

# **SPECIAL PUBLIC NOTICE**

U.S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

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PROPOSED

Clean Water Act Section 404 Letter of Permission Procedures and associated Environmental Assessment for the Salton Sea Management Program (SSMP) 10-Year Plan Projects

Public Notice/Application No.: SPL-2019-00951-KJD

Project: Salton Sea Management Program (SSMP) 10-Year Plan Projects

Comment Period: March 22, 2021 to April 21, 2021

Project Manager: Kyle Dahl; 760-602-4834; Kyle.J.Dahl@usace.army.mil

#### **Applicant**

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#### Agent

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#### Location

The projects implemented under Salton Sea Management Program (SSMP) 10-year Plan would include various locations within, along, and adjacent to the Salton Sea in Imperial and Riverside counties, within or near the cities or towns of Mecca, Desert Shores, Salton City, Westmorland, Calipatria, and Bombay Beach (Enclosure 1). U.S. Army Corps of Engineers (Corps) jurisdictional water bodies that would be affected by project construction activities include the Salton Sea and the New, Alamo, and Whitewater Rivers in addition to adjacent creeks, washes and agricultural drains.

The project areas addressed by this program are located on the following U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps: Fink (USGS 2018), Wister (USGS 2018), Niland (USGS 2018), Calipatria (USGS 1976), Westmorland West (USGS 2018), Kane Spring (USGS 2018), Truckhaven (USGS 2018), Oasis (USGS 2018), Mecca (2018), Mortmar (USGS 2018), and Durmid (USGS 2018). Within these USGS quadrangles, the project areas would affect multiple townships and ranges (Enclosure 2). Maps of the project opportunity areas are enclosed (Enclosure 3).

#### **Purpose**

The Corps has received a request from the State of California (Applicant; State) to establish alternative permitting procedures, specifically Letter of Permission (LOP) procedures, associated with the SSMP 10-year Plan. This Special Public Notice concerns the proposal to undertake the process to establish new LOP procedures, pursuant to 33 Code of Federal Regulations (C.F.R.) section

325.2(e), which allows the Corps to establish such alternative permitting procedures to address anticipated discharges of dredged and fill material into waters of the United States (U.S.). Specifically, by undertaking the process to establish new LOP procedures for the SSMP 10-year Plan projects, the Corps in coordination with other federal and state agencies and with notice to potentially interested parties, may evaluate the suite of proposed activities (see page 8) more effectively than would be afforded by review on a case-by-case basis. If established, LOP procedures would allow the Corps to authorize SSMP-related activities that would discharge dredged or fill material into waters of the U.S., as regulated under section 404 of the CWA.

The SSMP 10-year Plan Project Description/Proposed Action (Enclosure 4) proposes to implement 29,800 acres of habitat restoration and dust suppression projects on lakebed areas that have been, or will be, exposed at the Salton Sea by the year 2028. At least 14,900 acres of projects permitted under the SSMP 10-year Plan would be aquatic habitat restoration projects that convert exposed lakebed areas either to pond habitat suitable for fish and wildlife, or to wetland habitats. While all the aquatic habitat projects would suppress dust, their primary function would be to provide habitat for fish and wildlife. Dust suppression projects may also have habitat benefits by establishing vegetation or creating freshwater wetlands on exposed areas, but they would be designed primarily to suppress fugitive dust emissions for improved air quality. Likewise, the SSMP 10-year Plan provides for multiple benefit projects that combine dust suppression with habitat restoration to the extent practicable. The State intends for the proposed SSMP 10-year Plan projects to comprise its Watershed Project Plan pursuant to the Natural Resources Conservation Service (NRCS) National Watershed Program authorized under Watershed Protection and Flood Prevention Act (Public Law 83-566). The full SSMP 10-year Plan Project Description developed by the State can be found on their website at: https://saltonsea.ca.gov/planning/ssmp-draft-description-project/.

The establishment of SSMP-specific LOP procedures is an alternative regulatory mechanism to the Corps' typical evaluation of permit applications for individual projects and activities described below. It allows the Corps to consider the SSMP 10-year Plan and the associated activities in a more comprehensive way than would be possible if each activity were submitted one at a time. Some of these individual projects would likely be eligible for authorization under the Corps' Nationwide Permit (NWP) program, and therefore, would not have been afforded any public review through the Corps' existing permitting process. In contrast, this process to establish new LOP procedures is intended to increase transparency, efficiency, and effectiveness by providing notice to the public during the establishment of LOP procedures and in evaluating the aquatic ecosystem effects of constructing the SSMP 10-year Plan projects in total. The establishment of new LOP procedures and the SSMP program-level review allows the Corps to evaluate aquatic resource impacts more holistically, including the adequacy and appropriateness of impact avoidance, and minimization options that could offset unavoidable impacts to the aquatic ecosystem resulting from the individual projects. If established, under the LOP procedures the Corps would evaluate and authorize proposed SSMP projects that have less than significant individual and cumulative adverse effects on the aquatic environment, with many of the activities resulting in no more than minimal adverse effects to the aquatic ecosystem. Activities that could result in significant individual or cumulative adverse effects on the aquatic environment would not be eligible for authorization under any established LOP procedures. For more information see page 3 of this notice.

Development of the Corps' new LOP procedures for the SSMP 10-year Plan projects will be supported by the preparation of an Environmental Assessment pursuant to the National Environmental Policy Act (NEPA). The Corps will act as the lead Federal agency for this NEPA document. On February 19, 2021 the Corps submitted invitation letters to five other Federal agencies with potential jurisdiction by law or special expertise related to the SSMP 10-year Plan projects to participate as cooperating agencies in the preparation of the Environmental Assessment. Specifically,

these invitation letters were sent to the NRCS, United States Bureau of Reclamation (BOR), United States Fish and Wildlife Service (FWS), Bureau of Indian Affairs (BIA), and Bureau of Land Management (BLM).

Interested parties are hereby notified that an application has been received for Department of the Army establishment/authorization of alternative permitting procedures as described herein pertaining to the SSMP 10-year Plan projects and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed establishment of new CWA section 404 LOP procedures for addressing anticipated discharges of dredged and fill material into the aquatic ecosystem associated with constructing the SSMP 10-year Plan LOP projects. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that support the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the Corps' decision. The LOP procedures will be established/authorized with special conditions or denied under section 404 of the CWA.

Comments should be sent electronically to: Kyle.J.Dahl@usace.army.mil.

