



When the River Meets the Sea

Michael Cohen
Pacific Institute

2019 GWC Summer Conference

Pacific Institute



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DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
COLORADO RIVER BASIN

MAP NO. 25900

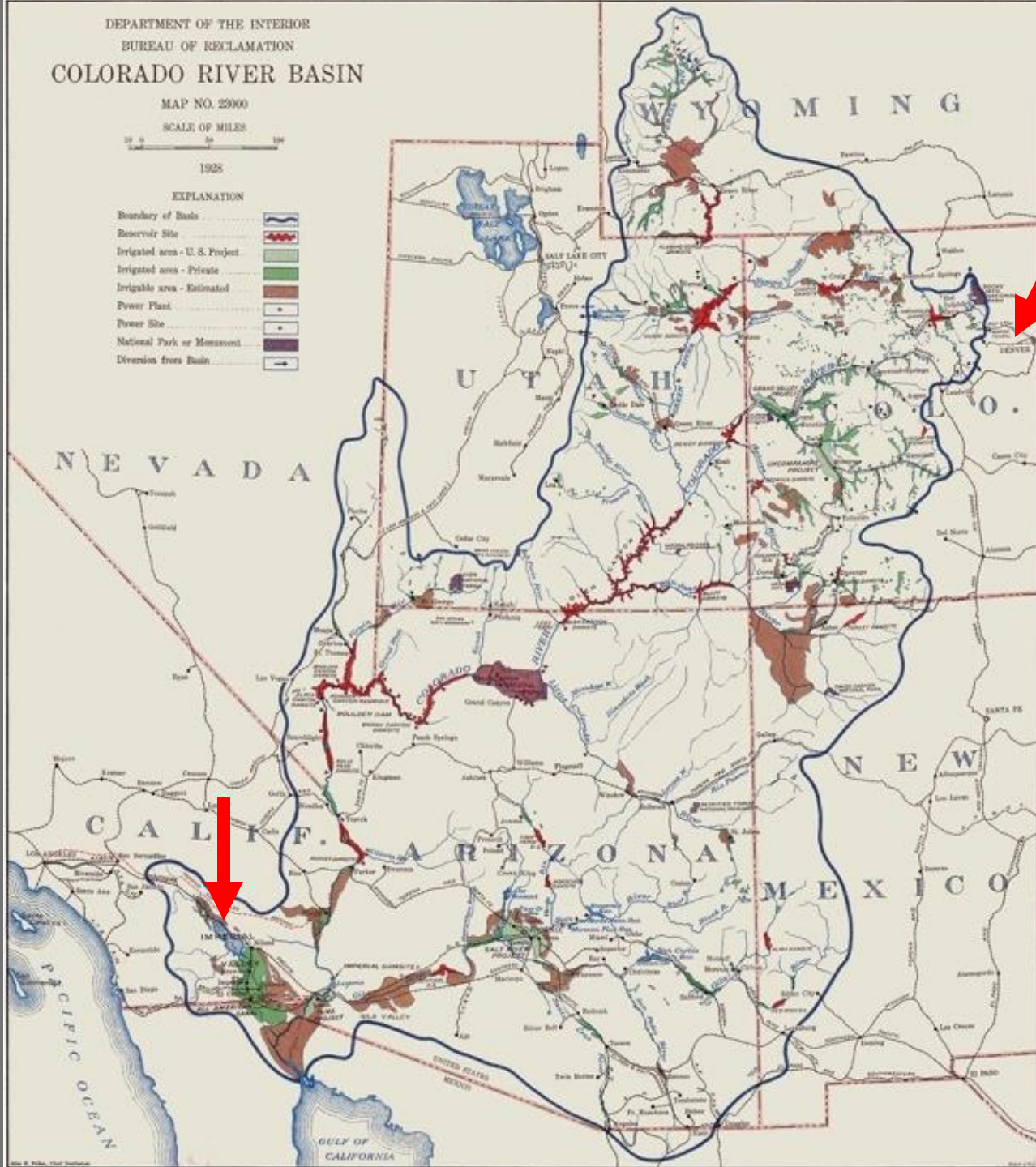
SCALE OF MILES



1925

EXPLANATION

- Boundary of Basin
- Reservoir Site
- Irrigated area - U. S. Project
- Irrigated area - Private
- Irrigable area - Estimated
- Power Plant
- Power Site
- National Park or Monument
- Diversion from Basin





Overview

- Salton Sea progress
- The river and the sea
- New bargains?
- Lasting solutions?

