

**MONTHLY REPORT TO THE
COLORADO RIVER BOARD OF CALIFORNIA**

April 13, 2022

COLORADO RIVER BASIN WATER SUPPLY CONDITIONS REPORT

As of April 4th, the surface water elevation of Lake Powell was 3,523.04 feet with 5.81 million-acre feet (MAF) of storage, or 24% of capacity. The surface water elevation of Lake Mead was 1,061.04 feet with 8.50 MAF of storage, or 33% of capacity. As of April 3rd, the total System storage was 20.88 MAF, or 35% of capacity, which is about 5.39 MAF less than the total System storage at this same time last year.

As of April 5th, storage in the Upper Basin reservoirs, excluding Lake Powell, included the following volumes: 46% of capacity at Fontenelle Reservoir in Wyoming; 78% of capacity at Flaming Gorge Reservoir in Wyoming and Utah; 93% of capacity at Morrow Point and 29% of capacity at Blue Mesa Reservoir in Colorado; and 51% of capacity at Navajo Reservoir in New Mexico.

As of April 4th, the March observed inflow into Lake Powell was 0.30 MAF (55% of normal) and the April forecasted inflow is 0.60 MAF (66% of normal). The preliminary forecasted unregulated inflow into Lake Powell for Water Year (WY) 2022 is 6.31 MAF (66% of normal). The forecasted April through July 2022 unregulated inflow into Lake Powell is 4.1 MAF (64% of normal). To date, WY-2022 precipitation is 97% of normal and the current Basin snowpack is 87% of normal.

Colorado Basin River Forecast Center Water Supply Webinar

On April 7th, the Colorado Basin River Forecast Center (CBRFC) held a webinar to review the Basin's current water supply conditions and forecasts. Precipitation conditions in March were more active, with storm activity in the beginning and end of the month. However, monthly precipitation conditions were below normal across most of the Colorado River Basin, marking the third month of dry conditions in the Basin.

Water-Year 2022 precipitation conditions are near average across the Upper Basin due to above average precipitation during October 2021 and December 2021. WY-2022 precipitation conditions for the Upper Colorado River Basin range from 90% of average in the Upper Green, Dolores, and San Juan River Basins to 110% of average in the Prince/San Rafael River Basin. In the

Lower Colorado, precipitation conditions range from 45% of average in the Upper Gila River Basin to 90% of average in the Virgin River Basin.

Temperatures in March were near to slightly above average and did not cause extreme snowmelt. However, some snowmelt did occur below 9,500 feet during a few warm days during the month. Dry soil conditions continue to persist throughout the Basin, but in areas of average soil moisture, spring runoff is expected to be efficient.

The April 1st water supply forecasts have decreased over the past month due to dry precipitation conditions in March. The water supply forecasts for the Upper Colorado River basin ranges from 40% to 100% of normal, while the Lower Colorado River basin forecast ranges from 10% to 65% of normal.

As of April 6th, the snow water equivalent (SWE) conditions in the Upper Colorado River Basin range from 70% of median in the Upper Green River basin to 100% of median in the Gunnison River basin. In the Lower Colorado River Basin much of the snow has melted out, with the exception of the Virgin River basin with SWE conditions at 70% of median.

Over the next week, it is expected that dry and warm conditions will persist, and snowmelt may occur at lower elevations. Some precipitation is expected during next week. Between the second and third week of April, ridging is anticipated to occur over the Eastern Pacific causing below normal precipitation across parts of the Colorado River Basin.

GENERAL ANNOUNCEMENTS AND UPDATES

Department of the Interior Letter Regarding Drought Response Measures at Glen Canyon Dam/Lake Powell, April 8, 2022

On April 8th, the Assistant Secretary for Water and Science, Ms. Tanya Trujillo, distributed a letter to the representatives of the seven Colorado River Basin States. The purpose of the letter was to outline and highlight the continued deteriorating hydrologic and water supply conditions in the Basin and specific concerns related to the effective operation and management of Lake Powell and the Glen Canyon Dam power-plant. Specifically, Reclamation is concerned that if Lake Powell declines to, or below, elevation 3,490 feet (minimum power pool) releases through Glen Canyon Dam could only be accommodated on the river outlet works. From an infrastructure perspective, this could result in operational challenges in delivering annual water supplies, increase the risks of uncertainty and instability in the western electrical grid, and cause public health and safety concerns associated with drinking water supplies to Page, Arizona, and Native American communities in the region.

