CALIFORNIA natural resources AGENCY

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2020 Annual Report on the Salton Sea Management Program

February 2020

PROJECT TEAM

This annual report was prepared by staff from the California Natural Resources Agency (CNRA), the California Department of Fish and Wildlife (CDFW), the California Department of Water Resources (DWR), the California Air Resources Board (CARB), and the following consultants supporting the Salton Sea Management Program (SSMP): Cardno, ESA, and Tetra Tech.

ACKNOWLEDGMENTS

We acknowledge data, maps, and photographs provided by the various organizations working on the Salton Sea, including the Imperial Irrigation District, Sonny Bono Salton Sea National Wildlife Refuge, Audubon California, and the Oasis Bird Observatory.

ADDITIONAL INFORMATION

An electronic copy of this report and additional information about the SSMP can be found at www.saltonsea.ca.gov. To receive periodic updates on SSMP implementation, please sign up at www.saltonsea.ca.gov or send an email to cnra-saltonsea@resources.ca.gov.

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EXECUTIVE SUMMARY

Improving air quality and creating habitat at the Salton Sea are key priorities for Governor Gavin Newsom and the California Natural Resources Agency. The Sea's continuing decline in elevation and resulting exposure of lakebed negatively impact surrounding communities and reduce remaining habitat for fish and wildlife. The California Natural Resources Agency, the California Department of Water Resources, and the California Department of Fish and Wildlife (together, the State Team) are focused on implementing the Salton Sea Management Program's (SSMP's) 10-Year Plan to improve conditions by constructing 30,000 acres of habitat and dust suppression projects around the Sea.

Since the California Natural Resources Agency's last report to the State Water Resources Control Board (State Water Board) in March 2019, the State Team has significantly improved its capacity to deliver projects at the Sea. Informed by constructive input from community members, local leaders, and interested groups, the team has strengthened its organizational structure and worked with partners to plot a course for making substantial progress on the ground this year.

Project Delivery

The State Team worked with the Imperial Irrigation District (IID) to complete the first project under the SSMP in January 2020. The 112-acre Bruchard Road Dust Suppression Project used surface roughening , an erosion control practice, to create furrows that will slow wind down as it sweeps over exposed lakebed and physically trap soil particles entering the roughened area from upwind sources.

The project also served to develop a streamlined permitting approach that will expedite additional dust suppression projects to be constructed and completed this year.

The State Team is on track to release a draft Dust Suppression Action Plan in February 2020 that identifies and prioritizes locations for approximately

8,200 acres of dust suppression projects around the Sea — including up to 3,800 acres identified for completion in 2020. The projects, to be constructed in strategic locations along the perimeter of the Sea, will target the most emissive sites to help control dust from exposed lakebed areas and limit Sea-related impacts on air quality for communities such as Salton City, Bombay Beach, and North Shore.

In addition to public meetings held in December 2019 to inform development of the Dust Suppression Action Plan, three more meetings are slated for late February and early March to gather community input to help refine the plan. The final plan will be released by May and will serve as a "living document" that will be refined over time through monitoring and adaptive management, as well as continued engagement with the community. The State Team will make a concerted effort to complete the approximately 8,200 acres of dust suppression projects identified in the plan by the end of 2022.

The State Team is on track to begin construction in fall 2020 on the first major habitat project of the SSMP — the 3,770-acre Species Conservation Habitat (SCH) Project at the southern end of the Sea along both sides of the New River. This project will suppress dust while creating a series of ponds with islands and areas of varying water depths to serve as fish and bird habitat. After obtaining site access in May 2019, the State Team launched the contracting process for the project and expects to award a design-build contract in late summer. The State Team also executed a water use agreement with IID for the project. The State has committed $206.5 million for SCH construction and expects to complete the project by the end of 2023.

Planning

This spring, the State Team will launch the public phase of the federally required environmental planning process for the SSMP. The process will complete permitting for the full 30,000 acres of projects identified in the Phase 1: 10-Year Plan. The first phase of this project will include several public scoping meetings. The State Team is partnering with the U.S. Army Corps of Engineers to complete a detailed environmental document under the National Environmental Policy Act (NEPA) by spring of 2021.

The State Team continues to work with local partners, including Riverside County and the Salton Sea Authority, to further refine and incorporate the North Lake Concept into the SSMP. The concept envisions construction of a 3,680-acre horseshoe-shaped lake at the north end of the Sea to control dust and create habitat for fish and birds.

The State Team also is meeting with proponents of several other individual projects that could become part of the SSMP, including several IID proposals to suppress dust on exposed lakebed as well as Audubon California's Bombay Wetlands Project, which would suppress dust while also creating managed wetland habitat on the east side of the Sea.

While the State Team continues to implement the Phase 1: 10-Year Plan, it is simultaneously developing a path forward for long-term restoration and management of the Salton Sea. As an important first step, the State has launched a process to convene an independent review panel to evaluate the feasibility of water importation as a long-term strategy for restoration of the Salton Sea.

The State Team issued a Request for Proposals on February 14, 2020, for the panel, which will solicit and evaluate water importation proposals, including those received in response to a Request for Information in 2018. Building on previous work to date, the panel will conduct a thorough and objective assessment of the high-risk and complex technical topics associated with water importation. By the end of 2020, the independent review panel will provide the State with a report summarizing its findings.

The report will inform the State Team's development of a long-term plan for the Salton Sea beyond the Phase 1: 10-Year Plan. The new plan will likely include a range of feasible restoration alternatives. The State Team will begin development of the long-term plan in the first quarter of 2021 and intends to complete it by the end of 2022.

Partnerships

The State Team also has expanded partnerships and collaboration with local, state, and federal entities. Key activities include ongoing engagement with the Salton Sea Authority, IID, Riverside County, and Imperial County to develop projects to complement or include in the SSMP. Examples include a project in cooperation with the Salton Sea Authority to rehabilitate and restore boat access to enable continued scientific monitoring and data collection at the Sea and a project in collaboration with the Kounkuey Design Initiative to expand access to recreation at the Salton Sea State Recreation Area.

The State Team also is working with partners to pursue available federal funding sources, including submitting an application to the U.S. Department of Agriculture in December 2019 for $7 million in funding under the 2018 Farm Bill through the Natural Resources Conservation Service's (NRCS's) Regional Conservation Partnership Program (RCPP).

In addition, the team is working with partners to develop templates for land access and water availability to help streamline project delivery. Other areas of focus include addressing scientific data gaps and identifying priorities for a monitoring plan for SSMP implementation.

Community Engagement and Transparency

Since the last annual report to the State Water Board, the State Team has increased its community engagement. In partnership with local community groups and leaders, the State Team reinvigorated the SSMP Engagement Committee and held community meetings to inform development of the draft Dust Suppression Action Plan. Members of the State Team participated in numerous meetings with local groups and non-governmental organizations, including two roundtables hosted by Secretary Wade Crowfoot and Assemblymember Eduardo Garcia, and a community engagement forum at the Salton Sea Summit in October.

In cooperation with community groups, the State Team is refining a Community Engagement Plan that will guide the State's long-term approach to engaging with Salton Sea community members, listening to their ideas and concerns, and incorporating their input into SSMP decisions where possible. The Engagement Committee will serve as the hub for implementing the plan and

Biological sampling in the Salton Sea.

provide direction at its next meeting in March 2020.

The State Team also took significant steps to improve transparency of SSMP work currently underway, including launching a comprehensive website in February 2020 at www.saltonsea.ca.gov to provide a single, one-stop-shop site where the public can find information on SSMP projects and opportunities to provide input. The website includes a meeting calendar, access to meeting materials and notes, and will continue to be built out with additional features.

The State continues to share news and updates via an e-newsletter that debuted in November 2019. The *Salton Sea Management Program Update* provides information on project delivery, upcoming meetings, opportunities to provide input, and other relevant information and is distributed through the California Natural Resources Agency Salton Sea Listserv.

The State Team also is working to increase its physical presence at the Sea by establishing a local Salton Sea Program Office. Short-term options under consideration include establishing a temporary project office at the southern end of the Sea or entering into a lease agreement to establish an office in one of the local communities. Long-term options being considered include co-locating an office at an existing government facility, constructing a new office space, or entering into a long-term lease agreement. The State will conduct a comprehensive assessment of the options in the first half of 2020.

Forward Momentum

With expanded institutional capacity now in place and a detailed time line to deliver projects (see **page 10** of this report), the State Team will continue implementing the SSMP in collaboration with its partners. At the same time, the Newsom Administration remains focused on securing additional resources to implement the program. In early January, Governor Newsom proposed $220 million in funding to support SSMP implementation as part of a proposed general obligation bond measure before the Legislature for consideration.

The State looks forward to working with local, tribal, state, and federal partners to complete projects that improve conditions at the Sea for local communities as well as fish and wildlife.

1 INTRODUCTION AND PURPOSE

The Salton Sea Management Program (SSMP) was established in 2017 and is 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). The SSMP released its Phase I: 10-Year Plan in 2017 and updated it in 2018 to guide state projects at the Salton Sea over the next decade (2018–2028).

The Phase I: 10-Year Plan lays out a high-level schedule for project locations and identifies acreage goals to meet the requirements of State Water Resources Control Board (State Water Board) Order WR 2017-0134. This order, adopted in 2017, outlines the State Water Board's oversight role in monitoring and ensuring progress toward the goals of the SSMP and sets annual milestones for habitat restoration and dust suppression projects.

Report Goals

This annual report presents a summary of recent and planned activities by the SSMP to address air quality and ecological threats at the Sea. This report also provides an update on funding availability and needs. This update is a requirement of State Water Resources Control Board Order WR 2017-0134.

In addition, a Memorandum of Understanding (MOU) with the U.S. Department of the Interior affirms that the State has the lead role in Salton Sea management efforts and expresses mutual intent to facilitate implementation through expedited permitting and other support where possible.

The purpose of this report is to provide an update on SSMP activities over the past year and to outline future activities and funding status and needs. The activities performed by the State Team fall under four broad areas as described in this report: **project delivery; planning** for future activities of the SSMP; **partnerships** to enhance the capacity of the State Team; and **outreach and engagement** with communities and stakeholders in the Salton Sea region and beyond. The report also provides technical information and data requested by the State Water Board, including the most recent environmental conditions at the Sea.

Table 1 provides an overview of the reporting elements defined in Order WR 2017-0134. As noted above, this report goes beyond the reporting elements in the Order and provides an update on current conditions at the Sea as well as a range of management activities intended to support the efficient and timely delivery of future project milestones.

With the Salton Sea as the backdrop, Arturo Delgado (left) was sworn in as Assistant Secretary for Salton Sea Policy on October 3, 2019. Natural Resources Secretary Wade Crowfoot administered the oath. Delgado previously served as Salton Sea Program Manager at the CDFW. Crowfoot also thanked and acknowledged Bruce Wilcox for serving as the State's point person on Salton Sea policy from 2015 to October 2019.

