water-transfer/mitigation-implementation.

Funding for the implementation of QSA environmental mitigation activities is from the QSA JPA, which is comprised of designated representatives from the CDFW, CVWD, IID, and San Diego County Water Authority. Additional information about the QSA JPA can be found at www.qsajpa.org.

2.3.2 New River Improvement Project

The New River contains untreated wastewater and other pollutants from Mexico as it flows north through the City of Calexico, CA, before emptying out into the Salton Sea. This polluted waterway is a threat to human health and ecosystems and limits economic development in the Imperial Valley. To address this long-standing problem, a project has been conceived that will encase the New River's polluted water in the Calexico area, minimizing direct or indirect human contact. The project also includes an automated trash screen for the river downstream from the United States-Mexico International Boundary to remove solid waste. Furthermore, the project will also reroute treated and disinfected wastewater from the Calexico treatment plant to restore flow in the river channel through the city to maintain floodplain wetlands and improve water quality.

The New River Improvement Project (NRIP) is being funded with approximately $28 million from state funds. Under the leadership of the California Environmental Protection Agency and the State Water Resources Control Board (SWRCB), the SSMP was able to secure additional funding for the NRIP. On January 30, 2023, DWR executed a grant agreement with the SWRCB to provide an additional $18.5 million towards the project. On June 13, 2023, DWR executed a grant agreement with the Department of Parks and Recreation to provide an additional $2.5 million towards the project.

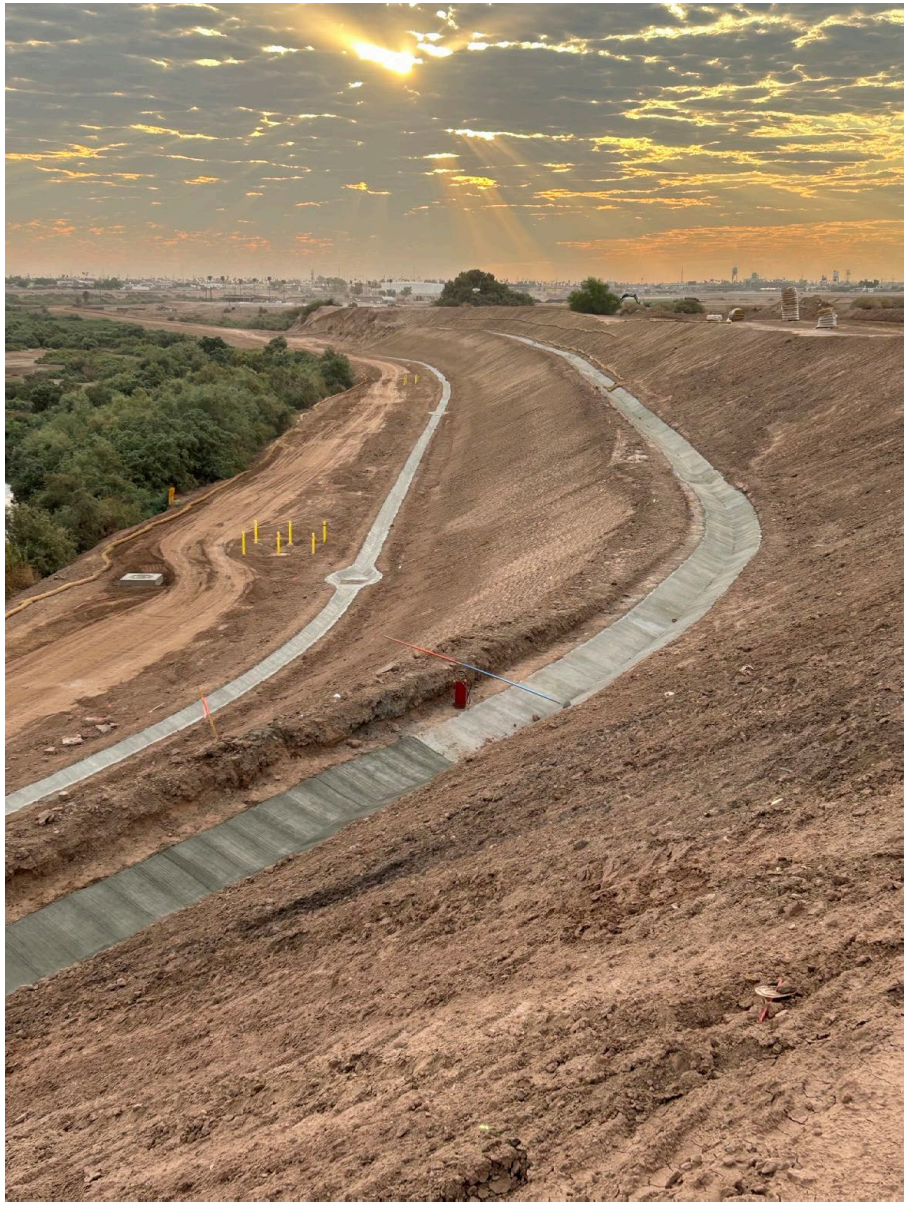
On February 27, 2023, the City of Calexico accepted a bid for the construction of the NRIP. The contractor was fully mobilized to the project site by early summer 2023. In 2024, the contractor completed construction on major components (**Figure 19** and **Figure 20**). Both the 16-inch and 72-inch pipelines were installed. All building, structures and hydraulic components were completed. All grading, erosion control, and drainage improvements were finished.

In 2025, the contractor will be working to install the electrical and mechanical components of the project. After completing these components,

Figure 19. New River Improvement Project trash screen at the diversion structure on the New River.

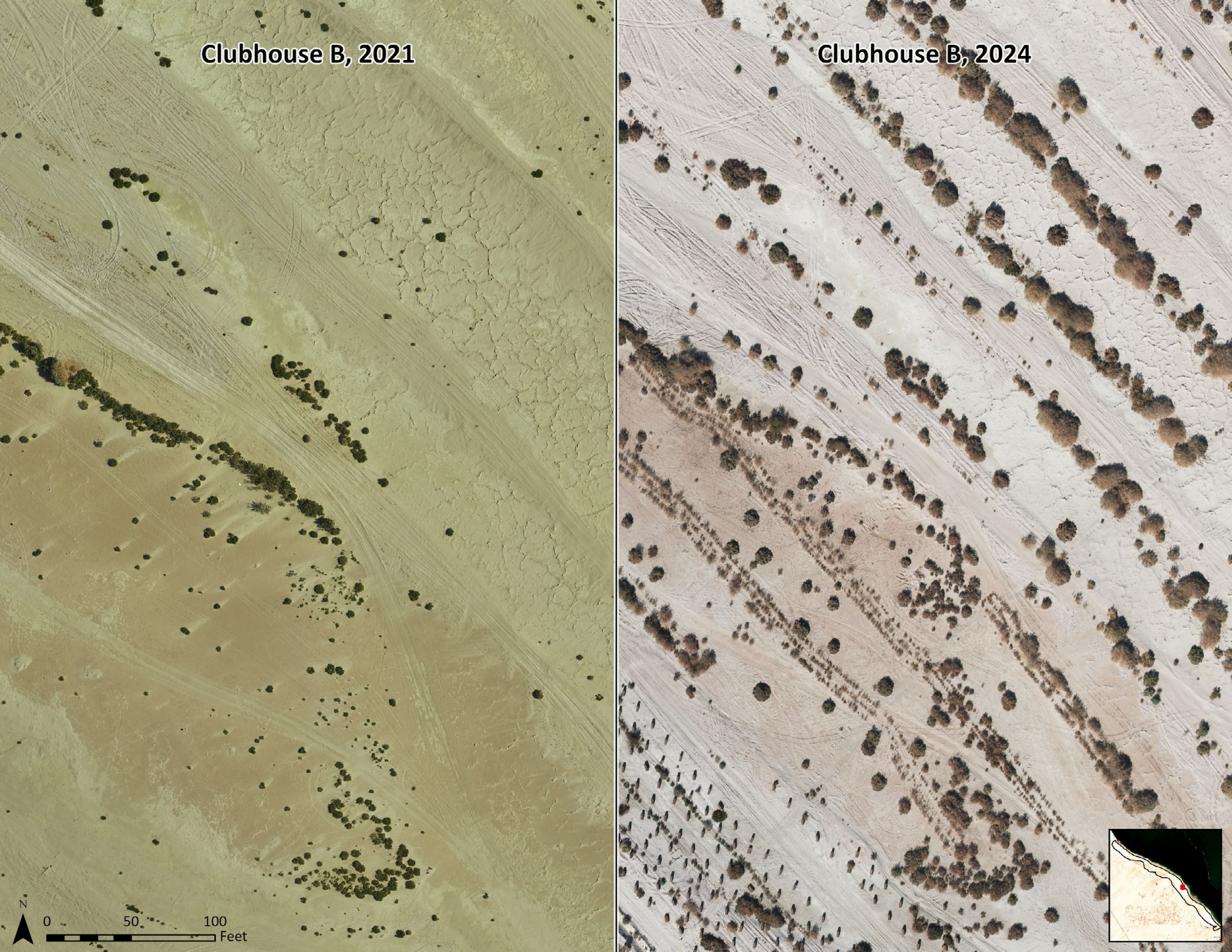


Figure 20. New River Improvement Project west slope grading, erosion control, and drainage improvements.



the system will undergo operational testing, and the city staff will receive system training. A final construction punch list is scheduled to be completed in February 2025. All construction activities are anticipated to be completed in late February 2025 with a contract completion date of March 2025.

CDFW staff are coordinating with the NRIP team as they implement restoration and revegetation of temporary impact areas in accordance with the project's Streambed Alteration Agreement.


Clubhouse B, 2021
Clubhouse B, 2024
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3 Partnerships

Partnerships with local, state, and federal agencies, the community, tribal governments, and other interested parties are crucial in helping to fulfill the goals of the SSMP. The SSMP Team is working with partners to pursue available funding sources; develop projects; share data; improve community engagement, outreach, and involvement; and streamline planning and approval processes. In addition, the SSMP Team is collaborating with partners to develop templates for land access, water availability, public access opportunities, and other elements key to the success of the SSMP. In 2024 the State, Reclamation, IID, and other parties to the Salton Sea Commitments Agreement met with partners quarterly at a principal level, to continue the momentum of the commitments described in the agreement, along with interested Salton Sea partners. This series of meetings was led by CNRA Secretary Wade Crowfoot and Reclamation Commissioner Camille Calimlim Touton.



3.1 Audubon California

The SSMP Team has continued to partner with Audubon California to address data gaps and develop projects. Audubon California has continued to conduct quarterly shoreline bird surveys. They have collaborated with the SSMP during the development of the Salton Sea MIP and helped identify strategies to streamline data sharing between SSMP partners.

In addition, the SSMP Team has been working with Audubon California to support the Bombay Beach Wetland Enhancement Project, which will suppress dust while also creating managed wetland habitat on the east side of the Sea (additional details on this project are provided in Chapter 2).

Audubon, USFWS, and CDFW staff and other volunteers conducted shorebird surveys in April, August, and December 2024. This successful and coordinated effort surveyed shorebirds along the entire shoreline of the Salton Sea. Additionally, Audubon California has collaborated in community tours to bring residents to SSMP projects and other areas of interest. Staff are actively involved in the SSMP Community Engagement Committee.

3.2 Bureau of Land Management

BLM is a cooperating agency in preparing the EA for the Phase 1: 10-Year Plan. The State will continue to coordinate with BLM for land access agreements when projects are being designed and implemented on BLM land. Also, a portion of the SCH Project and project expansion is being constructed on BLM land. The SSMP coordinated with BLM for the North Lake Pilot Demonstration Project to gain temporary access agreements for surveys and preconstruction work. In 2024, BLM leadership met quarterly with partners at a principal level, as part of the Salton Sea Commitments Agreement Working Group.

3.3 California Air Resources Board

The California Air Resources Board (CARB) is an active participant in vegetation enhancement, dust suppression projects, performance monitoring, and air quality monitoring activities with the SSMP's Air Quality Team. CARB staff helped in the preparation of the air quality monitoring plans and reports. On an ongoing basis, CARB staff have been working with the SSMP Team to identify and review dust control strategies and monitoring requirements at individual project sites. CARB staff is also a member of the Community Engagement Committee, supporting best engagement methods and recommending actions to connect with Salton Sea communities.

The New River diversion structure at the SCH Project.



3.4 Coachella Valley Water District

The CVWD owns land along the northern shore of the Sea, as well as drains with inflows into and towards the Sea. CVWD is an SSMP Team partner and has provided access to data crucial to project planning and design, has participated in SSMP meetings, and has provided access to install air quality monitoring equipment at four sites to evaluate the potential for dust emissivity. The State will continue to work with CVWD as projects planned along the northern shore are advanced in 2025 and beyond.

3.5 Colorado River Basin Regional Water Quality Control Board

The construction or operation of SSMP projects may impact water bodies, wetlands, or Waters of the State that are regulated by the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB). This may include impacts

to wetlands that require a 401 certification or compliance with the Waste Discharge Requirements (WDR) Program permit, direct discharges of pollutants (regulated by the National Pollutant Discharge Elimination System or NPDES permit), or stormwater discharges from project areas (requiring a SWPPP). Necessary applications have been filed with the CRBRWQCB.

During 2024, the SSMP Team continued coordinating and discussions with the CRBRWQCB regarding SSMP program milestones and progress and upcoming permitting needs. The SSMP Team also provided input into the CRBRWQCB planning processes. A regular standing meeting continued through 2024 to facilitate ongoing collaboration for project permitting, and implementation has led to a more efficient permitting process. In addition, CDFW staff coordinated with the CRBRWQCB to conduct quarterly water quality sampling in the Salton Sea to inform programs, reduce duplicity, and maximize resources. The data will go through a quality assurance process and will be entered into the publicly available California Environmental Data Exchange Network.

3.6 Imperial Irrigation District

The SSMP Team and IID have been collaborating on a broad range of Salton Sea management priorities, including the SCH Project and Expansion, and land access permits and agreements. IID was an integral partner and signatory in developing the December 2022 Salton Sea Commitment Agreement and secured an additional $245 million for the SSMP upon execution of the System Conservation Implementation Agreement in August 2024.

IID continued to share their available geologic, water quality, and drain flow data in 2024. DWR may use this data as needed to supplement their groundwater data collection (see Section 2.2.2) and design of projects such as Kane Springs and SCH Vegetation.

IID continues to share annual emissions estimates and proactive dust control planning and monitoring data as part of the SSAQMP, used by the SSMP to support the DSAP.

The SSMP Team is working with IID to develop a Programmatic Land Access Agreement for future projects. The SSMP Team also worked with IID to amend the SCH Easement to accommodate work on the SCH Expansion and executed easements for the Clubhouse and Tule Wash project areas. The SSMP Team also entered into a number of other temporary access permits for planning and design work.

3.7 Imperial County

Imperial County and the SSMP Team have significant and complementary interests regarding the development and enhancement of activities that restore the Salton Sea ecosystem. The SSMP Team participated in interagency meetings on the Desert Shores Channel Restoration Project, which includes Imperial County and the SSA. Imperial County has taken a lead role in CEQA compliance and in developing a hydrologic analysis for groundwater availability for the project. Imperial County has been an invaluable partner in furthering the Desert Shores Channel Restoration Project. Imperial County also serves as a co-chair of the SSMP Community Engagement Committee with Alianza Coachella Valley. In this role, the County and Alianza Coachella Valley assist the SSMP Team with scheduling, developing agendas, reviewing materials and presentations, and facilitating meetings.

The SSMP Team recognizes that partnering with local agencies can provide substantial public benefits and will continue to coordinate with Imperial County to identify lands and projects that may be eligible for funding opportunities.

3.8 Imperial County Air Pollution Control District

ICAPCD is a key partner for the SSMP Team in implementing projects around the Sea. ICAPCD has regulatory authority over the contribution or control of anthropogenic fugitive dust emissions in the Salton Sea region within Imperial County. Dust suppression projects located within ICAPCD's jurisdiction are subject to its regulations. In July 2020, CNRA and the ICAPCD signed a Memorandum of Understanding (MOU) documenting their intent to coordinate and collaborate on the Desert Shores Channel Restoration Project described in Chapter 2. The project proposes to refill channels located

between residences on the Salton Sea shoreline in the disadvantaged community of Desert Shores to provide habitat and air quality benefits. Under the MOU, CNRA will analyze and document the project's public benefits as part of the NEPA EA for the Phase 1: 10-Year Plan and as required for funding under the SSMP. Furthermore, ICAPCD staff served as members of the Long-Range Planning Committee (LRPC), MIP Working Groups, and the Community Engagement Committee. Finally, ICAPCD was provided a draft of the SSMP's Vegetation Adaptive Management plan for review and input.