The letter requests the consideration by the seven Basin states regarding potentially reducing the Calendar-Year 2022 annual release from Lake Powell from 7.48 million acre-feet to 7.0 million acre-feet. Reclamation also intends to provide additional certainty regarding the annual water release volumes and tier determinations associated with the 2023 Annual Operating Plan and Glen Canyon Dam and Lake Mead operations. Furthermore, the letter refers to the authorizations provided in Sections 6 and 7.D. of the 2007 Interim Shortage Guidelines for taking this extraordinary action. The letter also acknowledges that this proposed reduction in the annual release from Glen Canyon Dam in 2022 would be done in conjunction with the proposed drought operations plan that is currently being finalized and readied for implementation by the Upper Basin States, Upper Colorado River Commission and Reclamation. These two extraordinary efforts combined are intended to bolster storage in Lake Powell by approximately 1.0 million acre-feet and significantly reduce the probability of Lake Powell reaching the critical elevation of 3,490 feet. Assistant Secretary Trujillo has requested a response from the seven Basin states on, or before, April 22, 2022. Representatives of the agencies and Board staff will be working with representatives of the other six states in developing a response to the Interior Department's letter. A copy of the April 8th letter sent to Chairman Nelson has been distributed with the handout materials and this monthly report.

California Drought Executive Order

On March 28th, Governor Newsom signed an executive order (EO-N-7-22) in response to the ongoing drought conditions in California. The order asks the Water Board to consider a ban on watering of decorative grass around commercial, industrial, and institutional buildings. To further conserve water and strengthen drought resiliency in this critically dry year, the Governor is encouraging suppliers, where appropriate, to consider going above and beyond the Level 2 of their water shortage contingency plans, activating more ambitious measures. The Governor has also ordered state agencies to submit funding proposals to support the state's short- and long-term drought response measures, including emergency assistance to communities and households facing drought-related water shortages, facilitating groundwater recharge and wastewater recycling, improvements in water use efficiency, protecting fish and wildlife, and minimizing drought-related economic disruption. The executive order includes several other provisions that will protect all water users:

- Ensuring Vulnerable Communities Have Drinking Water - Cuts red tape so communities that need access to emergency hauled or bottled water can get it immediately.
- Safeguarding Groundwater Supplies - Requires local permitting authorities to coordinate with Groundwater Sustainability Agencies to ensure new proposed wells do not compromise existing wells or infrastructure, as 85 percent of public water systems rely

heavily on groundwater during drought, and streamlines permitting for groundwater recharge projects that help to refill aquifers when rains come.

- Protecting Vulnerable Fish and Wildlife - Expedites state agency approvals for necessary actions to protect fish and wildlife where drought conditions threaten their health and survival.
- Preventing Illegal Water Diversions - Directs the Water Board to expand site inspections in order to determine whether illegal diversions are occurring.

More information on the executive order is available at:

<https://www.gov.ca.gov/2022/03/28/as-western-drought-worsens-governor-newsom-moves-to-bolster-regional-conservation-efforts/>

State, Federal Agencies Announce Agreement with Local Water Suppliers to Improve the Health of Rivers and Landscapes

On March 29th, State, federal and local water leaders announced a memorandum of understanding (MOU) for measures to provide additional water flows and new habitat to help improve conditions in the Sacramento-San Joaquin River Delta watershed. The MOU outlines terms for an eight-year program that would provide substantial new flows for the environment to help recover salmon and other native fish, create new and restored habitat for fish and wildlife, and provide significant funding for environmental improvements and water purchases. It also outlines a governance and habitat monitoring framework with clear metrics and goals to allow state, federal and local partners to analyze progress, manage adaptively and decide whether the program should be continued, modified, or ended after eight years. Signatories to the agreement also committed to finalize the following elements:

- Up to 824,000 acre-feet of additional flow to and through the Delta in the ecologically important window of January through June. Target flow volumes vary depending upon how wet or dry a year is, and flows made available under the agreement will be above current regulatory conditions.
- 20,000 acres of additional floodplain habitat.
- 20,000 acres of rice cropland inundated in ways to improve generation of microscopic plants and animals that provide fish food.
- Over 5,000 acres of additional tidal wetlands and associated floodplain.
- Nearly 3,300 acres of additional spawning, and instream and floodplain juvenile rearing habitat.
- A new state multi-disciplinary restoration unit to accelerate permitting and implementation of habitat projects.

- Annual reports informing adaptive management and describing status and trend of native fish populations and whether commitments by voluntary agreement parties are being met.
 - Triennial reports and public workshops in years three and six of the agreement to analyze progress.
- A “red,” “yellow,” or “green” decision by state water quality regulators in year eight to determine if the voluntary agreements are achieving ecological objectives and should be continued, modified, or ended.

A copy of the MOU is available at:

https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf?utm_medium=email&utm_source=govdelivery

Reclamation announces Funding Opportunity for Drought Resiliency

On March 24th, the Bureau of Reclamation announced a funding opportunity for WaterSMART: Drought Resiliency Projects. This program provides federal cost-share funds for entities to take a proactive approach to drought through building projects that increase water supply reliability and improve water management. Eligible applicants could include:

- States, Tribes, irrigation districts and water districts.
- State, regional, or local authorities, the members of which include one or more organizations with water or power delivery authority.
- Other organizations with water or power delivery authority.
- Nonprofit conservation organizations that are acting in partnership with an entity listed.

Applicants are invited to submit proposals under the following funding groups:

- Funding Group I: Up to \$500,000 in federal funds will be available for projects that generally should be completed in two years.
- Funding Group II: Up to \$2,000,000 in federal funds will be available for larger projects that may take up to three years to complete. Projects in this group may be funded on an annual basis, and if so, funding for the second and third years of the project is contingent upon future appropriations.
- Funding Group III: Up to \$5,000,000 in federal funds will be available for larger projects that may take up to three years to complete.

Applications are due June 15, 2022. For more information on this funding opportunity, visit www.grants.gov and search funding opportunity number R23AS00005.

Washington, D.C. Report

President Proposes \$1.4 billion in Fiscal Year 2023 for Bureau of Reclamation

On March 28th, the Biden-Harris Administration submitted to Congress the President's Budget for fiscal year 2023, which proposes a \$1.4 billion Fiscal Year 2023 Budget for the Department of the Interior's Bureau of Reclamation. Reclamation's budget supports the Administration's conservation and climate resilience priorities through funding for programs in the Colorado River Basin to continue to implement the drought contingency plans, implement long-term, comprehensive water supply solutions for farmers, families, and communities in California, and continued funding for programs such as WaterSMART that allow Reclamation to work in close collaboration with non-federal partners to address emerging water demands and water shortage issues in the West.

Additional information on the President's FY-2023 Budget, is available at:

<https://www.whitehouse.gov/omb/budget/>. Additional details about Reclamation's budget request are available at www.usbr.gov/budget.

Senator Feinstein's "STREAM" Act

Senator Feinstein (D-CA) is again circulating a discussion draft of a western water bill that she is calling the STREAM Act and is seeking letters of support and potential edits from outside organizations. Senator Feinstein hopes to introduce the bill in late-April or early-May.

Infrastructure

The Bureau of Reclamation intends to spend \$1.6 billion from the Infrastructure Investment and Jobs Act in FY22. The FY22 Spend Plan allocations include:

- \$420 million for rural water projects that benefit various Tribal and non-Tribal underserved communities by increasing access to potable water.
- \$245 million for WaterSMART Title XVI that supports the planning, design, and construction of water recycling and reuse projects.
- \$210 million for construction of water storage, groundwater storage and conveyance project infrastructure.

