

CHAPTER 4

SUMMARY OF PREVIOUS STUDIES AND RELATED PROJECTS

This chapter presents a summary of previous studies and projects addressing Salton Sea ecosystem restoration. Related projects may affect the Salton Sea or the biological resources that depend on the Salton Sea. These projects are considered in the Existing Conditions, No Action Alternative-CEQA Conditions, No Action Alternative-Variability Conditions, and Cumulative Impacts analysis, as described below.

PREVIOUS STUDIES

Over the past four decades, investigations of the Salton Sea have considered numerous concepts for addressing water quality, biological, recreation, and/or economic issues at the Salton Sea. Individual study objectives have differed, but the main focus has generally been on methods to control the salinity and elevation of the Salton Sea. Most investigations sought concepts to preserve the Salton Sea as a thriving fishery and recreational destination, and most of the concepts addressed methods to preserve the “whole Salton Sea.” More recently, studies have recognized that a partial Salton Sea should be considered due to declining historical and projected inflows to the Salton Sea.

Prior investigations considered numerous ways to divide the Salton Sea with barriers and provide multiple water bodies. Some concepts were developed to generate revenue for use in restoration of the Salton Sea. Many of the concepts have been addressed in multiple studies. As described in Chapter 2, information from these prior investigations was used in developing a list of alternative concepts for this Draft Programmatic Environmental Impact Report (PEIR).

Summaries of prior studies are provided in Table 4-1 and are intended to provide a general understanding of the scope and content of the prior investigations. The reader should refer to the website www.saltonsea.water.ca.gov to view these documents.

RELATIONSHIP TO OTHER PLANNED PROJECTS, PROGRAMS, AND ACTIONS

There are several water and natural resources management projects that affect the Salton Sea and the biological resources that depend on the Salton Sea. These projects are considered in the Existing Conditions, No Action Alternative-CEQA Conditions, No Action Alternative-Variability Conditions, and Cumulative Impacts, as appropriate. A list of the related projects and the method of inclusion in the PEIR are summarized in Table 4-2 in this PEIR. Some projects are considered in multiple categories because of their implementation schedule or uncertainty in their implementation. The list of projects considered in this PEIR was developed from comments received from stakeholders and interested individuals throughout development of this document, previous environmental documents, consultation with Responsible, Trustee agencies, and interviews with various federal, State, and local agencies involved in planning and developing projects within the study area.

Table 4-1
Summary of Previous Studies and Investigations

Publication Year	Title	Author	Summary
1963	Conservation of the Beneficial Water Uses of Salton Sea in California	Colorado River Basin Regional Water Pollution Control Board (CRBRWQCB, 1963)	This investigation included preliminary analysis to assist in preparation of a water quality control plan. Recommendations involved a Partial Sea with an evaporation pond to concentrate salts for physical removal.
1965	A Reconnaissance Study and Preliminary Report on a Water Quality Control Plan for Salton Sea	California State Water Quality Control Board (Pomeroy, Johnston and Bailey Engineers, 1965)	This report concluded that, without controls, the fishing and recreational values of the Salton Sea would decline sooner than generally thought at the time. The report also concluded that engineering measures could preserve the uses of the Salton Sea probably using a Partial Sea and an evaporation pond.
1969	Federal-State Reconnaissance Report	U.S. Department of the Interior and The California Resources Agency (DOI and The California Resources Agency, 1969)	This report compared the benefits of controlling salinity, nutrients, and sediment. Based upon the executive summary, the report considered nutrient control to be of the highest value at the Salton Sea. Methods for reducing nutrients in the inflows were discussed, however, the report indicated that these efforts may not be adequate to reduce eutrophication due to the high nutrient concentrations in the sediments.
1971	Salinity Control Study, Salton Sea Project	Aerospace Corporation (Goldsmith, 1971)	This report was not found during the preparation of the PEIR. However, several reports referenced this work as an evaluation of a range of alternatives including import-export to and from the Gulf of California.
1974	Salton Sea Project, California, Federal-State Feasibility Report	U.S. Department of the Interior and The California Resources Agency (DOI and The California Resources Agency, 1974)	This report evaluated a wide range of alternatives with and without diked impoundments in the Sea Bed, or Partial Sea concepts. Four alternative plans that included 30 to 50-square mile diked impoundments in the southern portion of the Sea Bed were found to be the most feasible.
1976	Water Supply Dilemmas of Geothermal Development in the Imperial Valley of California	Lawrence Livermore Laboratory (Layton, 1976)	This paper evaluated several water supplies to improve geothermal development in the Imperial Valley, including use of water from the Salton Sea. This alternative was identified as being beneficial to the Salton Sea due to the removal of saltwater. However, the report identified that this action would reduce the Salton Sea elevation. This report also considered the adverse impact on the Salton Sea of using irrigation water for geothermal development.
1976	Geothermal Development and the Salton Sea	California Institute of Technology, Pasadena (Goldsmith, 1976)	The abstract of this paper indicates that use of Salton Sea water for deep groundwater injection could be used to maintain geothermal reservoir pressure and reduce Salton Sea salinity. However, the report identified that this action would reduce the Salton Sea elevation. This report also considered the adverse impact on the Salton Sea of using irrigation water for geothermal development.

