

#### International Boundary and Water Commission United States Section

For immediate release October 22, 2024

#### USIBWC Colorado River Citizens Forum in El Centro, Calif., on October 30

The U.S. Section of the International Boundary and Water Commission (USIBWC) Colorado River Citizens Forum board will host an in-person and virtual public meeting on **Wednesday**, **October 30**, **2024**, **from 4 p.m. to 6 p.m. PDT**.

Meghan Thiemann, Civil Engineer/Project Manager, U.S. Bureau of Reclamation, will provide a system status update for the Lower Colorado River Basin for water year 2025 and discuss hydrology, operations and projections, and drought response actions.

Robert Cardenas, Assistant Area Operations Manager, USIBWC Yuma Field Office, will speak about the Mexicali Sanitation Binational Technical Committee (BTC), including the status of active and pending projects.

#### The public meeting will be held in person at:

Imperial Irrigation District Board Room 1285 Broadway El Centro, CA 92243

The public meeting will also be held virtually. <u>Click here to join the meeting</u>. If possible, it may be helpful for you to test connectivity on your own prior to the meeting by clicking on the "Join" link and ensuring your camera and microphone are functioning. Or join by phone: Call-in number +1 915-320-4718,,480159132## Phone conference ID: 480 159 132#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the USIBWC Citizens Forum page at <a href="https://www.ibwc.gov/meetings/list/">https://www.ibwc.gov/meetings/list/</a> and look for the links for the Colorado River Citizen Forum meeting.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Frankie Pinon at frankie.pinon@ibwc.gov or 915-832-4716 by noon on October 28th, 2024.

News Media Contact:

Frankie Pinon <u>frankie.pinon@ibwc.gov</u> 915-832-4716

#### COLORADO RIVER CITIZENS FORUM Wednesday, October 30, 2024, from 4 p.m.-6 p.m. PST.

#### Imperial Irrigation District Board Room 1285 Broadway El Centro, CA 92243 And Via Teams

#### **Agenda**

- Welcome and Introductions USIBWC Citizen Board Introductions
- Lower Colorado River Basin Updates Meghan Thiemann, Civil Engineer/Project Manager, U.S. Bureau of Reclamation.
- **Mexicali Sanitation BTC Updates** Robert Cardenas, Assistant Area Operations Manager, USIBWC Yuma Field Office.
- Public Comment
- Board Discussion
- Suggested Future Agenda Items

If you have a disability that you wish to self-identify confidentially that requires accommodation, please advise us ahead of time. For more information call 915-832-4716 or email frankie.pinon@ibwc.gov

#### **Microsoft Teams meeting**

Join on your computer, mobile app or room device: Click here to join the meeting.

Meeting ID: 226 974 113 464 Passcode: jxUXFQ

Download Teams | Join on the web

Or call in (audio only)

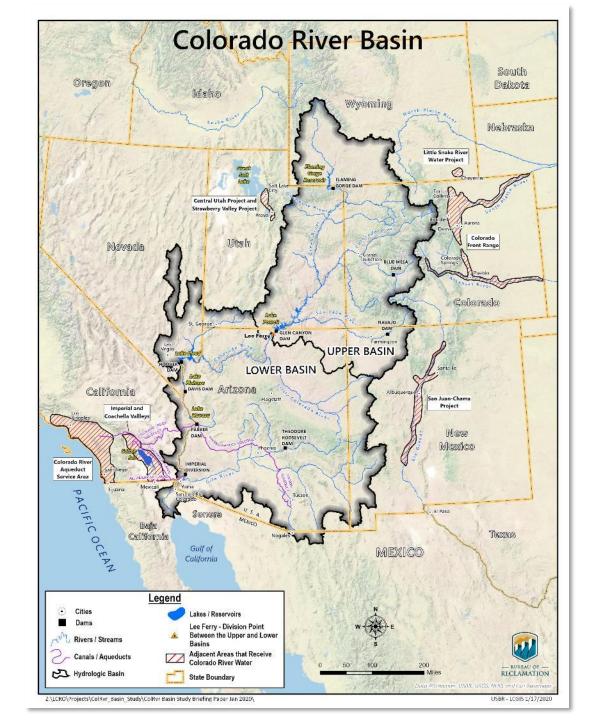
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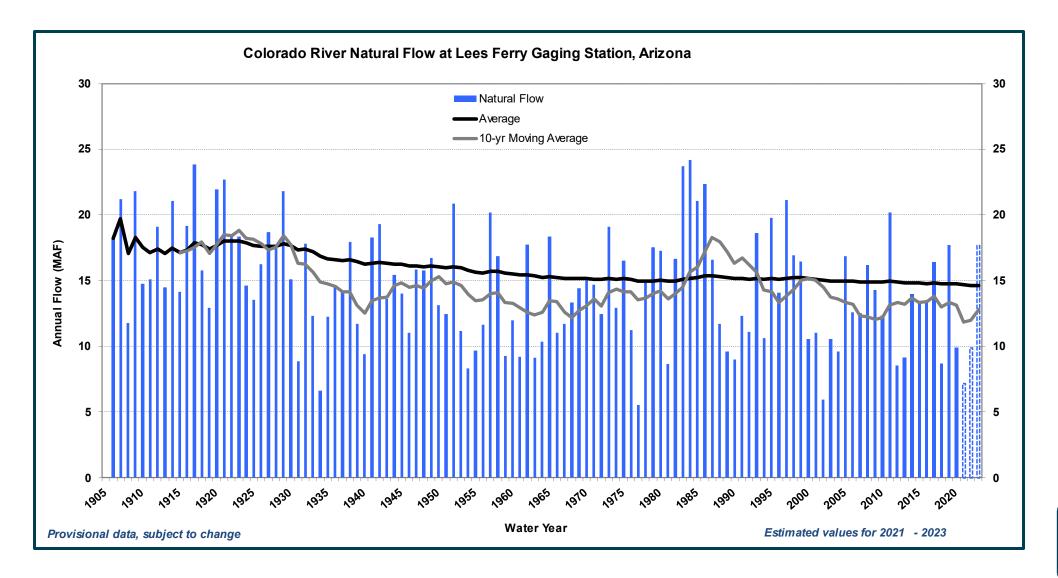
# Colorado River Basin Hydrology

