STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
STAFF REPORT
April 2025

Annual Public Workshop on the Status of Phase 1 of the Salton Sea Management Program

Introduction

This staff report provides information on the background and status of the Salton Sea Management Program (SSMP) as part of the State Water Resources Control Board's (State Water Board) oversight role of the SSMP.

The staff report is organized into five sections:

- **Section 1: Salton Sea Watershed** provides a description and current environmental conditions of the Salton Sea.
- **Section 2: Water Right Transfer** provides a background and history of water rights order (WRO) 2017-0134.
- **Section 3: Purpose of Workshop** provides a high-level summary of why the State Water Board is holding the workshop.
- **Section 4: SSMP Annual Report** provides an overview of purpose and submittal of the SSMP Team's annual report.
- **Section 5: More Information** provides a link to the State Water Board's Salton Sea webpages and staff contact information.

Section 1: Salton Sea Watershed

Description of the Salton Sea

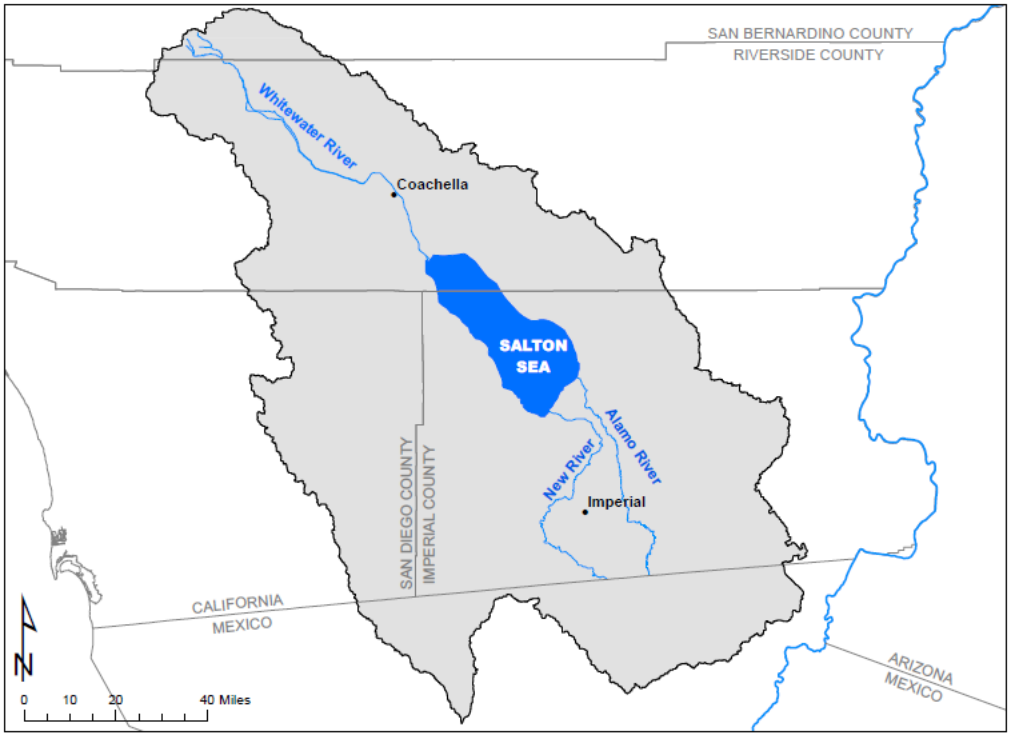
Located in the Salton Basin (part of the Colorado River Delta), the Salton Sea is California's largest lake, with a surface elevation of approximately 240 feet below sea level. The Salton Sea watershed encompasses an area of approximately 8,000 square miles from San Bernardino County to the Mexicali Valley. The Salton Sea lies at the lowest point in the Salton Basin and collects runoff and agricultural drainage from most of Imperial County, a portion of Riverside County, smaller portions of San Bernardino and San Diego Counties, as well as the northern portion of the Mexicali Valley (see Figure 1).

Over the past millennia, the meandering Colorado River periodically filled the Salton Basin, creating ancestral freshwater lakes that eventually evaporated. Today's Sea was formed in 1905 when massive flooding caused the Colorado River to break through an irrigation canal and flow uncontrolled into the Salton Basin for 18 months. After the

breach in the irrigation canal was fixed, the Salton Sea has been primarily sustained by agricultural drain water, approximately 80 percent of which flows from the farming-heavy Imperial Valley to the south. However, inflow into the Sea has declined over the past several decades, causing the water level to recede. This has led to increased salinity and concentrated nutrients from farm runoff, both of which create inhospitable conditions for fish and wildlife. The Sea is currently more than twice as salty as the Pacific Ocean, and nutrient pollution has caused an overgrowth of algae which are depleting oxygen levels. Many species depend on the Salton Sea ecosystem; it is home to many species of fish and is a critical stop on the Pacific Flyway for migrating birds, including several threatened and endangered species.