**Table 4-1
Summary of Previous Studies and Investigations**

Publication Year	Title	Author	Summary
1978	Water for Long term Geothermal Energy Production in the Imperial Valley	Lawrence Livermore Laboratory (Layton, 1978)	This report provided further evaluation of the water supply concepts considered in an 1976 report by Layton (see above). Conclusions related to the Salton Sea are the same as reported above.
1983	The Salton Sea and the Push for Energy Exploitation of a Unique Ecosystem	California Department of Fish and Game (DFG, 1983)	This paper concluded that a large scale solar pond and removal of Salton Sea water for geothermal power plant cooling and injection into the groundwater to control subsidence could reduce the salinity of the Salton Sea. However, the report recognized potential adverse impacts related to these facilities. The report recommended further collaborative studies to provide multiple benefits and minimal adverse impacts.
1988	Problems and Potential Solutions at Salton Sea	The California Resources Agency (The California Resources Agency, 1988)	This report identified three concepts to control Salton Sea salinity and provide for flood management: 1) use of impoundments on the Sea Bed for evaporation ponds, 2) solar ponds to combine evaporation ponds and electricity generation to raise revenue or power desalination plants, and 3) a canal to the Gulf of California which was determined to be infeasible due to the need for approvals from Mexico.
1994	Strategies for the Restoration and Enhancement of the Salton Sea, A White Paper for the Salton Sea Authority	Salton Sea Authority (Salton Sea Authority, 1994)	This report reviewed potential alternatives from previous reports and considered possibilities which might reduce costs, generate revenues, or create access to new funding sources. The report suggested four alternatives to be evaluated further, including: 1) use of diked areas to reduce the size of the marine sea with solar ponds and constructed wetlands; 2) import-export from and to the Gulf of California with energy generation; 3) use of solar ponds, constructed wetlands, desalination plants to reduce salinity in the freshwater wetlands, and import-export from and to the Gulf of California with energy generation; and 4) use of solar ponds and import-export from and to the Gulf of California with energy generation. This report suggested incremental funding strategies and initial actions such as improved shoreline enhancements and pilot studies to evaluate specific issues such as selenium toxicity.
1996	Salton Sea Management Project, Evaluation of Salinity and Elevation Management Alternatives	Salton Sea Authority (Salton Sea Authority, 1996)	The executive summary of this report indicated a wide range of alternatives described in previous reports were compared to a screening criteria that provided for salinity of 30,000 to 40,000 mg/L, Salton Sea water elevation of -230 to -235 feet mean sea level, operations and maintenance costs of less than \$10,000,000/year, and proven technology. The report recommended further evaluation of diked areas within the Sea Bed for evaporation ponds and development of a Partial Sea.

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Publication Year	Title	Author	Summary
1997	Salton Sea Alternative Evaluation, Final Draft Report	Salton Sea Authority, California Department of Water Resources, and the U.S. Department of the Interior, Bureau of Reclamation (Salton Sea Authority et. al., 1997)	This report presented results of an appraisal level study of 54 alternatives and compared the results to the same criteria as the 1996 report described above. Of the five alternatives selected in the screening process, all involved separating portions of the Salton Sea with dikes and using evaporation ponds within the Sea Bed.
1997	Salton Sea Management Project Implementation Plan	Salton Sea Authority (Salton Sea Authority, 1997)	This report indicated that the Salton Sea Authority Board of Directors adopted the diked impoundment in the Sea Bed as the preferred approach on September 26, 1996.
1998	Evaluation of Options for Reclamation of the Salton Sea	R. Wayne Hardie, Los Alamos National Laboratory in response to request by Congressional Salton Sea Task Force (Hardie, 1998)	This report considered a variety of options for controlling the salinity and elevation of the Salton Sea. The report concluded that: 1) desalination was not a viable option; 2) that import-export concepts would not be feasible due to a lack of water for import and the use of evaporation ponds outside of the Sea Bed would be feasible, but would result in a smaller Salton Sea; and 3) a diked impoundment using a Partial Sea and evaporation ponds in the Sea Bed could control salinity and elevation of the Salton Sea.
1998	Salton Sea Alternatives, Final Preappraisal Report	Reclamation (Reclamation, 1998)	The report reviewed 74 alternatives, including alternatives from previous reports and additional concepts. The alternatives were compared to criteria for salinity of less than 40,000 mg/L and Salton Sea elevation of about -232 feet mean sea level using proven technology. The report identified three concepts for further evaluation including import-export, desalination with solar ponds, and use of displacement dikes with evaporation ponds in the Sea Bed.
1999	Salton Sea Restoration Alternatives Packet	Salton Sea Authority and Reclamation (Salton Sea Authority and Reclamation, 1999)	This packet provided an overview of the alternatives development process and identified the highest ranking alternatives based on the 1998 report described above. The alternatives included: import of reclaimed water from Yuma/export (pump-out) of saltwater to Gulf of California, import of reclaimed water from Yuma/export (pump-out) of saltwater to Pacific Ocean, Partial Sea in northern portion of Salton Sea and evaporation pond in southern Sea Bed, desalination to reduce salinity of Salton Sea with export of brine to Gulf of California, and use of desalination and a solar pond with export of brine to Gulf of California.

**Table 4-1
Summary of Previous Studies and Investigations**

Publication Year	Title	Author	Summary
2000	Salton Sea Draft Alternatives Appraisal Report	Reclamation (Reclamation, 2000)	This report presented appraisal level evaluation of the alternatives identified in the 1999 packet described above. The report also evaluated several geological constraints and benefits of the alternatives.
2000	Salton Sea Restoration Project Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR)	Salton Sea Authority and Reclamation (Salton Sea Authority and Reclamation, 2000)	This report evaluated five alternatives including the use of Partial Seas and evaporation ponds with and without enhanced evaporation systems. The alternatives were structured with the recognition that Salton Sea inflows could decrease in the future and additional features may be needed. Each alternative included the same set of common actions such as fish harvesting, recreational facilities, shoreline improvements, integrated wildlife programs, long term management strategies, and strategic science plans.
2000	Analysis of Salton Sea Restoration Plans	Salton Sea Authority and Reclamation (Parsons et. al., 2000)	This report presented an independent technical review of Phase I alternatives presented in the 2000 Salton Sea Restoration Project Draft EIS/EIR and described possible modifications to the concepts including use of solar evaporation ponds, deep ponds for salt disposal, dredging of Sea Bed, fallowing of agricultural lands to increase inflows, and use of solar ponds to remove salt.
2001	A Proposal to Preserve and Enhance Habitat at the Salton Sea	Pacific Institute (Pacific Institute, 2001)	This report presented the concept of diked impoundments at the northern and southern ends with stable elevations and brackish water quality with the evaporation pond in the Sea Bed.
2002	Evaluation of a Proposal for Conservation of the Salton Sea Ecosystem	Workshop coordinated by the U.S. Department of the Interior, Geological Survey, Salton Sea Science Office (USGS, 2002)	This report summarized the results of an independent review of the 2001 proposal by the Pacific Institute, described above. The review identified several issues of the proposal that would need to be resolved for implementation.
2003	Salton Sea Study, Status Report	Reclamation (Reclamation, 2003a)	This report presented a summary of the evaluation of 14 alternatives. The report made no recommendations. The report concluded that it is difficult to make a recommendation without a decision by Congress regarding funding of Salton Sea restoration.
2003	US Filter Corporation Salton River Proposal	US Filter Corporation (US Filter Corporation, 2003)	The US Filter Corporation proposed to construct a diked impoundment within the Salton Sea to create a ring of brackish water with a stable elevation and shoreline. The proposal included desalination of water for use in the Southern California area.

