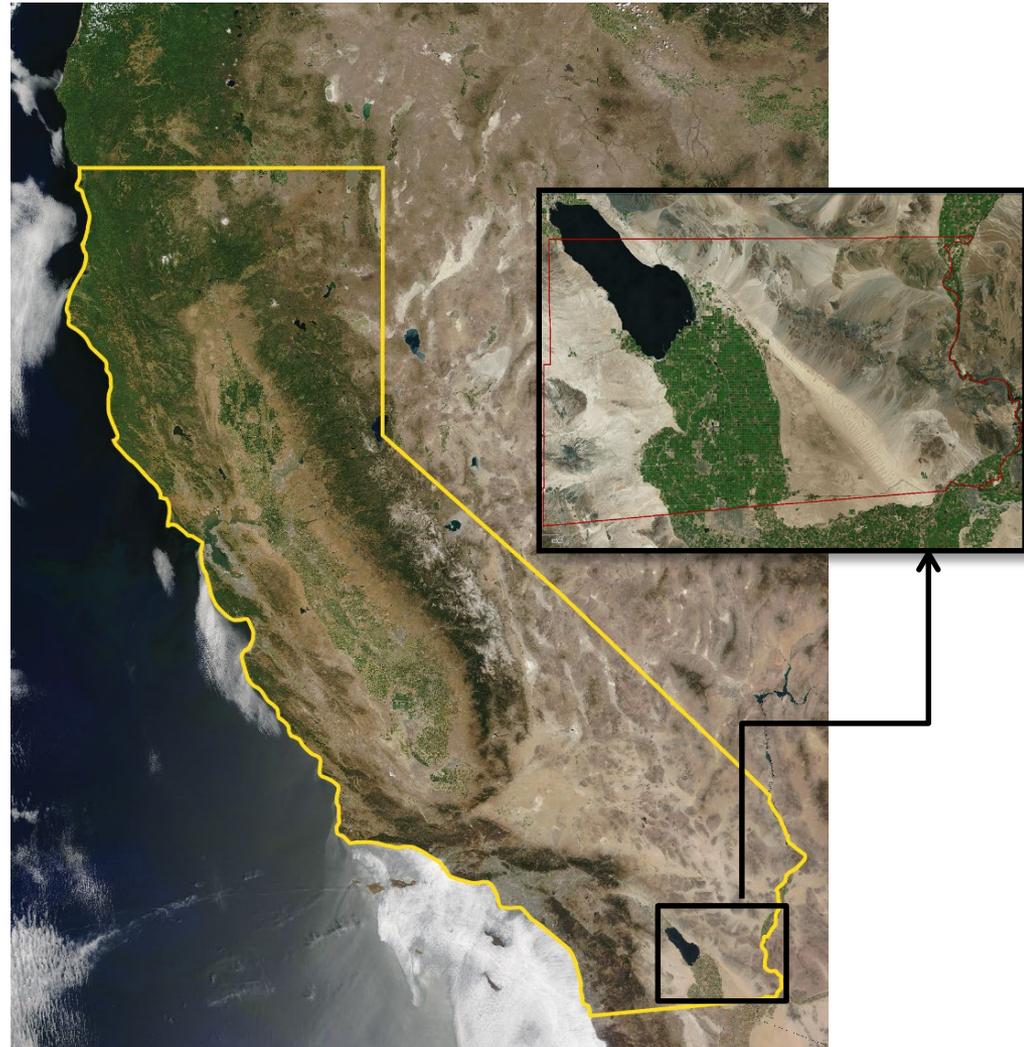


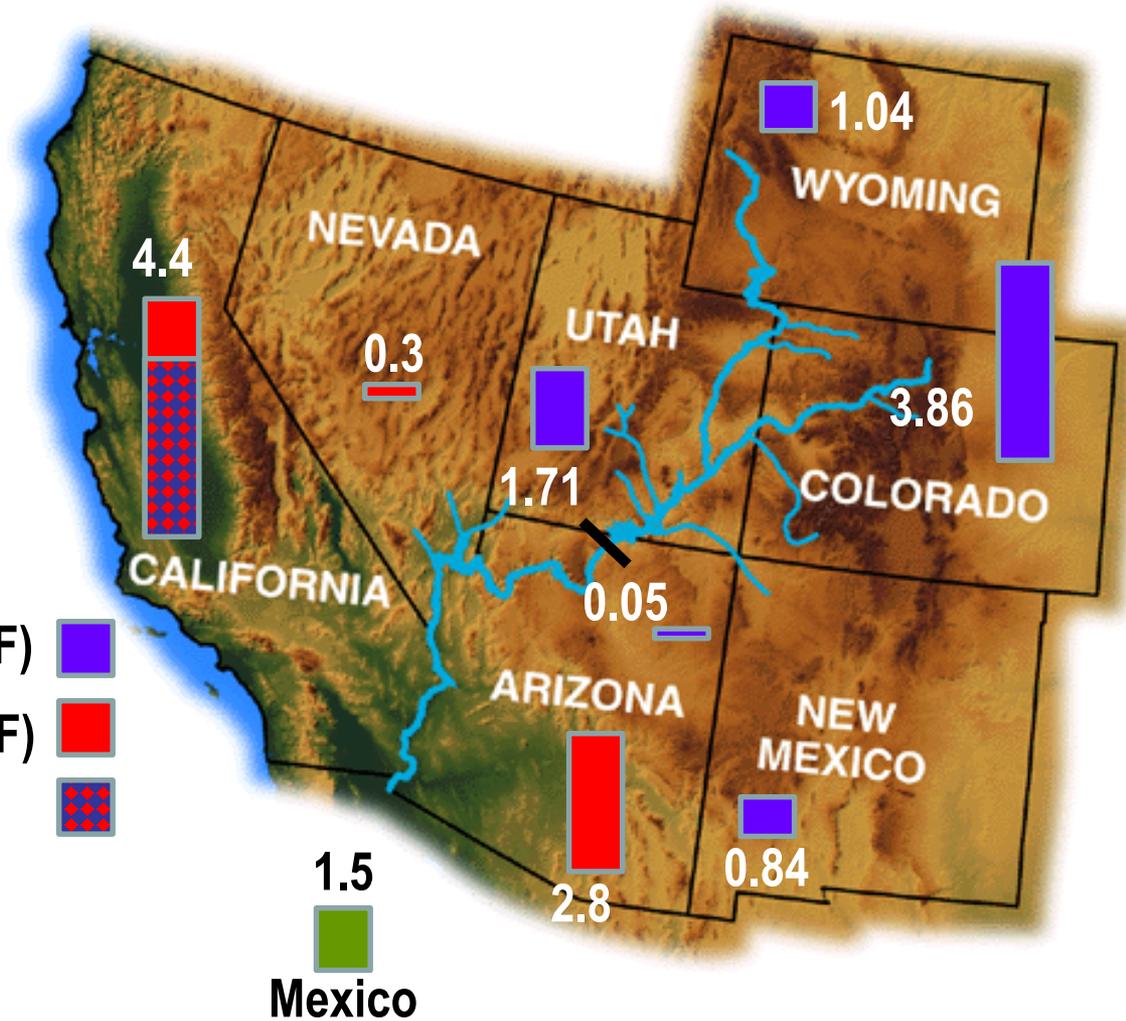
# Water Conservation Consequences, Challenges and Opportunities at the Salton Sea



**IID**

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# Colorado River Basin State Entitlements



Upper Basin (7.5 MAF)



Lower Basin (7.5 MAF)



IID (3.1 MAF)



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# Priorities for California's 4.4 MAF Apportionment with the QSA

1. PVID	} (420,000 AF*)	} 3,850,000 AF
2. Yuma Project		
3. IID (3,100,000 AF*) and CVWD (330,000 AF*)		
4. MWD.....	550,000 AF	
<b>= 4.4 MAF (California's apportionment)</b>		

5a. MWD.....	550,000 AF
5b. San Diego city, county (given to MWD).....	112,000 AF



\* Agricultural water agency entitlements under the QSA; MWD is responsible for the PVID/Yuma Project over/under as PVID/YPRD is not a party to the QSA.

# IID's Water Supply & Service Area

- 3,100,000 acre-feet annual Colorado River consumptive use entitlement
- 1,062,216 – gross acres within boundaries
- 520,347 – total acreage receiving water
- 471,392 – total farmable acreage
- Imperial Dam diversion structure, headworks and six desilting basins
- 82-mile long All-American Canal



# Imperial County - \$2.6 Billion Agricultural Economy



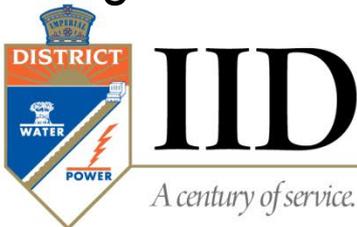
# QSA/Salton Sea Chronology

- **1982 – 1984:** State Water Resources Control Board issues Decision 1600, finding that IID’s operational practices result in the “misuse of water” and contribute to Salton Sea flooding. **IID is ordered to implement measures to conserve water.**