Further, receding water levels create public health risks for nearby residents due to air pollution from dust particles released from the previously submerged lakebed. With no natural outlet, decades of agricultural and wastewater accumulation are embedded in the Sea's now-exposed soils. As the Sea continues to shrink, more of this particulate matter that contains dangerous pollutants will be released into the air.

Figure 1: Map of the Salton Sea Watershed



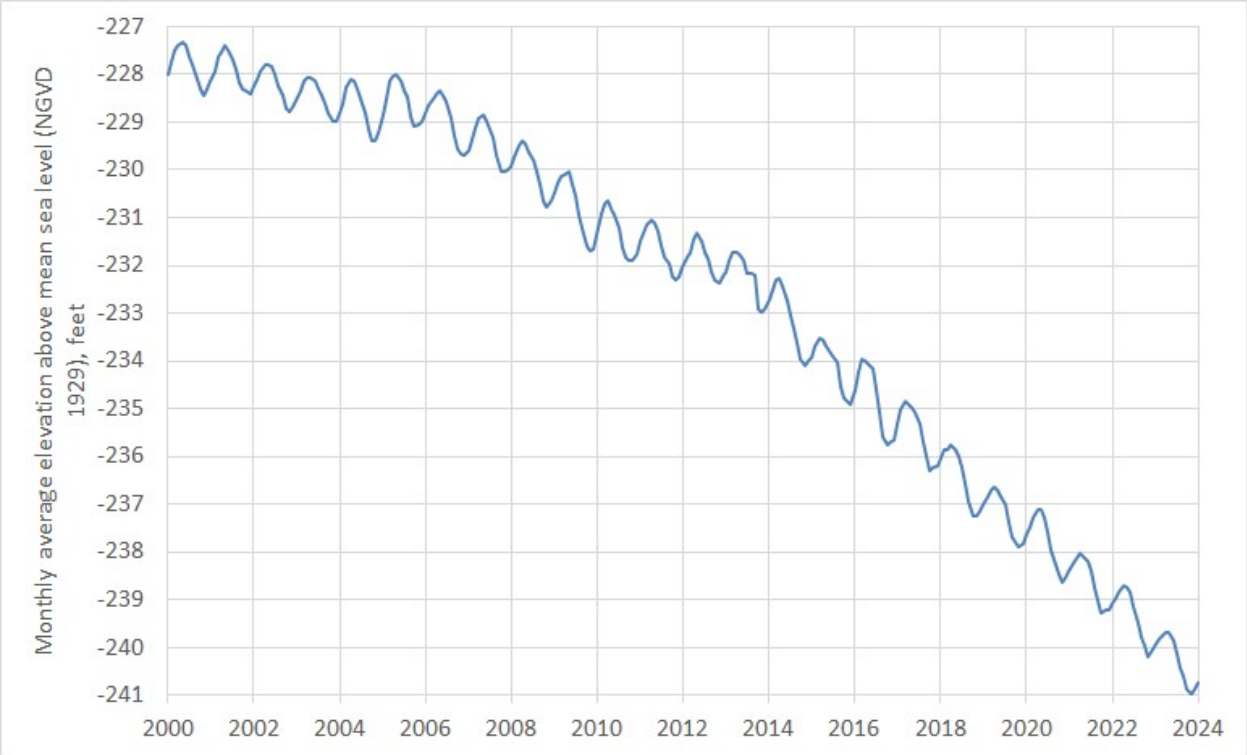
Environmental Conditions of the Salton Sea

Environmental conditions are changing rapidly within the Salton Sea watershed, in part due to water transfers under the 2003 Quantification Settlement Agreement and water management planning within Coachella, Imperial, and Mexicali Valleys. While inflows into the Sea have remained relatively stable over the last few years, they remain lower than the evaporative loss from the Sea's surface. There will therefore be a reduction of inflows to the Salton Sea as time progresses, which without restoration actions will

result in declining surface water elevations and increased salinity at the Salton Sea. Additionally, ongoing drought conditions on the Colorado River will influence the conditions at the Salton Sea, as the Colorado River is the sole source of water for the Imperial Valley, and the main source of inflow into the Salton Sea. Near-term reductions in water use and increases in water conservation can reduce inflows to the Sea and result in additional acres of exposed lakebed.