3.9 Natural Resources Conservation Service

The NRCS is a federal cooperating agency developing the SSMP 10-Year Plan NEPA EA. In 2022, the SSMP Team developed a Draft Watershed Plan as an appendix in the NEPA Draft EA. NRCS will use the appendix to develop a more focused supplement covering the Watershed Plan requirements in the National Watershed Program Manual. The NRCS-led activity kicked off in 2024, in which the SSMP identified the Mundo and Travertine projects. The SSMP produced project descriptions for both projects and provided information to inform further analysis by NRCS and consideration for federal funding to design and construct the projects. This further analysis will continue through 2025 in close coordination with the SSMP.

3.10 Riverside County

The SSMP Team continues to meet regularly with the County of Riverside to coordinate project and planning priorities related to projects at the northern end of the Salton Sea. The SSMP Team assisted the County of Riverside and SSA with the development of a revised conceptual design for the North Lake Pilot Demonstration Project. More information about the project can be found in Chapter 2. Staff from the County of Riverside consistently participate in the Community Engagement Committee.

3.11 Salton Sea Authority

The SSA is a JPA with a focus on protecting human health and revitalizing the environment and economy of the Salton Sea. The SSA's board members represent five of the major interested parties at the Sea: the CVWD, County of Imperial, County of Riverside, IID, and the Torres Martinez Desert Cahuilla Indians. This representation makes the SSA uniquely positioned to assist in planning and implementing the SSMP.

CNRA and the SSA have signed an MOU outlining how the parties will coordinate and consult to support the broader goals of the Salton Sea restoration and the SSMP. The MOU contemplates continued close coordination between the SSA and the SSMP to ensure prompt communication of local priorities to CNRA through the SSA, as outlined in the MOU, and to seek out federal funding opportunities for projects that will help restore the Sea. CNRA staff hold regular standing meetings with SSA, serve as ex officio members on the SSA Board, provide monthly updates at Board meetings, and coordinate on planning, funding, and public outreach.

As noted in Chapter 2, the SSA, working with Riverside County, is leading the North Lake Pilot Demonstration Project. In 2024, the SSMP met regularly to develop this project and to provide public engagement opportunities. SSA is another key partner with the SSMP Community Engagement Committee.

In December 2022, USACE, DWR, and the SSA signed a cost-share agreement to launch the Feasibility Study, aimed at identifying potential ecosystem, flood-risk management, or other land- and water-resource projects and actions for the long-term restoration of the Sea. The Feasibility Study officially began in March 2023, as described below under the USACE section.

3.12 South Coast Air Quality Management District

South Coast AQMD has regulatory authority over the contribution or control of anthropogenic fugitive dust emissions in the Salton Sea region within Riverside County. Dust control projects located within the South Coast AQMD's jurisdiction are subject to applicable Air District Rules and Regulations. The SSMP Team coordinated with the South Coast AQMD during the development of the DSAP, especially related to project areas in Riverside County. South Coast AQMD was an active part of the MIP Working

Tour of vegetation enhancement sites for Torres Martinez Tribe, May 2024.



Group. The State worked collaboratively with the South Coast AQMD prior to project construction and has coordinated with them on monitoring station locations in their jurisdiction. In 2024, the SSMP met with South Coast AQMD to coordinate data sharing with respect to air quality monitoring and future collaboration on this front. Finally, South Coast AQMD was provided a draft of the SSMP's Vegetation Adaptive Management plan for review and input.

3.13 Torres Martinez Desert Cahuilla Indians

The Torres Martinez Desert Cahuilla Indians have ancestral lands in the Salton Sea area and are a major landowner along the northern shore of the Salton Sea in the vicinity of the Whitewater River. Past coordination with the Tribe includes the following:

- On March 16, 2022, Torres Martinez Desert Cahuilla Indians hosted Southern California Native American tribes, CNRA, SSMP, DWR, CDFW, and the California Energy Commission (CEC) for an Inter-tribal roundtable discussion on the Salton Sea.
- On November 4, 2022, with the assistance of the Torres Martinez Desert Cahuilla Indians, a joint tribal meeting was held with tribal governments for the SSMP to provide an update on the development of the LRP including the restoration concepts and the concept evaluation criteria. Informational meetings related to the LRP and the USACE Feasibility Study will continue throughout 2025.
- In September of 2023, the first temporary entry permit (TEP) was finalized between the Torres Martinez Desert Cahuilla Indians and DWR. The TEP allowed entry to three parcels of land to conduct reconnaissance and surveys needed to plan and design the North Lake Project.

As an important partner in the region, CNRA is committed to regular government-to-government consultations and partnering with the Torres Martinez Desert Cahuilla Indians Tribe on projects impacting the Salton Sea. Initial conversations on potential partnerships on northern shore projects have continued, and the State looks forward to working with the Tribe in this region to support their priorities and gather field data to help evaluate potential alternative approaches for dust suppression and mitigation. The State is also working with the Tribe to identify collaborative projects to expand on existing restoration work on exposed lakebed that is being funded by the Coachella Valley Mountains Conservancy. Tribe members are also represented on the Community Engagement Committee.

Beginning in October 2023 and continuing throughout 2024, regular tribal informational meetings were held with members and

representatives of the Torres Martinez Desert Cahuilla Indians Tribe and the SSMP at a frequency of one to four times per month. The focus of these meetings was to share information, develop and finalize a Tribal Agreement to compensate the Tribe for tribal monitors and participation in the planning and development of projects, establish protocols and procedures for the SSMP to adhere to when accessing land and performing work around the Sea, schedule tours and site visits, as well as planning for ways to engage tribal youth. In 2024, the SSMP coordinated with tribal monitors to inspect ongoing construction activities at vegetation enhancement sites and the SCH Project. Tribal representatives participated in various tours and events at the SCH Project and vegetation enhancement sites in 2024. Collaboration and tribal monitoring are expected to continue into 2025, along with the following activities:

- Participating in design of interpretive panels for the SCH Visitor Observation Area.
- Submitting design for an air monitoring display at the SCH Visitor Observation Area.
- Hosting a hybrid tribal roundtable for the SSMP.
- Actively engaging in the Yuma Ridgway's Rail selenium research.

3.14 Government-to-Government Consultations and Partnership with California Native American Tribes

CNRA, DWR, and CDFW are all committed to meaningful and timely consultation with all California Native American tribes with ancestral ties to the Salton Sea area. The CNRA Tribal Consultation policy requires the SSMP to provide tribes with an opportunity for government-to-government consultation early in project planning and development to ensure tribal input is considered and cultural resources are protected.

CNRA initiated a formal government-to-government consultation process with 25 tribal nations that may be affected by projects described in the DSAP and completed the consultation process in July 2020. Since then, multiple tribal roundtables and informational meetings have been held. CNRA's goal is to better understand tribal priorities, interests, and concerns early in the development of SSMP-related plans and conceptual SSMP projects. Throughout the implementation and operation of SSMP projects, CNRA remains committed to meaningful consultations and development of partnerships with tribes with interests and concerns related to SSMP projects.

In addition to the early project planning consultation, USACE led tribal Consultation for Section 106 compliance for the EA. The SSMP Team as well as the federal cooperating agencies were invited to participate in the consultations. In 2024, tribal consultation for the EA and development of the Section 106 Programmatic Agreement was completed.

In the fall of 2024, representatives from the Torres Martinez Desert Cahuilla Indians, Agua Caliente Band of Cahuilla Indians, and the SSMP kicked off a working group to develop interpretive panels for display at the SCH Visitor Observation Area.

3.15 U.S. Army Corps of Engineers

USACE and DWR entered into an agreement under the Water Resources Development Act to facilitate funding of the NEPA process as well as permitting for SSMP projects. The process was completed in November 2024, and in December 2024 DWR submitted the first pre-application package using the Letter of Permission (LOP) procedures and held a pre-notification, pre-filing meeting with federal landowning and permitting agencies, and State permitting agencies. The first set of permits using the EA are expected to be issued in 2025.

USACE staff are also working closely with the SSMP Team to prioritize project review and issue permits. The most recent were Nationwide Permits to support the vegetation enhancement projects.

In December 2022, the DWR, SSA, and USACE Los Angeles District entered into a Feasibility Cost Share Agreement, effectively kicking off

the Feasibility Study. During 2024, the three agencies continued to work together to develop a shared understanding of the challenges and opportunities surrounding the Salton Sea. In August 2024, USACE leadership approved the scope, schedule and budget of the Feasibility Study. This scope was heavily informed by the LRP document, process, and public comments, and requires substantial engineering analyses to address the complex issues associated with the Salton Sea study area. The approved scope also includes a strategy to provide benefits to communities and the ecology of the Salton Sea sooner than analysis and implementation of the long-range restoration concepts would allow. The strategy, referred to as the early implementation increment, involves evaluating smaller-scale, targeted restoration opportunities, that could be implemented on an accelerated schedule. These two efforts, the analysis of the LRP restoration concepts and the early implementation increment, will run in parallel and could result in two separate recommendations to Congress, also known as Chief's Reports. The entire Feasibility Study is estimated to be completed by 2029 for approximately $22.5 million, dependent on funding availability and complexity of analyses. If a feasible and federally justified restoration alternative solution is identified, it has the potential to receive a 65% federal cost share for construction.

3.16 U.S. Bureau of Reclamation

The SSMP Team meets regularly with Reclamation to advance the implementation of the vegetation enhancement projects and the Reclamation-funded SCH expansion, as described in Chapter 2. The SSMP has obtained land access agreements with Reclamation to develop and implement habitat and dust suppression projects on approximately 1,700 acres at Clubhouse, Tule Wash, and West Bombay Beach. As these projects are implemented, the State continues to develop plans for additional project areas on Reclamation lands, such as the Kane Spring, San Felipe Fan, Bombay Beach Wetlands, and North Lake Wetlands projects (identified in Chapter 2).

In September 2024, the SSMP received a $170 million commitment from Reclamation and another $5 million commitment in January 2025, the last of the remaining funding installments, to accelerate dust suppression and aquatic habitat projects at the Sea. In total, SSMP received $245 million from Reclamation between 2023 and 2025 that will be used to expand the SCH. In 2025, the SSMP will continue to coordinate with Reclamation to identify federal funding opportunities to advance SSMP projects and priorities.

3.17 U.S. Fish and Wildlife Service

The USFWS operates the Sonny Bono Salton Sea National Wildlife Refuge in Imperial County. USFWS partners with the SSMP Team on monitoring, information sharing, and desert pupfish relocation as part of the SCH Project and on developing the SCH vegetation projects that are adjacent to USFWS refuge lands. The USFWS also plays a key regulatory role for all SSMP activities that may affect federally endangered species at the Salton Sea. USFWS staff serve on the MIP Working Group and chair the Science Committee. The USFWS is also an active member of the QSA Implementation Team and participates in quarterly meetings. The QSA Implementation Team is responsible for implementing the mitigation requirements of the QSA water transfer.

Through 2024, the Yuma Ridgeway's Rail and Selenium working group continued to meet with participants from the USFWS, CDFW, U.S. Geological Survey (USGS), DWR, University of Idaho, and Reclamation. The purpose of the working group is to discuss the current selenium research and the various construction and proposed projects affecting the marshes and the federally listed Yuma Ridgway's Rail around the Salton Sea. A priority for this group has been to identify risks, constraints, and opportunities for wetland enhancement and restoration around the Sea. This effort going forward will also help create comprehensive documents to identify research needs and results, as well as standard protocols for data collection. DWR is helping to fund this selenium research allowing USGS to expand their work to include an area adjacent to SCH.



4 Community Engagement

The SSMP Team continued to place a strong focus on community engagement throughout 2024. The SSMP Team continues to seek to develop and actively maintain an engagement program that enables consistent lines of open communication to intentionally serve and engage the frontline communities of the Salton Sea region, creating opportunities for community members to share concerns and provide input, and ultimately contribute to the delivery of projects that improve conditions for communities around the Salton Sea.



The SSMP Community Engagement Committee serves as the hub and primary venue to plan engagement activities and identify best outreach and involvement strategies for SSMP public events, including coordination with the SSMP LRPC and the Science committee. The Community Engagement Committee consists of representatives from Community-Based Organizations (CBOs), interested parties, local leaders, governmental agencies, and tribal governments. It enlists leaders of local community groups and NGOs to help guide SSMP engagement efforts, reach community members through varying communications channels, and increase community engagement in SSMP planning activities.

4.1 Community Engagement Committee

The Community Engagement Committee advises and assists the State in engaging local communities and other interested parties to inform and solicit meaningful input regarding health, air quality, environmental, and social aspects of SSMP projects, for the State to integrate into the Phase 1: 10-Year Plan and long-term restoration projects for the Salton Sea. The Committee's Charter lays out its advisory role, its composition, and how the Committee is determined to be inclusive of all by implementing accepted principles underlying equity and environmental justice. A new Community

Outreach and Engagement Plan was released in December 2024, capturing the recommended strategies and tactics to best engage with Salton Sea communities.

The Charter identified the need to create subgroups to further support the efforts of the Community Engagement Committee. In 2022, two groups were created with the support of the Committee Cochairs and the support of interested committee members to become active members of these subgroups.

- The Annual Review Working Group meets to (1) review the Community Engagement Charter to identify and recommend updates to the State, (2) review existing membership to identify any gaps in representation within the membership including their respective networks, (3) allow existing members to choose whether they can or would like to continue serving on the Committee, and (4) evaluate the composition of the Chairs and their selection.
- The Outreach Working Group meets to (1) coordinate engagement opportunities and event promotion, (2) develop agendas together, (3) provide support during public community meetings, and (4) make recommendations to the SSMP for meaningful outreach and engagement.

4.2 Engagement Activities

Public engagement through virtual meetings has occurred as a part of all major ongoing SSMP activities. Over the past year, the SSMP Team has been involved in the following engagement activities:

- SSMP Update community meetings
- Community Engagement Committee meetings
- Outreach Working Group meetings
- MIP Annual Work Plan meetings
- SCH Project outreach tours
- Vegetation enhancement project outreach tours
- Partner-led project tours
- SWRCB Annual Workshop

In addition, the SSMP Team members participated in and provided updates at various other regional meetings and forums, including the following:

- Mission Springs Water District
- Community Meeting at Bombay Beach Community Services District
- Coachella Valley Water Counts Academy
- Monthly SSA Board meetings
- Quarterly QSA JPA meetings
- CRBRWQCB SSMP update
- Salton Sea Action Committee meetings and tours
- Salton Sea Summit and hosted project tours
- Environmental Health Leadership Summit
- Desert Managers Group meeting
- Water Authority Monthly Board Meeting, San Diego County Water Authority
- Council meetings throughout the Salton Sea region in Imperial and Riverside Counties

4.3 Engagement for the Salton Sea Management Program and Community Needs Report

In 2024, the SSMP released the *Salton Sea Management Program and Community Needs Report* and the related *Salton Sea Community Needs and Recommended Actions Report* by Better World Group. These reports identified community needs related to the Salton Sea, described the status of the SSMP efforts, and listed potential future opportunities. These potential future opportunities with added funding and capacity would address community needs while implementing restoration projects. The SSMP Team carried out a public engagement project in 2022 and 2023 with Better World Group, where communities and tribes highlighted the following core needs related to the Salton Sea: community engagement, meaningful tribal consultation, outdoor access, public health, workforce and sustainable economic development, climate action, transportation, and broadband access.

Bus tour held as part of SCH Expansion groundbreaking, October 2024.



The SSMP provided a 60-day public comment period to solicit feedback and recommendations on the Draft Salton Sea Management Program and Community Needs Report and the related Draft Salton Sea Community Needs and Recommended Actions Report by Better World Group. The 60-day period was selected to allow ample time for community members and organizations to review the draft documents and provide comments. The SSMP first announced the release of the Draft Reports and the start of the public comment period in January 2024 through the SSMP Update e-Newsletter. The SSMP Team also directly distributed the draft documents via email at the start of the public comment period to the SSMP Community Engagement Committee, tribes, organizations, and partners who participated in working groups during the development of the Community Needs Reports. The draft documents were posted on the SSMP website in English and Spanish.