- 16.5 million acre-feet (maf) allocated annually
  - 7.5 maf each to Upper and Lower Basins
  - 1.5 maf to Mexico
- 16 maf average annual "natural flow" (from historical record)
  - 14.8 maf in the Upper Basin and 1.3 maf in the Lower Basin
- Inflows are highly variable year to year
- 60 maf of storage (about 4 times the annual average inflow)
- Operations and water deliveries governed by the "Law of the River"

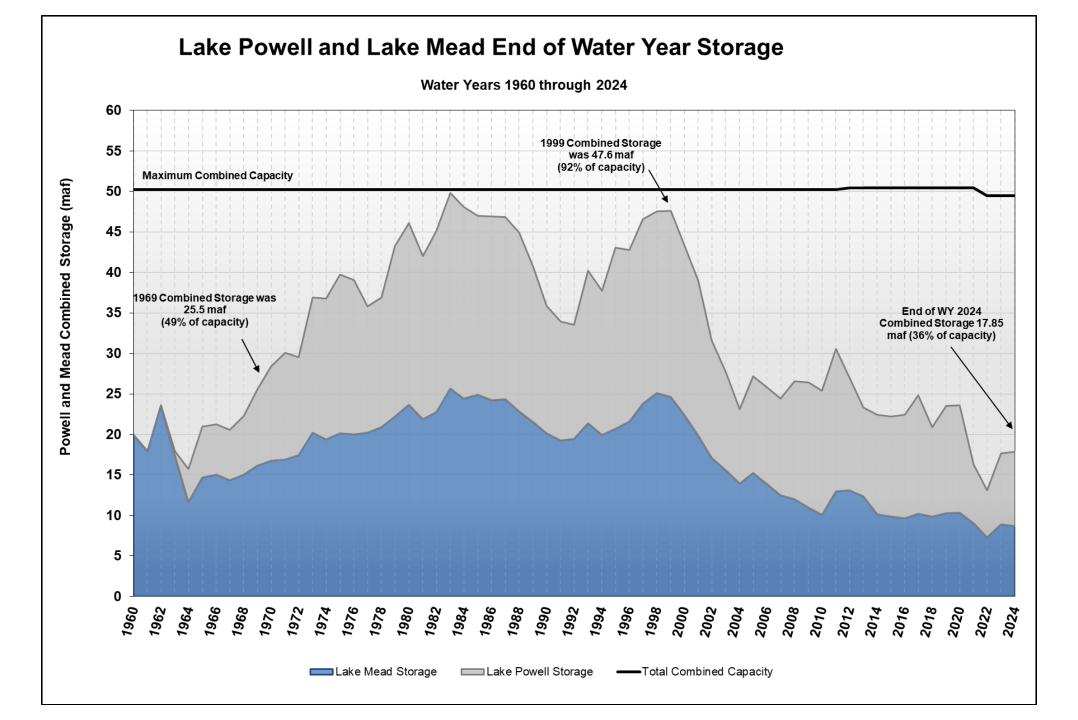




# Natural Flow Colorado River at Lees Ferry Gaging Station, Arizona Water Year 1906 to 2023

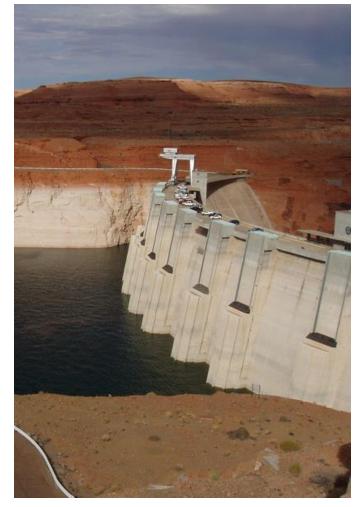








# Colorado River – Current Conditions (as of October 28, 2024)



Lake Powell near Glen Canyon Dam



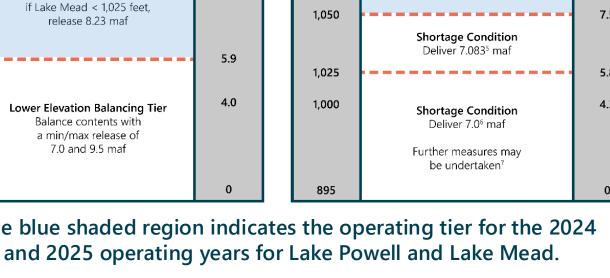
Lake Mead near Hoover Dam

- Lake Powell currentelevation is 3,577 feet at39% of capacity
- Lake Mead current elevation is 1,062 feet at 33% of capacity
- Total system storage currently 42% of capacity