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Publication Year	Title	Author	Summary
2003	Review of US Filter Corporation Salton River Proposal, Final Report	Salton Sea Authority (Salton Sea Authority, 2003)	This report summarized the evaluation of the Salton River Proposal proposed by US Filter, described above. This report concluded that the proposal would provide a stable shoreline, however, sediment could accumulate in the ring, contaminants could become concentrated if adequate water was not provided for mixing and circulation, temperatures could vary significantly, and air quality issues may occur. This report discussed potential modifications including increasing the depth of water in the ring.
2003	Proposal for Restoration of the Salton Sea	Black & Veatch (Black & Veatch, 2003)	This proposal used evaporation ponds created by diking portions of the Salton Sea perimeter to lower salinity. The proposal also included desalination of a portion of the inflows for water transfers to provide revenues for restoration activities. A shoreline canal would be constructed between the ponds and the existing shoreline to provide continuity between the Salton Sea and the tributaries.
2003	Proposal for the Restoration of the Salton Sea Based on Groundwater Sequestering	Timothy J. Durbin, Inc (Durbin, 2003)	This proposal extracted 200,000 acre-feet/year of groundwater for export, use within the Imperial Valley, or replacement water for the Salton Sea. Water from the Salton Sea would be injected into the groundwater to replace the water removed from the aquifer and provide salt disposal. If the groundwater was sold, this would provide a revenue source for restoration activities. The report estimates that the groundwater system is finite, but could be used for 100 years.
2004	Mid-Sea Dam and Barrier Concepts, Salton Sea Study, Riverside and Imperial Counties, California	Reclamation (Reclamation, 2004)	This report evaluated mid-Sea dam and barrier concepts for elevation and/or salinity control. The report concluded that mid-Sea dam and barrier concepts could be viable. However, a variety of challenging design and construction considerations, such as weak foundation soils and seismic hazards, would need to be considered.
2004	Salton Sea Restoration, Final Preferred Project Report	Salton Sea Authority (Salton Sea Authority, 2004)	This report documented the process and identified a preferred alternative for the Salton Sea Authority efforts. The report concluded that most of the "whole Salton Sea" alternatives considered in previous reports would not be flexible to accommodate reduced inflows to the Salton Sea. Many of the previous alternatives that would remove salt also would remove water, which would further decrease Salton Sea elevations. The report concluded that the North Marine Lake with Elevation Control was the preferred alternative.

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Summary of Previous Studies and Investigations**

Publication Year	Title	Author	Summary
2004	Salton Sea Restoration – The Cascade Alternative	The Imperial Group / Salton Sea Restoration Consortium (Imperial Group, 2004)	This proposal used a series of relatively low concentric dikes to impound wetlands, ponds and marine lakes with different salinities and elevations. The proposal included construction of dikes using geotextile tubes filled with material dredged from the Sea Bed.
2005	Integrated Water Management Plan Evaluation, A Review of Salton Sea Authority's Preferred Project Concept for Rehabilitating the Salton Sea	Reclamation and USGS (Reclamation and USGS, 2005)	This report summarizes the results of an independent review of the Salton Sea Authority's 2004 Final Preferred Project Report, described above. The review identified several issues that could require additional analyses including dust control, selenium management, and accommodation of seasonal and annual fluctuations in inflows.
2005	Proposal to Address the Relevant Issues Identified by the Department of Water Resources for the Restoration of the Salton Sea Ecosystem—CRM Proposal	Consortium for Resource Management, Inc. (Consortium for Resource Management, Inc., 2005)	This proposal recommends import-export from and to the Gulf of California a route that extends from the Gulf of California by Laguna Salada and to the Salton Sea.
2006	Hazard The Future of the Salton Sea with No Restoration Project	Pacific Institute (Pacific Institute, 2006)	This report projects conditions that would occur if restoration actions are not implemented in a manner similar to the No Action Alternative.

**Table 4-2
Related Projects**

Related Projects, Programs, and Actions	Existing Conditions	No Action Alternative-CEQA Conditions	No Action Alternative-Variability Conditions	Cumulative Projects
All-American Canal Lining Project		X	X	X ^a
Brawley Constructed Wetlands Demonstration Project	X	X	X	
Coachella Canal Lining Project		X	X	
Coachella Valley Multiple Species Habitat Conservation Plan				X
Coachella Valley Water Management Plan	X	X	X	
Colorado River Aqueduct Desalination and Salton Sea Water Supply Project				X
Colorado River Basin Salinity Control Projects	X	X	X	
Colorado River-Tijuana Aqueduct Enlargement			X	
Desert Southwest Transmission Line				X
Drop 2 Reservoir, Lower Colorado River Water Storage Project				X
Green Path Project— Imperial Irrigation District, Los Angeles Department of Water and Power, and Citizen's Energy				X
Imperial Irrigation District Water Conservation and Transfer Project	X	X	X	
Imperial County General Plan	X	X	X	
Imperial County / Imperial Irrigation District Groundwater Management Plan	X	X	X	
Imperial-Mexicali 230-kV Transmission Lines	X	X	X	
Metropolitan Water District of Southern California New and Alamo River Water Right Applications				X
New and Alamo Rivers - Reconnaissance Inventory of Wetland and Sedimentation Basin Sites				X
Quantification Settlement Agreement	X	X	X	
Riverside County General Plan	X	X	X	
Salton Sea Restoration Project-Federal Feasibility Study				X
Salton Sea Shallow Water Habitat Pilot Project				X
Salton Sea Unit 6 (Geothermal)		X	X	X ^a
Southwest Transmission Expansion Plan		X	X	X
Torres Martinez Land Use, Zoning and Development Plan	X	X	X	
Torres Martinez Water Quality Wetland Project				X
Total Maximum Daily Load Implementation	X	X	X	X ^a
Vertical Tube Evaporator Geothermal Desalination Demonstration Project				X
Wastewater Conveyance and Treatment Project for the Mexicali II Service Area	X	X	X	

Note: X^a = Long term operational impacts are included in Existing Conditions and No Action Alternative. Short term construction impacts, especially related to biological resources, are included in Cumulative Impact Assessment.

The projects, programs, and actions considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions are described in this chapter to provide the reader with a “road map” to the Salton Sea-related activities, and describe how these projects relate to the alternatives. Descriptions of the cumulative projects, programs, and actions are provided in Chapter 23.

