

The Economics of Land Use



Salton Sea Governance Study – A New Governance and Management Structure for the Salton Sea

Prepared for:



Prepared by:

Economic & Planning Systems, Inc.

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*Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612-3604
510.841.9190 tel
510.740.2080 fax*

*Oakland
Sacramento
Denver
Los Angeles*

www.epsys.com

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BACKGROUND ABOUT THIS STUDY

This Study was commissioned by the Water Foundation to provide an expert, unbiased recommendation about the governance and management of the Salton Sea to decision makers and stakeholders. After more than a decade of little action to address the public health and ecological declines at the Salton Sea, stakeholders, including the State of California, have come together to develop a 10-year plan, issue an order from the State Water Resources Control Board to oversee and enforce the goals and deadlines of that plan, and procure more than \$280 million of bond funds (with an additional \$200 million before the voters in November 2018) toward implementation of projects. Interviews with each of the major stakeholders indicates the need for an enhanced governance and management structure for the Sea to capitalize upon those other successes and move the Salton Sea into a new era of project implementation.

The Water Foundation is a non-partisan, non-profit organization, dedicated to the sustainable management of water for the benefit of people and nature. The Salton Sea has been an area of focus for the Foundation for the past two years and investments have included support of grassroots and statewide stakeholders, facilitation services, organizing and hosting meetings, and supporting technical analysis. The design and implementation of this Study was guided by an advisory committee with the principle authorship by Economic & Planning Systems Inc (EPS). The advisors and authors interviewed more than 25 stakeholders from water agencies, state regulators, citizen groups, environmental interests, and subject matter experts. They also carefully considered the experience of other regions facing similar challenges of governance and management of complex, large scale landscape transformation. Many of these comments are reflected in the document and all were considered carefully in the development of the final recommendation. The Water Foundation is deeply appreciative of all who contributed to this effort. We sincerely hope that this product can help and inform any future discussions about governance and management of the Salton Sea for the people, environment, and economy of the region.

Any questions, comments, or further suggestions can be directed to:
Andrew Fahlund, Senior Program Officer, Water Foundation,
555 Capitol Mall, Suite 1155, Sacramento, CA 95814 or afahlund@waterfdn.org

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EXECUTIVE SUMMARY

This Study reviews the current governance framework of Salton Sea revitalization and dust suppression efforts and specifically, the efforts of the *Salton Sea Management Program* (SSMP). This Study presents recommendations and options intended to improve the pace and success of project delivery in the short term and overall long-term success of efforts to save the Salton Sea. The Study has been conducted in the context of SSMP's efforts to address the ongoing and intensifying impacts of the declining surface level of the Salton Sea. These impacts include reduced air quality and related public health effects related to dust generated from the exposed lakebed (playa), a collapse of the Sea's ecosystem and related loss of wildlife habitat, and the reduced economic development potential of the surrounding region resulting from these impacts. It is estimated that as much as 100,000 acres of lakebed could be eventually exposed as the lake's surface level continues to decline.

While substantial efforts have been underway for decades to address this existing and impending environmental crisis, including the recent creation of the SSMP and funding made available, actual project delivery efforts have been impeded by a variety of factors. Improving the coherence, capacity, intergovernmental coordination, and resources available can 1) address these delays immediately and create a sound long-term basis for meeting the State of California's (State) mandates for dust suppression and habitat restoration projects, and 2) lead to a further set of projects that will further stabilize the Salton Sea and provide economic development opportunities in both Riverside and Imperial counties.

The Water Foundation and affiliated organizations sponsored this Study reflecting their long-standing concern and involvement in Colorado River and Salton Sea issues. The Study effort included extensive background research reviewing technical studies; legislation, agreements and orders, and journalism related to the Salton Sea; a set of stakeholder interviews with key State, regional, and local agencies and other knowledgeable individuals; and case studies of other conservation and project delivery organizations.

Conclusions

- 1. Despite years of analysis, project planning, organizational efforts and expenditures in the millions of dollars, the SSMP has yet to complete a mitigation or habitat restoration project and will not achieve at least the first two State-mandated annual acreage milestones.***

Over the past 50 years, federal, State, regional and local government agencies have anticipated and studied ways to stabilize the sea level, control increasing salinity and toxicity, reduce and restore habitat loss, and reduce public health impacts related to exposure of the receding lakebed. While substantial efforts have been underway for decades to address this existing and impending environmental crisis, including the recent creation of the SSMP, State funding, and the State Water Resources Control Board issuance of Order 2017-0134, actual project delivery efforts have been impeded by a variety of factors.

2. Stakeholders interviewed universally agreed that organizational impediments are at the root of the delays in Salton Sea project delivery; their comments can be summarized in six objectives for reorganization of the SSMP.

The stakeholder interviews included formal conversations with over 25 individuals representing State government agencies, local and regional agencies, public interest and advocacy organizations. Those interviewed, while providing a variety of perspectives and opinions, agreed that reorganizing governance and increasing overall level of effort were essential. The six objectives derived from the interviews are:

- Provide continuous State leadership and oversight
- Establish clear lines of authority
- Provide sufficient technical capacity and staffing
- Clarify and distinguish roles and relationships of the entities involved in the Salton Sea
- Improve community engagement, cooperation, and responsiveness
- Focus upon project delivery, operations, maintenance, and adaptive management activities

3. A new locally-based Joint Powers Authority - the SSMP Project Delivery Office - has the best opportunity for meeting State-mandated project milestones.

This Study considers four organizational options to improve the current deficiencies in Salton Sea project delivery efforts, including, 1) Status Quo, strengthening existing SSMP staffing and resources; 2) Intergovernmental Agreement to assign SSMP functions to existing local entities; 3) Creation of a new State entity within the Department of Water Resources to assume SSMP functions; and 4) Creation of a new intergovernmental entity to assume SSMP functions. Of these options, it is determined that Option 4, establishing a new entity through a Joint Powers Agreement, has the best opportunity for meeting all of the organizational objectives identified. Notably, the key advantages would be responsiveness afforded by the local location of the Office and the leadership (Board of Directors) representing the local organizations most affected by the impacts of the declining Salton Sea level while also including State participation to assure consistency with State mandates and funding controls. The ability to independently and flexibly partner and contract with local agencies, contractors, and farmers in pursuit of project delivery milestones is also a significant advantage.

Under Option 4, a new Joint Powers Authority (JPA) would be recognized by State legislation as the project delivery entity. Similar to the other options, the State would maintain its leadership and oversight functions but all SSMP project delivery functions would be reorganized into the new locally-based JPA – the SSMP Project Delivery Office. The JPA Board would include representation from State and local entities, including Imperial Irrigation District (IID), San Diego County Water Authority (SDCWA), Coachella Valley Water District (CVWD), Riverside County, Imperial County, and the Torres Martinez Desert Cahuilla Indian Tribe. To maintain state leadership and oversight, a representative of the Governor's Office would chair the Board of Directors and would hold full veto authority over board decisions,

including the authority to reject the entity's budget and to fire the executive director¹. The JPA would be located at the Salton Sea and would be led by an executive director, appointed by the board of directors, leading a team that would include a senior staff in charge of operating departments along with select specialist and administrative personnel.

The executive director of the JPA would report to the JPA board of directors and maintain liaison with the involved State agencies. The mission of the JPA will also be achieved through technical cooperation with existing agencies and the retention and management of consultants and contractors. A Steering Committee composed of representatives of regulating agencies, advocacy organizations, and other experts would provide guidance and input to the executive director and will also provide a forum for discussing planning and project implementation issues. The California Department of Water Resources (DWR) would participate on the steering committee and provide technical advice and support as may be requested. A citizens advisory committee composed of appointed members of the public, community-based organizations, and non-governmental organizations, would provide input to the board of directors and the executive director and provide an important vehicle for community engagement and communication.

4. Immediate action is required to remedy the lack of resources available to the Salton Sea Management Program (SSMP) and to mobilize the recommended reorganization efforts.

Action needed to accelerate SSMP project delivery is past due. Considerable frustration has developed with nearly all involved in the process, including the Legislature, State agency staff, local government officials, and the local community and advocacy organizations. Accordingly, a deliberate program should be activated by an exercise of executive authority in the Natural Resources Agency and DWR in parallel with adoption of guiding legislation by the Legislature. As a part of this effort the shortcomings of previous planning and organizational efforts and the need for immediate improvement in project delivery efforts should be kept in mind. There are three primary ways parties may choose to move forward:

- Initiate legislation and related organizational efforts to establish the Joint Powers Authority (as recommended above) and the related realignment of existing State and local agency revitalization and dust suppression activities.
- Immediately assign State staff and/or retain consulting engineers to augment current SSMP project delivery efforts on an interim basis until the new Joint Powers Authority/ SSMP Project Delivery Office is functioning.
- Following the creation of the recommended Joint Powers Authority, activate and fund organization of the SSMP Project Delivery Office and related agreements pursuant to legislation and stakeholder and community engagement.

¹ This authority is deemed necessary given the State's overall responsibility and stake in achieving Salton Sea revitalization and dust suppression targets and also the fact that the State will be funding the largest share of project delivery and operations and maintenance costs.

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1. INTRODUCTION

This Study reviews the current governance framework of Salton Sea revitalization and dust suppression efforts and specifically, the *Salton Sea Management Program*. It also presents options and recommendations intended to improve the pace and success of project delivery in the short term and the overall long-term success of efforts to save the Salton Sea. This initial Chapter provides the context for this Study, background on the Salton Sea, and a description of the Study organization.

Study Context

The Study has been conducted in the context of the SSMP's efforts to address the ongoing and intensifying impacts of the declining surface level of the Salton Sea. These impacts include reduced air quality and related public health effects related to dust generated from the exposed lakebed (playa), a collapse of the Sea's ecosystem and related loss of wildlife habitat, and the reduced economic development potential of the surrounding region resulting from these impacts. It is estimated that as much as 100,000 acres of lakebed could be eventually exposed as the lake's surface level continues to decline.

Over the past 50 years, federal, State, regional and local government agencies have anticipated and studied ways to stabilize the sea level, control increasing salinity and toxicity, reduce and restore habitat loss, and reduce public health impacts related to playa exposure. While substantial efforts have been underway for decades to address this existing and impending environmental crisis, including the recent creation of the SSMP, actual project delivery efforts have been impeded by a variety of factors. Improving the coherence, capacity, intergovernmental coordination, and resources available can address these immediate delays and create a sound basis for meeting State acreage mandates for dust suppression and habitat restoration projects. These efforts can also support the implementation of a further set of projects that will further stabilize the Salton Sea and provide important economic development opportunities in both Riverside and Imperial counties.

Salton Sea Background

The Salton Sea is California's largest lake. At 35 miles long and 15 miles wide, it extends from the Coachella Valley in the north to the Imperial Valley in the south. Though presently saltier than the ocean, the Sea historically supported an abundance of fish, a food source for millions of migratory birds on the Pacific Flyway, replacing habitat lost to development. During the 20th century the Salton Sea also became a significant recreation and economic asset to region, supporting a sport fishery, boating, and shoreline resort developments.

The Salton Sea is located in the Salton Sink, a below sea level basin located along the trace of the San Andreas Fault Zone. The most recent lake² was created by a levee break along the

² A series of lakes have naturally formed and dried up during the post-glacial Holocene Period as the course of the Colorado River has meandered.

Colorado River in 1905 that for several years redirected the entire flow of the Colorado River into the Salton Sink. Subsequently, water supplies from IID outfalls supported the water levels. Since its creation the Sea evolved to support a diverse ecosystem, providing food and habitat for more than 400 bird species, and supported recreational activities including boating and fishing. By about 2003, reduced water quality (due to increased salinity and eutrophication) had eliminated the marine sport fishery, leaving only a remnant population of the salt tolerant tilapia as the primary fish species. These changes and the continued lowering of the Sea's level now threaten remaining fish and bird habitat and increasing fine dust (PM10) emissions now threaten local and regional populations.

Quantification Settlement Agreement

The Quantification Settlement Agreement (QSA) addresses water allocation between certain holders of water rights to Colorado River water and is designed to enable California to stay within its 4.4 million-acre foot annual apportionment of Colorado River water.

The QSA also authorized a water transfer from agricultural water users to urban water users. During the first 15 years of the transfer (through 2017), the IID provided mitigation water to offset salinity impacts to the Salton Sea. Beginning in January 2018, the loss of this mitigation water, combined with the continued increase in the amount of water conserved and transferred to San Diego County, has accelerated the lowering of the Sea's level. This has led to increases in salinity that further reduce the Sea's ability to support fish, bird, and other wildlife species and at the same time exposing more playa, thus increasing dust that will further reduce air quality and quality of life. The 15-year mitigation water delivery period was envisioned as the planning period for the State to determine and develop a plan for its Salton Sea revitalization efforts.

One of the conflicts identified during negotiations of the QSA was the extent of ecosystem mitigation required and the associated need for revitalization within the Salton Sea watershed and specifically for the Salton Sea. Recognizing these conflicts, the State of California entered into contracts that not only allowed the QSA to be executed, but also limited environmental mitigation and restoration responsibilities and liabilities for IID, CVWD, and San Diego County Water Authority. These contracts and related legislation established a cost limit on environmental mitigation requirements for the water agencies involved in the QSA.

Salton Sea Legislation

In addition to the QSA, the Legislature passed legislation to facilitate environmental mitigation and, importantly, allocated responsibility for future actions to restore important functions of the Salton Sea as the sole responsibility of the State. The legislation also required the Secretary for Resources to undertake a study to determine a preferred alternative for the revitalization of the Salton Sea ecosystem and the permanent protection of wildlife dependent on that ecosystem. The Salton Sea ecosystem is defined to include, but not be limited to, the Salton Sea, agricultural lands surrounding the Salton Sea, and the tributaries and drains within the Imperial and Coachella Valleys that deliver water to the Salton Sea.

After more than three years of deliberation and study the Resources Agency released a *Salton Sea Ecosystem Restoration Study* which described a range of water management, habitat restoration, and dust suppression projects. The preferred alternative was included in the Programmatic Environmental Impact Report (PEIR) completed by the DWR and the Department of Fish and Game (DFG) in 2007 that evaluated and analyzed potential environmental impacts of

various alternatives developed for the revitalization of the Salton Sea. The Legislature has not, however, taken any comprehensive action on the preferred alternative, perhaps due to the \$8.9 billion capital cost estimated for that option. Five years ago, the US Army Corp of Engineers, in collaboration with DWR and the Department of Fish and Wildlife, completed an EIS/EIR for the Salton Sea Species Conservation Habitat Project (July 2013).

Current Salton Sea Management Plan

Governor Edmund G. Brown Jr.'s Salton Sea Task Force³, created in May 2015, directed agencies to develop a comprehensive management plan for the Sea that:

- Meets a short-term goal of 9,000 acres to 12,000 acres of habitat and dust suppression projects and
- Sets a medium-term plan to construct 18,000 acres to 25,000 acres of habitat and dust suppression projects.

These goals led to creation of the SSMP and also were memorialized in 2016 through a Memorandum of Understanding between the United States Department of Interior and the Natural Resources Agency. The SSMP was created to achieve the following objectives:

- Restoration of long term stable aquatic and shoreline habitat for the historic levels and diversity of fish and wildlife that depend on the Salton Sea
- Elimination of air quality impacts
- Protection of water quality

The first draft of the *SSMP Phase 1: 10-year Plan* was published in March 2017. The *Phase 1 Plan* identifies a set of concepts for five areas totaling 29,800 acres of proposed habitat and dust suppression projects. These projects were selected by the State to initiate full scale efforts needed to meet revitalization acreage goals and were required in the State Water Resources Control Board (SWRCB) Order WR 2017-0134⁴ to be completed over the next decade (through 2028). Additionally, the *Phase 1 Plan* is intended to guide the State's broader efforts at the Salton Sea to protect fish and wildlife resources, develop shoreline and aquatic habitats, reduce public health hazards by suppressing dust from exposed playa, and to obtain and allocate necessary funding to the identified projects.

Study Organization

Beyond this introductory and background chapter, this Study includes three additional chapters. **Chapter 2** provides an overview of the existing SSMP, including its existing organizational structure, the identified pilot and primary projects, the preliminary cost estimates, and available funding. **Chapter 3** provides the findings from the extensive stakeholder interviews and broader

³ IID's petition to the State Water Resources Control Board was a driving force behind the clarification of State roles and responsibilities and the Task Force.

⁴ Included as Appendix A.

research effort, organized into a series of management objectives necessary for more successful SSMP governance. Finally, **Chapter 4** considers different governance options and lays out a broad framework for a recommended governance re-organization.

Throughout these subsequent chapters the various efforts underway to improve water quality, restore wildlife habitat, and increase economic development opportunities will be collectively referred to as “Salton Sea revitalization”. Dust suppression projects (where areas of exposed playa are mechanically and/or chemically treated, or vegetated to reduce wind borne dust emissions) are a separate category of projects.

2. EXISTING SALTON SEA MANAGEMENT PROGRAM

This Chapter describes the existing SSMP, including the current governance/management structure and the currently identified projects, estimated costs, and available funding. The State's draft SSMP *Phase 1: 10-year Plan (Phase 1 Plan)* is an important document that outlines an initial set of projects that must be completed by 2028 consistent with a State Water Resources Control Board (SWRCB) Order. The SSMP governance/management structure describes the organization of State departments, staff, and resources that is charged with SSMP implementation, both Phase 1 and beyond. A key purpose of this Study is to determine whether a different governance/management structure would improve the pace and success of project implementation, both for Phase 1 projects and for subsequent and related phases and projects.