As of March 9, 2025, the Pacific Institute states that the current elevation of the Sea is 241.87 feet below mean sea level. This is a drop of 13 feet, from the 2003 baseline elevation of 228.9 feet below mean sea level. The reduction of Salton Sea area is currently 36,500 acres (57 sq. miles), and there are approximately 22,400 acres (35 sq. miles) of net exposed playa. The Salton Sea is currently shrinking by about 2,400 acres (3.75 sq. miles) each year. There has been a steady decline in the surface water elevation of the Salton Sea, as shown in Figure 2 below.

Figure 2: Salton Sea Elevation from January 2000 to January 2024



Data available from USGS at:
https://waterdata.usgs.gov/ca/nwis/uv?site_no=10254005

Section 2. Water Right Transfer

On October 28, 2002, the State Water Board issued Water Rights Order (WRO) 2002-0013 which approved the long-term transfer of water from the Imperial Irrigation District (IID) to the San Diego County Water Authority, the Coachella Valley Water District, and

the Metropolitan Water District of Southern California. On December 20, 2002, the State Water Board issued WRO 2002-0016, which revised the original Order.

On November 18, 2014, IID filed a Petition for Change seeking modification of Revised Order WRO 2002-0013. In May 2015, Governor Edmund G. Brown, Jr. established the Salton Sea Task Force to identify realistic short and medium-term goals to respond to potential air quality and ecological impacts resulting from reduced flows of fresh water to the Salton Sea. As a part of the Salton Sea Task Force, the State Water Board regularly monitored and assessed progress on the implementation of the SSMP and held multiple workshops from March 2015 through September 2017. On November 7, 2017, the State Water Board adopted WRO 2017-0134 amending revised WRO 2002-0013 to incorporate additional conditions that set forth specific restoration milestones (see State Water Board Table 1) to address public health and environmental concerns within Phase 1 of the SSMP.

WRO 2017-0134 requires that the State Water Board hold a public meeting during each year of Phase 1 of the SSMP (2018-2028) to receive oral and written comments on the status of Salton Sea restoration. The order also requires an annual report from the California Natural Resources Agency (CNRA), to identify:

I. Completed projects and milestones achieved in the prior year;
II. Amount of acreage of completed projects that provide dust suppression and habitat restoration, broken down by habitat type;
III. Upcoming projects to be completed and milestones to be achieved prior to the next annual progress report;
IV. The status of financial resources and permits that have not been secured for future projects;
V. Any anticipated departures from the dates and acreages identified in condition 24 of the order (see State Water Board Table 1);
VI. Progress toward development of the long-range plan described in condition 26 of the order, and;
VII. In the event an annual milestone shortfall exceeds 20 percent of a year's annual obligation, a plan that will cure the deficiency within 12 months.

WRO 2017-0134 contains annual implementation acreage milestones and cumulative amounts for 2018 through 2028, shown in the table below, including a requirement that no less than 50 percent of the annual milestones shall provide habitat benefits for fish and wildlife that depend on the Salton Sea ecosystem.

State Water Board Table 1: Specific restoration milestones to address public health and environmental concerns within Phase 1 of the SSMP.

Year	Total acreage of habitat and dust-suppression projects that shall be completed each year (annual milestones).	Cumulative acreage to be completed by the end of each year.
2018	500	500
2019	1,300	1,800
2020	1,700	3,500
2021	3,500	7,000
2022	1,750	8,750
2023	2,750	11,500
2024	**2,700**	**14,200**
2025	3,400	17,600
2026	4,000	21,600
2027	4,000	25,600
2028	4,200	29,800

Section 3: Purpose of Workshop

The State Water Board hosts an annual workshop so that interested parties can review and comment on activities undertaken over the previous year to help address environmental and public health issues at and surrounding the Salton Sea.

The California Natural Resources Agency (CNRA) leads these efforts, in collaboration with the California Department of Water Resources (DWR), and the California Department of Fish and Wildlife (CDFW), collectively the Salton Sea Management Program Team (SSMP Team). The SSMP Team provides an update to the State Water Board with other interested and involved parties in attendance. In addition to information presented by the SSMP Team, the Annual Public Workshop is an opportunity to hear from additional organizations on their involvement in the SSMP effort, and for the State Water Board to receive comments from the public.

The State Water Board's role in hosting the annual workshop came about as a result of recommendations made by the State's Salton Sea Task Force, and through continued oversight of a water right transfer order. Condition 28 of WRO 2017-0134 requires the State Water Board to hold an annual workshop and receive an annual report from the SSMP Team no later than March 31 of each year. In 2020, the annual workshop was delayed until August due to the pandemic. The workshop has been delayed until April or May since 2021 to allow sufficient time for review of the annual report by the public and State Water Board staff ahead of the workshop, as well as to allow additional time for public engagement and participation, including ensuring meeting materials are translated into Spanish.