Three public workshops were held during the public comment period in March 2024, one in Riverside County, one in Imperial County, and one online. Over the following months, public input was incorporated, and the two reports were finalized. The final Salton Sea Management Program and Community Needs report and the final Salton Sea Community Needs and Recommended Actions report by Better World Group were posted to the SSMP website in September 2024. Finally, the feedback received during the comment period and community meetings was summarized in an appendix for both reports.

4.4 SSMP Project Tracker Website

Debuted in March 2024, the SSMP Team developed and presented an online Project Tracker to provide a comprehensive public platform with updated information on SSMP projects. The Project Tracker shows progress under the Salton Sea Management Program Phase 1: 10-Year Plan in a single location.

Integrated into the SSMP website at www.saltonsea.ca.gov, this tool tracks current progress on SSMP 10-Year Plan projects. Projects

are viewable and sortable by project phases, activity type, and category. The Explore Projects and Project Info sections display information on the activities, outcomes, and different SSMP metrics important to the Salton Sea Region. The Results section has a Progress Dashboard that provides a snapshot of the accomplishments and advancements being made to improve conditions at the Salton Sea and displays information on the current progress towards meeting the requirements in State Water Resources Control Board Order 2017-0134. This Project Tracker website has previously been reported as the Program Management Tool in previous Annual Reports. Updates to the Project Tracker will continue to occur twice per year.

4.5 Salton Sea ArcGIS Community Hub Website

The Salton Sea ArcGIS Community Hub website is designed to provide new capabilities and tools that will help organize projects, partners, data, visualization tools, and public outreach. The website is envisioned to connect multiple data sets, shapefiles, ArcGIS Online layers, websites, dashboards, Story Maps, and web applications related to the Salton Sea. The ArcGIS Community Hub has been proposed because of its ease of use and connectivity to existing state, federal, and NGO partners' ArcGIS online published datasets. A draft version of the ArcGIS Online Hub website is being reviewed by the SSMP leadership team. The SSMP, led by CDFW staff, will continue to develop the Salton Sea ArcGIS Community Hub and hope to make the website publicly accessible by the end of 2025.

4.6 Enhanced SSMP Presence in the Region

Local SSMP Team members served as the point of contact in coordinating and hosting tours of the SCH throughout 2024. During the later months of 2024, the SSMP Team participated in multiple city council meetings from across the region in Riverside and Imperial County. The Team provided a succinct presentation about the work that the SSMP is doing to improve conditions and restore ecological value at the Salton Sea. The presentation included past, ongoing, and future work at the Sea, including the Phase 1: 10-Year Plan and the LRP, and inviting the audience to engage in the public process that the Feasibility Study, with USACE, will bring for future long-term restoration of the Sea. The update also included several pictures of the SCH and Vegetation Enhancement Projects to highlight the work that is occurring at the Salton Sea today. Dates and locations of the meetings were as follows:

- September 4, 2024, City of Westmorland
- September 24, 2024, City of Calipatria
- October 12, 2024, City of Holtville

Community Needs workshop in Mecca, March 2024.



The Team expects to continue visiting other cities to provide the SSMP update presentation in person to inform local communities about its work at the Sea and encourage participation in future SSMP engagement opportunities.

Finally, the SSMP hosted and participated in multiple tours throughout the year, with more than a dozen tours at both the SCH and Vegetation Enhancement Project sites. The SSMP Team invited and hosted tribal partners, community organizations, partner agencies and legislators, academia, and regional media to provide updates about the latest project milestones and identify areas for collaboration.

4.7 The SSMP Website and E-Newsletter

The SSMP Team continues to update the program website, www.saltonsea.ca.gov, to provide both information on SSMP projects and opportunities to offer input. The Team is working to make substantial updates to the structure of the website. The State also continues to share news and information via the CNRA SSMP Update e-newsletter that debuted in November 2019. The SSMP e-newsletter provides information on project delivery, important program milestones, the SSMP Team, upcoming meetings, and opportunities for engagement. It also offers opportunities for feedback and public comment periods. The SSMP e-newsletter is distributed via the CNRA Salton Sea electronic mailing list. These updates occurred at a regular frequency in 2024. You can register to receive the SSMP e-newsletter by clicking here.

4.8 Contacting the SSMP Team

We encourage the public, community partners, tribal governments, and other interested parties to get involved!

We encourage participation in many ways:

- Attend workshops and committee meetings. Most meetings are open to the public and are accessible virtually. Updates on future meetings are provided through newsletters, flyers, and announcements in traditional and social media.

Tour of SCH Project for State Parks staff, March 2024.



- Communicate via email: Interested individuals can reach out by email at cnra-saltonsea@resources.ca.gov.
- Receive website updates and newsletters: Information on current and future updates is provided on the SSMP website: https://saltonsea.ca.gov/. Interested individuals may also sign up to receive regular email updates about the SSMP.



5 Planning

In 2024, the SSMP Team continued its strategic vision and planning activities on five main fronts for delivering dust suppression and habitat projects in the remaining years of the Phase 1: 10-Year Plan:



- The SSMP Team worked with USACE and the federal cooperating agencies to complete the NEPA EA for the Phase 1: 10-Year Plan (CNRA, DWR, and CDFW, 2017). The EA was finalized in November 2024, following completion and execution of the Programmatic Agreement between USACE and the State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), and the signatories, which contains standardized review procedures for compliance with Section 106 of the National Historic Preservation Act (NHPA). With this, the Corps has issued a permit to the State of California (the Project Applicant) establishing new procedures for Letters of Permission (LOP) under Section 404 of the Clean Water Act (CWA) for activities and projects implementing the SSMP 10-Year Plan.
- The SSMP Team continues to meet its commitment for long-term planning beyond Phase 1: 10-Year Plan by finalizing the LRP and advancing the Feasibility Study with USACE and the Salton Sea Authority. The Draft LRP was submitted to the State Water Board in December 2022. After a public comment period, the SSMP Team prepared the Final LRP released in March 2024. On October 4, 2024, USACE approved increasing the scope, schedule, and budget of the Feasibility Study, due to the substantial engineering data necessary to

address the complex issues associated with the Salton Sea study area. This also included the approval of the Early Implementation Increment Plan to analyze two projects to provide benefits to communities and the ecology of the Salton Sea sooner than the Feasibility Study would have allowed.

- The Salton Sea Monitoring Implementation Plan (MIP), a regional-scale monitoring plan for the Salton Sea ecosystem, was completed in December 2022. The MIP recommended an Annual Work Plan be completed to outline planned and possible monitoring to take place the following year. The first annual Work Plan was completed in 2024, and included surveys and investigations anticipated to be completed during 2024. Development of the 2025 Work Plan began in November 2024 and will be available on the SSMP website in early 2025. This will include updated information from the 2024 Work Plan in addition to new studies planned for 2025.
- The Team developed and released the Salton Sea Management Program and Community Needs Report to identify core needs for Salton Sea communities. Vital needs identified by communities and discussed within this document include the following: community engagement, meaningful Tribal consultation, outdoor access, public health, workforce and sustainable economic development, climate action, transportation, and broadband access.

Community Needs workshop in Mecca, March 2024.



A public draft was released in January 2024 for a 60-day public comment period. In September 2024, the reports were finalized with an added appendix detailing outreach efforts to finalize and incorporate any new recommendations as a result of the comment period and public meetings.

- The Bombay Beach Wetlands Enhancement Project has been accepted as a Pilot Project for the newly passed Cutting the Green Tape Initiative for a Restoration Management Permit that will cover activities related to construction for State Endangered and Threatened Species, Fully Protected Species, and effects to waters of the State that are covered in a LSAA, in one application.

In 2024, the SSMP hired seven staff members, bolstering organizational capacity to deliver on its commitments.

This chapter also presents an overview of the current funding status and financial plan for the program (see Section 5.8). Additional planning efforts to enhance public engagement were described in Chapter 4 (Community Engagement).

5.1 U.S. Army Corps of Engineers Feasibility Study

The SSMP Team prepared the draft LRP to comply with State Water Resources Control Board Order WR 2017-0134 (Order). Condition 26 of the Order required the CNRA to issue a long-term plan

no later than December 31, 2022. The Plan was required to be consistent with the requirements of the Order and the Salton Sea Restoration Act (Act) (Fish and Game Code § 2930, et seq.), including the statutory restoration objectives set forth in Fish and Game Code Section 2931, subdivision (c). The Plan was developed as a second phase to the Phase 1: 10-Year Plan.

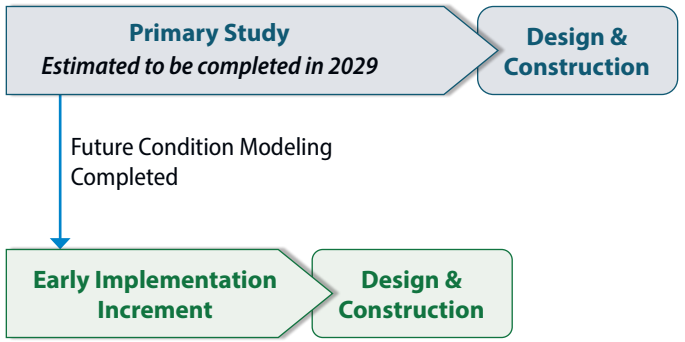
The public draft of the LRP was released by the SSMP Team in December 2022 (CNRA, 2022a). The Air Quality Appendix was released in February 2023. After the conclusion of a 45-day comment period on March 17, 2023, the SSMP Team compiled, reviewed, and responded to the comments. The Final LRP was released in April 2024. This final plan, as well as the comments submitted on the Draft LRP, were submitted to USACE for consideration in the Feasibility Study.

USACE, DWR, and SSA signed a cost share agreement in December 2022 to launch the Feasibility Study, aimed at identifying potential ecosystem, flood-risk management, or other land- and water-resource projects and actions for the long-term restoration of the Sea. DWR and SSA represent the non-federal co-sponsors in the agreement with USACE. The Feasibility Study officially began in March 2023. The planning process for civil works projects used by USACE includes the following steps: identifying problems and opportunities, inventorying and forecasting conditions, formulating alternative plans, evaluating alternative plans, comparing alternative plans, and finally recommending a plan for congressional authorization and appropriation.

In spring 2024, USACE held a Salton Sea Basin Future Hydrology Workshop to gather data and develop assumptions to assess future condition scenarios at the Salton Sea. The USACE Feasibility Study Team will model future hydrologic and hydraulic conditions at the Salton Sea over a 50-year period of analysis (approximately 2035 to 2085) for the Study. A sound assessment of future conditions is a prerequisite to developing and evaluating potential solutions to aquatic habitat losses and other problems facing the Sea. During the workshop, participants discussed policies that affect the hydrology of the basin, how those polices might change in the future, and technical modeling considerations.

As described in Chapter 3, USACE approved the scope, schedule, and budget of the Feasibility Study, which includes the analysis of long-range restoration concepts recommended for further evaluation in the long-range restoration increment of the Feasibility Study, as well as the early implementation increment, which will focus on accelerated implementation of projects at two locations: (1) a project near Alamo River and (2) a project west of the Whitewater River/Coachella Valley Stormwater Channel. These two efforts, the analysis of the long-range restoration increment and the early implementation increment, will run in parallel and could result in two separate recommendations to Congress, also known as Chief's Reports (**Figure 21**). The entire Feasibility Study is estimated to be completed by 2029 for approximately $22.5 million, dependent on funding availability and complexity of analyses. If a feasible and federally justified restoration alternative solution is identified, it has the potential to receive a 65% federal cost share for construction.

Figure 21. Feasibility Study timeline.



The approved USACE and SSMP Cost Share Agreement allows USACE and its partners to split the cost of the study and work collaboratively on possible solutions. Planned work in 2025 includes identifying the final array of long-range restoration alternatives, hydrologic and hydraulic modeling of existing and future-without project conditions, developing initial alternatives for the early implementation increment, as well as continued federal and state coordination to gather information and progress the evaluation of alternatives through USACE's planning process in accordance with federal regulation and policy.

5.2 Adaptive Management Plan for Dust Suppression and Vegetation Enhancement

The SSMP Team released the Adaptive Management Plan for Dust Suppression and Vegetation Enhancement in the fall of 2024. The plan builds on the DSAP and describes activities related to implementation of the first set of dust suppression projects between 2021 and 2024. These activities involved a mix of irrigation and planting/seeding to grow native species and installation of bales and furrows to increase roughness; these help to reduce wind shear and stabilize the sand surfaces. Data collected at these sites show a dramatic reduction in saltation, and thus particulate emissions, that can be explained by a large reduction in wind shear at the surface. The Adaptive Management Plan identifies lessons learned from current work at the Clubhouse, Tule Wash and West Bombay Beach sites and serves as a roadmap for future actions to meet the State Board Order targets. Future project plans will evolve through continued engagement with the community, tribes, collaborating agencies, and other interested parties. Projects will be developed through tribal consultation and to meet the specific regulatory requirements of various regional, state, and federal agencies with jurisdiction over the project areas, including the requirements of air quality regulators, such as the ICAPCD and the South Coast AQMD. The Plan was sent to the Science Committee for review in December 2024.

5.3 Monitoring Implementation Plan Annual Work Plan

The final version of the MIP was released in December 2022 and is available on the SSMP website (CNRA, DWR, and CDFW, 2022). The MIP was built from prior scientific efforts to identify, prioritize, and describe monitoring activities to track the status and trends of resources at the Salton Sea, which can be used to inform the implementation of the restoration programs.

The MIP recommended an annual study or work plan be produced, which would highlight the planned monitoring activities to be conducted in the upcoming year for SSMP agencies and implementing partners as part of the collaborative science within the Salton Sea ecosystem. This effort is also to promote coordination and information sharing among all entities conducting monitoring and research.

In 2024, DWR and CDFW collaborated with partner agencies, NGOs, and the scientific community to compile an inventory of planned monitoring and studies for 2025, including baseline status, effectiveness monitoring, and focused studies. The Work Plan promotes collaborative science to leverage partner expertise and investments. It supports the SSMP's vision for dust suppression and habitat projects during Phase 1: 10-Year Plan, while also informing long-range planning beyond Phase 1: 10-Year Plan. A public kick-off meeting was held in November 2024 summarizing the work plan and demonstrating how to submit information into an online survey.

In 2024, CDFW performed a general analysis of the MIP objectives. The goal of the analysis was to identify gaps in the proposed priorities and sampling measures. The analysis will be used to help in prioritizing projects for the upcoming 2025 Work Plan. One preliminary outcome of the analysis was the identification of a gap in the plankton and macroinvertebrate research in and around the Salton Sea. The 2025 Salton Sea MIP Annual Work Plan is planned for release in March 2025.

The data collected will form a basis to evaluate the overall, long-term effectiveness of projects through an adaptive management approach. It is envisioned that individual projects would

develop effective monitoring plans based off the MIP, tailored to that project's specific objectives. This would provide consistent methodology, facilitate comparison to regional trends, and allow roll-up of results across multiple projects. Where possible, monitoring activities would be coordinated among partners to increase data sharing and realize economies of scale.

5.4 The Salton Sea Community Needs Report

Over many decades, community members and organizations have advocated for multi-benefit infrastructure projects at the Salton Sea to address a range of community health, environmental, and economic needs. However, limitations on the use of certain fund sources, cost, and regulatory, technological, and landownership challenges have posed barriers to integrating these into the design of the SSMP projects to date. The SSMP Team carried out a public engagement project during 2022 and 2023 with Better World Group, where communities and tribes highlighted the following core needs for the Salton Sea: community engagement, meaningful tribal consultation, outdoor access, public health, workforce and sustainable economic development, climate action, transportation, and broadband access.

In 2024, the SSMP released the *Salton Sea Management Program and Community Needs Report*. This report identified community needs related to the Salton Sea, described the status of SSMP efforts, and listed potential future opportunities with added funding and capacity, to address community needs while implementing restoration projects.

Accompanying the release of the SSMP report was a public draft of the *Salton Sea Community Needs and Recommended Actions Report* by Better World Group. This commissioned document reflects the broader feedback of community members and tribes in public comment letters, interviews, and work group sessions as a part of CNRA and Better World Group's public engagement project. This report also identified needs and actions that can be taken by federal, state, and local government agencies, business organizations, philanthropic groups, community-based groups, and nonprofit organizations.