Introduction to SSMP

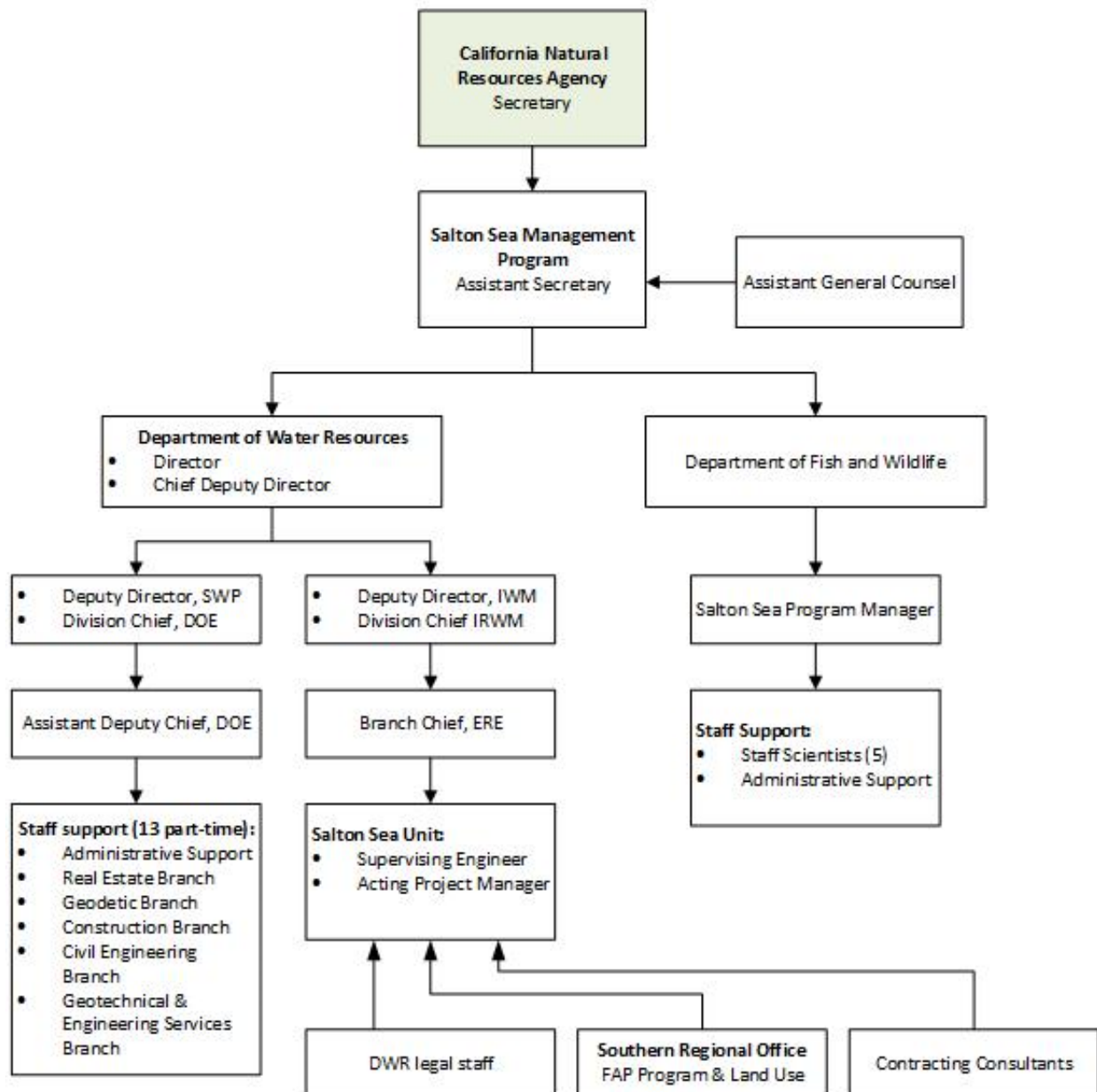
The State of California's SSMP was conceived as an important step in the very large effort needed to manage the shrinking Salton Sea. The *draft Phase 1 Plan* was published in March 2017. An associated Work Plan with new and expanded information was published in January 2018. The *Phase 1 Plan* identifies a set of five proposed habitat restoration and dust control project areas totaling 29,800 acres generally located at the southern and northern extents of the Salton Sea. Following their inclusion in the *Phase 1 Plan*, these projects were mandated by the acreage milestones set forth in the SWRCB Order WR 2017-0134 over the next decade (through 2028).

The *Phase 1 Plan* is intended to guide future technical work for the SSMP and the DWR, in coordination with what has been accomplished in prior restoration and impact mitigation projects, and ongoing efforts by other agencies active at the Salton Sea. It is also intended to guide the State's broader efforts at the Salton Sea to protect fish and wildlife resources, develop shoreline and aquatic habitats, reduce public health hazards by suppressing dust from exposed playa, and to obtain and allocate necessary funding to the specific projects.

Existing Organizational Structure

The SSMP 10-Year Plan Committee Meeting presentation on February 7, 2018, provides an SSMP Organization Chart and describes the current governance/management structure. The SSMP Organization Chart outlines a system where program oversight and management, project design, and project implementation all fall under the purview of the State of California with support from specific contractors. The SSMP Organization Chart is replicated, without staff names, in **Figure 1**. Under this structure, the Assistant Secretary of Salton Sea Policy is charged with leading the implementation of the SSMP with a support from a large number of staff (predominantly allocated on a part-time basis) from the DWR and the Department of Fish and Wildlife (DFW). A total of 25 staff positions (both part time and full time), in addition to the Assistant Secretary of Policy, are identified.

Figure 1 Salton Sea Management Program Existing Organization Chart



Assistant Secretary and Supporting Staff

The Assistant Secretary of Salton Sea Policy was appointed by the Secretary of Natural Resources in October, 2015 to lead the State's Salton Sea revitalization efforts. The Assistant Secretary operates out of a DFW office located in Bermuda Dunes (Coachella Valley). Additional staffing resources for the SSMP are derived from existing State Agencies, reporting to their departmental supervisors (as is typical) and not directly to the Assistant Secretary. When available, these staff work with the Assistant Secretary on Salton Sea efforts. A number of private consulting firms also support these efforts.

Advisory Committees

A set of committees have been assembled by the Assistant Secretary, including a range of stakeholders, each focused on different aspects of the SSMP including:

- 10-Year Plan Committee (41 members): Charged with consultation on advance implementation of the 10-Year Plan by providing input and making recommendations to resolve issues and concerns. Topics include habitat, air quality, hydrology, and environmental compliance.
- Long-Range Committee (24 members): Charged with considering alternative long-range solutions and recommend those that should advance to scientific review. Committee provides input on proposed long-range plans. Topics include identification of long term revitalization projects that extend beyond the 10-Year Plan.
- Air Quality Committee (15 members): Charged with providing guidance on air quality regulatory compliance and coordinate with Air Boards. The Committee has a shared purpose with the Science Committee on reviewing research issues and integrating regulatory issues going to the 10-Year Plan Committee and/or State. Topics include air quality compliance, dust control, air monitoring.
- Community Engagement Committee (24 members): Charged with providing advice on local community outreach to inform and solicit input on health, air quality, and social aspects of implementation of the SSMP. The mission of the Community Engagement Committee is to assist the State in communicating clear and consistent mutual understanding of the SSMP for communities and stakeholders concerned across the Salton Sea. Topics include establishing and implementing a Community Outreach Plan.
- Science Advisory Committee (21 members): Charged with providing scientific expertise and guidance on SSMP projects and efforts. The State or other committees refer topics to the Science Committee. Topics include hydrology, biology, air quality, monitoring and adaptive management.

Other Agencies/Stakeholders

Numerous other agencies and stakeholders are involved in a range of ways. The IID, for example, plays a critical role as stakeholder, landowner of planned project sites, QSA party, and source of most of the Salton Sea's inflows, among others. Riverside County and Imperial County are directly concerned about the impact of the shrinking Salton Sea on air quality, quality of life, and associated impacts on economic development and activities. The local Tribe is a key stakeholder with tribal members living adjacent to the Sea and at direct risk to PM10 exposure, while their traditional sites and practices are threatened by salinity and exposure. The local Tribe is also implementing one of the pilot projects. Numerous local, Statewide, and national organizations, concerned with community well-being, environmental decline, among other important issues, are also involved. Most of these groups provide direct input to the Assistant Secretary and the State Legislature and sit on one or more committees. In addition, the Salton Sea Authority (SSA) is a JPA that includes Riverside County, Imperial County, IID, CVWD, and Torres Martinez Desert Cahuilla Indian Tribe. Its mandate is to protect human health and

revitalize the environment and the economy of the Sea. The SSA is funded by its JPA members and has an Executive Director and a small support staff.

SSMP Projects

A range of revitalization projects are currently being pursued and envisioned in response to the declining water levels in the Salton Sea and the acreage requirements laid out in the SWRCB Order WR 2017-0134. These projects and their estimated costs, including the pilot projects currently under construction, are broadly outlined in the Phase 1 Plan (see Appendix 1). Subsequent (February, 2018) presentations by the State provided additional information on the projects and an updated set of cost estimates.

Currently Planned SSMP Projects

There are four types of projects currently being pursued and envisioned in response to the declining water levels in the Salton Sea under the SSMP: 1) habitat restoration, 2) dust suppression projects (where areas of exposed playa are mechanically or chemically treated to reduce wind borne dust from forming, 3) improved water management and flows, and 4) water quality improvements that reduce sediment and pollutant loads. Additionally, there will be efforts by the participating and responsible agencies to improve the area's community and economic development.

SSMP 10-Year Plan Projects

SWRCB Requirements

The SWRCB Order WR 2017-0134 set out milestones above and beyond pilot projects and the QSA JPA-funded Salton Sea mitigation projects. The Order provides annual milestones for acres of habit and dust-suppression projects on exposed playa over the period 2018-2028 for a total of 29,800 acres (see **Table 1**). No less than 50 percent of this acreage is required to provide habitat benefits for fish and wildlife that depend on the Salton Sea ecosystem.

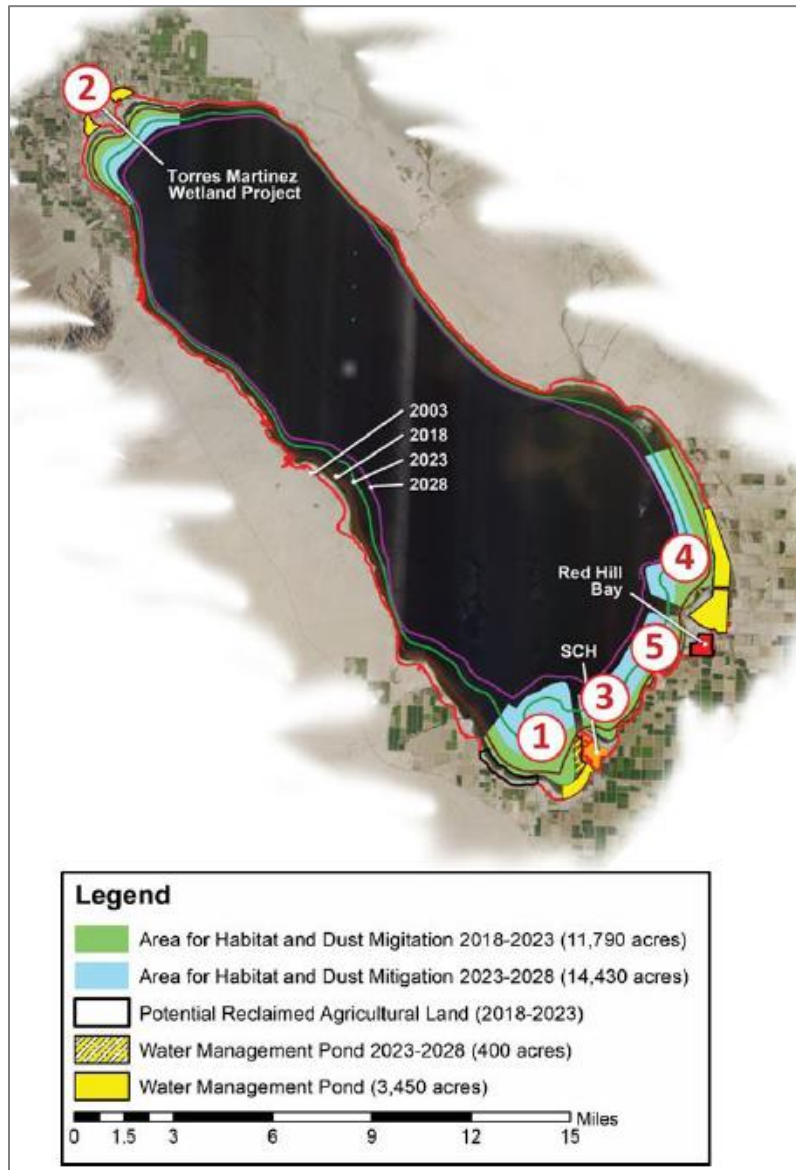
Table 1 Milestones: Annual Acres of Projects

Item	Year											TOTAL Acres
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Acres	500	1,300	1,700	3,500	1,750	2,750	2,700	3,400	4,000	4,000	4,200	29,800

SSMP 10-Year Plan Projects

The Phase 1 Plan identifies a range of Salton Sea habitat creation and dust management projects for the 2018-2028 period. **Figure 2** shows the five main project areas envisioned over this 10-year period, including one on the north shore, linked to the Whitewater River, and four on the south shore tied to the New River and the Alamo River.

Figure 2 Salton Sea Pilot Projects



Source: page 6; Salton Sea Management Program Phase 1: 10-Year Plan January 2018 document

A total of about 30,000 acres of habitat and dust suppression and associated water pond management has been proposed. **Table 2** shows a summary of acres by project type and location.

Table 2 SSMP Phase 1: 10-Year Plan Proposed Projects

Project by Geography	Land Area (acres) [1]		Total
	2018-2023	2023-2028	
New River			
Habitat and Dust Mitigation	4,800	6,500	11,300
Water Management Pond	500	400	900
Subtotal	5,300	6,900	12,200
Alamo River			
Habitat and Dust Mitigation	5,020	5,910	10,930
Water Management Ponds	2,500	-	2,500
Subtotal	7,520	5,910	13,430
Whitewater River			
Habitat and Dust Mitigation	1,970	2,020	3,990
Water Management Ponds	450	-	450
Subtotal	2,420	2,020	4,440
TOTAL	15,240	14,830	30,070

[1] Estimates for land acreage based on Appendix 1 and Appendix 2 of Draft SSMP dated March 2017 and Internal Review Draft of SMMP Phase 1: Schedule and Cost Estimates dated February 2, 2018.

Despite the acreage milestones shown in **Table 1** and almost three years of effort by the SSMP, an Implementation Summary Table prepared by the State, dated June 4, 2018 and discussed at the June 12, 2018 10-Year Plan Committee, shows that the SSMP will not have constructed any habitat or dust control project acreage by the end of this year, and only expects to construct 308 acres of projects by 2019, of a cumulative total requirement of 1,800 acres. The State's Species Conservation Habitat Project, initiated in 2008, has yet to begin construction.

An updated cost estimate of the proposed Phase 1 projects was provided in February 2018 by the State and, as shown in **Table 3**, indicates a total cost estimate of about \$417.2 million, an average of \$13,600 per acre. The cost estimate includes about \$344 million in hard costs and an additional \$73 million in soft costs (for project engineering and design, environmental permitting, mobilization, and construction management). It is important to note that no official cost estimates have been developed for the typically substantial ongoing costs associated with program administration and management, project operations, maintenance, and monitoring, and adaptive management of programs and projects.

Table 3 SSMP Phase 1: 10-Year Plan Proposed Project Costs

Project/Line Item	Phase 1 Total
Hard Costs	
Storage Ponds	\$153,830,000
Causeways	\$24,850,000
Conveyance	\$29,220,000
Extension	\$57,660,000
Other	\$18,640,000
DCA	\$59,793,750
Subtotal Hard Costs	\$343,993,750
Soft Costs	
Mobilization/Demobilization	\$18,830,000
Engineering and Design	\$15,240,000
Environmental/Permitting	\$15,240,000
Costruction Management	\$23,920,000
Subtotal Soft Costs	\$73,230,000
TOTAL COST	\$417,223,750

[1] Cost estimates from Internal Review Draft of SMMP
Phase 1: Schedule and Cost Estimates dated February 2, 2018.

SSMP Funding

The Legislative Analyst's Office (LAO) has released several reports and handouts on the Salton Sea since 2008.⁵ The most recent report, "The Salton Sea: A Status Update", August 29, 2018, indicates the level of authorized spending and the remaining (unspent) funding on Salton Sea mitigation and restoration projects.

- \$365.4 million (in 2018-dollar terms) in State bond funding has been authorized, of which \$315.2 remains unspent.
- \$356.5 million in local funding has been authorized and collected in association with the QSA JPA (\$288 million) and the associated Salton Sea Restoration Fund (\$68.5 million), of which about \$184 million remains unspent.
- \$8.3 million in federal funding (NCRS) has been committed which all remains unspent.

Future State ballot measures, additional local funding from a variety of sources, and additional federal funding will be needed to fund SSMP projects as well as to support ongoing operations and maintenance activities.

⁵ LAO reports include: (1) Restoring the Salton Sea, January 24, 2008; (2) The Salton Sea: A Status Update, August 29, 2018. LAO handouts include: (1) Governance and Funding Options for Restoring the Salton Sea, November 29, 2011; (2) Salton Sea Management: Overview and Update, May 8, 2018.

3. FINDINGS

The technical efforts undertaken for this report included an extensive review of the research, environmental studies, legislation, regulatory orders, intergovernmental agreements, and Salton Sea restoration plans proposed over the years to address the Salton Sea's decline. The existing organizations involved, including federal, State, intergovernmental entities, local governments, and other stakeholders, were identified and their Salton Sea-related activities documented. Following this background research, a set of stakeholders were identified, largely representing the involved governmental agencies and other organizations. Confidential interviews were held with about 25 individuals seeking their response to a standard set of questions and also their other observations regarding the current status of governance and issues that are impeding project delivery.

The research findings from this effort are organized by six management objectives that derived from the common themes that arose during interviews and the associated research effort. The five management objectives define what is needed in the way of improvements to the existing governance organization for the SSMP and broader State and local efforts to address existing and impending impacts and pursue economic development initiatives.

Management Objectives

- Provide Continuous State Leadership and Oversight
- Establish Clear Lines of Authority and Distinguish Roles and Relationships of the Entities
- Provide Sufficient Technical Capacity and Staffing
- Improve Community Engagement, Cooperation, and Responsiveness
- Focus Upon Project Delivery, Operations, Maintenance, and Adaptive Management

Each objective is described below, including a definition, the technical findings of this research effort, the specific findings from the interviews, and the associated policy direction. These objectives and the associated findings/direction shape the reorganization of SSMP governance and management efforts.

1. Provide Continuous State Leadership, Funding, and Oversight

The State bears ultimate responsibility for what happens at the Salton Sea. This responsibility arises directly from existing statutes and the QSA and other agreements and contracts, as well as from the State's broader Constitutional responsibility to protect public health, safety, and welfare, its related regulatory authority and activities, and its ultimate authority over allocation of the State's water resources. The Legislature, the Natural Resources Agency, DWR, DFW, SWRCB, and other involved State agencies all recognize the State's responsibilities and ultimate liability for the impacts resulting from the shrinking Salton Sea. As a result, the State's engagement, funding, and leadership are critical components of Salton Sea revitalization and dust suppression projects.

Technical Findings

There is a large body of federal, State, and local governmental law and related actions regarding the Salton Sea dating back 25 years including State legislation, federal legislation, regulatory orders, settlement agreements, interagency MOUs and agreements, and State ballot (funding) measures. This body of law, orders, agreements, and committed funding provide the basis of required State leadership regarding revitalization of the Salton Sea.⁶ The appointment of an Assistant Secretary of Salton Sea Policy in the California Natural Resources Agency was an important step. However, this appointment and efforts of the nascent SSMP have not been sufficient to create the necessary sense of urgency, commitment of resources, or progress on Salton Sea revitalization and dust suppression project delivery.