Table 1. Activities Identified in Stipulated Order

Item	Reporting Requirement	SSMP Activity
(i)	Completed projects and milestones achieved in the prior year.	Though the State Team did not complete projects and acreage identified in the Stipulated Order in 2019, it significantly improved its capacity to deliver projects. The team completed the 112-acre Bruchard Road Dust Suppression Project in January 2020 and expects to complete up to 3,800 acres of additional dust suppression projects by the end of 2020.
(ii)	Amount of acreage of completed projects that provide dust suppression and habitat, broken down by habitat type.	Following resolution of site access issues in 2019, the State Team expects to award a design-build contract in summer 2020 for the Species Conservation Habitat (SCH) project, which will transform 3,770 acres of exposed lakebed in the New River area into a brackish shallow- and deep-water fish and bird habitat that will include bird islands for roosting and nesting. Construction will begin as soon as possible once the contract is awarded. In addition, a 112-acre Bruchard Road Dust Suppression Project was completed in an emissive area along the western delta of the New River.
(iii)	Upcoming projects to be completed and milestones to be achieved prior to the next annual progress report.	The following activities are expected to be completed in 2020: Award of design-build contract for SCH and implementation of project; programmatic environmental analysis of the planned Phase I projects (NEPA and permits for 10-Year Plan); implementation of Dust Suppression Action Plan projects covering up to 3,800 acres; completion of programmatic land use and water agreements; and securing of additional federal and state funding for SSMP implementation.
(iv)	Status of financial resources and permits that have not been secured for future projects.	Additional funding will be required to complete all the acreage requirements in the Stipulated Order. Funding needs will be identified as habitat and dust suppression projects are implemented in 2020. The financial status of the SSMP is presented in Chapter 3.
(v)	Any anticipated departures from the dates and acreages identified in condition 24 of the Stipulated Order.	Based on current understanding of the steps required to implement large-scale projects at the Salton Sea, Chapter 6 presents proposed targets to achieve the acreage schedules.
(vi)	Progress toward development of the long-range plan described in condition 26.	Requests for information or RFIs for water importation proposals were solicited in 2017 and received in 2018. CNRA issued a request for proposals in February 2020 to develop an independent panel of technical experts to review water importation proposals. Chapter 3 describes the status of the long-term plans.
(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 project delivery is described throughout this report and is summarized in Chapter 6.

2 SSMP PROJECT DELIVERY

Since CNRA's last report to the State Water Board in March 2019, the State Team has significantly improved its capacity to deliver projects at the Sea. Aided by constructive input from community members, local leaders, and interested groups, the team has strengthened its organizational structure and worked with partners to set the stage for substantial progress on the ground in 2020.

2.1 Bruchard Road Dust Suppression Project

The State Team completed the Bruchard Road Dust Suppression Project in January 2020. The project, located near the mouth of the New River at the Salton Sea, was the first project completed under the SSMP and was designed to reduce fugitive dust emission from areas of lakebed that have been exposed because of dropping lake levels. The project also served to develop a streamlined permitting approach that can be implemented at other sites to expedite projects around the Sea.

The project used surface roughening to reduce dust emissions. Surface roughening created 2- to 3-foot ridges and furrows perpendicular to the prevailing wind direction. This approach (a) modifies the airflow and thus decreases wind velocity at the soil surface, and (b) physically traps soil particles that enter the roughened area from upwind sources. Surface roughening was favored for this project because it is expected to provide quick, waterless, and effective dust control of the soil types present at the site.

Bruchard Road Dust Suppression Project furrows looking northeast.

2.2 Species Conservation Habitat Project

The Species Conservation Habitat (SCH) Project is the first major habitat project of the Phase I: 10-Year Plan. The project will encompass an approximately 3,770-acre site of exposed lakebed located at the southern end of the Salton Sea, east and west of the New River. The SCH will create a series of ponds with islands and areas of varying water depths to serve as fish and bird habitat. The project will also function as a dust suppression project. The water sources for the SCH will be brackish water pumped from the New River, runoff from the existing drainage facilities, and saline water pumped from the Salton Sea. The SCH will also serve as a reservoir for future projects, and runoff may be used to feed into potential future downstream habitat and dust suppression projects.

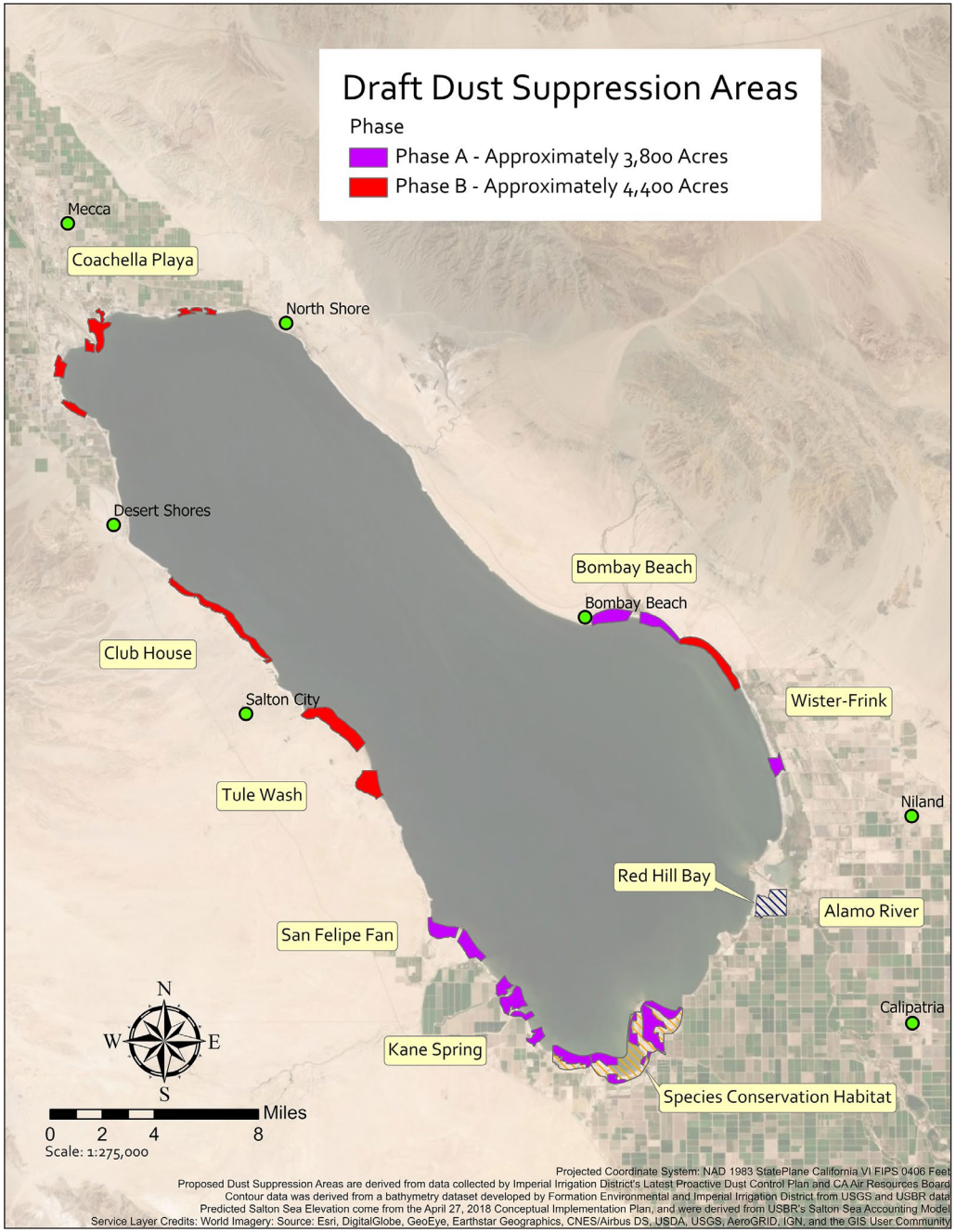
Through legislative authority, DWR will utilize a design-build contractor for this project. The contract is slated to be awarded in summer 2020, and project construction will begin as soon as possible after that. The project is expected to be completed by the end of 2023. The State has committed $206.5 million for construction of the project.

2.3 Additional Dust Suppression Projects

The State Team is focused on implementing near-term dust control projects and is developing a Dust Suppression Action Plan to prioritize and identify approximately 8,200 acres of dust suppression projects on emissive lakebed at locations around the Salton Sea (**Figure 1**). The plan proposes to implement dust suppression projects using a two-phased approach. Phase A would consist of up to 3,800 acres of surface roughening projects identified for completion in 2020. Phase B would consist of vegetation establishment on portions of Phase A project sites, where possible, and implementation of approximately 4,400 acres of additional projects in areas that require further data collection, design, and planning and have more extensive environmental permitting requirements. Phase B projects would be implemented as early as possible and a concerted effort would be made to complete identified projects by the end of 2022.

Bruchard Road Dust Suppression Project Construction.

Project Bidder Site Visit at SCH Project Site, November 2019.



In addition to public meetings held in December 2019 to inform development of the Dust Suppression Action Plan, three more meetings are slated for late February and early March to gather additional community input prior to finalizing the plan. The final plan will be released by May and will identify specific projects, methods and activities, schedules, and locations. The following is a preliminary list of Phase A projects being considered for implementation in 2020:

1. **Bombay Beach**
   Phase A – 2020 - implementation of up to 200 acres of surface roughening.

2. **Kane Spring**
   Phase A – 2020 - implementation of up to 820 acres of surface roughening.

3. **San Felipe Fan**
   Phase A – 2020 - implementation of up to 770 acres of surface roughening.

4. **Species Conservation Habitat Site**
   Phase A – 2020 - implementation of up to 1,800 acres of surface roughening.

5. **Wister-Frink**
   Phase A – 2020 - implementation of up to 190 acres of surface roughening.

Figure 1. *Draft Dust Suppression Action Plan Preliminary Project Locations and Acres by Phase.*

3 PLANNING

Since the last annual report to the State Water Board, the State Team has redoubled its planning activities on several fronts to create a strategic vision for delivering dust suppression and habitat projects in the remaining years of the Phase I: 10-Year Plan.