Lake Powell & Lake Mead Operational Diagrams from the 2007 Interim Guidelines<sup>1</sup>

	Lake Powell	
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>
3,700	<b>Equalization Tier</b> Equalize, avoid spills, or release 8.23 maf	24.3
<b>3,636-3,666</b> (2008-2026)	<b>Upper Elevation Balancing Tier³</b> Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of	<b>15.5-19.3</b> (2008-2026)
3,575	7.0 and 9.0 maf  Mid-Elevation Release Tier  Release 7.48 maf;  if Lake Mead < 1,025 feet,	9.5
3,525	release 8.23 maf	5.9
3,490	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	4.0
3,370		0

	Lake Mead	
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) <sup>1</sup>
1,220	Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf	25.9
<b>1,200</b> (approx.) <sup>2</sup>	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	<b>22.9</b> (approx.) <sup>2</sup>
1,145	Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	15.9
1,075	Shortage Condition	9.4
1,050	Deliver 7.167 <sup>4</sup> maf  Shortage Condition	7.5
1,025	Deliver 7.083⁵ maf	5.8
1,000	<b>Shortage Condition</b> Deliver 7.0 <sup>6</sup> maf	4.3
	Further measures may be undertaken <sup>7</sup>	
895		0







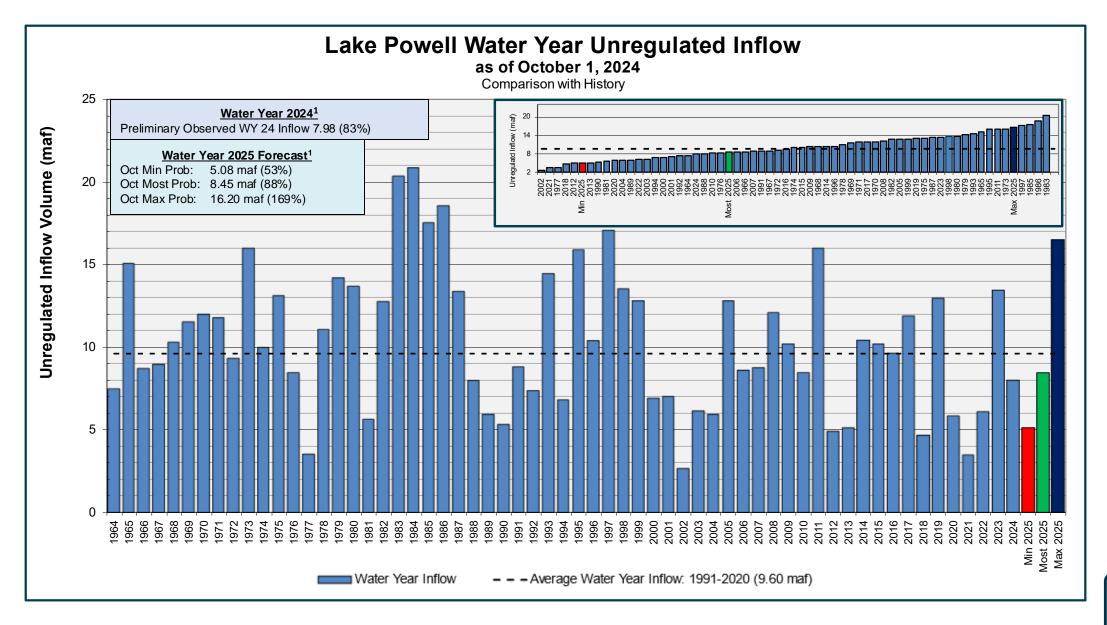


#### 2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan, and Binational Water Scarcity Contingency Plan Total Volumes (kaf)