Legislative Hearings, SWRCB actions, and pressure from local governments in the region along with the concerns of a range of stakeholders including advocacy groups and local community members have increased attention on the Salton Sea project delivery, all pointing to the need for greater State leadership in regards to project planning and prioritization, directed funding, increased staffing, and the flexibility needed to ensure timely project delivery. While substantial funding has been assembled to proceed with the Phase 1 SSMP project construction, there is also the need to provide a stable and recurring source of funding for ongoing maintenance and operation of these projects.

Interview Findings

Despite the institutional and policy framework created by State legislation, settlements, and agreements, it has been repeatedly noted that the Salton Sea has not continuously garnered an adequate amount of State leadership and oversight and that project planning and delivery efforts have been understaffed. This situation can be attributed to a variety of factors including competition with other major water resources project priorities in the State and the limited number of staff resources dedicated to Salton Sea revitalization by key State agencies (e.g., DWR), and difficulty recruiting and retaining staff.

Policy Direction

Completion of the Phase 1 Plan projects requires reorganization and refocusing by the State government. This includes an expanded effort to advocate and oversee revitalization and dust suppression efforts, to resolve roles and relationships of the involved entities towards common objectives, and to expeditiously address capacity and resource and organizational deficiencies. This effort will likely include staff assignments and budget expenditure authorizations under existing authority, special legislation initiating needed organizational changes, and additional budget authorization in future State budgets.

2. Establish Clear Lines of Authority and Distinguish Roles of Participating Entities

Numerous State agencies, local governments, federal agencies and intergovernmental entities participate in Salton Sea revitalization and dust suppression efforts through their direct or indirect obligations to implement a broad range of regulations, special legislation, orders, agreements, memoranda of understanding, and contracts. There are also a wide range of public

⁶ See Appendix B

interest, advocacy, and community-based organizations involved given the public health and environmental issues at stake. At the same time, clear lines of authority necessary to establish order and resolve issues as they arise is lacking. Given this complexity, it is necessary to establish, communicate, and exercise clear lines of authority that can resolve potential differences and focus combined efforts on achieving project delivery in the short term and establishing an effective, sustainable, and inclusive approach to Salton Sea revitalization and dust suppression. In addition to clarifying the line of authority, there is a need to clarify roles and relationships between the State and federal agencies, local governments, water purveyors, existing intergovernmental entities, the sovereign native tribes, advocacy organizations, and the public-at-large. These parties should be involved at the appropriate time in program development and project delivery cycles including project design, prioritization and selection, permitting, funding, construction, and operations and maintenance.

Technical Findings

The current management structure, reflecting the participation of numerous State agencies, federal agencies, regulating agencies, other local agencies, advocacy interest groups, and the public-at-large, evolved incrementally, in a largely ad hoc fashion, over time in response to individual regulatory obligations, special legislation, directives, agreements, and stakeholder interest. As a result, the current structure does not sufficiently establish clear lines of authority and responsibility necessary to efficiently implement the SSMP projects and broader Salton Sea revitalization and dust suppression efforts. Ideally, the multifaceted efforts of stakeholders involved should be coordinated through a set of unifying objectives, clarification of each participant's role(s), and an exercise of clear lines of authority beginning with the State Legislature, Administration, and Natural Resources Agency.

The wide number of agencies and stakeholders involved in and focused on Salton Sea revitalization and dust suppression brings important energy, capacity, and oversight. However, when combined with the deficiencies in SSMP staff capacity and an associated lack of progress, this has resulted in both more expansive and less focused roles than would be ideal. For example, the appropriate roles in project design and regulatory oversight/permitting of some State agencies (e.g., DFW) do not appear to be sufficiently distinguished, while local agencies and stakeholders are all seeking to push forward revitalization projects, though often in spite of, rather than in full concordance with the State's efforts. Similarly, the current SSMP management structure involves the activities of five standing committees of stakeholders involving as many as 125 members (with some overlapping membership), many derived from State and local agencies. While these committees are presently under assessment and review as part of a separate evaluation effort underway by the SSMP, there remains the question of whether such an extensive committee structure is necessary as currently configured. Reorganization efforts should be linked with the goals of assuring effective involvement and community engagement in Salton Sea revitalization and harmonizing the efforts and interests of the parties, subordinated to overall SSMP project delivery objectives.

Interview Findings

There is general agreement among those interviewed that the current SSMP project development and management lacks clear lines of authority and clarity regarding the roles of participating entities despite the good will and considerable efforts of all the participants involved. For example, the Assistant Secretary of Salton Sea Policy has limited direct reports/staff and

progress on the various SSMP project delivery efforts remain nearly completely dependent on the availability of staff from several State agencies who have multiple other competing demands on their time within their respective agencies. It was also noted that divergent approaches and interests have existed, for example the emphasis upon mitigation projects versus pursuing revitalization and economic development opportunities that have not been effectively engaged and integrated.

Interviews recognized the broad number of stakeholders and interested parties in the Salton Sea revitalization and dust suppression efforts along with the large number of regulatory agencies that were involved in the permitting process. While the complexity of the project and the impacts of the changing state of the Salton Sea naturally results in the involvement of many parties, it was also apparent from the interviews that there is a need to clarify the roles of different public agencies and other stakeholders and to move away from the current dispersed set of roles and responsibilities. Among stakeholders, for example, there is a need to distinguish between groups that can provide a scientific advisory role, those who are best situated to conduct community engagement, and those that are primarily seeking updates on State actions and progress. In addition, it was clear that some of the active involvement was the direct result of a sense of frustration at the lack of progress at the Salton Sea and an effort to spur progress. It was recognized that of particular importance for the implementation of the SSMP was the clear identification of the key parties involved in the different steps of successful project delivery and the provision of sufficient technical and staffing resources to implement the projects.

Policy Direction

To ensure clear lines of authority and assignment of roles and responsibilities an effective interagency and intergovernmental organizational structure is required in addition to the effort needed to create a more independent and fully resourced SSMP project delivery unit. The current reliance upon otherwise committed State agency staff and ad hoc advisory framework (the existing committee structure) should be reorganized into a new organizational structure with a clear mandate to support delivery of SSMP projects. An effort is also necessary to clarify roles and engage existing local governmental agencies, nonprofit organizations, and private entities that have a role in planning, permitting, funding, and possibly constructing SSMP projects. The specific roles of the multiple public agencies involved should be clarified and subordinated to an overall organizational framework that distinguishes the State's oversight, regulatory, and funding responsibilities from the efforts of local agencies to participate in Salton Sea revitalization and dust suppression in a manner consistent with local plans and programs and the mandate to protect public health, safety, and welfare. SSMP leadership and staff should collaborate with the supporting agencies, both State and local, to assure that their respective regulatory and permitting efforts do not unnecessarily impede SSMP project delivery.

3. Provide SSMP with Sufficient Technical Capacity and Staffing

While some initial/pilot projects have been designed, there is still substantial work to be done to obtain easements and to design, permit, and implement the SSMP projects envisioned for the next ten years (as well as continuing ongoing management, monitoring and future project planning efforts). Effective SSMP project delivery requires a dedicated professional staff that possess the range of capacities needed to deliver projects including project planning, programming, project construction as well as project operations, management, monitoring, and adaptation over time. Additionally, the SSMP must respond to State agency guidance and

regulatory requirements, participate in effective community and stakeholder engagement, and cooperate with local governments, intergovernmental organizations, the nonprofit sector and advocacy organizations, and private sector stakeholders.

Technical Findings

Presently there is insufficient staff capacity to oversee the Salton Sea revitalization efforts and implement the SSMP at the State and local level. Given the scale of work involved it is estimated that a core dedicated staff of 15 professionals are required to administer, manage, advocate, and oversee Salton Sea revitalization and dust suppression projects, along with supporting specialist consultants and project construction and maintenance contractors. This staff should be fully dedicated to the Salton Sea revitalization and not have overlapping responsibilities for other State projects. While some State agency participants will be located in Sacramento, it will be necessary to maintain full-time SSMP staff in the Salton Sea area to assure proper project delivery, monitoring, and operations and maintenance, cooperation with local government participants, and continuing community engagement efforts.

Interview Findings

Interviews consistently recognized a lack of staffing devoted to the SSMP as a major limiting issue. Too many tasks have fallen to the Assistant Secretary of Salton Sea Policy, and others have additional responsibilities/multiple priorities. Several options were noted by interviewees for expanding staff resources including 1) outsourcing various functions to existing agencies (e.g., the county governments), 2) expanding staffing at existing agencies (e.g., SSA), 3) creating a new independent intergovernmental entity, 4) creating a distinct and fully staffed SSMP management unit within an existing State agency (e.g., DWR), and (5) supplementing any of these options with private contractors/consultants.

Policy Direction

Salton Sea revitalization and dust suppression efforts require fully resourced and dedicated staff to operate an expanded Project Delivery Office located at the Salton Sea area. Additional supporting expertise, as necessary, beyond the roles and expertise of the core project delivery staff such as legal, real estate services, project engineering and design, management and monitoring, and contract management, can be outsourced to private firms or obtained, on a contractual basis, from State agencies.

4. Improve Community Engagement, Cooperation, and Responsiveness

Local government entities in the Salton Sea region have a strong interest in Salton Sea revitalization and dust suppression efforts linked to their mandate to protect public health, welfare, and safety. At the same time a range of more broadly-based public interest groups recognize the importance of Salton Sea revitalization to regional, national, and international issues involving water resources, habitat protection, and public health and safety. But it is the local community, residents and businesses alike, that are most affected by the shrinking Sea and thus should have a proper role in the revitalization process consistent with the urgency with which revitalization and dust suppression projects must be pursued given the worsening public health hazards, loss of habitat, and reduction of economic activity (visitors, etc.).

Air quality impacts in particular have a disproportionate impact on the region's disadvantaged communities, lower income households living in communities near the Salton Sea in Coachella

Valley and the Imperial Valley and along the Sea's shore. Data from the Southern California Association of Governments (SCAG) indicates that a sizeable population occupies the Salton Sea area's "communities of concern". At the same time, opportunities for sustaining and growing the local economy are being foregone by the Sea's shrinking and deteriorating ecological conditions.

Technical Findings

A fully functional public engagement process has not been developed for the Salton Sea revitalization and dust suppression efforts, although the SSMP has established an Outreach (recently renamed "Community Engagement") Committee and there have been efforts to identify improvements including by the Consensus Building Institute⁷ and an earlier study of the SSMP's public engagement strategy. These prior efforts to improve community engagement have underscored the need for substantial improvements. An improved engagement process would actively engage local agencies, community-based organizations, disadvantaged and highly vulnerable communities, and local businesses. Need for this engagement is heightened by deteriorating environmental conditions including dust storms from exposed playa, lofted by desert winds; degrading air quality for residents of the Coachella and Imperial valleys; and worsening respiratory health conditions in a region where childhood asthma rates are currently more than double the State's average.

This engagement process should include (1) strong lines of communication between the Salton Sea team and the residents of communities surrounding the Salton Sea; (2) genuine opportunities for local agencies, community groups, and businesses to provide input into project design options, recognizing the overarching goals of the projects and the need for expedient project implementation; (3) close ongoing coordination between the Salton Sea team and local landowning and permitting agencies to ensure progress in the pre-development project phases and beyond; and (4) engagement of local businesses with expertise in and capital equipment for working with the land (or other pertinent expertise) to support project implementation efforts and allow for capture and retention of these investments in the local economy.

Interview Findings

Interviews consistently recognized the need for improvements in technical, policy, and community engagement. Particular concern was expressed regarding the limited amount of community engagement surrounding selection of the revitalization and dust suppression projects prioritized in the SSMP, though it was recognized that time being of the essence, a full vetting or community-based project selection was not possible. Similarly, some local public agencies indicated that there were missed opportunities for coordination between SSMP revitalization and dust suppression efforts and one of their core goals of economic development. It was also noted that the brunt of the public health impacts disproportionately occurs in lower income disadvantaged communities that surround the Salton Sea. It was also noted that the high costs of revitalization and dust suppression projects are due in some measure to the cumbersome and costly way that that State agencies must do business. Exploring partnerships with existing local agencies and private companies, including farmers, may offer a way to achieve desired projects in a less costly and more expedient manner.

⁷ Stakeholder Issue Assessment Themes and Recommendation on Salton Sea Stakeholder Engagement (May 2017)

Policy Direction

As part of reorganization, an improved and clarified set of local agency roles, community outreach systems, and local business opportunities should be identified and pursued. Some of this relates directly to the clarification of roles and the focus on project delivery (objective #6), but it also requires clear organizational responsibilities and assigned staffing and responsibility. Project design, in particular, should engage local agencies and community-based organizations in the Salton Sea area, will require clear specification of those components of project design where real options/choices exist.

5. Focus Upon Project Delivery, Operations and Maintenance, and Adaptive Management

The stated focus and purpose of the SSMP is to deliver a set of priority habitat and dust suppression projects identified as the "Phase I Actions" over a period of the next 10 years. The timely completion of these projects provides a basis of assuring progress towards the habitat and dust control milestones set forth in the SWRCB Order WR 2017-0134. Achieving the year-to-year metric by which progress toward these milestones will be measured, requires a sound approach to project planning, programming and delivery typical of capital improvement programs commonly created and implemented by public agencies.

Technical Findings

While identifying priority projects, the Phase 1 Plan is not adequately descriptive of the priority projects and lacks a clear implementation project delivery framework. Proper capital improvement programming and project delivery requires definition of: 1) pre-development/construction activities (land easements; permitting, project design, ongoing management plan); 2) project construction and oversight; 3) ongoing operations and maintenance, monitoring; and 4) adaptive management. As each individual project is planned, developed, managed, and monitored, new and important conclusions will be drawn that can inform subsequent projects. Without a clear, direct, and urgent focus on these project delivery tasks, the SSMP goals and the SWRCB milestones will not be met.

Interview Findings

No one interviewed was pleased with the progress on SSMP project delivery or the lack of specificity in the Phase 1 Plan. There was recognition among those interviewed that circumstances, including the experimental and "start-up" nature of the ongoing pilot projects and SSMP projects, the limited staff capacity and resources, and a range of complex impediments including perfecting easements and regulatory permitting, all contribute to this situation. Interviewees suggested that the SSMP should be open to creative and innovative ways of achieving and funding revitalization projects. It was also noted that the SSMP responsibilities go beyond project construction/delivery and also require proper commitment to operations and maintenance, as well as performance and environmental monitoring to assure that the projects perform well over time. In addition, it was also learnt that local farmers have been experimenting with and participating in dust suppression and habitat restoration efforts.

Policy Direction

The SSMP reorganization efforts should be designed to address the issues raised and take on these complex challenges involved in revitalization and dust suppression project delivery. Concurrent and consistent with the proposed reorganization efforts, the Phase 1 Plan should be thoroughly reviewed and restructured. The revised document should also reflect the contents of

a typical and complete capital improvement program, including project delivery strategies, project timelines and status, an operations and maintenance program, and a detailed financing plan. Pursuant to this document, the reorganized SSMP should focus exclusively upon advancing and streamlining project delivery, including inclusion of innovative project delivery approaches such as public private partnerships.

4. IMPROVING SSMP GOVERNANCE

As documented in this Study, substantial efforts have been underway for decades to address the impacts of increasing salinity and the declining Salton Sea level, which include serious public health hazards due to increasing levels of particulate playa dust and the loss of the Sea's vital wildlife habitat. These efforts have involved federal, State, and local governments operating both independently and cooperatively, conducting research and monitoring environmental conditions and impacts, developing various revitalization strategies, adopting legislation, developing and appropriating funding, issuing regulatory orders, entering into intergovernmental agreements, and undertaking mitigation and habitat restoration projects. Parallel with these governmental activities there have been repeated efforts to establish a governance framework to organize and coordinate the construction "delivery" of mitigation and restoration projects.⁸ The existing SSMP is the most recent example of these organizational efforts. Despite these efforts and the extended time available to initiate full-scale project delivery⁹, progress has been impeded by a variety of factors.

This Chapter proposes organizational objectives and capacities and considers options for a new entity which will focus on "project delivery" efforts and will have the authority, organizational and technical capacities, and the stable and recurring funding sources needed to deliver the SSMP projects required to meet the milestones specified in the SWRCB Order 2017-0134.

Organizational Objectives

The following objectives directly address the current deficiencies of the SSMP and clarify needed institutional capacities.

1. Improve the coherence, capacity, intergovernmental coordination, and resources available to accelerate the pace of project delivery consistent with meeting State-mandated timeframes for revitalization and dust suppression projects and providing for long term operations and maintenance and adaptive management of constructed projects.
2. Resolve institutional road blocks currently deterring project delivery efforts and concurrently streamline State, federal, and local regulatory oversight, environmental review, and permitting of Salton Sea revitalization and dust suppression projects.
3. Transform the Phase 1 Plan into a fully detailed program of specific habitat and dust control projects consistent with typical public agency capital improvement programs and capable of meeting the milestones set forth in SWRCB Order 2017-0134.

⁸ See *Restoring the Salton Sea*, Elizabeth Hill, State of California Legislative Analyst's Office, 2008

⁹ The *Quantification Settlement Agreement* (QSA), adopted in 2003 in the wake of substantial water transfers from the Imperial Valley to urban water users, provided a 15-year timeframe during which it was anticipated that mitigation programs and restoration projects would be well-underway.

4. Create a robust and inclusive process for defining and planning future (beyond 2028) projects needed to further stabilize the Salton Sea, mitigate environmental impacts, restore habitat, and support economic development opportunities in Riverside and Imperial counties.
5. Secure stable and continuing sources of funding, including State, federal, and local sources, to pay for currently defined and future projects, to support ongoing project delivery, monitoring, operations and maintenance, intergovernmental cooperation, and to sustain community engagement efforts.

Salton Sea Governance Institutional Framework

Salton Sea management and revitalization and dust suppression efforts involve a large number of federal, State, and local government entities each having unique roles, capacities, and resources. Clarifying the ongoing roles of these entities, defining their interrelationships, and aligning their efforts with the new project delivery entity is a necessary part of the reorganization effort.

There are three organizational aspects involved in achieving the objectives listed above: (1) determining the most effective and responsive option for creating a functional and responsive “project delivery” entity; (2) establishing overall authority and obligations as well as the specific roles of and relationships between the State and local government entities involved; and (3) establishing and sustaining an effective and inclusive stakeholder and community engagement process. Thus, in addition to resolving the best option for a new project delivery entity, a parallel effort is needed to bring existing State and local government efforts into harmony with each other and the new project delivery entity all toward meeting SWRCB Order 2017-0134 milestones. A robust and collaborative effort by the State and local government participants to reorganize and intensify their respective Salton Sea efforts, including creation of a fully resourced project delivery entity based in the Salton Sea area, is required.

Due to the State’s responsibilities, liability, and funding, there is no alternative to the State maintaining its overall leadership, regulatory, and funding roles. At the same time the local government agencies have a very large stake in the Salton Sea as well as regulatory and other roles and responsibilities. Imperial and Riverside counties have the obligation to protect public health and safety and pursue positive economic development of their respective communities. The water districts must meet their water delivery commitments and impact mitigation obligations as established in the QSA.

