



**WESTERN  
RESOURCE  
ADVOCATES**

# The Colorado River Basin Transformative Change Through Incrementalism

**Sustainability of Engineered Rivers in Arid Lands: Response to Critical Challenges  
IWRA WEBINAR**

**June 17, 2021 | John Berggren**

# WHO IS WRA?



PROTECTING THE WEST'S LAND, AIR, AND WATER

## Western Resource Advocates

- We are a conservation organization with more than 30 years experience in the Intermountain West
- We use law, science, and economics to craft innovative solutions to the most pressing environmental challenges
- We work to conserve western lands, advance clean energy, ensure healthy rivers, and protect air quality throughout the region

**OUR MISSION:** Western Resource Advocates is dedicated to protecting the West's land, air, and water to ensure that vibrant communities exist in balance with nature.

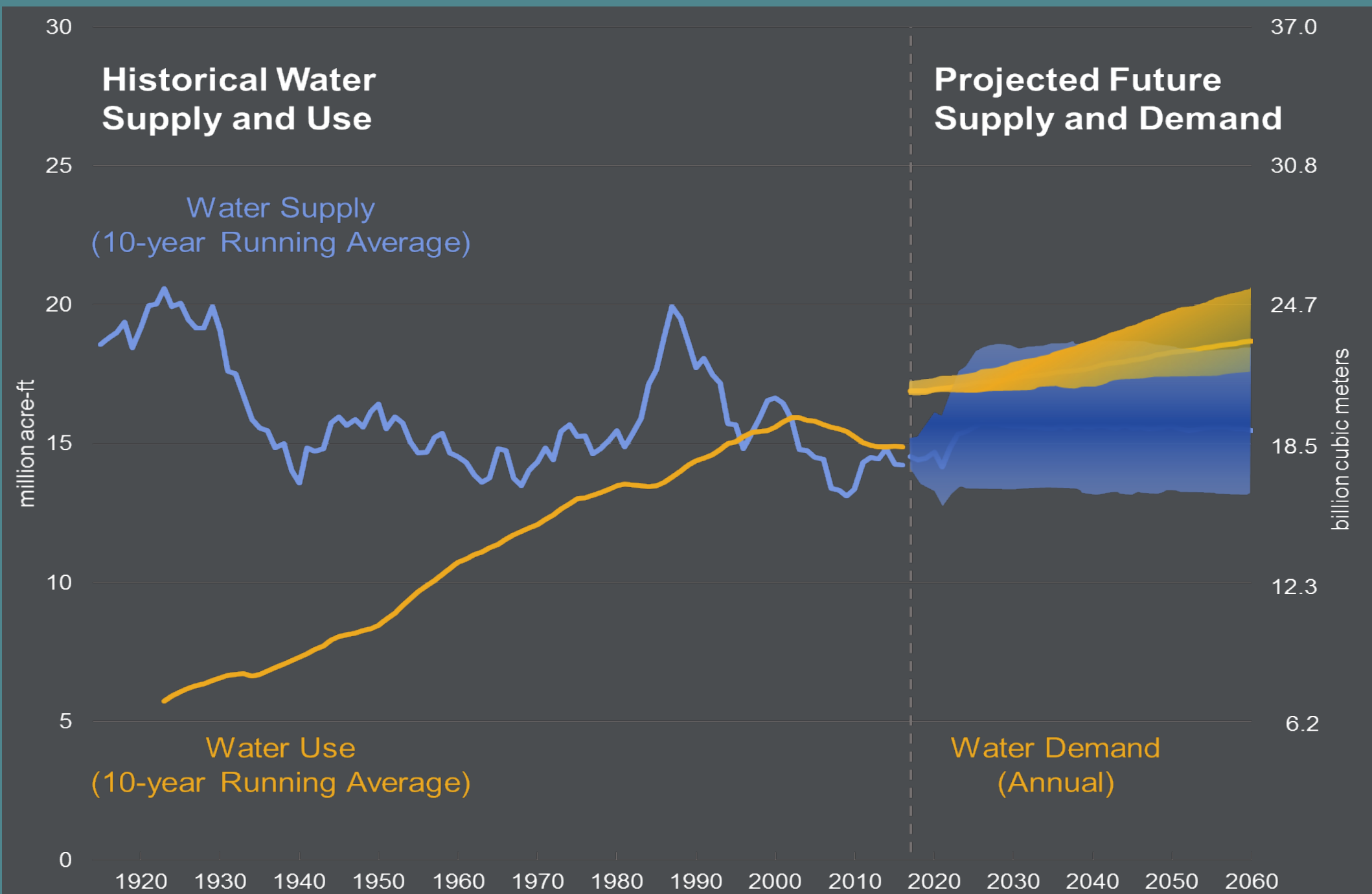
[www.westernresources.org](http://www.westernresources.org)



**Legend**

- Colorado River Basin hydrologic boundary
- Areas outside hydrologic basin receiving Colorado River water







Source: John Fleck <http://www.inkstain.net/fleck/2015/03/lake-mead-bathtub-ring/>

