SALTON SEA AS FEDERAL DRAINAGE RESERVOIR

Annotated Documentary Record - Chronological

VERIFIED entries are confirmed from primary source materials reviewed by the author.
PARTIALLY VERIFIED entries are confirmed through a combination of primary source materials and secondary references, as noted.
PRIMARY SOURCE NOT REVIEWED entries are based on secondary sources or references to primary materials that have not yet been independently reviewed.

This Annotated Documentary Record ("Record") is intended to assist policymakers, agencies, and stakeholders in understanding the evolving institutional record surrounding the Salton Sea, including recurring Federal recognition of the basin's role as the receiving environment for drainage, return flows, and residual discharges associated with operation of the lower Colorado River system. It is not intended to function as a comprehensive historical narrative or litigation brief.

Certain entries include interpretive observations intended to explain the relevance of specific records to the broader feasibility study, WRDA authorization history, Tribal trust considerations, and ongoing regional restoration and management discussions. Where appropriate, entries identify whether underlying source material has been fully verified, partially verified, or remains subject to additional primary-source confirmation.

The Record compiles selected historical, legal, operational, and administrative records concerning the relationship between the Salton Sea and development of the lower Colorado River delivery system. It is not intended as a litigation brief or comprehensive history. It is intended to orient policymakers, agencies, and stakeholders to a recurring institutional record: for more than a century, federal, state, judicial, and regional documents have recognized the Salton Sea basin as the receiving environment for drainage, seepage, and return flows associated with Colorado River water delivery operations.

The record begins before the modern Salton Sea existed. In 1853, federal geologist William Phipps Blake documented the Salton Sink as a closed basin below sea level with no outlet except evaporation. Later nineteenth-century congressional and engineering records similarly described the basin's terminal character and its dependence on introduced water. By 1893, early irrigation planning for the Imperial Valley treated the Salton Sink as the receiving terminus for waste and drainage water.

That physical reality became embedded in federal water planning during the formative period of the lower Colorado River system. Congressional hearings on the All-American Canal, the 1920 Kinkaid Act, and the 1922 Fall-Davis Report all preceded the Colorado River Compact, Boulder Canyon Project Act, Hoover Dam, and the All-American Canal. Those records show that federal officials were evaluating a domestic Colorado River delivery system while also recognizing that the Salton Basin functioned as the terminal receiving area for drainage and surplus flows.

In 1924, President Coolidge issued Public Water Reserve No. 90, withdrawing more than 100,000 acres for the express purpose of creating a reservoir in the Salton Sea for storage of waste and seepage water from irrigated lands. A second withdrawal followed in 1928, the same year Congress authorized Hoover Dam and the All-American Canal. Those actions did not create the basin's terminal hydrology, but they placed the federal government's recognition of its drainage function into formal administrative action.

The consequences were also documented early. USGS records showed rapidly increasing salinity. In 1950, Imperial Irrigation District Board President Evan Hewes testified before a California legislative committee that the Sea was dedicated for use as a "drainage and waste

cesspool" and described an accelerating salinity trajectory. In 1969, the Department of the Interior and the California Resources Agency identified the central institutional problem: no agency or level of government had unilateral responsibility for stabilizing the Sea, and the Sea itself had no priority to receive water from any source. The 1974 Federal-State Feasibility Report repeated that diagnosis, identified technically feasible salinity control plans, and concluded that time was of the essence. No comprehensive federal implementation framework followed.

The tribal record is inseparable from that history. Torres Martinez Desert Cahuilla Indian trust lands have remained inundated for generations. In 1992, the United States District Court for the Southern District of California found that the Sea would have receded to its pre-flood level by 1923 but for irrigation in the Imperial and Coachella Valleys, and that use of the Sea as a drainage reservoir was integral to the federal program to provide water to Southern California. Congress later enacted the Torres-Martinez Desert Cahuilla Indians Claims Settlement Act, including permanent flowage easements over tribal and federal lands within the Salton Sink.

Beginning in the 1990s, the record shifts from diagnosis to institutional response. The Salton Sea Authority was formed in 1993, following decades of federal and state recognition that no suitable local entity existed to operate, maintain, and coordinate long-term Salton Sea management. Congress recognized the Authority in the Salton Sea Reclamation Act of 1998. Bureau of Reclamation and Authority planning documents in 1998 and 2000 continued to identify maintenance of the Sea as a repository of agricultural drainage as an express project objective, while also evaluating restoration, habitat, recreation, fishery, and economic development goals.

The modern record reflects continued evolution but not final resolution. The 2003 Bureau of Reclamation Status Report returned the question of the Sea's future to Congress after evaluating costly alternatives and declining to recommend implementation without congressional direction. California later assigned restoration coordination roles to the Natural Resources Agency in consultation with the Authority, while also authorizing the Authority to lead funding and feasibility work. Between 2014 and 2016, the Authority's benchmark studies developed the Perimeter Lake concept that became the basis for the WRDA 2020 feasibility authorization. The current Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study, now treated as a mega-study with implementation costs estimated in the billions, reflects the latest federal planning vehicle in that sequence.

The Record therefore documents a continuous institutional pattern. Federal and state actors repeatedly recognized the Sea's receiving-basin function. They repeatedly documented ecological, salinity, public health, and governance consequences. They repeatedly studied possible interventions. Regional institutions emerged to coordinate action. Congress authorized studies and programs. Yet no durable federal framework has been established commensurate with the Sea's continuing operational role in the lower Colorado River system.

That history matters now because Colorado River conservation, shortage management, and post-2026 operating decisions are likely to further reduce agricultural deliveries and associated return flows that sustain the Sea's elevation. The Bureau of Reclamation's 2026 Draft Environmental Impact Statement acknowledges the Salton Sea as a terminal receiving environment for agricultural drainage while treating Salton Sea impacts separately from the operational analysis of Colorado River management alternatives. The documentary record helps explain why that separation is difficult to sustain as a matter of planning and policy.

The Record is offered to support a more complete understanding of the Salton Sea's role in the federal water infrastructure system. It does not ask the reader to accept a conclusion without evidence. It presents the record from 1853 through 2026 so that policymakers can see the continuity for themselves.

1853 - Pacific Railroad Survey, Blake Geological Report

Source: United States War Department, Reports of Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean, Volume V (1856).

William Phipps Blake, federal geologist conducting survey work authorized by Congress and directed by the Secretary of War, documented the Salton Sink as a closed basin below sea level with no outlet. He established the basin's terminal hydrology as a matter of federal scientific record. Every subsequent federal actor had access to this description.

> *"The depression is evidently the ancient bed of the Gulf of California... There is no outlet, and the waters of any stream or flood which might reach this hollow would have no escape but by evaporation."*
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> **VERIFIED:** *Primary source. Text confirmed. Congressional document. Publicly available through the Library of Congress.*

1859-1860 - Army Officer Correspondence and Congressional Committee Letters

Source: Appendices to House Report No. 1321, 49th Congress, 1st Session (1886), containing correspondence compiled for the Committee on Public Lands in connection with the Wozencraft reclamation bill. Letters dated 1859-1860.

Army officers and government surveyors described the basin in letters compiled for congressional consideration. Captain H.S. Burton, Third Artillery, U.S. Army: "I consider it an immense waste of uninhabitable country, incapable of cultivation without irrigation." B.C. Matthewson, Government Surveyor: "This section of country is of no earthly use in its present condition." John Rains noted that after the overflow of New River in 1849 he witnessed luxuriant growth of grass and other vegetation along the course taken by the water, establishing that congressional consideration of the basin already understood its response to inflow and its reversion upon evaporation.

> **VERIFIED:** *Primary source. Documents reviewed. Letters appear as appendices to House Report No. 1321, 49th Congress, 1st Session. Publicly available through Library of Congress.*

1886 - House Report No. 1321, 49th Congress, Wozencraft Bill

Source: House Report No. 1321, 49th Congress, 1st Session, Committee on Public Lands, March 25, 1886. Report accompanying bill H.R. 3219.

The House Committee on Public Lands documented the terminal basin dynamic in explicit congressional language, predating Rockwood by seven years and predating the Coolidge order by thirty-eight years.

> *"The delta of the Colorado River extending southward has cut off communication with the waters of the gulf, and thus deprived it of a connection with its source of supply, and evaporation has changed it from an inland lake to an arid plain, whose surface is lower than the bed of the river."*
>
> **VERIFIED:** *Primary source. Document reviewed. Publicly available through Library of Congress.*

1893 - Colorado River Irrigation Company Engineering Report, Rockwood

Source: Engineering report, Colorado River Irrigation Company, C.R. Rockwood, Chief Engineer, 1893.

Rockwood designated the Salton Sink as the receiving terminus for waste and drainage water as an explicit engineering premise of the first Imperial Valley irrigation project. He identified

approximately 190,000 acres surrounding the Sink as the designated drainage receiving area. He calculated that the evaporation surface was "ample for all possible needs." This private design premise, established before a single acre was irrigated, was later carried forward into the federal lower Colorado River delivery system authorized in 1928. The drainage function was treated as an integral operational component of the irrigation design from its inception.