For purposes of this effort, the following organizational components should be defined:

- State Leadership and Oversight
- SSMP Project Planning and Delivery
- Local and Regional Agency Participation
- Community and Stakeholder Engagement

The project delivery entity will initially focus upon designing, engineering, and building the SSMP Phase 1 projects. It is understood that SWRCB Order 2017-0134 also requires subsequent project phases to be developed. Ideally, a collaborative process that builds upon prior work by the State agencies as well as the local and regional governments can be established that selects

the needed mitigation and habitat restoration projects as well as supporting the community and economic development goals of the local agencies.

State Leadership and Oversight

During the past 30 years, the State has adopted legislation, monitored and evaluated impacts, issued regulatory orders, entered into agreements, created special programs and studied alternatives for Salton Sea revitalization and dust suppression. Legislative and executive oversight, project delivery support, regulatory permitting and environmental review, and funding must continue.

Program Oversight

State Legislature

The State Legislature has demonstrated its concern and leadership regarding the Salton Sea through adoption of a substantial body of legislation creating new programs, directing State resources and creating mandates related to revitalization and dust suppression and to assuring performance and accountability of the participating entities involved with implementation. The Legislature has also appropriated funding needed to support State and local efforts.

Natural Resources Agency

The Secretary of Natural Resources should provide executive leadership and direct the engaged departments toward mandated Salton Sea responsibilities and objectives. The existing position of Assistant Secretary of Salton Sea Policy may need to be redefined as part of creating a new SSMP project delivery entity. Departments in the Natural Resources Agency will continue to play key roles in Salton Sea management, including DWR and DFW, in addition to the essential functions of the SWRCB, the Regional Water Quality Control Board, and the California Air Resources Board. However, a better effort, perhaps directed by the Assistant Secretary, to improve cohesiveness and coordination between these State agencies will be needed as part of reorganization efforts.

Agreements and Orders

Implementation of the QSA, SWRCB Order 2017-0134, and any new agreements and orders, will provide the legal framework for Salton Sea revitalization and dust suppression efforts. The State's obligation to fund Salton Sea projects is based in contractual agreements and statutes. The QSA and related legislation, as well as SWRCB Order 2017-0134, are the centerpiece defining the State's obligations.

Long Range Project Identification and Programming

The State must continue in its role of long range (subsequent to the SSMP Phase 1 projects) project identification, programming and funding through a collaborative effort with local governments and other stakeholders to align these future projects with the broader long-range objectives, local policies, and programs in a manner that meets overall program targets established by State legislation or future regulatory orders.

Funding

During the negotiations surrounding the QSA, a critical issue was the financial responsibility for any negative environmental impacts on the Sea from the water transfers. The State, in signing the QSA, assumed most of the financial responsibility for the mitigation of the Sea. It is

estimated that the QSA parties have spent, to date, about \$184.0 million meeting their share of QSA related mitigation costs.

In addition to the QSA statutes, the State is a signatory to certain agreements relating to the QSA and has resulting contractual obligations to mitigate environmental impacts at the Sea. Beyond the State's contractual and statutory obligations, there are the public health reasons for revitalization efforts, most importantly, addressing airborne dust levels that will otherwise increase proportional to the exposed playa.

The long-term financing for Salton Sea revitalization and related ongoing maintenance and operations has not been resolved. However, future funding for Salton Sea projects should derive largely from State sources, including funds from State bonds and General Fund appropriations. To date funding committed by the State is approximately \$365.4 million (from Propositions 68, 1, 84, 50, and 12). Additionally, the federal government, which owns approximately 40 percent of the land under the Salton Sea, could be expected, at some future date, to increase its contribution to the costs of long-term habitat and dust control efforts.

A variety of local sources have also been proposed including the recent interest by Imperial and Riverside counties to develop "tax increment" financing (derived from increased development in the Salton Sea area) and funding derived from increased geothermal development (as previously proposed by IID).

Any allocation of funding, whether from State, federal, or local sources, will require clear accounting procedures, budgeting, appropriation controls, and annual financial and performance audits by the respective appropriating agencies.

Regulatory, Research, and Monitoring Efforts

Building upon past efforts, the State should be engaged functionally at the Salton Sea by enforcing its air and water quality statutes and orders, environmental permitting and impact analysis, and related environmental monitoring and research efforts. For example, in 2013 DWR and DFW completed an EIR/EIS to evaluate the impacts of alternative methods of implementing the Species Conservation Habitat Project (SCH Project), which is a proof of concept project for restoring shallow water habitat that supports fish and wildlife dependent upon the Sea, although to date, construction has not begun on the SCH Project.

Local and Regional Agency Participation

Local governments, including Imperial and Riverside counties, the IID, the CVWD, Salton Sea Authority, and the San Diego County Water Authority, have been engaged in Salton Sea efforts, both in response to State mandates and as independent efforts to address water resources management, habitat restoration, impact mitigation, and economic development initiatives. These activities are expected to continue and evolve over time. Additionally, there have been experimental restoration efforts conducted by local farmers. The recent *Memorandum of Understanding* between Imperial and Riverside counties is an example of a cooperative effort to seek and benefit from economic development around the Salton Sea as the revitalization and impact mitigation projects begin to have their desired effects.

Community and Stakeholder Engagement

As noted in **Chapter 3** and above, improvements to the community engagement in Salton Sea management are needed with the intent of having actual community and stakeholder interest reflected in project planning and priority-setting. The Phase 1 Plan has not, according to community-based stakeholders, achieved this objective. And despite considerable efforts on the part of the State and local agencies, the desired and needed level of community engagement, especially with the disadvantaged and highly affected communities, can be improved. In addition to the interests and needs of the local communities, the Salton Sea and the related water resource issues draw the attention of a wide range of public interest and advocacy organizations. Hence, a key governance objective is to establish a broad program. Any program will need to be provided with sufficient authority, direction, resources, and include representatives from the following:

- Existing JPA organizations
- Federal agencies
- State regulatory agencies
- Local agencies
- Local community-based organizations
- Advocacy organizations
- Private sector businesses
- disadvantaged communities

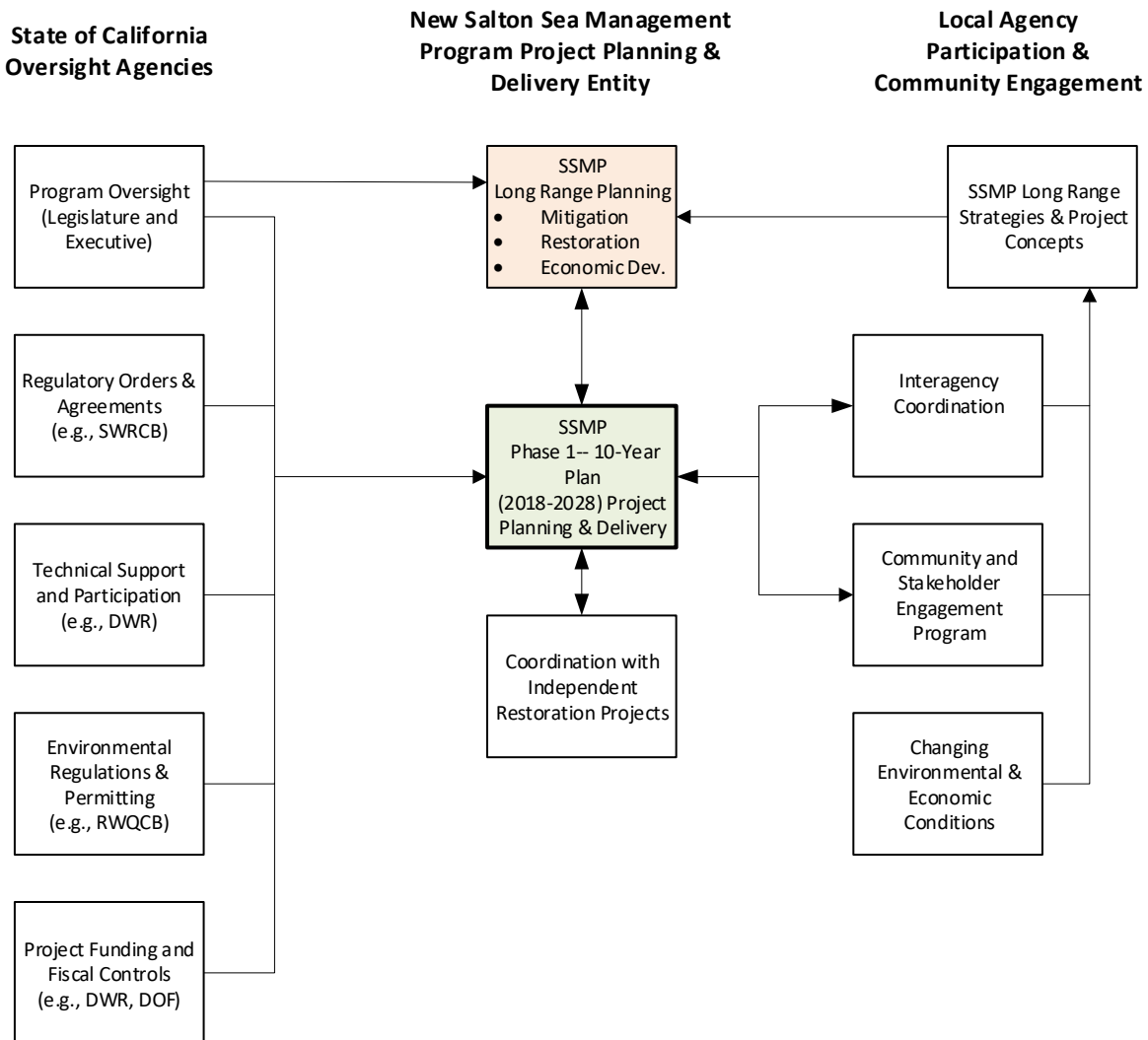
A recent effort led by the Consensus Building Institute has been underway to evaluate and suggest improvements in Salton Sea community engagement.¹⁰ Building on this effort, a new community engagement program should be established that effectively engages stakeholders and the broader community in Salton Sea project definition and priorities going forward.

Proposed Institutional Framework

Figure 3 illustrates a conceptual framework of the State and local government functions in relationship to SSMP project delivery functions where project delivery functions are fully assigned to a new governmental entity. Precisely defining the roles and relationships of existing State and local government participants in relation to an independent project delivery entity will be an important first step of the reorganization effort.

¹⁰ *Stakeholder Issue Assessment Themes and Recommendations on a Salton Sea Stakeholder Engagement*, Consensus Building Institute, May 2107

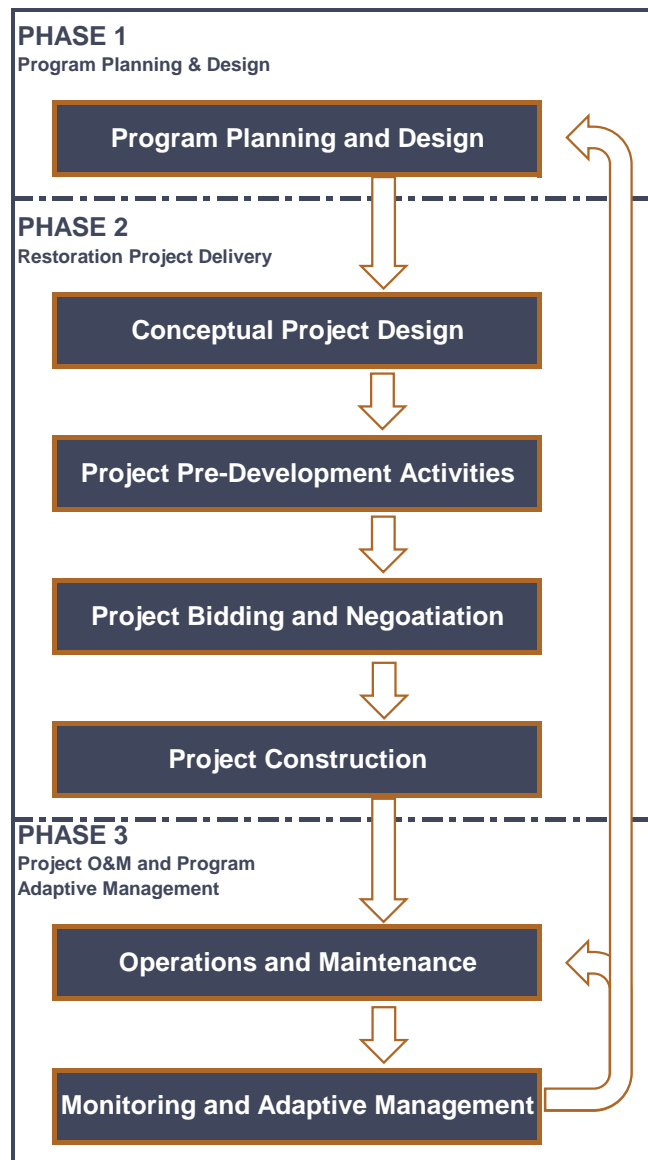
Figure 3 SSMP Proposed Governance Organization Plan



Establishing a New Project Delivery Entity

Within the broader institutional framework, the new project delivery entity will have as its primary responsibility the design, engineering, construction, monitoring, and operations and maintenance of completed revitalization and impact mitigation projects. Improving project delivery through creation of such a new entity is essential to achieving the SWRCB Order 2017-0134 milestones, and subsequent milestones needed to complete revitalization efforts. With support, oversight, and funding from State leadership and guidance, direction, and support from local agencies, stakeholders, and broader community, as illustrated in **Figure 3**, this new project delivery entity would be organized and resourced to follow the typical cycle of infrastructure project program management, including design and engineering, construction, and operations and maintenance. **Figure 4** illustrates this “project delivery cycle” that the new entity would implement, as described below.

Figure 4 Program Management and Project Implementation



- **Phase 1: Program Planning and Management.** Phase 1 includes upfront and ongoing program management and implementations tasks. These include responding to State and local government entities regarding long range comprehensive revitalization program planning, revitalization strategies and project identification, revitalization and dust suppression project management, monitoring, and adaptive management principles, programmatic environmental review and permitting, revitalization project programming, and obtaining appropriate funding allocations.
- **Phase 2: Project Implementation** – Revitalization and dust suppression project delivery. Phase 2 includes all activities required for project delivery. This includes complete individual project design and engineering, securing of easements, right-of-way, and encroachment permits, obtaining all permits and environmental clearances, bidding specifications and

strategy and bid solicitation issuance, contractor selection, construction management and change orders, and project testing and acceptance.

- **Phase 3: Maintenance, Monitoring, and Adaptive Management.** Phase 3 includes project operations and maintenance activities, cooperation with broader environmental monitoring, monitoring performance of projects, adaptation of projects and programs as necessary in response to changing conditions, new technology, and lessons learned, and associated coordination with local agencies, landowners, and affected communities.

Project Delivery Entity Governance Options

The new project delivery entity could be organized and governed in a variety of ways. As part of this study a set of case studies were assembled to explore how similar “project delivery” entities have been organized. Additionally, the specific organizational needs of the SSMP and the existing organization and capacities were considered. Four options for organization of the project delivery entity are presented in **Table 4**, ranging from the simplest, enhancing the existing SSMP staffing and resources, to creation of an entirely new intergovernmental entity (JPA). In all options the local office responsibilities would include program planning, design, permitting, project bidding and negotiation, contract management, project construction, operations and management, and monitoring and adaptive management. The local project delivery entity would be led by an executive director, supported by deputy program managers, specialist and administrative staff, and contractors, and organizationally should include the following components:

1. Direct accountability to the State related to meeting established project targets, appropriation and expenditure of State funding, and maintaining a high standard of accountability and collaboration with all local agency participation.
2. Access to a technical committee and citizen’s advisory committee.
3. Operational departments including:
 - Project Development/Engineering
 - Finance and Human Resources
 - Science and Monitoring
 - External Affairs
 - Long Range Planning

Case study research conducted as a part of this study indicates that a significant professional staff of full-time professional positions will be required. The complexities of the Salton Sea revitalization and dust suppression efforts suggest that at least 15 full-time professional positions will be required to achieve organizational objectives in a manner consistent with the statutory project delivery milestones.

Table 4 Salton Sea Project Delivery Entity Governance Options

Governance Option	General Description	Formation Process	Match with Functional Requirements of SSMP
1. Status Quo (distributed responsibility)	Retain existing organizations but clarify and improve lines of authority and resources available at the State and local level	Improvements achieved through internal reorganization, State budget allocations, designating staff, and related organizational development	Retains SSMP as the planning and project delivery entity cooperating, as is currently the case, with the SSA, IID, and other State and local entities providing support functions
2. Adopt new Intergovernmental agreement assigning functional roles for existing entities	Prepare an intergovernmental agreement that invigorates and coordinates project management and accountability within existing State agencies with clear lines of authority and funding commitments.	State takes lead in formulating intergovernmental agreement involving the State and through negotiation, the key existing local government entities involved	Retains SSMP as the planning entity, with the SSA, IID, and other State and local entities playing specifically defined roles. Project delivery activities could be "outsourced" under this Option
3. Create a new Program (within an existing State Agency) charged with planning, managing, and delivering Salton Sea Restoration Projects.	Prepare special legislation that creates a new fully resourced State program with full project planning, management, and project delivery and operations and maintenance authority.	Following new legislation, State takes lead in reorganization efforts including necessary negotiations with local government entities to reorganize and advance delivery of restoration projects, meet restoration objectives and support community and economic development efforts	SSMP as it currently exists would be entirely replaced by the new State program. Project delivery activities could be "outsourced" under this Option.
4. Create new Independent Intergovernmental Authority charged with SSMP project delivery and planning	Prepare special legislation that creates a new JPA, Conservancy or Trust, based in the Salton Sea area with inclusive local government leadership and charged with leading SSMP project delivery and operations and maintenance activities	State adopts new legislation creating the new entity focused on project delivery. This entity would have substantial participation by local government entities. This entity could be a JPA but also be formed as a 501 c.3. non-profit entity	The new JPA, Conservancy or Trust would assume all project delivery and operation and maintenance activities from the existing SSMP and the currently involved State agencies

These options have been considered from the perspective of how well they can address the findings set forth in Chapter 3, and the specific organizational objectives set forth above.

Governance Options

Option 1 – Status Quo

The least complicated approach for the new entity would be to simply more fully resource the existing SSMP office under the direction of the Assistant Secretary of Salton Sea Policy, maintaining the organizational plan described in **Chapter 2**. This would involve, at the minimum, replacing the existing "on loan" staff from various State agencies with a permanent staff located in both Sacramento and the Salton Sea area (the existing project office in Bermuda Dunes).

Evaluation: While such administratively directed staffing improvements could help move the SSMP projects forward, this option would not establish the necessary State directives and sustained commitments of operating funding or necessarily enhance the needed clarification of roles and relationships or improve accountability, and would not address improved participation and vesting of the local agencies in the SSMP project planning and delivery process. Moreover, without a legislative directive, administratively assigned staff levels would be subject to future

discretion by the participating agencies thus continuity of project delivery efforts would remain at risk. While this option is not judged to be the best long-term solution, immediate interim enhancement of SSMP capacity and resolution of various impediments should occur while the preferred option is being shaped and organized.