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the matter of

IMPERIAL IRRIGATION DISTRICT'S (IID) AND
SAN DIEGO COUNTY WATER AUTHORITY'S
(SDCWA) AMENDED JOINT PETITION FOR
APPROVAL OF A LONG-TERM TRANSFER OF
CONSERVED WATER FROM IID TO SDCWA
AND TO CHANGE THE POINT OF DIVERSION,
PLACE OF USE, AND PURPOSE OF USE

Under Permit 7643 on Application 7482 of Imperial
Irrigation District

(counsel listed on next page)

**PETITION OF IMPERIAL
IRRIGATION DISTRICT FOR
MODIFICATION OF REVISED
WATER RIGHTS ORDER 2002-0013**

Submitted Nov. 18, 2014

www.waterboards.ca.gov/waterrights/water_issues/programs/salton_sea/

Salton Sea Management Program

Preserving clean air, ecosystem wealth, and a stable water supply.



About

The Salton Sea is California's largest lake. Thirty-five miles long and 15 miles wide, the desert lake extends from the Coachella Valley into the Imperial Valley. Though saltier than the ocean, the Sea supports an abundance of fish, a food source for millions of migratory birds on the Pacific Flyway. Managing the Sea's natural, agricultural, and municipal water inflows to maximize bird and fish habitat and minimize fine-particle air pollution will allow California to protect regional health, ecological wealth and a stable water supply.

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

Vicinity Map of the Salton Sea



Estimated Salton Sea Playa Exposure and SWRCB Milestones Over the Next Decade

From Salton Sea Management Program Phase I Ten-Year Plan

Year	Acres of Newly Exposed Playa	Acres of Projects To Be Constructed
2018	3,500	500
2019	4,200	1,300
2020	5,000	1,700
2021	5,600	3,500
2022	5,500	1,750
2023	5,300	2,750
2024	4,900	2,700
2025	4,300	3,400
2026	3,900	4,000
2027	3,300	4,000
2028	2,800	4,200
Totals	48,300	29,800

Salton Sea Management Needs

- **Water** – ✓
- **Stakeholder support** – ✓
- **Funding** – ✓
- **Leadership** – ✓
- **Long-term Commitment** – X

Figure 7

Source: CA LAO, 2018. <https://lao.ca.gov/Publications/Report/3879>

Funding for Salton Sea Mitigation and Management

As of June 2018 (In Millions)

Source	Authorized	Unspent	Use
State			
Proposition 12 (2000)	\$4.8	\$4.8	Constructing Species Conservation Habitat (SCH) project.
Proposition 50 (2002)	33.6 ^a	9.7	Environmental Impact Report and related studies and planning activities, SCH project.
Proposition 84 (2006)	47.0	23.4	Staffing and planning activities; SCH project planning and design; partial funding for projects including Red Hill Bay, Seawater Marine Habitat Pilot, and Torres-Martinez Wetlands.
Proposition 1 (2014)	80.0	77.3	Projects to meet goals identified in Phase I Ten-Year Plan.
Proposition 68 (2018)	200.0	200.0	Projects to meet goals identified in Phase I Ten-Year Plan.
Federal			
NRCS (to Salton Sea Authority)	\$7.5	\$7.5	Agricultural dust suppression and wetlands projects.
NRCS (to state)	0.8	0.8	Planning activities.
Local			
QSA Joint Powers Authority	\$288.0	\$130.5	Various mitigation requirements associated with the QSA.
Salton Sea Restoration Fund	68.5	53.5	Various restoration activities.
Totals	\$730.1	\$507.5	\$358.7, excluding JPA & federal

^aThe bond authorized \$58.6 million for various purposes in the Colorado River basin, of which \$33.6 million has been allocated specifically for activities at the Salton Sea.

NRCS = National Resources Conservation Service and QSA = Quantification Settlement Agreement.





Finally, California and IID reach agreement on Salton Sea access and liability

Janet Wilson, Palm Springs Desert Sun

Published 6:10 p.m. PT May 7, 2019 | Updated 6:42 p.m. PT May 7, 2019



Eva Pineda talks about how dust from the Salton Sea has affected the air she breathes in Westmorland, Calif.



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The Imperial Irrigation District board of directors voted Tuesday to allow access across its lands for critically needed state wetlands projects at the Salton Sea, designed to tamp down dangerous dust storms and give threatened wildlife a boost. In exchange, California will shoulder the maintenance and operations of the projects,

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An occasional email with a California focus on water, energy and climate change, curated by reporter Janet Wilson.