There are a variety of existing or planned projects in the Salton Sea watershed that are not considered in this PEIR because they would not affect the Salton Sea ecosystem or alternatives, or they have not been developed in enough detail, and, therefore, are speculative. An example of a project that would not affect implementation of the PEIR alternatives is the Lower Colorado River Multi-Species Conservation Program. An example of a project that has not been developed in enough detail, and is therefore, speculative, is a Feasibility Study for restoration of the Salton Sea being developed by the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) as directed in the Water Supply, Reliability, and Environmental Improvement Act of 2004 (Public Law 108-361).

Related Projects in Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions

This section provides a description of the related projects included in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions. Related projects that are included in the Existing Conditions are projects that had been implemented and were operational at the time the Notice of Preparation (NOP) was issued (February 27, 2004), and that would affect the Salton Sea ecosystem or the implementation of the alternatives. Related projects included in the No Action Alternative-CEQA Conditions were approved with environmental documentation, permits, and/or funding at the time the NOP was issued, and would affect the Salton Sea ecosystem or implementation of the alternatives. The No Action Alternative-Variability Conditions includes a variety of potential future actions that have not completed the planning process and may affect inflows to the Salton Sea. The descriptions of related plans, programs, and actions are provided in alphabetical order below.

All-American Canal Lining Project

The All-American Canal begins at Imperial Dam, located north of Yuma, Arizona, and generally parallels the United States-Mexico border to its terminus in the western Imperial Valley. The canal conveys water for use in the Imperial and Coachella valleys. The All-American Canal Lining Project includes the construction of a new parallel canal from about 1 mile west of Pilot Knob to Drop 3, which is a distance of 23 miles. The Lining Project would conserve about 67,700 acre-feet/year of water lost to seepage from the All-American Canal and would make this water available for use by San Diego County Water Authority (SDCWA) and the San Luis Rey Water Right Settlement parties. The centerline of the new canal would be offset from the old centerline of the original canal by a distance of about 300 to 600 feet, depending on terrain, ease of construction, and location of existing structures (Reclamation and IID, 1994). Excavation of 25,000,000 cubic yards of earth would be required. Excess material would be placed in the old canal or in rows along the new canal. Other land disturbances would include a 10-acre concrete batch plant and three 5-acre staging areas, all of which would be on previously disturbed lands. Power lines would be relocated as required. Actual construction would last about three years. The canal would be in service year-round during and after construction. Portions of the old canal would be retained for a regulating reservoir. Details of the construction, safety, and operation components of the canal lining are included in the All-American Canal Lining Project Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and the All-American Canal Lining Project Supplemental Information Report (Reclamation and IID, 1994; Reclamation, 2006).

A Final EIS/EIR for the All-American Canal Lining Project was released by Reclamation and Imperial Irrigation District (IID) in March 1994 (State Clearinghouse Number 90010472). In November 1999, Reclamation completed a Reexamination and Analysis of the 1994 Final EIS/EIR and its Record of

Decision concluding that the 1994 document satisfies the requirements of the National Environmental Protection Act. A second reexamination was completed in 2003 and described that the conclusions had not changed. In 2006, Reclamation completed a Supplemental Information Report that concluded that no significant new circumstance or information have occurred since the completion of the 1994 document..

Final design for the All-American Canal Lining Project was initiated in 2004 and largely completed in early January 2006 (Reclamation, 2006). Construction was scheduled to begin in 2006 (Reclamation, 2006). However, in response to litigation, the Ninth Circuit Court of Appeals issued an emergency injunction in August 2006 with a hearing scheduled for December 2006.

Relationship to the Salton Sea Ecosystem Restoration

While this project is a water management project in the vicinity of the Salton Sea, it does not have substantial direct relevance to long term implementation of restoration actions evaluated in this PEIR. As described in the Final EIS/EIR for the All-American Canal Lining Project, the majority of the seepage from the canal flows toward Mexico, and less than 5 percent of the annual seepage from Pilot Knob to Drop 3 (the section to be lined) flows toward the East Mesa in the direction of the Salton Sea (Reclamation and IID, 1994). The Final EIS/EIR estimated that none of the seepage from the canal enters the Salton Sea directly through the subsurface. Therefore, it was determined that analyses and findings presented for the All-American Canal Lining Project related to inflows would not be incorporated in this PEIR and that the All-American Canal Lining Project would not adversely or beneficially affect restoration efforts at the Salton Sea.

The All-American Canal Lining Project was considered in the development of inflows for the No Action Alternative-Variability Conditions because the reduced recharge to the Mexicali groundwater basin due to the Canal Lining Project may reduce groundwater use for agriculture in the Mexicali area. New River flows at the United States-Mexico border include return flows from agriculture in the Mexicali area that may be reduced as a result of projects in Mexico in the future. However, due to lack of groundwater pumping and elevation information and agricultural drainage and reuse information for areas in the Mexicali Valley, the relationship between seepage flows from the All-American Canal and flows in the New River are not known. As groundwater derived from seepage flows is used and reused in the Mexicali Valley, the likelihood that this water contributes any meaningful amount of inflow to the Salton Sea is speculative.

Brawley Constructed Wetlands Demonstration Project

The Brawley Constructed Wetlands Demonstration Project (also referred to as the New River Wetlands Project) included construction of two pilot treatment wetlands to improve the quality of water in Imperial Valley agricultural drains, New River, and Salton Sea. A 6-acre wetland has been constructed near the City of Brawley, and a 22.7-acre wetland has been constructed near the City of Imperial. The purpose of these wetland demonstration projects is to determine the effectiveness of wetlands to remove silt, nutrients, and other constituents and to determine the potential for pesticide/herbicide and selenium toxicity in the shallow ponds. A monitoring program has been initiated to determine water quality improvement and effects on wildlife (Reclamation, 2001b). Previous studies have identified over 4,000 acres of potential wetlands that could be constructed based upon the results of this demonstration project.

Relationship to the Salton Sea Ecosystem Restoration

Preliminary results indicate that the wetlands improve water quality, although flows are reduced due to evapotranspiration. In addition, the wetlands provide freshwater wetland habitat for species that also utilize the Salton Sea area. The wetlands demonstration project is considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions.