Option 2 – Existing Entity or Interagency Agreement

The second option would transfer control of the SSMP to an existing local entity (e.g., the Salton Sea Authority or other local agency) through an interagency agreement. Staffing could be new independently hired staff or, alternatively, staff roles could be provided, all or in part, by “outsourcing” specific functions to participating existing local agencies, assuming that a recurring funding source was made available by the State.

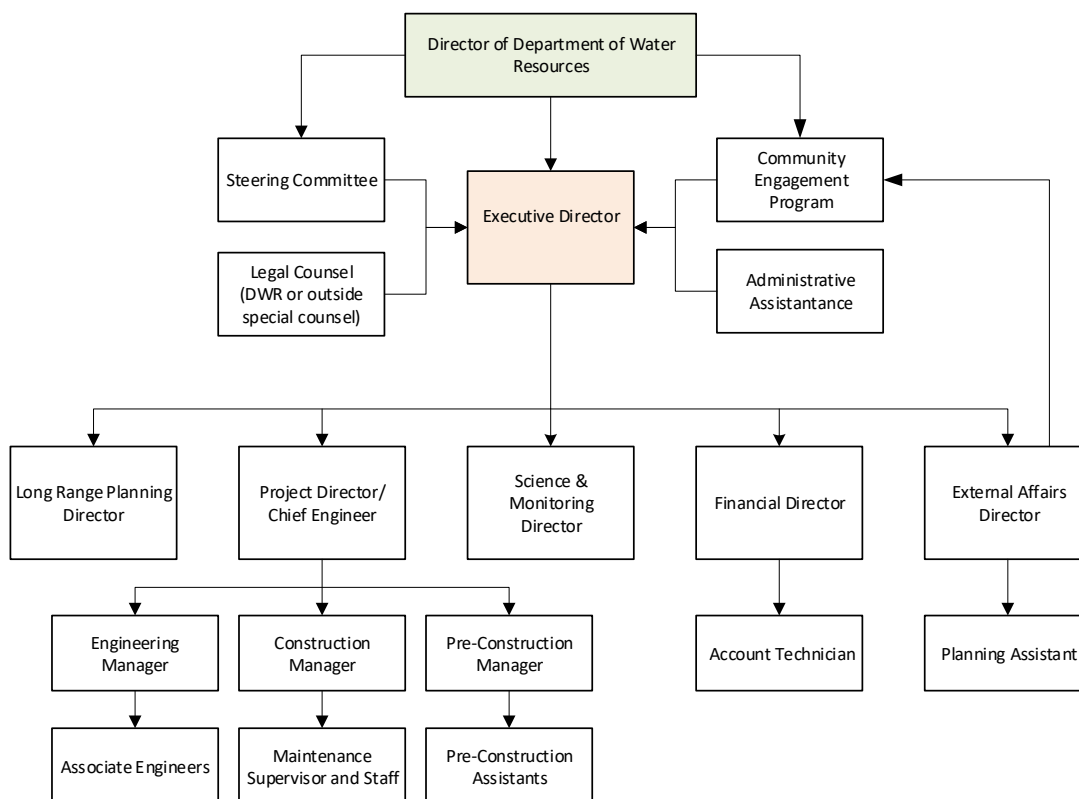
Evaluation: While Option 2 has the merit of utilizing existing local organizations and their respective capacities, their leadership may not adequately represent all of the appropriate State and local entities. Also, given the more diverse functions and responsibilities of these existing local entities, the necessary focus on State-mandated project delivery may not occur and needed State oversight would be lacking. The capacity of existing local entities also appears to be insufficient to meet the milestones established by SWRCB Order 2017-0134. The absence of this clear State nexus would likely lead to diminished State funding and oversight in the future.

Option 3. New State Office of SSMP Project Delivery

Under this option, the State would maintain responsibility for SSMP project delivery by creating a new fully resourced State Office of Salton Sea Project Delivery that would be established within DWR in the Natural Resources Agency. The new State Office of Salton Sea Project Delivery would include 1) a Sacramento executive management team responsible for both executive management, program funding, and administration and 2) a local project management office located at the Salton Sea area with responsibility for SSMP program management and project delivery and coordination with local agency participants. **Figure 5** provides a conceptual organizational plan for Option 3.

Under this option, the new office would report to the Director of DWR who is, in turn, accountable to the Governor and the Legislature. Thus, DWR would be responsible on a day-to-day basis for executive management of the program, including aligning different State objectives, departments, and priorities with the Salton Sea revitalization and dust suppression efforts, providing updates to State legislators, ensuring sufficient overall funding, and appropriately allocating funding to the Program Management office. It is proposed that the new State Office of Salton Sea Project Delivery would also receive guidance and input from a steering committee composed of involved local public agencies, including IID, SDCWA, CVWD, Riverside County, Imperial County, and the Torres Martinez Desert Cahuilla Indian Tribe, members of the public, citizen organizations, and non-governmental entities.

Figure 5 State Office of SSMP Project Delivery



Evaluation: If properly organized and staffed on a sustained basis as a new State entity under the direction of DWR, Option 3 could greatly improve Salton Sea project delivery efforts. While Option 3 would take advantage of the State’s considerable administrative and technical capacities, past experience and the immediate situation indicate project delivery functions led by State agencies and staff have not been adequately resourced nor have they been fully responsive to local interests and stakeholder and community concerns, perhaps due to other priority projects and emergency situations facing the State. Lack of a local presence in the Salton Sea area has also reduced continuity and responsiveness. Additionally, State contracting procedures are necessarily cumbersome and time consuming leading to additional costs and project delivery delays.

Option 4. New Joint Powers Authority Implementation

Under this option, a new JPA would be created by State legislation as the “SSMP Project Delivery Office”. Similar to the other options, the State would maintain its leadership and oversight functions but all SSMP project delivery functions would be reorganized into the new JPA. The JPA would be located at the Salton Sea and would be led by an executive director, appointed by the board of directors, leading a staff that would include a deputy director along with select specialist and administrative staff. The JPA board would include representation from key State and local entities, including IID, SDCWA, CVWD, Riverside County, Imperial County, and the Torres Martinez Tribe. To maintain State leadership and responsibility, a representative of the Governor’s Office would chair the board and would hold veto authority over board decisions, including the authority to reject the entity’s budget and to fire the executive director.

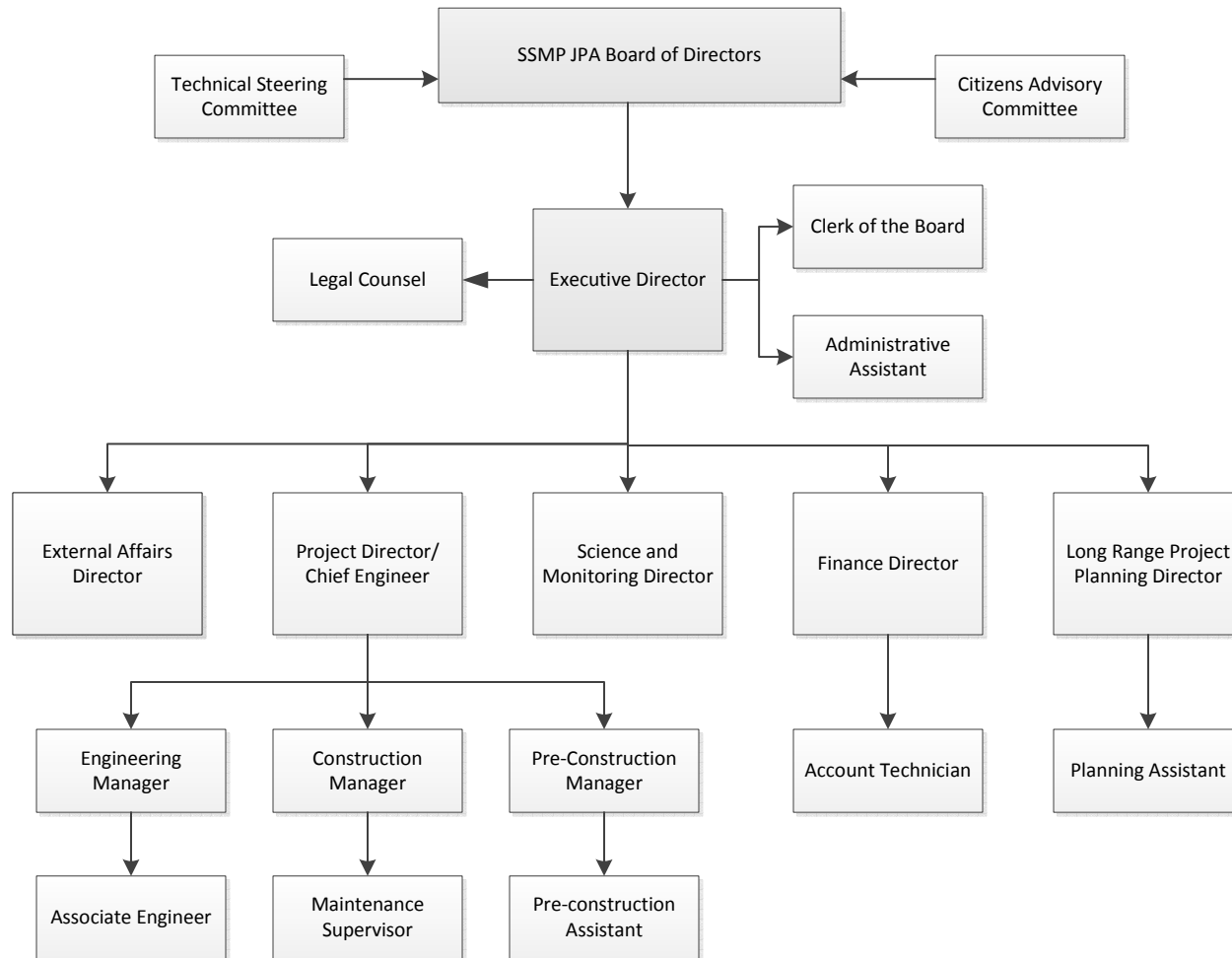
Figure 6 presents a conceptual organizational chart showing the new JPA's leadership and executive director, the core program managers and supporting positions that will be required to implement the SSMP projects. The executive director of the JPA would report to the JPA board of directors and maintain liaison with the involved State agencies. The mission of the JPA would also be achieved through technical cooperation with existing agencies and the retention and management of consultants and contractors to provide particular expertise as required for program design, planning, permitting, project delivery, operations and management, and adaptive management. A steering committee composed of representatives of regulating agencies, advocacy organizations, and other experts would provide guidance and input to the executive director and will also provide a forum for discussing planning and project implementation issues. DWR would participate on the steering committee and provide technical advice and support as may be requested. A citizen advisory committee composed of members of the public, community-based organizations, and non-governmental organizations, would provide input to the board of directors and the executive director and provide for community engagement and communication.

Creation of an independent JPA for project delivery and program implementation is a commonly used approach for implementation of conservation plans, transportation projects, wastewater treatment facilities, as well as other programs. A large number of California's regional habitat conservation plans use a JPA to implement conservation plans with oversight by State and federal regulators. Examples can be found in Riverside County, San Joaquin County, Contra Costa County, and Santa Clara County, among others. In addition, the State's Waterfix program has also recently established the Delta Conveyance Design and Construction Joint Powers Authority (DCA) to work with the DWR to construct the California Waterfix project. DWR also established the Delta Conveyance Office to manage the work of the DCA and the DCA has begun establishing an interim staff. In all these cases, the precise role of the JPA staff and Board in relationship to program planning, funding, and implementation is different depending on circumstances/needs.

Evaluation: An independent JPA would focus exclusively on SSMP project planning and delivery, would implement projects in direct response to State mandates, and would be led by a Board of Directors with members from existing State, local, and regional government agencies. In this way, the recommended JPA would echo the QSA JPA that has been successful at meeting its mandated mitigation project objectives and relying upon the leadership and capacities of local and regional governmental entities. Also, an independent JPA would not be subject to the State's complex and often time-consuming contracting rules allowing for flexibility that may be needed for creative approaches to dust suppression and habitat restoration projects.

Similar to other specialized project planning and project delivery infrastructure construction-focused entities, a newly retained professional staff will be required, and would be located in the Salton Sea area to deliver projects in an expedited manner and conduct necessary ongoing operations and maintenance and adaptive management efforts. A key concern regarding all organizational options is the ability to attract, organize, and sustain a highly professional staff to the Salton Sea region, especially given the existing tight labor market in the professional services categories needed. The JPA could compete in the labor market to attract the most qualified candidates for open positions and not be limited by the State's hiring procedures.

Figure 6. SSMP Planning and Project Delivery JPA



While each of the four options considered could improve the current deficiencies in Salton Sea project delivery efforts, Option 4 would have the best opportunity for meeting the organizational objectives listed above. Key advantages would be responsiveness to the leadership (Board of Directors) representing the local organizations most affected by the impacts of the declining Salton Sea level. The ability to independently and flexibly partner and contract with local agencies, contractors, and farmers in pursuit of project delivery milestones is also a significant advantage.

Implementation

Action needed to accelerate SSMP project delivery is past due. Considerable frustration has developed among the Legislature, State agency staff, local government officials, the local community and advocacy organizations. Accordingly, an expanded program should be activated as soon as possible by considering the following actions:

- 1. Initiate legislation and related organizational efforts to establish the JPA – the SSMP Project Delivery Office - and the related realignment of existing State and local agency revitalization and dust suppression activities.**

The Legislature can take action to implement the objectives and elements presented in this Study. In taking up the matter, the Legislature would hold the necessary hearings and receive public and State agency input regarding the necessary immediate staffing and funding for SSMP enhanced interim operations, define the elements of the new SSMP Project Delivery Office, and operating and project costs and funding sources for the Phase 1 Plan projects. Critical to the success of the the Salton Sea effort will be the delineation of an explicit set of tasks, with clear deadlines, for the new project delivery entity. These tasks should reflect existing statutes and the milestones established by SWRCB Order 2017-0134.

Establishing the new SSMP Project Delivery Office will require a deliberative process by the Legislature and participating local government entities to shape the new organization and determine parallel reorganization steps including the role, if any, for existing project delivery and intergovernmental efforts. This process will result in a new and fully resourced SSMP Project Delivery Office and a simultaneous alignment of the roles and relationships of participating State, regional, and local government entities in support of the new entity. Due to the critical need to make progress on the SSMP projects, the need to engage stakeholders and the broader community, and the time required to establish the SSMP Project Delivery Office along with related reform of roles and relationships, a phased program of reorganization is recommended as described below.

- 2. Immediately assign State staff and/or retain consulting engineers to augment existing SSMP project delivery efforts on an interim basis.**

It is necessary to bolster the efforts of the SSMP immediately so that ongoing project delivery can be accelerated and project milestones can be met. The establishment of the new project delivery entity will require time, but in the interim additional staff and resources should be made available to the SSMP, including assignment of additional full-time State agency staff, and retention of necessary consultants and contractors.

This interim expansion in staffing and resources could be established with a fixed term of a year or two during which time the SSMP Project Delivery Office would be established following a deliberative process, staff development, and other implementing efforts. As a part of this reorganizational effort, the Assistant Secretary of Salton Sea Policy could continue ongoing project planning and community engagement programs but project delivery efforts would be accelerated. It may be necessary to establish interim agreements with the existing State, regional, and local agencies to address program inefficiencies.

3. Following the creation of the Joint Powers Authority, activate and fund the organization

Following legislative approval, organizational development efforts should begin immediately to create the new SSMP Project Delivery Office. Organizational efforts will include further evaluation of staffing needs and conducting recruitment efforts. These organizational efforts will also include formation of the board of directors, retention of required senior management and technical staff, establishing an operating office in the Salton Sea area, and coordinating with participating State, federal, regional, and local government entities.

Conclusion

Immediate action is required to remedy the lack of resources available to the Salton Sea Management Program (SSMP) and to mobilize the recommended reorganization efforts.

Action needed to accelerate SSMP project delivery is past due. Considerable frustration has developed with nearly all involved in the process, including the Legislature, State agency staff, local government officials, and the local community and advocacy organizations. Accordingly, a deliberate program should be activated by an exercise of executive authority in the Natural Resources Agency and DWR in parallel with adoption of guiding legislation by the Legislature. As a part of this effort the shortcomings of previous planning and organizational efforts and the need for immediate improvement in project delivery efforts should be kept in mind. A three-pronged effort is recommended:

- Initiate legislation and related organizational efforts to establish the Joint Powers Authority and the related realignment of existing State and local agency revitalization and dust suppression activities.
- Immediately assign State staff and/or retain consulting engineers to augment current SSMP project delivery efforts on an interim basis until the new Joint Powers Authority/ SSMP Project Delivery Office is functioning.
- Following the creation of the recommended Joint Powers Authority, activate and fund organization of the SSMP Project Delivery Office and execute related agreements.

APPENDIX A:

State Water Resources Control Board (SWRCB)
Order WR 2017-0134



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STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

ORDER WR 2017-0134

In the Matter of the Petition of

Imperial Irrigation District

Regarding State Water Board Revised Order WRO 2002-0013

SOURCE: Colorado River

COUNTY: Imperial

**ORDER ACCEPTING STIPULATION AND REVISING STATE WATER BOARD
REVISED ORDER WRO 2002-0013**

BY THE BOARD:

The Salton Sea is California's largest lake and was once famous for its sport fishery and recreational uses. It is approximately 35 miles long and up to 15 miles wide with approximately 360 square miles of water surface and 105 miles of shoreline. The surface of the Salton Sea lies approximately 232 feet below sea level. Approximately 90 percent of the freshwater inflow to the Salton Sea is agricultural drain water from the Imperial Valley. As the Salton Sea has no outlets, salts and nutrients concentrate in it and nutrients enhance the formation of eutrophic conditions. Currently, the Salton Sea has a salinity level that is approximately 50 percent higher than the ocean. The Salton Sea is a critical stop on the Pacific Flyway for migrating birds, including several threatened and endangered species. The Salton Sea National Wildlife Refuge was established in 1930 to preserve wintering habitat for waterfowl and other migratory birds.

The California Water Action Plan (January 2014) calls for protection and restoration of key ecosystems, including the Salton Sea. The California Water Action Plan provides that the California Natural Resources Agency (CNRA), in partnership with the Salton Sea Authority, will coordinate state, local and federal restoration efforts and work with local stakeholders to develop a shared vision for the future of the Salton Sea. The California Department of Fish and Wildlife and the California Department of Water Resources are immediately to begin implementing the first phase of this effort with the construction of

600 acres of near shore aquatic habitat to provide feeding, nesting and breeding habitat for birds. This project could increase to 3,600 acres or more with additional resources. Concurrently, CNRA and the Salton Sea Authority are developing plans for the Salton Sea that will evaluate additional restoration projects and identify economic development opportunities through renewable energy development.