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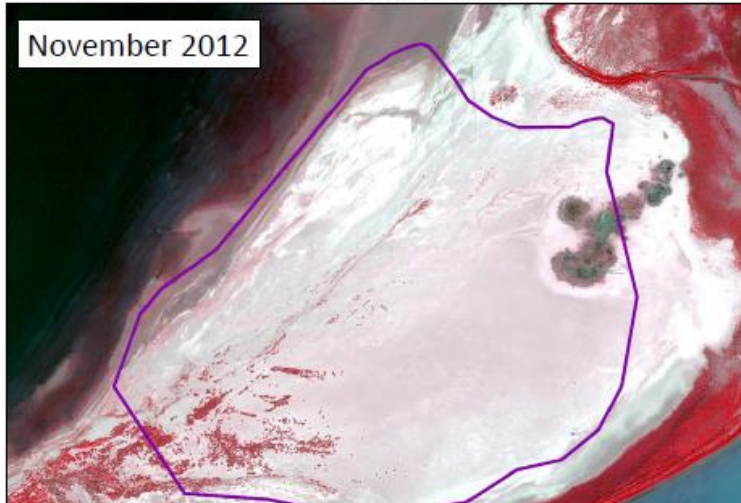


Raul Ruiz comes to rescue of Vietnam veteran

May 7, 2019, 6:45 p.m.

ALAMO NORTH DUST CONTROL AREA – BEFORE AND AFTER

Before: Non-Roughened Playa



After: Roughened Playa

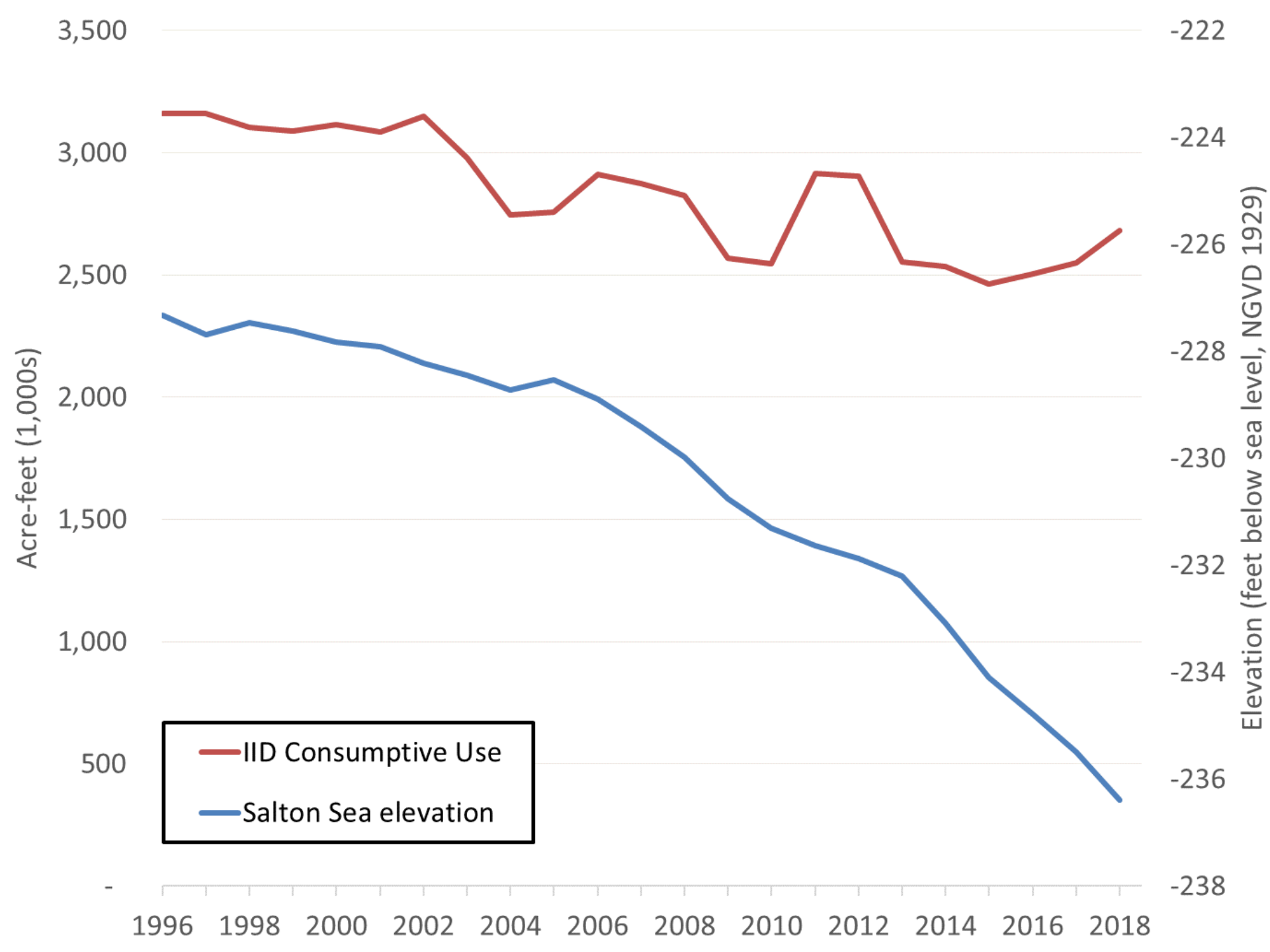


For more information on IID's Salton Sea Air Quality Mitigation Program, please visit www.iid.com/airquality.