Coachella Canal Lining Project

The Coachella Canal is a 49-mile structure that conveys Colorado River water from the All-American Canal to the Coachella Valley. The Coachella Canal Lining Project includes the construction of a new, parallel Coachella Canal from Siphon 7 to Siphon 32, a distance of about 33 miles. The Lining Project would conserve about 26,000 acre-feet/year of water lost to seepage from the Coachella Canal and would make this water available for use by SDCWA and the San Luis Rey Water Right Settlement parties. The centerline of the new canal would be offset from the old centerline of the original canal by a distance of about 100 to 500 feet, depending on terrain, ease of construction, and location of existing structures (CVWD and Reclamation, 2001). Excavation of 10,000,000 cubic yards of earth would be required. Excess material would be deposited in the abandoned canal. Other land disturbances would include a 10-acre concrete batch plant and three 5-acre staging areas. A more detailed description of the Coachella Canal Lining Project, including construction, operations and maintenance, and safety components, is provided in the Coachella Canal Lining Project EIS/EIR (CVWD and Reclamation, 2001).

A revised and updated Draft EIS/EIR for the Coachella Canal Lining Project was circulated for public review by Reclamation and Coachella Valley Water District (CVWD) in September 2000. A Final EIS/EIR was released in April 2001 (State Clearinghouse Number 1990020408). Construction began in late 2004 and is anticipated to be completed in early 2007.

Relationship to the Salton Sea Ecosystem Restoration

While this project is a water management project in the vicinity of the Salton Sea it does not have substantial direct relevance to restoration actions evaluated in this PEIR. CVWD and Reclamation concluded that the canal lining would reduce the amount of water lost to the environment as a by-product of water conveyance to the Coachella Valley by 30,850 acre-feet/year. This savings was allocated in the following manner: 4,850 acre-feet/year to sustain marsh/desert and riparian habitat that would be adversely affected; 4,500 acre-feet/year to the San Luis Rey settlement parties; and 21,500 acre-feet/year to other water users in California. These agencies determined that there was no surface runoff to the Salton Sea from the Coachella Canal and that canal-seepage did not result in groundwater discharge to the Salton Sea. However, the analysis did identify the need to mitigate losses from canal seepage to Salt Creek. Therefore, as part of the mitigation, water will be released from the Coachella Canal to Salt Creek. This mitigation will maintain existing flows in Salt Creek and is included in the No Action Alternative-CEQA Conditions and No Action Alternative-Variability Conditions.

Therefore, it was determined that the Coachella Canal Lining Project would not adversely or beneficially affect restoration efforts at the Salton Sea.

Coachella Valley Water Management Plan

The CVWD prepared the Coachella Valley Water Management Plan to establish an overall program for managing surface water and groundwater resources (CVWD, 2002a and 2002b). The plan includes actions to reduce the current groundwater overdraft in the Coachella Valley through increased use of Colorado River water to reduce groundwater pumping, water recycling programs, and conservation measures to decrease the consumption of water.

The plan includes components described in the Quantification Settlement Agreement (QSA; see discussion below) and non-QSA components. Water that becomes available through implementation of the QSA will be used to reduce groundwater overdraft in the Coachella Valley. Under the QSA, from 52,000 to 152,000 acre-feet/year of additional Colorado River water and an exchange of State Water Project water would be used to replace an equivalent portion of the groundwater now used, or that would be used, for direct groundwater recharge. Reducing the amount of groundwater pumping and increasing the use of imported water would allow the overdrafted aquifer to recover. Water would be gained through non-QSA-related sources, including recycled water, desalinated agricultural drain water, municipal and

industrial conservation, and golf course conservation. Implementing these elements of the plan would involve construction of various facilities for water treatment and development of additional policies to implement increased conservation. Implementation of the plan may also result in additional water from other transfers not related to the QSA, such as a transfer of up to 100,000 acre-feet/year of State Water Project water.

CVWD circulated a Draft Programmatic EIR for the Coachella Valley Water Management Plan and State Water Project Entitlement Transfer Project in June 2002. A Final Draft Programmatic EIR was released in September 2002 (State Clearinghouse numbers 20000031027 and 1999041032).

Relationship to the Salton Sea Ecosystem Restoration

The Coachella Valley Water Management Plan will affect Salton Sea inflows from the Coachella Valley, as described in Appendix H-2. As such, the plan would be considered in determining long term surface water and groundwater inflows from the Coachella Valley into the Salton Sea under the Existing Conditions and No Action Alternative-CEQA Conditions. The No Action Alternative-Variability Conditions includes only partial implementation of some of the long term plans that would require future approvals.

Colorado River Basin Salinity Control Program

This program, pursuant to the 1974 Colorado River Basin Salinity Control Act, Public Law 93-320, as amended, provides for construction, operation, and maintenance of projects in the Colorado River Basin to control salinity in the Colorado River. A wide range of salinity control actions have been implemented in the Colorado River basin as part of this program.

The actions that comprise the program include the construction of a desalting plant at Yuma, Arizona; development of a protective well field along the United States-Mexico border; a salinity control program on Bureau of Land Management lands; voluntary on-farm salinity control program by U.S. Department of Agriculture; other specific projects; and a program for funding basinwide salinity control projects. The Salinity Control Program is composed of numerous units within which various salinity control projects are implemented. The overall goal of the program is to reduce annual salinity loading to the Colorado River by 1,800,000 tons by 2020 (CRBSCF, 2002). As of 2001, an annual reduction of 800,000 tons had been achieved.

Relationship to the Salton Sea Ecosystem Restoration

The program is composed of numerous individual projects throughout the Colorado River watershed. Some of the individual projects have been completed, while other projects are still in the design and construction phase. The program will continue to result in reduced salinity in Colorado River water. This indirectly results in reduced salinity in Salton Sea inflows. The Salinity Control Program is considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions.

Colorado River-Tijuana Aqueduct Enlargement

The Colorado River-Tijuana Aqueduct (know as the ARCT for its Spanish acronym) was built in 1975 and conveys water from the Colorado River to the cities of Tecate and Tijuana to the west. In order to satisfy the growing demand in these water short regions, the capacity of the aqueduct is being increased from 141 to 187 cubic feet/second (cfs) (COSAE, 2005). Design was initiated in the summer of 2005. The source of water to be conveyed through the enlarged aqueduct has not yet been contracted, but the National Water Commission of Mexico has indicated that the supply will be developed through transfers from agricultural users in the Mexicali Valley, recovery of seepage losses, reclamation of wastewater, and/or through improved efficiency in the use of water (CEA, 2005).

