

Advocates Say Federal Plan for Colorado River Fails to Solve the Biggest Problem in the Basin: Glen Canyon Dam

Glen Canyon Dam's Engineering Flaws are Forcing these Massive Water Cuts, Yet the Real Problem is Being Ignored

The Bureau of Reclamation announced on Tuesday its intentions to force water cuts to California, Arizona, and Nevada to keep water levels in Lake Powell from falling to levels which threaten downstream water delivery to 30 million people. Yet advocates say that the federal agency's proposal completely missed the target.

The need for water cuts comes from the grave engineering flaws inside Glen Canyon Dam which prevent water delivery past the dam. But instead of addressing its own failings, the Bureau is treating a symptom rather than the problem itself.

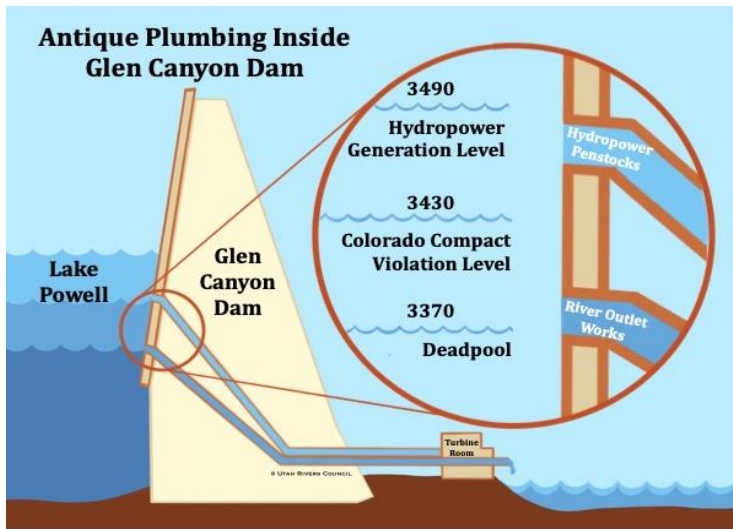
"The Bureau is failing to address the core problem facing 1 in 8 Americans who live in the Colorado River Basin: Glen Canyon Dam's engineering crisis," said Zachary Frankel, Executive Director of the Utah Rivers Council.

In August 2022, a coalition of public interest organizations released a report, [*Antique Plumbing and Leadership Postponed*](#), which documented these engineering flaws and urged the Bureau to immediately act to retrofit a permanent construction solution to the plumbing problem inside the dam. Yet six months later, the Bureau has still failed to address the problem of water delivery through Glen Canyon Dam.

"Reducing releases from Glen Canyon Dam only staves off disaster for so long," said Eric Balken, the Executive Director of the Glen Canyon Institute. **"It's time for Reclamation to address the elephant in the room and modify the bottleneck that is Glen Canyon Dam so water can flow downstream in any hydrology."**

Two decades of climate change-induced megadrought has pushed Lake Powell to the cusp of dropping below the minimum water level needed to deliver water downstream through the Grand Canyon. Once Lake Powell water levels drop below the hydropower turbines in Glen Canyon Dam, another set of tubes must be used to deliver water to California, Arizona and Nevada. Once that happens, it's only a matter of time before not enough water is being released through the dam to meet the water delivery obligations of the 1922 Colorado River Compact.

"This proposal hangs the Lower Basin out to dry. The SEIS is mum on the very fact that the Upper Basin wants to develop considerable quantities of water in the coming years without addressing its antique plumbing at Lake Powell," said Kyle Roerink, the Executive Director of Great Basin Water Network. **"The Upper Basin is clinging to their paper water rights like a child to a security blanket, and the federal government is placating those states while leaving us subject to the liabilities of Glen Canyon Dam."**



Left: The plumbing system inside Glen Canyon Dam was designed in the 1950's and isn't capable of delivering enough water to the populous states of California, Nevada and Arizona once water levels begin to drop below 3,490 feet above sea level.

The lowest set of tubes, known as the River Outlet Works, are limited in the amount of water they can deliver. Yet rather than address this engineering flaw, the Bureau has kicked the can down the road by imposing water cuts on the Lower Basin. In the supplemental environmental impact statement released Tuesday, the Bureau outlined a plan to force an additional ~1 million acre-feet of water cuts on California, Arizona, and Nevada in 2024.

Table 2-3
Lower Division States' Shortages and DCP Contributions, Action Alternatives 1 and 2 (2024)*

Lake Mead Elevation (feet)	No Action Alternative			Additional Shortages under Action Alternatives 1 and 2 (2024)	
	2007 ROD Shortages (1,000 af)	2019 DCP Contributions (1,000 af)	No Action Total (1,000 af)	2024 Additional Shortages (1,000 af)	2024 Total Shortages + Contributions (1,000 af)
1,090 – >1,075	0	200	200	200	400
1,075 – 1,050	333	200	533	533	1,066
<1,050 – >1,045	417	200	617	617	1,234
1,045 – >1,040	417	450	867	867	1,734
1,040 – >1,035	417	500	917	1,166	2,083
1,035 – >1,030	417	550	967	1,116	2,083
1,030 – 1,025	417	600	1,017	1,066	2,083
<1,025 – 1,000	500	600	1,100	983	2,083
<1,000 – 975	500	600	1,100	983	2,083
<975 – 950	500	600	1,100	983	2,083
<950	500	600	1,100	983	2,083

Left: The Bureau plans to cut an additional ~1 million acre-feet of water from the Lower Basin states in an effort to keep Lake Powell levels from falling to the point where Glen Canyon Dam's plumbing cannot deliver water downstream. The Bureau should be working to treat the root of the problem: engineering flaws in Glen Canyon Dam. (The red box shows the Bureau's proposed cuts).

While these water cuts may ease the pressure the Basin States face from Glen Canyon Dam's glaring engineering flaws temporarily, they will not solve the issue. The longer the Bureau delays acting to directly fix these engineering problems, the closer we will inch to crisis, and the larger future water cuts will have to be to compensate.

“One does not solve a household plumbing problem by not drinking water,” said Frankel. **“If the Bureau's pride prevents itself from solving its own failures, its time to call someone else in.”**

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