- **1988:** **IID is ordered** by the State Water Resources Control Board **to implement additional water conservation measures or execute conservation/transfer agreements** with a funding partner. IID and the Metropolitan Water District of Southern California develop an agreement for MWD to invest in system improvements in exchange for the long-term use of the conserved water.



# QSA/Salton Sea Chronology

- **1998 – 1999:** Pressure mounts on California to live within its 4.4 MAF Colorado River entitlement as Arizona and Nevada begin to take their full entitlements and drought conditions worsen. Intra-California disputes increase between MWD, IID and the Coachella Valley Water District regarding their respective water rights.
- **October 2002:** IID, MWD, CVWD and the state of California issue “key terms” for a proposed QSA and begin negotiations
- **December 9, 2002:** IID Board does **NOT** approve draft QSA, which imposed extensive mitigation obligations over and above what IID had agreed to and did not address Salton Sea concerns.





# QSA/Salton Sea Chronology

- **December 27, 2002:** Department of Interior issues a December 31, 2002 deadline for IID to [agree to the QSA or face a 300,000 AF water order cut](#).
- **December 31, 2002:** IID approves a modified QSA, not the version authorized by other agencies. [Interior reduces IID's 2003 water order](#).
- **January, 2003:** IID files a lawsuit against the United States; a [temporary injunction](#) is granted in March restoring IID's water order.
- **April 2023:** USBR initiates yet another review of IID's water use in order to reduce IID's order yet again.