Relationship to the Salton Sea Ecosystem Restoration

Flows in the New River across the United States-Mexico border may be affected as more water is exported out of the basin, thus reducing the amount of water that flows into the Salton Sea. This project is considered under the No Action Alternative-Variability Conditions, as described in Appendix H-2.

Imperial Irrigation District Water Conservation and Transfer Project

The IID Water Conservation and Transfer Project is a 75-year water conservation program by IID to conserve up to 300,000 acre-feet/year of Colorado River water and transfer the water to SDCWA, CVWD, and/or Metropolitan Water District of Southern California (Metropolitan). The terms of the project are set forth in the Agreement for Transfer of Conserved Water (commonly referred to as the IID/SDCWA Transfer Agreement) initially executed by IID and SDCWA in 1998, and in various subsequently amended agreements associated with the QSA (see discussion below).

Under terms of the IID Water Conservation and Transfer Project, water can be conserved by IID using: 1) on-farm irrigation system improvements, including on-farm irrigation management techniques, 2) improvements by IID to its water delivery system, and 3) fallowing (IID and Reclamation, 2002b). The conservation and transfer of water ramps to about 300,000 acre-feet/year incrementally over the first 23 years of the project and is sustained at that level until Year 45 (2048) when the initial contract ends. The project can be renewed for an additional 30 years with the consent of all parties.

IID and Reclamation circulated a Draft EIR/EIS for the IID Water Conservation and Transfer Project in January 2002. A Final EIR/EIS was released in June 2002 (State Clearinghouse Number 1999091142).

Impacts of the project are related to the reduction of inflow from agricultural runoff into the Salton Sea, which accelerates the rate that salinity of the Salton Sea would increase. The Salton Sea fishery has historically supported several piscivorous (fish-eating) birds, some of which are listed as threatened or endangered species under federal and State Endangered Species Acts. During the first 15 years of the project, (c)(2) water would be delivered to the Salton Sea to reduce the increase in salinity and the reduction in elevation, as described in Chapter 1 (IID and Reclamation, 2003c).

Approval of the IID Water Conservation and Transfer Project by the State Water Resources Control Board (SWRCB) resulted in Board Order 2002-13, which requires IID to implement all of the measures in the EIR/EIS and the Habitat Conservation Plan (HCP) (SWRCB, 2002). In addition, IID must implement all of the measures in the California Endangered Species Act Permit (2081.1 permit) for the project. Key components of the project include:

- Measures to address increasing salinity in the Salton Sea which include 15 years of mitigation water to the Salton Sea, referred to as (c)(2) water;
- Measures for conserving selected species including desert pupfish and burrowing owl;
- Measures for conserving selected species associated with tamarisk scrub, IID drains, and desert areas along IID canals; and
- Development and implementation of an Air Quality Mitigation and Monitoring Plan, including providing for dust control on areas of the Sea Bed that are exposed due to this project and located below -235 feet msl.

In July 2002, Reclamation initiated an Endangered Species Act (ESA) compliance process by submitting a Biological Assessment to the U.S. Department of the Interior, Fish and Wildlife Service (Service) and requesting consultation pursuant to Section 7 of the federal ESA (Reclamation, 2002b). The Service issued a Biological Opinion in December 2002 (Service, 2002), which describes the voluntary conservation proposed by Reclamation, the conservation agreements to be entered into by Reclamation

and the California water agencies, and their effects on federally listed species and designated critical habitat. The Biological Opinion requires the establishment of at least two major roost sites along the California coast to offset the potential take of California brown pelicans at the Salton Sea as a result of a reduction in fish abundance.

In addition to the conservation measures proposed by Reclamation, the Biological Opinion describes a 15-Year Minimization Plan required by the SWRCB Board Order 2002-13 to minimize the impacts on salinity and inflows to the Salton Sea. The 15-Year Minimization Plan requires a reduction in the volume of conserved water transferred to SDCWA for the first 15 years of the project. A subsequent Natural Community Conservation Plan is to be completed by IID by 2006.

Relationship to the Salton Sea Ecosystem Restoration

The IID Water Conservation and Transfer Project will result in a variety of physical and social changes in the Imperial Valley that have the potential to affect the Salton Sea, and, therefore, are being considered in the PEIR. The transfer project is considered under the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions including actions related to air quality mitigation, desert pupfish connectivity, and provisions for (c)(2) water.

Imperial County General Plan

The Imperial County General Plan establishes public policy that shapes the physical development of the unincorporated areas of the county (County of Imperial, 1993a). The General Plan is a long range planning tool used to guide future development in ways that are conducive to community development goals. In addition, the General Plan serves to direct development and urban growth to areas where available infrastructure exists. The General Plan is mandated to contain several elements that serve to ensure long range planning sustainability within the county. These elements are Land Use, Housing, Circulation and Scenic Highways, Noise, Seismic and Public Safety, and Conservation and Open Space. In addition, Imperial County has optional Agricultural, Geothermal and Transmission, and Water Elements in the General Plan. The Imperial County General Plan contains several Community Area Plans, Urban Area Plans, and colonias master plans that define current land and resource conditions in the unincorporated areas of the county. These plans also direct future growth within the communities. Future land use changes in the county should comply with the guidelines and policies in the Imperial County General Plan; however, the General Plan is a dynamic document in that it can be amended as needed to respond to changing community and regional goals, physical and public infrastructure resources, and social concerns. The most recent Imperial County General Plan was adopted in 1993, but some elements have been updated since that time.

The Land Use Element is the primary policy statement for implementing development policies in the unincorporated portions of the county. The goals and policies in the Land Use Element promote the economic prominence of agricultural enterprises, determine appropriate urban development centers and encourage their economic development, protect the existing character of rural and recreational communities and areas, and preserve the unique natural and cultural resources of the Imperial Valley. The Land Use Element identifies the Salton Sea as a potential additional recreation site and contains objectives related to improving the conditions at the Salton Sea, as described in Chapter 11. The Water Element contains a goal and related objectives related to the Salton Sea and the ecological communities that rely on the Salton Sea. The Conservation and Open Space Element also includes objectives and programs specifically related to improving the water quality and recreational opportunities at the Salton Sea. The Imperial County General Plan designations in the study area are described in Chapter 11.

Relationship to the Salton Sea Ecosystem Restoration

The Imperial County General Plan directs the location and to some extent, the amount of land use changes in the county. These land use changes may affect the Salton Sea and are considered in the No Action Alternative-CEQA Conditions and No Action Alternative-Variability Conditions.