ENVIRONMENT

# 'Red alert': Lake Mead falls to record-low level, a milestone in Colorado River's crisis

Ian James Arizona Republic

Published 10:00 a.m. MT Jun. 10, 2021 | Updated 1:53 p.m. MT Jun. 11, 2021

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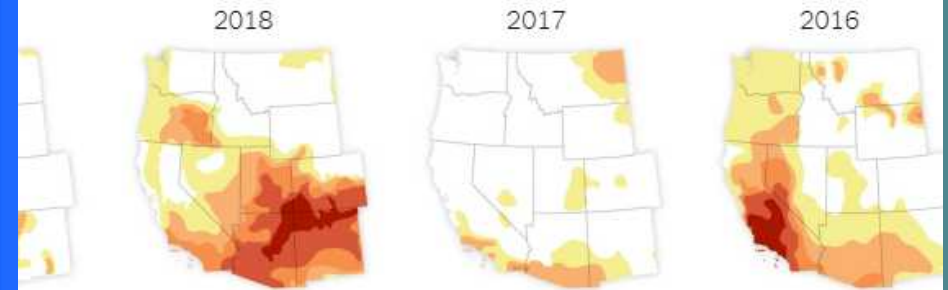
VIEW FULL GALLERY

# The Western Drought? Or Yourself.

By Lisa Popovich June 11, 2021

ing the American West. Extreme  
read than at any point in at least 20  
Drought Monitor, the government's  
vice.

ummer are still to come.



	Year	What it did (major elements)	Citations
Colorado River Compact	1922	Apportioned river flow between Upper and Lower Basins	45 U.S. Stat. 1057
Boulder Canyon Project Act	1928	Ratified Compact; authorized Boulder Canyon Dam	45 Stat. 1057
Treaty with Mexico	1944	Apportioned river flow between the United States and Mexico	59 Stat. 1219
Upper Colorado River Basin Compact	1948	Apportioned Upper Basin waters among Colorado, New Mexico, Utah, and Wyoming	63 Stat. 31 (1949)
Colorado River Storage Project Act	1956	Authorized several projects, including Glen Canyon Dam	43 U.S.C 620
Arizona v. California decision	1963	Settled Lower Basin apportionments among Arizona, California, and Nevada (as first proposed in 1928)	373 U.S. 546 (1963)
Colorado River Basin Project Act	1968	Authorized the Central Arizona Project, and required preparation of Annual Operating Plan (AOP) for the two major dams (Hoover and Glen Canyon)	43 U.S.C. 1501

Minute 242	1973	Established salinity criteria for deliveries to Mexico	Treaty minutes available at <a href="http://www.ibwc.gov/">www.ibwc.gov/</a>
Colorado River Basin Salinity Control Act	1974	Created basinwide salinity control program	43 U.S.C. 1571
Grand Canyon Protection Act	1992	Established reservoir operating criteria at Glen Canyon to balance hydropower and environmental concerns	106 Stat. 4669
Interim Guidelines (Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead)	2007	Provided for coordinated reservoir operations of Lake Powell and Lake Mead, and defined Lower Basin curtailment schedules. Promoted conservation and storage in Lower Basin, implicitly creating multi-year accounting.	<a href="http://www.usbr.gov/lc/region/programs/strategies/FEIS/index.html">www.usbr.gov/lc/region/programs/strategies/FEIS/index.html</a>
Minute 319	2012	Expanded US/Mexico cooperation on river management especially regarding storage, curtailments, and delta recovery	Treaty minutes available from IBWC: ( <a href="http://www.ibwc.gov/">www.ibwc.gov/</a> )
Minute 323	2017	Extended terms of Minute 319, provided for emergency curtailments, funding for conservation projects in Mexico, and further restoration of the delta	Treaty minutes available from IBWC: ( <a href="http://www.ibwc.gov/">www.ibwc.gov/</a> )



### ARTICLE III

(a) There is hereby apportioned from the Colorado River System in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.



# LBDTCP & BWSCP Reductions

Lake Mead Elevation	AZ (2007)	AZ (Plan)	AZ Total	NV (2007)	NV (Plan)	NV Total	CA (2007)	CA (Plan)	CA Total	USBR	Mexico Minute 323 LERS	Mexico Minute 323 BWSCP	Mexico Total	TOTAL
1,090-1,075	0	192,000	192,000	0	8,000	8,000	0	0	0	100,000	0	41,000	41,000	341,000
1,075-1,050	320,000	192,000	512,000	13,000	8,000	21,000	0	0	0	100,000	50,000	30,000	80,000	713,000
1,050-1,045	400,000	192,000	592,000	17,000	8,000	25,000	0	0	0	100,000	70,000	34,000	104,000	821,000
1,045-1,040	400,000	240,000	640,000	17,000	10,000	27,000	0	200,000	200,000	100,000	70,000	76,000	146,000	1,113,000
1,040-1,035	400,000	240,000	640,000	17,000	10,000	27,000	0	250,000	250,000	100,000	70,000	84,000	154,000	1,171,000
1,035-1,030	400,000	240,000	640,000	17,000	10,000	27,000	0	300,000	300,000	100,000	70,000	92,000	162,000	1,229,000
1,030-1,025	400,000	240,000	640,000	17,000	10,000	27,000	0	350,000	350,000	100,000	70,000	101,000	171,000	1,288,000
<1,025	480,000	240,000	720,000	20,000	10,000	30,000	0	350,000	350,000	100,000	125,000	150,000	275,000	1,475,000

LERS - Low Elevation Reservoir Shortages  
 BWSCP - Binational Water Scarcity Contingency Plan reductions



Source: Central Arizona Project

MARCH 3, 2021

# In rapidly warming Colorado River Basin, the negotiating table is being set

A new round of talks could define how the river system adapts to a changing climate for the next generation.

by Luke Runyon, KUNC

TWEET

SHARE

“A palpable sense of optimism and pride that such innovation is possible has emerged in recent years, even as reservoir levels remain dangerously low.” Kenney, et al., “The Colorado River Basin”, *forthcoming*



# Thanks!

John Berggren

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