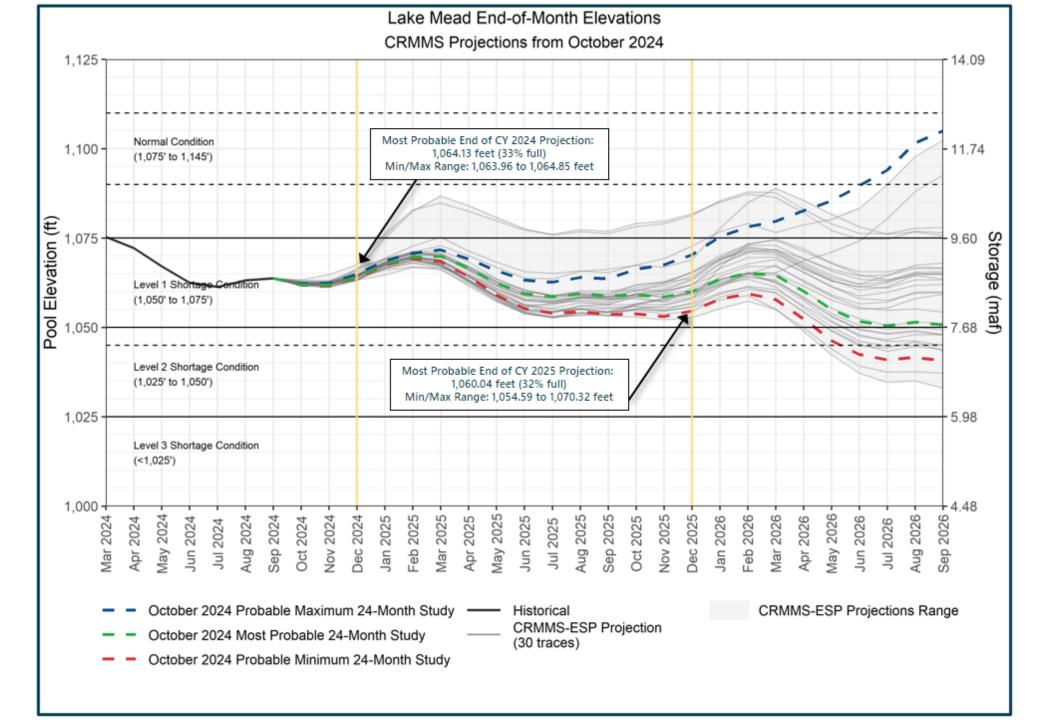
	Lake Mead Elevation		Interim delines rtages	Minute 323 Delivery Reductions	Total Combined Reductions	DCP Water Savings Contributions			Binational Water Scarcity Contingency Plan Savings	Combined Volumes by Country US: (2007 Interim Guidelines Shortages + DCP Contributions) Mexico: (Minute 323 Delivery Reductions + Binational Water Scarcity Contingency Plan Savings)					Total Combined Volumes
	(feet msl)	AZ	NV	Mexico	Lower Basin States + Mexico	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	Lower Basin States Total	Mexico Total	Lower Basin States + Mexico
Lake Mead	1,090 - 1,075	0	0	0	0	192	8	0	41	192	8	0	200	41	241
Operations	1,075 - 1050	320	13	50	383	192	8	0	30	512	21	0	533	80	613
(2024 & 2025)	1,050 - 1,045	400	17	70	487	192	8	0	34	592	25	0	617	104	721
	1,045 - 1,040	400	17	70	487	240	10	200	76	640	27	200	867	146	1,013
	1,040 - 1,035	400	17	70	487	240	10	250	84	640	27	250	917	154	1,071
	1,035 - 1,030	400	17	70	487	240	10	300	92	640	27	300	967	162	1,129
	1,030 - 1,025	400	17	70	487	240	10	350	101	640	27	350	1,017	171	1,188
	<1,025	480	20	125	625	240	10	350	150	720	30	350	1,100	275	1,375



The Secretary of the Interior will take affirmative actions to implement programs designed to create or conserve 100,000 acre-ft per annum or more of Colorado River System water to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the lower basin. All actions taken by the United States shall be subject to applicable law, including availability of appropriations.









# Operational Response to Changing Hydrologic Conditions

Minute 319

to the 1944

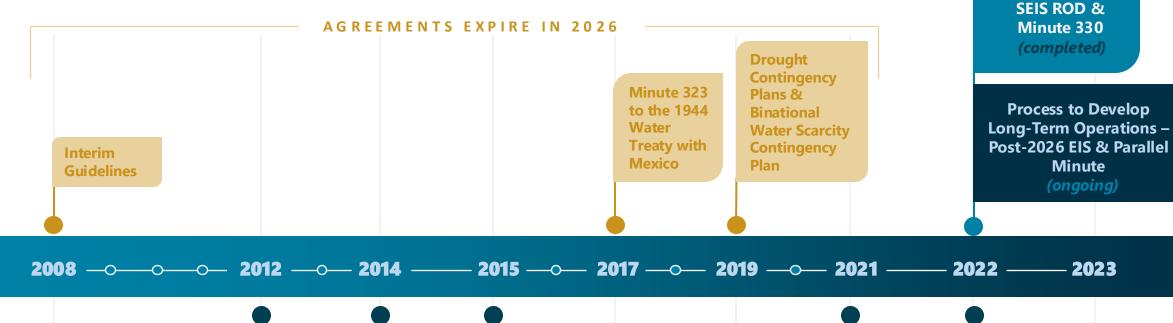
**Water Treaty** 

with Mexico

**Pilot System** 

**Program** 

Conservation



**Pilot Drought** 

**Understanding** 

Response

Memo. of

Lower Basin
500 + Plan

UC and LC System
Conservation and
Efficiency Programs
(ongoing)

Process to
Develop NearTerm Operations –

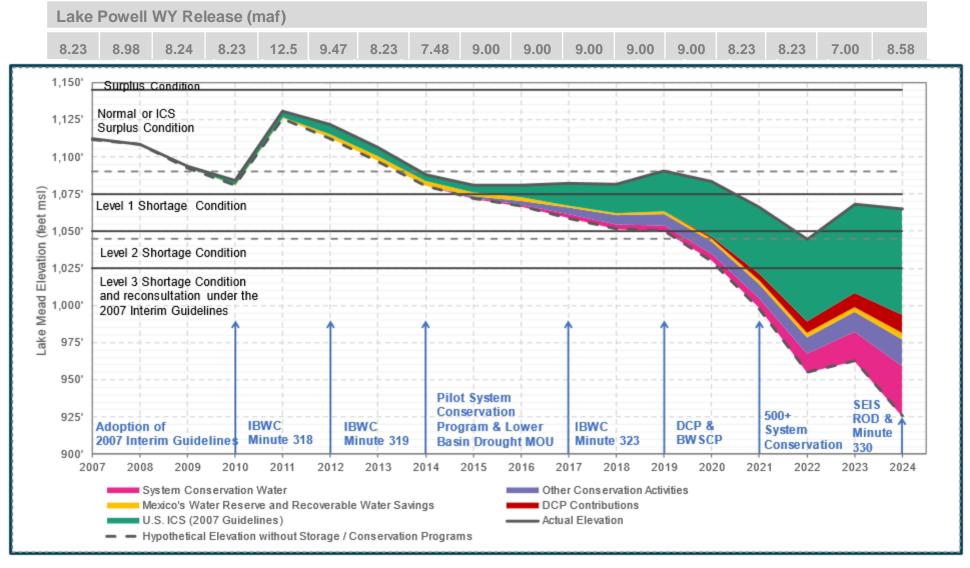
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# Additional Conservation Efforts Supplemental EIS and IBWC Minute 330