Imperial-Mexicali 230-kV Transmission Lines

The Imperial-Mexicali 230-kV Transmission Lines project consists of two natural gas-fired combined-cycle power plants, the La Rosita Power Complex and Sempra Energy Resources' Termoeléctrica de Mexicali, and transmission lines from the power plants to the San Diego Gas and Electric Imperial Valley Substation. The La Rosita Power Complex is located about 10 miles west of Mexicali, Mexico and about 3 miles from the United States-Mexico border, while the Termoeléctrica de Mexicali is located 13 miles west of Mexicali, Mexico and about 3 miles from the United States-Mexico border. The La Rosita Power Complex consists of two natural gas-fired combined-cycle generating units with a total nominal generating capacity of about 1,060 megawatts. The Termoeléctrica de Mexicali power plant consists of one natural gas-fired combined-cycle generating unit with a nominal generating capacity of 650 megawatts. Both power plants include transmission lines to the Imperial Valley Substation (about 6 miles of each transmission line are in the United States). Water used for cooling purposes at both power plants comes from the Zaragoza Oxidation Lagoons and is treated before use (DOE and BLM, 2004). Both projects have been completed and are in operation.

Impacts of the projects include the following: consumption of about 10,700 acre-feet/year for cooling purposes that reduces New River flows and Salton Sea inflows by a corresponding amount, changes in salinity in the New River, and increased air emissions from power plant operations (DOE and BLM, 2004).

Relationship to the Salton Sea Ecosystem Restoration

The Imperial-Mexicali Transmission Line project has resulted in a reduction in inflows to the New River and Salton Sea and increased air emissions from power plant operations. These inflow and air quality changes are considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions.

Quantification Settlement Agreement

The use of Colorado River water is governed by federal and state laws, interstate compacts, an international treaty, court decisions, federal contracts, federal and state regulations, and multi-party agreements. This body of law, known as the Law of the River, collectively establishes the priority and use of Colorado River water among the seven Colorado River Basin States, and among the Colorado River water users within each state.

Prior to 1996, California diverted more than its normal yearly apportionment of 4.4 million acre-feet of Colorado River water. California used in excess of 4.4 million acre-feet/year. The excess water was met solely by diverting unused apportionments of other Lower Division States (Arizona and Nevada) that were made available by the Secretary of the Interior. Since 1996, California also has utilized surplus water made available by Secretarial determination. Arizona and Nevada have recently approached full utilization of their apportionments, and declared surpluses of Colorado River water are expected to diminish in future years. California, therefore, needed to reduce consumptive use of Colorado River water to 4.4 million acre-feet in normal years.

In a major step toward achieving this goal, the Colorado River Board of California developed the California's draft Colorado River Water Use Plan (CRBC, 2000). Incorporating many of the concepts of the Water Use Plan, three of the major Colorado River water users in California (CVWD, IID, and Metropolitan) negotiated the QSA, which established a framework of water conservation actions and

transfers between the participating agencies for a period of up to 75 years. The QSA provides an important mechanism for California to reduce diversions of Colorado River water to the 4.4 million acre-foot normal year apportionment.

The QSA quantifies the amount of Colorado River water available to CVWD, IID, and Metropolitan, and requires specific, changed distribution of that water among the agencies. The QSA anticipates a transition period of about 25 years for the full implementation of water conservation, transfers, and exchange projects. The QSA is composed of related agreements, activities, and projects, which, when taken together, support the consensual agreement among CVWD, IID, and Metropolitan regarding the use of Colorado River water. The QSA includes provisions that would:

- Cap the share of Colorado River water that may be diverted and put to beneficial use by CVWD and IID;
- Facilitate the various conservation, transfer, and exchange agreements including:
 - IID Water Conservation and Transfer Project which would result in conservation and transfer of 300,000 acre-feet/year from IID to SDCWA and CVWD (or Metropolitan under certain circumstances);
 - All-American Canal Lining Project which would result in the conservation of 67,700 acre-feet/year from lining a portion of the canal and transferring the conserved water to SDCWA and the San Luis Rey Water Rights Settlement Parties;
 - Coachella Canal Lining Project which would result in the conservation of 26,000 acre-feet/year from lining a portion of the canal and transferring the conserved water to SDCWA and the San Luis Rey Water Rights Settlement Parties;
 - Transfer of 20,000 acre-feet/year of water conserved as part of the IID and Metropolitan 1988 Agreement and subsequent agreements to CVWD instead of Metropolitan;
 - Exchange of 35,000 acre-feet of Metropolitan’s State Water Project Table A Entitlement to CVWD for 35,000 acre-feet of CVWD’s Colorado River water delivered to Metropolitan; and,
 - Settle, by consensual agreement, longstanding disputes regarding the priority, use, and transferability of Colorado River water.

CVWD, IID, Metropolitan, and SDCWA completed a Final Draft PEIR in June 2002 (State Clearinghouse number 2000061034).

Relationship to the Salton Sea Ecosystem Restoration

Similar to the IID Water Conservation and Transfer Project, the QSA results in the conservation, transfer, and exchange of water from the Imperial and Coachella valleys to other areas within the Salton Sea watershed and to areas outside of the watershed. This will result in a variety of physical and social changes in the Imperial and Coachella valleys that have the potential to affect the Salton Sea. The QSA is considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions.

Riverside County General Plan

In 2003, Riverside County completed a three-year integrated planning effort that resulted in a General Plan for the unincorporated portion of the county, including 19 Area Plans (County of Riverside, 2003a). These Area Plans define current conditions, direct future growth within specific communities, and provide more detailed land use and policy direction for the general plan elements within the specific community. The Eastern and Western Coachella Valley Area Plans encompass the northern Salton Sea

watershed. The Eastern Coachella Valley Area Plan encompasses a substantial portion of the northern Salton Sea watershed, including the portions of the Coachella Valley south of Indio, east of La Quinta and the Santa Rosa Mountains, and extending south to the Imperial County line. The Western Coachella Valley Area Plan includes the portions of the Coachella Valley north of the City of Coachella, west of the Joshua Tree National Park, south of San Bernardino County, and east of the San Jacinto Mountains. The Eastern and Western Coachella Valley Area Plans identify the Salton Sea as a unique feature and note that it is home to large bird and fish populations. The General Plan and associated Area Plans direct the location and amount of growth in the unincorporated areas of the county through 2020, although the Area Plans provide greater detail about their respective locations. The Riverside County General Plan and the Eastern and Western Coachella Valley Area Plans designations in the study area are described in more detail in Chapter 11.