Alternatively, comments may be mailed to:

DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS REGULATORY DIVISION ATTN: Kyle Dahl, Chief, San Diego & Imperial Counties Section 5900 La Place Ct., Suite 100 Carlsbad, CA 92008-8832

#### **Evaluation Factors**

The decision whether to establish/authorize LOP procedures for the SSMP 10-year Plan projects will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activities on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against the reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, air quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, because the proposal would result in the discharge of dredged or fill material into waters of the U.S., it would be subject to evaluation under the U.S. Environmental Protection Agency (EPA) Guidelines (40 CFR Part 230), as required by section 404 (b)(1) of the CWA.

The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether

to establish/authorize, modify, condition, or deny permit procedures for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement (EIS) pursuant to the NEPA. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

#### **Background**

The surface elevation of the Salton Sea has been declining over time, due to evaporation loss that exceeds inputs from rivers and drains. The Quantification Settlement Agreement (QSA) is an additional contributing factor to the decline of surface elevations in the Salton Sea due to the reduction of freshwater inflows to the Salton Sea. A series of agreements, collectively known as the QSA, were made with various entities with authorities within and surrounding the sea in October 2003. The QSA imposes water conservation measures within areas surrounding the sea to allow the transfer of this water elsewhere, which reduces the volume of agricultural runoff that constitutes the Salton Sea's chief source of water. Under the QSA, conserved water was required to be provided to the sea to mitigate the effects of the transfer on salinity until 2017, at which point the delivery of mitigation water ceased and the decline of the Sea surface elevation accelerated.

Declining freshwater inflows and evaporation have resulted in increasing salinity within the Salton Sea to levels that has exceeded most fish species' tolerance limits and resulted in loss of fisheries, bird declines due to loss of food, and exposure of previously inundated lakebed.

Continued expected loss of freshwater inputs into the Salton Sea in future years will result in increasing salinity and other water quality issues, including temperature extremes, eutrophication, i.e., high concentrations of nutrients from agricultural runoff can cause dense growth of algal and plant life leading to anoxic conditions where oxygen is depleted from the water, which in turn affect the Sea's ecological resources, including fish and bird populations. The SSMPP 10-year plan intends to create aquatic habitat to support fish populations and provide forage for the birds that feed on them. Creating aquatic habitat with suitable environmental conditions would support the fish and wildlife dependent on the Salton Sea ecosystem. Moreover, the restoration of aquatic habitat would also address the need of protecting and conserving the federally endangered desert pupfish by restoring pupfish habitat and enhancing connectivity among pupfish populations.

Continued recession of the sea has increased exposure of the previously inundated lakebed resulting in increased fugitive dust emissions, which contributes to poor air quality and can affect human health. Exposure to fine particulate matter increases the risks of developing long-term lung issues and diseases (like asthma), especially for children and the elderly. The Salton Sea Air Basin was in compliance with air quality standards approximately two-thirds of the days in 2019. As more of the Salton Sea lakebed is exposed in the future, additional emissions of fine particulate matter are predicted, which could result in an increase in severity of dust events, the number of days the region is not in attainment with National Ambient Air Quality Standards, and the land area that experiences dust impacts. As such, the SSMP 10-year Plan is needed to address the greatest amount of lakebed that prioritizes the most emissive exposed lakebed areas.

#### **Development of LOP Procedures**

In accordance with 33 C.F.R. section 325.2(e), the Corps is authorized to use "alternative procedures", including LOPs, to authorize activities under the Corps Regulatory Program, pursuant to section 10 of the Rivers and Harbors Act (RHA) or section 404 of the CWA. LOPs are a type of

individual permit issued through an abbreviated processing procedure completed by the Corps that includes coordination with other federal and state fish and wildlife agencies, as required by the Fish and Wildlife Coordination Act, the Regional Administrator of the EPA, the state water quality certifying agency, and, if appropriate (in or affecting the coastal zone), the state Coastal Zone Management Agency, as well as a public interest evaluation, but without publishing an individual public notice for each proposed action. In accordance with 33 C.F.R. §325.2(e)(1), LOPs may be used:

- (i) In those cases subject to section 10 of the RHA when, in the opinion of the district engineer, the proposed work would be minor, would not have significant individual or cumulative impacts on environmental values, and should encounter no appreciable opposition.
- (ii) In those cases subject to section 404 of the CWA after:
  - (A) The district engineer, through consultation with federal and state fish and wildlife agencies, the Regional Administrator, EPA, the state water quality certifying agency, and, if appropriate, the state Coastal Zone Management Agency, develops a list of categories of activities proposed for authorization under LOP procedures;
  - (B) The district engineer issues a public notice advertising the proposed list and the LOP procedures, requesting comments and offering an opportunity for public hearing; and
  - (C) A 401 Water Quality Certification has been issued or waived and, if appropriate, Coastal Zone Management Act (CZMA) consistency concurrence obtained or presumed either on a generic or individual basis.

LOP authorizations differ from a standard individual permit process in that an LOP may be issued without publishing a public notice for each project, and without completing a detailed environmental assessment. The Corps' review, including inter-agency coordination, of each LOP application will ensure adverse impacts are avoided and minimized to the maximum extent practicable, adequate and appropriate mitigation occurs for unavoidable impacts to the aquatic ecosystem, and each project's proposed activities comply with established LOP permitting procedures. If the Corps determines that a project is ineligible, the applicant would have to seek authorization under a different Corps permitting mechanism or modify the project sufficiently to comply with the established LOP procedures.

As proposed, LOP procedures would be established specifically for the SSMP 10-year Plan projects, including any compensatory mitigation activities that may be required to offset unavoidable impacts to waters of the U.S. If any such LOP procedures are established, each individual project would still require submittal of an LOP application to the Corps Regulatory Division to determine whether it is eligible for authorization under the established LOP procedures. The Corps Regulatory Division would also notify other federal and state agencies of the submitted application in determining a given project's eligibility. If determined to be eligible as meeting all LOP procedure requirements, the Corps would issue an LOP determining the project's impacts to waters of the U.S. are authorized under the established LOP procedures.

At this time, the Corps proposes that each application for an LOP submitted under new LOP procedures would include information clearly demonstrating that impacts to aquatic resources have been and will be avoided and minimized to the maximum extent practicable, as well as a statement regarding compensatory mitigation. Though aquatic restoration projects normally do not require compensatory mitigation, certain activities that could be allowed under the proposed LOP may require implementation of a habitat mitigation and maintenance plan (HMMP), or a long-term resource management plan (LTRMP) to offset any aquatic resource losses that may occur and to ensure in a net increase in aquatic resource functions.