# QSA/Salton Sea Chronology

- **September 2003:** State legislation signed by Governor
  - **SB277 (Ducheny 2003)** authorized to facilitate approval of the QSA - *established California's intent to restore the Salton Sea and initiated a process to develop a Salton Sea restoration and financing plan.*
  - **SB 654 (Machado, 2003)** *established a mechanism to allocate and cap environmental mitigation costs to the QSA water agencies with a funding backstop by the state (in addition to California's SB 277 restoration responsibility).*
- **October 2003:** IID authorizes the QSA on a 3-2 vote with the first following program implemented in December 2003. This is followed by the election of 3 new IID board members to replace those who voted for the agreement, and more than a decade of additional litigation.

# 1988 IID/MWD Conservation Program

MWD funded capital improvements to IID's conveyance system (completed in 1997) and related annual O&M expenses in exchange for the 105,000 acre-feet per year of conservation those projects generate.

- 5 Reservoirs (Bevins, Young, Russel, Willey and Galleano)
- 270 miles of concrete lined canals
- 3 Lateral Interceptors (Plum-Oasis, Mulberry-D, Trifolium)
- System Automation (SCADA, main canal automated gates, water information system and Water Control Center)
- 12-Hour Delivery Program



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# 2003 SDCWA/CVWD Conservation Programs

303,000 AFY of conservation generated from capital improvement projects that increase operational flexibility combined with on-farm programs that improve ag water use efficiencies.

- *Seepage recovery systems, lateral interties, automation, operational reservoirs and technology.*
- *On-farm efficiency conservation program to incentivize growers to implement irrigation improvements (tailwater return systems, drip irrigation, sprinklers, precision land-leveling, etc.).*

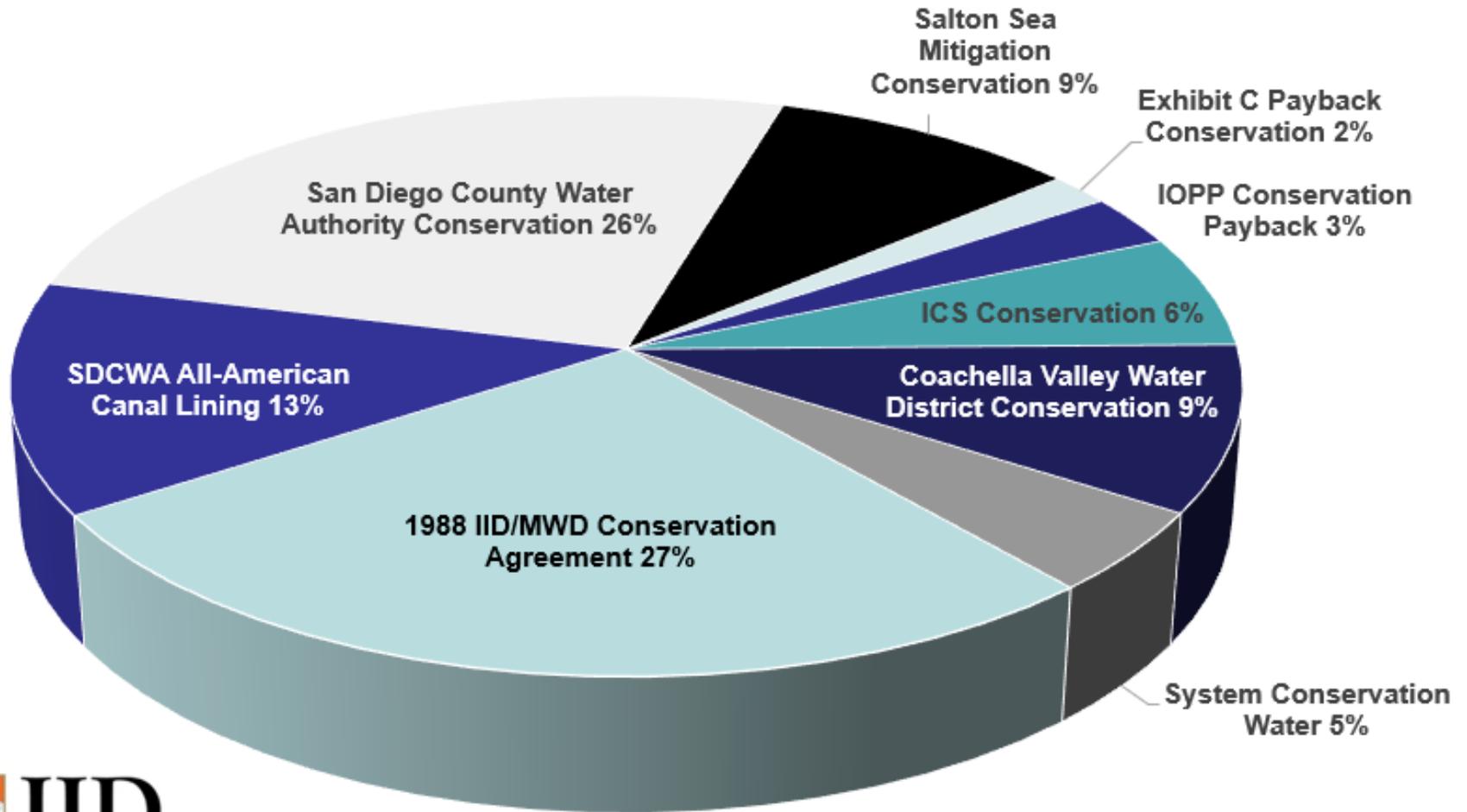


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# IID's Water Conservation & Transfer Summary