- \$160 million for WaterSMART Grants to support Reclamation efforts to work cooperatively with states, Tribes, and local entities to implement infrastructure investments to increase water supply.
 - \$100 million for aging infrastructure for major repairs and rehabilitation of facilities.
 - \$100 million for safety of dams to implement safety modifications of critical infrastructure.
 - \$50 million for the implementation of the Colorado River Basin drought contingency plan for use in the Lower Colorado River Basin for projects to establish or conserve recurring Colorado River water supplies that contributes to storage in Lake Mead and other Colorado River water reservoirs in the Lower Colorado River Basin, or to improve the long-term efficiency of operations in the Lower Colorado River Basin.
 - \$18 million for WaterSMART's Cooperative Watershed Management Program for watershed planning and restoration projects for watershed groups.
 - \$15 million for Research and Development's Desalination and Water Purification Program for construction efforts to address ocean or brackish water desalination.
- \$8.5 million for Colorado River Basin Endangered Species Recovery and Conservation Programs.

Senate Hearing on Colorado River Indian Tribes Water Rights

On Wednesday, March 23rd the Senate Committee on Indian Affairs held a hearing on the Colorado River Indian Tribes (CRIT) Water Resiliency Act of 2021 ([S. 3308](#)). The bill introduced by Senator Mark Kelly (D-AZ) would grant the Colorado River Indian Tribes the ability to lease or make storage agreements with its Arizona allocation of currently utilized Colorado River water supplies.

CRIT Chairperson, Ms. Amelia Flores, was in Washington D.C to urge the Committee to support this legislation. CRIT is Arizona's largest and most senior Colorado River water rights holder, with an annual allocation of up to 719,248 acre-feet for use on its lands in Arizona and California. Currently, the CRIT's water rights cannot be transferred or leased for off-reservation use due to a 1782 federal statute prohibiting the transfer of federal Indian trust assets, such as CRIT's water rights, without an act of Congress.

Bryan Newland, Assistant Secretary for Indian Affairs at the Department of the Interior, appeared at the hearing and said "[t]he bill is carefully balanced among interests in the Lower Colorado River basin and contains important safeguards to promote the conservation of water."

In memoriam: Mr. Henry (Hank) Kuiper



Mr. Henry (Hank) Kuiper, one of the Board's public members, passed away in March 2022 after an extended illness. Mr. Kuiper was appointed to the Board in 2005 and continued to serve until his death. In addition to his many years on the Board, Mr. Kuiper's career demonstrates his commitment to public service, including stints as Imperial County Supervisor, El Centro City Councilmember, and El Centro mayor. The Board and staff offer their sincere condolences to Mr. Kuiper's family and loved ones.



United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, DC 20240

APR 08 2022

Mr. Peter Nelson
Governor's Representative
State of California
770 Fairmont Avenue, Suite 100
Glendale, California 91203

Dear Mr. Nelson:

As all who rely on the Colorado River are well aware, the Colorado River Basin is experiencing prolonged drought, low runoff conditions, and depleted storage in Lake Powell and Lake Mead. Recent studies indicate we are experiencing the driest conditions in the Basin in more than 1,200 years. These unprecedented challenges and changes in the Basin's runoff began more than two decades ago. The best available science indicates that the effects of climate change will continue to adversely impact the basin.

In light of the continuing drought and low runoff conditions, in recent weeks technical staff from the Bureau of Reclamation, along with Interior leadership, have communicated our concerns with projected runoff in the Colorado River Basin and the risk of Lake Powell and Lake Mead declining to critically-low elevations over the next 24 months. Our staff has worked diligently to explain the basis for these risks and concerns with representatives of the Basin's Tribal nations, other federal and state agencies, the Republic of Mexico, water users, and non-Governmental Organizations (NGOs). As you know we have also communicated these concerns to each of you in your roles as the Governor's Representatives of the seven Colorado River Basin States.