A preliminary review of the anticipated impacts to waters of the U.S. associated with implementation of the SSMP 10-year Plan indicates the proposed aquatic habitat restoration and dust suppression projects would result in minor adverse environmental impacts, hence the appropriateness of establishing LOP procedures. However, pending further environmental review of an individual project, the Corps would reserve the use of its discretionary authority to determine that an activity is authorized under established LOP procedures, that an activity is authorized by established LOP procedures with the inclusion of additional special conditions, or that an activity is not authorized under established LOP procedures and will require evaluation for another form of Corps permit.

Any comments received during the comment period for this notice, as well as subsequent coordination with Federal and state resource/action agencies and the applicant will inform the Corps in its preparation of draft LOP procedures and a draft Environmental Assessment for public review and comment. The forthcoming draft LOP procedures may include pre-application requirements, an application to use established LOP procedures requirements, processing procedures, and general conditions.

#### **Preliminary Review of Selected Factors**

<u>National Environmental Policy Act/EIS Determination</u> - A preliminary determination has been made that an Environmental Impact Statement (EIS) is not required for the proposed work in waters of the U.S. under the SSMP 10-year Plan projects. Instead, development of LOP procedures will be supported by the preparation of an Environmental Assessment pursuant to NEPA to evaluate proposed Federal actions associated with implementation of the SSMP 10-year Plan projects; the Corps will act as the lead Federal agency.

On February 19, 2021, the Corps submitted invitation letters to five other Federal agencies with potential jurisdiction by law or special expertise related to the SSMP 10-year Plan projects to participate as cooperating agencies in the development of the Environmental Assessment. Specifically, these invitation letters were sent to the BOR as owner/manager of Federal Reclamation lands; the FWS as a Federal wildlife refuge operator and Federal agency with special expertise and jurisdiction with respect to federally listed species and critical habitats within the project areas; the BIA as the Federal agency responsible for protecting Tribal assets, including trust lands; BLM as a manager of Federal public lands and their natural resources; and the NRCS as the technical and financial assistance lead for a approving a watershed project plan pursuant to the National Watershed Protection and Flood Prevention Act of 1954 (Public Law 83-566). These federal agencies may be involved in the SSMP 10-year Plan NEPA process as cooperating agencies.

<u>Water Quality</u>- The Corps and the State will coordinate with the California State Water Resources Control Board to certify these LOP procedures for compliance with CWA section 401 water quality certification. Until such time, the State would need to obtain an individual Section 401 Water Quality Certification, unless waived (see 33 CFR section 330.4(c)), through the applicable Regional Water Quality Control Board for any regulated activities or activities, including any that may be covered under LOP procedures.

<u>Coastal Zone Management</u>- For those projects in or affecting the coastal zone, the Federal CZMA requires that prior to issuing the Corps authorization for the project, the State must obtain concurrence from the California Coastal Commission that the project is consistent with the State's Coastal Zone Management Plan when requesting an LOP. The SSMP 10-year Plan LOP projects are located outside the coastal zone, and none of them would affect coastal zone resources; therefore, concurrence from the California Coastal Commission is not expected to be necessary.

<u>Essential Fish Habitat</u>- The Corps Regulatory Division's preliminary determination is that the proposed activities would not adversely affect Essential Fish Habitat. All program activities, including the compensatory mitigation options being considered currently to address unavoidable aquatic resource impacts, would occur well outside of areas subject to tidal influence. Therefore, consultation under section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act is not expected to be required.

<u>Cultural Resources/Historic Properties</u>- In evaluating whether a given SSMP 10-year Plan LOP project would comply with the established LOP procedures, the Corps would review each project's proposed activities for compliance with section 106 of the National Historic Preservation Act (NHPA) of 1966 (36 CFR Part 800), as amended, including tribal coordination as appropriate. Currently, the SSMP 10-year Plan LOP projects lack sufficient technical details to accurately identify each project's Area of Potential Effects (APE); as noted, some of these projects are several years from planned construction, and the planning and designs are in preliminary stages. The State will provide the cultural information to the Corps and coordination with the tribes and the State Historic Preservation Officer will be completed by the Corps in accordance with section 106 of the NHPA.

In cases where the Corps determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), the activity is not authorized until the requirements of section 106 of the NHPA have been satisfied.

<u>Endangered Species</u>- The Corps Regulatory Division will coordinate with the FWS to identify a strategy for ensuring the SSMP 10-year Plan projects comply with the Federal Endangered Species Act (ESA). No activity will be authorized that is likely to jeopardize the continued existence of a federally listed as threatened or endangered species or a species proposed for such designation, as identified under the ESA, or which will destroy or adversely modify designated critical habitat of such species. The LOP procedures would include conditions to assure compliance with the ESA.

<u>Air Quality</u>- Implementation of the SSMP 10-year Plan projects will result in a net reduction of airborne particulate matter. However, during project construction, some degree of emissions will be unavoidable. No activity will be authorized that causes or contributes to any new violation of national ambient air quality standards, increases the frequency or severity of any existing violation of such standards, or delays timely attainment of any such standard or interim emission reductions, as described in the applicable California State Implementation Plan (SIP) for the Salton Sea Air Basin. The State is responsible for complying with applicable local, state, and federal air quality standards. They shall provide documentation in each project's application for a Corps permit demonstrating that: (1) the project's emissions are accounted for in emissions budgets in the currently approved SIP; (2) the project's emissions would be below the current de minimis thresholds for any criteria pollutants or their precursors; or (3) a conformity determination for the project's emissions has been completed finding they conform with the approved SIP.

<u>Public Hearing</u>- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state with particularity the reasons the Corps should hold a public hearing.

The State conducted a series of workshops on the various efforts around the SSMP 10-year Plan process. On August 31, 2020, the State distributed its draft description of the proposed SSMP 10-year Plan in English and Spanish for 30 days of public review and comment. The State posted a public notice in English and Spanish and notified interested parties via email of the opportunity to provide feedback and to attend related public workshops. In addition, the State sent press releases to media. Three State-led/hosted public workshops were held from September 22 through 24 in English

and Spanish, to share information about the proposed aquatic habitat restoration projects and dust suppression and restoration projects with the public in a virtual format using a series of PowerPoint slides. There were also phone lines available to interested parties unable to access the virtual format. During each public workshop, the State provided a question and answer session, coordinated over the chat feature, and audio channels were open to public comment. All received public comments (verbal and written), press releases, public notices, and PowerPoint slides are posted on the State's public website and were used to inform the version of the SSMP 10-year Plan Project presented herein for consideration of the for new LOP procedures.