*(2003-2024 Total = 8,441,003 acre-feet)*

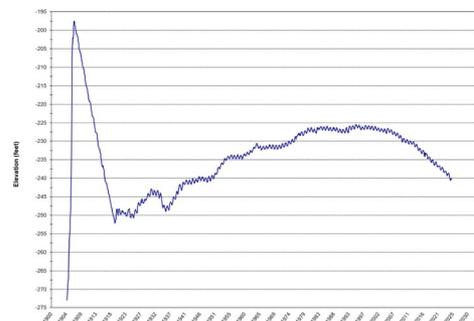


# Salton Sea



- 306 square miles, up to 50' deep
- Congressionally designated agricultural sump for IID/CVWD
- Volume of 4.3 MAF with annual inflow of  $\approx 1 \pm$  MAF, no outflow
- > 50% saltier than the ocean
- Repository for agricultural drainage
- Heavily used by migratory waterfowl including endangered species
- $\approx 12.75'$  elevation decline since October 2003
- Without transfers, Sea was estimated to turn hypersaline between 2010 and 2025; with transfers, Sea was estimated to turn hypersaline 1 to 9 years earlier

Salton Sea Elevation @ Fig Tree John



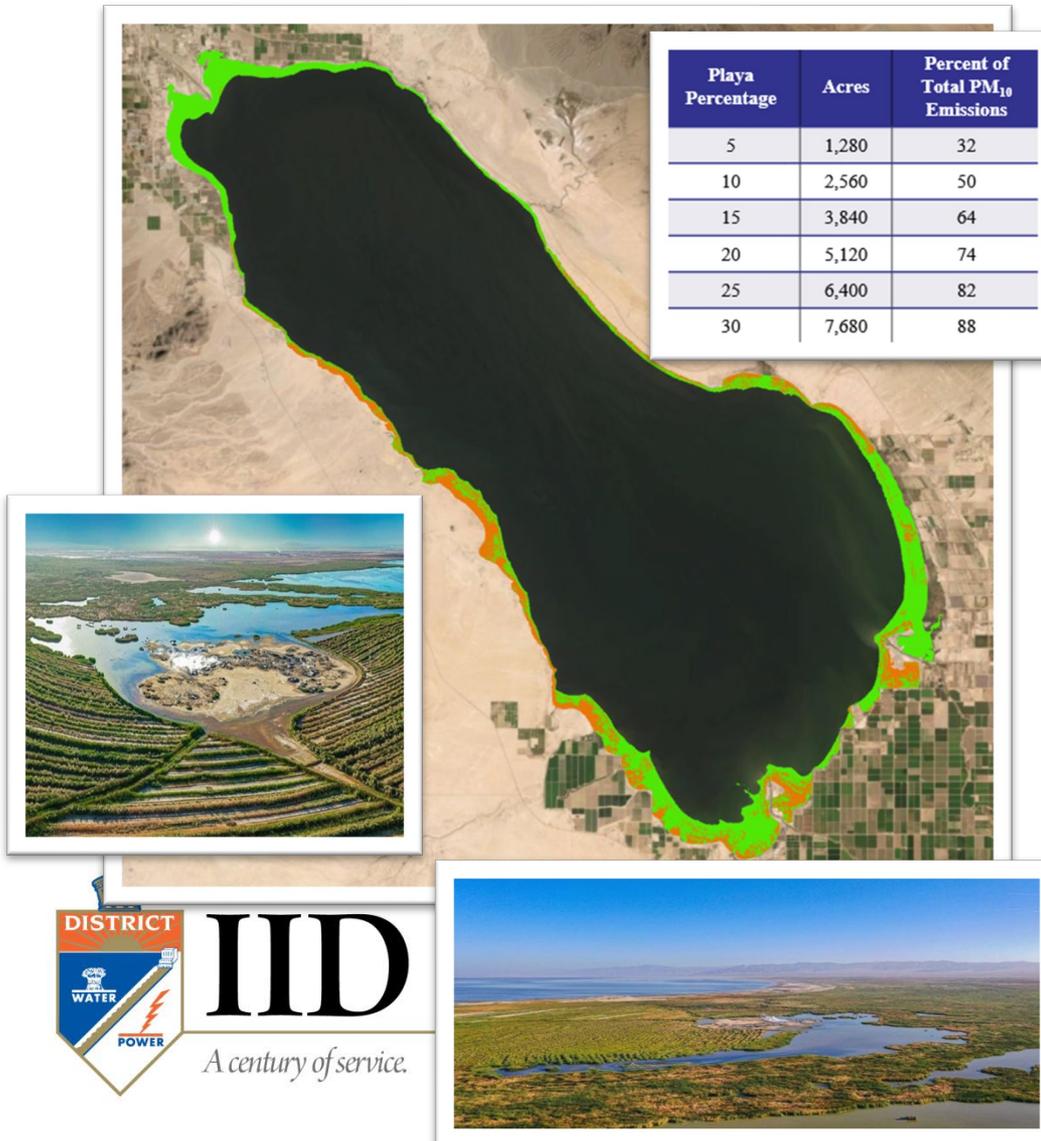
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# A Call to Action: IID's SWRCB Petition