- SEIS conservation by the U.S. Lower Basin
  - Record of Decision published in May 2024
  - Additional conserved water through System Conservation, Intentionally Created Surplus, and Other Conserved Water Left in Lake Mead
  - Cumulative volume of 3.2 maf or more through 2026
    - Incorporates 2.3 maf of system conservation water under the LC Conservation Program
- IBWC Minute 330 conservation by Mexico
  - Minute put into force in April 2024
  - Additional conserved water through System Conservation and Mexico's Water Reserve
  - Cumulative volume of 400,000 acre-feet through 2026
- Collectively add nearly 50 feet to Lake Mead's elevation



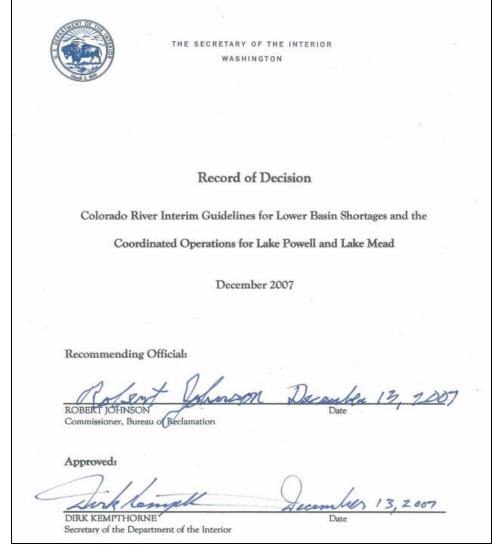
# Lake Mead Storage and Conservation\*



<sup>\*</sup>End of calendar year 2024 balances of U.S. ICS and Mexico's Water Reserve, system conservation water, and other voluntary contributions to Lake Mead are provisional numbers and are subject to change.



# Colorado River Operating Agreements



- Several agreements governing the operation of Lake Powell and Lake Mead expire at the end of 2026
  - 2007 Interim Guidelines (adopted in 2007, amended in 2024)
  - Minute 323 to the 1944 Water Treaty with Mexico (adopted in 2017)
  - 2019 Colorado River Basin Drought Contingency Plans (adopted in 2019)
- Agreements were adopted in sequence in response to changing hydrologic conditions
- The "Post-2026" process is intended to develop successor <u>domestic</u> agreements prior to preparation of the 2027 Annual Operating Plan (anticipated mid-2026)



# Post-2026 Process

- June 2022: "Pre-Scoping" Federal Register Notice
- June 2023: Notice of Intent to prepare an EIS formally initiates the Post-2026 process and public scoping period
- October 2023: Scoping Summary Report and Federal Register Notice identifies <u>Proposed Federal</u> <u>Action and Purpose & Need</u>
- Spring 2024: Began Alternatives Development Phase
  - Overall process is currently in this phase
- December 2024: Release Range of Alternatives
- Record of Decision planned for mid-2026



# **Need More Information?**

- Post-2026 Project Website: <a href="https://www.usbr.gov/ColoradoRiverBasin/post2026/index.html">https://www.usbr.gov/ColoradoRiverBasin/post2026/index.html</a>
  - Recordings & presentations from all public webinars
  - Recordings & presentations from Integrated Tech. Education Workgroup sessions
  - Pre-Scoping & Scoping Summary Reports
  - All Pre-Scoping & Scoping comments received by Reclamation
  - Link to the Operations Exploration Web Tool: <u>www.crbpost2026dmdu.org</u>
- Contacts:
  - Post-2026 Inbox <u>crbpost2026@usbr.gov</u>







#### INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

#### **New River Update 2024**

#### **Presentations by:**

**Robert Cardenas** 

Assistant Area Office Manager, Yuma, AZ

#### **Colorado River Citizens Forum**

October 30th, 2024



# **New River Background**

- New River originates South of Mexicali
- Initially Ag returns
- Flows North due to natural topography
- Through the center of Mexicali, BC Mexico
- Flows into the Salton Sea





## IBWC Addressing Water Quality

- Minute 261 October 2, 1979 Recommendations for the solution to the border sanitation problems
  - Provided definition and reiteration on the 1944 treaty for the preferential treatment of border sanitation.