Though the Corps attended and presented at the State's recent public workshops, they were held before the submittal of an application package to the Corps and prior to the Corps' formal initiation of this NEPA review process to develop LOP procedures. Consequently, any and all comments received by the State during its workshops and comment period may remain part of the State's records but are outside the Corps' administrative records for establishing the LOP procedures and the associated NEPA review.

#### **Proposed Activities**

The LOP procedures would authorize implementation of projects within the SSMP 10-year Plan, including aquatic habitat restoration projects, and dust suppression and restoration projects that would be located around the Salton Sea between the shoreline elevations measured in 2003 and forecasted for 2028, i.e., marking the extent of the sea's recession for purposes of the SSMP 10-year Plan. The SSMP 10-year Plan projects consist of a collection of pond construction, habitat restoration, and dust suppression activities to restore habitat and reduce dust.

Aquatic habitat and restoration projects will include the following various habitat types and features for fish and birds:

- Mudflats and shallow water
- Mid-depth habitat
- Deep-water habitat
- Permanent vegetated wetlands
- Islands
- Snags or other vertical structures
- Seasonal flooding
- Swales or channels
- Hard substrate on berms
- Bottom hard substrate
- Floating islands

The projects would include the components listed above to support birds, aquatic invertebrates, and fish, and would generally include: construction of berms; creation of pond habitat at different water depths and timing of inundation; installation of features to support bird nesting, resting, and foraging habitat; and creation of wetland and seasonally flooded habitats. All of these components are being designed to support ecosystem restoration.

Dust suppression projects may employ a variety of techniques to reduce dust emissions. Techniques that are currently under consideration include:

• Temporary surface roughening

- Vegetation establishment
- Dust suppressant application
- Shallow-water habitat dust suppression
- Sand fencing
- Engineered roughening
- Gravel and other cover
- Shallow flooding
- Stormwater spreading
- Enhancing soil crusts

The projects would include the components listed above to decrease dust emissions on the exposed lakebed at the Salton Sea, and may be constructed with and without the use of water. Water-reliant dust suppression techniques include vegetation establishment, shallow-water habitat and freshwater wetlands, shallow flooding, and stormwater spreading. Waterless dust suppression techniques depend on soil type and include temporary surface roughening, dust suppressant application, sand fencing, engineered roughening, gravel or other cover, and enhancing soil crusts. These waterless techniques may require initial application of water, but generally are not dependent on periodic surface water application.

<u>Materials to be Discharged into Waters of the U.S.</u>: The LOP procedures would require that detailed information regarding dredged and fill material to be discharged into waters of the U.S., including estimated volumes and specific locations, be provided in each project's LOP application. In general, a preliminary list of materials proposed for discharge into waters of the U.S. would be expected to include one or more of the following:

- Clean earthen fill material (backfill), from dredged or excavated source material
- Earthen berms
- Ungrouted rock riprap slope protection (inert)
- Galvanized corrugated metal pipe(s)
- · Rock-filled basket gabions
- Filter fabric
- Geotextile
- Prefabricated concrete box/arch culvert (or bridge footing/abutment, etc.)
- Pumps and other water control infrastructure
- Inflow and outflow structures
- Breakwater for construction (timber, tire, etc.)
- Access for construction, operations, and maintenance (ramps, facilities, tools, equipment, etc.)

No toxic or hazardous materials would be discharged into the aquatic ecosystem.

Potential Impacts to Jurisdictional Waters of the U.S.: Activities associated with the SSMP 10-year Plan, including pond construction, habitat restoration, dust suppression techniques, and diversions would discharge dredged or fill material into waters of the U.S., requiring authorization from the Corps pursuant to section 404 of the CWA. Any stream channel or other aquatic habitat modifications would be limited to the minimum necessary to accomplish the goal. Temporary structures, fills, and work necessary to construct the projects would also be authorized by the proposed LOP procedures. Moreover, while permanent impacts to waters of the U.S. are not anticipated, the LOP procedures would also require and authorize compensatory mitigation for any unavoidable adverse impacts to waters of the U.S. associated with construction of the SSMP 10-year Plan LOP projects.

The project team is currently working on a desktop mapping of features anticipated to qualify as waters of the U.S. It is understood that some areas currently known as jurisdictional waters of the U.S. because they are inundated by the Salton Sea, may not be jurisdictional at the time of project development due to the permanent receding nature of this water body. In addition, some areas that are currently barren may be colonized by wetland (hydrophytic) vegetation, forming jurisdictional wetlands as water, from drains and other sources, spreads out along the receding shoreline.

Overall, the State anticipates that the sum total acres of waters of the U.S. would increase as a result of the proposed SSMP 10-year Plan projects considered for new LOP procedures.

Avoidance and Minimization Measures: Pursuant to the Section 404(b)(1) Guidelines and the 2008 Mitigation Rule, the Corps evaluates proposed discharges of dredged or fill material with the primary intent of avoiding and minimizing adverse impacts to the aquatic ecosystem to the maximum extent practicable. The last step in the Corps' evaluation process focuses on determining adequate and appropriate compensatory mitigation for any unavoidable impacts to waters of the U.S. The State proposes to create at least 14,900 acres of aquatic habitat including wetlands through implementation of the SSMP 10-year Plan, which is expected to result in an increase in the amount of aquatic ecosystems around the Salton Sea. The program intends to enhance and restore jurisdictional wetlands and other waters of the U.S. Each project would be designed with the intent of avoiding and minimizing impacts to waters of the U.S. during enhancement and restoration activities. The following avoidance and minimization measures are proposed for projects that could be permitted under the LOP procedures:

- Dust suppression and restoration projects will be adjusted to avoid vegetated portions of the exposed lakebed when feasible, to limit impacts on wetlands.
- Areas that are underwater at the time of construction will be avoided unless needed for a specific project purpose (e.g., diversion of water).
- Aquatic habitat projects will be developed in areas that are predominantly dry lakebed.
- Development of an adaptive management plan that will be updated to include projects as they are implemented.
- Preparation of a Habitat Protection, Mitigation and Restoration Program to detail measures to avoid and minimize impacts to habitat.
- Development of a Temporary Impacts Restoration Plan that details measures to restore areas that were temporarily impacted during construction.