- **November 2014:** IID submits a petition to the State Water Resources Control Board to exercise its continuing authority over the QSA.
  - *The petition called for an order conditioning the water transfers on the state satisfying its unmet restoration obligation.*
- **March 2017:** IID files a request for a SWRCB evidentiary hearing to require a state Salton Sea Management Plan (SSMP)
- **November 2017:** The SWRCB adopts a stipulated order developed by IID, IC and SDCWA, in consultation with NGOs, requiring a SSMP that includes annual acreage milestones, performance standards, adaptive management, funding alternatives and a state restoration commitment with SWRCB oversight.



# IID's Salton Sea Air Quality Mitigation Program



- Developed in coordination with Imperial County; a comprehensive, **science-based adaptive approach** to characterize emissions potential of exposed playa as the Sea recedes and **proactively implement projects** to prevent significant dust emissions
- Pilot testing a range of dust control measures tailored to climate and soil conditions around the Salton Sea
- Identifying measures that can be quickly implemented and scaled to create a stable surface and/or prevent the spread of dust emissions on exposed playa

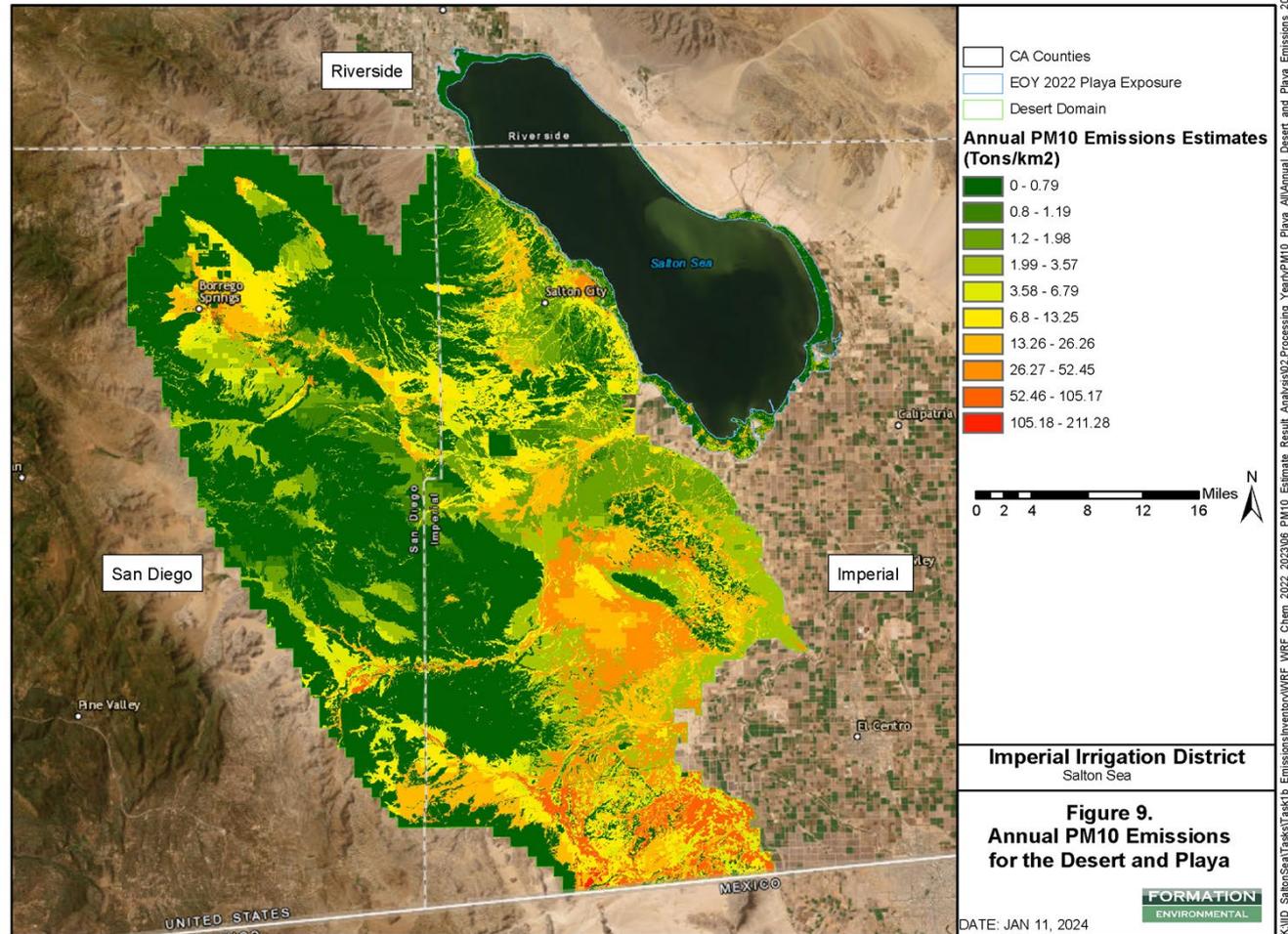