PRIMARY SOURCE NOT REVIEWED: *Referenced in congressional committee reports and feasibility study documents. Originals or verified copies of this document may be available in the archives of the local water agency or regional historical repositories.*

1905-1907 - Colorado River Overflow and Presidential Message to Congress

Source: Message from the President of the United States to Congress, January 12, 1907.

The California Development Company allowed the entire Colorado River to break through an irrigation canal in 1905. For two years the river flowed uncontrolled into the Salton Basin, forming the modern Salton Sea. President Theodore Roosevelt formally addressed the overflow to Congress on January 12, 1907, confirming federal engagement with basin conditions at the highest executive level before the Compact, before the reservoir designation, before Hoover Dam. The message was incorporated into the 1909 Ninth Circuit opinion in The Salton Sea Cases.

PRIMARY SOURCE NOT REVIEWED: *Existence and date confirmed through the 1909 Ninth Circuit opinion. Presidential message full text not independently verified.*

1909 - The Salton Sea Cases, Ninth Circuit Court of Appeals

Source: California Development Company v. New Liverpool Salt Company, 172 Fed. 792, 97 C.C.A. 214 (9th Cir. 1909).

The United States Circuit Court of Appeals for the Ninth Circuit recognized that legal and operational consequences arise from control of Colorado River irrigation infrastructure, independent of nominal ownership or operational designation. The court held that the entity exercising control over diversion works at the time of the relevant operations bore responsibility for the consequences of directing water into the Salton Sink. The case recognized that responsibility for the consequences of diversion operations followed operational control of the infrastructure at issue rather than nominal ownership status alone.

VERIFIED: *Primary source. Citation confirmed at 172 Fed. 792. Text reviewed. The holding on operational control as the basis for responsibility for consequences of water direction is confirmed from case text.*

1912 - Cory, Carnegie Institution of Washington

Source: H.T. Cory, publication of the Carnegie Institution of Washington, 1912.

H.T. Cory, the engineer who personally redirected the Colorado River back to the Gulf in 1906, calculated that without continued Colorado River inflows the Salton Sea would evaporate completely in approximately eighteen years. Published before the Compact, this calculation established that the Sea's continued existence was entirely dependent on irrigation return flows. The entire period of Compact negotiation, reservoir designation, and Boulder Canyon Project authorization fell within the period Cory identified as dependent upon continued irrigation inflows.

PRIMARY SOURCE NOT REVIEWED: *Referenced in federal scientific literature and feasibility study documents. Primary Carnegie Institution publication not independently verified in this compilation.*

1914-1933 - Hydrographic Records of the Salton Sea (Lucy).

Source: Hand-drawn hydrograph maintained by Federal agencies, documenting Salton Sea water surface elevation, storage capacity, and inflow volumes, approximately 1914-1933. Originals or verified copies of this document may be available in the archives of the local water agency or regional historical repositories.

Continuous hydrographic records of the Salton Sea were maintained throughout the foundational period of Colorado River system development, through the Compact negotiations, the reservoir designation, and the Boulder Canyon Project Act authorization. If federal maintenance of these records is confirmed, they would document contemporaneous monitoring of the Sea during the period of the foundational Colorado River decisions.

> **PRIMARY SOURCE NOT REVIEWED:** *Originals or verified copies of this document may be available in the archives of the local water agency or regional historical repositories. Specific agency attribution not confirmed in this compilation.*

1919 - Congressional Hearing Record, All-American Canal, House Committee on Irrigation of Arid Lands

Source: All-American Canal in Imperial County, California. Hearings before the House Committee on Irrigation of Arid Lands, 66th Congress, 1st Session. July 9, 12, and 14, 1919. Library of Congress.

These hearings established two distinct and independently significant facts on the federal legislative record.

First: the Salton Sea as drainage terminal. A congressman asked directly how the system would dispose of surplus water. The witness answered on the record: a gate is dropped into the Alamo River and it has a free run from there on to the Salton Sea, and this is primarily a drainage canal to carry off any surplus water. The Sea is named in the congressional record as the answer to the surplus disposal question four years before the Colorado River Compact and five years before the Coolidge executive order. The hearing also confirmed the February 16, 1918 cooperative contract between the Secretary of the Interior and the Imperial Irrigation District for surveys and cost estimates of the All-American Canal, and the October 23, 1918 contract for construction - both signed before the Compact was negotiated.

Second: the sovereign sequestration rationale. Thomas C. Yager, attorney for the Coachella Valley County Water District, testified before the committee that building only a connecting link without a fully all-American canal means turning the American waters of the Colorado River into Mexico to irrigate Mexican lands while American farmers and American lands beg for this water. He stated explicitly: there is no obligation upon the United States to furnish Mexican lands with Colorado River water. He then articulated the legal consequence that has direct bearing on the Salton Sea's designation: for the federal government to divert water over a government structure and deliver it to Mexican lands would amount to a virtual recognition by our Government that these Mexican lands had a right to the waters - and that up to that point the government had most carefully and studiously avoided doing this very thing.

Phil Swing, who would later author the Boulder Canyon Project Act, then placed the legal framework on the record. He invoked Attorney General Judson Harmon's controlling opinion establishing that international law imposes no obligation upon the United States to restrain its citizens from making beneficial use of American waters so long as said waters are within the United States - even if that use reduces the volume reaching Mexico. Swing confirmed that the Mexican government had acquiesced in this interpretation and no longer claimed any right to object to diversions made within the United States. He cited Mexican engineer Garza's own

acknowledgment: the Republic of Mexico cannot prevent the waters from being taken in American territory. Swing's conclusion for the committee was unambiguous: as long as water remains within the United States, the United States has absolute and supreme control and jurisdiction over it and can make any disposition of it that it desires.

These two lines of testimony together establish that Congress understood the Salton Sea basin as the receiving terminus for surplus and drainage flows generated by a federally authorized domestic Colorado River delivery system operating entirely within United States territory.

> **VERIFIED:** *Primary source. Hearing record reviewed in full. All-American Canal in Imperial County, California, Hearings before the House Committee on Irrigation of Arid Lands, 66th Congress, 1st Session, July 9, 12, and 14, 1919. Drainage terminal testimony confirmed from document text. Yager testimony confirmed from document text, pages 184-186. Swing Harmon Doctrine testimony confirmed from document text, pages 110-111. February 16, 1918 and October 23, 1918 contract dates confirmed from document text. All quoted language verified from hearing record. Available through Library of Congress.*

1920 - Kinkaid Act, Act of May 18, 1920 (41 Stat. 600)

Source: Act of May 18, 1920, 41 Stat. 600. An Act to provide for an examination and report on the condition and possible irrigation development of the Imperial Valley in California. Approved May 18, 1920. Available through United States Statutes at Large.

The Kinkaid Act directed the Secretary of the Interior to examine the Imperial Valley and report to Congress on the feasibility, necessity, and advisability of Federal participation in irrigation development, including the modification, improvement, enlargement, and extension of the existing irrigation system. The examination was to address known sources of water supply, specifically diversion from the Colorado River at Laguna Dam. The statute authorized $20,000 for the examination, with the Federal government paying no more than half and interested irrigation associations providing the balance. The Secretary was required to report to Congress by December 6, 1920.

The Kinkaid Act is the statutory predicate for the 1921 hearings before the House Committee on Irrigation of Arid Lands and for the All-American Canal authorization that followed. It placed the Secretary of the Interior on record as the Federal officer responsible for analyzing and recommending a plan for placing the Colorado River delivery system entirely within the United States - the same sovereign objective articulated in the 1919 All-American Canal hearing testimony of Phil Swing and Thomas Yager. The hearings associated with this authorization were conducted in 1921 before the House Committee on Irrigation of Arid Lands, chaired by M.P. Kinkaid of Nebraska.

> **VERIFIED:** *Primary source. Act of May 18, 1920, 41 Stat. 600, text confirmed in full. Committee name confirmed as House Committee on Irrigation of Arid Lands from 1921 hearing record (67th Congress, 1st Session).*

1922 - Department of the Interior, United States Reclamation Service, "Problems of Imperial Valley and Vicinity"

Source: Senate Document No. 142, 67th Congress, 2d Session. Letter of submittal signed by A.P. Davis, Director, United States Reclamation Service, February 4, 1922. Letter of transmittal signed by Albert B. Fall, Secretary of the Interior, February 28, 1922. Government Printing Office, Washington, 1922. Available at the Internet Archive and the Varuna digital collection.

Senate Document 142 - the Fall-Davis Report - is the Bureau of Reclamation's comprehensive analysis of the Colorado River system, transmitted to Congress nine months before the Colorado River Compact was signed. Secretary Fall stated that its findings and recommendations "have

my hearty concurrence and approval." The report recommended Federal construction of the All-American Canal and a storage dam at Boulder Canyon - the system Congress authorized in 1928.