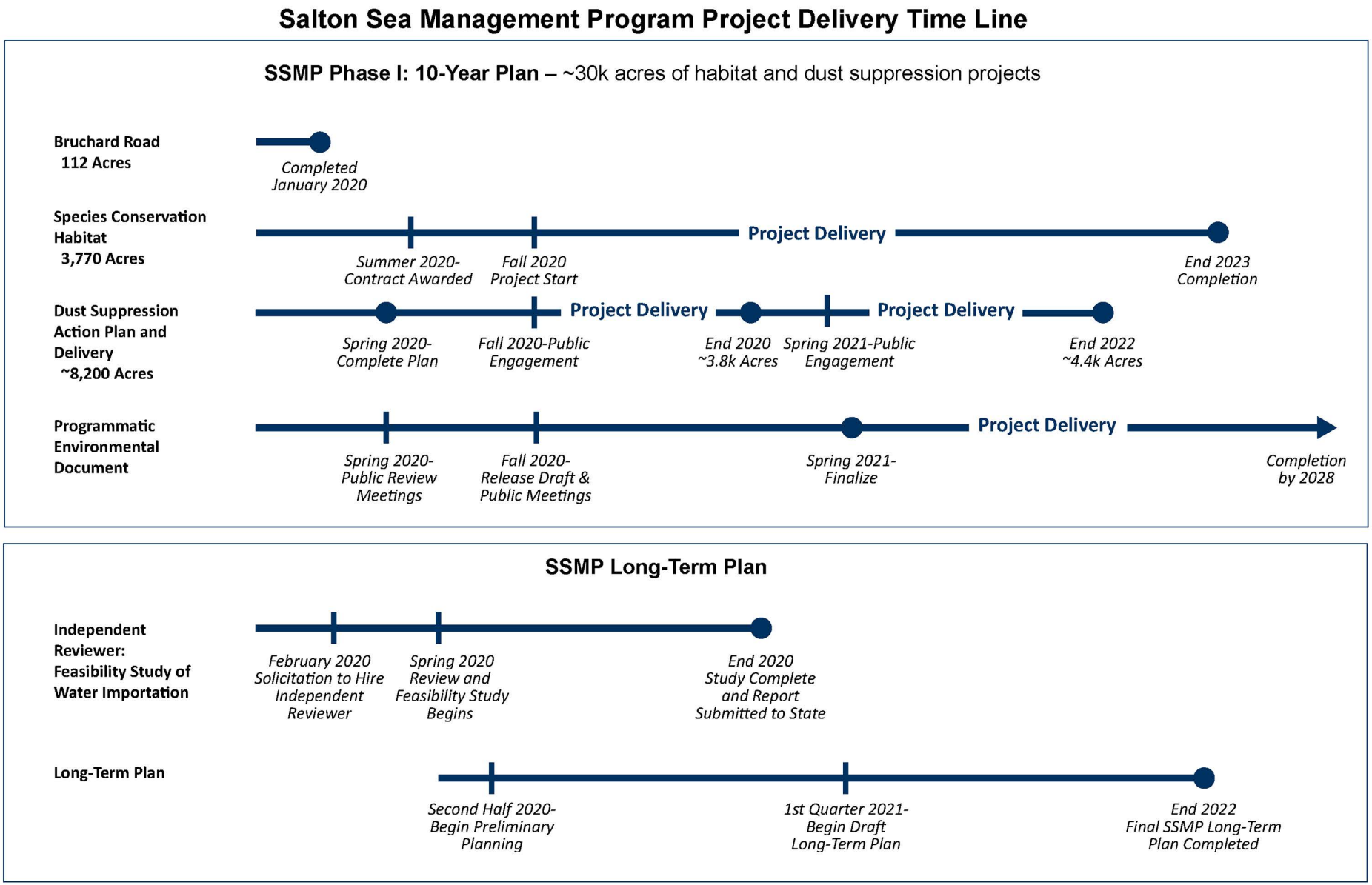
The State Team has developed a schedule with four tracks to meet the 10-Year Plan commitments. The 112-acre Bruchard Road Project was completed in January 2020. The SCH is on pace to begin construction by fall 2020. The Final Dust Suppression Action Plan will be released by May 2020, with implementation beginning shortly thereafter. The programmatic environmental document planning for the full 10-Year Plan will begin with the public scoping phase in spring 2020. In addition, the State Team is starting the process to meet its commitments for long-term planning beyond Phase I. The strategic overview of the program is shown in **Figure 2** and discussed in detail in the following sections.

3.1 Phase 1: Ten-Year Plan — Environmental Planning

3.1.1 Dust Suppression Action Plan

The State Team is developing a Dust Suppression Action Plan to prioritize and identify approximately 8,200 acres of dust suppression projects at locations around the Salton Sea based on soil emissivity, prevailing wind patterns, threat to populated areas, and community engagement (**Figure 1**). The State Team, using IID data as a foundation, has employed a technical approach to identifying priority areas for near-term dust suppression projects around the Sea. The State is working cooperatively

Figure 2. *Salton Sea Management Program project delivery time line.*



to incorporate data collected by IID to inform identification of priority areas. The plan is intended to expedite delivery of dust suppression projects through a streamlined environmental compliance and permitting process.

As described in Chapter 2, the plan proposes to implement dust suppression projects using a two-phased approach. Phase A would consist of up to 3,800 acres of surface roughening projects identified for completion in 2020. Phase B would consist of vegetation establishment on portions of Phase A projects, where possible, and include implementation of approximately 4,400 acres of additional projects in areas that require further data collection, design, and planning and have more extensive environmental permitting requirements.

The ability to secure land access agreements to implement projects on Bureau of Land Management, Bureau of Reclamation, and IID-owned lands is also a site location priority. Other key factors that will be considered include: areas outside of U.S. Army Corps of Engineers (USACE) jurisdiction that have the least amount of federal and/or state endangered species concerns; sites that have existing or require minimal California Environmental Quality Act (CEQA) and NEPA compliance; and sites with suitable soils to create stable furrows. The State is coordinating with IID to use existing scientific data that IID has collected around the Salton Sea to better inform site selection and project type with consideration of factors related to emissivity.

In addition to public meetings held in December 2019 to inform development of the Dust Suppression Action Plan, three more meetings are slated for late February and early March to gather community input to help refine the plan. The final plan will be released by May and will serve as a "living document" that will be refined over time through monitoring and adaptive management, as well as continued engagement with the community. The State Team will make a concerted effort to complete approximately 8,200 acres of dust suppression projects identified in the plan by the end of 2022.

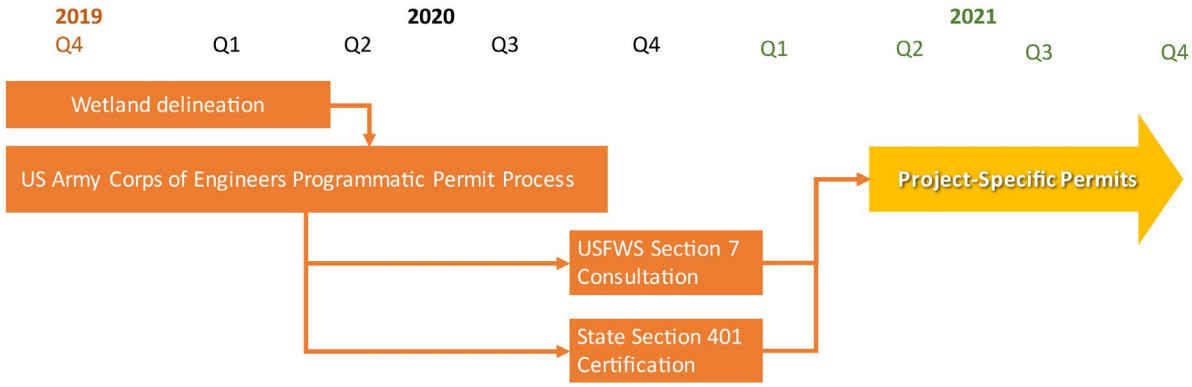
3.1.2 Programmatic Environmental Planning

The State has already started the federally required NEPA environmental planning process for the SSMP that will facilitate permitting for up to 30,000 acres of the Phase 1: 10-Year Plan, areas that are not addressed separately in the Dust Suppression Action Plan. The NEPA programmatic environmental document will analyze a range of covered activities and is required to ensure NEPA compliance of projects such as the North Lake Concept, additional habitat ponds at the New and Alamo Rivers, various dust suppression projects, and others that will be determined through public input. Over the last year, the State Team built relationships with the USACE team, which will be taking the lead for the NEPA permitting for the SSMP. CNRA has provided a letter of intent to the USACE to start the application process. A Water Resources Development Act (WRDA) funding agreement was drafted, reviewed, and negotiated by both the USACE and the State Team. The agreement has been signed by both parties and funds have been deposited with the USACE, which will facilitate funding the NEPA process as well as individual project permitting for projects implemented under the SSMP.

The State/USACE NEPA team has developed a detailed schedule with roles and responsibilities outlined for each step of the process (a summary of the schedule is shown in **Figure 3**). This schedule will serve as a backdrop to measure the team's ability to meet the time line and milestones for the program. Another aspect of the roles and responsibilities is how the USACE will handle the large number of projects that will need final approval quickly to ensure timely initiation of SSMP projects. An approach was developed to address this potential bottleneck.

The State Team and the USACE have met to discuss the type of NEPA document that will be required to meet project needs. The two types of NEPA documents under consideration include a supplemental environmental impact statement (SEIS) and a programmatic environmental assessment (PEA). The projects under the SSMP appear likely not to result in significant impacts, and a PEA will be prepared. However, if significant impacts are determined during PEA preparation, an SEIS, a more comprehensive document, will be prepared. The team is currently working under the assumption that a PEA will be adequate,

Figure 3. *Summary of NEPA planning and permitting schedule.*



and the general schedule is based on that assumption.

3.1.3 Programmatic Land Access Planning and Water Use Agreements

Negotiation of land access agreements can take a significant amount of time, potentially delaying project delivery. To mitigate this risk, the State Team is reaching out to major landowners around the Sea to discuss the possibility of developing programmatic land access agreements that would allow implementation of restoration projects on their land. Programmatic agreements would allow the State Team and the landowners to negotiate access for multiple potential SSMP project locations at once, instead of having to negotiate terms for every individual project. This process is in the beginning stages and will continue to evolve as the State Team develops further information on desired project types and locations. Successful negotiation of programmatic access agreements would remove a significant barrier to project implementation.

The State Team also is developing a framework to enter into water use agreements with various water rights holders to support the 10-Year Plan.

3.2 Long-Range Planning

While the State Team implements the Phase I: 10-Year Plan, it is simultaneously developing a path forward for long-term restoration and management of the Salton Sea. As a first step, the State Team has launched the process to convene an independent review panel to evaluate water importation as a long-term strategy for restoration of the Salton Sea.