# Air Quality Projects

- Nearly 2,900 acres of IID implemented projects that include tillage, surface roughening, surfactant application and native vegetation planting projects
- Nearly 7,000 acres of state projects either implemented or in active construction
- 8,135 acres with natural re-vegetation (wetlands), or 24% of exposed playa
- 20% of the exposed playa acreage contributes 78% of the total emissions
- Over 11,000 acres of playa in various planning stages

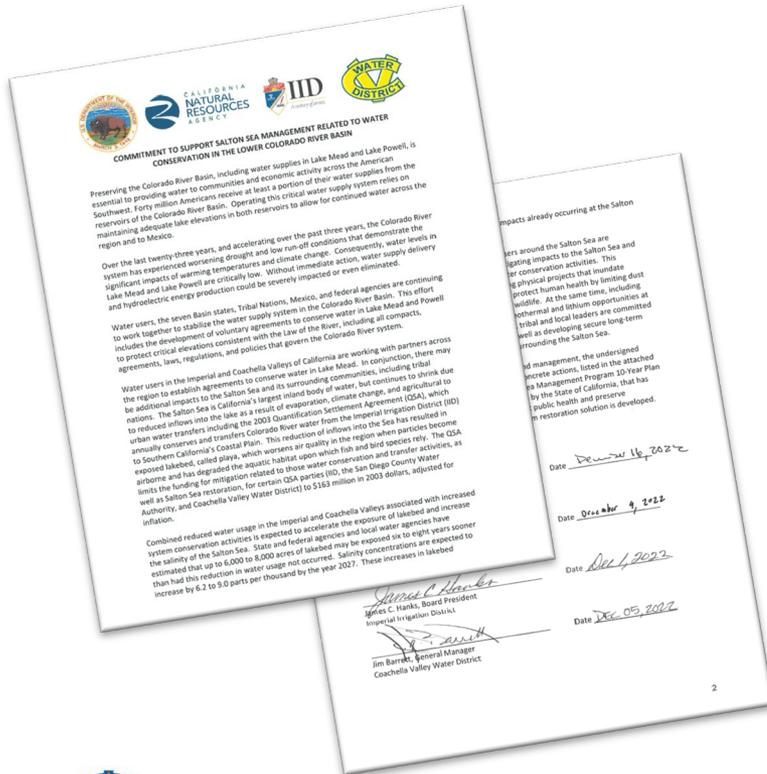


# Salton Sea Basin Emissions Estimates

Only one percent of the Salton Sea basin's dust emissions are from the playa, the desert to the west is the largest single uncontrolled dust contributor



# Salton Sea Management Commitment Related to Conservation in the Lower Colorado River Basin



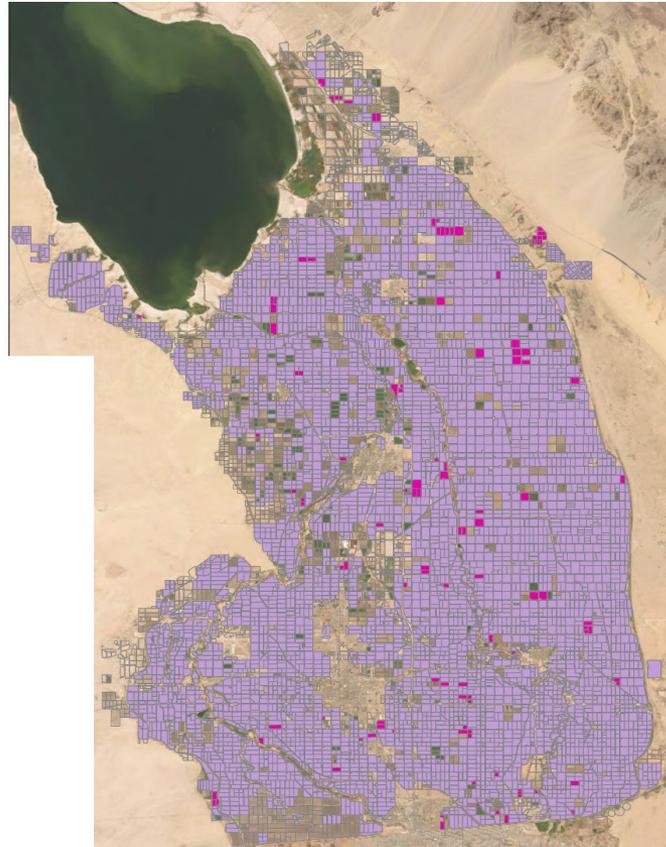
- IID's conservation was part of a Near-Term Lower Basin Drought Plan to protect critical Colorado River reservoir elevations and add 3,000,000 AF of water to Lake Mead ( $\approx$  40 feet).
- California water agencies = 1,500,000 AF
- IID's conservation was pre-conditioned on a state/federal commitment to address mitigation and funding of Salton Sea impacts related to accelerated playa exposure.
- 2022 Salton Sea Commitment Letter designated \$250 million to CNRA for Salton Sea Management Plan projects, conditioned on IID conservation.