The report identifies the Salton Sea's terminal basin function directly. In the flood control analysis, Director Davis states:

> *"As there is no escape of water from Salton Sea except by evaporation, the river flowing into this sea would, unless diverted, gradually fill it to sea level or above and submerge the cultivated land and the towns of Imperial Valley, nearly all of which are below sea level."*

On the drainage infrastructure, the report states: "The New, the Alamo, and the Greeson River channels are ideally located for the main drainage channels of the district. At the present time they are used as wasteways by the several water companies." On return flow reuse, the report concludes that because of "the peculiar topographical features of the region this will be comparatively small." The report identified the basin's topography as a limiting factor for return-flow reuse and as a defining characteristic of the Sea's terminal hydrology.

Recommendation 6 reflects an early Federal planning hierarchy: flood control first, irrigation second, power third - placing the irrigation system and its drainage consequences within a Federal management hierarchy that has governed the Colorado River ever since.

> **VERIFIED:** *Primary source. Text confirmed from Government Printing Office original. Key quoted passages confirmed: terminal basin characterization (pp. 7-8), drainage infrastructure (p. 73-74), return flow finding (Appendix B, p. 38), Recommendation 6 (p. 21).*

1923 - USGS Water-Supply Paper 497, The Salton Sea Region California

Source: United States Geological Survey Water-Supply Paper 497, The Salton Sea Region California, authored by John Stafford Brown, signed by George Otis Smith as Director, 1923.

The report documented the hydrological mechanism operating exactly as the closed basin hydrology predicted. Mineral content had increased from approximately 2,500-3,500 parts per million in 1907 to over 16,000 parts per million by 1916, a sevenfold increase in nine years, documented in a federal survey under the signature of the same Director who one year later recommended the Coolidge withdrawal order. The same federal institutional framework that documented the basin's rising salinity conditions also participated in the subsequent withdrawal and reservoir designation process.

> **VERIFIED:** *Primary source. USGS Water-Supply Paper 497 confirmed. Text reviewed. George Otis Smith confirmed as USGS Director and signatory. The specific Director Smith correspondence recommending the Coolidge designation is confirmed at March 4, 1924 - see 1924 entry.*

1924 - Public Water Reserve No. 90, President Coolidge

Source: Presidential Executive Order, recommended by USGS Director George Otis Smith by letter dated March 4, 1924. Referred to the President with favorable recommendation by Secretary of the Interior Hubert Work, March 8, 1924. Signed by President Coolidge March 10, 1924. Ten days from recommendation to Presidential signature.

President Coolidge formally withdrew 104,240 acres of federal land and reserved them explicitly for the purpose of creating a drainage reservoir for waste and seepage water from irrigated lands in Imperial Valley, California. The full chain of custody is confirmed: Smith recommendation letter March 4, Commissioner of the General Land Office William Spry concurrence March 8, Secretary Work referral, Presidential signature March 10.

"Withdrawing and reserving for the purpose of creating a reservoir in Salton Sea for storage of waste and seepage water from irrigated land in Imperial Valley, California."

Smith's recommendation letter stated: "This order of withdrawal (Public Water Reserve No. 90, California), involving approximately 104,240 acres, is recommended for submission to the President, in order that the lands affected thereby may be reserved for the purpose of creating a reservoir in Salton Sea for storage of waste and seepage water from irrigated land in Imperial Valley, California."

VERIFIED: *Primary source. Text confirmed. Full chain of custody confirmed: Smith recommendation March 4, Spry concurrence March 8, Work referral, Coolidge signature March 10. The executive order is recorded as No. 3963 in the numbered series of presidential executive orders. Available through the National Archives, the Office of the Federal Register historical compilations, and the Federal Register Index for 1924.*

1928 - Public Water Reserve No. 114

Source: Presidential Executive Order, February 23, 1928.

A second withdrawal order expanding the federal reservoir designation, issued in the same year as the Boulder Canyon Project Act. Both orders were subsequently revoked by Public Land Order 6105 in 1982, a revocation that removed the administrative designation while leaving the physical and operational function entirely unchanged.

PARTIALLY VERIFIED: *Existence and date of PWR No. 114 confirmed through PLO 6105, which revokes both orders by name and date (Federal Register Vol. 47, No. 25, page 5417). Primary text of PWR No. 114 not independently reviewed in this compilation.*

1928 - Boulder Canyon Project Act

Source: 45 Stat. 1057, December 21, 1928.

The Boulder Canyon Project Act authorized Hoover Dam and the All-American Canal in the same year as the expanded reservoir designation. The Boulder Canyon Project Act, authorizing Hoover Dam and the All-American Canal, was enacted in the same year as the expanded reservoir designation (PWR No. 114), placing the principal federal Colorado River infrastructure commitments and the federal recognition of the basin's drainage function on the same 1928 record.

PARTIALLY VERIFIED: *Boulder Canyon Project Act statute confirmed at 45 Stat. 1057, December 21, 1928. Publicly available. The Act's authorization of Hoover Dam and the All-American Canal is confirmed. The political interdependence with PWR No. 114 (issued the same year) is historically documented.* **PRIMARY SOURCE NOT REVIEWED:** *Specific voting record by state delegation not independently confirmed.*

1943 - Army Corps of Engineers, Preliminary Examination, Flood Control, All Streams in San Diego and Imperial Counties, California, Flowing into Salton Sea

Source: United States Army Corps of Engineers, Los Angeles District. "Preliminary Examination, Flood Control, All Streams in San Diego and Imperial Counties, California, Flowing into Salton Sea." July 1943. Limited distribution. Cited in: Flood Plain Information, New River, Vicinity of Brawley, Imperial County, California, United States Army Corps of Engineers, Los Angeles District, 1976, page 22.

The Corps of Engineers defined the scope of its flood control study not by county boundaries or river names but by terminus: all streams flowing into the Salton Sea. The Sea is in the title and serves as the organizing geographic reference point for the study area. The report concluded that dikes along the mountain washes on the west side of the Imperial Valley and an earth-filled dam on Pinto Wash would protect west side irrigation canals. Every proposed flood control structure - the Yuha Wash dike, the Plaster City dike, the Superstition Mountain dike - had a drain

extending to the New River, which flows to the Salton Sea. The Corps' flood control solution was to redirect water into the drainage system that terminates at the Sea. The study was issued in limited distribution. The report reflects that the Corps analyzed flood control infrastructure throughout the basin in direct relation to the Salton Sea receiving system, although the recommendations were not implemented. This study was produced nineteen years after the Coolidge executive order and seven years before the California legislative hearing at which the IID board president described the Sea as a waste cesspool.

PRIMARY SOURCE NOT REVIEWED (SECONDARY SOURCE): Existence, title, date, issuing office, and summary findings confirmed through citation in the 1976 Corps flood plain report, page 22. Primary document not independently reviewed. Issued in limited distribution; believed held at National Archives, Record Group 77 (Records of the Office of the Chief of Engineers), or at the Army Corps Los Angeles District archives.

1950 - Public Law 728 (64 Stat. 470)

Source: An Act to Provide for Disposition of Lands on the Cabazon, Augustine, and Torres-Martinez Indian Reservations in California, 81st Congress, 2nd Session, Chapter 780, approved August 25, 1950.

Section 7 explicitly excludes from general land sale provisions all Indian lands located under or adjacent to the Salton Sea below the minus-220-foot contour, and authorizes the Secretary of the Interior to purchase those submerged Indian lands specifically for the purpose of maintaining a drainage reservoir. Purchase price not to exceed five thousand dollars. Lands so acquired shall be reserved for drainage reservoir purposes and shall not be disposed of without Congressional consent.

> *"The Secretary of the Interior is further authorized to acquire by purchase for and in behalf of the United States... any Indian lands, whether tribally or individually owned, located under or adjacent to the Salton Sea, below a contour line of two hundred and twenty feet below sea level... The lands so acquired shall be reserved for the purpose of maintaining a drainage reservoir in said Salton Sea and shall not be exchanged or otherwise disposed of without the consent of the Congress."*
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> **VERIFIED:** *Primary source. Statutory language confirmed. United States Statutes at Large, 81st Congress.*

1950 - California Legislative Water Committee Hearing, Hewes

Source: Water Problems of California, California Joint Legislative Committee on Water Problems, field hearings, El Centro courthouse, April 25, 1950. Compiled in 1951 report to the California Legislature. Evan T. Hewes, President, Board of Directors, Imperial Irrigation District, and member of the Colorado River Board of the State of California.

Hewes testified that the Salton Sea was dedicated for use as a drainage and waste cesspool for the Coachella and Imperial Valleys. The remarks appear under the subheading Miscellaneous Recreational Development of Salton Sea, establishing their aside nature within a broader hearing focused on the Central Arizona Project, Pilot Knob power development, the Morelos Diversion Dam, and the Mexican Water Treaty. He stated this as background fact while testifying about something else entirely, before a California legislative committee, in the courthouse at El Centro.

He then provided a quantified salinity trajectory on the record. In the three years preceding the hearing, the salt load in water reaching the Salton Sea via the Alamo River had increased from just under two tons per acre-foot to over three tons per acre-foot. The New River had increased to approximately two and one-half tons per acre-foot. He projected that continued installation of tile drains in Imperial Valley farmlands - then proceeding at an accelerating rate - would cause the saline content of water feeding the Sea to reach between four and five tons per acre-foot

within five years. These are not estimates of a distant future condition. They are measurements of an accelerating present trajectory, stated on the legislative record by the man operating the drainage system.