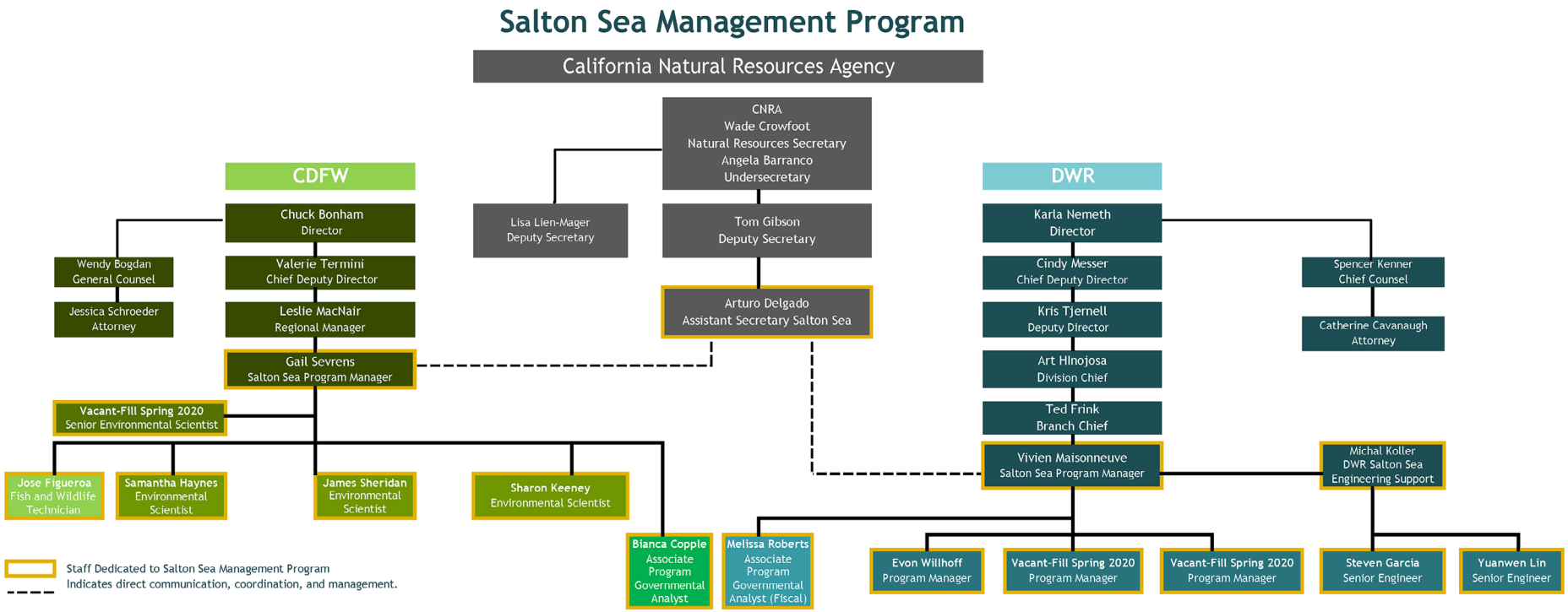
The State Team issued a Request for Proposals on February 14, 2020, for an independent review panel to solicit and evaluate water importation proposals. Panel members will have documented expertise and industry-recognized relevant work experience, allowing them to provide a thorough neutral assessment of the high-risk and complex technical topics associated with water importation. By the end of 2020, the independent review panel will provide the State with a report summarizing its findings.

The independent review panel's report will inform the State Team's development of a long-term plan for the Salton Sea. The State envisions the long-term plan including a range of feasible restoration alternatives that might include options ranging from build-out of projects using projected inflows to a potential whole-sea alternative based on water importation, if importation is determined to be feasible. The State Team will begin drafting the long-term plan in the first quarter of 2021 and intends to complete the plan by the end of 2022, consistent with the requirements of the State Water Board's Stipulated Order.

3.3 Organizational Capacity and Staff Planning

The State Team consists of 16 positions assigned full-time to the SSMP and is composed of personnel from CNRA (one position), CDFW (seven positions), and DWR (eight positions) (**Figure 4**). Of the 16 SSMP positions, there is currently one vacant Senior Environmental Scientist (Specialist) position at CDFW and two vacant Program Manager I positions at DWR. Recruitment efforts are currently underway, and positions are expected to be filled by spring 2020.

Figure 4. *Salton Sea Management Program Organizational Chart.*



There are additional State Team personnel that provide much-needed support and capacity.

The State Team recently completed an assessment of current and projected workforce conditions in the context of the SSMP's mission and strategic goals, budget allocation, program focus, workload, and performance goals. Based on this analysis, the team has identified opportunities and gaps and has developed a strategy to move the SSMP staff progressively to a workforce that will have more capacity to efficiently and effectively carry out our mission and produce desired outcomes that serve the public.

3.4 Program Management Tool

The SSMP is developing a Program Management Tool (PMT) to track tasks and the schedule for its portfolio of projects, as well as other SSMP activities. The PMT will allow managers to identify critical path elements and staffing needs across its program elements. Furthermore, the PMT will enhance transparency and coordination for all SSMP activities.

The framework and initial version of the PMT is described in Appendix B of this report. SSMP staff will maintain and update the PMT tasks and time lines for reporting to stakeholders and partners as needed. Further development as an interactive web-based PMT might be implemented as a future phase.

3.5 Financial Status and Planning

Since the execution of the Quantification Settlement Agreement in 2003, California voters have approved funding for Salton Sea-related activities through various general obligation bond measures. This funding has allowed the State to develop environmental documents (DWR and DFG, 2007; SCH EIR/EIS, 2013), acquire permits, develop plans and agreements, and conduct several studies on habitat, water quality, and soils.

In 2020, the State Team completed the first SSMP project—the 112-acre Bruchard Road Dust Suppression Project. The team will continue to monitor the site to evaluate effectiveness of the method used to suppress dust at the site. In summer 2020, the State Team will award a design-build contract to implement the SCH Project. The State set aside $206.5 million for construction of the SCH, which is included in the $298 million appropriated by the State as shown in **Table 2**.

The additional funds will be used for planning, permitting, design, and construction of other dust suppression and habitat projects. Additional funds will be needed to fully finance the Phase I: 10-Year Plan.

The current sources and expenditures of funding from a variety of state and federal sources are shown in **Table 2** (a more detailed breakdown by specific source is shown in Appendix C, **Table 4**). The State has been the largest source of appropriated funds ($356.8 million) of which $43.1 million has been spent. The majority of state expenditures have been related to planning, design, and permitting for the SCH Project. Other major state expenditures have related to monitoring at the Sea, including for state and federal endangered species, and for staff support of various aspects of Salton Sea permitting, CEQA review, etc.

DWR requested $7 million in federal financial assistance for the SCH from the federal NRCS RCPP under the Fiscal Year 2019 Announcement for Program Funding. This is in addition to the $7.5 million already awarded by this program to the Salton Sea Authority and included in the federal funding category in **Table 2**.

Funding needs have been estimated based on areas to be covered by either habitat or dust suppression projects. For habitat projects, cost estimates are based on conceptual designs that include berms, pumps, and pipelines. For dust suppression projects, costs are based on estimates per unit area. Total costs for implementing the acreage requirements of WR 2017-0134 were estimated to be $420 million in 2017 dollars (SSMP, 2018). These cost estimates are expected to evolve as designs and project goals change, as projects are constructed, and as better site-specific information on field implementation becomes available. Given current funding available for additional commitments (**Table 2**), additional funds will be required to implement the Phase I: 10-Year Plan.

Table 2. Funding Summarized by Major Category (State, Federal, and Local)

Funding Category	Authorized ($ M)	Appropriated ($ M)	Expended ($ M)	Available for Additional Commitments ($ M)	Sources
State	$356.8	$298.0	$43.1	$73.3	Funds from various propositions (Props 1, 12, 50, 84, and 68), General Fund reimbursements, and CDFW Water Agency Contribution (Salton Sea Restoration Fund).
Federal	$8.3	$8.3	$8.3	–	Primarily through NRCS to State and Salton Sea Authority.
Total	**$465.1**	**$306.3**	**$51.4**	**$73.3**	

In his 2020–21 budget proposal released on January 10, Governor Newsom proposed $220 million in additional funding for the SSMP through a new bond targeted for the November 2020 ballot. This proposed funding would bring the State's total financial commitment to $891 million for important work at the Salton Sea in the near future.

A broader strategy to request federal funds from other sources is being developed. DWR's RCPP proposal seeks to expand cooperation with the federal government through development of a partnership agreement for the SCH Project. The State Team intends to continue pursuing federal funding and partnership opportunities to assist with implementation of the SSMP.

3.6 Monitoring Implementation Plan

The purpose of the Monitoring Implementation Plan (MIP) is to identify, prioritize, and describe monitoring activities that would be implemented under the SSMP. The MIP will refine and tailor the monitoring questions, objectives, metrics, and protocols from the *Salton Sea Ecosystem Monitoring and Assessment Plan* (MAP) to address the management priorities and information needs of the Phase I: 10-Year Plan. The MAP (published 2013) was developed by DWR, CDFW, the U.S. Bureau of Reclamation, and the U.S. Geological Survey to guide data collection, analysis, management, and reporting.

In 2019, the State Team commenced preparation of the MIP, starting with an inventory of existing monitoring activities and studies. The next step is prioritizing information needs and monitoring drivers based on the SSMP 10-Year Plan and the MAP, as well as data needs for future projects. The MIP will outline protocols and schedules for discrete monitoring elements, including hydrology, water quality, biological resources, air quality, geology, and socio-economic metrics. A draft MIP is expected in summer 2020.

4 PARTNERSHIPS

The State Team continued to advance and develop partnerships and to collaborate with stakeholders, tribes, and local, state, and federal agencies in 2019. The State Team is working proactively with partners to pursue available funding sources, develop projects, share data, improve outreach and engagement, and streamline planning and approval processes. In addition, the team is collaborating with partners to develop templates for land access, water availability, and recreation opportunities on state park properties and other elements key to the success of the SSMP. The State Team also is engaging with partners to address scientific data gaps and identify priorities that can be incorporated into a monitoring implementation plan for the SSMP.

4.1 Audubon California

The State Team has continued to partner with Audubon California to address data gaps and develop new projects. CDFW is working with Audubon to incorporate their monthly shoreline surveys into the Salton Sea Monitoring and Adaptive Management Plan and identify strategies to share data between SSMP partners. In addition, the State Team has been working with Audubon to support the Bombay Beach Project, which would suppress dust while also creating managed wetland habitat on the east side of the Sea.

4.2 Imperial County

Imperial County is leading the Desert Shores Channel Restoration Project. As the Salton Sea has receded, the marina in the community of Desert Shores has become disconnected from the Sea and water levels in the marina have dropped. The project proposes to suppress dust on 32 acres by restoring the water level in the existing marina channels located between residences in the community. The project would pump water to the channels from the Salton Sea and install a berm to block the existing intake, allowing water levels to be maintained. The State Team is evaluating this project to determine how partnering with Imperial County might

complement the State's work to implement multi-beneficial restoration projects in the area.

Imperial County and the State Team have significant and complementary interests regarding the development and enhancement of activities that restore the Salton Sea, and Imperial County has sought to assist the State Team with its restoration goals by soliciting Statements of Interest from local landowners willing to implement dust suppression projects on their property. The State Team recognizes that partnership with local agencies could provide substantial public benefits and is currently working with Imperial County to identify lands that may be eligible for federal funding efforts.

4.3 Imperial Irrigation District

The State Team and Imperial Irrigation District (IID) have been working closely to collaborate on a broad range of Salton Sea management priorities, including the SCH Project, Dust Suppression Action Plan, biological monitoring, data management strategies, and public engagement. Last May, the State Team entered into an easement agreement with IID to secure access to the SCH Project site. The State also entered into a water use agreement with IID for up to 60,000 acre-feet of water per year from the New River and the Salton Sea. This water supply will cover the projected needs of the SCH Project. These collaborative agreements will serve as templates for future land access and water use agreements that will help expedite project delivery.

More recently, IID hosted the State Team at a dust suppression workshop, which resulted in improved coordination and information sharing. This collaboration has been integral to the development of the State's Dust Suppression Action Plan. In December, IID assisted and participated in the State's public engagement meetings to inform development of the Dust Suppression Action Plan.