On October 5, 1998, the Imperial Irrigation District (IID) and the San Diego County Water Authority (SDCWA) submitted a joint petition to the State Water Board. After amendments, the final petition requested the long-term transfer of up to 300,000 acre-feet of water per year authorized for diversion and use from the Colorado River under IID's water right permit 7643 as follows: (1) 200,000 acre-feet of water per year from IID to SDCWA; and (2) 100,000 acre-feet of water per year from IID to the Coachella Valley Water District (CVWD) and the Metropolitan Water District of Southern California (MWD). The approved transfer was for a term of 45 years with an optional 30-year renewal period, for a total of 75 years.

On October 28, 2002, the State Water Board approved the transfer with issuance of [Order WRO 2002-0013](#). In the order, the State Water Board concluded that salinity levels at the Salton Sea that would have existed in the absence of the transfer should be maintained for a period of 15 years. This requirement was intended to mitigate project impacts to the Salton Sea to provide time to study the feasibility of long-term restoration actions and begin implementation of any feasible restoration projects. At the same time, it avoided prejudging those restoration-planning efforts.

The conservation and transfer of water from agricultural to urban uses is part of California's Colorado River Water Use Plan, which provides a framework to reduce California's use of Colorado River water to a 4,400,000 acre-foot apportionment in normal years. To facilitate implementation of the Plan, in 2003, IID, the State of California, other California water agencies, the federal government and Indian tribes entered into a collection of agreements commonly referred to as the Quantification Settlement Agreement (QSA). The QSA was intended to address longstanding disputes regarding the priority, use, and transfer of Colorado River water. The QSA established water budgets for the parties and authorized the contracting parties to pursue the long-term transfer of conserved water from IID to SDCWA, CVWD, and MWD.

An immediate, continued, and focused effort to manage a smaller but sustainable Salton Sea is necessary to protect public health and the environment.

The Salton Sea Restoration Act, California Fish & Game Code section 2931, subdivision (a) states that "it is the intent of the Legislature that the State of California undertake the restoration of the Salton Sea ecosystem and the permanent protection of the wildlife dependent on the ecosystem."

The Salton Sea Restoration Act, California Fish & Game Code section 2942 provides that the Secretary of CRNA shall lead the state's efforts to restore the Salton Sea.

In May 2015, Governor Edmund G. Brown Jr. established the Salton Sea Task Force (Task Force). The Task Force includes experts from the CNRA and the California Environmental Protection Agency, including representatives from the State Water Board. The Task Force has sought input from tribal leaders, federal agencies, local water districts, local leaders, and other public and private stakeholders with an interest in the Salton Sea. The Task Force relied on information gathered during these meetings to produce its recommendations, which were released on October 9, 2015, and included a description of the principles necessary for a successful Salton Sea Management Program (SSMP). Governor Brown appointed Bruce Wilcox as assistant secretary for Salton Sea Policy at the CNRA to oversee habitat restoration efforts along the shoreline of the Salton Sea. As a part of the Task Force, the State Water Board regularly monitors and assesses progress on the implementation of the SSMP, and periodically holds public workshops as part of this function.

CNRA has prepared Phase 1 of the SSMP in furtherance of its Salton Sea restoration objectives and is committed to constructing and maintaining habitat and dust-suppression projects that address public health and environmental concerns. The SSMP contemplates future phases, and a long-range plan.

On November 18, 2014, IID filed a petition with the State Water Board, seeking to have the State Water Board enter an order to ensure success of Salton Sea restoration. The State Water Board conducted workshops in 2015 and 2016 to examine issues related to Salton Sea restoration.

On August 31, 2016, CNRA entered into a Memorandum of Understanding with the United States Department of the Interior that provides, in pertinent part, that the State will have a lead role in the cooperative effort to restore the Salton Sea. On January 18, 2017, CNRA and the United States Department of the Interior entered into an Addendum to the Memorandum of Understanding expressly identifying the importance of Salton Sea restoration as a critical component of plans for maintaining California's long-term water supply reliability.

On March 15, 2017, IID filed a motion with the State Water Board seeking to have an evidentiary hearing to address its November 18, 2014 petition regarding Salton Sea restoration. As a result of the motion, a draft stipulated order was developed for consideration by the State Water Board during a public workshop held on September 7, 2017. The draft stipulated order was revised following comments at the workshop and subsequent negotiations, resulting in a final draft stipulated order being shared with the State Water Board on October 20, 2017 (revised stipulation).

CNRA, IID, SDCWA, Imperial County, Audubon California, Defenders of Wildlife California, Sierra Club California, and the Pacific Institute (collectively Supporting Parties) have attested to their support for revised stipulation.

On October 26, 2017, the State Water Board provided notice of the revised stipulation and an opportunity to comment, circulated a redline reflecting the Supporting Parties' changes incorporated into the revised stipulation after the September 7, 2017 workshop, and provided notice that the State Water Board would consider adopting an order accepting the revised stipulation at its November 7-8, 2017 board meeting.

In addition to the mitigation requirements imposed by the federal and state endangered species laws, the California Environmental Quality Act (CEQA) (Pub. Resources Code, §§ 21000-21177) establishes requirements for the implementation of mitigation measures imposed to minimize the projected significant impacts of the Transfer Project. These mitigation measures and the Mitigation Monitoring & Reporting Program for the QSA transfers are not addressed by and are unaffected by this Order.

ORDER

IT IS HEREBY ORDERED THAT:

1. The State Water Board accepts in its entirety the revised stipulation submitted by the Supporting Parties attached as Exhibit A.
2. [Revised Water Right Order WRO 2002-0013](#) is amended to incorporate paragraphs 19-29 of provision 2 of Exhibit A as new ordering provisions of Revised Water Right Order WRO 2002-0013, pertinent to Salton Sea restoration.
3. As part of implementing this Order and to promote understanding of the issues within the vicinity of the Salton Sea, the Imperial Irrigation District, or another Supporting Party, shall:
 - a. make available Spanish-language materials summarizing the Salton Sea Management Program, projects proposed to implement the program, and annual status reports related to milestones;
 - b. conduct public meetings about the Quantification Settlement Agreement, the Salton Sea Management Program, and this Order.

4. The Division of Water Rights will work with the Supporting Parties to propose as part of an early milestone an appropriate monitoring framework to assess success in implementing the Salton Sea Management Program.
5. The State Water Board, consistent with the original transfer order and the stipulated order, retains continuing jurisdiction over Revised Water Right Order 2002-0013 as amended, as well as the stipulated order.
6. This Order is non-precedential pursuant to Government Code section 11425.60, subdivision (b).

CERTIFICATION

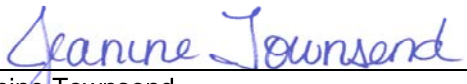
The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 7, 2017.

AYE: Vice Chair Steven Moore
Board Member Tam M. Doduc
Board Member Dorene D'Adamo
Board Member E. Joaquin Esquivel

NAY: None

ABSENT: Chair Felicia Marcus

ABSTAIN: None



Jeanine Townsend
Clerk to the Board

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Proposed SWRCB Order Revising WRO 2002-0013 (revised)

- A. Whereas, an immediate, continued, and focused effort to manage a smaller but sustainable Salton Sea is necessary to protect public health and the environment.
- B. Whereas, the Salton Sea Restoration Act, California Fish & Game Code section 2931(a) states that “it is the intent of the Legislature that the State of California undertake the restoration of the Salton Sea ecosystem and the permanent protection of the wildlife dependent on the ecosystem.”
- C. Whereas, the Salton Sea Restoration Act, California Fish & Game Code section 2942 provides that the Secretary of the California Natural Resources Agency (CRNA) shall lead the state’s efforts to restore the Salton Sea.
- D. Whereas, CNRA has prepared Phase I of the Salton Sea Management Program (SSMP) in furtherance of its Salton Sea Restoration objectives and is committed to constructing and maintaining habitat and dust-suppression projects that address public health and environmental concerns. The SSMP contemplates future phases, and a long-range plan.
- E. Whereas, the Imperial Irrigation District (IID) filed a petition with the State Water Resources Control Board (Board) on November 18, 2014, seeking to have the Board enter an order to ensure success of Salton Sea Restoration.
- F. Whereas, the Board conducted workshops in 2015 and 2016 to examine issues related to Salton Sea restoration.
- G. Whereas, on August 31, 2016, CNRA entered into a Memorandum of Understanding with the United States Department of the Interior that provides, in pertinent part, that the State will have a lead role in the cooperative effort to restore the Salton Sea.
- H. Whereas, on January 18, 2017, CNRA and the United States Department of the Interior entered into an Addendum to the Memorandum of Understanding expressly identifying the importance of Salton Sea restoration as a critical component of plans for maintaining California’s long-term water supply reliability.
- I. Whereas, on March 15, 2017, IID filed a motion with the Board seeking to have an evidentiary hearing to address its November 18, 2014 petition regarding Salton Sea Restoration.
- J. Whereas, in addition to the mitigation requirements imposed by the federal and state endangered species laws, the California Environmental Quality Act (Public Resources Code §§21000-21177 et seq.) establishes requirements for the implementation of mitigation measures imposed to minimize the projected significant impacts of the Transfer Project. These mitigation measures and the Mitigation Monitoring & Reporting Program for the QSA transfers are not addressed and are unaffected by this Order.

The State Water Resources Control Board finds and determines as follows:

- 1. For the reasons set forth in Water Rights Order 2002-0013 (revised) and Water Rights Order 2002-0016, the delivery of “mitigation water” to the Salton Sea will terminate on December 31, 2017. Mitigation measures shall continue to proceed pursuant to the Mitigation Monitoring & Reporting Program as provided in the “Water Conservation and Transfer Project” Environmental Impact Report and Environmental Impact Statement certified by IID and Amended and Restated in a September 2003 Addendum and incorporated into Water Right Order 2002-0013 (revised) including the four-step air quality plan outlined therein.

Proposed SWRCB Order Revising WRO 2002-0013 (revised)

2. Water Right Order 2002-0013 (revised) is hereby modified by adding the following paragraphs as new independent conditions 19-29 pertinent to Salton Sea Restoration:
 19. Conditions 20-29 are independent conditions pertinent to Salton Sea Restoration.
 20. The Board finds and declares that restoration of a smaller but sustainable Salton Sea is feasible, that the State of California will lead and coordinate management efforts, and that implementation of projects to protect or improve air and water quality and wildlife habitat will be completed forthwith to avoid severe consequences to the State of California as a whole, to the health of Imperial and Coachella Valley residents, and to multiple wildlife habitats that exist at the Salton Sea and serve the Pacific Flyway.
 21. The Board further finds and declares that successful management of a smaller but sustainable Salton Sea will require the active participation and support of the federal government, affected local and regional governing bodies, affected tribal governments, environmental and philanthropic organizations, and the State of California. While the importance, cost and scale of this endeavor will exceed what can be expected from any single entity, the State has acknowledged that its role as a catalyst is essential in advancing the cause of restoration.
 22. The Board further finds that the ability to successfully manage a smaller but sustainable Sea will require cooperation from non-state property owners, surface lease holders, surface and subsurface mineral rights owners as well as air quality management districts with jurisdiction over the Sea to ensure land use entitlements are secured expeditiously and management project design is compatible with existing land use and water conveyance infrastructure.
 23. The Board further finds that successful management of the exposed Salton Sea lakebed requires the cooperation of the State of California and air quality managers with jurisdiction over the Sea to develop future air quality projects.
 24. Consistent with Recitals B, C, and D [of this Order], in addition to currently planned and funded habitat projects (Red Hill Bay, Torres Martinez wetlands and Species Conservation Habitat) and all QSA JPA funded Salton Sea mitigation projects, restoration milestones detailed below are necessary to address public health and environmental concerns during Phase 1 of the SSMP. Additional projects and milestones will be developed for subsequent phases to address public health and environmental concerns.
 - a. By December 31, 2018, construction of habitat and dust-suppression projects shall be completed on 500 acres of exposed playa.
 - b. By December 31, 2019, construction of habitat and dust-suppression projects shall be completed on an additional 1,300 acres of exposed playa.
 - c. By December 31, 2020, construction of habitat and dust-suppression projects shall be completed on an additional 1,700 acres of exposed playa.
 - d. By December 31, 2021, construction of habitat and dust-suppression projects shall be completed on an additional 3,500 acres of exposed playa.
 - e. By December 31, 2022, construction of habitat and dust-suppression projects shall be completed on an additional 1,750 acres of exposed playa.

Proposed SWRCB Order Revising WRO 2002-0013 (revised)

- f. By December 31, 2023, construction of habitat and dust-suppression projects shall be completed on an additional 2,750 acres of exposed playa.
 - g. By December 31, 2024, construction of habitat and dust-suppression projects shall be completed on an additional 2,700 acres of exposed playa.
 - h. By December 31, 2025, construction of habitat and dust-suppression projects shall be completed on an additional 3,400 acres of exposed playa.
 - i. By December 31, 2026, construction of habitat and dust-suppression projects shall be completed on an additional 4,000 acres of exposed playa.
 - j. By December 31, 2027, construction of habitat and dust-suppression projects shall be completed on an additional 4,000 acres of exposed playa.
 - k. By December 31, 2028, construction of habitat and dust-suppression projects shall be completed on an additional 4,200 acres of exposed playa.
25. No less than 50% of the acreage described in condition 24 shall provide habitat benefits for fish and wildlife that depend on the Salton Sea ecosystem. Projects that provide habitat benefits for fish and wildlife do not include dust control projects that involve surface roughening, vegetation enhancement and surface stabilization.
26. CNRA will develop subsequent 10-year phases of the SSMP based upon available information, with the development of each phase commencing no later than midway through each current phase. Beginning with the development of Phase II, and in close coordination with stakeholders, CNRA will complete a long-term plan by no later than December 31, 2022.
27. Annual milestones are cumulative and if they are not achieved or exceeded in any given year, the amount of the shortfall or excess in that year will carry over to the following year.
28. No later than March 31 each year, the Board will hold a public meeting to receive oral and written comments on the status of Salton Sea Restoration, including a report from state agencies identifying: (i) completed projects and milestones achieved in the prior year; (ii) amount of acreage of completed projects that provide dust suppression and habitat, 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; and progress toward development of the long-range plan described in condition 26. 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.
29. The Board reserves jurisdiction to further amend conditions 19-28 of this Order as necessary to ensure Salton Sea Restoration throughout the term of the QSA through its continuing jurisdiction under this Order.
3. This Order, like Water Right Order 2002-13 (revised) and Water Right Order 2002-16, is determined to be non-precedential pursuant to Government Code section 11425.60(b).

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APPENDIX B:

History of Salton Sea Legislation, Agreements, and Orders



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Appendix B -- History of Key Salton Sea-related Legislation, Agreements, & Orders

Item	Intent & Issues Addressed	Date Promulgated	Implementing Entities	Status 2018	Policy Linkage to Salton Sea	Funding Sources Linked to Legislation
Colorado River Compact	Allocation of Colorado River Water Rights	1922	Seven States in the Colorado River Watershed	Compact remains in place; Minute Order 319 (2012) addressed Mexico's allocation	[x%] of water allocated to California is used for ag. Irrigation in Salton Sea watershed	Agency appropriations
Salton Sea Authority formed as JPA (Riverside and Imperial Counties, IID and CVWD)	improve water quality, stabilize water elevation, and to enhance recreation and economic development	1993	Riverside and Imperial Counties, IID and CVWD	Remains in place	First joint effort to achieve key policy objectives of Salton Sea restoration	Member contributions
Public Law 105-372	Initiated study of options for managing salinity and elevation to maintain fish and wildlife	1998	Secretary of Interior	Reporting requirements met in Jan 2000	Draft EIR/EIS and other reports sent to Congress	Federal appropriation
Infrastructure Financing for Salton Sea Authority SB 223 (Kelley)	Authorized use of an Infrastructure Financing District for funding environmental restoration and reclamation projects	1999	SSA	Remains in place	Potential funding source	IFD (now EIFD) is a tax increment funding source linked to increases in assessed valuation
State legislation allowing the Torres MartinezDeser Cahuilla Indians to participate in the SSA	Integration of the Indian Tribe into the SSA	2002	SSA	Remains in place	Not known	Allows use of Marks-Roos Bond Pooling
SWRCB WRO 2002-013 (revised)	authorizes water transfer, requires mitigation, affirms SWRCB continuing jurisdiction	2002	SWRCB	modified by Order WR 2017-0134	salinity trend, protect shoreline habitat	

Appendix B -- History of Key Salton Sea-related Legislation, Agreements, & Orders

Item	Intent & Issues Addressed	Date Promulgated	Implementing Entities	Status 2018	Policy Linkage to Salton Sea	Funding Sources Linked to Legislation
Quantification Settlement Agreement	Transfer of Water from IID to San Diego County Water Authority, CVWD, & MWD, among other provisions	2003	IID, SDWA, plus federal, State govermet, MET, CVWD	Current term thru 2047, with provision for 30 yr extension	Active mitigation programs linked to water transfers to SDCWA; CA assumes financial liability above QSA parties' mitigation cap Of \$133 million (2003\$)	SDWA funded major improvements to IID canals
Salton Sea Restoration Act (SB-277)	Provide technical framework and management oversight and funding for restoration	2003	State Department of of Fish & Game and DWR	Remains in place	Initiated reasearch and resoration activities; established parameters for selecting "preferred alternative" for restoration efforts	Established Salton Sea Restoration Fund
SB 317 - Kuehl	Authorizes take of listed species; protects IID water rights; authorizes SS Restoration study; imposes ecosystem restoration fee on transferred water	2003	DFG, Resources Agency	Remains in place	Initiated reasearch and resoration activities; basis of subsequent amendments and funding measures	ecosystem restoration fee
SB 654 - Machado	Authorizes take of fully protected species; authorizes DFG to enter into QSA JPA (transfer mitigation); authorizes state payment of mitigation costs; caps QSA parties' Restoration Fund contributions at \$30m (2003\$); defines env mitigation reqs.	2003	DFG	Remains in place	QSA JPA	Authorizes \$50m from Prop. 50; caps QSA parties' mitigation responsibilities
SB 1214 (Kuehl)	Reuires that the financing plan consider economic development and also expands boundary to include agriculture and watershed lands	2004	Secretary for Resources	Remains in place	directed Secretary of Resources to consider recreation and economic development opportunities	

Appendix B -- History of Key Salton Sea-related Legislation, Agreements, & Orders