- <u>Minute 264</u> December 4, 1980 Recommendations for solution of the New River border sanitation problem at Calexico, California/Mexicali, Baja Norte.
  - Established a water quality goal for the New River
  - Measures to improve infrastructure for treatment of industrial and domestic wastewater in Mexico



## IBWC Addressing Water Quality

- Minute 274 May 13, 1987 Joint Project for Improvement of the Quality of the Waters of the New River at Calexico, California/Mexicali, Baja California
  - Provided for a jointly funded project of \$1.2 million
  - Standby pumps for 2 of the pumping plants
  - Sewer cleaning equipment
- Minute 288 November 24, 1992 Conceptual Plan for the Long Term Solution to the Border Sanitation Problem of the New River at Calexico, California Mexicali, Baja California
  - Quick Fixes
    - Rehabilitation, replacement, and installation of sewer lines
    - Acquisition of sewer maintenance equipment
    - Control of untreated discharges into the New River
    - Expansion of Zaragoza WWTP
    - Construction of a new treatment plant (Las Arenitas)



- Minute 294 January 6, 1996 Facilities Planning Program for the Solution of Border Sanitation Problems
  - Established IBWC Binational Technical Committee
  - Participating agencies:

U.S.
IBWC
EPA
CRWQCB
IID
Imperial County PH
City of Calexico
NADBank

**Mexico** 

CILA

**CESPM** 

CONAGUA

CEA

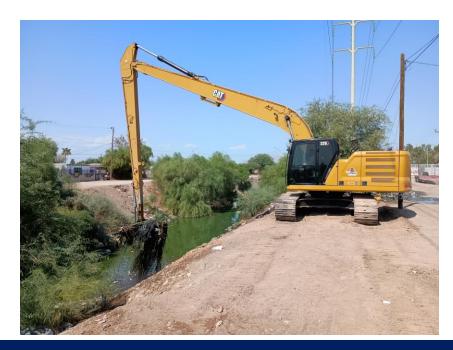
ConsulMex Calexico

**NADBank** 



- Field observation and meeting held every other month (6 per year)
- Visit key sites of interest:
  - Discharges to New River and its tributaries
  - Pumping Plants
  - Small lift stations
  - Treatment plants
  - Infrastructure
- Infrastructure status (issues, planned projects, repairs etc.)
- Present current water quality results