<u>Compensatory Mitigation</u>: The LOP procedures would include a condition such that compensatory mitigation will be required when necessary to offset unavoidable adverse impacts to waters of the U.S. associated with constructing the SSMP 10-year Plan projects. The Corps' participation in the mitigation site-selection process and mitigation approval is expected to ensure that waters of the U.S. are enhanced, restored, and preserved along with associated upland habitat, thereby providing a comprehensive approach to mitigation.

As described herein, the Corps proposes to establish new LOP procedures by which future SSMP 10-year Plan projects would be authorized when there would be discharges of dredged and fill material into the aquatic ecosystem. Following consideration of comments received during this 30-day review period, and agency coordination, the Corps expects to release draft LOP procedures along with a draft Environmental Assessment for public review and comment before finalizing its decision.

For additional information, please call Kyle Dahl of my staff at 760-602-4834 or via e-mail at kyle.j.dahl@usace.army.mil. This public notice is issued by the Commander, Los Angeles District.



#### Regulatory Program Goals:

- To provide strong protection of the nation's aquatic environment, including wetlands
- To ensure the Corps provides the regulated public with fair and reasonable decisions
- To enhance the efficiency of the Corps' administration of its regulatory program

DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS

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#### **Enclosures:**

Enclosure 1: Figure 1: Projects Map

Enclosure 2: Table 1: Township, Range, and Sections Enclosure 3: Figure 2: Detailed Map of Project Study Area

**Enclosure 4: Project Description** 

# Enclosure 1





TOWNSHIP	RANGE	SECTION
		32
		33
CA T7S	R9E	34
		35
		36
		31
	D405	32
	R10E	33
		34
		1
		2
		3
		4
		5
		8
		9
	DOE.	10
	R9E	16
		17
		20
		21
		22
		27
CA T8S		28
		34
		2
		3
	D4.05	11
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		33

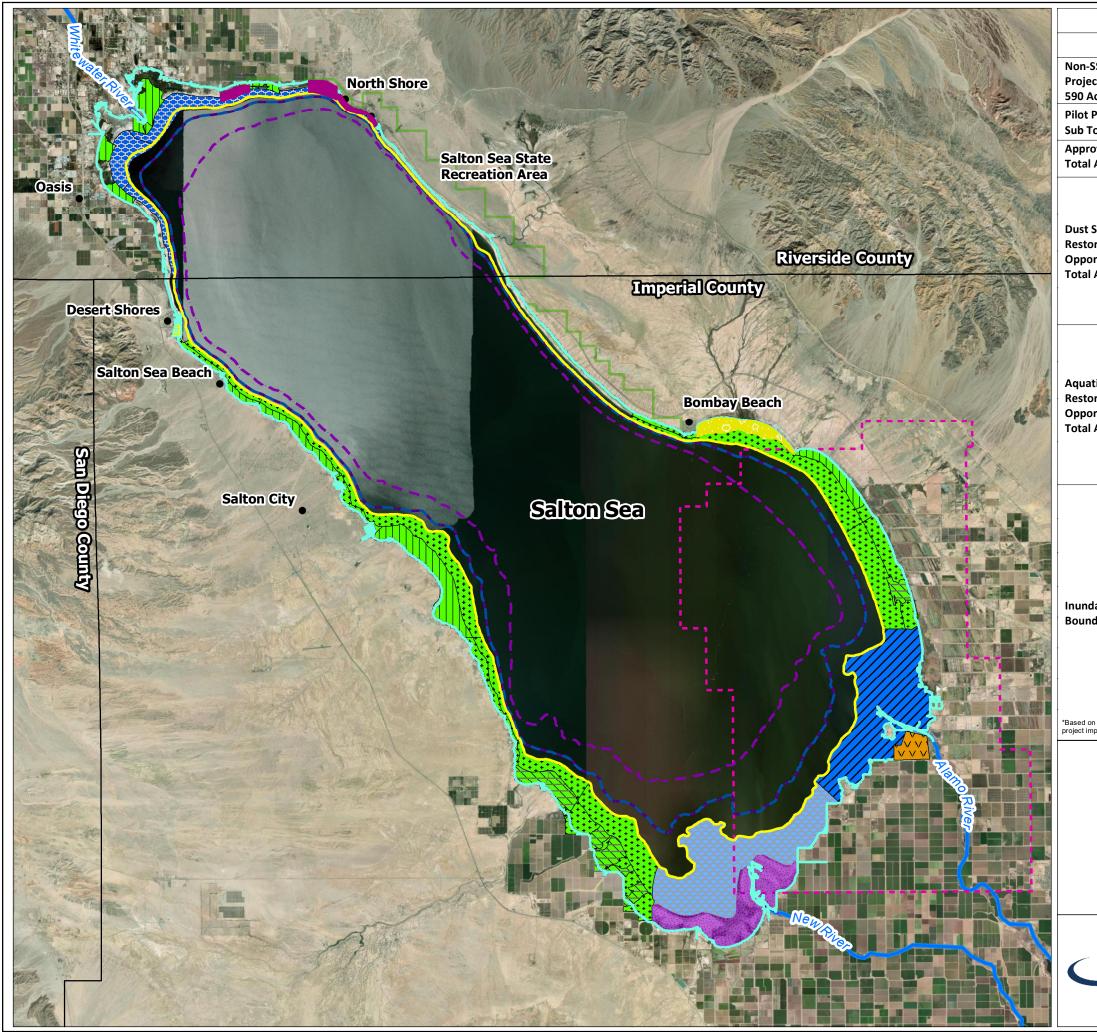
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		29
		30
	R10E	31
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CA TOS	R11E	9
CA T9S		10
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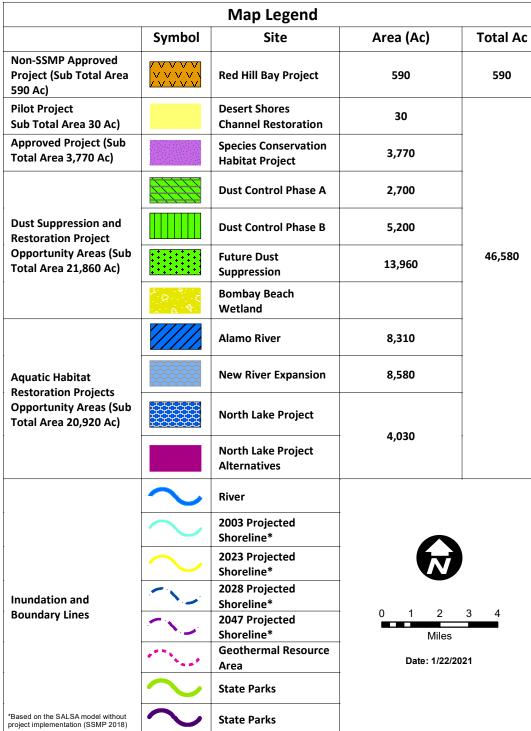
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	R11E	30
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		32
CA TAOS	R12E	1
CA T10S		2
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	R13E	5
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TOWNSHIP	RANGE	SECTION
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	R11E	25
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TOWNSHIP	RANGE	SECTION
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		2
	D11F	3
	R11E	11
		12
		13
		1
		2
		3
		4
		5
		6
		7
		8
		9
		10
		11
		12
		13
	R12E	14
CA T12S		15
		16
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		34
		5
	D12F	6
	R13E	7
		18