Item	Intent & Issues Addressed	Date Promulgated	Implementing Entities	Status 2018	Policy Linkage to Salton Sea	Funding Sources Linked to Legislation
HR 2828 (Calvert) Water Suply, Reliability, and Environmental Improvement Act PL No. 198-361	Requires DOI to complete feasibility study on preferred alternative for Salton Sea Restoration	2004	DOI, State Resources Agency, SSA			
Proposition 84 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Costal Protection Bond Act	Source of funding for Salton Sea Restoration Fund	2006	Secretary for Resources	Prop 84 funds largely exhausted	Funding Source	\$21 million from Prop 84 has been deposited in Salton Sea Restoration Fund
HR 1495 (Oberstar) Water Resources Development Act of 2007	Provided \$30 million of federal funding for restoration projects, limiting funding to \$5 million per project	2007	Secretary of Interior	Superceded by WIIN Act	Commitment for federal funding	Appropriations were never made but sbsequent federal decision to fund 35 percent of restoration project costs under 2016 WINN Act
SS Restoration Fund (SB 187)	designates Resources as lead agency	2008	CNRA, SWRCB, DWR, CARB, DFG	funding authorization remains, governance superceded		authorizes allocation of \$47m of Prop 84 funds for SS env purposes
SS Restoration Council (SB-51 Ducheny)	establishes the Council	2010	DFG	disbanded 2013 - never met (never staffed)		
Salton Sea Restoration Funding and Feasibility Study (AB-71)	Mandates completion of funding and feasibility study	2013	Salton Sea Authority	Study completed May 2016		Agency appropriations
MOU between Dept. of Interior and SSA	commitment to share information and collaborate on design of restoration projects	2014	DOI and SSA	Remains in place	Soure of some projects in the SSMP	None

Appendix B -- History of Key Salton Sea-related Legislation, Agreements, & Orders

Item	Intent & Issues Addressed	Date Promulgated	Implementing Entities	Status 2018	Policy Linkage to Salton Sea	Funding Sources Linked to Legislation
S. 612 Public Law No. 114-322, "WIIN Act" (Cornyn)	Continues funding and links efforts to the US Army Corp of Engineers	2016	SSA and Army Corp of Engineers	Remains in place	Not known	Maintained WRDA 2007 funding authorization for the Salton Sea
Budget Act of 2016/17	Proposition 1 Bond funding for Salton Sea Restoration	2016	Natural Resources Agency, DFW, DWR	Remains in place	Provided \$80 million of Bond funds for Salton Sea Restoration	State General Obligation Bond
Salton Sea Restoration Project Priorities (AB-1095)	Sets priority for "shovel-ready" restoration projects	2015	Natural Resources Agency, Salton Sea Authority	Remains in place	Priorities reflected in SSMP (?)	
Salton Sea Task Force Agency Actions	sets goals, ensures oversight, considers opportunities for renewable energy dev.	2015	Natural Resources Agency, SWRCB, Cal EPA, CEC, PUC, ISO	Remains in place		
Memorandum of Understanding	Established intergovernmental commitments leading to SSMP	2015	Department of Interior and CNRA	Remains in place	Priorities reflected in SSMP (?)	DOI pledged \$20 million for O&M costs, \$10 million for monitoring and funding for pilot project
Department of Interior Order 3344	Cites actions to address effects of historic drought on Colorado River water supplies	Jan-17	Department of Interior			Agency appropriations
Salton Sea Restoration Act (SB-615)	Implements Salton Sea Restoration Plan	2017	State Water Resources Control Board	Amends 2003 Act	Links Salton Sea Restoration to Salton Sea Management Plan	State General Obligation Bond (Prop.1)
SWRCB OrderWR 2017-0134	memorializes SSMP milestones, requires 50% habitat, reporting requirements	Nov-17	SWRCB	Amends 2002 order		

APPENDIX C:

Organization Case Studies



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APPENDIX C: ORGANIZATION CASE STUDIES

Following recommendations from the Client Management Team and supplemented with a broader search, EPS conducted case study research of analog organizations including intergovernmental agreements and joint intergovernmental management entities. This effort focused on identifying local and statewide multi-agency organizations that have addressed large-scale land management, environmental restoration, and/or public infrastructure development efforts. While it is recognized that no single analog reflects the circumstances faced at the Salton Sea, there is much to learn from these case studies established. This appendix section contains individual descriptions for each analog organization.

Figure 1 Summary of Case Studies

<i>Agency</i>	<i>Type</i>
Riverside County Transportation Commission (RCTC)	County Transportation Commission
Lower Colorado River Multi-Species Conservation Program (LCR MSCP)	Federal Department Regional Division and Steering Committee
<i>Coachella Valley Conservation Commission (CCVC)</i>	<i>Joint Powers Authority</i>
<i>Coachella Valley Mountains Conservancy (CVMC)</i>	<i>State Conservancy</i>
<i>Delta Conservancy</i>	<i>State Agency</i>
<i>California Ocean Protection Council (OPC)</i>	<i>State Agency</i>

Riverside County Transportation Commission (RCTC)

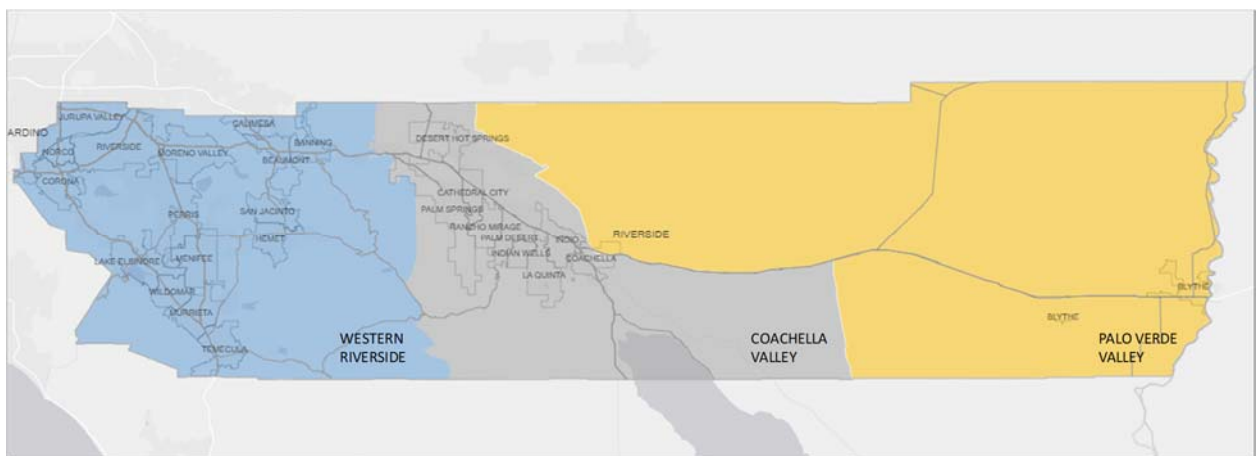
County Transportation Commission

Mission and Authority

The Riverside County Transportation Commission (RCTC) is the County Transportation Commission created in 1976 by State law to oversee funding and coordination of all public transportation services within Riverside County. As a subdivision of the six-county Southern California Association of Governments metropolitan planning organization (SCAG) for Riverside County, RCTC serves several transportation planning functions. RCTC is the funding agency for the county's transit systems, which include Corona Cruiser, Riverside Transit Agency, SunLine Transit Agency, Pass Transit Agency, and Palo Verde Valley Transit Agency. It also provides funds for city transit in Corona and Riverside and is one of Metrolink's five governing agencies. RCTC also serves as the tax authority and implementation agency for Measure A, a voter-approved ½-cent sales tax for transportation. RCTC recommends projects that will be federally funded under the Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS). RCTC's transportation work is integrated with Riverside County's multi-species habitat conservation plan.

The commission comprises 29 member jurisdictions in the county: County of Riverside, City of Banning, City of Beaumont, City of Blythe, City of Calimesa, City of Canyon Lake, City of Cathedral City, City of Coachella, City of Corona, City of Desert Hot Springs, City of Eastvale, City of Hemet, City of Indian Wells, City of Indio, City of Jurupa Valley, City of La Quinta, City of Lake Elsinore, City of Menifee, City of Moreno Valley, City of Murrieta, City of Norco, City of Palm Desert, City of Palm Springs, City of Perris, City of Rancho Mirage, City of Riverside, City of San Jacinto, City of Temecula, City of Wildomar, and Caltrans District #8. Planning efforts are generally undertaken through the three sub-regions of the county, as seen in the following map.

Figure 2 RCTC Boundary



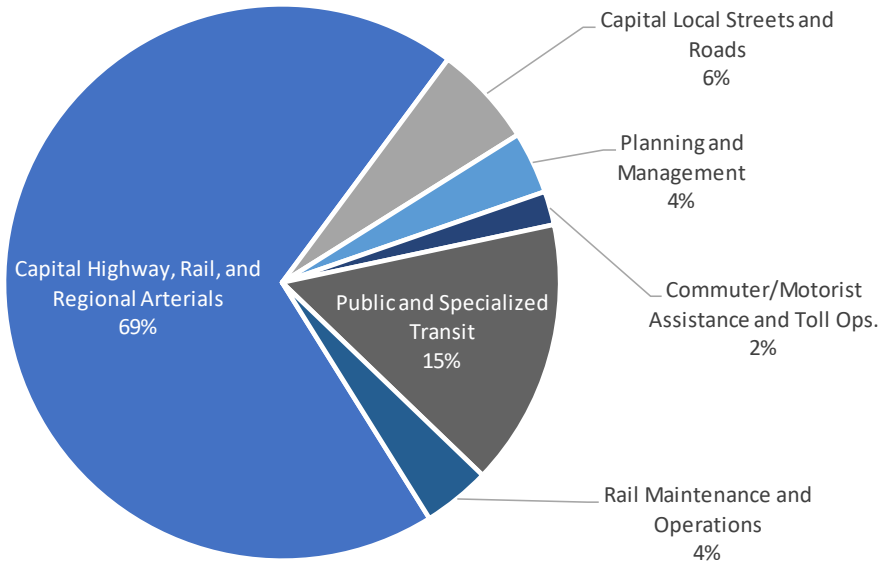
Staffing and Positions

RCTC has a staff of 49 full-time employees. Under the executive team, there are six main divisions: finance, planning and programming, external affairs, multimodal services, project delivery (capital projects), and toll program. The staff is overseen by the Board of Commissioners, which is seated by one representative from each member jurisdiction, plus four additional from the County.

Spending

Excluding debt service, RCTC's annual budget averages approximately \$850 million per year. In fiscal year 2016-2017, RCTC spent \$868.4 million, 69 percent of which was dedicated to capital projects. Approximately 4 percent of the budget in a given year is allocated for planning and management purposes. In addition to Measure A sales tax proceeds and toll revenues, RCTC's work is also funded by federal and state sources and the countywide transportation uniform mitigation fee (TUMF).

Figure 3 RCTC Expenditures (FY 2016-2017)



Source: RCTC 2017 Annual Report

Affiliations

In addition to its member jurisdictions, RCTC works closely with geographically and transportation-related agencies. These relationships are formally established through a number of ad hoc committees. As an example, its technical advisory committee comprises members from CVAG, Caltrans, Riverside Transit Agency, and PVVTA.

Lower Colorado River Multi-Species Conservation Program (LCR MSCP)

Federal Department Regional Division and Steering Committee

Mission and Authority

The Lower Colorado Region division of the federal Bureau of Reclamation (Reclamation) manages the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). The LCR MSCP was created to balance the use of the Colorado River water resources with the conservation of native species and their habitats. The LCR MSCP is a Habitat Conservation Plan (HCP) was created in 2004 and is set to be implemented over a 50-year period. The division overall is in charge of a larger region, covering over 202,000 square miles of the West with a focus on the lower 688 river miles of the Colorado River system from Lee's Ferry in northern Arizona to the border with the Republic of Mexico. The LCR MSCP program area is more narrowly defined as the 400 miles of the lower Colorado River from Lake Mead to the southernmost border with Mexico, and includes lakes Mead, Mohave, and Havasu, as well as the historic 100-year floodplain along the main stem of the lower Colorado River. Under the MSCP, 8,132 acres of habitat are to be restored.

Figure 4 LCR MSCP Boundary



Reclamation is the implementing agency for the LCR MSCP. The FMA also calls for the establishment of a Steering Committee to provide input and oversight functions in support of LCR MSCP implementation. The Steering Committee for the LCR MSCP is an unincorporated association of water and power users, and others participating in the development and implementation of the LCR MSCP. The Steering Committee works with the LCR MSCP Program Manager to coordinate implementation of the program, and reviews certain matters and actions presented by the Program Manager, including those related to annual work plans and budgets, land and water acquisitions, and reports and responses to Congress and Federal and state regulatory agencies. The Steering Committee meets three times a year, or on an as-needed basis.

Staffing and Positions

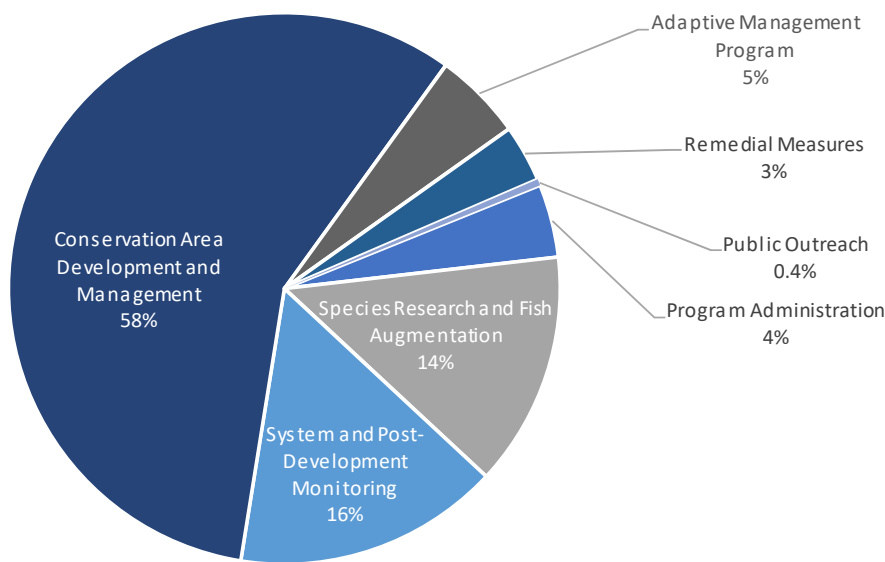
The Lower Colorado Region division of Reclamation is staffed with individuals who work on several projects throughout the region. Seven staff members are specifically designated as point-

persons for the LCR MSCP program, including a program manager, deputy program manager, restoration group manager, wildlife group manager, fisheries group manager, adaptive management group manager, and finance.

Spending

The estimated cost of this program is about \$626 million (2003 dollars) and is adjusted annually for inflation. Reclamation is responsible for 50% of the LCR MSCP cost. The States of California, Nevada, and Arizona will pay the remaining 50%, with California paying one-half of the State total and Nevada and Arizona each paying one-quarter of the State total. The budget for fiscal year 2017-2018 is approximately \$33.5 million, with approximately 58 percent of that designated for conservation area development and management.

Figure 5 LCR MSCP Program Activities (FY 2017-2018)



Source: LCR MSCP 2018 Annual Report

Affiliations

Partnership involvement occurs primarily through the LCR MSCP Steering Committee, currently representing 57 entities, including state and Federal agencies, water and power users, municipalities, Native American tribes, conservation organizations, and other interested parties, which provides input and oversight functions in support of LCR MSCP implementation.

In June 1993, the Imperial Irrigation District, Coachella Valley Water District, and Imperial and Riverside Counties formed the Salton Sea Authority. This group works with State and Federal government entities, including the Bureau of Reclamation, to develop plans to improve water quality, stabilize water elevation, and enhance recreational and economic development potential of the Sea.

Reclamation continues to help fund and work with the Authority in a technical assistance role, publishing reports that are both technical and management-related in nature. The following are examples of recent and ongoing studies: Salton Sea Salinity Control Research Project report;

Environmental assessment for a shallow water habitat pilot project; Salton Sea Ecosystem Monitoring Project, which serves as an existing conditions report; Restoration of the Salton Sea, a 2007 report summarizing a preferred alternative action for managing the Salton Sea; and Quarterly reports of water samples at the Sea and influent rivers to monitor salinity, selenium, nitrogen, phosphorus, and other water quality parameters.

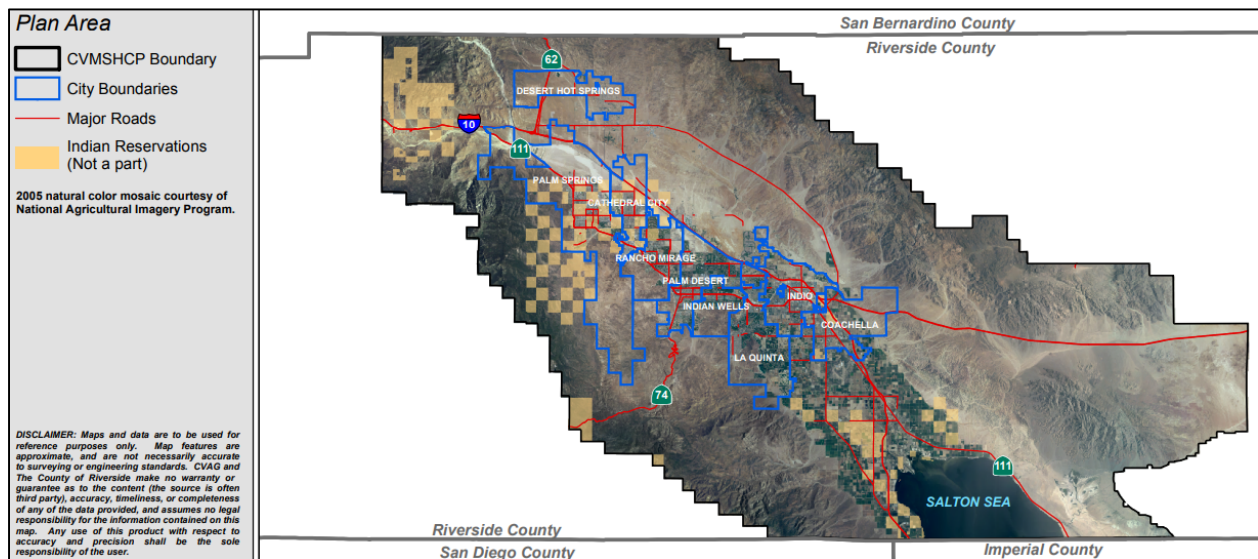
Coachella Valley Conservation Commission (CCVC)

Joint Powers Authority

Mission and Authority

The Coachella Valley Conservation Commission (CVCC), a joint powers authority of elected representatives, provides overall management of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The CVMSHCP provides a regional vision for balanced growth to meet the requirements of federal and state endangered species laws, while promoting enhanced opportunities for recreation, tourism and job growth; it complies with Endangered Species Acts for land in the Coachella Valley under a single permit. Participants include Riverside County, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage as well as Coachella Valley Water District, Mission Springs Water District, Imperial Irrigation District, Coachella Valley Association of Governments (CVAG), California State Parks, Coachella Valley Mountains Conservancy, and Caltrans. The CVCC has no regulatory powers and no land use authority. Its primary purpose is to buy land from willing sellers in the conservation areas and to manage that land. The CVMSHCP aims to conserve over 240,000 acres of open space, as shown in the following map.

