REVISED 4/26/2023

AGENDA: BOARD OF DIRECTORS MEETING

Salton Sea Authority

DATE: Thursday, April 27, 2023
10:00 a.m.

LOCATION: Coachella Valley Water District Board Room
Steve Robbins Administration Building
75515 Hovley Lane East
Palm Desert, CA 92260
(760) 398-2651

The following Salton Sea Authority Directors will be attending via video/teleconference from:

Director Yxstian Gutierrez
County Administrative Center
4080 Lemon Street
Conference Room C
Riverside, CA 92501
Ph: (951) 955-9500

Director V. Manuel Perez
Riverside County District 4 Office
73710 Fred Waring Drive
Suite 222
Palm Desert, CA 92260
Ph: (760) 863-8211

Director Alex Cardenas
CASA of Imperial County
229 South 8th Street
Suite B
El Centro, CA 92243
(760) 353-7456

The meeting can be viewed live at 10:00 a.m. on April 27. Please see the meeting login information at SaltonSea.com/meetings, *or access* www.zoom.us, *click "Join Meeting," and enter* ***Webinar ID*** **812 3614 5884** *and* ***Passcode 446431***.

I. CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

A copy of the agenda and supplemental materials will be available for viewing or download at: **saltonsea.com/meetings**

II. PUBLIC COMMENTS

This Public Comments time is reserved for comments on any agenda item that is not included under Section V or on matters not on the agenda.

Any member of the public may address the Board relating to any matter within the Authority's jurisdiction and are invited to speak to any ***Section V Item*** *listed in the agenda* ***at the time it is called; all other agenda items should be addressed during this***

***general public comment period**. California law prohibits members of the Board from taking action on matters not on the agenda.*

Remarks shall be limited to a maximum of three (3) minutes.

Public comments may be delivered verbally during the meeting.
Via Zoom: use Zoom's "raised hand" feature, or by phone press *9 to be acknowledged.
When you speak, state your name for the record prior to providing your comments. Please address the board, through the Chairman. You may also email your comments in advance to info@saltonsea.com (include in your subject line "Public Comment, 4/26/2023 SSA board meeting.") Hand-delivered comments should be placed in an envelope addressed to "Clerk of the Board, Salton Sea Authority," delivered to 82995 Highway 111, Suite 200, Indio, California, and left with the attending security officer by noon Wednesday, April 26, 2023. All written comments should include your name, address (addresses will be redacted), and whether it is for general public comment or a specific agenda item (number and topic). Comments received in writing, either by email or written, will be distributed to the Board, posted on the Salton Sea Authority website for public review and, if received before noon on Wednesday, April 26, will be acknowledged during public comments. Written comments will not be read aloud into the public record.

III. BOARD MEMBER COMMENTS

This is a time set aside for members of the Board to share their thoughts and concerns regarding general Authority matters not on the agenda, ask questions of staff, and request that items be added to the agenda at a later date.

The Brown Act expressly prohibits lengthy Board Member discussion of matters not on the agenda. The Board may at its discretion (by 4/5 vote) add items deemed to be an emergency to the agenda in order to engage in public discourse.

IV. ITEMS FOR BOARD DISCUSSION AND POSSIBLE ACTION

A. CONSENT CALENDAR – Approve, Receive, and File
   1. Minutes of Salton Sea Authority Board Meeting March 23, 2023
   2. Salton Sea Authority Warrant Register Ratification for 3/1/2023 – 3/31/2023
   3. Salton Sea Authority Internal Financial Report for: 7/1/2022 – 2/28/2023
   4. Financial Statement Analysis – Variance Report February 2023
   5. ACWA Region 9 Chair Nomination – G. Patrick O'Dowd

B. Supplemental Environmental Impact Statement (SEIS) for Near-term Colorado River Operations.

C. State Legislative Bill Packet Review
   1. Allen
      i. SB 867 – Resources and Resiliency General Obligation Bond

2. Garcia

    i. AB 1567 - Resources and Resiliency General Obligation Bond

    ii. AB 827 – Salton Sea Community Health Study

    iii. AB 1593 – California Workforce Development Board: Salton Sea Geothermal Resources Area: Equitable Access Program

    iv. AB 1569 – Salton Sea Geothermal Resource Area: Lithium valley Office of Development

    v. AB 1562 – Southeastern California Desert Economic Zone

3. Padilla

    i. SB 583 – Salton Sea Conservancy

D. Proposed 2023-2024 Budget - Discussion. Staff recommendation: Approve Budget as presented subject to each member finalizing ministerial, operational, or other actions or approvals.

E. Schedule of Future Board Meetings – Discuss and potentially take action to change dates and times to address various conflicts.

V. REPORTS

A. Federal

1. Federal Activities – Lisa Moore Lehman, Partner, Cultivating Conservation
2. US Bureau of Reclamation – Jeremy Brooks (No Report)

B. State

1. State Advocacy Report – Oracio Gonzalez, Principal, Ollin Strategies
2. State of California – Mr. Miguel Hernandez, Public Affairs Officer, California Natural Resources Agency
3. Salton Sea State Recreation Area Update on Activities – Steve Quartieri, District Superintendent, California State Parks – Report to be posted on the website

C. Local

1. Salton Sea Action Committee (SSAC) – Alan Pace, SSAC President

D. Executive Director's Report and Comments

1. G. Patrick O'Dowd, Executive Director/GM, Salton Sea Authority

VI. ADJOURNMENT

NEXT MEETING TIME & LOCATION:
The Salton Sea Authority board meeting will be held:
Thursday, May 25, 2023, at 10:00 a.m.

County of Imperial Board of Supervisors Chamber
County Administration Center
940 West Main Street, Suite 211
El Centro, CA 92243

(442) 265-1020

Salton Sea Authority

OFFICIAL PROCEEDINGS
SALTON SEA AUTHORITY
BOARD OF DIRECTORS MEETING
March 23, 2023

I. CALL TO ORDER

The regularly scheduled meeting of the Salton Sea Authority ("Authority") Board of Directors ("Board") was called to order by Luis A. Plancarte, President, at 10:05 a.m., March 23, 2023, at Imperial County BOS Chamber, and via Zoom Webinar.

PLEDGE OF ALLEGIANCE Led by Director Dockstader

DIRECTORS PRESENT ON SITE	AGENCY
Luis A. Plancarte, President	Imperial County
Ryan Kelley, Director	Imperial County
Alex Cárdenas, Treasurer	Imperial Irrigation District
Gina N. Dockstader, Director	Imperial Irrigation District
John Aguilar, Director	Coachella Valley Water District

DIRECTORS PRESENT VIA ZOOM	AGENCY
Altrena Santillanes, Vice President	Torres Martinez Desert Cahuilla Indians
Thomas Tortez, Director	Torres Martinez Desert Cahuilla Indians
V. Manuel Perez, Director	County of Riverside
Yxstian Gutierrez, Director	County of Riverside

DIRECTORS ABSENT	AGENCY
Cástulo R. Estrada, Secretary	Coachella Valley Water District

SALTON SEA AUTHORITY STAFF PRESENT

G. Patrick O'Dowd, Executive Director/GM (in person)
Carlos Campos, Best Best & Krieger, Legal Counsel (In Person)
Bob Hargreaves, Best Best & Krieger, Legal Counsel (Via Zoom)

MEMBERS OF THE PUBLIC PRESENT

On Site: Miguel Hernandez, Public Affairs Officer, CNRA, Luis Olmedo, Executive Director Executive Director Comite Civico del Valle, Inc. Monika Galvez-Lua, Adonis Galarza, Alma Sanchez, Alondra Lara, David Villarino, Lillian Garcia, L. Sierra and Thomas Brinkerhoff.

Via Zoom: Jasmyn Phillips, Nathan White, Tom Sephton and 41 others.

I. PUBLIC COMMENTS

Comments made in person by: Monika Galvez-Lua, Adonis Galarza, Alma Sanchez, Alondra Lara, David Villarino, Lillian Garcia, Luis Olmedo , Executive Director Executive Director Comite Civico del Valle, Inc.

Via Zoom: Jasmyn Phillips, Nathan White, Tom Sephton, Jose Barrera, Alex Zamora, Jose Garcia, Juan Serrato and Steven Belhumeur.

III. BOARD MEMBER COMMENTS

Treasurer Cardenas, Directors Aguilar, Dockstader, Tortez and Perez shared their comments.

IV. SPECIAL PRESENTATION

A. Current research regarding microbial toxins at the Salton Sea and recommendation for an effective epidemiological study. – Dr. David Lo, Senior Associate Dean for Research at the University of California, Riverside School of Medicine, and a Distinguished Professor in the Division of Biomedical Sciences presented research and findings regarding health impacts to changes at the Sea. [Dr. Lo's full presentation can be viewed online at Saltonsea.com (click here). Presentation begins at 28:50]

V. ITEMS FOR BOARD DISCUSSION AND POSSIBLE ACTION

A. *CONSENT CALENDAR – Approve, Receive, and File*

1. Minutes of Salton Sea Authority Board Meeting March 23, 2023
2. Salton Sea Authority Warrant Register Ratification for 2/1/2023 - 2/28/2023
3. Salton Sea Authority Internal Financial Report for: 1/1/2023 – 1/31/2023
4. Final executed "Agreement for the provision of non-tributary water to the Salton Sea Authority and Torres Martinez Desert Cahuilla Indians through a public private partnership" – Acknowledge, Receive, and File

On motion by Perez and second by Cardenas, *The Board* ***approved*** *the Consent Calendar to be received and filed.* ***Unanimously approved by the following vote:***

AYES: *Directors Plancarte, Tortez, Aguilar, Cardenas and Perez*
ABSENT: *Directors Estrada and Gutierrez*
ABSTAINED: *Directors Kelley, Santillanes and Dockstader*
MOTION PASSED

B. Guiding Documents – Review of Salton Sea Authority organizing documents (as amended) and legislation which informs and directs the work of the Authority – G. Patrick O'Dowd, Executive Director/General Manager

G. Patrick O'Dowd opened the conversation. Treasurer Cardenas and Directors Perez commented.

C. Oversight and Analysis – Discussion regarding proper role of Authority in assessing and mitigating risks to public health and economic impacts associated with changing conditions at the Salton Sea.

G. Patrick O'Dowd opened the conversation Treasurer Cardenas, Director Aguilar and Lisa Moore commented.

VI. REPORTS

A. Federal

1. Federal Activities
   Lisa Moore Lehman, Partner, Cultivating Conservation provided a written report on Federal Matters.
2. US Bureau of Reclamation – Jeremy Brooks provided an update.

B. State

1. State Advocacy Report
   Oracio Gonzalez, Principal, Ollin Strategies provided a written report on State Matters.
2. State of California

   Mr. Miguel Hernandez, Public Affairs Officer, California Natural Resources Agency provided an update on the newly appointed Assistant Secretary, Samantha Arthur for Salton Sea Policy at the CNRA.
3. Salton Sea State Recreation Area Update on Activities
   Steve Quartieri, District Superintendent, California State Parks provided an update of activities and visitors at the State Park.

C. Local

1. Salton Sea Action Committee (SSAC) Alan Pace, SSAC President – No Report

D. Executive Director's Report and Comments

VII. ADJOURNMENT

Board President Plancarte adjourned the meeting at 12:11 p.m.