Relationship to the Salton Sea Ecosystem Restoration

The General Plan directs the location and, to some extent, the amount of land use changes in the county. These land use changes may affect the Salton Sea and are considered in the No Action Alternative-CEQA Conditions and No Action Alternative-Variability Conditions.

Salton Sea Unit 6, CE Obsidian Energy LLC

Salton Sea Unit 6 is planned to be a 185 megawatt geothermal power plant consisting of a geothermal Resource Production Facility, a merchant class geothermal-powered Power Generation Facility, and associated facilities. Unit 6 will be located adjacent to the southern shore of the Salton Sea in Imperial County. The Salton Sea Unit 6 Project is owned by CE Obsidian Energy LLC and will be operated by an affiliate of CE Obsidian Energy. The transmission lines are owned and operated by IID. Unit 6 will supply capacity and energy to California's electricity market. IID has contracted for 85 percent of the plants output for a period of 20 years following the completion of the plant. The remaining energy will either be sold to the California Independent System Operator or contracted to third parties via IID. The California Energy Commission approved Unit 6 in 2003. The power plant project is in the Salton Sea Known Geothermal Resource Area, which extends from about Bombay Beach to Calipatria. Additional information on the Salton Sea Known Geothermal Resource Area is provided in Chapter 21.

Relationship to the Salton Sea Ecosystem Restoration

Unit 6 will affect land use and biological resources adjacent to the Salton Sea near the mouth of the Alamo River. These changes are considered in the No Action Alternative-CEQA Conditions and No Action Alternative-Variability Conditions.

Short term impacts during construction could impact some avian species that also use the Salton Sea, as described in Chapter 23.

Torres Martinez Land Use, Zoning and Development Plan

The Torres Martinez Desert Cahuilla Indians adopted a Land Use, Zoning and Development Plan (LZDP) in 1999 to guide development of Tribal lands (Torres Martinez, 1999), as described in Chapter 11. The LZDP is a statement that gives preference to those goals, policies, and procedures that will protect and preserve their lands, culture, and traditions. The LZDP states that the Torres Martinez people are desirous of achieving self-determination and improving the quality of life for the membership both current and future, and want to envision proactive comprehensive planning that will assure the orderly transition of Tribal lands for residential, commercial, industrial, agricultural, aquaculture, recreation and open space, cultural, historic, traditional, and development, or use thereon. The LZDP includes a variety of anticipated projects along the shoreline and within the Sea Bed.

Relationship to the Salton Sea Ecosystem Restoration

The LZDP directs the location, and to some extent, the amount of land use changes on Tribal lands. These land use changes may affect the Salton Sea and are considered in the No Action Alternative-CEQA Conditions and No Action Alternative-Variability Conditions.

Total Maximum Daily Load Implementation

Pursuant to requirements of the Clean Water Act, the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB) identified and ranked impaired waterbodies for which total maximum daily loads (TMDLs) need to be established. TMDLs are defined as the maximum amount of pollutants that a body of water can assimilate yet meet water quality standards and provide beneficial uses (Federal Water Pollution Control Act Section 303 (d) et seq.). The CRBRWQCB will develop and adopt an Implementation Plan for each TMDL/water body combination and identify implementing actions, monitoring and surveillance for compliance, and technical and economic feasibility.

The CRBRWQCB has identified the Salton Sea and its tributaries (i.e., New River, Alamo River, Imperial Valley Drains, and Coachella Valley Stormwater Channel) as quality limited waters (CRBRWQCB, 2000). The Salton Sea Watershed has also been identified as a priority watershed. In the Salton Sea Watershed, impaired waterbody listings address pollutants attributable to:

- Agriculture (applies to New River, Alamo River, and Imperial Valley Drains);
- Imported salts (applies to all Imperial Valley waterbodies); and
- Discharges within Mexico (applies to New River).

Pollutants for agricultural sources that impair listed waterbodies include sediment, pesticides, salts, nutrients, and selenium. Pollutants attributable to discharges from Mexico include salts, pathogens, organics that reduce dissolved oxygen, nutrients, pesticides, chloroform, toluene, p-Cymene, 1,2,4-trimethylbenzene, xylenes, p-dichlorobenzene, and trash.

Currently, TMDLs have been adopted for siltation/sedimentation in the New and Alamo rivers and Imperial Valley drains, pending approval by the U.S. Environmental Protection Agency (USEPA), and for pathogens in the New River, as described in Chapter 6. The CRBRWQCB is considering TMDLs for nutrients and selenium as related to the Salton Sea and the major tributaries.

Relationship to the Salton Sea Ecosystem Restoration

Implementation of adopted TMDLs will improve water quality in the New and Alamo rivers and Imperial Valley drains. However, implementation methods may reduce inflows to the Salton Sea if methods include water conservation or use of treatment wetlands. Implementation of adopted TMDLs is considered in the Existing Conditions and No Action Alternative-CEQA Conditions assuming no changes in inflows to the Salton Sea. Under the No Action Alternative-Variability Conditions, inflows are assumed to be reduced due to methods used to comply with the TMDLs.

Short term impacts during construction of measures to comply with TMDLs could impact some species that also use the Salton Sea, as described in Chapter 23.

Wastewater Conveyance and Treatment Project for the Mexicali II Service Area

About 43 to 49 acre-feet/day (14 to 16 million gallons/day) of untreated wastewater from a portion of Mexicali referred to as the Mexicali II service area enters the New River, and flows across the United States-Mexico border and eventually into the Salton Sea. The proposed Mexicali II Project includes a wastewater treatment plant in an area known as Las Arenitas, located about 20.6 miles south of the border (USEPA, 2003). Wastewater from the Mexicali II service area would be treated and discharged into a

tributary of the Rio Hardy, which flows to the Gulf of California. The facilities would be sized to accommodate growth until 2014.

The USEPA circulated an Environmental Assessment for the project in August 2003. The project has not been constructed at the time of preparation of the PEIR.

Relationship to the Salton Sea Ecosystem Restoration

The project would reduce inflows to the Salton Sea as wastewater from the Mexicali II service area would be treated and discharged into a tributary of the Rio Hardy that flows south to the Gulf of California, not north to the Salton Sea. This change is considered in the Existing Conditions, No Action Alternative-CEQA Conditions, and No Action Alternative-Variability Conditions.