Salton Sea Ecosystem Monitoring Project



Reclamation/USGS Saline Habitat Pond



Conservation has saved 4.8 million acre feet of water since 2003

BY MICHAEL MARESH
Staff Writer

IMPERIAL — Since 2003, Imperial Irrigation District has conserved almost 4.8 million acre feet of water, mostly through water transfers and agreements.

A 1988 agreement between IID and the Metropolitan Water District of Southern California near Los Angeles has amounted to 1.56 million of that amount since 2003 at the Imperial Dam.

The San Diego County Water Authority Conservation District received more than 993,000 acre

feet in water under the agreement from 2003 to 2017, and Salton Sea mitigation in the same frame was 730,182 acre feet of water.

IID Public Affairs Director Robert Schletter said the water transfers bring in money to the district because the water being delivered comes with a cost.

Water to local farmers, municipalities and industrial businesses is delivered for a charge of \$20 per acre foot, while the San Diego County Water Authority pays IID \$667 for every acre foot delivered. What the

Metropolitan Water District pays IID to deliver water to them is more complex because MWD is not charged per acre foot.

Every year the IID conserves close to 500,000 acre feet of water that other water districts and organizations use in water transfers or agreements, which equates to 10 percent to 15 percent of its share of water from the Colorado River.

The funds from MET for example has been used to line the IID canals with concrete to stop seepage.

Schletter said the

funds for the water transfers are also used for IID operations, its budget and developing projects on how to conserve water

IID's availability of water every year from the Colorado River is between 2.5 million and 2.6 million acre feet. One acre foot at 326,800 gallons of water would be enough water for one to two families for an entire year

Schletter said all the IID does is deliver raw water to entities in the county. Of the 2.5 million to 2.6 million acre feet of water from the

Colorado River IID receives and is available, 95 percent of it is used for agriculture. The other 5 percent of the raw water, that still must be treated, is delivered to Imperial County communities, which treat it and sell it to their ratepayers.

According to data for 2017, 2.186 million acre feet, or more than 712 billion gallons, of water were used for agriculture. Imperial Valley cities had 31,922 acre feet (10.4 billion of gallons) of water delivered to them.

For industrial operations, 24,076 acre feet,

or 7.8 billion gallons, of water were used for this purpose in 2017.