NEXT BOARD MEETING TIME & LOCATION:

The regularly-scheduled meeting will be held
Thursday, April 27, 2023, at 10:00 a.m.
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92260
(760) 398-2651

Salton Sea Authority
Checking Account Activity
March 1, 2023 through March 31, 2023

Date	Number	Vendor Name	Description	Amount
03/13/2023	EFT	Pacific Western Bank	Credit card charges	(1,116.96)
03/23/2023	EFT	Pacific Western Bank	Credit card charges	(201.07)
03/15/2023	EFT	Pacific Western Bank	Positive pay fee	(35.00)
03/23/2023	EFT	Verizon Wireless	Monthly phone charges	(143.75)
03/22/2023	1428	SystemGo IT LLC	Monthly computer support	(679.00)
03/22/2023	1429	Ollin Strategies	Monthly contract charges	(7,000.00)
03/22/2023	1430	G. Patrick O'Dowd	Expense reimbursement	(278.38)
03/22/2023	1431	Kounkuey Design Initiative, Inc.	Community outreach consulting contract	(40,500.00)
03/22/2023	1432	Cultivating Conservation	Monthly contract charges	(7,300.00)
03/22/2023	1433	Coachella Valley Water District	Board meeting recording fee	(600.00)
03/22/2023	1434	Best, Best & Krieger	Monthly legal expenses	(1,458.20)
03/31/2023	1395	G. Patrick O'Dowd	Void misplaced check and reissue in April	888.75
03/31/2023	1396	G. Patrick O'Dowd	Void misplaced check and reissue in April	330.00
03/17/2023	Deposit	Salton Sea Action Committee	Well event lunch sponsorship	685.80

Beginning Cash Balance	**$**	**175,674.59**
Monthly Activity		**(57,407.81)**
Ending Cash Balance	**$**	**118,266.78**

Salton Sea Authority
Budget to Actual
General Fund (Unaudited)
For the Period July 1, 2022 through February 28, 2023

		A	B	C	D	C / D	C - D
		January 2023	February 2023	YTD	Budget FY 23	YTD Target 67%	$ Variance
1	**REVENUE**						
2	Local Government / Member Assessments	$ -	$ -	$ 810,000	$ 800,000	101%	$ 10,000
3	Other Federal / State / Local Reimbursements	-	-	360	250,000	0%	(249,640)
4	Grant Reimbursements to General Fund	-	-	27,291	110,000	25%	(82,709)
5	**TOTAL REVENUE**	-	-	837,651	1,160,000	72%	(322,349)
6	**EXPENSES**						
7	**SSA Administration**						
8	Salaries & Benefits						
9	Total Salaries	9,818	30,258	165,205	270,600	61%	(105,395)
10	Total Employee Benefits	6,364	18,212	98,205	135,300	73%	(37,095)
11	Total Salaries & Benefits	16,183	48,470	263,410	405,900	65%	(142,490)
12	Contract / Professional Services						
13	DC Advocates	7,350	7,300	60,507	88,200	69%	(27,693)
14	Sacramento Advocates	7,000	7,000	56,000	84,000	67%	(28,000)
15	Grant Administration	7,968	1,195	55,920	100,000	56%	(44,080)
16	Community Outreach Initiative	28,833	11,667	55,500	-	N/A	55,500
17	Attorney Fees	5,072	1,458	32,737	50,000	65%	(17,263)
18	Audit & Accounting	7,174	3,283	46,371	75,000	62%	(28,629)
19	Total Contract / Professional Services	63,397	31,903	307,035	397,200	77%	(90,165)
20	Equipment / IT Maintenance	679	679	5,845	8,700	67%	(2,856)
21	Technical Support	-	-	1,200	-	N/A	1,200
22	Insurance	877	977	7,119	10,500	68%	(3,381)
23	Office Expense/Operating Supplies	1,983	(649)	8,404	8,300	101%	104
24	Office Expense/Online Services	375	436	2,375	3,300	72%	(925)
25	Dues, Subscriptions	1,603	698	6,513	14,200	46%	(7,687)
26	Travel/Mileage	2,470	1,433	19,653	40,000	49%	(20,347)
27	**TOTAL EXPENSES**	87,568	83,948	621,554	888,100	70%	(266,546)
28	**NET INCOME / (LOSS)**	**$ (87,568)**	**$ (83,948)**	**$ 216,097**	**$ 271,900**	**79%**	**$ (55,803)**

*No assurance is provided on these financial statements. The financial statements do not include a statement of cash flows. Substantially all disclosures required by accounting principles generally accepted in the U.S. are not included.

Salton Sea Authority
Budget to Actual
DWR - Proposition 68 Grant (Unaudited)
For the Period July 1, 2022 through February 28, 2023

		A	B	C	D	C / D	C - D
		January 2023	February 2023	YTD	Budget FY 23	YTD Target 67%	$ Variance
1	**REVENUE**						
2	State of California Grant (Prop 68)	$ -	$ -	$ 37,926	$ 2,200,000	2%	$ (2,162,074)
3	**TOTAL REVENUE**	-	-	37,926	2,200,000	2%	$ (2,162,074)
4	**EXPENSES**						
5	Salton Sea Authority Salaries	-	-	17,011	110,000	15%	(92,989)
6	Riverside County Salaries	-	-	2,803	-	0%	2,803
7	Contractors	-	-	17,568	2,090,000	1%	(2,072,432)
8	Audit & Accounting	-	-	544	-	N/A	544
9	**TOTAL EXPENSES**	-	-	37,926	2,200,000	2%	(2,162,074)
10	**NET INCOME / (LOSS)**	$ -	$ -	$ -	$ -		$ -

*No assurance is provided on these financial statements. The financial statements do not include a statement of cash flows. Substantially all disclosures required by accounting principles generally accepted in the U.S. are not included.

Salton Sea Authority
Budget to Actual
BOR -DSR (Unaudited)
For the Period July 1, 2022 through February 28, 2023

		A	B	C	D	C / D	C - D
		January 2023	February 2023	YTD	Budget FY 23	YTD Target 67%	$ Variance
1	**REVENUE**						
2	Bureau of Reclamation Grant	$ -	$ -	$ 18,312	$ -	N/A	$ 18,312
3	**TOTAL REVENUE**	-	-	18,312	-	N/A	$ 18,312
4	**EXPENSES**						
5	Salton Sea Authority Salaries	-	-	7,058	-	N/A	7,058
6	Contractors	-	-	8,577	-	N/A	8,577
7	Legal Expenses	-	-	2,677	-	N/A	2,677
8	**TOTAL EXPENSES**	-	-	18,312	-	N/A	18,312
9	**NET INCOME / (LOSS)**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**

*No assurance is provided on these financial statements. The financial statements do not include a statement of cash flows. Substantially all disclosures required by accounting principles generally accepted in the U.S. are not included.

Salton Sea Authority
Balance Sheet
(Unaudited)
As of February 28, 2023

		TOTAL
1	**ASSETS**	
2	Checking/Savings	$ 112,403
3	Other Current Assets	
4	Prepaid Items	7,568
5	Grant Receivable	52,563
6	Total Other Current Assets	60,131
7	**TOTAL ASSETS**	**172,535**
8	**LIABILITIES & FUND BALANCE**	
9	**Liabilities**	
10	Accounts Payable	53,966
11	Credit Cards	1,330
12	Other Current Liabilities	
13	Due to Imperial County	193
14	Due to Rivco- DWR	33,051
15	Accrued Vacation	39,316
16	Total Other Current Liabilities	72,559
17	**Total Liabilities**	127,855
18	**Fund Balance**	44,680
19	**TOTAL LIABILITIES & FUND BALANCE**	**$ 172,535**

*No assurance is provided on these financial statements. The financial statements do not include a statement of cash flows. Substantially all disclosures required by accounting principles generally accepted in the U.S. are not included.

Salton Sea Authority

Financial Statement Analysis

February 2023 – 67% of the Fiscal Year

Unaudited

General Fund

Line 2 Local Government / Member Assessments: Member agency contributions, paid in full at the beginning of the year.

Line 3 Other Federal / State / Local Reimbursements: Potential support on behalf of the tribes and other funding sources.

Line 4 Grant Reimbursements to General Fund: Reimbursement for administrative costs related to the Proposition 68 grant and the Bureau of Reclamation grant for the Desert Shores Revitalization, invoiced quarterly. YTD is trending under budget at 25%.

Line 10 Total Salaries: Employee salary expenses for the General Manager and support staff; YTD is trending under budget at 61% and will continue to be under budget due to the elimination of one staff position in February.

Line 11 Total Employee Benefits: Employee benefits expenses for the General Manager and support staff; YTD is trending over budget at 73% due to higher retirement costs than budgeted.

Line 14 DC Advocates: Cultivating Conservation. YTD is in line with budget.

Line 15 Sacramento Advocates: Ollin Strategies. YTD is in line with budget.

Line 16 Grant Administration: Grant administration expenses. YTD is trending under budget at 56% and will end under budget due to contract consulting services that ended in February.

Line 17 Community Outreach Initiative: Kounkuey Design Initiative, Inc. This line, not originally budgeted, is funded by a grant through the California Department of Natural Resources.

Line 18 Attorney Fees: Legal fees for general matters and federal funding. YTD is in line with budget.

Line 19 Audit/Accounting: Accounting / consulting services and annual audit costs. YTD is trending under budget at 62%.

Line 21 Equipment/IT Maintenance: Monthly IT services from SystemGO IT. YTD is in line with budget.

Line 22 Technical Support: Board Meeting recordings that were not budgeted.

Line 23 Insurance: Property/liability insurance and workers' compensation. YTD is in line with budget.

Line 24 Office Expense / Operating Supplies: General office supply purchases. YTD is trending over budget due to monthly personnel charges from the county and expenses incurred for the Feasibility Study signing ceremony not anticipated in the budget.

Line 25 Office Expense / Online Services: Office expenses for online services including: Zoom, Start Meeting, IVPress, Constant Contract, Adobe, and DocuSign. YTD is trending over budget at 72% due to the timing of software renewals.

Line 26 Dues, Subscriptions: Annual membership dues for ACWA, CSDA, NWRA and CalDesal. YTD is trending under budget at 46% due to non-renewal of the Caldesal membership.

Line 27 Travel/Mileage: Travel, mileage, and staff meeting expenses. YTD is trending under budget at 49%.

Proposition 68 Grant

Line 2 State of California Grant (Prop 68): Grant revenue of up to $19.25M to fund capital outlay projects that provide air quality and habitat benefits and that implement the Natural Resources Agency's Salton Sea Management Program. Invoices are submitted quarterly. YTD is 2%.

Lines 5-7 Expenses: Reimbursements to the Salton Sea Authority for administrative costs and to Riverside County for salaries and contractors for work related to the Proposition 68 grant. Invoices are submitted quarterly. YTD is 2%.

Bureau of Reclamation – Desert Shores Revitalization Grant

Line 2 Bureau of Reclamation Grant: Grant revenue of up to $1.25M for activities related to the Desert Shores Revitalization project to restore habitat and improve air and water quality at the Salton Sea. Invoices are submitted quarterly. This grant was not budgeted.

Lines 5-7 Expenses: Reimbursements to the Salton Sea Authority for administrative and legal costs and to Imperial County for salaries and contractors, related to the revenue in Line 2. This grant was not budgeted.

Salton Sea Authority

Memorandum

To: Salton Sea Authority Board of Directors

From: G. Patrick O'Dowd, Executive Director/GM

Date: April 27, 2023

Re: **Consider Nomination of SSA Representative for ACWA Region 9 Board Chair**

BACKGROUND:

Salton Sea Authority's Guiding Principles for Legislative Action adopted by the SSA Board of Directors calls for action to "ASSERT LOCAL LEADERSHIP" wherever feasible to advance the shared interests of the SSA and its partner agencies in revitalizing the Salton Sea. In addition, the Salton Sea is an issue that is certainly impactful on the region and the water agencies that share its watershed or rely upon Colorado River water.

The SSA is a member in good standing with California's largest water advocacy organization, Association of California Water Agencies (ACWA).

SSA's Executive Director/GM, G. Patrick O'Dowd, is a member of the ACWA Board of Directors, currently serving as Vice Chair for Region 9 (Riverside, Imperial, and San Bernardino Counties) and an active member of ACWA's statewide Board for the past eight years. Region 9 rotates Chair and Vice Chair between the Arid and Inland regions, and O'Dowd is now eligible for consideration as ACWA's Region 9 Chair.

RECOMMENDATION:

The Salton Sea Authority Staff recommends that the Salton Sea Authority Board approve Resolution No. 23-04 nominating the SSA Executive Director/GM to serve on the ACWA Region 9 Board as its Chairperson.

Respectfully submitted,

G. Patrick O'Dowd
Executive Director/GM

SALTON SEA AUTHORITY
RESOLUTION NO. 23-04

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SALTON SEA AUTHORITY PLACING IN NOMINATION G. PATRICK O'DOWD AS CHAIR OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES REGION 9 BOARD OF DIRECTORS

BE IT RESOLVED by the Board of Directors (Board) of the Salton Sea Authority (Authority), assembled in regular meeting this 27th day of April, 2023, as follows:

A. Recitals

(i) Whereas, The Board of the Authority does encourage and support the participation of its members in the affairs of the Association of California Water Agencies (ACWA);

(ii) Whereas, The Board of the Authority has adopted Guiding Principles urging its staff and member agencies to "Assert Local Leadership" where feasible to advance the shared objectives of revitalizing the Salton Sea;

(iii) Whereas, the Authority is a member in good standing with ACWA and;

(iv) Whereas, Authority Executive Director G. Patrick O'Dowd is currently serving as the Vice Chair for ACWA Region 9 Board of Directors and has indicated a desire and willingness to continue in service to ACWA Region 9;

B. Resolves

NOW, THEREFORE, BE IT RESOLVED THAT THE BOARD OF DIRECTORS OF THE SALTON SEA AUTHORITY

(i) Does place its full and unreserved support in the nomination of G. Patrick O'Dowd for the Board of ACWA Region 9 Chair.