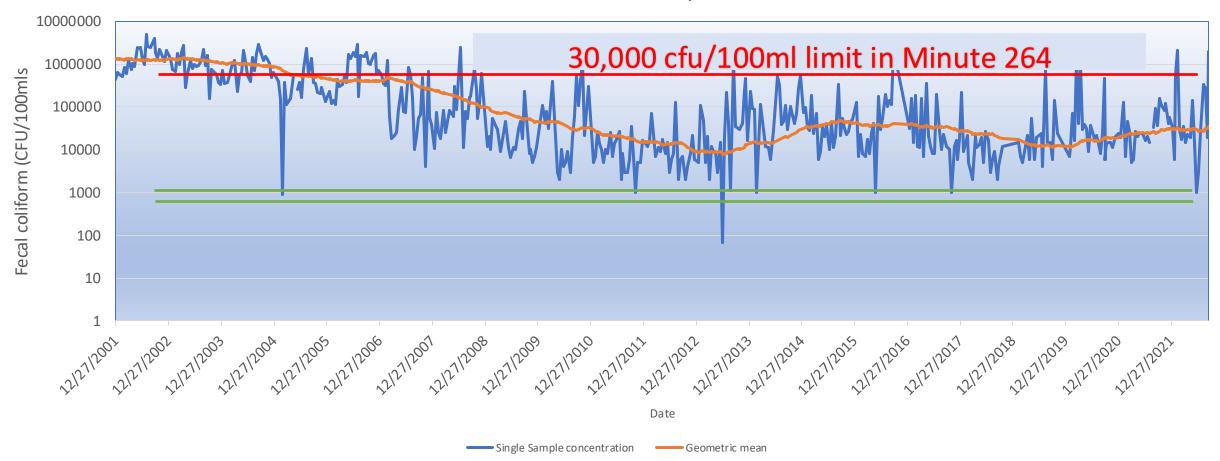




USGS* Flow cfs  1 118  85  73  76  67  79	Temp Air C 14.0 11.0 24.0 20.0 18.0	erature Water C 15.7 15.0 18.1 19.0 18.3 18.3	Dissolved Oxygen mg/l  4.78  4.04  4.77  3.36  4.00	pH Units 7.45 7.45 7.51 7.27 7.38	Conductance Umhos 3,754 3,724 4,698 5,234	Fecal Coliform #/100 ml 39,000 90,000 30,000 19,000	(1) E-Coli MPN 43,520 111,990 22,850 29,900	BOD mg/l n/a n/a 94.0	Analysis COD mg/l n/a n/a 107	Inspector - samplers  GC/RC  RC/GC  GC	Remarks rain event on 02/06/2024
1 118 85 73 76 67	14.0 11.0 24.0 20.0 18.0	15.7 15.0 18.1 19.0 18.3	4.78 4.04 4.77 3.36 4.00	7.45 7.45 7.51 7.27	3,754 3,724 4,698 5,234	39,000 90,000 30,000	43,520 111,990 22,850	n/a n/a	n/a n/a	GC/RC RC/GC	rain event on 02/06/2024
85 73 76 67 79	11.0 24.0 20.0 18.0	15.0 18.1 19.0 18.3	4.04 4.77 3.36 4.00	7.45 7.51 7.27	3,724 4,698 5,234	90,000	111,990 22,850	n/a	n/a	RC/GC	rain event on 02/06/2024
73 76 67 79	24.0 20.0 18.0	18.1 19.0 18.3	4.77 3.36 4.00	7.51 7.27	4,698 5,234	30,000	22,850				rain event on 02/06/2024
76 67 79	20.0	19.0 18.3	3.36 4.00	7.27	5,234			94.0	107	GC	
67	18.0	18.3	4.00		·	19,000	29 900	1			1
79				7.38	1 1		23,300			RC/JM	
	24.0	18.3	4.00		5,153	18,000	14,830	8.0	67	GC/RC	
70.5	1		4.90	7.59	4,843	25,000	17,850			GC/JM	
76.6	27.0	24.0	3.35	7.52	5,388	14,000	7,430	14.0	81	RC/GC	
71.2	29.0	23.3	4.35	7.71	5,300	29,000	44,200			GC/JM	
60	31.0	25.6	3.65	7.49	5,301	17,000	3,590	25.0	151	GC/RC	
64	34.0	28.6	3.93	7.63	5,351	13,000	4,110			RC/JM	
58	35.0	31.0	2.97	7.55	5,471	10,000	2,940	26.0	97	RC/GC	
50	36.0	31.0	2.80	N/A	5,664	38,000	53,550			RC/JM	YSI probe malfunctioning
35	34.0	30.9	2.72	N/A	5,889	130,000	111,990	13.0	188	RC/JM	YSI probe malfunctioning
42	40.0	31.2	N/A	N/A	5,695	600,000	523,100			GC/JM	YSI probe malfunctioning/PP#5 -rain bypass(8/12-
34	32.0	31.4	2.51	N/A	5,408	116,000	105,250	8.0	114	GC/JM	YSI probe malfunctioning
24	40.0	31.1	3.26	7.67	6,089	215,000	198,630			RC/IL	New YSI probe
	58 50 50 535 50 50 50 50 50 50 50 50 50 50 50 50 50	1 64 34.0 1 58 35.0 1 50 36.0 1 35 34.0 1 42 40.0 1 34 32.0	1 64 34.0 28.6 1 58 35.0 31.0 1 50 36.0 31.0 1 35 34.0 30.9 1 42 40.0 31.2 1 34 32.0 31.4	1 64 34.0 28.6 3.93 1 58 35.0 31.0 2.97 1 50 36.0 31.0 2.80 1 35 34.0 30.9 2.72 1 42 40.0 31.2 N/A 1 34 32.0 31.4 2.51	1     64     34.0     28.6     3.93     7.63       1     58     35.0     31.0     2.97     7.55       1     50     36.0     31.0     2.80     N/A       1     35     34.0     30.9     2.72     N/A       1     42     40.0     31.2     N/A     N/A       1     34     32.0     31.4     2.51     N/A	1     64     34.0     28.6     3.93     7.63     5,351       1     58     35.0     31.0     2.97     7.55     5,471       1     50     36.0     31.0     2.80     N/A     5,664       1     35     34.0     30.9     2.72     N/A     5,889       1     42     40.0     31.2     N/A     N/A     5,695       1     34     32.0     31.4     2.51     N/A     5,408	n     64     34.0     28.6     3.93     7.63     5,351     13,000       n     58     35.0     31.0     2.97     7.55     5,471     10,000       n     50     36.0     31.0     2.80     N/A     5,664     38,000       n     35     34.0     30.9     2.72     N/A     5,889     130,000       n     42     40.0     31.2     N/A     N/A     5,695     600,000       n     34     32.0     31.4     2.51     N/A     5,408     116,000	64     34.0     28.6     3.93     7.63     5,351     13,000     4,110       65     35.0     31.0     2.97     7.55     5,471     10,000     2,940       6     50     36.0     31.0     2.80     N/A     5,664     38,000     53,550       7     35     34.0     30.9     2.72     N/A     5,889     130,000     111,990       8     42     40.0     31.2     N/A     N/A     5,695     600,000     523,100       9     34     32.0     31.4     2.51     N/A     5,408     116,000     105,250	1     64     34.0     28.6     3.93     7.63     5,351     13,000     4,110       1     58     35.0     31.0     2.97     7.55     5,471     10,000     2,940     26.0       1     50     36.0     31.0     2.80     N/A     5,664     38,000     53,550       1     35     34.0     30.9     2.72     N/A     5,889     130,000     111,990     13.0       1     42     40.0     31.2     N/A     N/A     5,695     600,000     523,100       1     34     32.0     31.4     2.51     N/A     5,408     116,000     105,250     8.0	1     64     34.0     28.6     3.93     7.63     5,351     13,000     4,110       1     58     35.0     31.0     2.97     7.55     5,471     10,000     2,940     26.0     97       1     50     36.0     31.0     2.80     N/A     5,664     38,000     53,550       1     35     34.0     30.9     2.72     N/A     5,889     130,000     111,990     13.0     188       1     42     40.0     31.2     N/A     N/A     5,695     600,000     523,100       1     34     32.0     31.4     2.51     N/A     5,408     116,000     105,250     8.0     114	n         64         34.0         28.6         3.93         7.63         5,351         13,000         4,110         RC/JM           n         58         35.0         31.0         2.97         7.55         5,471         10,000         2,940         26.0         97         RC/GC           n         50         36.0         31.0         2.80         N/A         5,664         38,000         53,550         RC/JM           n         35         34.0         30.9         2.72         N/A         5,889         130,000         111,990         13.0         188         RC/JM           n         42         40.0         31.2         N/A         N/A         5,695         600,000         523,100         GC/JM           n         34         32.0         31.4         2.51         N/A         5,408         116,000         105,250         8.0         114         GC/JM



Fecal Coliform Concentrations at the New River At the International Boundary 2001-2022





#### **New River Notification Protocol-**

- A formal notification protocol was finalized in 2023.
- Notification protocol was created with public health in mind.
- The notification process consists of CESPM notifying the Mexican Section of the issue/incident.
- The information provided is then relayed to USIBWC via email. Upon receiving the notification, USIBWC sends an email notifying Headquarters, U.S. BTC members, Imperial County and other State, Local and Federal entities.
- As updates are received, the information is relayed to everyone until the issue is resolved.