In addition to collaborating on projects, IID has been supporting the State Team with biological monitoring and developing an approach for sharing data among stakeholders. CDFW, IID, and other partners have been cooperating to develop a pupfish interconnection plan that will be implemented around the Salton Sea and may eventually be integrated into SSMP projects.

Salton Sea Roundtable meeting, June 2019.

4.4 Riverside County

In 2019 the State Team partnered with Riverside County and various stakeholders over several months to develop and refine the North Lake Concept. The concept envisions the construction of an approximately 3,680-acre horseshoe-shaped lake at the north end of the Salton Sea to create habitat for fish and birds, dust control and recreational uses. A conceptual design technical report (*Conceptual Design Alternatives for Whitewater River Delta Project Area*) was released in February 2019. Collaborative workshops were held on March 8, May 2, July 17, and September

25, 2019. At the September 25 workshop, consensus was reached on incorporating the North Lake Concept into the SSMP's Phase 1: 10-Year Plan programmatic environmental planning process that will commence in spring 2020.

4.5 Salton Sea Authority

The Salton Sea Authority is a Joint Powers Authority with a focus on protecting human health and revitalizing the environment and economy of the Salton Sea. The Authority's board members represent five of the major stakeholders at the Sea: Coachella Valley Water District, County of Imperial, County of Riverside, IID, and Torres Martinez Desert Cahuilla Indians. This representation makes the Authority uniquely positioned to assist in planning and implementation of the SSMP. The State Team is working with the Authority to advance restoration efforts through development of an MOU outlining how the parties will coordinate and consult to support the broader goals of Salton Sea restoration and the SSMP.

Currently, the Authority is leading a project that will rehabilitate the North Shore Beach and Yacht Club Harbor and restore access to the Salton Sea. The Authority has secured a total of $1.6 million from the Coachella Valley Mountain Conservancy and the U.S. Bureau of Reclamation for the project, and the State will provide the remaining $500,000 to fully fund the project. The project will provide much-needed access by State scientists and other researchers to the Salton Sea and facilitate continued monitoring and data collections activities to inform data gaps, management, and planning efforts. In addition, the project will enhance connectivity between the Salton Sea and the harbor for fish species, such as the state and federally listed desert pupfish. Moreover, as a result of enhanced connectivity, the project will maintain water elevations in the harbor, thereby, minimizing the amount of lakebed that will be exposed as the Sea continues to recede.

Brawley Community Workshop.

4.6 Salton Sea State Recreation Area Community Engagement Partners

Kounkuey Design Initiative (KDI) is seeking funding for design and planning services for the Salton Sea State Recreation Area through the Coachella Valley Mountains Conservancy's Proposition 68 grant program. KDI's proposal would identify near-term projects and create a vision for the future of the recreation area that provides culturally relevant programming and education as well as more opportunities for residents to get involved, creating the foundation for future project implementation.

The proposal would help create a more equitable, accessible, and active Salton Sea State Recreation Area that extends park, recreation, and environmental education options to the

surrounding communities. The State Team has provided a letter of support for KDI's grant application, which represents an important step forward in putting community projects on the ground at the Salton Sea. KDI's application is expected to be considered for funding at the conservancy's March 9, 2020, meeting.

4.7 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) and DWR entered into a WRDA agreement to facilitate funding of the NEPA process as well as permitting for individual SSMP projects. The State Team will continue to hold regular meetings with the USACE with the goal of completing the NEPA process in 2021.

4.8 U.S. Bureau of Reclamation

The State Team has entered into a funding agreement with the U.S. Bureau of Reclamation for $270,000 to implement dust suppression projects. The funds will be used to research, implement, and monitor various options to mitigate dust emissions that originate from the exposed lakebed on the Salton Sea in Imperial and Riverside counties. DWR will be the lead agency on the project and will coordinate with the appropriate state, federal, and local agencies and stakeholders to plan and implement the dust suppression projects at the Salton Sea. As part of the agreement, DWR will implement 200 acres of dust suppression projects on Bureau of Reclamation lands by February 28, 2021.

4.9 U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) is implementing the Red Hill Bay Project, located within the Sonny Bono Salton Sea National Wildlife Refuge in Imperial County. The project will create 530 acres of habitat by pumping water from the nearby Alamo River and the Salton Sea, turning a dry lakebed into a wetland. This project will serve as a dust suppression project as well as create habitat for shore birds. The project is a joint effort between USFWS and IID. Through the Proposition 84 Salton Sea Financial Assistance Program, the State Team awarded a $1.2 million grant to this project. Construction is ongoing and is expected to be completed by December 2020.

Sonny Bono Salton Sea National Wildlife Refuge.

5 COMMUNITY ENGAGEMENT AND TRANSPARENCY

Since the last annual report to the State Water Board, the State Team has increased community engagement. In partnership with local community groups and leaders, the State Team reinvigorated the SSMP Engagement Committee and held community meetings to inform development of the draft Dust Suppression Action Plan. Members of the State Team participated in numerous meetings with local groups and nongovernmental organizations, including two roundtables hosted by Secretary Wade Crowfoot and Assemblymember Eduadro Garcia, and a community engagement forum at the Salton Sea Summit in October.

In cooperation with community groups, the State Team is refining a Community Engagement Plan that will guide the State's long-term approach to engaging with Salton Sea community members, listening to their ideas and concerns, and incorporating their input into SSMP decisions where possible. The reinvigorated Engagement Committee will serve as the hub for implementing the plan and provide direction at its next meeting in March 2020.

The State Team has dedicated a team to outreach and engagement and is working to build capacity for ongoing community engagement moving forward. The goal is to develop and actively maintain an engagement program that enables consistent two-way communication, creates opportunities for community members to share concerns and provide input, and ultimately contributes to delivery of projects that improve conditions for communities around the Salton Sea.

5.1 Communications Tools

The State Team has developed a comprehensive website at www.saltonsea.ca.gov to provide a single, one-stop-shop site where the public can find information on SSMP projects, status of state funding, and opportunities to provide input. This website includes a meetings calendar,

access to meeting materials and notes, and links to useful information.

The State continues to share news and updates via an e-newsletter that debuted in November 2019. The *Salton Sea Management Program Update* provides updates on the project delivery, upcoming meetings, opportunities to provide input, and other relevant information and is distributed through the CNRA Salton Sea Listserv.

5.2 Community Engagement Plan

As noted above, a Community Engagement Plan is being refined in collaboration with the Engagement Committee. The plan outlines an intentional and sustainable approach to engagement with specific objectives and tactics on three interrelated tracks.

In concert with refining the plan, the State Team is working to streamline the SSMP Advisory Committee structure by consolidating activities into the Engagement Committee and a Science and Monitoring Committee. Plans will be refined in April 2020.

5.3 State Presence at the Salton Sea

The State Team also is working to increase its physical presence at the Sea by establishing a local Salton Sea Program Office. Short-term options under consideration include establishing a temporary office at the southern end of the Sea or entering into a lease agreement to establish an office in one of the local communities. Long-term options being considered include co-locating an office at an existing government facility, constructing a new office space, or entering into a long-term lease agreement. During the first half of 2020, the State will conduct a comprehensive assessment of a full range of options that will meet both State and community needs.

Dust Suppression Planning Public Meeting in Mecca, CA.

6 NEXT STEPS IN PHASE I: 10-YEAR PLAN IMPLEMENTATION

As outlined in this report, the State Team has significantly improved its capacity to deliver projects at the Salton Sea.

The first SSMP project — the 112-acre Bruchard Road Dust Suppression Project — was completed in January 2020. The State Team will begin implementing the Dust Suppression Action Plan later this spring, with up to 3,800 acres of projects planned in 2020 and another 4,400 acres by 2022.

In addition, the State Team is on track to begin construction later this year on the first major habitat project — the 3,770-acre SCH Project.

With this work now underway, a strategic vision in place, and a detailed time line identified to deliver projects, the State Team will build on progress to date and continue to work with local, tribal, state, and federal partners to implement SSMP projects that improve conditions at the Sea for local communities as well as fish and wildlife.

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APPENDIX A. SALTON SEA: CURRENT CONDITIONS

This appendix provides an update on current conditions in the Salton Sea region, including new data on bird and fish abundance, inflows, exposed lakebed and water elevations, salinity, and air quality.

A.1 Description of the Salton Sea

The Salton Sea, an inland terminal lake, is located in a closed portion of the Colorado River basin in Riverside and Imperial counties, within the jurisdiction of the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB). The Sea is currently at about 235.6 feet below mean sea level[1] (msl) (as of December 31, 2019) and has no natural outlet. The Salton Basin is part of the Lower Colorado River Delta system. Lakes have historically existed in the basin as the course of the Colorado River shifted, most recently, several hundred years ago.

The climate in the Salton Basin is one of great extremes. The local rainfall is about 2.5 inches per year while the temperatures can often reach above 110° F in the summer and below freezing in the winter (DWR and CDFW 2011). The presence of the Sea has a microclimate effect in the Imperial Valley, which provides some regulation of extremes in temperature and humidity that is beneficial to agriculture. The temperature extremes, however, can have an adverse effect on the fish population in the Sea (DWR and CDFW 2011). Low temperatures in the winter can result in fish mortality while high temperatures in the summer can suppress oxygen levels in the water, which can also lead to fish mortality.

Projected inflow reductions in the upcoming years will shrink the Sea's wetted surface area, further concentrate salinity, and possibly increase problems associated with high nutrient levels, such as algal blooms, low dissolved oxygen levels, and odor problems. The primary reason for the projected inflow reductions, the Quantification Settlement Agreement (QSA), was signed in October 2003 by the Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), other California Colorado River water users, the U.S. Department of Interior, and the California Department of Water Resources (DWR). Under this landmark agreement, about 300,000 acre-feet per year (AFY) of Colorado River water (counting both contractual transfers and other reductions) that previously flowed into the Salton Sea will be supplied instead to other users outside the Salton Basin.

[1] In this document and other state documents, the NAVD 88 datum is used to represent the elevations in the Salton Sea region. The NAVD 88 datum is used by local agencies, although elevation data reported daily by the U.S. Geological Survey are in the NGVD 1929 datum (https://waterdata.usgs.gov/ca/nwis/uv?site_no=10254005). An approximate correction is as follows: NAVD 88 datum value = NGVD 29 datum value + 2.13 feet.

A.2 Current Conditions

A.2.1 Fish Populations

Pupfish: Desert pupfish populations were monitored in the northern and southern regions of the Salton Sea in 2019. Populations appear to be doing relatively well in some drains and shoreline pools/ponds, Varner Harbor, North Shore Marina, and Hot Mineral Spa Creek. Desert pupfish were particularly abundant in recently created furrows near one of the south end drains, and in one of the north end drains. In San Felipe Creek, the desert pupfish population continued to decline, while the Salt Creek populations, abundant in 2018, declined during 2019 primarily as a result of an infestation of crayfish. Most desert pupfish populations are negatively impacted by nonnative species, and some populations are threatened with extirpation from habitat desiccation or detrimental changes in water quality. State scientists have concluded that, once the salinity reaches 70 ppt in all areas of the Salton Sea, desert pupfish will be displaced from the lake entirely; however, they might be able to persist in creeks, drains, and newly created habitats such as the Species Conservation Habitat (SCH).