In March 2024, the SSMP held three public workshops to gather input within the 60-day comment period, one in Riverside County, one in Imperial County, and one online. Public comments and feedback received in the comment period were analyzed and incorporated where feasible into the final reports. The final Salton Sea Management Program and Community Needs report and the final Salton Sea Community Needs and Recommended Actions report by Better World Group were posted to the SSMP website in English and Spanish in September 2024.

5.5 Organizational Capacity



In late 2024, Joe Shea was appointed to the position of Assistant Secretary for Salton Sea Policy at the California Natural Resources Agency for the SSMP. He has been serving in this role since December 2024. Joe previously served in several roles in the Office of Governor Gavin Newsom since 2019, most recently as Deputy Cabinet Secretary, where he developed and advanced key priorities of the Governor's policy agenda to drive climate action, protect the environment, and promote new approaches to economic and workforce development. Additionally, previous Assistant Secretary for Salton Sea Policy Samantha Arthur was promoted in mid-2024 to Deputy Secretary for Water at the California Natural Resources Agency, and she will continue to maintain involvement with the SSMP in this new role.

In July 2024, in response to a constrained State Budget, the Department of Finance issued Government Efficiency Reductions Budget Letter 24-10, which included the direction to eliminate 10,000 vacancies statewide as a government efficiency measure to assist with balancing the State's budget. As a result, the SSMP was unable to fill four vacant positions. These positions, mostly identified for operations and maintenance, were vacant due to the ongoing conversation around the potential for the Salton

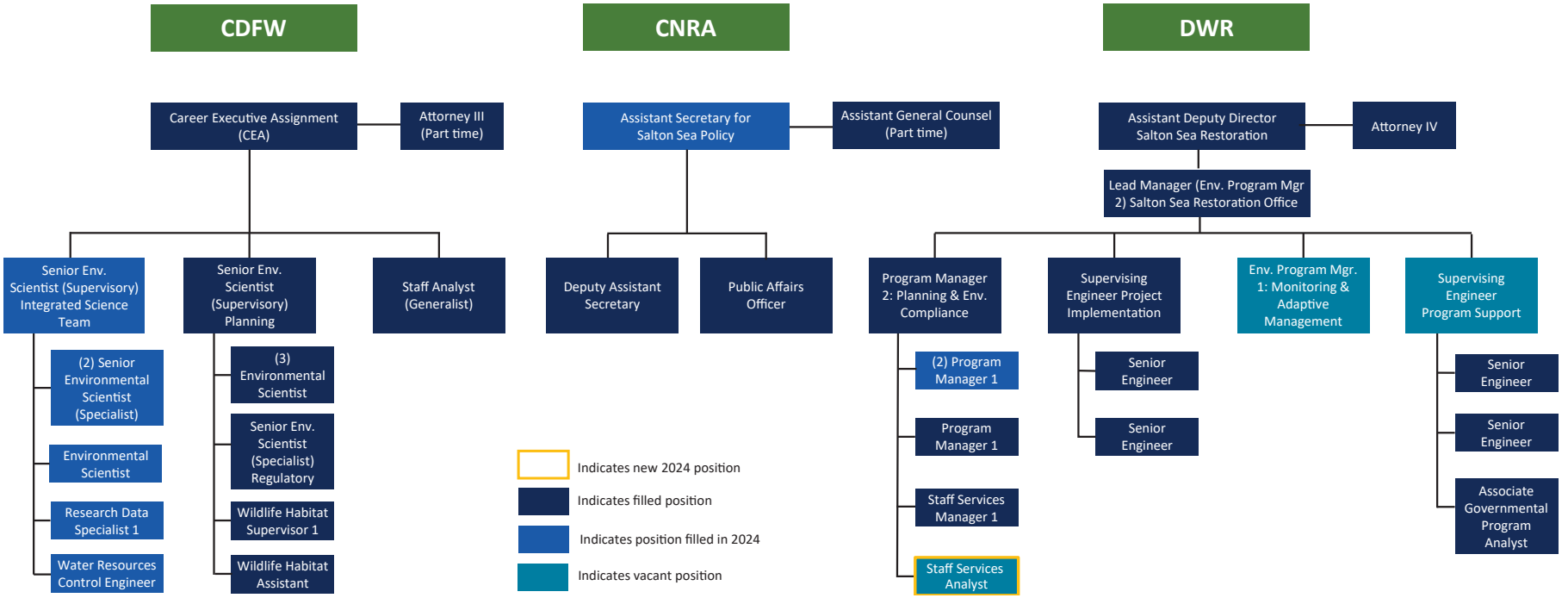
Sea Conservancy to absorb these positions for purposes of operating and maintaining SSMP restoration projects, pursuant to their statutory responsibility. Since the passing of Proposition 4 and the creation of the Salton Sea Conservancy, these positions are now being considered in budget planning for staffing the Conservancy.

The current organization of the SSMP Team is shown in **Figure 22**. The SSMP Team consists of 35 full-time positions and includes staff from CNRA (4 positions), CDFW (16 positions), and DWR (17 positions). In 2024, the SSMP filled seven key vacancies (five at CDFW and two at DWR), bolstering organizational capacity to deliver on its commitments. Most of these positions are based in the Salton Sea Region. Besides increasing the number of staff on the SSMP Team, the SSMP also has access to specialized staff through contracted services for planning, environmental analysis, engineering, outreach, and dust project implementation.

5.6 Funding Status and Planning

In the fall of 2024 and in early 2025, the U.S. Bureau of Reclamation (Reclamation) granted a total of $175 million in commitments to accelerate construction of restoration projects at the Sea, in addition to $70 million previously committed, for a total of $245 million in federal funding commitments per the Salton Sea Commitments Agreement. In December 2023, Reclamation committed $70 million to the State to begin the expansion of the SCH Project

Figure 22. Salton Sea Management Program organizational chart.



to accelerate dust suppression and aquatic habitat projects at the Sea. The $70 million was committed in connection with IID's actions to conserve water in 2023. In 2024, the $70 million commitment was quickly employed in the design and construction of the East Pond 1 Expansion, adding an additional nearly 750 acres to the original SCH footprint. In September 2024, the SSMP received an additional $170 million commitment and in January 2025 an additional $5 million commitment, to further plan, design, and construct additional seaward expansion of the SCH Center and West Ponds, which have the potential to add approximately 4,500 acres of aquatic habitat. In 2024, the SSMP received $60 million in state funding for capital outlay funding for planning, design, permitting, implementation, and/or maintenance of SSMP restoration projects at multiple sites around the Sea.

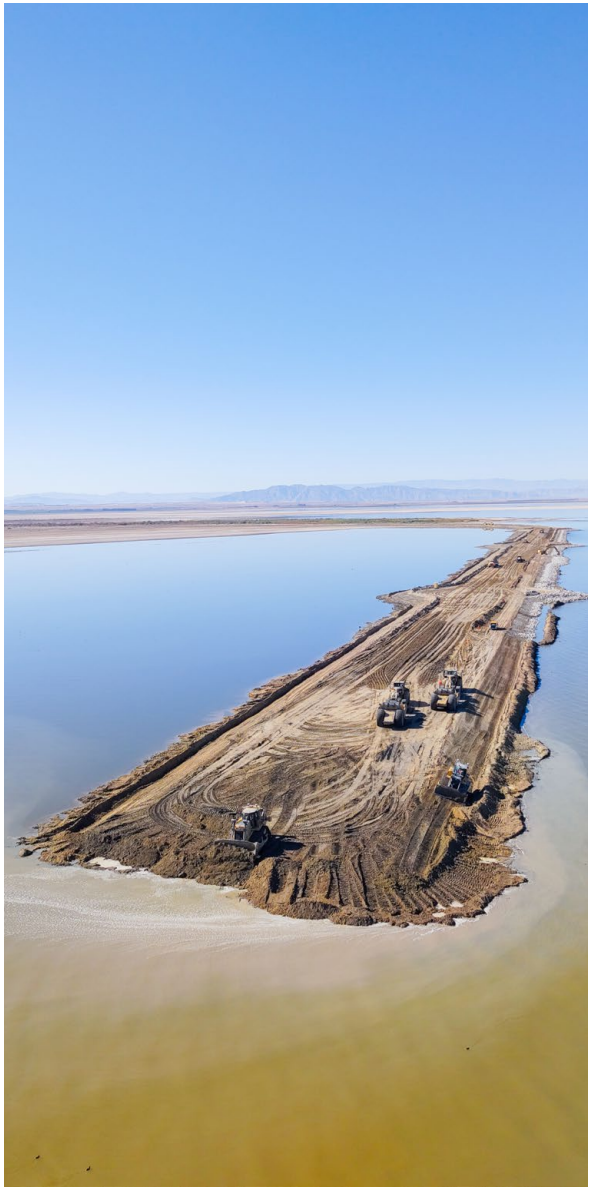
With the passage of Proposition 4 in November 2024, the SSMP will receive $160 million for restoration projects (less bond service fees), and additional funding of $10 million for either of the following purposes:

1. Creation of the Salton Sea Conservancy
2. The Salton Sea Authority

The SSMP fiscal year 2025-2026 budget proposal is detailed in the Governor's 2025-2026 proposed budget released in January 2025 and is currently under negotiation as part of the State's annual budget process. The Governor's January budget proposal requests $148.2 million in Climate Bond funding to advance the planning, permitting, and implementation of the State's portfolio of projects at the Salton Sea.

A detailed breakdown of sources and expenditures of SSMP funding from a variety of state and federal sources is shown in Appendix B (Funding Status).

The SCH Expansion East Pond 1 berm.





6 Next Steps

In 2024, with the NEPA EA opportunity area as a guide, the SSMP Team actively worked to identify future specific projects to meet the State Water Resources Control Board Order target of 29,800 acres. This was done (1) by identifying project areas and associated landowners and (2) by describing key attributes, such as water availability, elevation and year of anticipated actual exposure, dust emissions avoided, water needs, and other key criteria related to the type of project that could be constructed at the area. In 2024, this approach was used to evaluate different potential pathways to meet the cumulative 29,800-acre State Board Order milestone and support expanded project-level planning and implementation needed to carry out Phase 1: 10-Year Plan restoration.



The projects chosen to meet the 29,800-acre target are shown in **Figures 23a** and **23b**. Projects that are described in Chapter 2 (SSMP Project Delivery) are labeled in the figure as "Projects in Planning or Construction." Projects labeled "Future Planned Project" are further described below.

- The *Alamo River* Project is envisioned to include up to 3,200 acres of an aquatic habitat restoration area proposed for aquatic habitat ponds at the Alamo River. This project would include shallow- and deep-water brackish and saline habitat, and likely would include features such as bird islands. Water would be supplied from the Alamo River and combined with saltwater pumped from the Sea. The aquatic habitat ponds would likely be located on either side of the river mouth and could run west toward Red Hill Bay and east in the direction of the Wister Unit of the Imperial Wildlife Area. Like the SCH Project, the Alamo River habitat area would be constructed with a series of berms. This project is identified for early implementation by USACE in the Feasibility Study.
- The *North Lake Wetlands Expansion* Project (up to 800 acres) refers to wetland areas to the west of and downslope of the current North Lake Wetlands project within the original North Lake Alternative H footprint.

The New River flowing towards the Salton Sea.



Downslope areas are currently underwater and will become exposed as the Sea continues to recede.

- The *Bombay Beach Wetland Phase 2 Expansion* Project (560 acres) is an extension of the Bombay Beach Wetland Enhancement Project and will expand the project area downslope as the Sea continues to recede over the coming years.
- The remaining labeled project areas (*Wister Frink, Clubhouse-to-Tule Wash, San Felipe Fan to Kane Spring, San Felipe Fan Expansion, Clubhouse Expansion, Tule Wash to San Felipe Fan, Tule Wash Expansion, and Whitewater West*) comprise 8,339 acres and are envisioned as vegetation enhancement projects. These reflect projects which the SSMP can select to complete the 29,800-acre milestone. Significant portions of these project areas are currently underwater or the ground surface is saturated.

Taken together, the future planned projects comprise 12,900 acres. The projects listed as in planning or construction (described in Chapter 2) total 21,530 acres. The summed acreage value of 34,430 acres is higher than the acreage target of 29,800 acres from the State Board Order to allow for optionality as planning and design progress over the coming years. **Table 2** presents project work planned for 2025 to 2028. Site specific investigations will refine acreage estimates and guide which projects can be taken from concept to implementation.

Figure 23a. Northern Salton Sea. Future planned projects, shown in blue shading, will meet the State Board Order acreage requirement. Project areas discussed in Chapter 2 are denoted as "Project in Planning or Construction" on the figure.

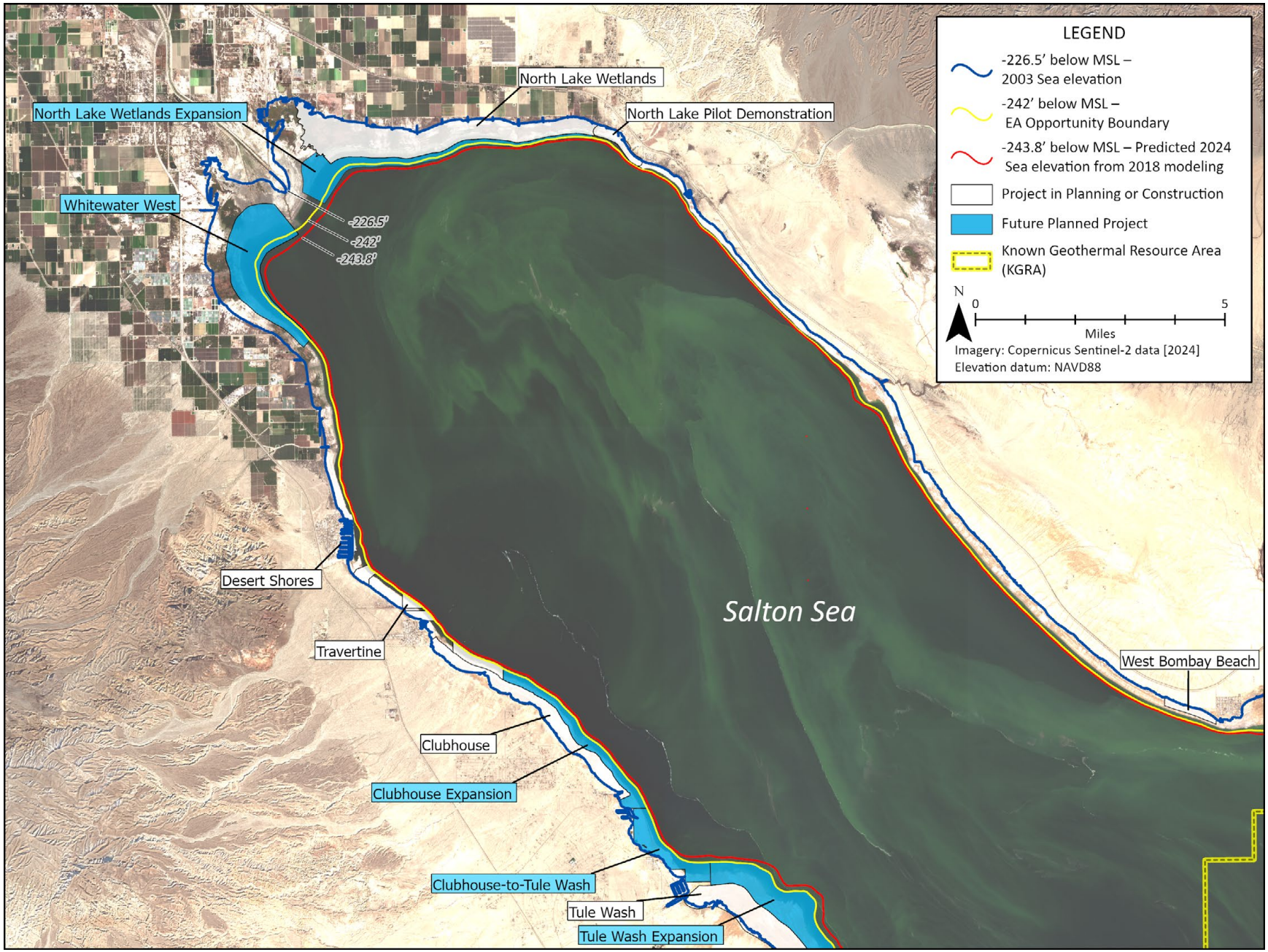
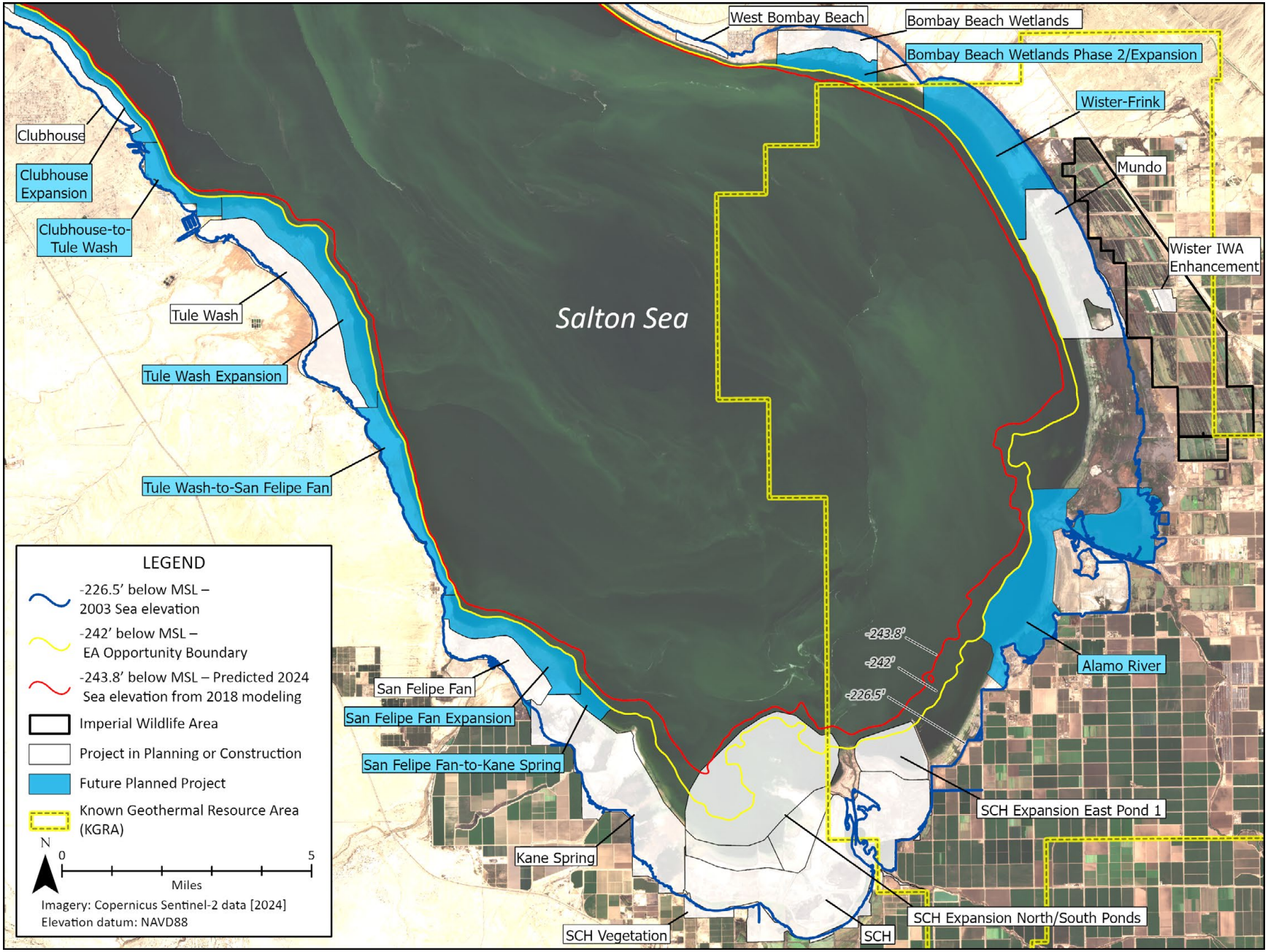