He then described the trend as irreversible. The maximum water volume they could ever expect under ultimate development - approximately 800,000 acre-feet - would be needed entirely to leach salts from irrigation soils and would not be sufficient to freshen the Sea. His precise words: from now on the sea will continue to become saline much more rapidly. Hewes testified that the trend was already established and would continue to worsen under the conditions then present.

He then named the terminal analogue: the Great Salt Lake. The Salton Sea, he told the committee, must be considered to face greater pollution than the Great Salt Lake in Utah, and up to the present time the ingenuity of man has not been able to devise any method where the Great Salt Lake can be used for major recreational purposes. Hewes testified that the Sea faced salinity conditions comparable to, and potentially exceeding, those observed at the Great Salt Lake.

He then moved on to the next agenda item. The committee compiled his remarks into a report to the California Legislature in 1951. No action was taken.

> **VERIFIED:** *Primary source. Document reviewed in full. Full title: Report to the Legislature of the State of California by the Joint Legislative Committee on Water Problems, 1951. Hearing date April 25, 1950 confirmed. Location El Centro courthouse confirmed. Hewes title confirmed as President, Board of Directors, Imperial Irrigation District, and member of the Colorado River Board of the State of California. Subheading Miscellaneous Recreational Development of Salton Sea confirmed from document text. Cesspool characterization confirmed from document text. Salinity data - Alamo River two to three tons per acre-foot, New River two and one-half tons per acre-foot, projected four to five tons within five years - confirmed from document text. Irreversibility declaration confirmed from document text. Great Salt Lake comparison confirmed from document text. All quoted language verified from document.*

1958 - Public Law 85-801 (72 Stat. 968)

Source: An Act to Provide for the Construction of an Irrigation Distribution System and Drainage Works for Restricted Indian Lands within the Coachella Valley County Water District, 85th Congress, 2nd Session, approved August 28, 1958.

Authorized construction of irrigation distribution and drainage works connecting to the Coachella Valley County Water District system for the Cabazon, Augustine, and Torres-Martinez Indian Reservations. Established financing mechanisms that included a recordable first lien against Torres Martinez Desert Cahuilla Indians trust lands, enforceable at the time the land passes out of Indian ownership, for amounts paid by the United States to the Coachella Valley County Water District pursuant to Federal guaranty of water delivery charges. The Federal government simultaneously built the infrastructure that generates the drainage, maintained the Sea as the terminal repository for that drainage, and secured a lien against Torres Martinez trust lands for the cost of doing so.

> **VERIFIED:** *Primary source. Statutory language confirmed. United States Statutes at Large, 85th Congress. Lien language drawn verbatim from the statute.*

1969 - Department of Interior and California Resources Agency, Federal-State Reconnaissance Report

Source: United States Department of the Interior and The Resources Agency of California, Salton Sea Project, California, Federal-State Reconnaissance Report, October 1969. Bureau of Reclamation, Boulder City, Nevada. Digitized by Google Books from the University of California library copy stamped received April 30, 1970.

The 1969 Reconnaissance Report was the predecessor investigation that authorized the 1974 Federal-State Feasibility Report. It is independently significant because it establishes that the institutional diagnosis - no responsible party, no water entitlement - was not a conclusion reached after years of additional study. It was the predicate finding of the reconnaissance investigation itself, stated in 1969 as the legal and institutional framework within which any remediation program would have to operate. The Federal and State governments identified the gap in 1969, confirmed it again in 1974, recommended authorization, and Congress did not act.

The report opens with the same operational statement that would carry forward verbatim into the 1974 report:

> *"The primary use of the Salton Sea is to serve as a repository for storage of agricultural drainage and seepage waters."*

Chapter II, Legal and Institutional Environments, then states the two findings that the 1974 report would carry forward identically:

> *"No agency or level of government has unilateral responsibility to stabilize the water level, limit the salinity, or control the nutrient-related problems of the Salton Sea. Many agencies - Federal, State, and local - have legislative or administrative responsibilities, or own or administer lands, that would be affected by such programs. Related public and private investments totaling more than $900 million, and Federal loans and grants of nearly $66 million, also impose attendant responsibilities that must be considered."*
>
> *"The Salton Sea itself has no priority to receive water from any source. Drainage and seepage waters, that perennially sustain the Sea, are the incidental result of beneficial uses of water, governed by existing laws, agreements, and court decrees. The primary use of the Sea to store these drainage and seepage waters is ensured by a Federal Public Water Reserve, and other public and private lands, set aside to provide a drainage repository."*

The 1969 report also contains a third formulation of the responsibility finding in its legal and institutional chapter: "No single agency or level of government has unilateral responsibility for the initiation or implementation of a comprehensive action program for the Sea. Moreover, unilateral action by one agency or level of government might well be adverse to the statutory, contractual, or vested interests of the other governmental agencies or private parties concerned." This formulation is more complete than the summary version: it does not merely describe the absence of a responsible party. It identifies why unilateral action by any one party would be legally and institutionally untenable.

The reconnaissance concluded that a diked impoundment was feasible and economically justified at a benefit-cost ratio of 1.4 to 1.0, and recommended further feasibility studies. The 1974 Federal-State Feasibility Report was the direct product of that recommendation. The chain runs from 1969 diagnosis, to 1974 confirmation with four priced solutions and a time-is-of-the-essence finding, to no congressional action even fifty-five years later.

> **VERIFIED:** *Primary source. Salton Sea Project, California, Federal-State Reconnaissance Report, United States Department of the Interior and The Resources Agency of California, October 1969. Bureau of Reclamation, Boulder City, Nevada. Document reviewed in full.*

1974 - Department of Interior and California Resources Agency, Federal-State Feasibility Report

Source: United States Department of the Interior and The Resources Agency of California, Salton Sea Project, California, Federal-State Feasibility Report, April 1974. Joint report of the U.S. Department of the Interior and The Resources Agency of California. Four volumes.

The joint Federal-State feasibility investigation produced the first comprehensive technical and institutional analysis of the Salton Sea's condition and the options available to address it. The report identified four viable salinity control plans ranging from $58 million (Plan D) to $141 million (Plan C) in 1974 dollars. It measured salinity at approximately 38,000 parts per million, rising at 550 parts per million per year, with fish die-off projected above 40,000 parts per million, approximately eighteen months away at the measured rate. The earliest any control plan could be authorized, constructed, and operational was calendar year 1979, by which point salinity was projected to exceed 42,000 parts per million, already past the fish die-off threshold.

The report stated the Sea's operational function and institutional status in the same prefatory section. Three sentences appear together in the Summary:

> *"The primary use of the Salton Sea is to serve as a repository for storage of agricultural drainage and seepage waters."*
>
> *"No agency or level of government has unilateral responsibility for the Salton Sea."*
>
> *"The Salton Sea itself has no priority to receive water from any source."*

The first sentence establishes the operational premise. The second identifies the institutional gap. The third establishes the legal status. Read together, they constitute the Federal and State governments' own diagnosis, in 1974: a system with a defined drainage function, no responsible party, and no enforceable water right.

Conclusion 10 of the report stated: "Time is of the essence in initiating salinity control measures that would accomplish the objectives of the project." Congress did not act.

Conclusion 6 identified a structural cost-sharing problem that has persisted for fifty years: existing laws and policies pertaining to cost allocation, reimbursement, and cost sharing for Federal projects were not entirely applicable to the Salton Sea Project, because its beneficial effects were not conjunctively related to customary project purposes such as water supply, flood control, and energy production. The report concluded that authorizing legislation would need to include reimbursement and cost sharing provisions designed specifically for this project.

The report further noted that there was presently no suitable local agency to operate, maintain, and administer any salinity control project, and that a new local district would need to be formed under State law for this purpose, with broad representation from the various interests at the Sea.

> **VERIFIED:** *Primary source. Salton Sea Project, California, Federal-State Feasibility Report, United States Department of the Interior and The Resources Agency of California, April 1974. Document reviewed in full. All quoted language verified from document text. Salinity measurements, cost ranges, timeline projections, and institutional conclusions confirmed from Summary and Conclusions sections.*

1982 - Public Land Order 6105

Source: Public Land Order 6105, Bureau of Land Management, Department of the Interior. Published Federal Register Vol. 47, No. 25, Friday February 5, 1982, page 5417. Signed by Garrey E. Carruthers, Assistant Secretary of the Interior, January 28, 1982. Effective date March 5, 1982.

Revoked Public Water Reserve Orders 90 and 114 in their entirety. Restored approximately 13,740 acres to operation of the public land laws and full operation of the mining laws, including both metalliferous and nonmetalliferous mineral location under the United States mining laws and mineral leasing. The order contains two acreage figures for the non-restorable lands: the summary states 106,817 acres and the body of the order states 106,871 acres. The physical and hydrologic function of the Salton Sea basin as a receiving environment was not altered by the

revocation. The drainage function continued the day after PLO 6105 exactly as it had under the formal reservoir designation. The restored acres were opened to mineral leasing.