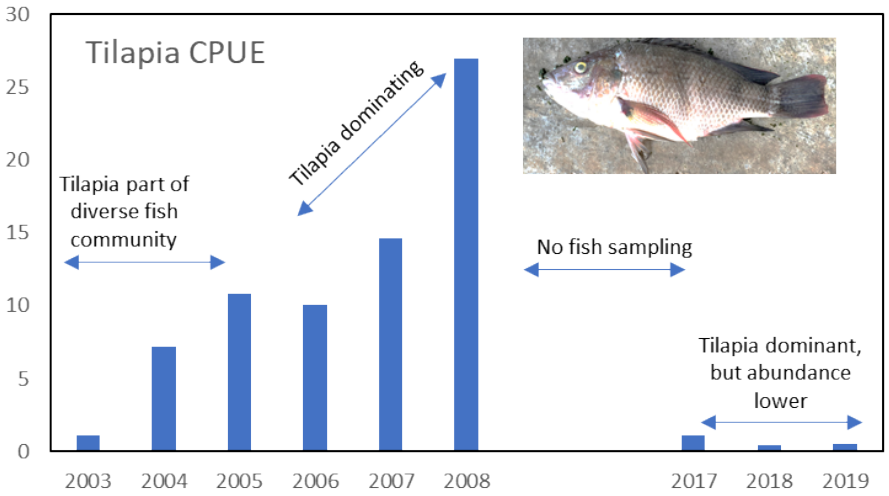
Spawning pupfish.

Tilapia: A long-term record of catch per unit effort (CPUE) developed by CDFW shows tilapia dominating the catch by 2008 as a consequence of this species being more tolerant of higher salinity conditions than other species previously present in the Sea. Sampling of tilapia was suspended after 2008 (**Figure 5**). When resumed in 2018, the catch was much lower than in 2008. In 2019, the CDFW staff surveyed two sites at the north end of the lake: Whitewater River and the Bat Caves. The 2019 population estimates at these two sites increased slightly from the 2018 estimate. It is not yet clear how the population will respond to increasing saline conditions in the Sea.

A.2.2 Bird Populations

In 2019 CDFW conducted U.S. Fish and Wildlife Service Pacific Flyway colonial nesting bird surveys, which monitors trends in American White Pelicans and Double-Crested Cormorants, two species of fish-eating, or piscivorous, birds. Double-Crested Cormorants had historically nested on Mullet Island, but no nesting has occurred there since 2014. Over the past several years, increased nesting activity has been occurring at numerous inland lakes and ponds away from the Salton Sea. It is unknown if this shift

Figure 5. ***Tilapia CPUE over time in CDFW monitoring efforts.***



Historical photo of cormorants on Mullet Island (pre-2014).

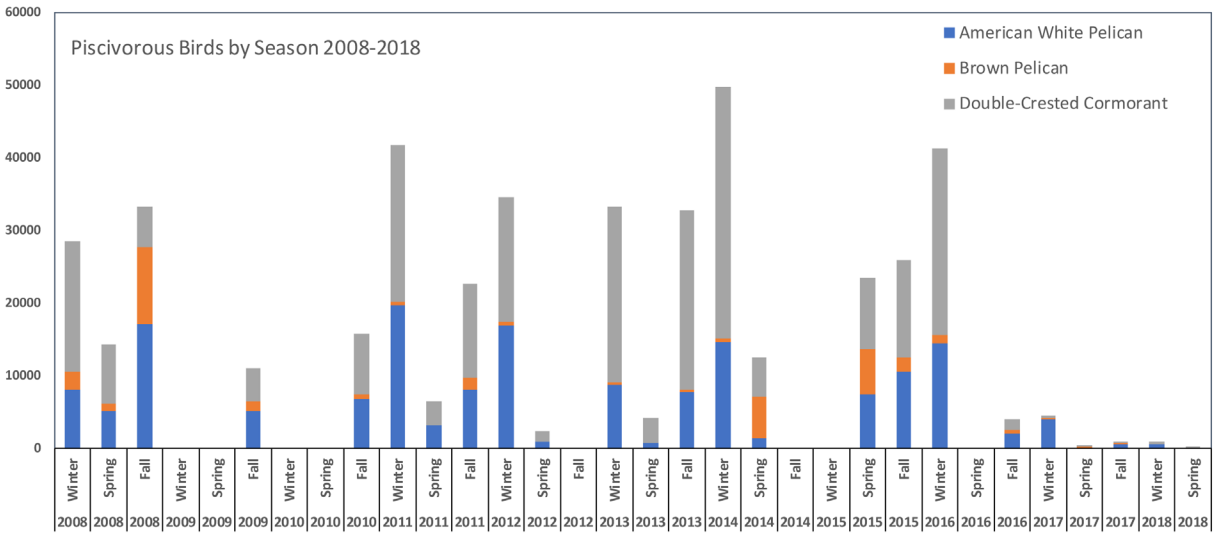
to other bodies of water is the result of the increased salinity in the Salton Sea or a reduction in available snags or islands for nesting.

The population of fish-eating birds (e.g., Double-Crested Cormorants, Brown Pelicans, and American White Pelicans) at the Salton Sea has declined. Beginning in spring 2016, the number of fish-eating birds at the Salton Sea began to fall to record lows (**Figure 6**). The 2017/2018 CDFW surveys showed the American White Pelicans occurred at only 10 percent of their historic average (2008–2018). Brown Pelicans surveyed in the same year were 3 percent and Double-Crested Cormorants were below 2 percent of their previously surveyed averages. In late 2018, aerial survey efforts were paused because of resource constraints. CDFW has resumed these surveys for the 2019/2020 survey period.

In contrast to fish-eating species, the populations of birds that feed at lower trophic levels are stable or increasing. Audubon California has continued to support the Salton Sea Management Program (SSMP) by conducting monthly bird surveys along the shoreline. The 2016–2019 survey results have shown a significant decrease in fish-eating birds such as American White Pelicans and Double-Crested Cormorants. During the same period, Audubon researchers observed an increase in birds of lower trophic levels such as Sandpipers, which feed on invertebrates. Numbers of other species that frequent the Salton Sea such as American Avocets, Ruddy Ducks, and Northern Shovelers appear stable and their usage of the area might be increasing.

Bird populations are also subject to individual extreme events. Between January 8 and 17, 2019, thousands of water birds died of an avian cholera outbreak at the south end of the Salton Sea. Outbreaks like this occur during the winter in California and can result in the deaths

Figure 6. *Piscivorous Birds by Season and Year Winter 2008–Spring 2018.*



of thousands of birds when they congregate at key water sources during migration, and the weather is cold and damp. Staff from CDFW and Sonny Bono Salton Sea National Wildlife Refuge investigated the event and collected more than 1,200 carcasses consisting of mainly Ruddy Ducks, Northern Shovelers, Black-Necked Stilts, and Gulls.

A.2.3 Inflows

Table 3 presents water inflow to the Salton Sea by year and river for the calendar years 2014 to 2019. Despite the ending of mitigation water flows at the end of 2017, total estimated inflows to the Salton Sea remain stable overall, showing a minimal decline of approximately 22 thousand acre-feet (TAF) from 2018 to 2019.

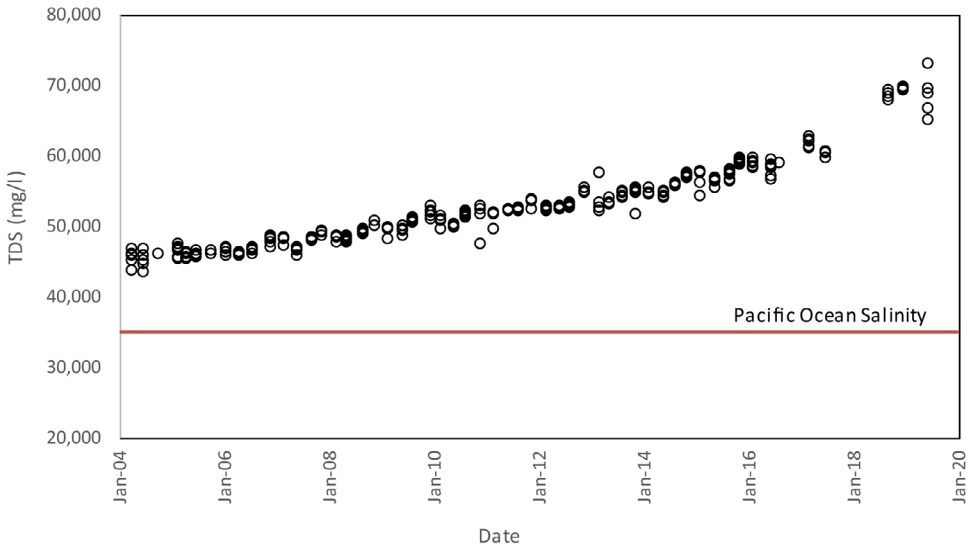
Table 3. Water Inflow by Year and River, in TAF

Year	Whitewater River	Alamo River	New River	Sum of River Inflow	Inflow including drains, small creeks, and GW
2014	39	548	384	971	1,067
2015	43	554	407	1,004	1,103
2016	47	548	421	1,016	1,116
2017	46	534	398	979	1,075
2018	45	572	330	947	1,041
2019	52	557	317	927	1,019

A.2.4 Salinity

Water quality data are collected by the Bureau of Reclamation and the Colorado River Basin Regional Water Quality Control Board. Salinity at the Sea has continued to increase over the past two decades, and appeared to show a more rapid increase over the most recent period (**Figure 7**). The most recent reported salinity levels are excess of 69,000 mg/l, twice the salinity of ocean water. While recent inflows (2014-2019) have remained relatively stable, they are nonetheless much lower than the rate of evaporative loss from the surface of the Sea. Nutrient concentrations remain relatively high, and selenium concentrations in the Sea continue to be lower than in the river inflows as a result of transformation and sequestration in deeper waters.

Figure 7. ***Observed salinity (expressed as total dissolved solids, or TDS) at the Salton Sea (2004–2020).***



A.2.5 Elevation and Shoreline Exposure, Historical and Projected

The elevation of the Sea is measured daily, and lakebed exposure can be estimated from the elevation-area relationship of the Sea. Exposed lakebed areas can be estimated more accurately from satellite imagery. For the SSMP, there is also a need to develop future projections of lakebed exposure, because a large fraction of the Stipulated Order project construction will likely occur on land that is currently underwater. Notably, there is need to estimate exposed lakebed on the time-scale of 5–10 years to support planning efforts. Thus far, for the SSMP, the State Team has used a computer program developed by IID called SALSA2 (for Salton Sea Elevation Model version 2) to estimate future changes in elevation. SALSA2 assumes projected future inflows to calculate the elevation and salinity of the Sea. Because future flows are only estimates, the SALSA2 model runs consider two flow ranges, one with conditions similar to what they are currently, and another that assumes a larger reduction in inflows. These model outputs can be used to bracket near-term expected elevations and lakebed exposure for planning purposes.