Figure 23b. Southern Salton Sea. Future planned projects, shown in blue shading, will meet the State Board Order acreage requirement. Project areas discussed in Chapter 2 are denoted as "Project in Planning or Construction" on the figure.



Note: IWA = Imperial Wildlife Area.

Table 2. SSMP Projects Planned Over 2025–2028

Year	SWRC 2017-0134 Year End Goal	SWRC 2017-0134 Cumulative Year End Goal	Projects
2025	3,400	17,600	Complete construction at Tule Wash (1,217 acres) and West Bombay Beach Projects (93 acres). Complete construction on the SCH Expansion East Pond 1 (750 acres). Commission East Pond (1,103 acres). Initiate construction on vegetation enhancement at Tule Wash and Clubhouse on IID Parcels (382 acres). Initiate construction on the Kane Spring San Felipe Fan Project (4,072 acres). Initiate construction on the SCH Expansion Center and West Ponds (4,500 acres). Initiate construction at the Bombay Beach Wetland Project (564 acres). Initiate construction on Wister Unit Marsh Bird Habitat Project (150 acres).
2026	4,000	21,600	Initiate construction on the North Lake Pilot Demonstration Project (70 acres). Initiate construction on the North Lake Wetlands project (1,966 acres). Initiate construction at the SCH Vegetation Project (537 acres). Complete construction on IID parcels adjacent to Clubhouse and Tule Wash sites (382 acres). Complete construction on Wister Unit Marsh Bird Habitat Project (150 acres). Ongoing construction work to continue.
2027	4,000	25,600	Initiate construction on the Mundo project (2,354 acres). Initiate construction on the Travertine project (297 acres). Initiate construction at Desert Shores Channel Restoration Project (30 acres). Ongoing construction work to continue.
2028	4,200	29,800	Initiate construction on the Alamo River project (up to 3,200 acres). Initiate construction on the North Lake Wetlands Expansion project (up to 800 acres). Initiate construction on the Bombay Beach Wetland Phase 2 Expansion project (560 acres). Initiate construction on remaining vegetation enhancement projects to meet 29,800 acres. Projects will be selected from the following universe of potential projects to achieve 29,800 acres (also shown on Figures 23a and 23b): Wister Frink, 2058 acres; Clubhouse-to-Tule Wash, 479 acres; San Felipe Fan-to-Kane Spring, 192 acres; San Felipe Fan Expansion, 1014 acres; Clubhouse Expansion, 516 acres; Tule Wash-to-San Felipe Fan, 1024 acres; Tule Wash Expansion, 1761 acres; and Whitewater West, 1295 acres. Note that not all projects listed above will be selected—the SSMP will determine which of the above projects to implement for purposes of reaching 29,800 acres based on site readiness and project feasibility. Additionally, the acreage for the projects listed above are estimates. Final acreage of these projects will be refined based on site investigation.

One factor that has informed the choice of future project locations is the amount of available acreage on which to construct projects. The Sea has receded at a slower pace than predicted in 2018, at the start of the 10-Year Plan period. The actual exposed acreage in 2024 is about 20,000 acres smaller than was projected in 2018 because inflows to the Sea have been higher than predicted by prior modeling studies. The acreage difference corresponds to the area between the 243.8 feet below mean sea level (MSL) elevation (the red line on **Figures 23a and 23b**), which is the previously predicted 2024 elevation (predicted in 2018), and the current shoreline as shown on the figure. Some of the project expansion areas are identified based on the recession trend of the Sea and may not be immediately buildable because they are recently becoming exposed and the lakebed is still saturated. At other sites in proximity to freshwater inflows, available acreage on which to implement restoration projects is limited by the growth of wetlands from water flowing to the exposed lakebed from agricultural drains. As of 2024, wetlands have formed on 7,960 acres of the exposed lakebed. Further discussion of available acreage on which to implement projects, including description of recent wetland mapping efforts, is presented in Appendix A (Existing Conditions).

6.1 Key Program Activities in 2025

Planning and project delivery activities are prioritized for advancement in 2025 to continue to drive progress towards the 29,800-acre milestone in the Phase 1: 10-Year Plan and advance long-term restoration planning. Project specific activities planned for 2025 are described in the preceding chapters and notable activities are summarized below.

In 2025, work on the operation and maintenance (O&M) facilities and workspace for the SSMP is scheduled to be completed. The SCH Visitor Observation Area will be further developed including signage and the design and installation of landscaping. Work will continue to improve drain and interceptor ditch maintenance access. Partial commissioning of the SCH project is expected upon completion of the 750-acre East Pond 1 Expansion. The original East Pond and the East Pond Expansion will be commissioned together as one operational unit totaling approximately 2,000 acres in 2025.

Significant progress on the 750-acre East Pond 1 Expansion occurred in 2024 using the first installment of the federal funding under the Salton Sea Commitments Agreement. Construction of East Pond 1 Expansion is expected to be completed in mid-2025. East Pond 1 will create up to 750 acres of additional aquatic habitat. Commissioning of the east portions of the SCH Project will begin in 2025 and will be aligned with the construction of additional ponds in the expanded project.

A significant expansion of the SCH is planned for the west side of the New River, with groundbreaking expected in mid-2025. Design and construction are expected to initiate in 2025 on the SCH's Center and West Pond Expansion areas. This expansion will increase the SCH's overall footprint to over 9,000 acres.

Weather permitting, the SSMP will complete all planting and irrigation at Reclamation vegetation sites at Clubhouse, Tule Wash, and West Bombay Beach in 2025 (totaling 1,709 acres). Groundwater well drilling will continue in 2025, which should support future vegetation work planned for expansion at Tule Wash and Clubhouse sites on IID parcels.

The SSMP Team will continue to monitor the performance of dust control at project sites with new air monitoring transects installed in 2024 and 2025. Vegetation establishment monitoring and maintenance will continue across all the vegetation enhancement sites.

Early in 2025, land access was finalized with IID on land adjacent to the existing Clubhouse and Tule Wash vegetation enhancement project sites; these project sites encompass an additional estimated 382 acres. Funding proposed by the Administration in budget year 2024-2025 is planned to support implementation of vegetation enhancement on this acreage. The SSMP plans to use the same vegetation enhancement approaches as used on the adjacent Reclamation parcels. The Team will take advantage of newly

built access roads for ease of access to these IID sites and new groundwater wells for irrigation.

Partner projects are anticipated to take a big step forward in 2025, beginning with the Bombay Beach Wetlands Enhancement Project in partnership with Audubon California. Audubon California, in close coordination with the SSMP, led the first phase of the Bombay Beach Wetland Enhancement Project (564 acres) to 65 percent design. The SSMP will assume the lead on design at 65 percent design, oversee completion of full design, support permitting, and support identification of long-term O&M needs with close coordination with Audubon California and IID. Upon completion of 65 percent design, significant work will continue to permit the project for construction. With the SSMP now leading completion of design, leading construction and transitioning to O&M, the State began land access agreements with Reclamation and IID in 2024 with a goal to complete these easements in the second quarter of 2025. Construction is anticipated to begin at the end of 2025. Partial funding is expected from the Wildlife Conservation Board.

Imperial County plans to complete CEQA for the Desert Shores Channel Restoration Project (approximately 30 acres). SSA is the lead for this project and will continue to work with the project management firm that was hired in 2023 to work on the project design and provide opportunities for robust public input opportunities in 2025.

U.S. Congressman Raul Ruiz addresses attendees celebrating a groundbreaking ceremony for the Species Conservation Habitat Project Expansion at the Salton Sea in October 2024.



The SSMP Team will continue to support the SSA and Riverside County in their efforts to lead the planning and construction of the revised 70-acre North Lake Pilot Demonstration Project concept, located at the northern end of the Salton Sea, in Riverside County, near the unincorporated community of North Shore. In 2025, project design will begin, and project construction is anticipated to start in 2026.

Two project areas identified for NRCS partnership are Mundo and Travertine as described in Section 2.2.7. Collaboration with NRCS will proceed to make these projects eligible for federal funding.

NRCS is leading the funding to develop a Watershed Plan to supplement the NEPA EA. This is a necessary step to qualify these two projects for federal funding. The SSMP has developed conceptual project descriptions for these projects that will be further analyzed for implementation with funding from NRCS.

The Kane Spring San Felipe Fan project concept was further developed in 2024 and is a high priority for 2025 (see Section 2.2.6). A multi-benefit project is envisioned that will provide dust control, as well as habitat for shorebirds and pupfish connectivity on 4,072 acres. The full

Least Sandpiper (foreground) and Western Sandpiper (background).



project scope will continue to be developed in 2025, informed by site investigations that are underway. The project will be a collaboration between the SSMP, IID, and Reclamation. Several public meetings will be scheduled to seek feedback, once baseline information is collected from site investigations to inform design options. Further design work is envisioned to support a progressive design-build contract to implement this project in 2025.

The SSMP Team will continue to work with USACE and SSA on the development of the Feasibility Study. Planned work in 2025 includes USACE identifying the final set of long-range restoration alternatives for analysis, hydrologic and hydraulic modeling of existing and future-without project conditions, developing initial alternatives for the early implementation increment, as well as continued federal and state coordination to gather information and progress the evaluation of alternatives through USACE's planning process in accordance with federal regulation and policy. The Feasibility Study development process also includes the development of NEPA and CEQA environmental compliance documents.

The SSMP Team will continue work on the Wister Marsh Unit Project in 2025. This will include obtaining pre-project site assessments, getting approvals, and conducting surveys as needed. Site clearing will occur prior to developing a conceptual design and starting construction. It is anticipated that construction will begin by the end of 2025.

Water quality monitoring will be performed at selected drains in the vicinity of projects, the SCH ponds, and the Salton Sea. Monitoring of bird, fish, and wildlife habitat in the Salton Sea ecosystem will also take place in 2025. Monitoring activities at the Salton Sea were greatly facilitated with a new boat ramp at SCH, and other potential boat ramps are being reviewed at the northern end of the Salton Sea. Additional monitoring associated with the MIP will be performed, including monitoring activities outlined in the MIP 2025 Annual Work Plan, which supports Phase 1: 10-Year Plan project delivery and informs long-range planning. Implementing partners are encouraged to participate in an annual coordination meeting anticipated for October 2025 to develop the 2026 MIP Work Plan.

In 2025, the SSMP will continue to update the new Project Tracker with acreage totals in June/July and again at the end of each January to align with Annual Report acreage reporting. The Project Tracker will be consistently updated with new projects, project photos, and important information, including when a project changes its status in development.

Lastly, the California Natural Resources Agency is committed to advancing the creation of the Salton Sea Conservancy, pursuant to Senate Bill 583, in partnership with the California State Legislature and interested parties. This Conservancy will support the State's restoration and management efforts at the Salton Sea by taking on critical operations and maintenance responsibilities for SSMP projects, as well as acquiring, holding and managing land and property rights. Significant work will be required this year to meet SB 583's statutory deadlines, which begin in 2026, and the SSMP looks forward to partnering with the Conservancy to ensure effective delivery of its statutory responsibilities.

6.2 Key Program Activities from 2026 to 2027

The USACE Feasibility Study will continue development for long-term restoration at the Sea, as well as implementation of early projects that are part of the Phase I 10-Year Plan.

The East Ponds of SCH encompassing the original East Pond and East Pond 1 Expansion will be commissioned in 2025 and will be under O&M in 2026. Additional expansion of the Center and West Ponds at SCH are planned to be designed and under construction. Additional commissioning of the SCH will be carried out upon completion of construction of the expanded areas.

Work will be completed at vegetation enhancement sites on IID parcels and at all three sites on Reclamation land. Construction should be underway at the Bombay Beach Wetland Enhancement Project, Desert Shores Channel Restoration Project, and the North Lake Pilot Demonstration Project. Completion of design and potential initiation of construction of the Kane Spring San Felipe Fan project is planned. Wister Unit Marsh Bird Habitat Project is also planned to be completed. The SSMP Team anticipates completing design and initiating construction of Mundo and Travertine projects with funding from NRCS.

Water quality monitoring will be performed at selected drains in the vicinity of the projects, the SCH ponds, and the Salton Sea. Monitoring of bird, fish, and wildlife habitat in the Salton Sea ecosystem will continue to take place in 2025 and 2026. Additional monitoring associated with the MIP will be performed, including monitoring activities outlined in the MIP 2025 and 2026 Annual Work Plans, which support Phase 1: 10-Year Plan project delivery and informs long-range planning. Implementing partners are encouraged to participate in an annual coordination meeting anticipated in October 2025 to develop the 2026 MIP Work Plan and in October 2026 to develop the 2027 MIP Work Plan.

The SSMP Team will develop permitting and field surveys for additional projects that will meet the State Board Water Order requirements for 29,800 acres of habitat and dust suppression projects (**Figures 23a and 23b**). Projects envisioned for initiation in years 2026 and beyond are further identified in **Table 2**.