# IID 2024 Conservation Total $\approx$ 673,340 AF

## System Efficiency Conservation Program

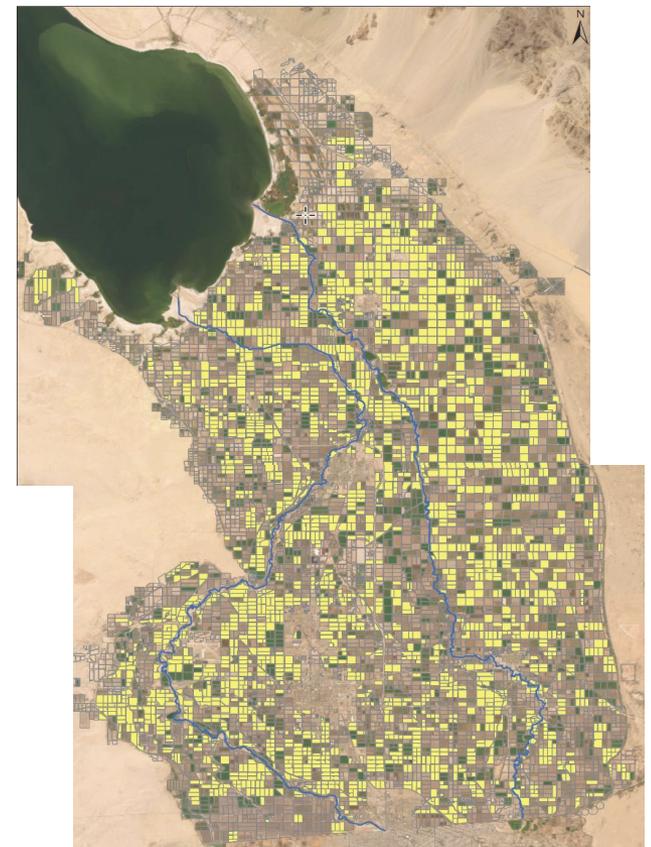
- Lateral Interceptors
- Automation
- Mid-Lateral Reservoirs
- SCADA and Technology
- Canal Lining
- Seepage Recovery Systems
- Interties
- 12-Hour Runs
- Operational Discharge Reduction

## On-Farm Efficiency Conservation Program



$\approx$  5,500 Participating Fields (>370,000 acres)

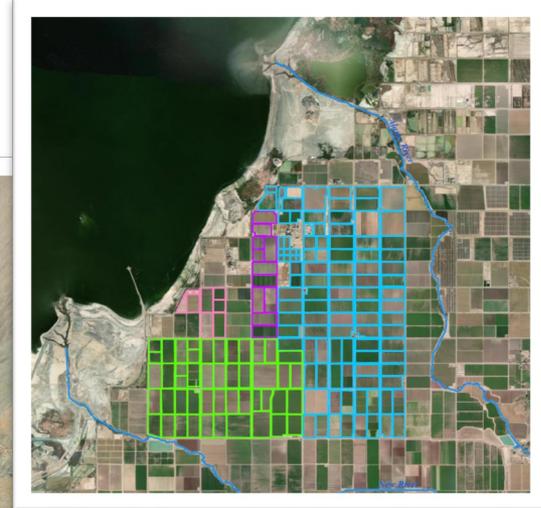
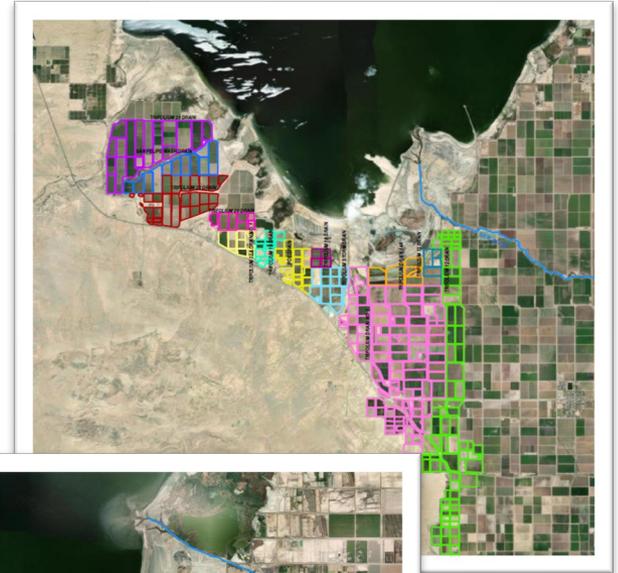
## Deficit Irrigation Program



$\approx$  2,279 Participating Fields (154,245 acres)

# DIP Monitoring & Vegetation Mapping

- All Direct-to-Salton Sea Drains are monitored for flow and if certain criteria is met it can trigger responsive actions to ensure there is no “take” of pupfish. One drain shed met the threshold in 2024, however no action was required. No drain shed will meet that threshold in 2025.
- IID is mapping wetlands vegetation where the drains outlet to the Salton Sea.