Since 2003, there has been a steady decline in the surface water elevation of the Salton Sea. That decline continued in 2019, with approximately 5,200 acres of lakebed exposed by the receding Sea (**Figure 8**). Some of the exposed lakebed has developed a vegetation cover or is covered by agricultural drainage, making it less likely to be emissive.

The water surface elevation measured on December 31, 2019, was 235.6 feet below mean sea level (msl). **Figure 9** illustrates the observed Salton Sea water surface elevation compared to SALSA2 model predictions. The water surface elevation in 2019 was generally consistent with model predictions assuming "low uncertainty" flows (i.e., inflows similar to current levels). Depending on future flows, another five feet of elevation decline is expected over the next five years.

Figure 8. *Historical lakebed (playa) exposure estimated by IID from 2002–2019, and projections for 2020 (Source: IID 2020).*

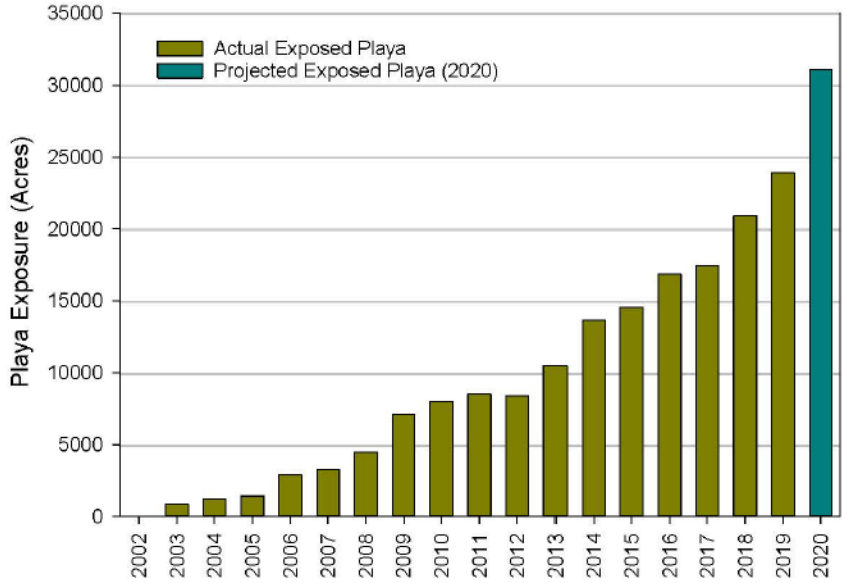
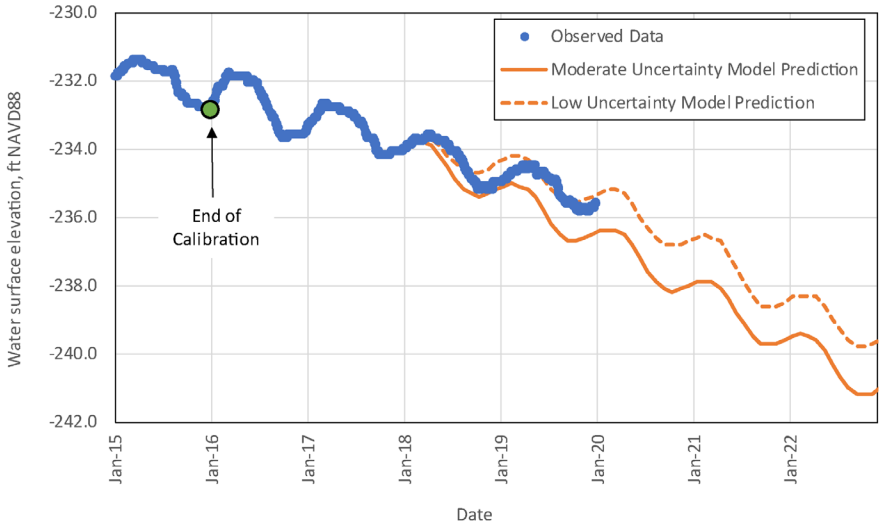


Figure 9. *SALSA Model Prediction and Actual Water Surface Elevation (NAVD88 Datum).*



A.2.6 Air Quality

Although data in the prior section show the continuous additional exposure of lakebed over 2003–2019, it is unclear how this condition has impacted air quality (CARB, 2019). While the State believes certain areas have experienced and will continue to experience additional dust because of their location along the Sea, wind patterns and the emissive nature of the lakebed at particular locations plays heavily into the experience of individual locations. Much of the dust being captured and monitored appears to be coming from the desert and background sources, which could be a product of both the natural geography of the Sea and the location of monitoring sites and stations. Further, the current location and distribution of monitoring stations make it difficult to accurately quantify the sources of dust. State scientists at the California Air Resources Board (CARB) continue to work to assess and ultimately quantify air quality differences driven by the Sea's recession and to identify what communities are most likely to experience additional impacts.

Air monitoring data in the vicinity of the Salton Sea were provided by CARB. **Figure 10** and **Figure 11** present annual average PM10 concentrations for regional air monitoring stations and Salton Sea shoreline monitoring stations for the years 1988 to 2018. Few discernible trends in PM10 air quality are evident in the monitoring data. **Figure 12** presents the number of PM10 exceedance days at North Shore (Riverside County) locations. **Figure 13** presents the number of PM10 exceedance days at Central and South Shore (Imperial County) locations. Migrating sand on the western shore of the Salton Sea is causing the highest PM10 readings and may significantly increase lakebed emissions unless stabilized on the coastal plain (CARB, 2019).

Figure 10. *Annual Average PM10 (micrograms per cubic meter [µg/m³]) at Salton Sea Regional Air Monitoring Stations.*

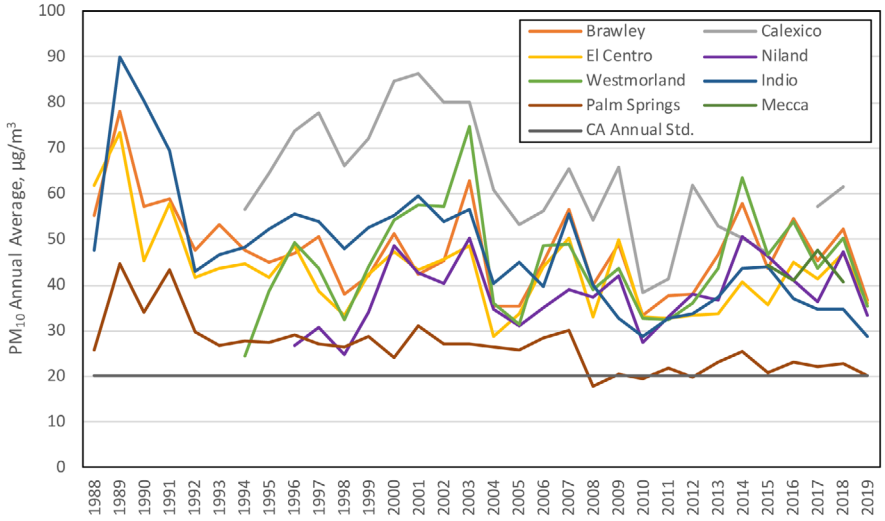


Figure 11. *Annual Average PM10 (micrograms per cubic meter [µg/m³]) at Salton Sea Shoreline Monitoring Stations.*

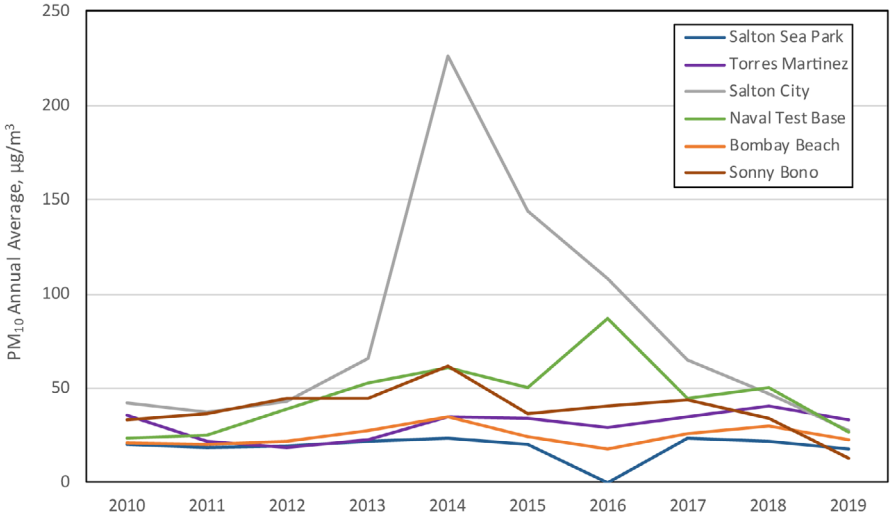


Figure 12. *Salton Sea PM10 Exceedance Days North Shore (Riverside County).*

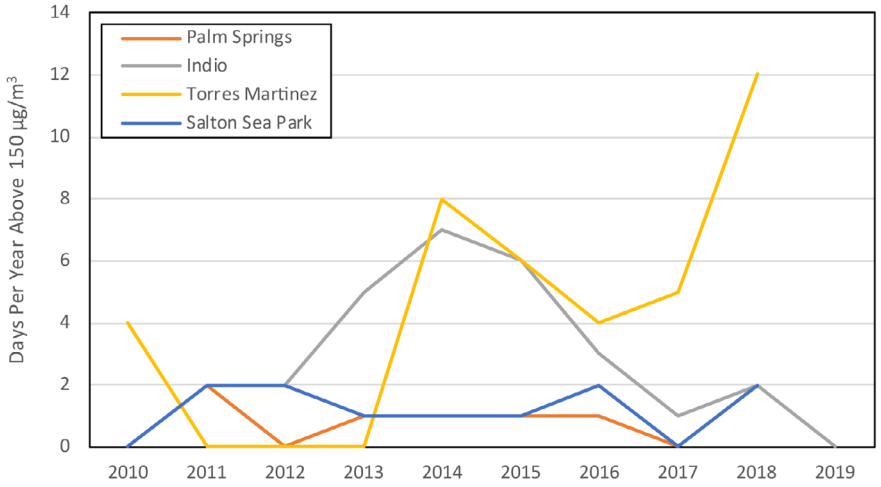
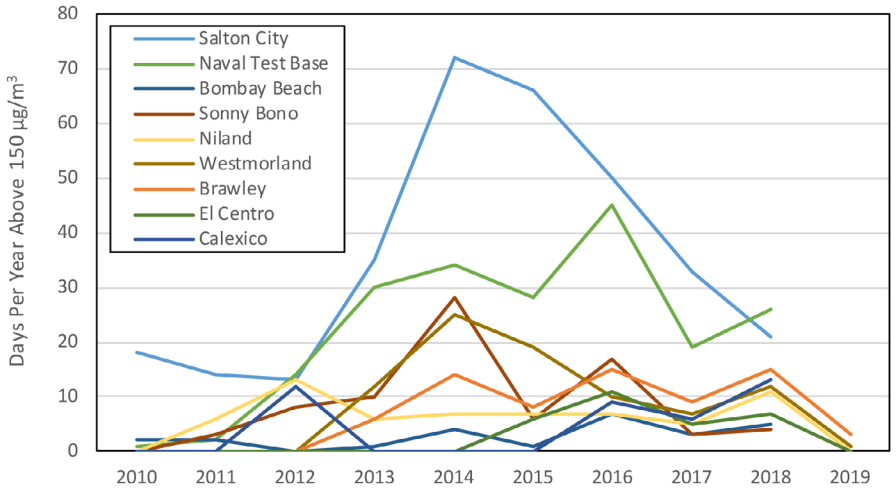