In 2025 and 2026, the SSMP will continue to update the Project Tracker with acreage totals in June/July and again at the end of the year to align with Annual Report acreage reporting. The Project Tracker will be consistently updated with project photos and important information, including when a project changes its status in development.

6.3 Meeting State Water Resources Control Board Order WR 2017-0134 Targets

The State Water Resources Control Board Order sets out annual targets that the SSMP Team has been actively working toward. Progress over the period from 2018 to 2024 is presented in **Table 3**.

Table 3. SSMP Projects Summary

Year	SWRC 2017-0134 Year End Milestone	SWRC 2017-0134 Cumulative Year End Milestone	Land Access Secured	Total SSMP Acres Under Construction in Each Year	Habitat Acres Completed[1]	Dust Suppression Acres		SSMP Cumulative Reported Acres to SWRCB	Projects
						Interim Dust Suppression Acres[2]	Dust Suppression Acres Completed[3]		
2018	500	500	-	-	-	-	-	-	
2019	1,300	1,800	4,100	-	-	-	-	-	
2020	1,700	3,500	0	755	-	755	-	755	Three interim dust suppression projects completed within the SCH footprint (755 acres).
2021	3,500	7,000	1,709	5,809	22	500	-	1,277	Construction on the 4,100-acre Species Conservation Habitat project began in Jan 2021. 22 acres of desert pupfish habitat created at SCH. 500 acres of interim dust control implemented within the SCH footprint. Construction began on three vegetation restoration projects on Reclamation Lands (1,709 acres): • Clubhouse Vegetation Enhancement Project (399 acres); • Tule Wash Vegetation Enhancement Project (1,217 acres); • Bombay Beach West Vegetation Enhancement Project (93 acres).
2022	1,750	8,750	0	5,504	15	~~25~~ 118*	~~290~~ 197*	1,607	Approximately 290 acres were seeded/planted and irrigated within the existing rows of grass bales at Clubhouse and West Bombay Beach sites. Major progress on the SCH Project included completion of most pond berms, nesting islands, the causeway connecting the saline water source to the pump and habitat ponds, and the New River Diversion Structure. *The 93 acres at West Bombay Beach were previously reported as complete. However, seeding was not successful, so these areas were moved to interim dust suppression since this site received bales and furrows. West Bombay Beach will be re-seeded in 2025.

Table 3. SSMP Projects Summary (Cont.)

Year	SWRC 2017-0134 Year End Milestone	SWRC 2017-0134 Cumulative Year End Milestone	Land Access Secured	Total SSMP Acres Under Construction in Each Year	Habitat Acres Completed[1]	Dust Suppression Acres		SSMP Cumulative Reported Acres to SWRCB	Projects
						Interim Dust Suppression Acres[2]	Dust Suppression Acres Completed[3]		
2023	2,750	11,500	1,000	4,960	130	319	414	2,445	414 acres vegetation completed in 2023 (171 acres at Clubhouse and 243 acres at Tule Wash). Major construction completed on SCH. 130 habitat acres consist of: • 100 acres in the east and west sedimentation basins at SCH. • 30 acres submerged at the south end of the diversion structure on either side of the New River Diversion Channel within the SCH footprint.
2024	2,700	14,200	1,132	5,199	180	258	691	3,574	691 acres of vegetation completed in 2024 (31 acres at Clubhouse and 660 acres at Tule Wash). 258 additional acres of grass bales installed at Tule Wash (reported as interim dust suppression acres). Completed construction at the original SCH Project (4,100 acres). Filled 180 acres in East Pond and Center Pond. Initiated construction on the first SCH Expansion project—East Pond 1.
Cumulative to date:			**7,941**	**Not applicable**	**347**	**1,950**	**1,302**	**3,574**	

1 Aquatic habitat is complete when wetted.

2 Immediate and ongoing dust suppression within the footprint of habitat or dust suppression projects under construction. These acres will become dust suppression acres completed or habitat acres completed and will not be double counted in cumulative reporting.

3 Vegetation enhancement is complete when planted/seeded and site has irrigation.



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Acronyms and Glossary

Ac	Acre
ACHP	Advisory Council on Historic Preservation
Administration	Newsom Administration, Governor of California
AF	Acre-Feet
ARD	Aquatic resource delineation
BLM	U.S. Bureau of Land Management
BO	Biological Opinion
CA	California
CALPUFF Model	CALPUFF is an advanced, integrated Lagrangian puff modeling system for the simulation of atmospheric pollution dispersion distributed by the Atmospheric Studies Group at TRC Solutions.
CARB	California Air Resources Board
CBO	Community-Based Organization
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFD	Computational Fluid Dynamics
CNRA	California Natural Resources Agency
CRBRWQCB	Colorado River Basin Regional Water Quality Control Board
CVSC	Coachella Valley Stormwater Channel
CVWD	Coachella Valley Water District
CWA	Clean Water Act
OF	Degrees Fahrenheit
DIP	Deficit Irrigation Program
DSAP	Dust Suppression Action Plan
DWR	California Department of Water Resources
EA	Environmental Assessment, part of the National Environmental Policy Act (NEPA) compliance process
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FAC	Facultative - Occur in wetlands and non-wetlands
FACW	Facultative Wetland - Usually occur in wetlands, but may occur in non-wetlands
Feasibility Study	Imperial Streams and Salton Sea Ecosystem Restoration Feasibility Study

ft	Foot or feet
g/L	grams per liter
ICAPCD	Imperial County Air Pollution Control District
IID	Imperial Irrigation District
JPA	Joint Powers Authority, created to fund mitigation activities to address impacts of agricultural-to-urban water transfers from the Quantification Settlement Agreement (see QSA)
LOP	Letter of Permission
LRP	Long-Range Plan
LRPC	Long-Range Planning Committee
LSAA	Lake and Streambed Alteration Agreement
MSL	mean sea level
mg/l	milligrams per liter
MIP	Monitoring Implementation Plan
MOU	Memorandum of Understanding
NAVD88	North American Vertical Datum 1988
NDVI	Normalized Difference Vegetation Index
NEPA	National Environmental Policy Act
NGO	Nongovernmental Organization
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRIP	New River Improvement Project
O&M	operations and maintenance
Order	State Water Resources Control Board Order WR 2017-0134
PM2.5	Particulate matter 2.5 micrometers in diameter
PM10	Particulate matter 10 micrometers in diameter
ppt	parts per thousand
QSA	Quantification Settlement Agreement, an agreement among state, federal, and local agencies allowing the transfer of irrigation water from IID to the San Diego County Water Authority, Coachella Valley Water District, and Metropolitan Water District of Southern California for urban use.
Reclamation	U.S. Bureau of Reclamation
South Coast AQMD	South Coast Air Quality Management District
SCH	Species Conservation Habitat
SCHX	Species Conservation Habitat Expansion
Sea	Salton Sea
SHPO	State Historic Preservation Officer
SSA	Salton Sea Authority
SSAM	Salton Sea Accounting Model
SSAQMP	Salton Sea Air Quality Mitigation Program
SSMP	Salton Sea Management Program
State	State of California
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAFY	thousand acre-feet per year
TDS	Total dissolved solids
TEP	temporary entry permit
µg/L	micrograms per liter
U.S.	United States
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirements
WR	Water Rights

Appendix A. Existing Conditions

This appendix provides an update on current conditions in the Salton Sea region, including Salton Sea inflows, elevation, salinity, fish habitat, and bird habitat.

A.1 Inflows

Inflows to the Salton Sea are a key driver of water elevations and salinity. **Table 4** presents water inflow to the Salton Sea by year and region for the calendar years 2016 to 2024. The SSMP Team performed a detailed analysis of inflows to the Salton Sea through 2022 as part of the LRP preparation and refined the methodology for the inflow sources to the Sea, as summarized in the table. Recent annual flows for 2023 and 2024 were compiled using the same methodology.

Each inflow term is further described in the following bullets. Detailed information and derivations for each of these inflow terms can be found in Appendix B (Hydrology and Climate Change) to the LRP (CNRA, 2022b).

- Imperial Valley: The Imperial Valley term consists of two components: gaged flow and ungaged flow. Gaged flows are recorded at USGS gages at the mouth of the Alamo and New Rivers in Imperial Valley (USGS Station ID: 10254730 and USGS Station ID: 10255550, respectively). To account for Mexico flows separately, the contribution from Mexico is subtracted from this term (see next bullet). For ungaged inflows into the Salton Sea from the Imperial Valley, IID previously estimated these as equal to approximately 9 percent of the total volume of gaged flows (IID, 2018).

Table 4. Water Inflow to the Sea by Year (in thousand acre-feet [TAFY])

Year	Imperial Valley	Mexico	Coachella Valley	Local Watershed	Ground-water	Total Inflow to Sea
2016	983	70	80	4.4	11.5	1,149
2017	942	69	77	4.7	11.8	1,104
2018	913	61	75	4.7	12.2	1,065
2019	883	64	80	5.0	12.3	1,044
2020	892	63	82	4.9	12.3	1,054
2021	934	62	81	4.7	12.3	1,094
2022	911	62	74	4.4	12.3	1,065
2023	839	53	78	4.7	12.3	987 [1]
2024	776	46	70	4.5	12.3	909

Notes:
1. In the 2024 Annual Report, total inflow to the Sea for 2023 was presented as 988 TAFY. The number changed due to updating 2023 provisional USGS gage data for this report.

- Mexico: This term is USGS gage flow from the New River at the International Boundary station (USGS Station ID: 10254970).
- Coachella Valley: This term consists of two components: USGS gaged flow, which measures the Coachella Valley Stormwater Channel (CVSC), and drain flow from drains other than the CVSC. Gaged flow is measured at USGS gage station Whitewater River near Mecca (USGS Station ID: 10259540). Drain flow from other than CVSC was provided by the CVWD.
- Local Watershed: This inflow term is derived through a combination of gaged flow (Salt Creek watershed) and analytical methods (San Felipe Creek watershed and areas not tributary to Salt or San Felipe creeks).
- Groundwater: The groundwater term is derived from a combination of literature values for the Imperial Valley and San Felipe alluvium and recent modeling of the Coachella Valley performed for the Indio Subbasin Water Management Plan Update. The groundwater term is an area of uncertainty, and the SSMP Team plans to conduct updated modeling of groundwater flows in the future.

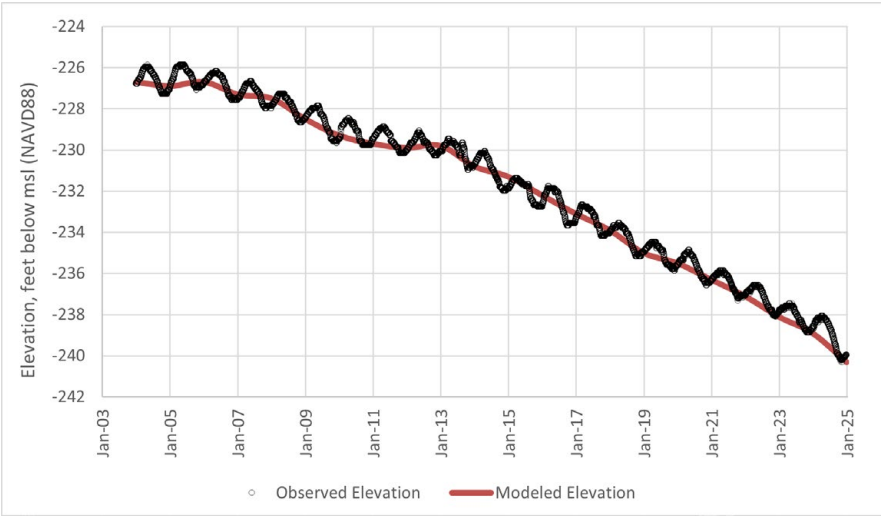
Despite the ending of mitigation water flows at the end of 2017, total estimated inflows to the Salton Sea remained stable through 2022. However, in 2023, total inflow dropped to 987 thousand acre-feet per year (TAFY). Inflow further declined in 2024 to 909 TAFY, driven in large part from conservation measures implemented by IID in response to the Colorado River drought.

A.2 Salton Sea Elevation

The elevation of the Sea is measured daily, and lakebed exposure can be estimated from the elevation-area relationship of the Sea. For the SSMP, there is a need to develop future projections of lakebed exposure, on the timescale of 5-10 years, because a large fraction of the State Water Resources Control Board Order WR 2017-0134 project construction will likely occur on land that is currently underwater. The SSMP Team uses a computer program, the Salton Sea Accounting Model (SSAM), originally developed by Reclamation, to predict Sea elevation and salinity. The model makes predictions of the future state of the Sea via mass balance of water volume and salt mass on an annual timestep. Freshwater inflows add water and salt to the sea, direct precipitation and evaporation add/remove water but not salt, and salt precipitation removes salt but not water.

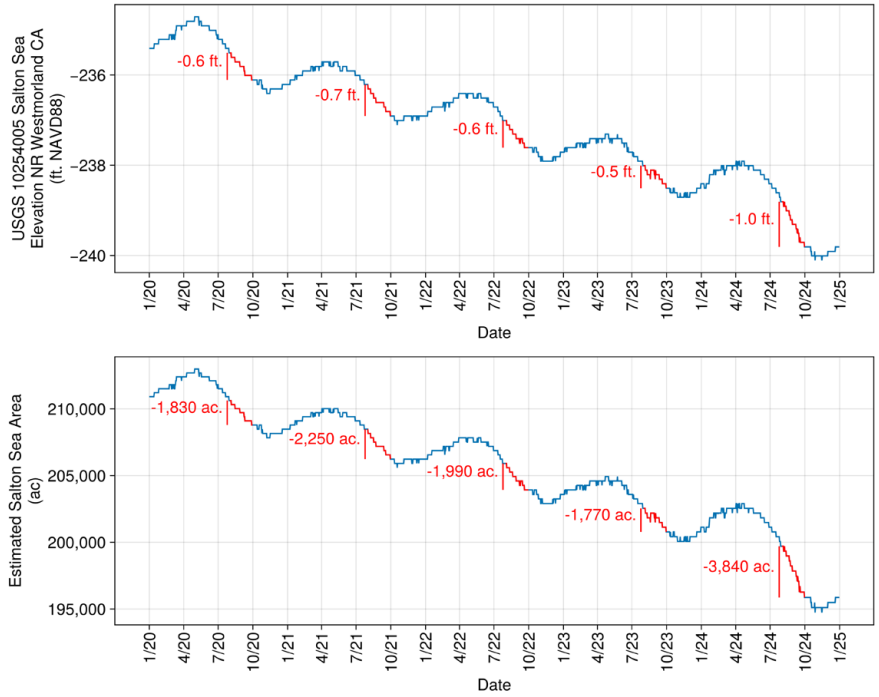
The water surface elevation measured on December 31, 2024, was 240.0 feet below mean sea level (msl). **Figure 24** illustrates the observed Salton Sea water surface elevation compared with SSAM model predictions. By using future estimated inflows, predicted Sea elevation can be used to bracket near-term expected elevations and lakebed exposure for planning purposes.

Figure 24. Observed Salton Sea water surface elevation (NAVD88 datum) compared with SSAM model predictions.



Conservation efforts by IID and CVWD in 2024 decreased inflow to the Sea, as noted in Section A.1. To evaluate Salton Sea elevation declines in 2024 as compared to earlier years, we examined IID and CVWD consumptive use over 2020-2024. Specifically, we examined the decline of Salton Sea elevations in 2024 and its potential attribution to the decreased inflow from conservation efforts including the Deficit Irrigation Program (DIP) implemented by IID during August and September. **Figure 25** below presents the observed Salton Sea elevation (using the NAVD 1988 datum) and corresponding area estimates based on an elevation-area-capacity curve for the Sea. In the preceding four years there has been a decline of 0.5 to 0.7 feet between August 1 and September 30, and in 2024, this decline increased to 1.0 feet.

Figure 25. Observed Salton Sea elevation (USGS station: Salton Sea NR Westmorland CA – 10254005; NAVD 88 reference) and corresponding area estimates. The changes from Aug 1 to Sep 30 of each year are highlighted in red. Notes: ac = acre(s), ft = foot/feet, NR = near.



American avocet flock in winter plumage.



Gambel's quail.



Figure 26 and **Figure 27** compare the monthly water deliveries to IID and CVWD, respectively, over the past five calendar years. These values represent the water supplied from storage in Lake Mead (termed consumptive use in Reclamation's annual reports). Because of the DIP, a substantial reduction in the IID's consumptive water use in 2024 occurred in August and September (**Figure 26**).