Figure 6 CVMSHCP Boundary



Staffing and Positions

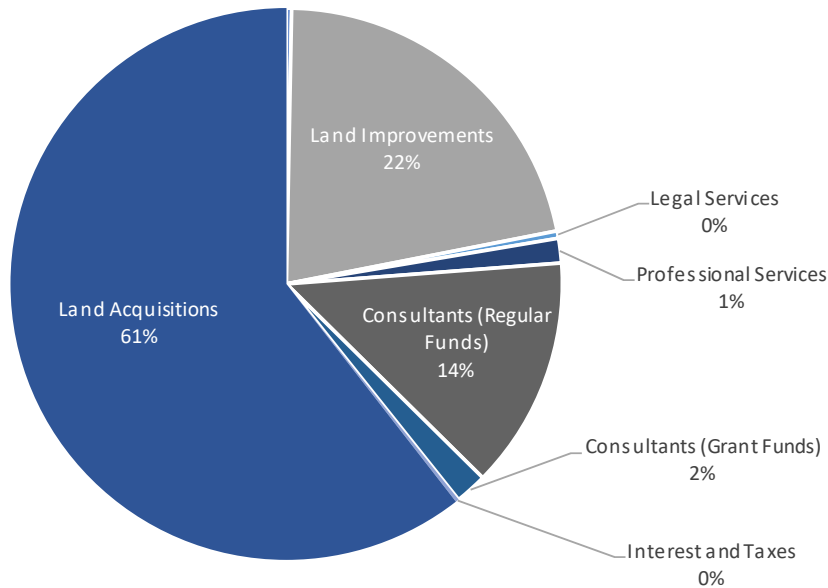
CVCC comprises one representative from each of the nine city jurisdictions and each of the three water districts (Coachella Valley Water, Imperial Irrigation, and Mission Springs Water), as well as five representatives from the County of Riverside. CVCC additionally has six staff members, including administrative roles such as the management analyst as well as technical roles such as the GIS program director and a director of environmental resources.

Spending

The CVMSHCP is funded through a combination of development impact fees, open space trust funds, and funding from some permittees for infrastructure projects. Currently there is about \$50 million available for land acquisition and CVCC plans to be able to leverage an additional \$50

million in partner agency dollars for acquisitions over the next few years. Expenditures for fiscal year 2017-2018 totaled \$11.5 million, 61 percent of which was used for land acquisitions. To date, approximately 40% of the land proposed for conservation (89,000 acres) has been acquired.

Figure 7 CVCC Expenditures



Source: Annual Report FY 2017-2018

Affiliations

CVCC often works with its internal members (Riverside County and the nine cities within Coachella Valley, Coachella Valley Water District, Mission Springs Water District, Imperial Irrigation District), as well as other agencies, including Coachella Valley Association of Governments (CVAG), California State Parks, Coachella Valley Mountains Conservancy, and Caltrans.

Coachella Valley Mountains Conservancy (CVMC)

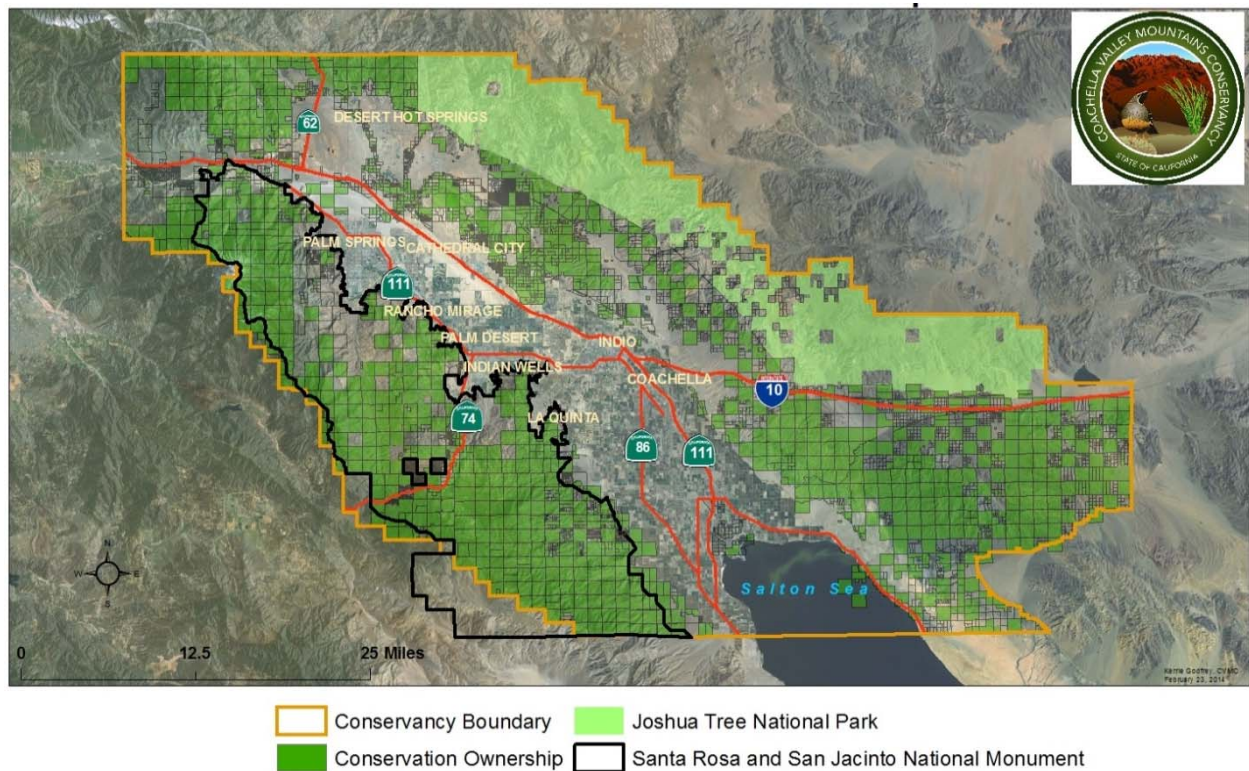
State Conservancy

Mission and Authority

Founded in 1997, the Coachella Valley Mountains Conservancy's (Conservancy) mission under state law is to protect lands, including both mountainous lands surrounding the Coachella Valley and natural community conservation lands as identified in the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

The Conservancy is one of ten conservancies affiliated with the California Natural Resources Agency. The Conservancy's territory coincides with the boundaries of the CVMSHCP area.

Figure 8 CVMC Boundary (same as CVMSHCP)



Staffing and Positions

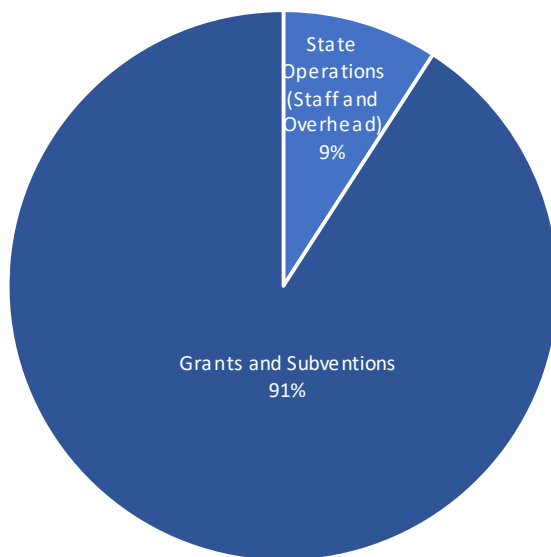
The Conservancy has three full-time positions, including an executive director, a deputy director, and a secretary.

Spending

The Conservancy provides grants on a rolling basis to local agencies and organizations. The Conservancy funds projects through State Bonds, including Proposition 12 of 2000 (Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Fund), which totaled approximately \$5 million. The Conservancy received \$20 million from Proposition 40 (California Clean Water, Clean Air Safe Neighborhood Parks and Coastal Protection Fund) in 2002. With those funds, the Conservancy has been able to make numerous grants to non-profit organizations and local agencies for acquisitions. Proposition 84 in November 2006 (Safe

Drinking Water, Water Quality and Supply, Flood Control River Protection Fund) provided the Conservancy with \$36 million for acquisitions. This funding source provides the Coachella Valley Conservation Commission (CVCC), the agency that will implement the MSHCP, with funding to additionally acquire and manage conservation lands. The Conservancy also operates a grant program funded by Proposition 1 (Water Quality, Supply, and Infrastructure Improvement Act of 2014) to support projects implementing the California Water Action Plan in the Coachella Valley. For this program, the Conservancy issues periodic Notices of Funding Availability for competitive rounds of funding. In addition, the Conservancy has assembled various multi-entity acquisition partnerships, facilitated acquisitions by other entities, and assisted other entities obtain grants from various sources. In FY 2016-2017, CVMC spent \$2.7 million on grants as well as staff operations.

Figure 9 CVMC Program Activities (FY 2016-2017)



Source: Governor's Budget FY 2016-2017

To date, the Conservancy has acquired 4,659 acres. In addition, the Conservancy has assisted in the acquisition of an additional 82,366 acres by other public agencies or nonprofit organizations through local assistance grants, partnership acquisitions and facilitated transactions (in which the Conservancy has provided no funds but arranged for the acquisition by another entity). The Conservancy's five-year infrastructure plan calls for the acquisition of an additional 13,900 acres in that period, or an average of 2,780 acres per year. All acquisitions are consistent with, and implement, the Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan and the California Water Action Plan.

Affiliations

The Conservancy receives funding from the State and is as such affiliated with several State departments. It lists the following as "conservation partners": the California Department of Fish and Wildlife, the California Wildlife Conservation Board, the Coachella Valley Association of Governments, Friends of the Desert Mountains, Friends of the Palm Springs Mountains, the Nature Conservancy, U.S. Fish & Wildlife Service, Wildlands Conservancy, the U.S. Bureau of Land Management, and the Center for Natural Lands Management. It is also affiliated with the

CVCC as its primary funder. In addition, the Conservancy is currently governed by a board of twenty members. The board members represent local jurisdictions, the public at large, several state agencies, and the Agua Caliente Band of Cahuilla Indians. The board meets on a bi-monthly basis.

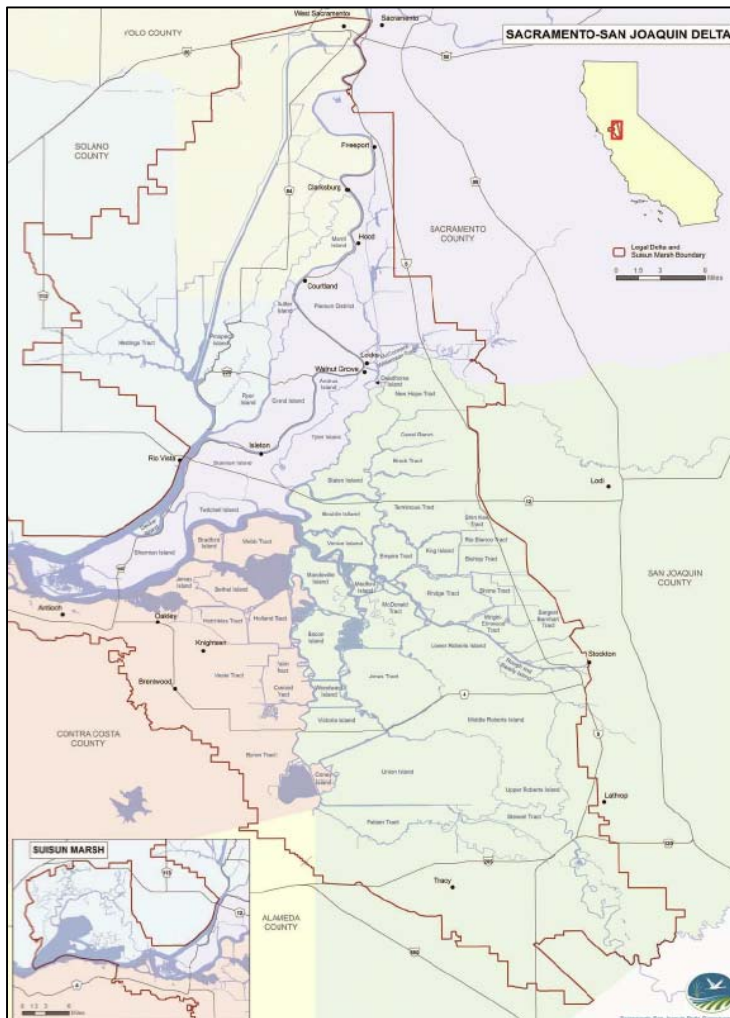
Delta Conservancy State Agency

Mission and Authority

The Sacramento-San Joaquin Delta Conservancy is a state agency within the Natural Resources Agency and was established through the Sacramento-San Joaquin Delta Conservancy Act of 2010. The Delta Conservancy is tasked as the primary state agency to implement ecosystem restoration in the Delta. It is governed by an 11-member Board, with assistance from 12 advisors. Collectively, the Delta Conservancy represents the five Delta Counties (Contra Costa, Sacramento, San Joaquin, Solano, and Yolo), local nonprofits, special districts, and State and Federal agencies. The Conservancy's service area is the statutory Delta and Suisun Marsh, approximately 1,300 square miles with over 1,000 miles of levees and waterways.

The Conservancy's goal is to implement projects that will result in integrated environmental, economic and social benefits. Part of its responsibility is to coordinate funding and efforts across other agencies in a balanced manner according to geography and legislative responsibilities. One of its main duties is to assist local entities in the implementation of their habitat conservation plans (HCPs) and natural community conservation plans (NCCPs).

Figure 10 Delta Conservancy Boundary



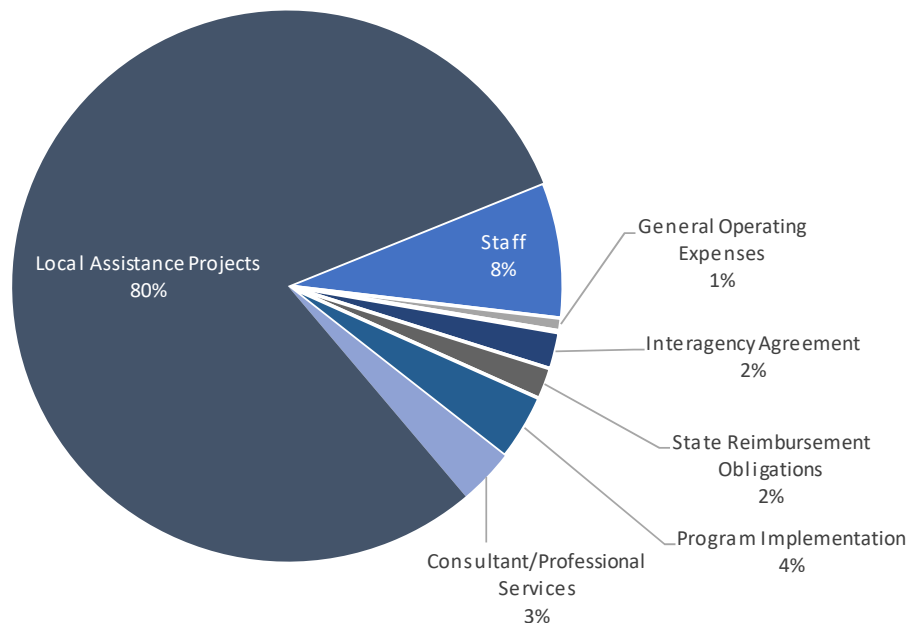
Staffing and Positions

The Conservancy has a staff of 12 all exclusively for the Conservancy, including three environmental scientists. The 11-member board has representatives from each county, state agencies, as well as public members. Advisors represent local (e.g. Suisun Resource Conservation District, Yolo Basin Foundation), state (e.g. California Coastal Conservancy), and federal agencies (e.g. U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service) and partner agencies (e.g. Delta Protection Commission).

Spending

In FY 2017-2018, the Delta Conservancy had an allocated budget of \$12.6 million. 80 percent of this amount was Prop 1 funding for local assistance projects. Approximately 8 percent went to staff salary and benefits, 3 percent went to consultant/professional services contracted externally, and the remaining went to various interagency obligations and overhead expenses.

Figure 11 Delta Conservancy Expenditures



Source: Annual Report FY 2017-2018

Affiliations

The Conservancy works in collaboration with local communities, interested groups and state and federal agencies. One of its primary collaborations is with the Delta Protection Commission (DPC). The DPC was established in 1992 and reorganized by 2009 Delta Reform Act as a 15-member planning and regulatory entity. It is responsible for protecting and where possible enhancing and restoring Delta environment and making determinations on development in Delta. Provide input on actions that impact Delta as a place. As a partner agency, the Conservancy is currently supporting the DPC in its creation of the Great Delta Trail (a continuous recreational trail network throughout the Delta), in seeking National Heritage Area designation for the Delta, and in marketing efforts for local tourism and recreation businesses.

California Ocean Protection Council (OPC)

State Agency

Mission and Authority

The California Ocean Protection Council (OPC) was created under the California Natural Resources Agency pursuant to the California Ocean Protection Act (COPA) of 2004 to coordinate activities of state agencies related to oceanic and coastal resources and to establish and recommend policies and legislative actions at the state and federal level. Importantly, the OPC is explicitly tasked in the COPA to establish a science advisory team to support these coordination and policy functions with technical expertise.

The OPC defines its work across six primary program areas: climate change, marine protected areas, sustainable fisheries, land-based impacts, sea floor and coastal mapping, and emerging uses and threats.

Staffing and Positions

The Council itself comprises six members representing different state agencies, governing bodies, as well as one public member. In addition, the OPC has a staff of 12 comprising program managers and policy advisers, some shared with the Natural Resources Agency, several of which have educational and professional backgrounds in environmental and marine science as well as policy-oriented backgrounds. In conjunction, the OPC Science Advisory Team (SAT) provides staff input through internal expert taskforces, advisory committees, expert panels, and as individuals. The current OPC SAT is made up of 25 members, the majority of which are academic and professional representatives from universities and research institutions across California.

Spending

The OPC is responsible for issuing grants through Proposition 84 (Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006) and Proposition 1 (Water Quality, Supply, and Infrastructure Improvement Act of 2014). Since 2005, OPC has funded \$84 million across 139 projects. Examples of projects include the California Sea Floor Mapping Program, monitoring for the Statewide Science Integration and Marine Protected Area, and grants to UC Regents for Marine Protected Area baseline data collection. Since OPC is run under the Natural Resources Agency and several staff members work in other divisions in addition to their OPC roles, OPC's operating and overhead budget is nested within the Natural Resources Agency's larger statewide budget.

Affiliations

The OPC functions under the California Natural Resource Agency. It additionally serves as a coordinating entity across several other state agencies related to oceanic and coastal resources. Since it is a grantor of Prop 1 and Prop 84 funds, OPC also monitors and works with public (e.g. University of California, USGS, CSU), private (e.g. University of Southern California, Tetra Tech), and non-profit research institutions (e.g. California Ocean Science Trust, The Nature Conservancy).