

The 1922 Compact is Now the Obvious Elephant in the Negotiating Room

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For the second time in its history, the 1922 Colorado River Compact is a limiting factor in the operation of Lake Powell. But unlike the mid-70s when Article III (d) (75 maf every 10 years) limited the rate at which Lake Powell could be filled, this year, the stakes are much higher.¹ The Secretary of the Interior could be faced with a choice between protecting the integrity of the power generating facilities and outlet works at Glen Canyon Dam or triggering litigation between the Upper and Lower Division States over disputed compact issues.

Under the September 2025 24-Month study minimum probable projection, the storage level of Lake Powell falls below the 3500-foot critical elevation² next August and stays there through the end of August 2027 (and perhaps through the following March 2028, under this hydrologic scenario.)³ The reservoir is predicted to hit a low point of 3464.4 feet at the end of March 2027. To maintain storage above 3500 feet in this scenario, the Bureau of Reclamation will have to find at least 1.6 million acre-feet (MAF) of some combination of increased inflows and decreased outflows. To put this in perspective, the four Upper Division States consume a total of about 4 MAF per year, exclusive of the evaporation from the CRSP storage reservoirs.

¹ During the initial fills of Lake Powell and Flaming Gorge Reservoir (a 30 MAF draw on the river), the ten-year Lee Ferry flow dropped to 75.3 MAF for the 1963-1972 period. Since the Basin was consuming about 4 MAF less than it is today and because of the power operations at Hoover Dam, deliveries to Mexico were typically more than the 1.5 MAF Treaty requirement, there was little dispute over consumptive water use. There was, however, a significant dispute between the Basins over the impact on hydroelectric power generation.

² The minimum power level at Glen Canyon Dam is at elevation 3490 feet, however, there are considerable uncertainties as to how the turbines will operate as the elevation approaches 3490 feet. In its May 2024 Record of Decision for near-term Colorado River operations (SEIS Record of Decision), Reclamation states its intention “to consider all tools that are available....to avoid Lake Powell elevation declining below 3500 feet” (10 feet above the level of the penstocks that deliver water to the hydroelectric turbines).

³ The last month displayed in the September-2025 24-Month study is August 2027. If the elevation of Lake Powell is below 3500 feet at the end of August 2027, under normal operations, the reservoir would continue to deplete storage until the following Spring runoff begins. How Reclamation would operate Glen Canyon Dam under conditions where the reservoir storage elevation is near or below the minimum power level for an extended period of time is an unknown. It may have no choice other than to operate the reservoir in a run-of-the-river mode (outflow is matched with inflow less evaporation).

At this point in the calendar, a reduction in consumptive use by the four Upper Division States in 2026 is unlikely. The Upper Basin System Conservation Pilot Program has not been reauthorized by Congress, making large-scale voluntary reductions in use unlikely.⁴ If needed, there are only two practical ways to find that much water: cutting the annual release from Glen Canyon Dam and/or delivering additional water from Flaming Gorge Reservoir. Under the Drought Response Operations Agreement (DROA) and its 2024 SEIS Record of Decision,⁵ Reclamation has the existing authority to do both. But if Reclamation cuts annual releases too much, it runs the risk of triggering interstate Compact litigation.

The potential for Compact litigation stems from the long-standing dispute between the two divisions concerning the flow requirements at Lee Ferry. Under Article III (d), the States of the Upper Division have an obligation to not cause the ten-year flow at Lee Ferry to be depleted to less than 75 MAF. Further, under Article III (c), the States of the Upper Division must deliver one-half of the annual delivery obligation to Mexico to the extent that obligation is not fulfilled by a system-wide surplus.⁶ That annual obligation is normally 1.5 MAF, but in recent years pursuant to Minutes 323 and 330, the delivery obligation has been slightly less. The States of the Lower Division have consistently taken the position that there is no surplus; thus, they contend that the total Lee Ferry obligation of the Upper Division States is 82.5 MAF every ten years (75 million plus 750,000 per year, which assumes a normal Mexico delivery of 1.5 MAF). This level of flow passing Lee Ferry has been called the “tripwire.”

The States of the Upper Division have just as consistently taken the position that their obligation to Mexico has never been formally quantified and that to the extent the

⁴ According to the UCRC (75th and 76th Annual Reports), in 2023 and 2024 the Upper Basin Pilot project conserved a total of ~101,400 acre-feet at a cost of ~\$43 million, paid for by the federal government. There is no estimate of how much of the conserved consumptive use water was physically delivered to Lake Powell.

⁵ Bureau of Reclamation, [Supplement to 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations of Lake Powell and Lake Mead, Record of Decision](#) (2024).