(ii) Does hereby determine that the expenses attendant with G. Patrick O'Dowd in the service of ACWA Region 9 shall be borne by the Salton Sea Authority

Adopted and approved this 27th day of April 2023.

_____
Luis A. Plancarte, President
Salton Sea Authority

ATTEST:

STATE OF CALIFORNIA)
) ss.
SALTON SEA AUTHORITY)

I, CASTULO R. ESTRADA, Secretary to the Salton Sea Authority, a Joint Powers Agency of the State of California, do hereby attest that the foregoing is a true and correct copy of Resolution No. 23-04 adopted by the Board of Directors of said Salton Sea Authority at a regular meeting thereof duly held and convened on the 27th day of April 27, 2023, at which meeting a quorum of said Board was present and acting throughout.

Dated this 27th day of April 2023.

_____
Secretary
Salton Sea Authority

Salton Sea Authority

Memorandum

To: Salton Sea Authority Board of Directors

From: G. Patrick O'Dowd, Executive Director /GM

Date: April 27, 2023

Re: Supplemental Environmental Impact Statement and Salton Sea Impacts

On Tuesday, April 11th, the Bureau of Reclamation (Reclamation) released a draft Supplemental Impact Statement for Near-term Colorado River Operations (SEIS). That document was prepared to address impacts from various alternatives being considered by the Bureau to address increasing operational risk on the Colorado River. We have been provided by Ms. Lisa Moore of Cultivating Conservation a preliminary overview of that SEIS, which is included in your board packet. The SEIS is now subject to a 45-day public comment period.

In summary, and as we were informed by Ms. Jaci Gould of Reclamation at the January meeting of this Board, environmental and public health impacts to the Salton Sea and associated regional impacts are unaddressed in the SEIS. And while the State and Reclamation under the current negotiations (as contemplated by the Commitment Agreement) are working to implement a program to create 250,000 acre foot of conserved water for the benefit of the basin, the apparent preferred alternative in the SEIS would likely require far greater sacrifice.

We were also recently provided by the State a copy of an analysis titled "Updating the US Bureau of Reclamation's Salton Sea Spreadsheet Model (SSAM) for Future Inflow Scenarios" which evaluates the physical impacts to the Sea from conservation measures that could yield 250,000 acre feet of water for benefit of the Colorado River. The model as presented demonstrates the same results as have been anecdotally shared with the Authority and discussed in some detail by staff at this Board's February gathering. However, in addition to the analytical concerns raised in that February memo, a cursory scan of the document reveals that the word urban is used once, to refer to runoff in the New River (pollution), and words such as community, human, health, and safety are nowhere to be found therein.

The Board was previously informed of our efforts to seek funding from Reclamation to conduct an independent review of the State's analysis for the benefit of the community, and that we were instructed by Reclamation in at a meeting in Washington, DC

February to elevate this request to what is now referred to as the "Salton Sea Coordinating Committee". The request was formally made at a meeting of that committee on Tuesday, April 25th, where we were advised that the State would be providing "appropriate indemnifications" and securing the necessary "environmental coverages" to facilitate the objectives of the Commitments Agreement, but that due to the urgency of this action the State was not inclined to commit to an independent study of the impacts, including impacts that might flow from the SEIS. Nonetheless, and to be fair, Secretary Crowfoot did agree to further these discussions offline. We believe that the State is sincere in its efforts to appropriately evaluate the risks to our community from these actions. But is that good enough?

Staff recommends that the board provide the following direction:

1. Prepare and submit comments consistent with Ms. Moore's memo highlighting the concerns therein and others that a closer review might identify;

2. Continue to pursue state and federal funding for an independent assessment of impacts to the Sea our communities from potential conservation measures as contemplated by the SEIS, the Commitment Agreement, and in anticipation of future actions for the Colorado River and its water users that might impact the Salton Sea and region.

Updating the US Bureau of Reclamation's Salton Sea Spreadsheet Model (SSAM) for Future Inflow Scenarios

Prepared by: Tetra Tech

April 6, 2023

Introduction

The Salton Sea is a terminal lake in Riverside and Imperial Counties, California, receiving runoff from Imperial Valley and Coachella Valley watersheds, including runoff from exports originating in the Colorado River basin. Over the past decades, the Sea's water level has been declining, and it has been the subject of various modeling efforts to quantify the decline, assess the resulting environmental impacts, and evaluate various mitigation and conservation efforts.

The US Bureau of Reclamation performed studies in the 1990s and early 2000s with a spreadsheet model called the Salton Sea Accounting Model (SSAM) [1]. SSAM operates under a simple mass balance for the Sea's water and salt on an annual timestep, assuming the Sea is uniformly mixed on that timescale relative to the mass balance terms. A projected hydrology for the major inflows to the Sea is applied, together with (salinity-dependent) evaporation and direct precipitation terms. The mass balance determines the change in volume at each timestep, and the Sea's total volume is simulated for the duration of the projected hydrology. An elevation-area-capacity (EAC) curve derived from Sea bathymetric survey data allows for a singular relationship between the Sea's volume, surface area, and surface elevation.

Another modeling effort called SALSA2 was developed by CH2M Hill and IID in 2018 [2]. The model used a commercial software platform called Goldsim for its development. The basic form of the SALSA2 model is conceptually similar to the SSAM, treating the Sea as a single storage reservoir and using conservation of salt and water mass to drive the model state. The GoldSim framework runs an explicit Monte Carlo approach for uncertainty in projected inflows to produce many separate model traces for future projections. This model also contains implementations of conservation efforts that were not present in the original SSAM model, such simulating water use for shallow water habitat and exposed playa mitigation. A graphical user interface is exposed that allows for some aspects of the simulation to be modified, but key model inputs such as inflows are hard-coded into the GoldSim modeling files and not able to be modified by the end user.

Starting in the mid-2010s, Tetra Tech began updating the SSAM model to incorporate the latest available hydrological data, bathymetry data [3], and add new features to simulate modern conservation efforts that are either being considered or are currently underway, such as the

Salton Sea Long Range Plan (LRP) concepts [4] or Salton Sea Management Program Phase 1 projects. This updated SSAM model was used in 2022 and 2023 to estimate the net impacts of short-term allocation reductions on key Sea conservation metrics such as salinity and exposed playa area. This document describes the foundations of the model's important components and input datasets.

Model Hydrology

The Salton Basin is the northern arm of the former Colorado River delta system. Agricultural return flows and drainage from these valleys and parts of the Mexicali Valley, in addition to municipal and industrial discharges in the watershed, feed the major rivers flowing to the Salton Sea. The Salton Sea watershed encompasses an area of approximately 8,000 square miles from San Bernardino County in the north to the Mexicali Valley (Republic of Mexico) to the south.

The principal sources of inflow to the Salton Sea are the Whitewater River to the north (also known as the Coachella Valley Stormwater Channel [CVSC]), the Alamo and New Rivers to the south, and direct return flows from agricultural drains in the Imperial Valley and Coachella Valley. The riverine sources of inflow are recorded by United States Geological Survey (USGS) gage stations situated at the river mouths, with observations dating back to at least 1988.

The Whitewater River (CVSC) is the primary river drainage channel of CVWD. It brings stormwater runoff, agricultural return flows, and municipal and fish farm discharges from the Coachella Valley to the Salton Sea. In the last few years, flows recorded by the Whitewater River USGS gage (USGS Station ID: 10259540) have been less than 50,000 AF/year.

The Alamo River originates approximately two miles south of the International Border with Mexico and flows north and into the Salton Sea. The USGS station that records Alamo River inflows into the Salton Sea is located near this point of discharge into the Sea (USGS Station ID: 10254730). The Alamo River is dominated by agricultural return flows from IID. In recent years, this flow has averaged 560,000 AF/year.

The New River also originates in Mexico. It travels through the Mexicali Valley, crosses the International Border, and flows into the Salton Sea. The New River carries urban runoff, industrial and municipal flows, and agricultural runoff from the Mexicali Valley. There are two USGS gages along the New River. One is in the Imperial Valley, near the mouth of the river at the Salton Sea (USGS Station ID: 10255550). The other is at the International Border (USGS Station ID: 10254970). Since 2018, flows at the New River (Imperial Valley) station have been consistently less than 350,000 AF/year. Flows at the New River (International Border) station have remained stable between 60,000 AF/year and 64,000 AF/year in the same timeframe.

Other outflows to the Salton Sea include a system of agricultural drains in the Imperial Valley, which discharge surface runoff into the Alamo and New Rivers, and agricultural drains in the Coachella Valley.

The agricultural drains in the Imperial Valley introduce approximately 830,000 AF/year of surface runoff to the Alamo and New Rivers.

The relationship between these flows, the Salton Sea, and the IID and CVWD watersheds are illustrated in Figure 1. Other losses are from IID and CVWD watershed evapotranspiration (ET)

and evaporation out of the Salton Sea. Other inflows include precipitation, local watershed, and groundwater inflows into the Sea. The ungaged flows (italicized in Figure 1) can be estimated by using the reported irrigated acreage and ET rates in the valleys and local weather data that are available for Imperial County, California.

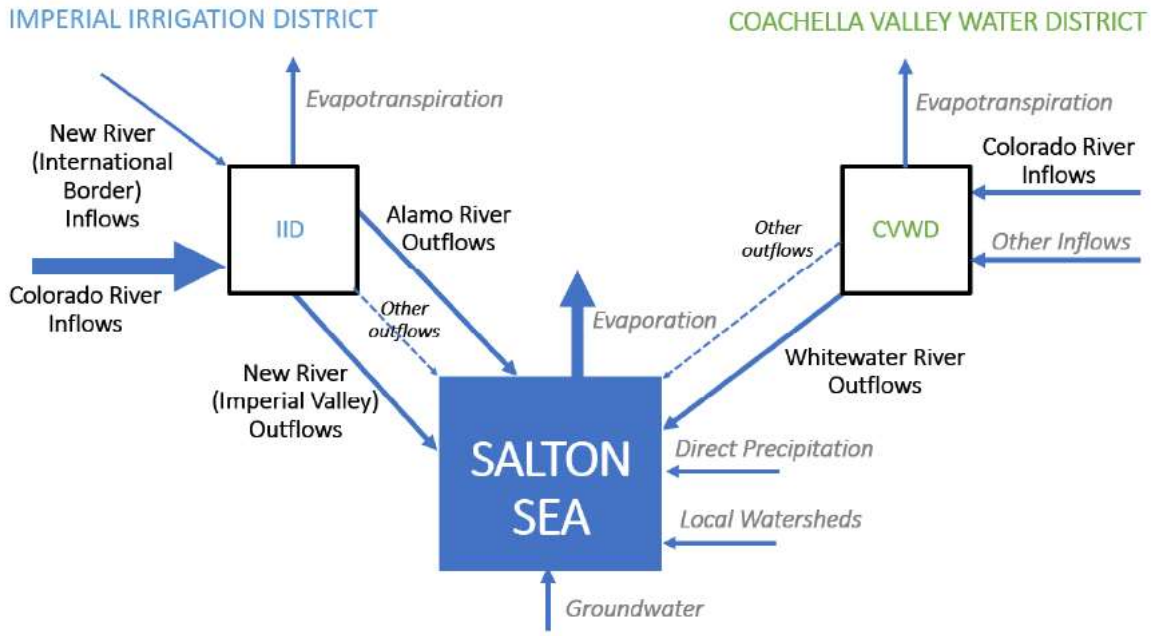

Figure 1. Flows into and out of the Imperial Irrigation District (IID), the Coachella Valley Water District (CVWD), and the Salton Sea. Flows that are italicized are ungaged but can be estimated.

Table 1. Recent historical inflows, compared to the SALSA2-predicted inflows (units: AF).

Year	Imperial Valley Flow Gaged (1)	Imperial Valley Estimated Ungaged (2)	Mexico Flows (3)	CVSC Gaged (4)	Coachella Valley Drain Flow (5)	Local Watershed (6)	Ground-water (7)	Total Inflow to Sea (8)	Mean SALSA2 Inflow, Low Uncertainty	Mean SALSA2 Inflow, Moderate Uncertainty
2015	885,643	79,708	75,252	42,980	27,779	4,279	11,000	1,127,000	--	--
2016	902,053	81,185	69,562	46,643	33,325	4,425	11,500	1,149,000	--	--
2017	864,193	77,777	68,548	45,730	31,528	4,729	11,800	1,104,000	--	--
2018	837,531	75,378	60,509	44,971	29,779	4,748	12,200	1,065,000	934,000	907,000
2019	810,277	72,925	63,926	52,324	27,359	4,964	12,300	1,044,000	917,000	871,000
2020	817,934	73,614	63,332	51,154	30,350	4,927	12,300	1,054,000	906,000	834,000
2021	856,862	77,118	61,866	46,548	34,172	4,710	12,300	1,094,000	905,000	808,000
AVG 2015-2021	**853,000**	**76,800**	**66,100**	**47,200**	**30,600**	**4,680**	**11,900**	**1,090,000**	-	-

Future Hydrology: Delivery allocations and climate change

The development of future inflow to the Sea is centered around determining how much the total freshwater inflow may change due to effects of climate change, including basin-wide ET changes for the areas producing the Sea's runoff, as well as any hypothetical changes to Colorado River water allocations, which make up the majority of Salton Sea inflows.