Section 4: Salton Sea Management Program Annual Report

The main focus of the workshop is to receive an update from the SSMP Team on the SSMP, based on their annual report. The SSMP Team submitted their annual report to the State Water Board on March 28, ahead of the March 31 deadline set forth in WRO 2017-0134. State Water Board staff recognize that the annual report, while prepared in compliance with WRO 2017-0134, contains additional content beyond the requirements, including updates on planning, permitting, and construction activities intended to support the delivery of future milestones, as well as information on environmental conditions at the Sea. The report is available in English and Spanish on the SSMP website at: saltonsea.ca.gov.

Select Information from the Annual Report

The 82-page report was prepared by the SSMP Team. Stakeholders interested in the status of the Salton Sea Management Program are encouraged to review the annual report in its entirety.

CNRA Report Table 1 provides information on activities identified in the State Water Board WRO 2017-0134. For reader ease of reference, a copy of this table is provided below.

CNRA Report Table 1: Activities Identified in State Water Board Order WR 2017-0134 (SSMP Annual Report, Page 4).

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 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 a 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.
(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.
(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 Board 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.

CNRA Table 3 of the report, on page 62, provides a summary of SSMP projects with acreages. A partial copy of the table is provided below. The project status column was omitted but can be viewed by accessing the CNRA report.

CNRA Report Table 3: SSMP Project Summary (Project status column omitted) (SSMP Annual Report, page 62).

Year	SWRCB 2017-0134 Year End Milestone	SWRCB 2017-0134 Cumulative Year End Milestone	Land Access Secured	Total SSMP Acres Under Construction Each Year	Habitat Acres Completed[1]	Interim Dust Suppression Acres[2]	Dust Suppression Acres Completed[3]	SSMP Cumulative Reported Acres to SWRCB
2018	500	500	-	-	-	-	-	-
2019	1,300	1,800	4,100	-	-	-	-	-
2020	1,700	3,500	0	755	-	755	-	755
2021	3,500	7,000	1,709	5,809	22	500	-	1,277
2022	1,750	8,750	0	5,504	15	~~25~~ 118*	~~290~~ 197*	1,607
2023	2,750	11,500	1,000	4,960	130	319	414	2,445
2024	2,700	14,200	1,132	5,292	180	258	691	3,225
Cumulative to Date:			7,941	Not applicable	347	1,950	1,302	3,225

*The 93 acres at West Bombay Beach were previously reported as complete. However, seeding was not successful, so these acres were moved to interim dust suppression since this site received bales and furrows. West Bombay Beach will be re-seeded in 2025.
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.

CNRA Table 3 of the report, on page 57, provides a summary of SSMP projects planned through 2028. A copy of the table is provided below.

CNRA Report Table 2: SSMP Projects Planned Over 2025-2028 (SSMP Annual Report, page 57).

Year	SWRCB 2017-0134 Year End Goal	SWRCB 2017-0134 Cumulative Year End Goal	Projects
2025	3,400	17,600	• Complete construction at Tule Wash (1,217 acres) and West Bombay Beach (93 acres) • Complete construction on the SCH Expansion East Pond (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 at 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 1 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: Wister Frink, 2,058 acres; Clubhouse-to-Tule Wash, 490 acres; San Felipe Fan-to-Kane Spring, 192 acres; San Felipe Expansion, 1,014 acres; Clubhouse Expansion, 516 acres; Tule Wash-to-San Felipe Fan, 1,024 acres; Tule Wash Expansion, 1,761 acres; and Whitewater West, 1,295 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 the 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 investigations.

Section 5: More Information

The annual report, as required by WRO 2017-0134 was submitted to the State Water Board on March 28, and was publicly released by the SSMP Team in both English and Spanish, ahead of the March 31 deadline set forth in WRO 2017-0134. The annual report is available on the SSMP webpage, as well as State Water Board's Salton Sea webpages in English and Spanish. The SSMP Team will present information from their report during the May 21st workshop.

The State Water Board maintains a webpage in both English and Spanish with additional information on the Salton Sea and engagement on the Salton Sea Management Program. Information relating to the upcoming workshop and how to participate will be added to the webpages as it becomes available.

For questions regarding this staff report or the upcoming workshop, contact Stephanie Holstege, Senior Environmental Scientist, Specialist at stephanie.holstege@waterboards.ca.gov.