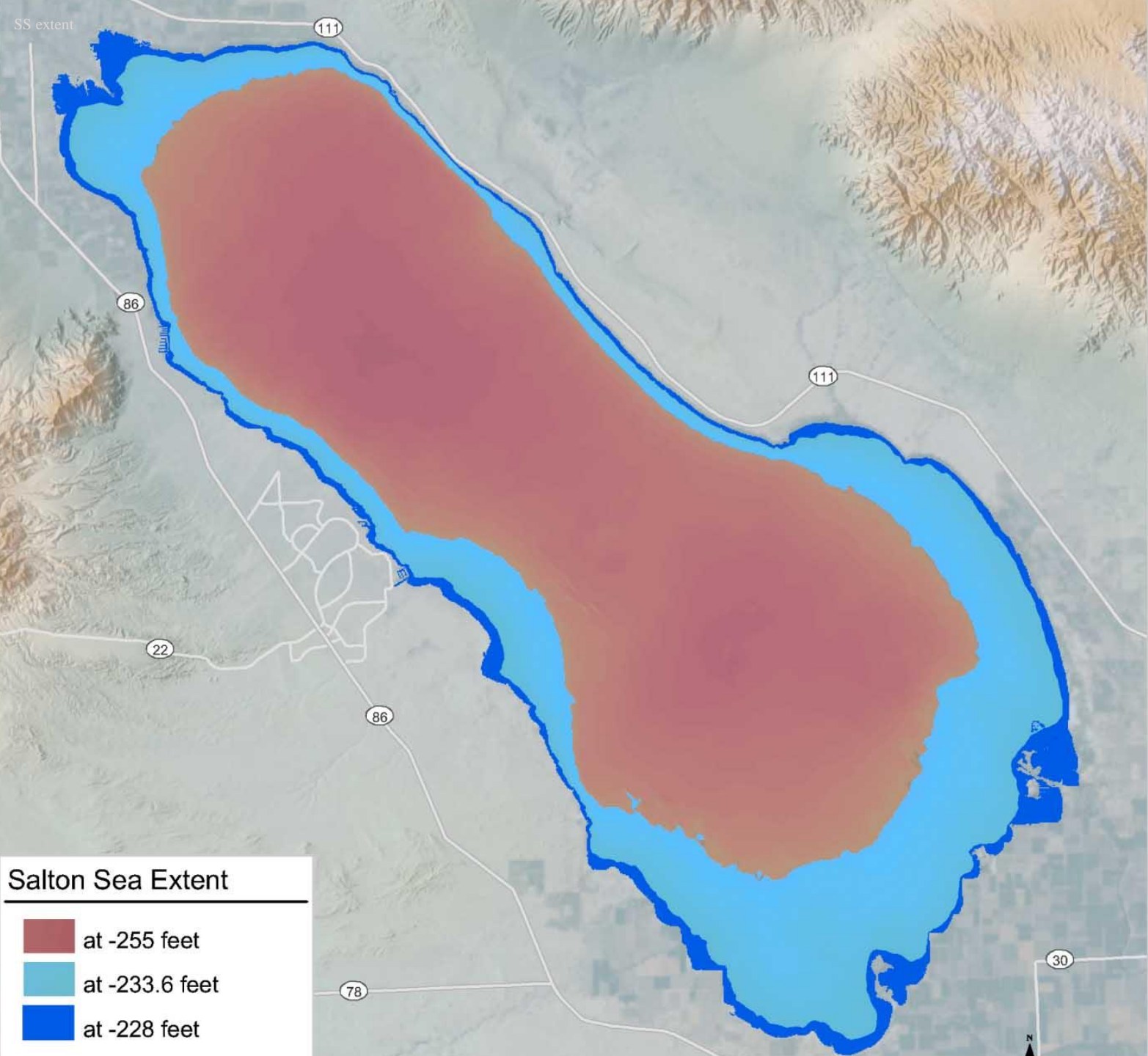
Some IID board members have made it clear they will not support another water transfer because they believe the water should stay in the county.

Protecting the county's water rights is a priority, Schettler said.

"When it comes to water in the desert we fight for it," he said. "When someone wants a chunk of the Colorado River we fight for it. This is a desert, and water is our life blood."

IID 2003-2018 Water Accounting Summary

- IID-MWD – 1.67 MAF
- IID-CVWD – 0.30 MAF
- ICS – 0.39 MAF
- IID-SDCWA – 1.12 MAF
- AAC Lining – 0.68 MAF



**Sea could
recede >5
miles from
2003
shoreline**

Salton Sea Extent

Dark Red	at -255 feet
Light Blue	at -233.6 feet
Dark Blue	at -228 feet



Photo courtesy of Norm Niver, Salton City

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Prior Conditions – CRWUA Dec. 2016

“If there is no going forward at the Salton Sea, then IID *cannot* help at Lake Mead.” - IID

MWD will not move forward on the Colorado River until matters are resolved at the Bay-Delta. MWD’s “conditions preceding”: clear direction from the federal government about the Bay-Delta and, in solidarity with IID, direction from the state and federal governments on the Salton Sea. - MWD

Pinal County Farmers Resist Abrupt Cutoff Of Colorado River Water

By **Bret Jaspers**

Published: Monday, October 8, 2018 - 8:16am

Updated: Monday, October 8, 2018 - 1:09pm

▶ Listen Now

 [Download mp3 \(6.74 MB\)](#)



Bret Jaspers/KJZZ

In the medium-term future, Pinal farmers will have to rely more on groundwater wells. But they hope to hang onto some Colorado River water when shortage comes in 2020, as is likely.

IID DCP Workshop

Nov. 14, 2018



December 10, 2018 Board meeting

Amended Motion to Approve

I move that the Board approve the three intra-California agreements

- a. **Agreement Between the Metropolitan Water District of Southern California and Imperial Irrigation District Apportioning Contributions to Lake Mead for Drought Contingency Plan Implementation**
- b. **Amendment No. 2 to the California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus**
- c. **Amendment No. 3 to the California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus.**

that were fully vetted at four workshops in which all Imperial Valley residents were invited to attend and present concerns. Numerous concerns were raised, and the conditions in this motion address some of those concerns.