Long-term Colorado River allocations to Imperial Valley were made by considering the output of the Colorado River Simulation System (CRSS) model, which is used by USBR to provide long-term projections at the Colorado River basin.

On October 5, 2022, California users of Colorado River water released a statement proposing to conserve 400,000 AF of water each year from 2023 to 2026 to contribute towards stabilizing elevations in Lake Mead.[1] IID pledged to cut 250,000 AFY, an amount contingent on federal funding and voluntary participation of water users.[2] Other California users of Colorado River water that signed the statement were the Metropolitan Water District, CVWD, and the Palo Verde Irrigation District. This amount forms the basis for the short-term (2023-2026) inflow reductions considered here, with two different total amounts based on the specific implementation of the reduction:

[1] http://crb.ca.gov/2022/10/california-water-agencies-pledge-to-conserve-additional-water-to-stabilize-the-colorado-river-basin/
[2] https://calmatters.org/environment/2022/10/california-colorado-river-water/

- Fallowing conservation program
- Hybrid conservation program (50 TAFY efficiency and 200 TAFY fallowing)

Based on a review of records over the past 5 years, the fallowing effect represents a 35.7% loss to the Sea, derived from the fraction of Salton Sea inflow compared to Colorado River water supply to IID.

CVWD suggested using delivery reductions of 25 TAFY (10% of inflow reduction to IID). The reduction would be achieved through voluntary Colorado River Water Conservation Program up to 10 TAFY. Average return flows to drains are 20%, so the maximum potential reduction in flows to Salton Sea over the four-year period would be approximately 2,000 AFY. The remainder and any amount that cannot be achieved by the Colorado River Water Conservation Program would be achieved by reducing recharge at CVWD groundwater recharge facilities, which would have no impact to flows to the Salton Sea for the four-year period. The impact on flows to the Salton Sea from Coachella Valley will be small, and therefore are not included in the modeling. See Figure 2 for an illustration of the different short-term reduction scenarios of flow to IID.

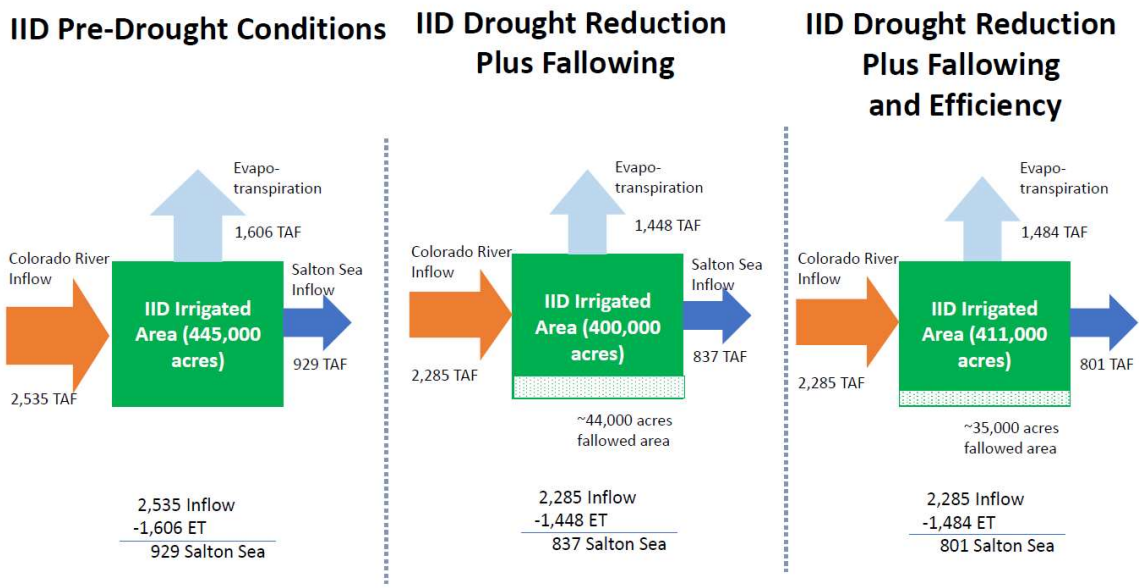

Figure 2. Schematic of effects of Colorado River allocations on IID inflow to Sea.

Projections of future IID water delivery were produced using the Colorado River Simulation System (CRSS) model developed by the US Bureau of Reclamation. The CRSS model was developed and is used by Reclamation to provide long-term projections at the Colorado River Basin (Reclamation, 2012 [4]). The June 2021 version of the CRSS model was obtained from Wheeler et al. (2022) [5] and was provided with the initial conditions in June 2021. Future water demands as the "2016 demands" (2016 Upper Colorado River Commission Schedule for the Upper Division States; and 2007 Final Environmental Impact Statement for the Colorado River Interim Guidelines with the update on Nevada demand in 2019 for the Lower Division States)

provided in the CRSS June 2021 version (Wheeler et al. 2022 [5]) were used. The projections of water delivery and other conditions at the Colorado River Basin were obtained from the CRSS model during the period 2022–2060.

Three delivery flows were computed as part of the Salton Sea Long Range Plan [6] (high probability, low probability, and very low probability, exceeded 50%, 90% and 95% of the time). For the high probability inflow scenario, water deliveries to Imperial Valley were based on the CRSS model and resampling hydrology from 2000-2018 (information from Wheeler et al. 2022 [5]). For the high probability inflow scenario, the 50th percentile flow (2.535 MAF) is assumed. In other words, the model predicts that 2.535 MAF of inflow to Imperial Valley will be exceeded 50 percent of the time. This represents full delivery of water to Imperial Valley.

Based on climate change effects discussed in, ET is expected to increase by 3.5 to 5.0% by the end of the century based on application of the Penman Monteith Method (see Table 2). As a conservative estimate for the future inflow scenarios, an increase of 5% is assumed. Therefore, the climate-adjusted ET rate is 3.78 AF/acre of irrigated land (or 5% increase from the current estimate of 3.60 AF/acre). The volume of water lost assumes an irrigated acreage value of 445,011 acres, which is the average over 2018 to 2021 for the Imperial Valley.

Table 2. Penman-Monteith estimates of ET.

Trace	Annual average maximum temperature increase (°C)	Annual average minimum temperature increase (°C)	Average wind speed change (m/s)	Estimated % increase in ET (1971-2000 to 2035-2064) via Penman-Monteith Equations
Low	1.69	1.66	0.987	3.56%
Average	2.01	1.96	0.988	4.46%
High	2.20	2.22	0.990	5.02%

In the Coachella Valley, the Indio Subbasin Water Management Plan Update (Indio Subbasin GSAs, 2021 [7]) was utilized as the source for future inflow to the Sea. The scenario representing future projects with climate change was selected as the most appropriate scenario with 70,000 AFY as the flow representing future conditions at the Sea. This represents the total inflow to the Sea from the Coachella Valley, including the gaged CVSC.

The model results shown here use a future hydrology that linearly decreases from current values to 889,448 (see Table 3) by 2040. Further details about the hydrology in the Salton Sea Long Range Plan modeling work can be found in Appendix B of [6].

Table 3. Future long-term hydrology based on LRP high probability inflow.

INFLOW TERM	VALUE (AF/year)	JUSTIFICATION
Imperial Valley	852,900	Inflow to Imperial Valley (2,535,000 AFY) minus ET at 3.78 AF/acre of irrigated land
Mexico	0	Mexico flows gradually decrease to zero from the Scenario #1 value of 66,100 AFY
Coachella Valley	70,000	Simulated drain flow for future projects with climate change scenario (Indio Subbasin GSAs, 2021)
Local watershed	4,680	See Section 5.3.4 of Appendix B in [6]
Groundwater	11,900	See Section 5.3.5 of Appendix B in [6]
Lithium Allocation	-50,000	Lithium is a new and growing water use in the basin.
TOTAL	**889,000 AF/year**	

Primary Model Calculations

The model operates by water and salt mass conservation of the Sea. At each annual timestep, the following quantities of water volume are added (+) or subtracted (-) from the volume that was present at the beginning of the year:

- (+) Freshwater Inflows, a time series input from the relevant estimated hydrology scenario, as discussed above.
- (-) Total Water Volume needed to satisfy evaporation demands of fixed-size conservation projects, when applicable.
- (-) Total Water Volume needed to meet dust suppression obligations, defined as 1 acre-ft of water annually per acre of area within the 2003 shoreline not covered by the remaining Sea or any planned conservation projects in a given year.
- (-) Direct evaporation volume from the dynamically sized Sea, dependent on the area and salinity of the Sea in a given year, using the same quadratic polynomial regression in USGS's original SSAM model (see below), which takes a baseline evaporation rate (calibrated to be 69.9 inches annual, see below) and returns a smaller evaporation rate with increasing salinity.
- (+) Direct precipitation volume on the Sea. Values from 2004-2012 are from PRISM. More recent years (2013-2022) are filled in from California Irrigation Management Information System (CIMIS) Imperial Valley data. The historical average of the updated dataset is approximately equal to 2.5 inches per year, and that is the value used for all future years.

Similarly, salt mass has the following additions (+) and subtractions (-) at each timestep, assuming direct evaporation and precipitation of water to have minimal effect on salt balance:

- (+) Salt coming in with freshwater inflows, using the inflow-dependent regression present in USGS's original SSAM model, which has higher salt concentrations with lower inflow volumes.
- (-) Annual salt precipitation of 0.15% of the current salt mass in the Sea.
- (-) Any salt above saturation salinity of 280 ppt.

Bathymetry data and EAC curve

For any state of the Sea, there is a 1-1-1 relationship between its elevation, area, and capacity (volume), also known as the EAC relationship or EAC curve (see Figure 3 and Figure 4). This relationship was estimated from the latest available bathymetry data (interpolated to the nearest 0.1 ft using the underlying raster dataset in [3]) and is available to view in the model spreadsheet EACInput. For each model run, this EAC curve is used to get the initial Sea volume (as the initial conditions are specified as an elevation) and to convert the Sea volume at each timestep to a Sea area and Sea elevation (interpolated to the nearest tenth of a foot, NAVD88).

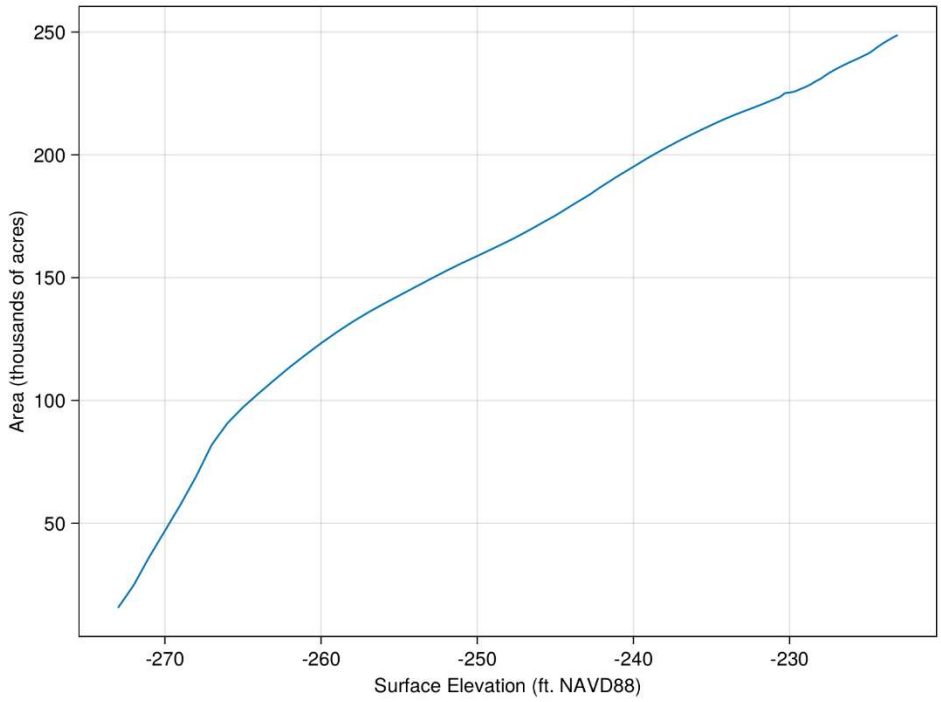

Figure 3. Relationship between elevation and area in the EAC curve used in these SSAM modeling efforts.