# Figure 2

Salton Sea Management Program 10-Year Plan Proposed Planning and Opportunity Areas Riverside and Imperial County, California



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# Enclosure 4

## SSMP PURPOSE AND NEED

The project purpose for the Salton Sea Management Program (SSMP) Project is to implement 29,800 acres of habitat restoration and dust suppression projects on lakebed areas that have been, or will be, exposed at the Salton Sea by 2028. The need of the proposed SSMP Project is to provide habitat for species dependent on the Salton Sea ecosystem and to reduce dust emissions from the increased extent of exposed lakebed that may impact public health. At least 14,900 acres of projects permitted under the SSMP would be aquatic habitat restoration projects that convert exposed lakebed areas to pond habitat suitable for fish and wildlife. While all of the aquatic habitat projects would suppress dust, their primary function is to provide habitat for fish and wildlife. Dust suppression projects may also have habitat benefits by establishing vegetation or creating freshwater wetlands on exposed areas, but they are primarily designed to suppress dust. To the extent practicable, the proposed SSMP Project would strive to provide multiple benefit projects that combine dust suppression with habitat restoration. Projects considered under this proposed SSMP Project will need: (1) water to meet the needs of the project (if applicable): (2) existing or obtainable land rights for the project itself and any needed access corridors; and (3) to provide a public benefit consistent with the SSMP Phase I: 10-Year Plan (SSMP 10-Year Plan) and the State of California's ecosystem and habitat restoration goals as described in the Salton Sea Restoration Act, Fish and Game Code section 2930, et sea.

The declining inflows have resulted in higher salinity and more exposed lakebed, affecting many of the approximately 400 species of birds that use the Sea. Increased salinity has extirpated most of the fish species that once thrived at the Sea, leaving a declining tilapia population to support the piscivorous birds. As the Salton Sea continues to become more saline, there is a need to create aquatic habitat to support fish populations that provide forage for piscivorous birds. Creating aquatic habitat with suitable environmental conditions would support the fish and wildlife dependent on the Salton Sea ecosystem. Moreover, the restoration of aquatic habitat would also address the need of protecting and conserving the endangered desert pupfish by restoring pupfish habitat and enhancing connectivity among pupfish populations as the Sea recedes and becomes more saline.

In addition to the ecological decline resulting from the receding Sea, fugitive dust emissions from the exposed lakebed contribute to poor air quality and can affect human health. Exposure to particulate matter 10 microns or smaller in diameter (PM<sub>10</sub>) increases the risks of developing long-term lung issues and diseases (like asthma), especially for children and the elderly (Audubon 2020). Particulate matter measurements at the Salton Sea Air Basin indicate this area met state and federal PM<sub>10</sub> air quality standards 36 percent of the days in 2018 (California Air Resources Board 2019). This area met state and federal PM<sub>10</sub> air quality standards 62 percent of the days in 2019, but the California Air Resources Board (CARB) has noted that data after 2018 is preliminary (CARB 2020). As more of the Salton Sea lakebed is exposed in the future, additional emissions of fine particulate matter are predicted, which could result in an increase in severity of dust events, the number of days the region is not in attainment with National Ambient Air Quality Standards, and the land area that experiences dust impacts. As such, the proposed SSMP Project is needed to address the greatest amount of lakebed that prioritizes the most emissive exposed lakebed areas.

### PROJECT DESCRIPTION

The Salton Sea, located in southern Riverside and northern Imperial counties in Southern California, is California's largest lake (Figure 1). The California Natural Resources Agency proposes to implement dust suppression and habitat restoration within exposed lakebed surrounding the Salton Sea, with the support of the California Department of Water Resources, and California Department of Fish and Wildlife. The planning area for the Proposed Action is 63,008 acres between the 2003 and projected 2028 water surface elevation on available land at elevations below -228 feet mean sea level (NAVD 1988) (Figure 2).

Within the planning area, opportunity areas have been identified which cover approximately 42,780 acres and further refine the potential locations of aquatic habitat restoration and dust suppression projects. The opportunity areas will help determine a regional analysis and allow for design and permitting within the larger area. The 29,800 acres of projects would be located within the opportunity areas and would meet the goals and objectives of the SSMP 10-Year Plan. Associated project infrastructure, such as access areas, staging areas, and/or visitor facilities could be located outside the exposed lakebed areas shown on Figure 2.

The amounts, types, and locations of habitat and dust suppression projects would be based on the location and availability of a water supply, suitable soils, and landscape/habitat compatibility. To the extent feasible, naturally forming wetlands along the exposed lakebed at the outlets of drains and other drainage will be avoided, preserved, or enhanced. Construction of habitat projects would begin in areas of exposed lakebed near water sources and would move downslope as the Sea recedes and more lakebed becomes exposed over time. Construction of habitat and dust suppression projects in areas that eventually become exposed lakebed, but are currently under water, would begin when portions of those areas are dry enough to allow equipment access. In some locations, habitat conversion could occur from wetlands to open ponded habitat but the total amount of aquatic habitat around the Salton Sea will increase as a result of implementing the SSMP. The proposed SSMP Program will strive to provide multiple benefit projects that combine dust suppression with habitat enhancement.

To the extent that public amenities do not conflict with the overall purpose and need of the proposed SSMP Project, they will be prioritized in the design of individual projects.

Proposed activities associated with the construction of the SSMP Project, would result in the discharge of dredge and/or fill material into wetlands and other waters of the United States and require a Department of the Army (DA) permit from the U.S. Army Corps of Engineers (Corps), authorization from the Corps, pursuant to Section 404 of the federal Clean Water Act. The Proposed Action would result in development of Corps Letter of Permission Procedures to permit the individual habitat restoration and dust suppression projects in the SSMP 10-Year Plan.