By this Motion **Amendment No. 2 to the California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus** is approved by the Board in its entirety, **Amendment No. 3 to the California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus** and **Agreement Between the Metropolitan Water District of Southern California and Imperial Irrigation District Apportioning Contributions to Lake Mead for Drought Contingency Plan Implementation** are likewise approved, but their implementation is suspended until the following conditions are met:

- 1) **All seven Colorado River Basin States and the United States have approved the interstate Drought Contingency Plan Documents in a form voted on and approved by the IID Board of Directors in a public meeting.**
- 2) **The IID Board of Directors have voted on and approved in a public meeting any proposed federal legislation that is to be submitted to Congress in conjunction with the DCP.**
- 3) **The State of California and the United States have irrevocably committed to provide sufficient funding for the full completion of the 10 year Salton Sea Management Program (SSMP) at a 1:1 federal-to-state funding commitment in addition to mitigating any and all future considerations as a result of the implementation of the Intra-California Agreements and the Interstate DCP Agreements.**

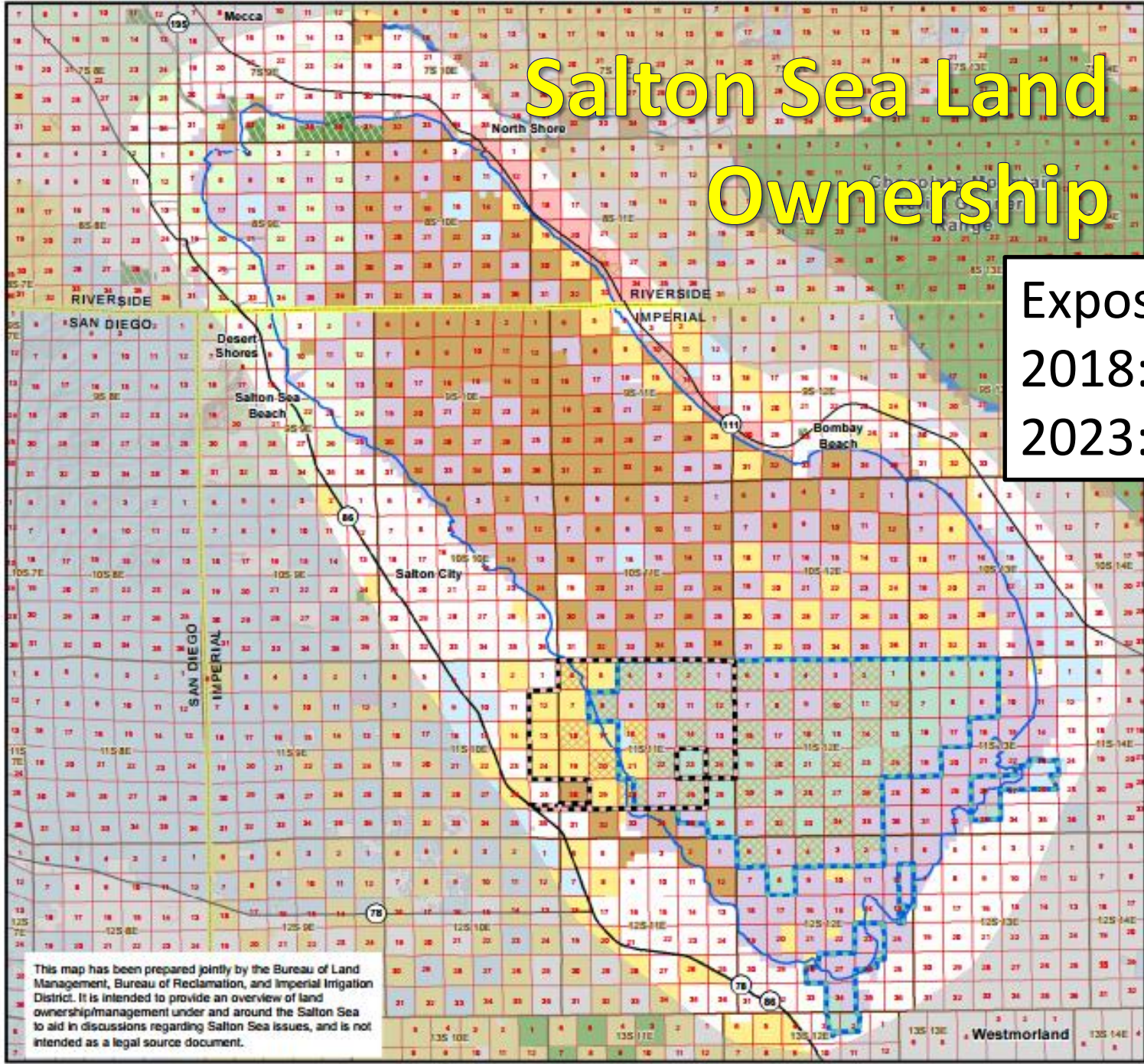
Motion carried 4-1

See Board minutes [here](#) and video [here](#).