> **VERIFIED:** *Primary source. Federal Register citation confirmed at Vol. 47, No. 25, page 5417. Signatory Garrey Carruthers confirmed. Dates confirmed. Both acreage figures confirmed from document text. The PWR No. 114 acreage was not independently verified against the primary source for this Record; the PLO 6105 figures — approximately 13,740 acres restored to public land laws, with 106,817 acres (summary) and 106,871 acres (body) noted as non-restorable — are treated as the controlling Federal determination of the combined withdrawal's extent at the time of revocation. Internal numerical discrepancy is a documented fact in the original Federal Register publication.*

1992 - Federal Court Judgment, Torres Martinez Trust Land Inundation

Source: United States v. Imperial Irrigation District, 799 F. Supp. 1052 (S.D. Cal. 1992). Docket No. 82-1790-K. Chief Judge Keep. United States District Court, Southern District of California. July 17, 1992.

The United States sued IID and CVWD on its own behalf and on behalf of the Torres-Martinez Band for trespass arising from the inundation of tribal trust lands by agricultural drainage. Chief Judge Keep found that the Salton Sea would have receded to its pre-flood level by 1923 but for irrigation in the Imperial and Coachella Valleys - a federal judicial finding that the modern Salton Sea is entirely a product of agricultural drainage. The court found that using the Sea as a drainage reservoir was an integral part of the federal program to provide water to Southern California. The court identified longstanding governmental omissions: the Secretary of Interior never exercised the 1950 statutory authority to purchase the Indian lands, the President was never specifically alerted in a documented manner that the 1924 and 1928 withdrawals contained Indian land, and the court concluded that governmental actions had failed to prevent the resulting conflict among the parties. The court stated explicitly: the band is suing these defendants largely because the United States inadequately protected Indian property rights. The court confirmed from trial exhibits that the clearly stated purpose of the PWR's was to provide an evaporation pan for surplus and waste water from Imperial Valley irrigation development. This judgment was the direct precursor to the congressional settlement legislation that followed in 1996 and 2000.

> **VERIFIED:** *Primary source. Full opinion reviewed. Citation confirmed at 799 F. Supp. 1052. Docket number, court, judge, and date confirmed. Key judicial findings confirmed from opinion text.*

1992 - Public Law 102-575, Title XI, Salton Sea Research Project

Source: Public Law 102-575, Title XI, Section 1101, approved October 30, 1992, 106 Stat. 4661.

Congress authorized a $10 million federal research project to develop methods to reduce and control salinity, enhance fisheries, and protect recreational values. The authorization acknowledged the Sea's deteriorating condition while leaving the drainage designation and operational structure entirely intact. No operational constraints were imposed on the agricultural drainage system. No remediation mandate was established.

> **VERIFIED:** *Primary source. Statute confirmed at 106 Stat. 4661. Public Law number and provisions verified.*

1993 - Formation of the Salton Sea Authority

Source: Joint Powers Agreement, Salton Sea Authority, June 2, 1993. California Government Code Articles I and II, Chapter 5, Division 7, Title 1, commencing with Sections 6500 et seq. Formation date and statutory basis confirmed in the Salton Sea Reclamation Act of 1998, Public Law 105-372, Section 2(2), and the 2014 Memorandum of Understanding between the United States Department of the Interior and the Salton Sea Authority.

The Salton Sea Authority was formed on June 2, 1993, as a joint powers authority under California Government Code Section 6500 et seq. The original member agencies were the County of Imperial, the County of Riverside, the Coachella Valley Water District, and the Imperial Irrigation District. The Torres Martinez Desert Cahuilla Indians subsequently joined the Authority and today remain one of its member agencies. Its formation mandate was to direct and coordinate actions relating to improvement of water quality and stabilization of water elevation and to enhance recreational and economic development potential of the Sea and other beneficial uses, recognizing the importance of the Sea for the continuation of the dynamic agricultural economy in Imperial and Riverside counties.

The 1974 Federal-State Feasibility Report had found that there was presently no suitable local agency to operate, maintain, and administer any salinity control project, and that a new local district would need to be formed under State law with broad representation from the various interests at the Sea. The Authority was formed nineteen years after that finding. The 1998 Salton Sea Reclamation Act defined the Salton Sea Authority by name and embedded it as a required party to the memorandum of understanding under which all subsequent federal study obligations were to be carried out. The Authority's formation precedes every instrument of federal and state partnership, statutory recognition, and co-authorization that follows in this record.

> **VERIFIED:** *Formation date June 2, 1993 confirmed from Public Law 105-372, Section 2(2), and the 2014 DOI-SSA MOU Explanatory Recital D. Member entity composition confirmed from both documents. Statutory formation authority confirmed as California Government Code Section 6500 et seq. Formation mandate language confirmed from 2014 DOI-SSA MOU Explanatory Recital D. 1974 Feasibility Report finding on absence of suitable local agency confirmed from Record entry for that document.*

1996 - S. 1893, Torres-Martinez Desert Cahuilla Indians Claims Settlement Act (not enacted)

Source: S. 1893, 104th Congress, 2nd Session, Report No. 104-360, introduced June 19, 1996, reported without amendment September 3, 1996.

Congressional findings established on the face of the federal legislative record that the 1909 expansion of the Torres-Martinez Reservation added 12,000 acres, 9,000 of which were already submerged under the Salton Sea, and that the majority of those lands remain inundated due in part to drainage water from the irrigation systems of the Imperial, Coachella, and Mexicali Valleys. Introduced the operative statutory definition of the Salton Sea as a drainage reservoir.

> *"The term 'Salton Sea' means the inland body of water located in Riverside and Imperial counties in California, which serves as a drainage reservoir for water from precipitation, natural runoff, irrigation return flows, wastewater, floods, and other inflow from within its watershed area."*
>
> **VERIFIED:** *Primary source. Bill number, session, and report number confirmed. Quoted language verified from bill text.*

1997 - House Subcommittee on Water and Power Oversight Hearing

Source: House Subcommittee on Water and Power Resources of the Committee on Resources, 105th Congress, First Session. Oversight hearing on Salton Sea Stabilization and Water Quality Improvement. October 3, 1997, Palm Desert, California.

The first congressional oversight hearing specifically on Salton Sea stabilization and water quality improvement. Representative Sonny Bono presided. Tellis Codekas testified as chairman of the Salton Sea Authority and simultaneously as a director of the Coachella Valley Water District. The Fish and Wildlife Service regional director confirmed three decades had passed since formal diagnosis with conditions worsening. Bureau of Reclamation confirmed federal

involvement dating to the late 1960s and early 1970s. Remediation cost estimates ranged from $40 million to $2 billion. No funding was committed. No solution was selected. No agency accepted responsibility.

> **VERIFIED:** *Primary source. Document reviewed. Hearing date, forum, and witnesses confirmed from document text. 105th Congress, First Session confirmed. First federal congressional appearance of the Salton Sea Authority by name confirmed.*

1998 - Public Law 105-372, Salton Sea Reclamation Act

Source: Public Law 105-372, approved November 12, 1998, 112 Stat. 3377.

Directed the Secretary of the Interior to conduct a feasibility study of options to address salinity and ecological decline. The operative mandate established the drainage function as the fixed premise within which all remediation options must be designed - not an outcome to be weighed against alternatives. Simultaneously prohibited any option relying on importation of new or additional water from the Colorado River, foreclosing the one intervention most capable of diluting accumulated salinity. Authorized $10 million for wildlife studies and $3 million for river reclamation. No construction authorized. The Salton Sea National Wildlife Refuge was renamed the Sonny Bono Salton Sea National Wildlife Refuge.

> *"The Secretary shall complete all studies... of the feasibility and benefit-cost of various options that permit the continued use of the Salton Sea as a reservoir for irrigation drainage..."*
>
> **VERIFIED:** *Primary source. Statute confirmed at 112 Stat. 3377. Quoted language verified.*

1998 - S. 1716, Sonny Bono Memorial Salton Sea Restoration Act (not enacted)

Source: S. 1716, 105th Congress, 2nd Session, introduced by Senators Boxer and Feinstein, March 5, 1998. Referred to the Committee on Environment and Public Works. Not enacted.

Authorized $30 million for a restoration action plan with specific enforceable salinity and elevation targets, $300 million for restoration construction, and $7 million for wildlife studies. Gave the Secretary authority to proceed with construction within 30 legislative days of submitting a final report unless Congress intervened. Died in committee. What passed in its place was Public Law 105-372 at less than one percent of S. 1716's authorized funding level and with no construction mandate. Congress had before it a fully developed restoration framework with enforceable benchmarks and construction authority. It declined to enact it.

> **VERIFIED:** *Primary source. Bill number, session, and sponsors confirmed. Authorization amounts and procedural provisions verified from bill text.*

1998 - Salton Sea Project Work Plan, Bureau of Reclamation and Salton Sea Authority

Source: Salton Sea Project Work Plan, June 18, 1998. Joint document of the Salton Sea Authority and the Bureau of Reclamation, Lower Colorado Region, Boulder City, Nevada.