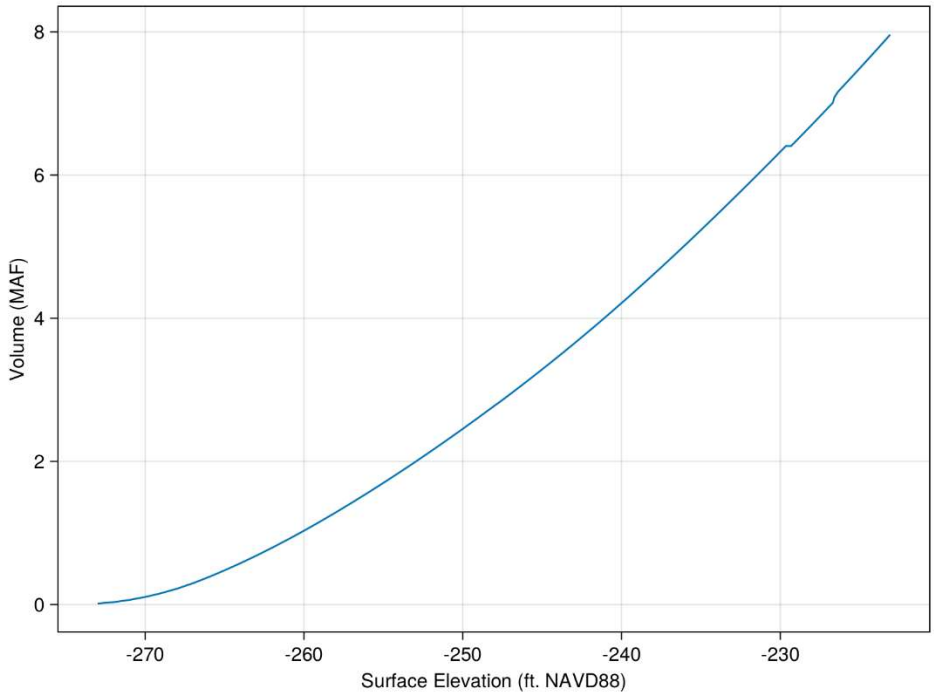

Figure 4. Relationship between elevation and volume in the EAC curve used in these SSAM modeling efforts.

Salinity-Dependent Evaporation

The evaporation rate from the Sea's surface is reduced as salt concentration in the Sea increases. The original USBR SSAM modeled this effect using a regression of the form:

$$E_{net} = E_{base} \cdot \left(\frac{a+b\cdot(S/1000)^{2.5}}{a+b\cdot(S_{ref}/1000)^{2.5}} \right)^2,$$

where:

- E_{base} is the baseline evaporation amount for freshwater,
- S, is the Sea's salinity at the current timestep,
- S_{ref} is a reference salinity value (set to 45723.33 ppm),
- a and b are model constants with values 0.981902618 and -1.39819E-07, respectively.

The same equation was used in the SSAM updated by Tetra Tech and is illustrated in Figure 5.

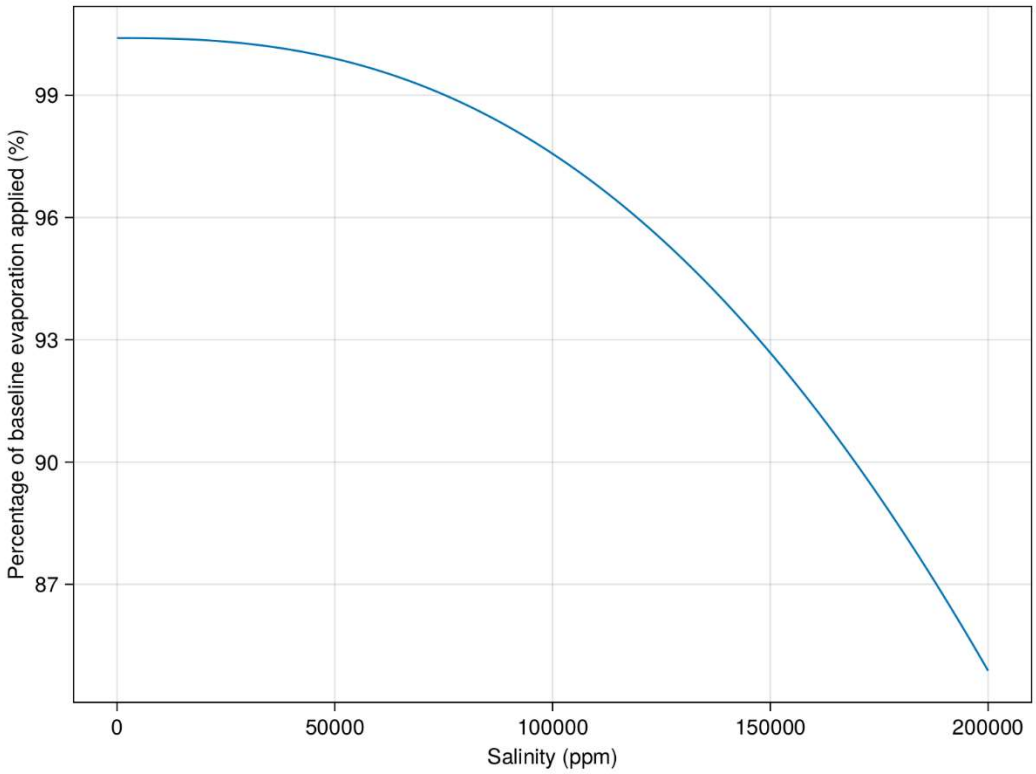

Figure 5. Illustration of decrease in net evaporation with salinity.

Salinity-Dependent Inflow Salinity

The salinity of the water specified as total inflow depends on the inflow volume in the form of a linear regression used in the original USBR model. $S_I = a + b \cdot V_I$, where $a = 5016.07448$ and $b = -0.00204508$, and this formulation has been retained in the Tetra Tech-updated version of SSAM.

Model Inputs

The main inputs the user is required to provide to the model are the following:

- The initial Sea state. These model runs were set to begin in 2020 at an elevation of -235.5 ft NAVD88 with an initial salinity of 74,250 ppm.
- Total freshwater inflow at each year, specified as a time series from the chosen starting year to 2100. This is the input that was modified to consider different drought mitigation scenarios. The description of how different potential CO River allocations correspond to different total Sea inflows is described below.
- The baseline evaporation for each year. This was derived as a calibrated average value from historical data from 2004 to 2020. The current value has been set at 69.9 inches per year.
- Although the model is able to simulate water use from conservation projects, the results shown in this memo do not include the effects of 10-Year plan projects, including SCH.

These input data are shown in **Table 4**.

Table 4. Primary SSAM input data

Year	Inflow Baseline (af)	Inflow Fallowing (af)	Inflow Fallowing and Efficiency (af)	Base evaporation (in)	Precipitation (in)
2004	1,205,693	1,205,693	1,205,693	66.0	4.4
2005	1,252,187	1,252,187	1,252,187	66.0	4.4
2006	1,214,560	1,214,560	1,214,560	70.0	0.7
2007	1,206,227	1,206,227	1,206,227	66.0	1.9
2008	1,166,790	1,166,790	1,166,790	74.0	2.7
2009	1,058,828	1,058,828	1,058,828	66.0	1.0
2010	1,190,201	1,190,201	1,190,201	69.0	4.9
2011	1,172,468	1,172,468	1,172,468	66.0	1.9
2012	1,267,420	1,267,420	1,267,420	68.0	2.2
2013	1,143,849	1,143,849	1,143,849	74.0	1.8
2014	1,098,163	1,098,163	1,098,163	66.0	0.6
2015	1,126,640	1,126,640	1,126,640	73.0	1.5
2016	1,148,693	1,148,693	1,148,693	74.0	1.9
2017	1,104,305	1,104,305	1,104,305	74.0	4.0
2018	1,065,116	1,065,116	1,065,116	74.0	2.3
2019	1,044,076	1,044,076	1,044,076	68.0	3.4
2020	1,053,611	1,053,611	1,053,611	71.0	2.0
2021	1,093,575	1,093,575	1,093,575	74.0	2.0
2022	1,090,859	1,090,859	1,090,859	69.9	2.5
2023	1,080,139	990,889	958,739	69.9	2.5
2024	1,064,483	975,233	943,083	69.9	2.5
2025	1,048,826	959,576	927,426	69.9	2.5
2026	1,033,169	943,919	911,769	69.9	2.5
2027	1,017,513	1,017,513	1,017,513	69.9	2.5
2028	1,001,856	1,001,856	1,001,856	69.9	2.5
2029	986,199	986,199	986,199	69.9	2.5
2030	970,543	970,543	970,543	69.9	2.5
2031	954,886	954,886	954,886	69.9	2.5
2032	939,229	939,229	939,229	69.9	2.5
2033	923,573	923,573	923,573	69.9	2.5
2034	907,916	907,916	907,916	69.9	2.5
2035	892,259	892,259	892,259	69.9	2.5
2036	891,695	891,695	891,695	69.9	2.5
2037	891,131	891,131	891,131	69.9	2.5
2038	890,567	890,567	890,567	69.9	2.5
2039	890,003	890,003	890,003	69.9	2.5
2040	889,438	889,438	889,438	69.9	2.5

Model Outputs

The primary outputs of interest are Sea area, elevation, and salinity. These are all reported on an annual timestep in the ModelCalcs spreadsheet.

Model Calibration

No sufficiently robust sources of direct Salton Sea evaporation data exist, so the baseline evaporation rate was treated as a calibration parameter. Daily Sea elevation data from 2004-2021 and periodic salinity data (approximately every three months) from 2004-2020 were available for use in calibration.

The model was initialized to January 2004 based on the average data of the first month of each of the above series. Then, historical inflow from 2004-2020 was input into the model.

First, evaporation was initialized to 68 inches for all years. Then an iterative calibration process was then applied to each year from 2004 to 2020 to better match observed salinity and elevation data as follows:

- Evaluate the effect of setting the evaporation of the year in question to each value in the set of candidates: {66, 67, 68, …, 74}. This range was deemed to be consistent with previously used estimates of annual evaporation in other analyses.
- Linearly interpolate the model output within the calendar year since the observed data are daily while the model output is annual.
- Note the rank for each candidate according to best sum of squared error performance on each for salinity and elevation only within the year being evaluated.
- Choose the candidate salinity with the best performance according to the weighted average of three times the elevation rank and one times the salinity rank. The elevation data were given more weight because there is less noise in that dataset.
- Proceed to the next year and repeat the process.

The model was able to match the observed elevation and salinity data well after calibration (see Figure 6 and Figure 7). The resulting average annual evaporation used for all future years was 69.9 inches.