Presently, staff from the Bureau of Reclamation and the Upper Division States are working closely with the Lower Division States, Tribes, other federal agencies, and NGOs to complete a 2022 Drought Response Operations Plan, as required by the 2019 Colorado River Drought Contingency Plan Authorization Act. Pub. L. No. 116-14 (Apr. 16, 2019). We are prioritizing these efforts and anticipate that the 2022 Drought Response Operations Plan will be finalized within the month.

Notwithstanding these robust, ongoing efforts to analyze potential releases from Colorado River Storage Project initial units to protect critical elevations at Lake Powell, we believe that additional actions are needed to reduce the risk of Lake Powell dropping to elevations at which Glen Canyon Dam releases could only be accomplished through the river outlet works (i.e., below elevation 3490' mean sea level (msl)), or hydropower operations infrastructure at Glen Canyon Dam would be adversely impacted (i.e., as reservoir elevations decline towards elevation 3490' msl). In such circumstances, Glen Canyon Dam facilities face unprecedented operational reliability challenges, water users in the Basin face increased uncertainty, downstream resources could be impacted, the western electrical grid would experience uncertain risk and instability,

and water and power supplies to the West and Southwestern United States would be subject to increased operational uncertainty.

Glen Canyon Dam was not envisioned to operate solely through the outlet works for an extended period of time and operating at this low lake level increases risks to water delivery and potential adverse impacts to downstream resources and infrastructure. In addition, should Lake Powell decline further below elevation 3490 feet, we have recently confirmed that essential drinking water infrastructure supplying the City of Page, Arizona and the LeChee Chapter of the Navajo Nation could not function.⁵ Given our lack of actual operating experience in such circumstances since Lake Powell filled, these issues raise profound concerns regarding prudent dam operations, facility reliability, public health and safety, and the ability to conduct emergency operations.

Consistent with applicable federal law, and applicable provisions of the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (73 FR 19873), we are fully committed to consult with the Basin States and work together to consider these concerns and develop and implement responsive operational strategies.

The Bureau of Reclamation is also fully committed to operate Glen Canyon Dam in a safe manner and maintain reliable downstream releases. However, given the ongoing low runoff conditions, as stated above, we are approaching operating conditions for which we have only very limited actual operating experience – and which occurred nearly 60 years ago. We hope to be able to delay or avoid operational conditions below the critical elevations referenced above but we fully realize that absent a change in the recent hydrological conditions, we may not be able to avoid such operations. This reality reinforces the need for the Basin States, and all entities in the Basin, to prioritize work to further conserve and reduce use of Colorado River water to stabilize the System's reservoirs. As we engage in that regard, we will continue to work cooperatively with each of you to develop prudent, temporary actions this calendar year to protect critical elevations at Lake Powell. In particular, in conjunction with any potential 2022 Drought Response Operations Plan releases the Department respectfully requests your consideration of potentially reducing Glen Canyon Dam releases to 7.0 maf this water year and providing additional certainty regarding annual release volumes and tier determinations for the 2023 water year. Sections 6 and 7.D. of the 2007 Interim Guidelines authorize the potential reduction under current circumstances.

Given the need to make prompt decisions and implement actions in a timely manner, we request your feedback and recommendations on or before April 22, 2022. Doing so would facilitate prompt decision making in the spring of this year, enhancing our ability to implement responsive actions in a timely manner.

We stand ready to work with each of you, along with our ongoing consultation and engagement with the Basin's Tribes, other federal agencies, the Republic of Mexico, water users, and NGOs. We appreciate your prompt attention to this important and urgent matter.

⁵ Reclamation estimates that at elevation 3465 feet these intakes would not function and staff are actively working with local officials about this concern.

Sincerely,



Tanya Trujillo
Assistant Secretary
for Water and Science

cc: Camille Calimlim Touton, Commissioner, Bureau of Reclamation
David M. Palumbo, Acting Commissioner, Bureau of Reclamation
Wayne G. Pullan, Regional Director, Bureau of Reclamation
Jacklynn L. Gould, Regional Director, Bureau of Reclamation

Identical Letters Sent To:

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