In addition to project implementation, operation, and maintenance (O&M) activities are required to maintain the integrity and functionality of the Proposed Action throughout the life of the Project.

## PROJECT FEATURES

Aquatic habitat restoration projects will include various habitat types and features for fish and birds. Construction and project activities may result in the discharge of dredge and/or fill material within wetlands and other waters of the U.S. and may include:

- Mudflats and Shallow-Water Water depth less than 6 inches could be located along the shallower ends of ponds and would support shorebirds.
- Mid-Depth Habitat Water depth 6 inches up to 4.5 feet to support a broad range of aquatic and bird species.
- Deep-Water Habitat Water depth above 4.5 feet. Ponds could provide varying depths with the deepest portions designed as fish refugia. The habitat would support fish and piscivorous and other bird species.
- Permanent Vegetated Wetlands Wetlands that would support habitat for marsh birds, waterfowl and shorebirds. Projects would use water less than 20 parts per thousand salinity to develop suitable wetland vegetation communities. Wetlands could be unmanaged or managed to be seasonally or permanently wet.
- Islands Could be placed in ponds to provide roosting, nesting, and foraging habitat for birds. The number of islands could be determined by the pond size, shape, and depth.
   Islands could be constructed by mounding sediments to create a tall profile and could include riprap.
- Snags or other vertical structures Could be installed in the ponds to provide roosting or nesting sites and constructed out of dead branches, artificial branching structures mounted on power poles, or other appropriate material.
- Seasonal flooding Could be used to manage water use at some pond areas. Storm flows would be used to fill ponds, followed by reducing water levels to keep the surface saturated.
- Swales or channels Could be excavated through the middle of ponds to the exterior berm below the surface of the pond bottom. They could be designed to be self-draining if a pond needed to be drained for emergency purposes. Swale size would be designed based on the pond size and would provide variable depths to enhance habitat diversity and connectivity to different pond areas and habitats.
- Hard substrate on berms Riprap could be used to armor berms to protect the toe, spanning an approximately 1 to 2-foot depth at the waterline. The rocky substrate would also provide diverse microhabitat and hard attachment points for algae or invertebrates.
- Bottom hard substrate Pond bottoms could include some patches of submerged hard substrate (e.g. riprap concrete) to increase the amount of cover and attachment sites for sessile or benthic organisms that support food for fish.
- Floating islands Could provide cover for fish from predation and attachment for sessile organisms. The best available use of floating islands would have to be evaluated.

Dust suppression and restoration projects may employ a variety of techniques to reduce dust emissions. Construction and project activities may result in the discharge of dredge and/or fill material within wetlands and other waters of the U.S. Techniques that are currently under consideration include:

 Surface Roughening – This method consists of constructing berms and ditches, created by deep tillage perpendicular to the predominant high wind direction. It may need to be repeated over time because surface features may degrade, or material may accumulate in roughened areas.

- Vegetation Establishment This method consists of establishing vegetation, sometimes in furrows such as the ones described for surface roughening. It can require water inputs from wells or diversions.
- Dust Suppressant Application This method could be used to control dust in specific areas where other methods are not feasible, such as along access roads. The aerial application of dust suppressants could also be completed on exposed lakebed to reduce emissivity on a larger scale with minimal disturbance of the soil.
- Shallow-Water Habitat Dust Suppression This method involves establishing wetlands along the exposed lakebed through strategic placement or fortification of berms and removal of intensely water consuming invasive species (tamarisk).
- Sand Fencing This method includes setting up arrays of sand fences to reduce wind velocity. New fences may need to be installed as existing ones become buried. This method may be used in combination with others. For example, it could be used to reduce wind and particulate material from accumulating on newly establishing vegetation.
- Engineered Roughening This method consists of placing large items such as straw bales or manufactured items (e.g., concrete blocks).
- Gravel and Other Cover This method includes placing gravel over a geotextile. Limited maintenance is required.
- Shallow Flooding This method consists of sheet flooding of exposed area to keep it moist year-round.
- Stormwater Spreading This method consists of spreading stormwater laterally across the landscape and retaining it using berms.
- Enhancing Soil Crusts This method consists of using biotic or abiotic amendments to enhance soil crust development.

Interim dust suppression measures could be implemented within the habitat project footprints. This interim dust suppression is considered to be a temporary solution to address air quality issues and may include the range of dust control measures as described above, such as surface roughening.

Projects may include the following infrastructure and activities:

- Staging areas to store equipment and supplies during construction and for any maintenance activities.
- Sedimentation basins to allow sediment to settle prior to introducing water to the projects.
- Mixing basins may be needed to mix hypersaline water from the Salton Sea and other sources to attain desired salinity and/or other mineral conditions (e.g., selenium levels).
- Earthen berms to impound water and divide pond sections which could be constructed from lakebed sediments or other sources. Berms would be constructed in dry soil. Depending on soil composition, other engineering solutions may be employed to stabilize berms including sheet pile walls and geotextile fabric.
- Pond infrastructure to improve water aeration including pumps and cascading designs to allow water to flow from one pond to another. Various inflow and outflow structures as well as drop structure(s) would be required.
- Boat ramps would be built to allow access to ponds for maintenance. They would likely be sized for a vehicle and trailer. Material for the ramps might be precast concrete or similar material.

- Shallow monitoring wells, primarily used to test groundwater depth and water characteristics and movement across the lakebed.
- Deep wells, primarily to produce irrigation water for vegetation establishment and long-term survival, but also monitoring.
- Pumps and associated infrastructure to deliver water to the sites from rivers, drains, wells, the Salton Sea, and other sources. For water from the Salton Sea, pump locations could be moved as the Sea recedes. It is possible that basins or dredged channels will be excavated for saline pumps. Over the long term of projects, saline water from the Salton Sea may not be needed and tailwater from upslope ponds could be used for the saltwater input, which will need a pump and infrastructure for the water return.
- Access roads within project areas, on the top of berms, and from existing infrastructure to the site. Some access roads may require the use of imported fill, base, and concrete.
   Turnouts may be required on single lane access roads to allow vehicles to pass.
- Weirs and other structures in waterways to divert water for project purposes.
- Interceptor ditches and connection of drains to mix water between projects and to facilitate movement of desert pupfish between different water bodies.
- Power and other utilities as needed for operation of the projects.
- Operational facilities including office trailers, with water and power. Sewerage would most likely be self-contained.
- Fish rearing facility to generate fish needed to populate the ponds.
- Public amenities including picnic areas, parking, pathways, viewing platforms, signage, and water access points for non-motorized watercraft which may be boat ramps or similar.
- Installation of various materials for dust suppression including dust suppressants, gravel, fencing, and other materials to facilitate engineered roughening.
- Physically roughening the ground surface to create furrows, to lessen airborne dust.