This joint planning document, co-authored by the Salton Sea Authority and the Bureau of Reclamation, formally lists among its proposed project objectives "maintaining the Sea as a repository of agricultural drainage from the Imperial and Coachella Valleys." This is not a historical characterization or a background condition. It is a stated operational objective of a federal agency in an active planning document, co-authored with the Authority, twenty-four years after the 1974 Federal-State Feasibility Report documented the ecological consequences of that same function. The document lists as additional objectives providing a productive environment for resident and migratory birds and endangered species, restoring recreational uses, maintaining a viable sport fishery, and providing opportunities for economic development along

the shoreline, all premised on a Sea sustained by continued agricultural drainage inflows. The Work Plan confirms that as of 1998 the Bureau of Reclamation understood and incorporated the drainage repository function as a continuing operational premise, rather than a legacy condition.

"maintaining the Sea as a repository of agricultural drainage from the Imperial and Coachella Valleys" (Salton Sea Project Work Plan, June 1998, Bureau of Reclamation, Lower Colorado Region, and Salton Sea Authority, proposed project objectives).

> **VERIFIED:** *Primary source reviewed in full. Joint authorship of Bureau of Reclamation, Lower Colorado Region and Salton Sea Authority confirmed. Date confirmed June 18, 1998. Quoted language confirmed from project objectives section. All five project objectives confirmed.*

2000 - Draft Environmental Impact Statement/Environmental Impact Report, Salton Sea Restoration Project

Source: Draft Environmental Impact Statement/Environmental Impact Report, Salton Sea Restoration Project. January 2000. Prepared for the Salton Sea Authority and prepared by the United States Department of Interior, Bureau of Reclamation, and Tetra Tech, Inc. State Clearinghouse No. pending. Riverside and Imperial Counties, California.

The January 2000 Draft EIS/EIR was prepared for the Salton Sea Authority and by the Bureau of Reclamation and Tetra Tech, Inc. The Authority served as Lead Agency for the California Environmental Quality Act review; the Bureau of Reclamation served as Lead Agency for the National Environmental Policy Act review. The document identified fourteen cooperating agencies: the United States Environmental Protection Agency, the United States Army Corps of Engineers, the United States Geological Survey, the Torres Martinez Band of Cahuilla Indians, the United States Bureau of Indian Affairs, the United States Fish and Wildlife Service, the United States Bureau of Land Management, the Imperial Irrigation District, the Coachella Valley Water District, the Regional Water Quality Control Board, the California Department of Fish and Game, Riverside County, and Imperial County.

The abstract states: "The Bureau of Reclamation and the Salton Sea Authority are proposing to maintain and restore the ecological and socioeconomic values of the Salton Sea, an artificially maintained body of water in south central California." The document identified five project goals. Goal 1 is stated as: "Maintain the Sea as a Repository of Agricultural Drainage." Goals 2 through 5 address wildlife, recreation, sport fishery, and economic development opportunities respectively. Five restoration alternatives plus a No Action alternative were evaluated across a two-phase framework: Phase 1 through 2030 and Phase 2 through 2100. The document was transmitted to Congress by Secretary of the Interior Babbitt on January 27, 2000, fulfilling the reporting requirement of the Salton Sea Reclamation Act of 1998. No alternative was selected. No construction was authorized. No funding was committed.

> **VERIFIED:** *Primary source. Document reviewed. Cover page confirmed: prepared for the Salton Sea Authority; prepared by the United States Department of Interior, Bureau of Reclamation, and Tetra Tech, Inc. Co-lead agency structure confirmed: Bureau of Reclamation as NEPA lead; Salton Sea Authority as CEQA lead. Fourteen cooperating agencies confirmed from cover page. Abstract language confirmed. Five project goals confirmed from table of contents. Goal 1 designation as "Maintain the Sea as a Repository of Agricultural Drainage" confirmed from table of contents. Transmission date January 27, 2000 confirmed from 1998 Act reporting requirement and Appendix A of the 2003 Reclamation Status Report. Document is 767 pages. Digitized by Google Books from library copy.*

2000 - Torres-Martinez Desert Cahuilla Indians Claims Settlement Act (Public Law 106-568)

Source: H.R. 4643, 106th Congress, enacted 2000, Public Law 106-568.

Enacted the operative statutory definition of the Salton Sea as a drainage reservoir. Conveyed permanent flowage easements to both the Coachella Valley Water District and the Imperial Irrigation District over approximately 11,800 acres of Torres-Martinez tribal trust land and approximately 110,000 acres of federal land, all within and below the minus-220-foot contour of the Salton Sink. The settlement reflects the United States' dual role as trustee for the Torres-Martinez Tribe and as holder of federal lands within the basin. Section 7(a)(2) conveyed the federal land easement notwithstanding any prior or present reservation or withdrawal of land of any kind. Section 8 provides that the settlement constitutes full satisfaction of claims arising from or related to the inundation and lack of drainage of tribal and allottee lands.

> *"The perpetual right by the water districts to use the described lands in the Salton Sink within and below the minus 220-foot contour as a drainage reservoir to receive and store water from their respective water and drainage systems, including flood water, return flows from irrigation, tail water, leach water, operational spills and any other water which overflows and floods such lands, originating from lands within such water districts."*
>
> **VERIFIED:** *Primary source. Public Law number, session, and statutory language confirmed. Quoted language verified from enacted text. The Salton Sea Authority is named in the enrolled bill as a party.*

2003 - Bureau of Reclamation, Salton Sea Study Status Report

Source: United States Department of the Interior, Bureau of Reclamation, Lower Colorado Region, Boulder City, Nevada. Salton Sea Study Status Report. January 2003.

The Bureau of Reclamation published its Status Report on the Salton Sea Study in January 2003, continuing work on alternatives developed in the January 2000 Draft EIS/EIR for which the Salton Sea Authority was the procuring entity and CEQA Lead Agency. The study was conducted under the memorandum of understanding framework the Salton Sea Reclamation Act of 1998 mandated between the Secretary of the Interior, the Salton Sea Authority, and the Governor of California. The Authority's role as co-initiating party to the study effort is established by the June 18, 1998 joint Work Plan, co-authored by the Authority and the Bureau of Reclamation, Lower Colorado Region, five months before the Act was signed, which structured the study framework this report documents.

The Status Report evaluated fourteen alternatives across four categories: salinity control, salinity and elevation control, causeway and barrier concepts, and specialized diking, with present value cost estimates ranging from $800 million to over $35 billion. Every alternative was extremely expensive. None was recommended for implementation. The report stated explicitly:

> *"given that all of the alternatives identified to date are extremely expensive, it is difficult, if not impossible, to make any recommendation without a decision by Congress regarding the relative importance of the Sea in light of other pressing national priorities."*

The report confirmed the Sea's operational function in its opening paragraph, describing the modern body of water as formed by the 1905 Colorado River levee breach and sustained since then by agricultural drainage flows from the Imperial, Coachella, and Mexicali Valleys. It documented salinity at approximately 44,000 milligrams per liter, above the 40,000 mg/L fish die-off threshold identified in the 1974 Federal-State Feasibility Report, and confirmed that salinity would continue to rise under all modeled inflow scenarios. The report is the third federal diagnostic document in the sequence running from the 1969 Federal-State Reconnaissance Report through the 1974 Federal-State Feasibility Report. Each confirmed the operational function, documented deteriorating conditions, identified viable interventions, and produced no

implemented solution. The question was returned to Congress in January 2003. No Congressional determination of national priority followed.

VERIFIED: *Primary source. Bureau of Reclamation, Lower Colorado Region, Salton Sea Study Status Report, January 2003. Document reviewed in full. Quoted language confirmed from Executive Summary. Cost ranges confirmed from Tables 1 and 2 and Executive Summary. Salinity figures confirmed from Section 1.1 and Executive Summary. MOU requirement confirmed from Section 1.3 and Attachment A (Public Law 105-372). Co-initiating role of the Salton Sea Authority established by the June 18, 1998 joint Work Plan of the Bureau of Reclamation, Lower Colorado Region, and the Salton Sea Authority, which predates the Act by five months and structured the study framework this report documents.*

2013 - AB 71, California Fish and Game Code Section 2940, Salton Sea Restoration

Source: Assembly Bill No. 71, Chapter 402, approved by Governor September 28, 2013. Filed with Secretary of State September 28, 2013. Adding Article 2 (commencing with Section 2940) to Chapter 13 of Division 3 of the Fish and Game Code. Author: V. Manuel Pérez.

AB 71 required the Secretary of the Natural Resources Agency, in consultation and coordination with the Salton Sea Authority, to lead Salton Sea restoration efforts, and separately authorized the Authority to lead a restoration funding and feasibility study in consultation with the Agency. The Salton Sea Restoration Council, previously established as a state agency in the Natural Resources Agency to oversee restoration, had sunsetted on January 1, 2013. Rather than reconstitute a state agency, the Legislature vested the coordinating function in the Secretary acting in consultation with the Authority, and authorized the Authority to lead the study process.