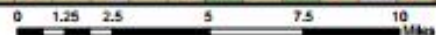


Salton Sea Land Ownership

Exposed Federal:
2018: 6190 acres
2023: 8880 acres



This map has been prepared jointly by the Bureau of Land Management, Bureau of Reclamation, and Imperial Irrigation District. It is intended to provide an overview of land ownership/management under and around the Salton Sea to aid in discussions regarding Salton Sea issues, and is not intended as a legal source document.





Cedric Gillette, Onepointfourphotography



THE BEATINGS
WILL CONTINUE
*UNTIL MORALE
IMPROVES!*



Mead Storage Opportunities

- IID under-runs – 60 KAF/yr
- Line East Highline Canal – 100 KAF/yr?
- Additional on-farm opportunities?
- Total of >200 KAF/yr??

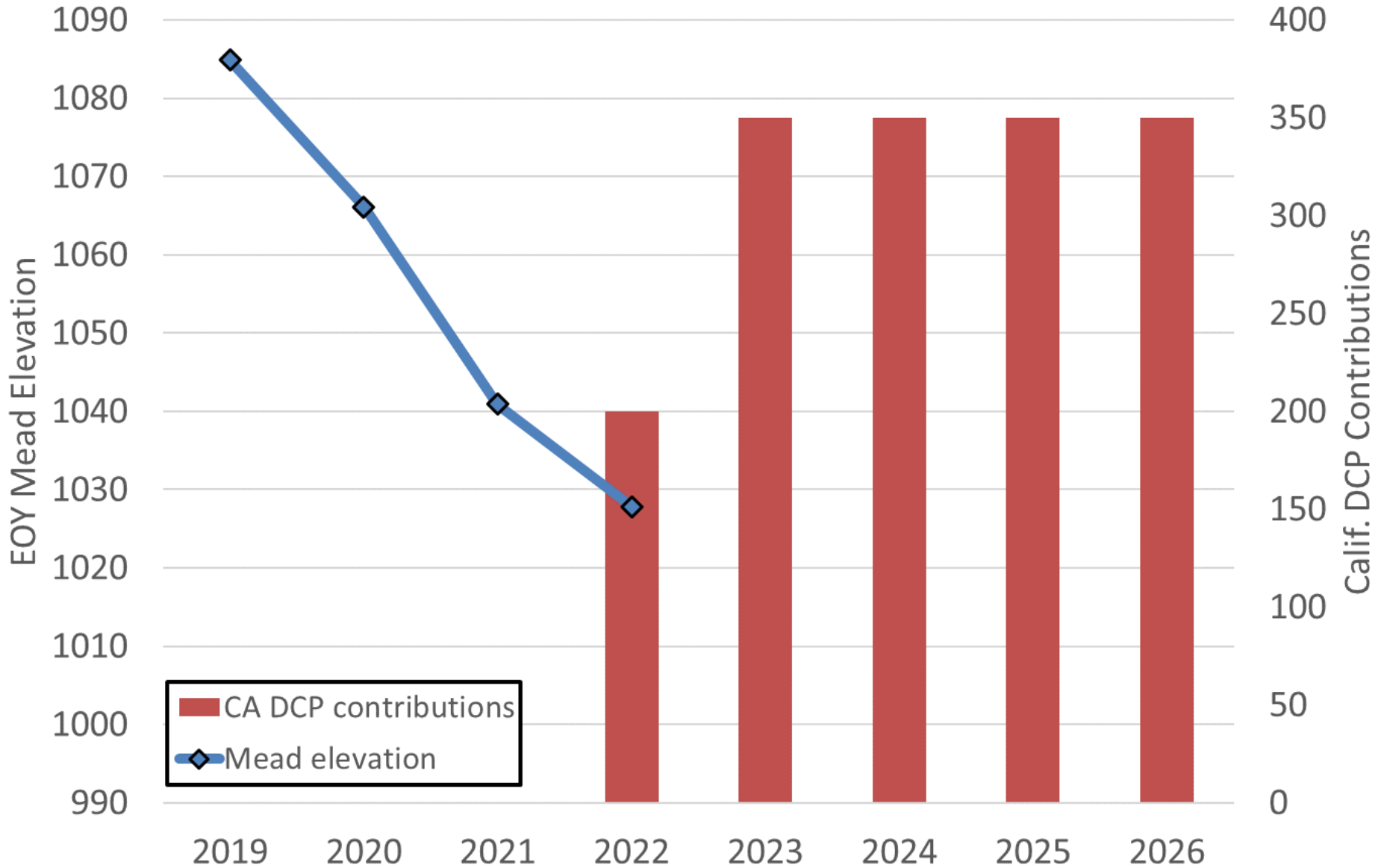
“Everybody’s issues are real”