A desktop mapping of features anticipated to qualify as waters of the U.S is currently under development. These include special aquatic sites, mostly playa wetlands, channels of rivers and drains, as well as the Salton Sea itself. It is important to note that some of the areas that are currently waters of the U.S., because they are inundated by the Salton Sea, would not be at the time of project development due to the ongoing receding nature of this water body. In addition, some areas that are currently barren will be colonized by hydrophytic vegetation as water from drains and other sources spreads out along the receding shoreline.

## Monitoring and Adaptive Management

Different monitoring and adaptive management needs are associated with the different project types. Aquatic habitat restoration projects would be operated and monitored to evaluate project effectiveness and address key uncertainties about habitat function. A monitoring program would be implemented to collect data necessary to operate the ponds, to evaluate their effectiveness, and to assess status of threats. The frequency of data collection and evaluation would be guided by the purpose and need for monitoring. An overall data review would be conducted

annually to evaluate project status and performance. A decision-making framework would be established to provide recommendations to project managers for maintaining or adjusting operations.

Monitoring of dust suppression and restoration projects is required to evaluate performance effectiveness of dust suppression projects to meet air quality regulations. In most areas, strong winds capable of creating conditions likely to generate airborne dust (saltation activity) may occur from a predominant direction and mass transport occurs along that direction. To determine the effectiveness of control areas there is a need to measure the saltation activity and dust concentration upwind and downwind of the project areas. For this plan, required measurements include: (1) saltation activity (frequency and magnitude), (2) ambient concentrations of airborne PM<sub>10</sub>, and (3) meteorology. A 360-degree camera is also used collect a timeseries of high-resolution panoramic photos to aid in dust source area identification. Light Detection and Ranging (also known as LIDAR) from an airborne platform can be carried out on a as needed basis to provide data on elevational change in the control areas through time. In addition, for projects that contain ponded water, measurements would be made for concentrations of potential toxic substances such as selenium in water, sediment, and bird eggs.

#### Maintenance Activities

Maintenance activities would also be needed. These will be identified as the need arises, but some anticipated activities include:

- Removing sediment from the sedimentation basin.
- Repairing:
  - Berms, most likely using excess sediment from the sedimentation basin;
  - Protective riprap;
  - Pumping plants, particularly the saline pumps which would have to be maintained to reduce fouling; and
  - Diversions, to keep the diversions free from sediment and monitor the riverbed elevation which is expected to change as the elevation of the Salton Sea declines.
- Removal of invasive plant species.

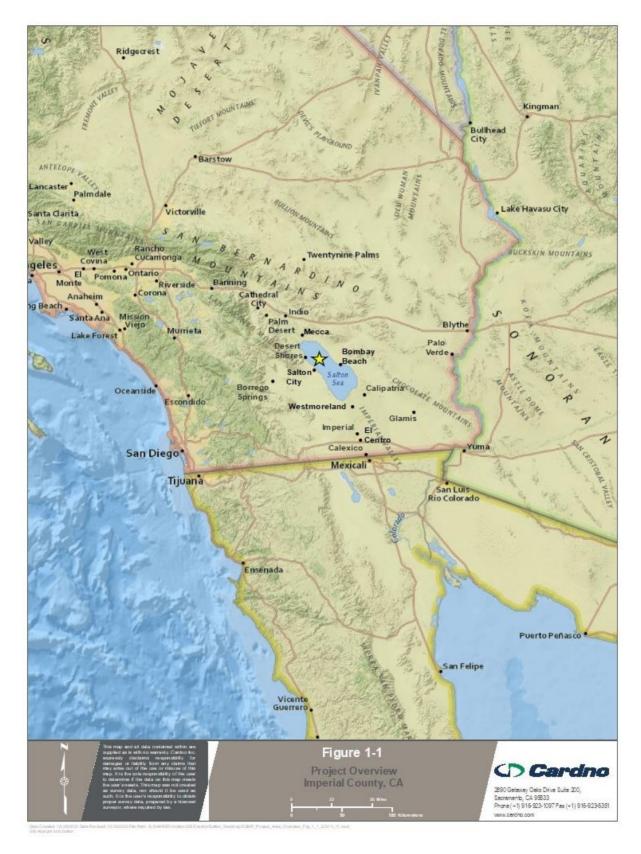


Figure 1-1 Project Location Overview

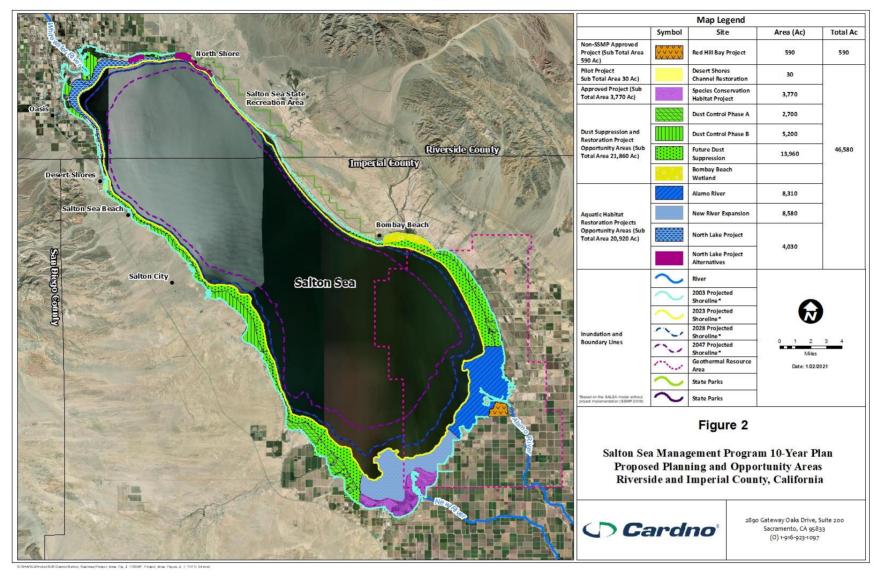


Figure 2-1 Salton Sea Management Program 10-Year Plan Proposed Planning and Opportunity Area