⁶ Given the dry hydrologic conditions, it may seem odd to use of the term “surplus.” In this situation, however, the word has a specific, but disputed, 1922 Compact meaning. Article III. (c) states that “such waters (for Mexico) shall be first supplied from the waters which are *surplus* over and above the aggregate of quantities specified in paragraphs III (a) and III (b). Paragraphs III (a) and III (b) apportion 7.5 MAF per year of beneficial consumptive use to the UB and 8.5 MAF per year of beneficial consumptive use to the LB. The Upper Division States have a nuanced argument that even though the aggregate of III (a) and III (b) is 16 MAF, if the LB (including tributary uses and mainstem reservoir evaporation) is consuming more than 8.5 MAF per year, the excess (over 8.5 MAF) should be delivered to Mexico before determining the Upper division’s share. Thus, if the LB excess use is greater than 1.5 MAF, the Upper Division States would have no obligation to Mexico. The LD States have taken the position that the under the plain language of the Compact, the Lower Basin’s use is irrelevant. For more information see Eric Kuhn, “The Risks and Potential Impacts of a Colorado River Compact Curtailment on Colorado River In-Basin and Transmountain Water Rights Within Colorado, *Colorado E. L. J.*, V. 35 No.2, pages 281-292.

Lower Basin is consuming more than its total Compact apportionment of 8.5 MAF, the excess must be delivered to Mexico before the Upper Division's obligation can be determined. In addition, the Upper Division States have made the argument, based on the language of Article III (d), that they have a "non-depletion" obligation, not a "delivery" obligation. They argue that, if the ten-year flow were to drop below the tripwire, an inquiry into the cause of the failure to maintain the required flow at Lee Ferry would be needed, and if the cause is climate change, not Upper Basin depletions, there is no Compact violation.⁷

This unresolved dispute has been recognized for decades, but to date, the ten-year flow at Lee Ferry has not reached the 82.5 MAF tripwire, so the dispute continues. Depending on how much water is released from Glen Canyon Dam in 2026 and in future years, that dynamic is likely to change and perhaps as early as September 2026.

Based on data from the Upper Colorado River Commission (76th Annual Report), the ten-year flow for 2015-2024 was 86.03 MAF. At the end of Water Year 2025, the ten-year running average will fall to 84.42 MAF (in the calculation of the ten year total the 9.0 MAF release from Lake Powell in 2015 is replaced by a 7.5 MAF release in 2025).⁸ If the release from Glen Canyon Dam is 7.5 MAF in 2026, as contemplated by both the minimum and most probable projections from the September 2025 24-Month Study, the ten-year running average will be about 82.78 MAF.⁹ In addition to releases from Lake Powell, the Lee Ferry flow includes the Paria River and leakage around and under Glen Canyon Dam, both of which are small, but highly variable.¹⁰ Thus, by the end of Water Year 2026, less than one year from now, the ten-year flow could be within 400,000 acre-feet of the tripwire. Considering the reduced deliveries to Mexico (pursuant to Treaty Minutes 323 and 330) the actual tripwire is about 82.4 MAF, but it could be less depending on how deliveries to Mexico are computed.¹¹

⁷ For additional information, see "In the Colorado River Basin, there are no Simple Disputes" - Eric Kuhn February 22, 2024, <https://www.inkstain.net/2024/02/on-the-colorado-river-there-are-no-simple-disputes/>

⁸ Although the difference in the annual release from Glen Canyon Dam was 1.5 MAF, the difference between the sum of the Lees Ferry and Paria gages is 1.61 MAF, see Footnote 9.

⁹ This is an estimate; it assumes that the flows from the Paria River and leakage past Glen Canyon Dam in 2026 are the same as in 2025,

¹⁰ The average annual flow of the Paria from 2000-2024 is about 17,000 acre-feet per year. The groundwater inflows between Glen Canyon Dam and the Lees Ferry gage average more than 100,000 acre-feet per year but are highly variable. In 2025 through 11 months, the total was only 45,000 acre-feet, see the September-2025 24-Month study.

¹¹ Determining the delivery may be complicated by Minutes 323 and 330. Using actual physical deliveries to Mexico, the tripwire could be as low as 82 MAF. For example, according to the USBR's Accounting and Water Use Reports, in 2024 the delivery of physical water to Mexico in satisfaction of treaty requirements was 1.318 MAF, but the total water provided Mexico in satisfaction of the treaty requirements was 1.45 MAF, see page 31. In 2023, the totals were 1.383 MAF and 1.430 MAF, in 2022 the