For IID, the total annual water use has varied from year to year between 2020 and 2023, with 2024 water use 111,031 acre-feet (AF) lower than in 2023 (see inset box on **Figure 26**). For CVWD, there is no continuing decline in water use. The 2024 use is higher than for 2023 and is similar to values in 2020 through 2022 (see inset box on **Figure 27**).

A.3 Salton Sea Salinity

Salinity data have been collected by Reclamation and CDFW, represented by the observed data presented in **Figure 28**, which are plotted alongside SSAM-predicted salinity values. For each date when data were collected, there were typically six data points representing surface and bottom samples taken at three separate locations at the Sea. Salinity at the Sea has continued to increase over the past two decades and appears to show a more rapid increase over the most recent period. Salinity sampling in 2020, 2021, and 2022 was not conducted because of COVID-19 restrictions and because of challenges in boat ramp access due to declining Salton Sea elevations. Water quality monitoring was reinstated in November 2023. Since that time, CDFW in coordination with the CRBRWQCB was able to use the boat ramp at the SCH project to launch an airboat and access the lake to perform water quality sampling on a quarterly basis. Salinity, reported as total dissolved solids (TDS), ranged from 68,000 milligrams/liter (mg/l) to 86,000 mg/l collected at four sampling locations in the Salton Sea in November 2024. As water quality monitoring continues in 2025, more data will provide a clearer understanding of the conditions across the Sea.

Figure 26. IID water deliveries by month from 2020 to 2024. Annual acre-feet are shown in the insert box. Notes: CY = calendar year and AF = acre-feet. Water use reported by the Bureau of Reclamation (https://www.usbr.gov/lc/region/g4000/hourly/use.pdf).

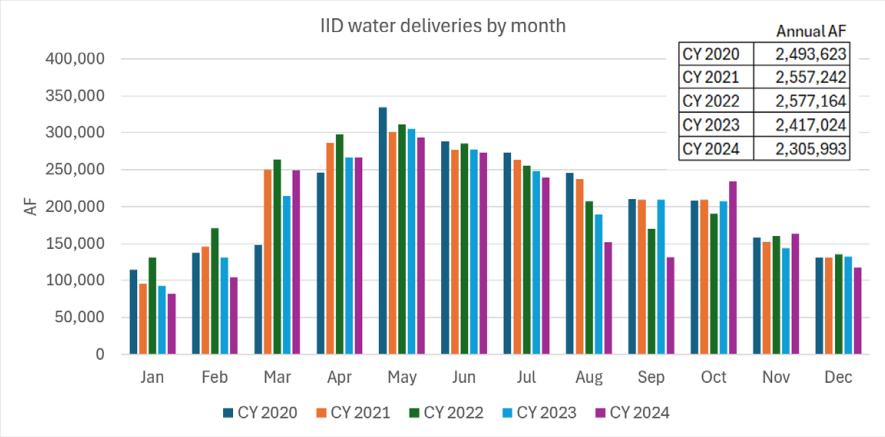


Figure 27. CVWD water deliveries by month from 2020 to 2024. Annual acre-feet are shown in the insert box. Notes:=CY = calendar year and AF = acre-feet. Water use reported by the Bureau of Reclamation (https://www.usbr.gov/lc/region/g4000/hourly/use.pdf).

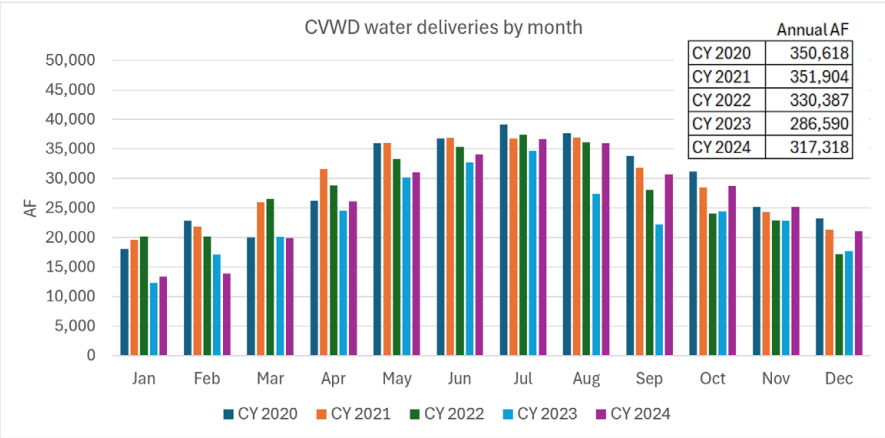


Figure 28. SSAM model-predicted salinity and observed salinity (mg/l).

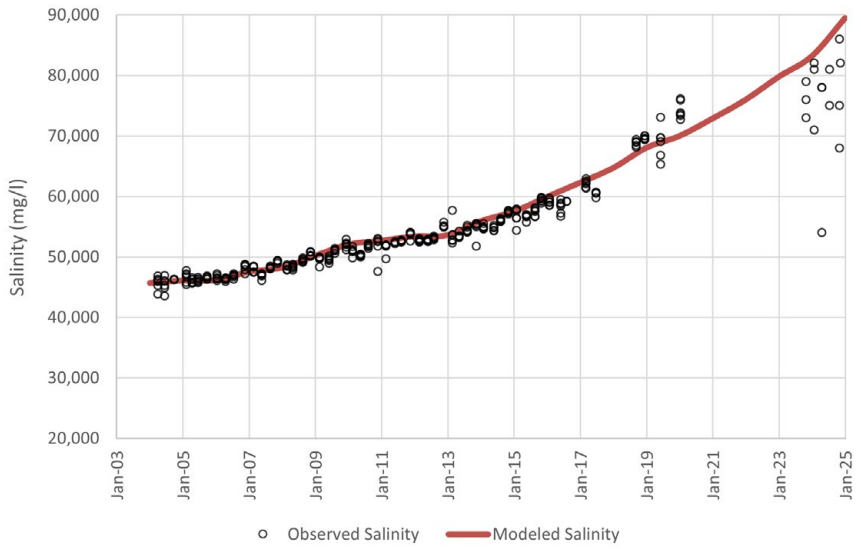
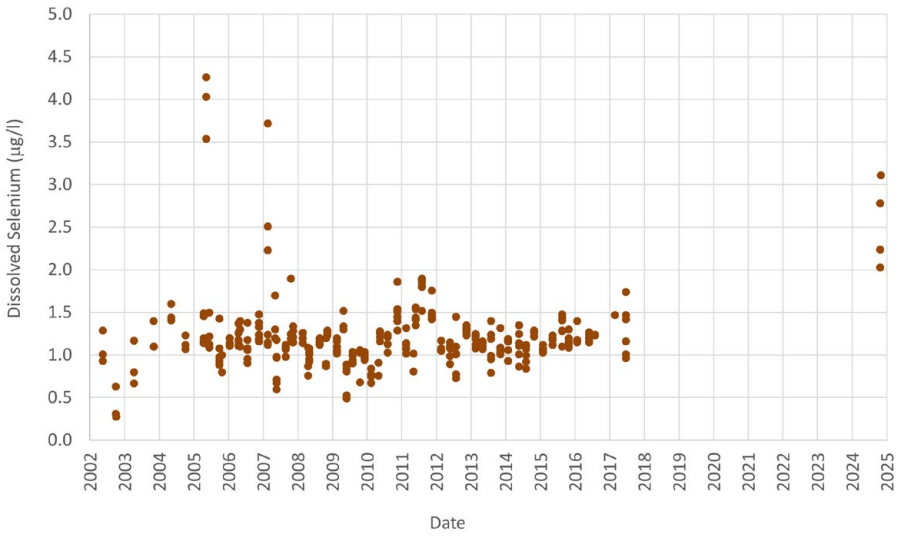


Figure 29. Dissolved selenium concentrations at locations in the Salton Sea.



A.4 Salton Sea Water Quality

Dissolved selenium concentrations sampled at the Salton Sea by Reclamation and USGS between 2002 and 2017 ranged from 0.3 to 4.3 micrograms per liter (µg/L) (**Figure 29**). Two large spikes were observed in 2005 and 2007, but dissolved concentrations were otherwise consistent over this time period. Average selenium was approximately 1.2 µg/L over the period 2002 to 2017. Data were collected by Reclamation in 2018 and 2019; however, the data were reported as nondetectable at a large detection limit (> 20 µg/L), so they were not reported on this figure. Selenium sampling resumed in 2024 at four locations at the Sea. Selenium concentrations were higher than past observations and ranged from 2.0 to 3.1 µg/L in November 2024 (**Figure 29**). Continued measurements will help explain whether this is a consistent change from previous levels that mostly ranged from 1 to 1.5 µg/L.

A.5 Acreage Available for Project Implementation

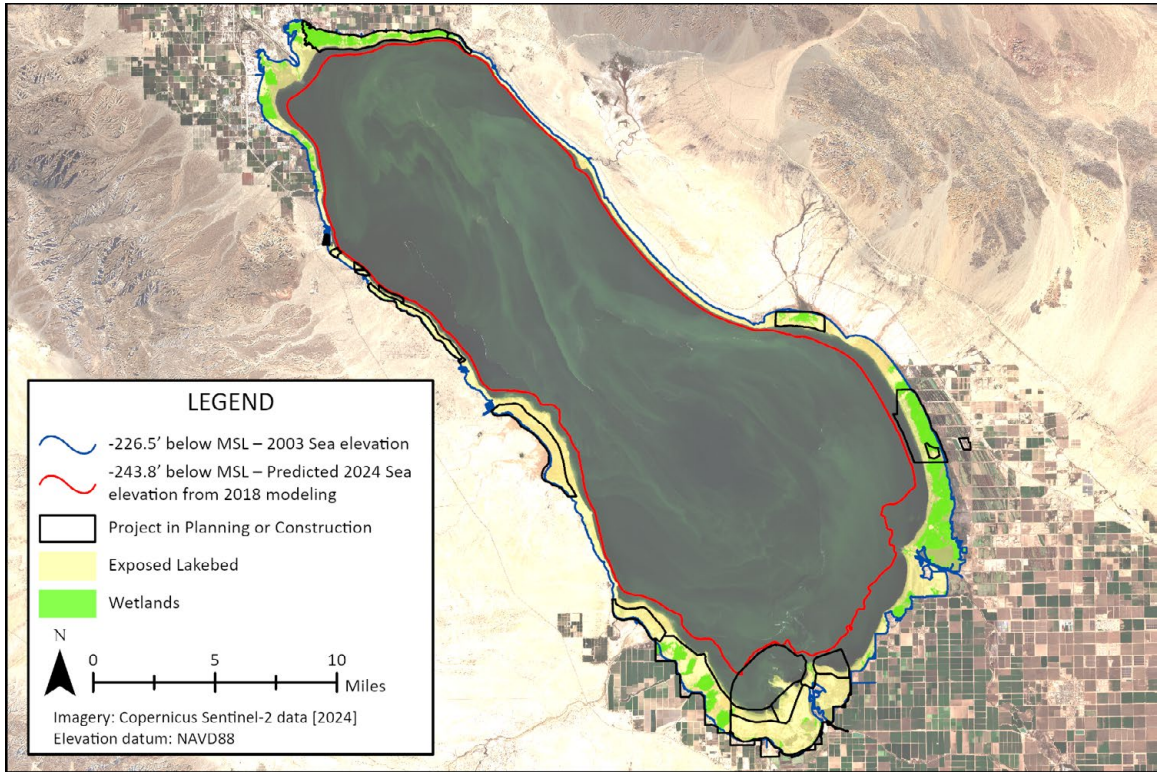
The Sea has receded at a slower pace than predicted in 2018, at the start of the 10-Year Plan period, because inflows to the Sea have been larger than predicted by prior modeling studies. **Figure 30** shows the previously predicted 2024 elevation (predicted in 2018), corresponding to an elevation of 243.8 feet below msl (North American Vertical Datum 1988 [NAVD88 datum]). When compared to the actual shoreline in 2024 (**Figure 30**), the exposed acreage in 2024 was about 20,000 acres smaller than was projected in 2018.

Available acreage on which to implement restoration is partly limited by the growth of wetlands from water flowing to the exposed lakebed from agricultural drains. Audubon California (2020) assessed the amount and distribution of newly emerging wetlands on exposed playa. The study used multispectral 10-meter resolution satellite imagery and a Normalized Difference Vegetation Index (NDVI) to identify vegetation and

differentiate between algal and plant vegetation. NDVI is a commonly used index for detecting and quantifying relative health and density of vegetation, calculated from imagery containing red and near-infrared bands. Following the methodology that Audubon California (2020) employed, the calculation of existing and emergent vegetation within the analysis area was repeated using Sentinel-2 satellite imagery from January 30, 2024. A date early in the year was chosen when vegetation was not under water stress and thus easier to detect.

Results from the mapping exercise are presented in **Figure 30**. Wetlands estimated from the 2024 imagery are mapped on this figure. Wetlands have formed on 7,960 acres of the exposed lakebed. The areas labeled "Project in Planning or Construction" are consistent with those discussed in Chapter 2. The presence of wetlands makes project implementation more challenging, due to the difficulty of accessing areas with heavy vegetation. However, projects that include wetland enhancement are in the planning or construction phase for areas with existing wetlands. These projects include North Lake Wetlands, Kane Spring San Felipe Fan, Bombay Beach Wetlands, and Mundo, as described in Chapter 2. Further project development on downslope areas of exposed lakebed could occur in the future as the Sea continues to recede.

Figure 30. Map of the Salton Sea showing available exposed lakebed for project implementation. The red line illustrates the previously predicted 2024 elevation (predicted in 2018), corresponding to an elevation of 243.8 feet below MSL (NAVD88 datum). When compared to the actual shoreline on January 30, 2024, shown in this image, the exposed acreage is about 20,000 acres smaller than was projected in 2018.



A.6 Salton Sea Fish Surveys

CDFW staff and conservation partners conducted surveys for desert pupfish (*Cyprinodon macularius*) in 2024. The habitat surveyed included irrigation drains, tributary streams, SCH West Interception Ditch, ponds (North Shore Marina, Varner Harbor, USFWS Pupfish Pond), and refuges. Desert pupfish were found in most of the north end (CVWD) drains, and in a few of the south end (IID) drains that were surveyed. The species was abundant in many CVWD drains, with over 1,900 desert pupfish captured in one drain. Desert pupfish were also abundant in San Felipe Creek, but surveys in Salt Creek yielded only non-native species. CDFW staff and partners conducted salvaging efforts in a few irrigation drains, moving desert pupfish from shallow areas that were drying to deeper, connected waters. Staff also

Gull-billed terns and black skimmers nesting on loafing island at the SCH Project.



continued to remove invasive non-native species in selected waters, as these species continue to threaten desert pupfish populations.

CDFW staff conducted fish monitoring activities within the Salton Sea in October and November of 2024. The completion of the boat ramp construction at the SCH causeway enabled CDFW to conduct general fish surveys identified in the MIP. Fish surveys using boats had not been performed for several years due to the lack of a usable boat ramp.

Fish surveys were conducted using cast nets from the shore of river deltas, as well as deploying trammel nets from a boat. Trammel nets were deployed at two stations at each location and hauled in the following day. Trammel nets were set in water depths between 8 and 10 feet at each nearshore location. Nearshore locations prioritized for general fish surveys in 2024 included sampling points near the deltas of the New River, Alamo River, and Whitewater River.

A.7 Salton Sea Bird Surveys

Bird surveys at the Salton Sea continued in 2024, including work performed by CDFW, USFWS, Point Blue, Audubon California, Oasis Bird Observatory, and the University of Idaho.

CDFW Marshbird Surveys

Secretive marshbird surveys were performed by CDFW staff to evaluate habitat in several locations around the Salton Sea. These surveys were performed for the second year in the wetland habitat that occurs on the northern shoreline of the lake between the Whitewater delta and the Yacht Club. Four hundred and ninety (490) acres of habitat were found to be suitable for marshbirds and were occupied by a diversity of species, including shorebirds, songbirds, quail, and nighthawks. One hundred and four (104) acres were found to be occupied by the fully protected Yuma Ridgway's Rail. One territory was confirmed including one breeding pair. In addition, surveys were performed for the first year at the wetlands at the terminus of the Hot Mineral Springs Wash, the site of the planned Bombay Beach Wetlands Project.