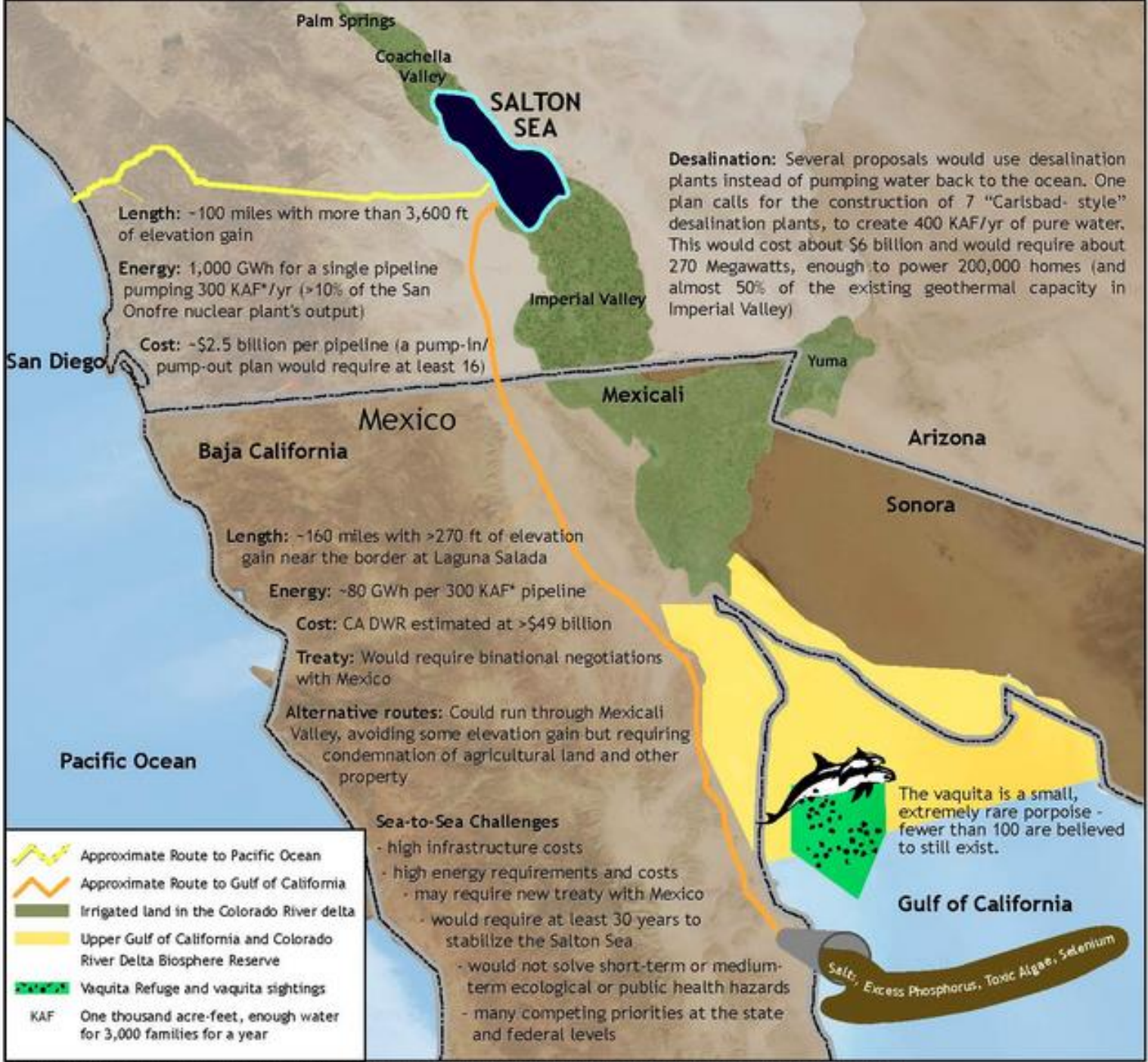


Learning Lessons

- **Milestones & conditions valuable**
- **Requires political will**
- **IG unlikely until relationships repaired**
- **IG 2.0 should have open process**

Black Swan Projection





Sources: Bureau of Reclamation, California Department of Water Resources, CH2M-Hill, USGS, TetraTech, various import/export proposals.



Further Reading

- resources.ca.gov/salton-sea/
- www.waterboards.ca.gov/waterrights/water_issues/programs/salton_sea/
- www.iid.com/water/salton-sea-initiative
- pacinst.org/issues/salton-sea/
- ca.audubon.org/conservation/birds-salton-sea
- www.usbr.gov/lc/region/programs/salton-sea.html