Figure 13. *Salton Sea PM10 Exceedance Days Central and South Shores (Imperial County).*



APPENDIX B. PROGRAM MANAGEMENT TOOL

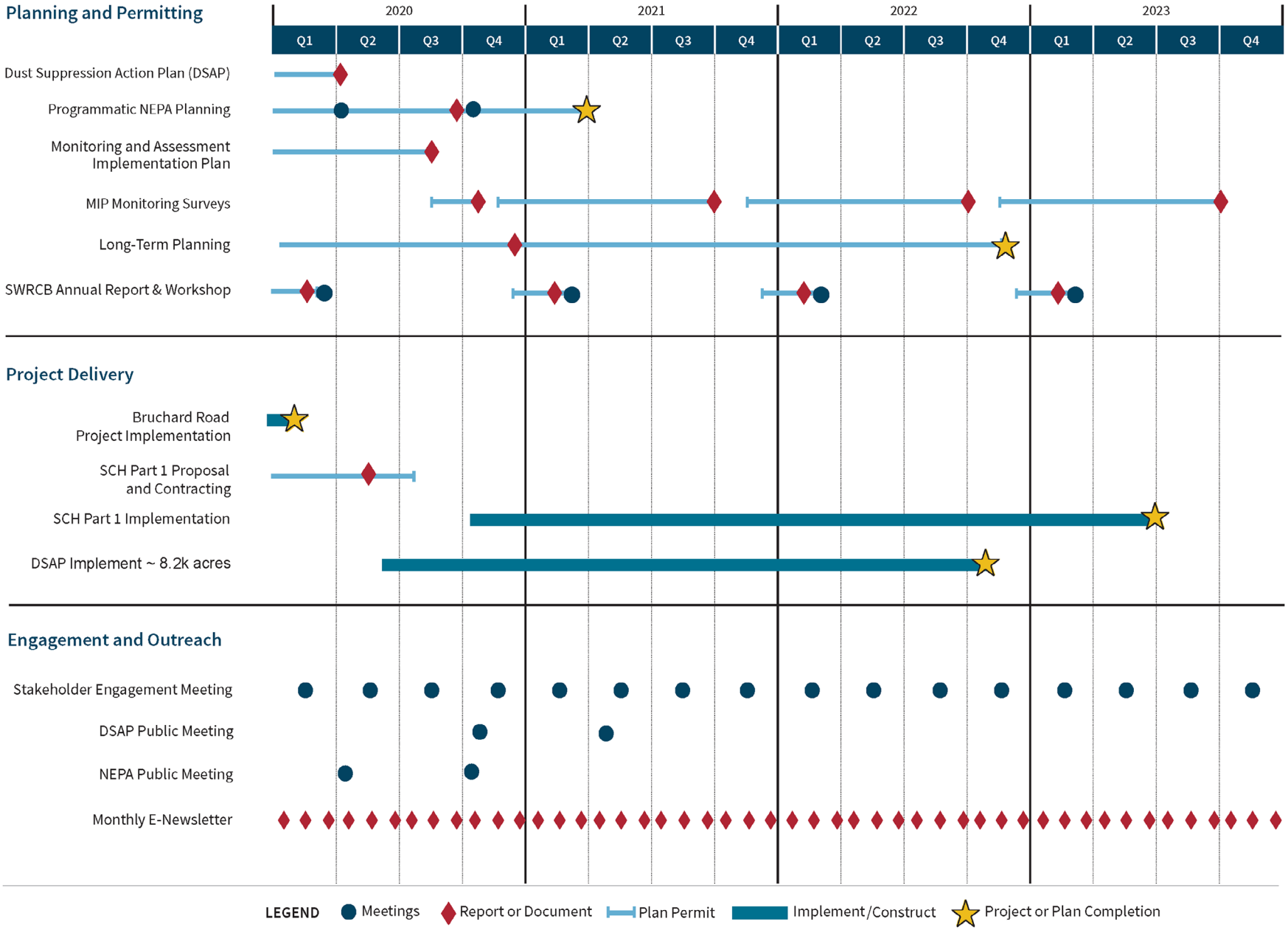
The SSMP is developing a Program Management Tool (PMT) to track tasks and the schedule of four major SSMP elements: planning and permitting, project delivery, engagement and outreach, and administration and budget planning.

- **Planning and Permitting** encompasses programmatic planning to secure land access and water supply for SSMP projects; development of the Dust Suppression Action Plan; environmental permitting to complete National Environmental Policy Act compliance for the 10-Year Plan; development and implementation of the monitoring and assessment implementation plan, including status and trend monitoring of the Sea; and long-term planning beyond the initial 10-year near-term phase. This also includes annual reporting to the State Water Resources Control Board.
- **Project Delivery** involves tracking on-the-ground implementation of projects from contract execution, construction, project completion, and the transition to operations and maintenance. The SSMP project portfolio currently includes SCH Project Part 1, which will be implemented as a design-build project; Bruchard Road Project; priority projects under the Dust Suppression Action Plan; and expected phases such as SCH Part 2 (to be built as more lakebed is exposed), the North Lake Project, and the Alamo Project.
- **Engagement and Outreach** involves tracking communications and coordination with partners, stakeholders, and agencies. Activities include the development of a community engagement plan, regular committee meetings, workshops, monthly e-newsletter, and participation with stakeholders such as at regional board meetings.
- **Administration and Budget Planning** involves tracking ongoing activities to administer agreements and contracts, secure and manage funding and budgets, and general coordination and planning.

The PMT will allow managers to identify critical path elements and staffing needs across SSMP elements. Information on individual projects will be captured in a framework (based on Microsoft Project Online) to show the detailed tasks, durations, and dependencies for planning and implementation. These projects can be linked for the Project Delivery portfolio, and also linked to other SSMP elements. The PMT will enhance transparency and coordination for all SSMP activities. The schedule outputs can be rolled up to provide an overview of all SSMP activities across its portfolio, as shown for 2020–2023 in **Figure 14**.

SSMP staff will maintain and update the PMT tasks and time lines for reporting to stakeholders and partners as needed. Further development as an interactive web-based PMT could be implemented as a future phase.

Figure 14. *Summary schedule of activities over 2020–2023 in the Project Management Tool*



APPENDIX C. FUNDING STATUS

Table 4. Funding Available for Salton Sea Mitigation and Restoration

Source	Authorized ($ M)	Appropriated ($ M)	Expended ($ M)	Available for Additional Commitments ($ M)	Use
State[a]					
DWR - Prop 50	$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	$8.75	$8.75	-	-	$8.75M of $14M allocated/reserved specifically for the Salton Sea for SCH construction.
DWR & IID via WCB - Prop 50	$4.8	$4.8	$4.3	-	$1M to DWR 2008 Salton Sea planning. $3.3M allocated to IID for construction of power lines to SCH project (completed). $0.5M of $14M allocated to DWR and reserved for SCH construction.
DWR via WCB - Prop 12	$4.75	$4.75	-	-	$4.75M allocated/reserved for SCH.
DWR via CDFW - Prop 84	$44.1	$39.4	$16.9	$4.7	Since 2008, SCH planning, design, and staffing ($14.5 M), plus $21M allocated/reserved for SCH construction, $0.9M for construction management, and $3M for Financial Assistance Program projects, including Red Hill Bay, Seawater Marine Habitat Pilot, Torres-Martinez Wetlands.

Source	Authorized ($ M)	Appropriated ($ M)	Expended ($ M)	Available for Additional Commitments ($ M)	Use
DWR (State Operations) - Prop 1	$20.0	$20.0	$2.7	$14.5	Staffing and other design costs for SSMP projects (of the $20M appropriated, $5.5M committed to existing Salton Sea projects).
DWR (Construction) - Prop 1	$60.0	$60.0	-	-	Construction of SCH projects.
CNRA - Prop 68	$165.7	$141.1	$0.0	$24.6	$111.1M for construction of SCH projects; $30M appropriated in 2018-19 will need to be re-appropriated before it can be used. Most of the $30M is not committed to a particular project.
Salton Sea Authority (New River) Prop 68[b]	$9.75	-	-	$9.75	
Salton Sea Authority - Prop 68[b]	$19.5	-	-	$19.5	
Revive the Salton Sea Fund	$0.1	-	-	$0.1	Tax Check Off Box - Collected $118k per SCO 6/30/18 Report.
General Fund/ Reimbursements	$0.35	$0.35	$0.35	N/A	CDFW receives $300k, CNRA receives $200k for positions supporting the Salton Sea annually.
CDFW Water Agency Contribution (Salton Sea Restoration Fund)[c,d]	$68.5	$15.8	$15.8	see note	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	**$356.8**	**$298.0**	**$43.1**	**$73.3**	
Federal					
NRCS (to Salton Sea Authority)[b]	$7.5	$7.5	$7.5	-	Agricultural dust suppression projects and wetlands.
NRCS (to state)	$0.8	$0.8	$0.8	-	Planning activities.
Federal Total	**$8.3**	**$8.3**	**$8.3**	**-**	

Source	Authorized ($ M)	Appropriated ($ M)	Expended ($ M)	Available for Additional Commitments ($ M)	Use
Local					
QSA Joint Powers Authority[c,e]	$288.0	132.8	132.8	$130.4	Various mitigation requirements associated with the QSA, documented at the task level by the JPA.
Local Total	**288**	**132.8**	**132.8**	**130.4**	
Total (State, Federal, and Local)	**$653.07**	**$439.10**	**$184.20**	**$203.65**	

Notes:

[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 stakeholder groups, including the Torres Martinez Desert Cahuilla tribe, two water agencies, and two county governments.

[c] The QSA Authority is a JPA that comprises the State and three water districts: IID, CVWD, and the San Diego County Water Authority.

[d] While a total of $68.5 million will be ultimately be available, $42 million in payments must be collected between now and 2047 to support any expenditures from the fund. Expenditures are monitored to ensure expenses do not exceed available cash.

[e] The water agencies in the QSA Authority agreed to pay $133 million in 2003 dollars, while the State is responsible for costs in excess of the water agency contributions. The current estimate for the ultimate amount of the water agency commitment (with interest and inflation) is approximately $288 million. The expenditures to date have not been adjusted for inflation and, therefore, the amount remaining will not be equal to the difference between authorized and expended. The remaining amount available for allocation is based on the QSA JPA Fiscal Year 2020 Budget & Work Plan document, detailing the total payments to be made (by fiscal year) pursuant to the 2015 Advanced Funding Agreement. Like the Salton Sea Restoration Fund, the remaining amount will be collected over multiple years (through FY2036).

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