#### Actions by Mexico - BEIF Projects (NADBank/CESPM 2022-2024)

Phase I WWC System and Lift Stations.

- Replacement of 10,506 meters of concrete sanitary sewer lines that fulfilled their useful life with more than 50 years -100% complete; and rehabilitation of 3 phase I wastewater pumping plants (PP#2, PP#4-complete & PP#5-complete) 98.5% complete as of September 2024.
  - Cost \$8.77 m USD (BEIF \$4.37m; ConAgua/CESPM \$4.40m)
  - mitigates 33.1 MGD untreated WW discharges into the New River
- Rehabilitation of 12 lift stations
  - 99.8% complete, as of September 2024
  - mitigates 8.7 mgd untreated WW discharges into the New River
  - Total cost \$5.7 m (BEIF \$2.7 m; Conagua/CESPM \$3m)



- Main Lines Phase II Rehabilitation
  - Rehabilitation of 12,910 meters of WW collection system in 20 subdivisions.
  - Eliminates risk of 2.2 mgd untreated WW discharge into the New River
  - Total cost \$4.96 M-USD (BEIF \$2.42m; ConAgua \$1.27m; CESPM \$1.27 M)
  - 100% complete as of September 2024.
- Phase II Sewer Force Mains Rehabilitation
  - Cost \$6.8 m-USD (BEIF \$3.4m; ConAgua/CESPM \$3.4 m)
  - Mitigates risk of 44.8 MGD untreated WW discharges into the New River
  - Project includes the rehabilitation of five forces mains of Lift Stations
  - PP#1,3, 4 (complete), 6, 7 (complete) 57% complete as of September 2024



- WW Force Main to Collector Voluntad
  - Total estimated cost \$4 M-USD
  - Construction of 5,117.4m of 18" Force Main PVC pipe towards Zaragoza treatment plant
  - Eliminates risk of 4.6 mgd transboundary flows
  - 69.8% complete as of September 2024

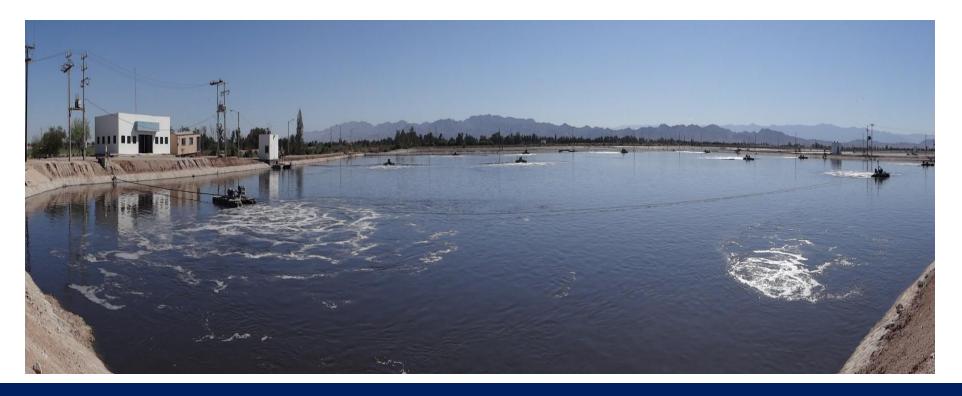


- Las Arenitas WWTP Phase I Expansion
  - Total estimated cost \$40 M-USD
  - Increases 9.5 mgd capacity (actual treatment capacity 19.2 mgd, plant operating at an average 22 mgd.
     New scope of work for 29 mgd treatment capacity)
  - Mitigates risk of 28.8 MGD untreated WW discharges into the New River
  - Final design awaiting approval as of September 2024
- Zaragoza WWTP Improvements
  - Total estimated cost \$40 M-USD
  - Mitigates risk of 29.7 mgd of untreated www discharges into the New River
  - Application under review by NADBank (September 2024 update)



# ZARAGOZA WASTEWATER TREATMENT PLANT

- Became operational in 1969, current capacity is 1,300lps
- Aeration lagoons
- Effluent flows into the New River
- Effluent is sampled monthly in accordance with Min. 264.





## LAS ARENITAS WASTEWATER TREATMENT PLANT

- Became operational in 2007, current capacity 840lps
- Effluent flows South into Rio Hardy
- Diverted untreated wastewater away from the New River, resulting in large water quality improvement after 2007
- Expansion of treatment capacity is currently under development, cost is estimated at \$40M









#### BINATIONAL WATER QUALITY MONITORING STUDY

- Comprehensive binational study
  - One year study will assess and characterize New River water quality
  - Multi-agency collaboration from both countries through the BTC
  - Sampling sites in Mexico and the US
  - Proposed parameters include: Metals, semi volatile organics, nutrients, bacteria
  - Sampling events starting November 13<sup>th</sup> 2024

#### The IBWC and the BTC will use the study to:

- Document the condition of the New River
- Evaluate water quality to validate recent improvements
- Create a baseline for planned improvements
- Identify pending issues
- Updated efforts in both U.S. and Mex.
- Utilize the information to discuss the water quality standards found in IBWC Minute 264
- Negotiate new Minute for water quality goals (would update Minute 264)



# QUESTIONS?

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