Section 2942(b)(1) authorized the Authority to lead a restoration funding and feasibility study to investigate funding sources, analyze economic development opportunities including renewable energy, mineral development and algae production, identify state procurement and royalty sharing opportunities, and review existing long-term restoration plans and recommend changes to the Secretary. Section 2943 required the Secretary to seek input from the Authority with regard to design opportunities, public access, economic development, habitat mosaics, vector management, and feasible financial resources for all recommended restoration program components. The Legislature expressly acknowledged the statute as an unfunded mandate, noting in Section 2 that no state reimbursement was required because the only costs incurred by the Authority were the result of a program for which legislative authority was requested by the Authority itself.

VERIFIED: *Primary source. AB 71, Chapter 402, text confirmed in full. Approval date September 28, 2013 confirmed. Author V. Manuel Pérez confirmed. Legislative Counsel's Digest confirmed. Restoration Council sunset date January 1, 2013 confirmed from Digest. Section 2942(b)(1) study authorization confirmed. Section 2943 input requirements confirmed. Unfunded mandate acknowledgment confirmed from Section 2 of the enrolled bill.*

2014 - Memorandum of Understanding, United States Department of the Interior and Salton Sea Authority

Source: Memorandum of Understanding Between the United States Department of the Interior and the Salton Sea Authority for Collaboration and Exchange of Technical and Scientific Information Regarding the Resources of the Salton Sea. Signed February 27, 2014. Signatories: Anne J. Castle, Assistant Secretary for Water and Science, Department of the Interior; Jim Hanks, President, Salton Sea Authority.

The MOU was entered into by the Department of the Interior and the Salton Sea Authority for the purpose of collaboration in connection with actions affecting resources of the Sea and identification of opportunities for practical and implementable projects for mitigation and improvement of conditions in and around the Sea. The DOI signatory was Anne J. Castle,

Assistant Secretary for Water and Science, signing at the secretarial level. Named DOI parties included the Bureau of Reclamation, the United States Fish and Wildlife Service, the United States Geological Survey, the Bureau of Land Management, and the Bureau of Indian Affairs, with identified points of contact in each bureau.

Explanatory Recital G states: "Significant funds and efforts have been invested by both Parties to date on topics including, but not limited to, science, engineering, and community outreach at the Sea." Recital F notes that any actions should recognize and further the implementation of the Colorado River Water Delivery Agreement of 2003 and related agreements. General Provision B states that nothing in the agreement obligates DOI or the United States to any current or future expenditure of resources in advance of the availability of appropriations from Congress, and that the agreement does not obligate DOI, the United States, or the Authority to spend funds on any particular project or purpose even if funds are available. The MOU carried an initial term of ten years from its effective date.

> **VERIFIED:** *Primary source. MOU reviewed in full. Execution date February 27, 2014 confirmed from signature page. Signatories confirmed: Anne J. Castle, Assistant Secretary for Water and Science; Jim Hanks, President, Salton Sea Authority. Five DOI bureau points of contact confirmed from Section IV. Recital G language confirmed from document text. General Provision B language confirmed from document text. Ten-year term confirmed from General Provision J.*

2014-2016 - Financial Feasibility Action Plan, Benchmarks 1-7, Salton Sea Authority

Source: Salton Sea Funding and Feasibility Action Plan, Benchmarks 1 through 7. Salton Sea Authority, 2014-2016. Prepared by Tetra Tech, Inc., with subcontractors including the United States Department of Energy, National Renewable Energy Laboratory (Benchmark 6). Funded by grant from the California Natural Resources Agency to the Salton Sea Authority. All benchmark documents publicly available through the Salton Sea Authority website.

The Financial Feasibility Action Plan constituted a set of scientific, engineering, and economic analyses performed over 2014 through 2016, authorized under AB 71 and funded by a grant from the California Natural Resources Agency to the Salton Sea Authority. The grant was managed by the Authority and executed by a consulting team led by Tetra Tech, Inc. The primary objective was to develop a roadmap toward a comprehensive solution to the Salton Sea's environmental concerns in the context of current funding opportunities and constraints. The work was performed in parallel with a related effort by the Imperial Irrigation District and Imperial County identified as the Salton Sea Restoration and Renewable Energy Initiative.

The work was completed in seven benchmarks. Benchmark 1 was the Work Plan. Benchmark 2 reviewed and updated existing hydrology and water quality condition data. Benchmark 3 evaluated all prior restoration alternatives, including the State of California's 2007 preferred alternative, the Salton Sea Authority's 2006 preferred plan, the Bureau of Reclamation's 2007 six alternatives, the Pacific Institute's 2001 proposal, and the U.S. Filter Corporation's proposal, against current and projected hydrology. Benchmark 4, Volume 1 evaluated ten water import and export options. Benchmark 4, Volume 2 introduced the Perimeter Lake concept: a new approach involving construction of a lake around the perimeter of the Sea along with a central saline pool, designed to take into account the immediate need for action, limitations on water supply, and the possibility of constructing a project with incremental funding. Benchmark 5 conducted an infrastructure financing feasibility analysis, identifying the Authority's statutory authority under California Government Code Section 53395.9 to form Infrastructure Financing Districts for the purpose of funding construction of projects for the reclamation and environmental restoration of the Salton Sea. Benchmark 6, prepared by the United States Department of Energy's National Renewable Energy Laboratory, analyzed the technical and market potential of geothermal, solar

photovoltaic, and concentrating solar power development as revenue streams for restoration. Benchmark 7 provided an integrated project summary.

The Perimeter Lake concept introduced in Benchmark 4, Volume 2 became the conceptual foundation for the authorization language in Section 203(c) of the Water Resources Development Act of 2020, which directed the Secretary of the Army to carry out a study for the construction of a perimeter lake, or a northern or southern subset thereof, for the Salton Sea, California. All benchmark documents and supporting data and analysis tools were placed in the public domain upon completion.

> **VERIFIED:** *Primary sources. Benchmark 3 (August 2015), Benchmark 4 Volume 2 (May 2016), and Benchmark 7 (May 2016, updated May 2020) reviewed. CNRA grant funding confirmed from Benchmark 7 Executive Summary. Tetra Tech authorship confirmed. DOE/NREL role as Benchmark 6 subcontractor confirmed from Benchmark 7 Executive Summary. AB 71 authorization confirmed. Seven-benchmark structure confirmed. Perimeter Lake concept introduction in Benchmark 4 Volume 2 confirmed. IFD statutory authority under California Government Code Section 53395.9 confirmed from Benchmark 5 description in Benchmark 7. Public domain status of all documents confirmed from prefatory notice on each benchmark document.*

2016 - Senate Committee on Environment and Public Works, Committee Resolution, Salton Sea and Tributaries

Source: Committee Resolution, United States Senate Committee on Environment and Public Works. "Salton Sea and Tributaries, Riverside, Imperial, and San Diego Counties, California." Adopted April 28, 2016. Signed by the Chairman and Barbara Boxer, Ranking Minority Member.

The Senate Environment and Public Works Committee adopted a bipartisan resolution on April 28, 2016 requesting the Secretary of the Army to review the reports of the Chief of Engineers contained in the preliminary examination report on flood control for all streams in San Diego and Imperial Counties, California, flowing into Salton Sea, dated July 15, 1943, and other pertinent reports to determine the advisability of Federal participation in providing improvements for flood risk management, ecosystem restoration, and other water and land related resources for the Salton Sea and the vicinity including all tributaries, with a view towards restoration and protection of the environment, and improvements to public health and safety.

Three elements of this resolution are independently significant. First, the resolution specifically names and formally references the 1943 Corps flood control report - the same report that defined the study area by its terminal point, all streams flowing into the Salton Sea - placing it back on the active congressional record seventy-three years after it was issued without implementation. Second, the resolution was adopted with bipartisan signatures at the committee level, establishing Senate EPW committee consensus on Federal interest in Salton Sea restoration as a predicate for the statutory authorization that followed. Third, the resolution preceded by eight months Section 1181 of the Water Infrastructure Improvements for the Nation Act (WIIN Act, Public Law 114-322, December 16, 2016), which amended Section 3032 of WRDA 2007 to authorize project-specific restoration plans and projects at the Salton Sea. Together, the EPW Resolution and WIIN Act Section 1181 form the 2016 layer of the authorization chain that, along with WRDA 2020 Section 203(c), underlies the current Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study.

> **VERIFIED:** *Primary source. Committee resolution reviewed from document image. Text confirmed. Adoption date April 28, 2016 confirmed. Signatories confirmed: EPW Committee Chairman James Inhofe and Barbara Boxer, Ranking Minority Member. Reference to July 15, 1943 Corps flood control report confirmed from resolution text.*

2016 - Water Infrastructure Improvements for the Nation Act, Section 1181, Salton Sea, California (Public Law 114-322)

Source: Water Infrastructure Improvements for the Nation Act, Public Law 114-322, 114th Congress, December 16, 2016. Section 1181, Salton Sea, California. 130 Stat. 1628. Available through the Government Publishing Office.