Surveys confirmed that Yuma Ridgeway's Rails are occupying the site. California Black Rails were also confirmed to be in one of the marsh patches. Marshbird surveys were continued at the southern end of the lake at Poe Road where Ridgeway's Rails were confirmed to be present. Additional surveys for secretive marshbirds were performed by USFWS along with support from CDFW staff at other high-quality habitat at the south end of the Sea. The areas of marsh habitat north of Morton Bay have been confirmed to be occupied by Yuma Ridgeway's Rail and represent a large amount of habitat along the Salton Sea that has naturally developed and has become highly functional. These areas also support protected California Black Rails and desert pupfish.

Monitoring for dead and sick birds by CDFW staff continues to be performed along the Sea. Reported dead and sick birds have been sent to the CDFW Wildlife Investigations Laboratory for further analysis. In November and December 2024, several sick birds were collected and sent for testing. At least one instance of Avian Influenza has been detected locally.

CDFW Seabird Nesting Surveys

In 2024, CDFW took over the weekly monitoring of seabird nesting surveys. At the SCH project site, gull-billed terns, Caspian terns, and black skimmers nested on an inundated loafing island in East Pond, as well as on dredged islands located east of the causeway.

CDFW conducted a limited study to evaluate the effectiveness of predator scents, specifically wolf and mountain lion urine, in deterring coyotes from accessing sensitive bird areas along the causeway at the SCH Project. The findings indicated that using wolf urine as a deterrent barrier was ineffective in preventing coyotes from reaching the sensitive bird area on the causeway. Additionally, it remains unclear whether mountain lion urine would have been more effective than wolf urine, as it was only applied for a duration of three weeks.

USFWS Surveys

Staff at the USFWS Sonny Bono National Wildlife Refuge conducted the following avian surveys in 2024:

- Mid-Winter Aerial Waterfowl Survey
- Secretive Marshbird Surveys (Shafique-Sabir, 2024)
- Sandhill Crane Evening Roost Surveys
- Mid-Winter Pacific Flyway White Goose Surveys

Refuge staff conducted aerial waterfowl surveys around the Salton Sea on Jan 27, 2024. A total of 53,922 were observed, which is 41,317 fewer individuals compared to 2023. A major reason for such reduced numbers could be the re-flooding of Lake Tulare in the Central Valley, which saw record-breaking numbers of waterfowl. The Snow/Ross geese were still the most prominent species at 25,005 individuals, followed by Northern Shovelers at 8,049 individuals. Northern Shovelers were also the most prominent dabbler species, and the Ruddy Duck was the most prominent diver species at 2,984 individuals. The Species seen were a mixture of waterfowl, grebes, and gulls. Sandhill Crane surveys were performed from September through February at the Refuge and Keystone Duck Club. Cranes maxed out at 1,230 individuals in 2023, and 1,230 individuals for the 2023/2024 migratory period. While fewer cranes were detected for this migratory period compared to 2022/2023, more dispersal was noticed within the roost sites, compared to past surveys.

Coordinated Shorebird Surveys

Point Blue has continued to lead surveys of shorebirds through the Pacific Flyway Shorebird Survey and Intermountain West Shorebird Surveys (**Figure 31**). In 2024, Intermountain West Shorebird Surveys were conducted during April, August on foot and by airboat. This survey at the Salton Sea is a significant undertaking, requiring the expertise and dedication of professional biologists, supported by volunteers. Among these individuals were staff from the USFWS, CDFW, Audubon California, Point Blue Conservation Science, and Oasis Bird Observatory, who faced extreme heat to gather invaluable bird population and distribution data.

The Pacific Flyway Shorebird Survey was conducted in December 2024. Due to the constructed boat ramp at the SCH project site, CDFW and USFWS were able to perform surveys from the water and therefore access more area. This enabled the first comprehensive survey of the shoreline during winter since 2015. The total number of shorebirds counted was 26,703. Results and trend analysis are not yet available for release, although data from winter 2024 can be previewed here: https://migratoryshorebirdproject.org/explore-data/interactive-map/.

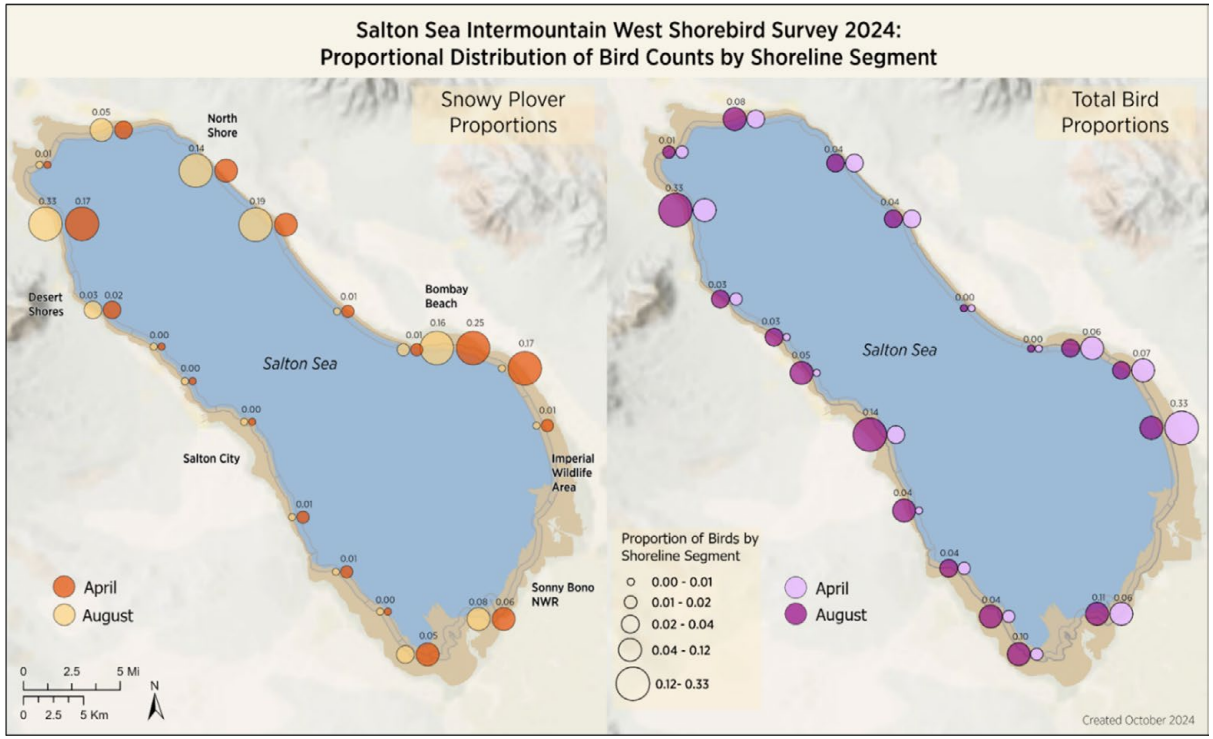
Audubon California

Audubon California has continued to support the Salton Sea program in a substantial manner and in 2024 worked to support ongoing biological monitoring and coordination of the shorebird survey efforts.

Oasis Bird Observatory Surveys

Oasis Bird Observatory continued to perform weekly surveys along the northern shoreline of the lake. These regularly occurring surveys have allowed the documentation of peak periods of Eared Grebes and Red Knots at the Salton Sea.

Figure 31. Map showing the distributions of all shorebirds (right) and snowy plovers (left) during 2024 at the Salton Sea (preliminary data). More information can be found at www.imwss.org.



During May to July 2024, one colony of Gull-billed Terns was documented, containing 8-12 adults, offshore of Niland Boat Ramp on exposed riprap infrastructure (McKernan, 2024).

University of Idaho Yuma Ridgway's Rail Research

University of Idaho has continued to perform research on the effects of selenium concentrations on Yuma Ridgway's Rails and their nesting success. The recent thesis presented by Cydney Yost found that selenium concentrations were higher in all tissue, prey, and egg samples of Yuma Ridgway's Rail collected from agricultural-fed marshes compared to spring-fed and river-fed marshes. However, nesting success was only slightly lower in the agricultural-fed marshes. More information can be found in the *Effects of Selenium Accumulation on Yuma Ridgway's Rails 2024 Annual Report* (Sliwa et al., 2024), and *Effects of Irrigated Agriculture on Selenium Concentrations and Nesting Success in Yuma Ridgway's Rails* (Yost, 2025).

A.8 Boat Ramps and Access Points

CDFW staff conducted a preliminary launch ramp assessment with the goal of assisting the SSMP in determining a feasible location for an additional launch ramp to access the Salton Sea. The SCH causeway boat ramp has been a great resource in enabling SSMP and collaborating entities to access the Salton Sea to conduct monitoring activities identified in the MIP. However, there is an outstanding need to safely and efficiently access areas in the northern portion of the Salton Sea.

The assessment occurred at six locations, consisting of three existing launch ramps that are no longer functional that could be rehabilitated, and three areas where a new launch ramp facility could be constructed. Sites were prioritized based on location in relation to the northern part of the Salton Sea, land ownership, existing infrastructure, and relative slope of the shoreline in relation to the ability to launch a boat. There may be an opportunity to coordinate with additional landowners to perform preliminary assessments at additional areas. Final location selection for a new or rehabilitated launch ramp facility will incorporate a feasibility analysis.



Appendix B. Funding Status

Table 5. Funding Available for the Salton Sea Management Program (in millions)

Agency and Source	Authority	Authorized for Appropriation	Appropriated/ Committed	Expended as of 9/30/24	Available for Additional Commitment	Use
DWR - Prop 50[a]	WC - 79567	$19.3	$19.2	$19.20	$0.10	2003-2007 Programmatic EIR/EIS and related studies and planning activities (completed).
DWR via WCB - Prop 50	WC - 79568	$8.75	$8.75	$8.75	$0.0	Used specifically for the Salton Sea for Species Conservation Habitat (SCH) construction.
DWR & IID via WCB - Prop 50	WC - 79565	$4.8	$4.8	$4.8	$0.0	$1M to DWR 2008 Salton Sea planning. $3.3M allocated to IID for construction of power lines to SCH project (completed). $0.5M allocated to DWR and reserved for SCH construction.
DWR – via WCB - Prop 12	5096(a)(7)	$4.75	$4.75	$4.75	$0.0	$4.75M used for SCH.
DWR – via CDFW - Prop 84	PRC - 75050(b)(3)	$47	$43.3	$41.91	$5.09	Since 2008, SCH planning, design, and staffing ($14.5M), plus $21M used for SCH construction, $900K for construction management, and $3M for Financial Assistance Program projects.

Table 5. Funding Available for the Salton Sea Management Program (in millions) (Contd.)

Agency and Source	Authority	Authorized for Appropriation	Appropriated/ Committed	Expended as of 9/30/24	Available for Additional Commitment	Use
DWR – (State Operations) - Prop 1	WC - 79736(c)	$20.0	$20.0	$18.11	$0.0	Staffing and other design costs for SSMP projects. (Of the $20M appropriated, $5.5M is committed to existing Salton Sea Projects.)
DWR – (Construction) - Prop 1	WC - 79736(c)	$60.0	$60.0	$57.71	$0.0	Construction of SCH projects.
CNRA - Prop 68	PRC - 80116	$165.7	$165.7	$132.1	$0.0	$135.7M for construction of SCH projects, $20M for Habitat Enhancement and Dust Suppression Projects. Approximately $10M for staffing and administration.
DWR - General Fund	Budget Act of 2021	$40.0	$40.0	$29.34	$0.0	Dust suppression and vegetation enhancement projects, staffing, and other design costs for SSMP projects.
DWR - General Fund	Budget Act of 2022	$11	$11	$8.25	$0.0	SCH construction, construction management, and staffing.
DWR - General Fund	Budget Act of 2023	$50	$50	$34.82	$0.0	Funding committed to SCH and vegetation enhancement projects. Expenditures will occur when agreements are finalized.
DWR – GGRF State Operations	Budget Act of 2024	$4.319	$4.319	$0.475	$0.0	Item 3860-001-3228 of the Budget Act of 2024, as amended by AB 107 (Chapter 22, Statutes of 2024) appropriates to Department of Water Resources, CA Water Plan Program $4.319M for 2024 ($719K for Technical Assistance Staff + $3.6M Technical Assistance Contracts).
DWR – General Fund	Budget Act of 2024	$6.835	$6.835	$0	$0.0	Item 3860-101-3228 of the Budget Act of 2024, as amended by SB 108 (Chapter 35, Statutes of 2024) appropriates to Department of Water Resources, CA Water Plan Program $6.835M for 2024.

Table 5. Funding Available for the Salton Sea Management Program (in millions) (Contd.)

Agency and Source	Authority	Authorized for Appropriation	Appropriated/ Committed	Expended as of 9/30/24	Available for Additional Commitment	Use
DWR – General Fund Capital Outlay	Budget Act of 2024	$60	$60	$0.299	$0.0	Item 3860-301-3228 of the Budget Act of 2024, as amended by SB 108 (Chapter 35, Statutes of 2024) appropriates to Department of Water Resources $60M for 2024.
DWR - Salton Sea Authority[b] - Prop 68	PRC-80110(a)	$19.25	$19.25	$0.91	$0.0	$19.25M to implement North Lake Pilot Demonstration Project.
Revive the Salton Sea Fund	R&T - 18736	$0.2	$0.0	$0.0	$0.2	Tax Checkoff Box - $191K balance per State Controller's Office 6/30/2023 Report.
General Fund/ Reimbursements	Budget Act	$0.935/$0.316 annually	$0.935/$0.316 annually	$0.935/$0.316 annually	N/A	CDFW receives $437K General Fund and $498K reimbursement (via DWR) annually for positions supporting the Salton Sea. CNRA receives $166K General Fund and $150K reimbursement (via DWR) annually to support the Asst. Secretary for Salton Sea Policy position.
CDFW – Water Agency Contribution (Salton Sea Restoration Fund)	2003 QSA Agreements	$68.5[c]	$26.18	$20.06	See footnote	Annual surveys to monitor bird and fish populations at the Sea, including state and federal endangered species, staff development of various implementation and monitoring plans, issuance of Section 1600 permits, CEQA review, QSA Implementation Team staffing, etc.
State Total		**$591.34**	**$545.02**	**$382.42**	**$5.39**	**Amount shown is available and is committed to projects in the near term.**
Federal						
DWR	Bureau of Reclamation	$1.79	$1.79	$1.8	$0.0	Planning activities include preparing a Watershed Plan and implementation of dust suppression projects.

Table 5. Funding Available for the Salton Sea Management Program (in millions) (Contd.)

Agency and Source	Authority	Authorized for Appropriation	Appropriated/ Committed	Expended as of 9/30/24	Available for Additional Commitment	Use
DWR	Bureau of Reclamation	$245	$245	$9.54	$0.0	$70M total committed in December 2023 for construction and project management of initial SCH Expansion. $175M committed September 2024 for design and construction of further SCH expansion. This funding is committed to the State via a USBR funding agreement for State reimbursement for work performed.
Federal Total		**$246.79**	**$246.79**	**$11.34**	**$0.0**	
Overall Total		**$838.13**	**$791.81**	**$393.76**	**$5.39**	

Notes:

EIR/EIS = Environmental Impact Report/Environmental Impact Statement

FY = Fiscal year

GF = General Fund

GGRF = Greenhouse Gas Reduction Fund

K = Thousand

M = Million

NRCS = National Resources Conservation Service

PRC = Public Resources Code

Prop = Proposition

QSA = Quantification Settlement Agreement

R&T = Revenue and Taxation

SSMP = Salton Sea Management Program

WCB = Wildlife Conservation Board

Footnotes:

a. Bond funds provided reflect the bond allocations available after statewide bond costs and outyear amounts already committed to by the Legislature. Statewide bond costs are authorized "off the top" in each bond act for things like the State Treasurer's Cost of issuing the bonds, Department of Finance's Costs of auditing bond expenditures, etc. Exact amounts are published on the CNRA bond accountability website.

b. The Salton Sea Authority is a Joint Powers Authority (JPA) of local interested parties including the Torres Martinez Desert Cahuilla Tribe, two water agencies, and two county governments.

c. While a total of $68.5 million will ultimately be available, $38 million in payments must be collected between FY 2024-25 and FY 2047-48 to support any expenditures from the fund. Annual payments from water districts average approximately $1.58M annually, which CDFW uses to fund existing staff and positions received through approved budget change proposals.

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