Under its SEIS Record of Decision, Reclamation could cut the Water Year 2026 release from Lake Powell from 7.5 MAF down to as little as 6.0 MAF to protect the critical Lake Powell elevation of 3500 feet. Doing so would keep Lake Powell close to or above that elevation through March 2027 under the minimum probable projection, but at the expense of about 25 feet of storage in Lake Mead. A 6.0 MAF release would drop the storage level in Mead to close to or below its critical elevation of 1000 feet. Such a release would also drop the ten-year flow to 81.2 MAF, well below the tripwire. Under this scenario, and assuming the Basin States do not reach an “umbrella” agreement that waives all Compact-related litigation, the Lower Division States are likely to object and possibly legally challenge any Reclamation decision that drops the Lee Ferry flow below the tripwire.¹²

To avoid litigation, Reclamation may be limited to reducing the Water Year 2026 release from Lake Powell by no more than 300,000 acre-feet. A 7.2 MAF release would drop the ten-year flow to 82.48 MAF.¹³ The remaining water necessary to keep Lake Powell above 3500 feet under the minimum probable projection (~1.3 MAF) would then have to be delivered from Flaming Gorge Reservoir. A significant amount of water is available from Flaming Gorge. The September 2025 24-Month study minimum probable projection shows that active storage in the reservoir is predicted to never fall below 2.895 MAF (~78% full). In theory, all 1.6 MAF of the water necessary to keep Lake Powell above 3500 feet could be delivered from Flaming Gorge Reservoir.

There is, however, a serious problem with a strategy that relies on Flaming Gorge to provide the lion’s share of water needed to keep Lake Powell above 3500 feet (1.3 to 1.6 MAF). Delivering a large amount of Flaming Gorge water to Lake Powell is most likely just a one-shot opportunity. Refilling the reservoir would reduce future inflows into Lake Powell by a like amount and could turn a year or two of average inflows to Lake Powell into below average years.¹⁴

totals were 1.322 MAF and 1.45 MAF, and in 2021 the totals were 1.45 MAF and 1.5 MAF. Assuming the deliveries to Mexico in 2025 and 2026 are the same as 2024, for the 2017-2026 period, total physical deliveries to Mexico (ignoring inadvertent overruns) would be about 14.100 MAF, but the total water provided Mexico in satisfaction of the treaty would be about 14.830 MAF. Thus, assuming there is no surplus, the total obligation of the Upper Division States (tripwire total) could range between 82.050 MAF and 82.415 MAF.

¹² Section 602(a) of the 1968 Colorado River Basin Project Act (Pub. L. 90-537 82 Stat.885) sets the priorities for the release of water from Glen Canyon Dam. The first priority is “releases to supply one-half the deficiency described in Article III (c) [Mexico obligation] if any such deficiency exists and is chargeable to the States of the Upper Division.” The second priority is “release to comply with Article III (d).”

¹³ Given the uncertainty in the Lee Ferry contribution by the Paria River and leakage past the dam and uncertainties in the 24-Month study projections, a cushion is wise.

¹⁴ Furthermore, drawing down Flaming Gorge by a large amount will impact the regional recreation-based economy of Northeastern Utah and Southwestern Wyoming, likely resulting in political pushback from the Congressional delegations of both states.

No matter what actions are ultimately taken in 2026, unless flow conditions turn unusually wet during the next three to five years, it may be impossible to both keep the elevation of Lake Powell above 3500 feet and the Lee Ferry ten-year flow greater than the tripwire. From 2015 through 2019, the annual releases from Lake Powell were 9.0 MAF. These releases created a temporary bubble in the ten-year Lee Ferry flow, but these large release years inevitably fall out of the ten-year flow computation. As each does, if it is replaced by a year in which the Glen Canyon Dam release is less than 9.0 MAF, which is quite likely, the ten-year flow drops. For example, if after the 7.5 MAF release in 2026, the annual releases were set at 8.23 MAF for 2027, 2028, and 2029, the ten-year flow for 2020-2029 would be about 80.6 MAF. Thus, even if the 2026 runoff is closer to the most probable projection, it may only be a matter of when, not if, flows drop below the tripwire.

Making a large release from Flaming Gorge Reservoir may temporarily keep Lake Powell above elevation 3500 feet and keep the Lee Ferry ten-year flow above the tripwire through 2026, but as upstream reservoirs, including Flaming Gorge, are refilled the ten-year obligation must still be met. It is time for the Basin States and Federal Government to acknowledge that there is no painless strategy that both keeps Lake Powell above elevation 3500 feet and prevents the ten-year flow dropping below the tripwire. There is only one comprehensive approach that works and avoids interstate litigation: Both Basins, including all seven states, must negotiate an enforceable agreement to reduce their total consumptive uses to a sustainable level - one that is equal to or less than the amount of water nature is providing. Moreover, to avoid destructive litigation over the 1922 Compact, all seven states must agree to waive Compact claims for the duration of the agreement.

Besides litigation, which will not create an additional drop of water for the river, there is no other choice.