Section 1181 of the WIIN Act, titled "Salton Sea, California," amended Section 3032 of the Water Resources Development Act of 2007 (Public Law 110-114; 121 Stat. 1113) in three substantive ways. First, it converted Section 3032 from a "pilot projects" authority to a permanent "program" - directing the Secretary to carry out a program to implement projects to restore the Salton Sea. Second, it inserted the Salton Sea Authority by name as a recognized non-Federal partner, adding "Salton Sea Authority, or other non-Federal interest" in two places within the amended section. Third, it updated the table of contents designation from "Salton Sea restoration" to "Salton Sea restoration program, California." The clerical amendment is itself a formal recognition - the word "program" now appears in the statutory heading of the Salton Sea provision in federal water resources law.

Section 1181 and the April 28, 2016 Senate EPW Committee Resolution were enacted in the same calendar year and together constitute the 2016 layer of the authorization chain. The resolution authorized the Secretary of the Army to investigate Federal participation; Section 1181 simultaneously converted the existing WRDA 2007 Section 3032 pilot projects authority into a permanent restoration program and formally inserted the Salton Sea Authority into the federal statutory framework as a named non-Federal partner. WRDA 2020 Section 203(c) subsequently modified Section 3032 to authorize the perimeter lake feasibility study that became the Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study.

> **VERIFIED:** *Primary source. Full text of Section 1181 confirmed from uploaded copy of Public Law 114-322. Section heading "Salton Sea, California" confirmed. Three operative amendments to WRDA 2007 Section 3032 confirmed: (1) section heading changed from "restoration" to "restoration program"; (2) "Salton Sea Authority, or other non-Federal interest" inserted in subparagraph (C)(i)(II) and paragraph (3)(ii); (3) table of contents item updated to "Salton Sea restoration program, California."*

2020 - Memorandum of Understanding, California Natural Resources Agency and Salton Sea Authority

Source: Memorandum of Understanding Between the California Natural Resources Agency and the Salton Sea Authority for Collaboration and Cooperation on Restoration of the Salton Sea. Approved at the February 20, 2020 Salton Sea Authority Board meeting. Signatories: Arturo Delgado, Assistant Secretary for Salton Sea Policy, California Natural Resources Agency; Castulo Estrada, President, Salton Sea Authority.

The MOU was entered into pursuant to the Salton Sea Restoration Act, Fish and Game Code Section 2930 et seq. Section C notes that pursuant to Fish and Game Code Sections 2942(a)(1) and 2943, the Secretary for Natural Resources shall undertake Salton Sea restoration efforts in consultation and coordination with the Authority. Section D(1) provides that the Secretary or the Secretary's representative may participate in Authority Board of Directors meetings on a regular basis as an ex officio, non-voting member of the Authority pursuant to the Joint Powers Agreement creating the Salton Sea Authority. Section D(2) states that CNRA recognizes that the Authority is uniquely positioned to assist in coordination of local priorities for Salton Sea restoration projects, that the Parties intend the Authority to continue its leadership role in the development and consolidation of local priorities, and that the Authority is to be the primary channel through which such local priorities are communicated to CNRA. Section D(3) provides that the Parties intend to work together to seek out federal funding partnership opportunities for

planning and implementation projects. Section E(5) states that the MOU is legally nonbinding and does not create any legal rights, obligations, benefits, or trust responsibilities enforceable at law or in equity by any Party against any other Party.

> **VERIFIED:** *Primary source. MOU reviewed in full. Approval date February 20, 2020 confirmed from document notation. Signatories confirmed: Arturo Delgado, Assistant Secretary for Salton Sea Policy; Castulo Estrada, President, Salton Sea Authority. Statutory authority Fish and Game Code Section 2930 et seq. confirmed from Section C. Ex officio participation provision confirmed from Section D(1). "Uniquely positioned" and "primary channel" language confirmed from Section D(2). Nonbinding clause confirmed from Section E(5).*

2020-2022 - Water Resources Development Act of 2020 / Imperial Streams and Salton Sea Ecosystem Restoration Feasibility Study

Source: Water Resources Development Act of 2020; Federal Cost Share Agreement, December 16, 2022, amended February 19, 2025.

The Water Resources Development Act of 2020 (Division AA of Public Law 116-260, December 27, 2020), Section 203(c), authorized the Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study (P2: 445445) by modifying the existing Salton Sea restoration authorization under Section 3032 of the Water Resources Development Act of 2007 (121 Stat. 1113; 130 Stat. 1677) to authorize the Secretary to carry out a study for the construction of a perimeter lake, or a northern or southern subset thereof, for the Salton Sea, California. The August 2024 Vertical Team Alignment Memorandum designated the Study a Mega Study with implementation costs estimated at $2 to $18 billion and a Chief's Report targeted for December 2030. The Salton Sea Authority and the California Department of Water Resources serve as joint non-Federal sponsors under the Federal Cost Share Agreement signed December 16, 2022 and amended February 19, 2025.

> **VERIFIED:** *WRDA 2020 authorization confirmed at Division AA of Public Law 116-260, Section 203(c), December 27, 2020. Section number confirmed from H.R. 7575 (116th Congress, 2d Session), the House-passed version of WRDA 2020, which contains identical Salton Sea language at Section 203(c). The enacted S. 1811 carries the same provision. Section 203(c) modifies the existing Section 3032 of WRDA 2007 authorization. Cost Share Agreement date December 16, 2022 confirmed. Amendment date February 19, 2025 confirmed. Mega Study designation and Chief's Report target date confirmed from VTAM August 2024.*

2022-2024 - Salton Sea Long-Range Plan, California Salton Sea Management Program

Source: Salton Sea Long-Range Plan, Salton Sea Management Program, April 2024, Rev 1.01. California Natural Resources Agency. Available through saltonsea.ca.gov. Federal Cost Share Agreement, Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study, December 16, 2022, amended February 19, 2025.

Following the WRDA 2020 authorization of the Imperial Streams and Salton Sea Aquatic Ecosystem Restoration Feasibility Study, the California Natural Resources Agency initiated a long-range plan process to satisfy the state's obligation under the 2017 Revised Water Rights Order. The Salton Sea Authority and the California Department of Water Resources served as joint non-Federal sponsors of the federal feasibility study. The Federal Cost Share Agreement was signed December 16, 2022, with the state's long-range plan incorporated as the sponsor's plan for purposes of the federal study.

The Long-Range Plan, published in final form in April 2024, evaluated thirteen restoration concepts in addition to the Phase 1 Ten-Year Plan. The thirteen concepts are: Restoration Concept 1, North/South Marine Sea; Restoration Concept 2, Divided Sea/Marine Sea South; Restoration Concept 3, Updated Perimeter Lake; Restoration Concept 4, Pump Out Options; Restoration Concept 5, Water Optimization; Restoration Concept 6, Southlake Restoration and

Enhanced Vegetation; Restoration Concept 7, Water Recycling (Desalination); Restoration Concept 8, Reclamation of Native Desert and Agriculture; Restoration Concept 9, Floating Solar and Water Generation System; Restoration Concept 10, Save the Coachella Valley Basin; Restoration Concept 11, IRP Water Importation; Restoration Concept 12, IRP Water Exchange; and Restoration Concept 13, IRP Colorado River Water Transfer. The Updated Perimeter Lake appears as Restoration Concept 3. The document evaluated all thirteen concepts against criteria including air quality and public health, habitat, water quality, tribal access to natural resources, and feasibility. Although the Long-Range Plan was published as Rev. 1.01 in April 2024, the principal analytical work underlying the plan had already been completed and circulated for review before execution of the Federal Cost Share Agreement in December 2022. As a practical matter, execution of the Cost Share Agreement marked the transition from long-range planning to active federal feasibility analysis.

VERIFIED: *Primary source. Long-Range Plan April 2024 Rev 1.01 reviewed. Thirteen concept designations and titles confirmed from table of contents, Sections 5.3 through 5.15. Updated Perimeter Lake as Restoration Concept 3 confirmed from Section 5.5. Evaluation criteria confirmed from Chapter 7. Federal Cost Share Agreement date December 16, 2022 confirmed from existing Record entry for WRDA 2020. Amendment date February 19, 2025 confirmed. Non-Federal sponsor identities confirmed from existing Record entry.*

2026 - Post-2026 Colorado River Operations Draft Environmental Impact Statement

Source: Bureau of Reclamation, Post-2026 Colorado River Operations Draft Environmental Impact Statement, January 2026. Section 3.2.7.

The document acknowledges the Salton Sea as a terminal receiving environment for agricultural drainage originating from the federal reclamation system and then states explicitly that analysis of impacts on the Salton Sea is not included in this EIS. Two rationales are offered for the exclusion. First, that any resultant impacts are within the scope of the SSMP's long-range plan. Second, and more consequential: Reclamation does not control the end use and management of delivered or conserved water. As such, Reclamation has no management authority over inputs to the Salton Sea, and Reclamation has no enforcement authorities over the Salton Sea.

The Draft EIS reflects a distinction between Reclamation's operational reliance upon the Salton Sea basin as a receiving environment and its stated position regarding direct management authority over conditions within the Sea itself.

VERIFIED: *Primary source. Document reviewed. Section 3.2.7 confirmed. Exclusion language and both stated rationales confirmed from document text. Publicly available through Bureau of Reclamation NEPA portal.*