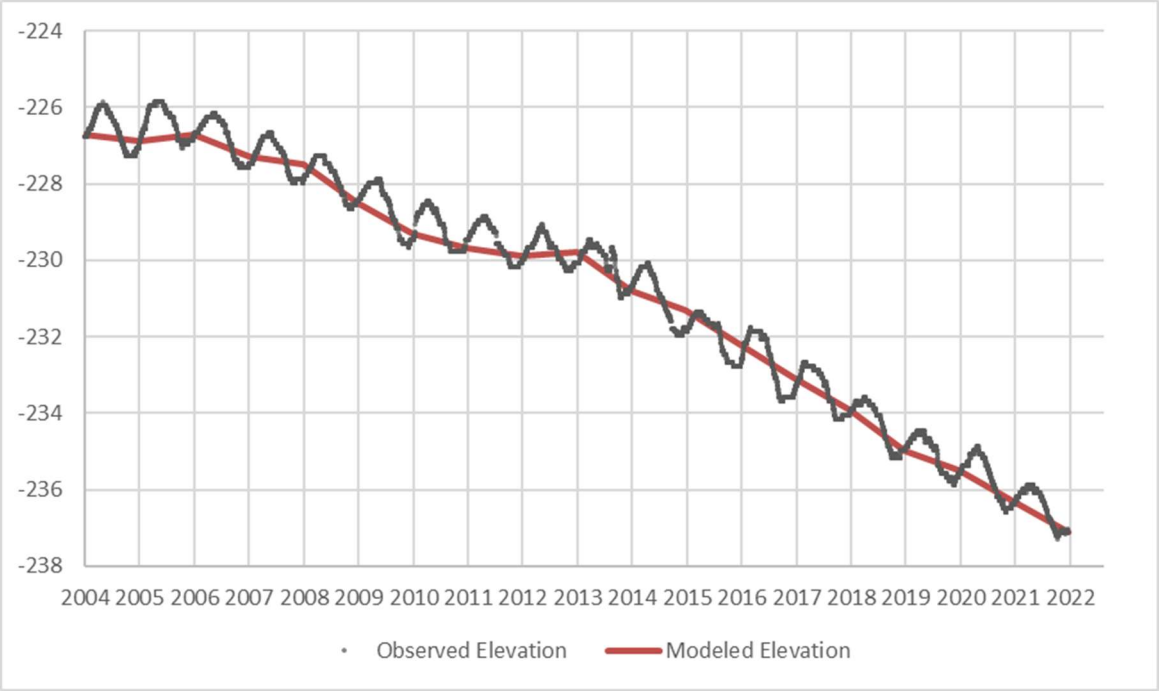

Figure 6. Observed and Calibrated Salton Sea Elevation (ft NAVD88)

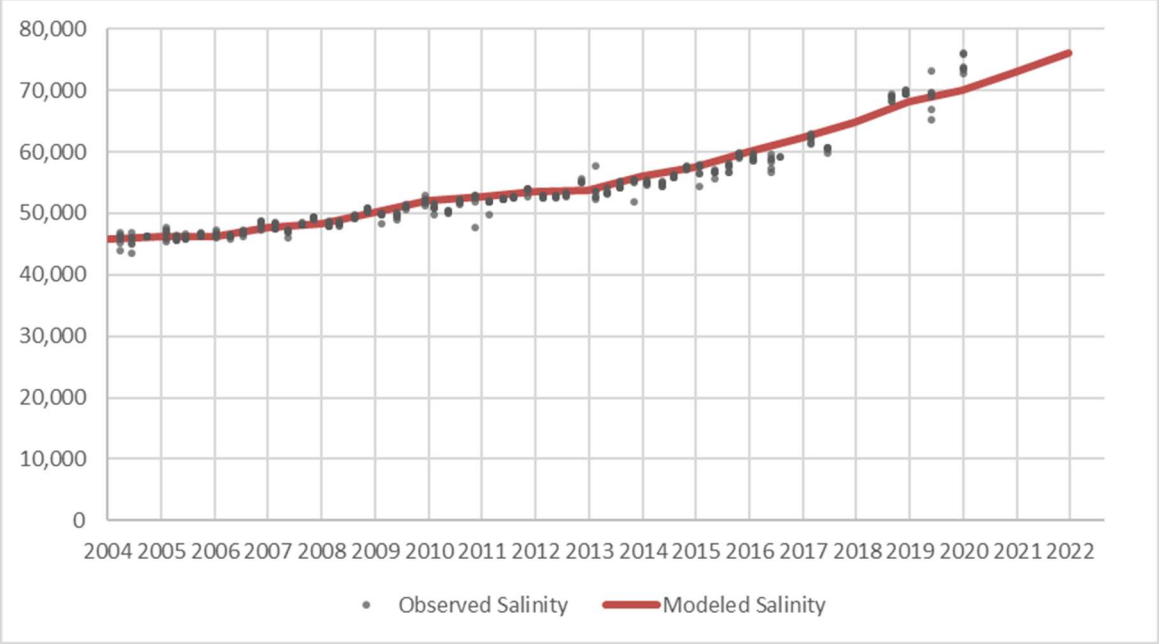

Figure 7. Observed and Calibrated Salton Sea Salinity (ppm)

As a sensitivity analysis, we also repeated the entire calibration with best-estimate historical inflows perturbed by +/- 5%. The case with 5% less inflow decreased the calibrated average evaporation to 68.0 inches, whereas the case with 5% more inflow increased it to 71.0 inches.

Modeled Inflow Scenarios

Figure 8 shows the three inflow scenarios used for the projections in this study, the baseline projected flow, and with drought conservation with fallowing on IID lands and with fallowing and efficiency on IID lands. Fallowing and efficiency results in lower inflows to the sea than fallowing alone. The drought conservation was applied for 4 calendar years (2023-2026).

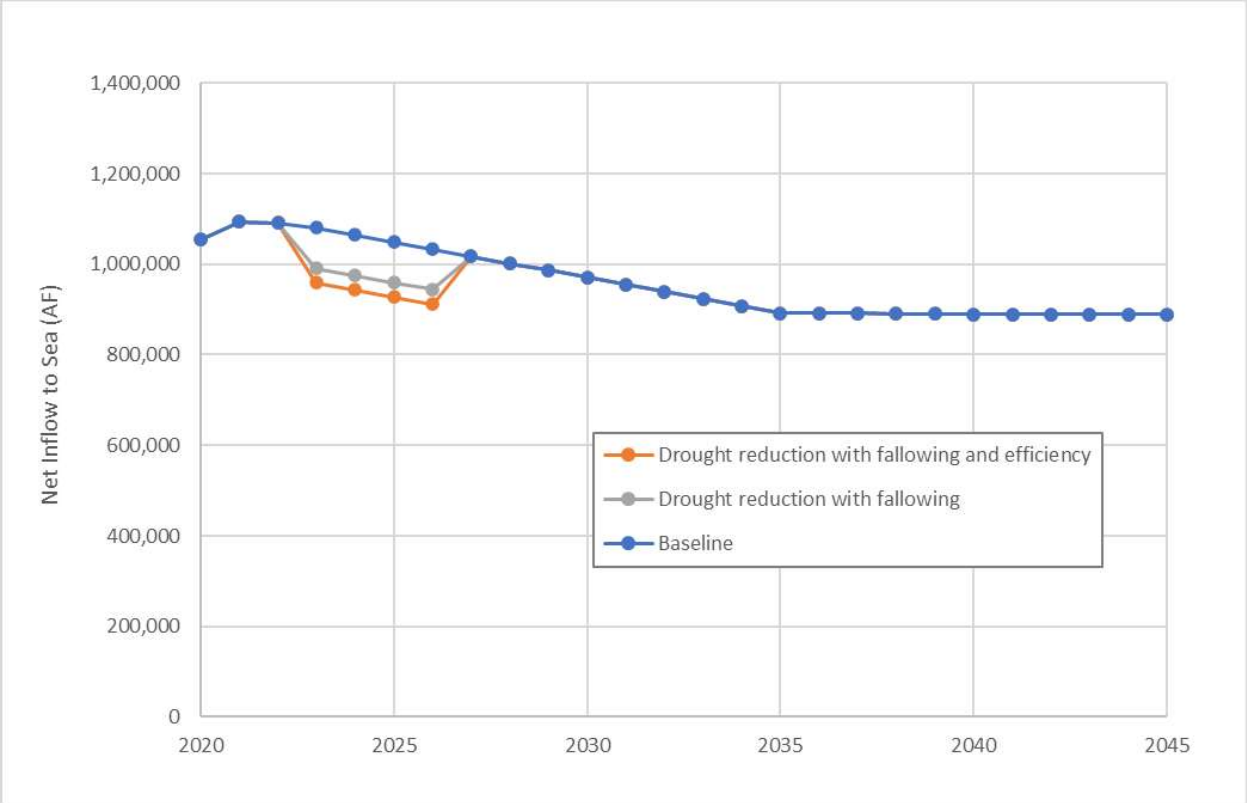

Figure 8. Effect of estimated drought reduction inflows on total inflow to Sea used by the model.

Results

The figures below show the primary outputs of interest from the updated model. Figure 9 shows the projected exposed lakebed area from 2020-2045, and Figure 10 shows the same data zoomed in to show 2020-2035 values.

Figure 11 shows a comparison of the salinity impacts from 2020-2045, and Figure 12 shows the same data zoomed in to show 2020-2035.

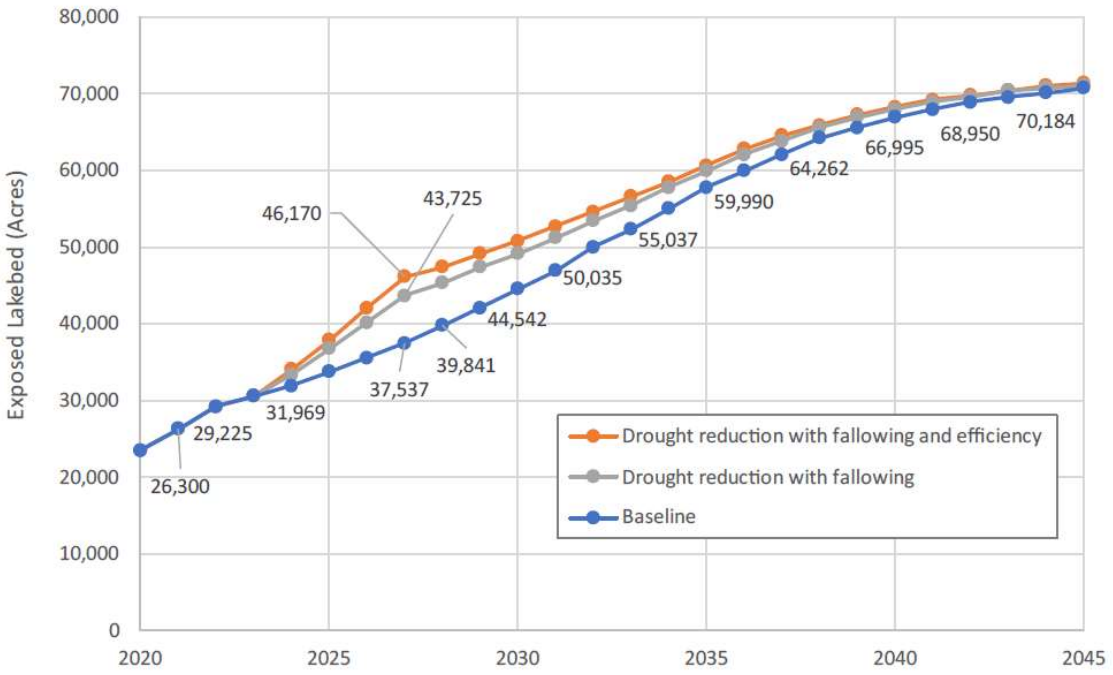

Figure 9. Impact to exposed lakebed from drought reduction scenarios (2020-2045)

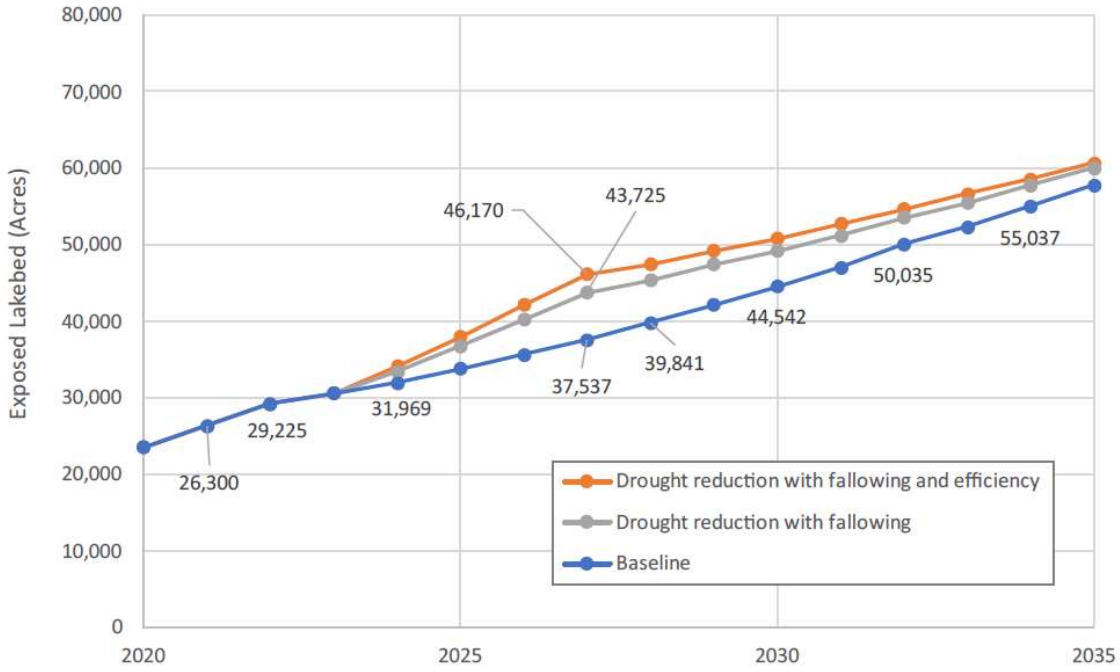

Figure 10. Impact to exposed lakebed from drought reduction scenarios (2020-2035)