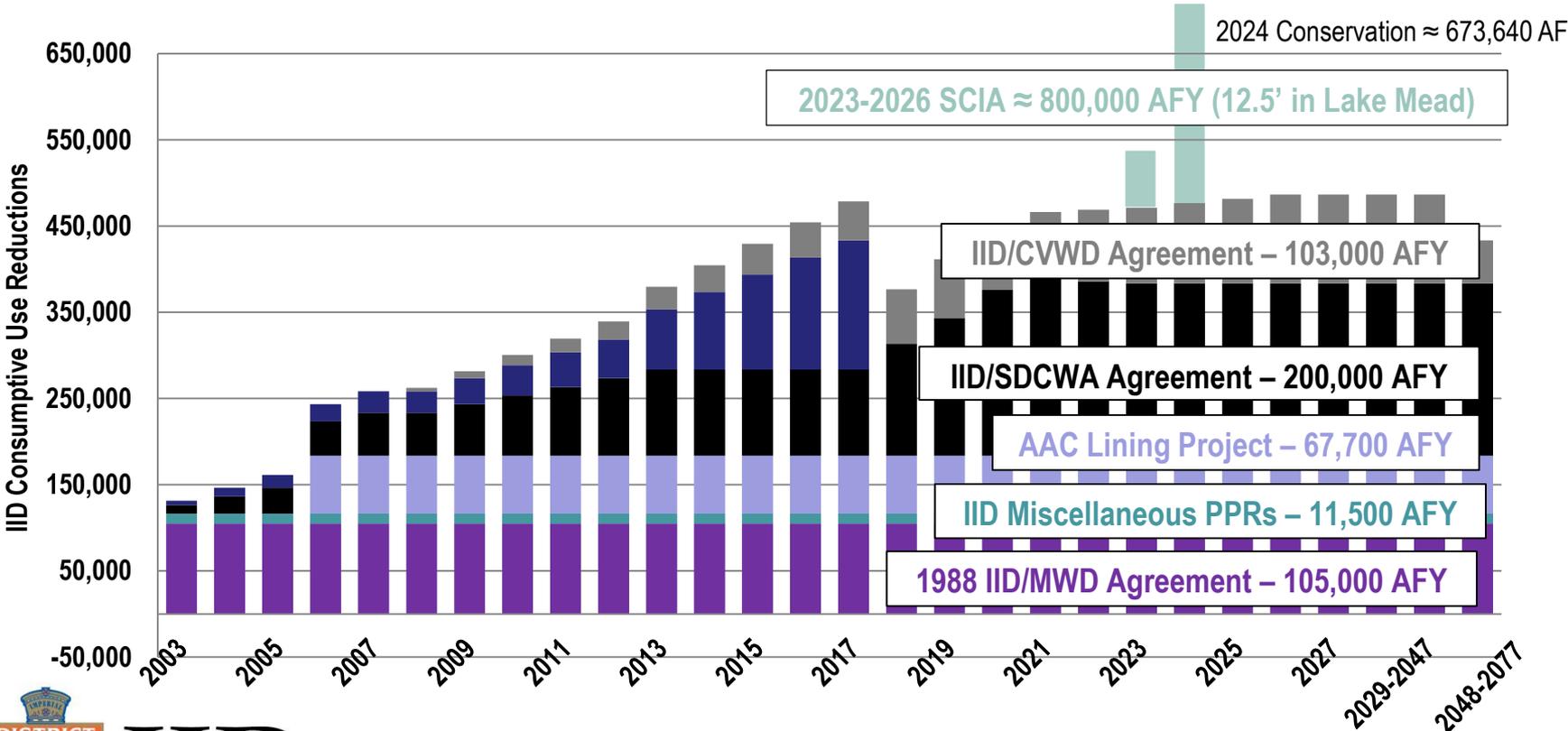


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# Water Conservation Agreements Summary

2003-2024 Total Conservation > 8.44 Million Acre-Feet



# The Colorado River / Salton Sea Nexus



- The Colorado River is Imperial Valley's **only water supply**, with water delivered to rural farms, communities, homes and industries.
- IID has a year-round growing season with robust cropping yields that provide the nation a safe and reliable food supply. **One in every six jobs** in Imperial Valley is directly related to agriculture.
- The Salton Sea has no water right and would not exist were it not for IID agricultural runoff.
- IID conserves and transfers 16 percent of its water supply each year, more than 485,000 AF, to support Southern California water supply reliability, and will increase that volume to **protect critical reservoir elevations** and provide IID water supply resiliency through 2026.
- The recent **\$250,000,000 federal funding** to accelerate Salton Sea projects is a direct result of IID's reservoir protection conservation programs and advocacy efforts.
- **IID will continue to protect its senior water rights**, which ensures water flows to Imperial Valley and runoff to the Salton Sea.
- **California's Salton Sea restoration obligation, the Salton Sea Management Plan and federal funding are a direct result of IID's water transfer programs, advocacy and legislative efforts.**

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