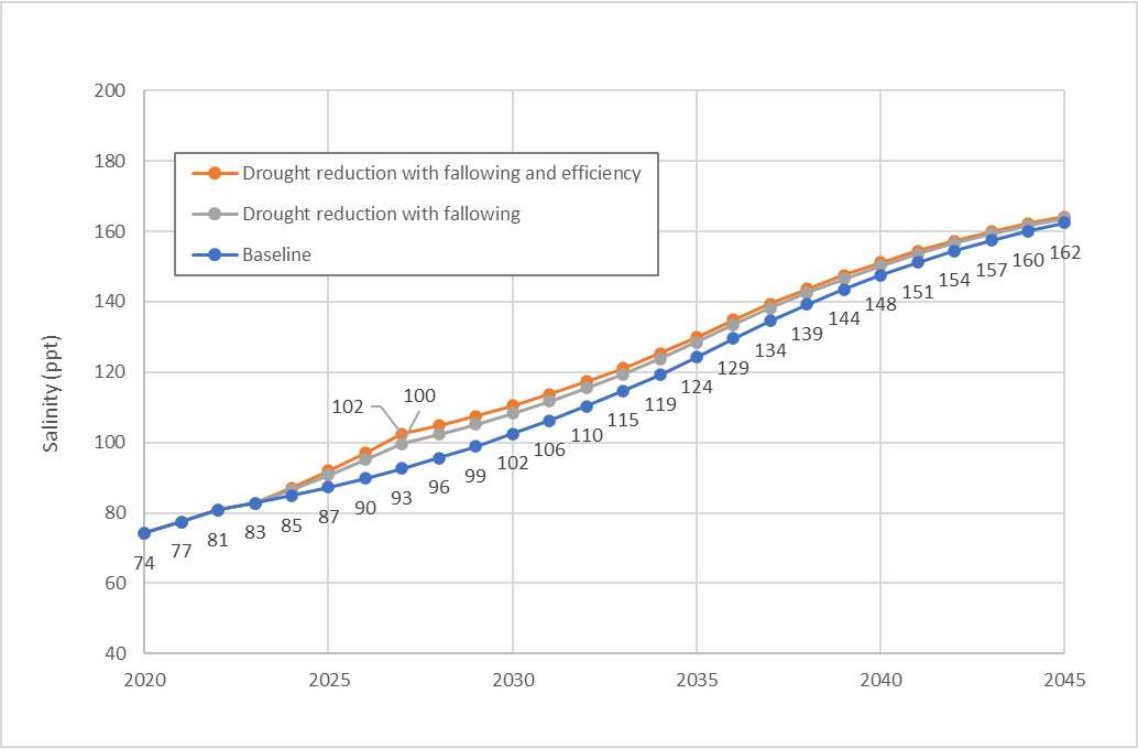

Figure 11. Impact to salinity from drought reduction scenarios (2020-2045)

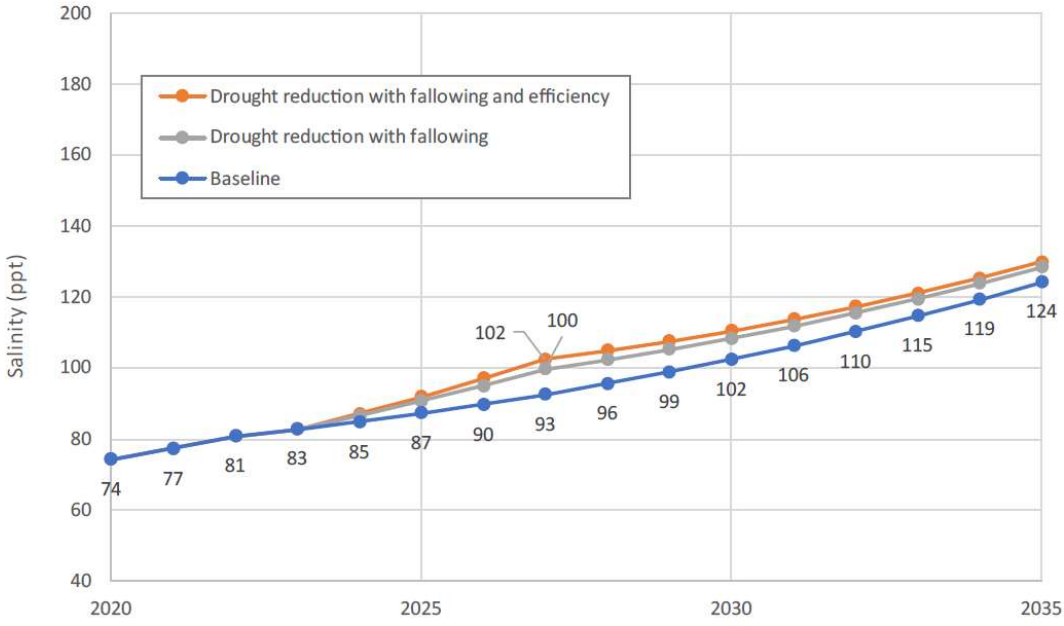

Figure 12. Impact to salinity from drought reduction scenarios (2020-2035)

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AB-71 Salton Sea restoration. (2013-2014)

Assembly Bill No. 71

CHAPTER 402

An act to add Article 2 (commencing with Section 2940) to Chapter 13 of Division 3 of the Fish and Game Code, relating to the Salton Sea.

[Approved by Governor September 28, 2013. Filed with Secretary of State September 28, 2013.]

LEGISLATIVE COUNSEL'S DIGEST

AB 71, V. Manuel Pérez. Salton Sea restoration.

Existing law, until January 1, 2013, established the Salton Sea Restoration Council as a state agency in the Natural Resources Agency to oversee the restoration of the Salton Sea.

This bill would require the Secretary of the Natural Resources Agency, in consultation and coordination with the Salton Sea Authority, to lead Salton Sea restoration efforts. This bill would authorize the authority to lead a restoration funding and feasibility study, in consultation with the agency, as prescribed. This bill would also require the secretary to seek input from the authority with regard to specified components of restoration of the Salton Sea. By imposing duties on a local joint powers authority, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Article 2 (commencing with Section 2940) is added to Chapter 13 of Division 3 of the Fish and Game Code, to read:

Article 2. Salton Sea Restoration

2940. The Legislature finds and declares all of the following:

(a) The Salton Sea is California’s largest inland water body with beneficial uses that include fisheries and wildlife habitat and preservation of endangered species, and is a repository for agricultural drainage.

(b) The Salton Sea ecosystem is a critical link on the international Pacific Flyway and supports over 400 species of birds.

(c) The Salton Sea is threatened by increasing salinity and reduced inflows. These changes increasingly threaten the unparalleled wildlife resources at the sea, as well as air quality in the region.

(d) In cooperation with local governments, nonprofit organizations, private businesses, and the public, the Salton Sea Authority can help protect wildlife habitats and endangered species, improve water and air quality, and enhance recreational opportunities in the region.

(e) In restoring the Salton Sea, it is the intent of the Legislature to do all of the following:

(1) Permanently protect fish and wildlife that are dependent on the Salton Sea ecosystem.

(2) Restore the long-term stable aquatic and shoreline habitat for fish and wildlife that depend on the Salton Sea.

(3) Mitigate air quality impacts from restoration projects using the best available technology or best available control measures, as determined by the South Coast Air Quality Management District and the Imperial County Air Pollution Control District.

(4) Protect water quality.

(5) Maintain the Salton Sea as a vital link along the Pacific Flyway.

(6) Preserve local tribal heritage and cultural values associated with the Salton Sea.

(7) Minimize noxious odors and other water and air quality problems.

(8) Coordinate with local, state, and federal agencies that are responsible for air quality, endangered species, and other environmental mitigation implementation requirements of the Quantification Settlement Agreement.

(9) Enhance economic development opportunities that will provide sustainable financial improvements benefiting the local environment and the economic quality of life for communities around the Salton Sea.

2941. Unless the context requires otherwise, the definitions set forth in this section govern the construction of this article.

(a) "Agency" means the Natural Resources Agency.

(b) "Habitat mosaics" means two or more proximate habitat types, such as saltwater shoreline abutting riverine deltas and irrigated farmland.

(c) "Quantification Settlement Agreement" has the same meaning as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002.

(d) "Salton Sea Authority" or "authority" means the joint powers authority comprised of the County of Imperial, the County of Riverside, the Imperial Irrigation District, the Coachella Valley Water District, and the Torres Martinez Desert Cahuilla Indian Tribe.

(e) "Secretary" means the Secretary of the Natural Resources Agency.

(f) "Vector management" means services that eliminate or reduce the risk of illness caused by any organism transporting a pathogen.

2942. (a) (1) The secretary, in consultation and coordination with the authority, shall lead the Salton Sea restoration efforts that shall include all of the following:

(A) Early start habitat demonstration projects.

(B) Biological investigations relating to the restoration of the Salton Sea.

(C) Investigations of water quality, sedimentation, and inflows relating to the restoration of the Salton Sea.

(D) Air quality investigations, in consultation and coordination with local and regional air quality agencies, relating to the restoration of the Salton Sea.

(E) Geotechnical investigations relating to the restoration of the Salton Sea.

(F) Financial assistance grant programs to support restoration activities of local stakeholders.

(2) The secretary and the Legislature shall maintain full authority and responsibility for any state obligation under the Quantification Settlement Agreement. The secretary and the Legislature shall have final approval for any proposed restoration plan.

(3) (A) To the extent that funding is appropriated to the department for Salton Sea restoration activities, the Department of Water Resources, in coordination and under agreement with the department, may undertake restoration efforts identified in this subdivision.

(B) The department and the Department of Water Resources shall do all of the following for the Salton Sea Species Conservation Habitat Project:

(i) Immediately make available relevant information relating to the factors that influence the cost and size of the alternatives discussed in the environmental impact report or environmental impact statement for the species habitat conservation program.

(ii) Release all available detail on a final project design immediately, or upon final determination of a least environmentally damaging preferred alternative by the United States Army Corps of Engineers. Details of a final project design shall include location, configuration, size, and cost.

(iii) Immediately make available project evaluation protocols that include the following principles of adaptive management:

(I) Goals and objectives of the project.

(II) The project design and an operations plan.

(III) A monitoring plan that will include metrics that identify benefits to the species.

(IV) A performance evaluation based on species population identified through monitoring.

(V) A decisionmaking framework to evaluate project performance and guide operations and management changes.

(b) (1) The authority may lead a restoration funding and feasibility study, in consultation with the agency, to do the following:

(A) Investigate access and utility agreements that may contribute to the future funding of restoration activities at the Salton Sea.

(B) Analyze all feasible funding sources for restoration program components and activities.

(C) Analyze economic development opportunities, including, but not limited to, renewable energy, biofuels, mineral development, and algae production for the purposes of identifying new revenue sources for the Salton Sea restoration efforts.

(D) Identify state procurement and royalty sharing opportunities.

(E) Review existing long-term plans for restoration of the Salton Sea and recommend to the secretary changes to existing restoration plans. In any review pursuant to this subparagraph, the authority shall consider the impacts of the restoration plan on air quality, fish and wildlife habitat, water quality, and the technical and financial feasibility of the restoration plan and shall consider the impacts on other agencies responsible for air quality, endangered species, and other environmental mitigation requirements for implementation of the Quantification Settlement Agreement.

(2) No evaluation, study, review, or other activity pursuant to this article shall delay the planning and implementation of ongoing and planned mitigation projects, including, but not limited to, the Salton Sea Species Conservation Habitat Project or other mitigation measures pursuant to existing state and federal programs and agreements, including, but not limited to, those programs and agreements undertaken pursuant to the Quantification Settlement Agreement.

2943. For the purposes of considering local, publicly derived input concerning habitat objectives and actions, types and levels of public access, and integration of air quality management and habitat restoration, the secretary shall seek input from the authority with regard to the following components of restoration of the Salton Sea:

(a) Design opportunities and constraints, including the integration of the habitat, public access, and air quality management objectives.

(b) Public access and recreational components.

(c) Opportunities for economic development.

(d) Habitat mosaics and location.

(e) Vector management and predator control.

(f) Feasible financial resources to fund all recommended restoration program components.

2945. (a) Nothing in this article interferes with or prevents the exercise of authority by a public agency to carry out its programs, projects, or responsibilities.

(b) Nothing in this article affects requirements imposed under any other provision of law.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district are the result of a program for which legislative authority was requested by that local agency or school district, within the meaning of Section 17556 of the Government Code and Section 6 of Article XIII B of the California Constitution.

State Legislative Bill Packet Review

Bill Number	Description	Staff Recommendation
SB 867 (B. Allen)	Authorizes a $15.5 Billion Resources and Resiliency General Obligation Bond	Oppose Unless Amended to include a minimum investment of $500 million for the Salton Sea
AB 1567 (E. Garcia)	Authorizes a $15.5 Billion Resources and Resiliency General Obligation Bond	Support if Amended to increase allocation to the Slaton Sea from $240 million to $500 million, with $50 million set aside for the Authority
AB 827 (E.Garcia)	This bill would direct the California Department of Public Health to conduct a comprehensive health study to better understand the health impact of dust, and other irritates on residents who live near the Salton Sea.	Support
AB 1593 (E.Garcia)	Establish the Equitable Access Program to prioritize employment in construction, manufacturing, technical, maintenance, operations, or reclamation activities for local residents in the Salton Sea geothermal resources area.	Support
AB 1569 (E. Garcia)	Would establish the Lithium Valley Office of Development and would require the office, in consultation with relevant state agencies, to coordinate initiatives related to funding, economic development, construction, manufacturing, technical development, and reclamation of lithium in the Salton Sea Geothermal Resource Area	Support
AB 1562 (E Garcia)	Establish the Southeastern California Desert Valleys Economic Zone to include the Imperial, Eastern Coachella, and Palo Verde Valleys.	Support
SB 583 (S. Padilla)	Establishes a Salton Sea Conservancy	Awaiting Board Direction

Salton Sea Authority

Memorandum

To: Salton Sea Authority Board of Directors

From: G. Patrick O'Dowd, Executive Director/GM

Date: April 27, 2023

Re: **Presentation of FY 2023/2024 Budget for Salton Sea Authority**

GENERAL:

Under this cover find the Salton Sea Authority proposed operating budget for the period July 1, 2023 through June 30, 2024. This budget was prepared relying principally on existing contracts and agreements and tested against historical costs from 2022-2023 actuals and informed by prior years, with a few modifications, including:

- Local Government / Member Assessments – After increasing member assessments to $200,000 last year, this year's budget keeps member contributions on par with last year's approved request, or $200,000 per agency member. Preliminary discussions with TMDCI indicate an intent to pay a minimum of the $10,000, equal to the amount contributed in the current fiscal year. However, and as is our practice, Torrez Martinez Desert Cahuilla Indians contributions are strictly voluntary, are budgeted at zero, and recorded when received.

- Grants Funding – this principally reflects anticipated work on the North Lake Pilot Demonstration Project, fundings for the Desert Shores project and other creditable work reasonably anticipated to materialize during the budget year.

- CNRA Outreach – budgeted amounts are per contract for FY24.

- Salaries and Benefits are budgeted in accordance with the employment policies for the County of Riverside. One new position was budgeted, with 70% of costs to be reimbursed from various existing contracts.

- Travel – Reflects a 20% increase over this year's actual but unchanged from prior year. This investment is justified by both increased travel costs and the prospect of increased travel.

In recent years, the Authority's operating results and cash flows have been negatively impacted by project delays from which the Authority had direct reimbursements as well as the effects of COVID-19. The Authority received no Federal or State support during the COVID emergency, and as a result has experienced operating losses for each of the past four years. Those persistent losses and unreimbursed, escalating costs have had a deep impact on Authority cash flows. However, as a result of strong member support, disciplined spending, and a strategic workforce realignment implemented earlier this year, I am pleased to report that the Authority expects to show positive results from operations for the first time since 2018. We achieved these results even though we received less than 25% of grant revenues because of unanticipated delays in contract implementation. Those issues have largely been resolved and we are confident that the Authority now stands on sound financial footings, and that the budget as presented is a responsible assessment of anticipated operating results for the coming fiscal year.

RECOMMENDATION:

The budget as presented does not seek increased member funding and is projected to produce net positive results from operations. Therefore, Staff is recommending that the Salton Sea Authority Board of Directors approve the budget as presented. Alternatively, the Board could approve the Budget with revisions, or provide Staff direction and continue this item to be revisited again in May.

Respectfully submitted,

G. Patrick O'Dowd
Executive Director/GM

Salton Sea Authority
Proposed Budget
General Fund
FY 2023-24

		A	B	C	D	E	F
		FY 22/23 Adopted Budget General Fund	FY 22/23 Projected YTD General Fund	FY 23/24 Proposed Budget General Fund	$ Difference (C-B)	% Difference (D/B)	FY 23/24 Proposed Budget Grants
1	**REVENUE**						
2	Local Government/Member Assessments	$ 800,000	$ 800,000	$ 800,000	$ -	0%	$ -
3	Tribal Contribution (Voluntary)	-	10,000	-	(10,000)	-100%	
4	Other Federal/State/Local Reimbursements	250,000	400	25,000	24,600	6150%	-
5	Sponsorships	-	-	25,000	25,000	0%	-
6	Grants and Other Reimbursements to General Fund	110,000	49,900	194,400	144,500	290%	-
7	Department of Water Resources-North Lake Demonstration	-	-	-	-	-	2,000,000
8	Bureau of Reclamation-Desert Shores Revitalization	-	-	-	-	-	750,000
9	California Natural Resources Agency-Community Outreach	-	-	-	-	-	215,000
10	**TOTAL REVENUE**	1,160,000	860,300	1,044,400	184,100	21%	2,965,000
11	**EXPENSES**						
12	**SSA ADMINISTRATION**						
13	Salaries and Benefits						
14	Total Salaries	270,600	236,600	309,300	72,700	31%	-
15	Total Employee Benefits	135,300	141,200	171,600	30,400	22%	-
16	Total Salaries and Benefits	405,900	377,800	480,900	103,100	27%	-
17	Contract Services / Professional Fees						
18	DC Advocates	88,200	89,700	94,200	4,500	5%	-
19	Sacramento Advocate	84,000	84,000	88,200	4,200	5%	-
20	Grant Administration	100,000	55,900	-	(55,900)	-100%	-
21	Attorney Fees	50,000	49,100	54,000	4,900	10%	-
22	Audit & Accounting	75,000	69,300	76,200	6,900	10%	-
23	Total Contract Services / Professional Fees	397,200	348,000	312,600	(35,400)	-10%	-
24	Equipment Maintenance	8,700	8,600	8,300	(300)	-3%	-
25	Non-capitalized Office Equipment	-	-	8,000	8,000	0%	-
26	Insurance	10,500	10,700	11,600	900	8%	-
27	Office Expenses /Operating Supplies	8,300	7,900	8,700	800	10%	-
28	Operating Expenses / County Charges	-	6,700	7,400	700	10%	-
29	Office Expenses /Online Services	3,300	3,600	4,000	400	10%	-
30	Coachella Water District Board Room Usage Fees	-	2,400	2,400	-	0%	-
31	Dues & Subscriptions	14,200	8,000	10,000	2,000	25%	-
32	Travel /Mileage	40,000	33,600	40,000	6,400	20%	-
33	Utilities	-	-	-	-	-	-
34	**TOTAL SSA ADMINISTRATION**	888,100	807,300	893,900	86,600	11%	-
35	**GRANT EXPENSES**						
36	Department of Water Resources-North Lake Demonstration	-	-	-	-	-	1,918,900
37	Bureau of Reclamation-Desert Shores Revitalization	-	-	-	-	-	725,000
38	California Natural Resources Agency-Community Outreach	-	-	-	-	-	121,600
39	Reimbursement to General Fund	-	-	-	-	-	194,400
40	**TOTAL GRANT EXPENSES**	-	-	-	-	-	2,959,900
41	**TOTAL EXPENSES**	888,100	807,300	893,900	86,600	11%	2,959,900
42	**NET INCOME / (LOSS)**	**$ 271,900**	**$ 53,000**	**$ 150,500**	**$ 97,500**	**184%**	**$ 5,100**
43	**PROJECTED BEGINNING CASH - 7/1/23**			**$ (19,750)**			
44	**PROJECTED ENDING CASH - 6/30/24**			**$ 130,750**			

Cultivating Conservation

MEMO

TO: Salton Sea Authority Board of Directors and G. Patrick O'Dowd
FROM: Lisa Moore
RE: Federal Report
DATE: April 21, 2023

This memo provides Directors with a summary of the Bureau of Reclamation's (Reclamation) recently released draft Supplemental Environmental Impact Statement (draft SEIS) to "potentially revise" the 2007 operating guidelines Glen Canyon and Hoover Dams, https://www.usbr.gov/ColoradoRiverBasin/SEIS.html, and how Reclamation evaluated the impacts to the Salton Sea region in that document. As described below, the document only analyzes impacts to our region where that analysis tends to favor Reclamation's proposed alternative of an equal cut of 2,083 million acre feet of water in 2024 across California, Arizona and Nevada. Impacts to our region that would clearly show the costly public health and environmental impacts associated with an equal cut scenario that would need to be mitigated are simply not analyzed. Staff recommend preparing comments on the draft SEIS.

Why is Reclamation preparing a SEIS?

The National Environmental Policy Act (NEPA) is a federal law which requires that prior to taking a major federal action significantly affecting environment, the federal agency taking the action must prepare an environmental impact statement evaluating the environmental impacts. Reclamation prepared an EIS on the 2007 interim operating guidelines for Glen Canyon and Hoover. Where an agency is, as in this case, proposing to make substantial changes to an existing EIS like the 2007 document that may impact the environment, or where there are significant new circumstances relevant to environmental concerns that have emerged, the law requires the agency to prepare a Supplemental EIS.

While NEPA does not mandate a particular substantive course of action, the purpose of the law is to surface and evaluate the environmental impacts of different alternatives which would accomplish the agency's stated objective. The goal is to inform both decision makers and the public of alternatives, identify alternatives that would avoid or minimize environmental impacts, and identify mitigation measures to address unavoidable impacts. If the agency hasn't surfaced and evaluated the environmental impacts of the different alternatives it could implement, the purpose of NEPA is defeated because decision makers are not acting with a full picture of these impacts, nor a clear picture of mitigating actions which should be adopted to avoid and minimize them.

What does the draft SEIS propose?

The draft SEIS proposes two main substantive alternatives and invites comment on them. One of the two alternatives proposed by Reclamation calls for each of the Lower Basin states to reduce Colorado River water use equally to achieve a savings of 2,083 million acre feet in 2024. The other main alternative proposes achieving this same acre foot savings, but would distribute conservation in accord with the priority system consistent with the proposals California has put forth since Reclamation began this

process. Both alternatives would reduce inflows to and thus impact the Salton Sea — with the equal cut being particularly negative.

Reclamation proposes adopting one of these two alternatives for 2024 and potentially through 2026, when the 2007 guidelines expire. The agency intends to prepare a new EIS for its revisions to the guidelines beyond 2026. Reclamation is taking comment on the draft SEIS before making a final selection. The final selected alternative could adopt elements of both proposed alternatives, or a consensus alternative designed by the Basin States.

Does the draft SEIS consider the environmental/public health impacts of the different alternatives on the Salton Sea region?

No. While the document does include an evaluation of the impacts of the two alternatives on the Salton Sea region, it does so only with respect to impacts that tend to favor the adoption of the equal cut alternative across the Lower Basin states. Notably, the document omits consideration of environmental impacts (air quality most notably, but also species habitat) on our region which would be expected to clearly indicate a different environmental impact between the two main alternatives.

For example, the draft SEIS analyzes the socioeconomic and landscape character impacts of both alternatives on agriculture in the Imperial and Coachella valleys, as well impacts to Arizona agriculture. The draft EIS finds that the equal cut alternative more broadly distributes those impacts across agricultural interests and is presumably preferable.

Similarly, while the draft SEIS includes an environmental justice (EJ) section and includes our region within that analysis, the only impact analyzed to evaluate the different alternatives on EJ communities is whether the alternative results in reducing water supply to zero. The document finds that the equal cut alternative results in no EJ community losing access to Colorado River water supplies, while the priority cut alternative results in EJ communities in Arizona losing access to Colorado River supplies. Again the language of the draft SEIS suggests this makes the equal cut alternative presumably preferable.

With respect to environmental impacts (air quality, habitat, etc.), however, the draft SEIS does not evaluate these environmental impacts of the alternatives on our region. Notably, these are the impacts which would likely show a clear difference between the two alternatives — with California's EJ communities likely bearing the brunt of those air-related public health impacts.

Instead, the draft SEIS analyzes those impacts by narrowly focusing on the environmental impacts of the proposed alternatives near Lake Mead/Colorado River. For example, with respect how each alternative would affect compliance with Clean Air Act standards, it defines the relevant area for analysis narrowly by Colorado River reach. The document identifies the air quality agencies responsible for assuring the attainment of federal Clean Air Act standards to be the relevant Nevada and Arizona agencies, omitting Imperial County Air Pollution Control District and South Coast Air Quality Management District.