

PROTEST

PROTEST FEE PAID

\$15.00 20-02075

Fee Rec'd BY: ONLINE

May 26, 2020

Protestant: Eric Balken
c/o Glen Canyon Institute
3090 E 3300 S, Suite 400
Suite 400

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MAY 26 2020
WATER RIGHTS
ONLINE

RE: Protest of Change Application a45683 (41-3479)

A hearing is requested.

May 26, 2020

State Engineer's Office

Division of Water Rights

Hello,

Glen Canyon Institute (GCI) is a non-profit founded in 1996 to restore Glen Canyon and a healthy, free-flowing Colorado River through Glen Canyon and Grand Canyon. GCI is filing a protest against the water right change application (41-3479) for the Lake Powell Pipeline because extensive academic and government-led scientific research over the past decade has shown with high certainty that water that would be diverted through the Lake Powell Pipeline will not be available in the future. It's widely known that the Colorado River is already over-allocated, and has been facing a supply and demand deficit for two decades, a phenomenon that is being exacerbated in real time by climate change.

Simply put, there isn't water available for the Lake Powell Pipeline water right application. The over-allocation of Colorado River water is one of the most studied phenomena of natural resources in the American West. With 15 million acre-feet (MAF) of water allocated to the basin states, and 1.5 MAF promised to Mexico, there is a total of 16.5 MAF "promised water" from the river. According the Bureau of Reclamation (BOR), the 1981-2010 average unregulated inflow to Lake Powell, the best estimate of the river's flow, was 10.83 MAF. The projection for 2020's unregulated inflow is 6.7 MAF. Even with Upper Basin states using only a portion of their allotment, this imbalance has resulted in an ongoing supply and demand deficit. The BOR's 2012 Supply and Demand Study calculated that this deficit could reach 3.2 MAF annually by 2060.

Adding to the problem of a river whose allocations far exceed its flows is the fact that climate change is causing Colorado River runoff to rapidly decline. A 2017 study by Brad Udall and Jonathan Overpeck published in the journal Water Resources Research showed that runoff between 2000-2014 was only 19% of the 1906-1999 average. They state that "approximately one-third of the flow loss is due to high temperatures now common in the basin" and that future losses "may exceed 20% at mid-century and 35% at end-century."

A study published in 2020 by Park Williams in the journal Science shows that the Colorado River basin is experiencing a drought

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that is as bad or worse than some of the "megadroughts" that have occurred in the basin over the past 500 years. Using tree-ring data, this study identified several prolonged drought events in the Colorado River basin since 800 A.D., some of which lasted up to 90 years. Using 31 computer climate models, Williams stated that climate change "contributed nearly half to the severity of the current drought." In other words, without global warming the current drought would be only a moderate one rather than one of the worst, confirming the findings of the Udall Overpeck study, and signaling a future of less water on the Colorado.

For the reasons of over-allocation and reduced flows resulting from climate change, the basin states recently passed Drought Contingency Plans (DCP) to avoid an official shortage declaration under the current operating criteria, the 2007 interim guidelines. But shortage declarations, defined as states' inability to meet its Colorado River compact requirements, are still very much possible in the near future. In the spring of 2019, Lake Powell dropped to within 45 feet of its official shortage level, 3,525 feet above sea level (fsl), while Lake Mead avoided its shortage level of 1,075 fsl by a few feet. The total amount of water stored between the two reservoirs dropped to its lowest level since Powell began filling in the 1960's.

Under the DCP's, lower basins states are beginning to proactively reduce their water use to avoid a shortage deceleration. Despite these reductions in use, the BOR has raised the probability of shortage occurring in 2022 because of 2020's low runoff. The cuts in consumptive use prescribed by the DCP's are not meant to hold over the states indefinitely. In fact, the DCP's are only meant to hold the states over until 2026, when the next operating criteria, "Interim Guidelines 2.0", will be finalized. There's no reason to assume stricter rules on consumptive use of Colorado River water won't be imposed under the new criteria. As Dr. Williams of Columbia University states, "The fact that the normal average year is actually getting drier and is projected to keep getting drier in the Colorado River means that we're probably going to have to revise how much each state is allocated on the Colorado River substantially."

The proposed change of water right application for the Lake Powell Pipeline would entail a new diversion of 86,000 acre feet of Colorado River water. This new consumptive use would only make sense under the assumption that the Colorado River supply can meet existing demand-an assumption we now know is false. An overwhelming body of scientific research, coming from government agencies like Bureau of Reclamation as well as academic institutions, has shown the river is already overdrawn and that climate change will further reduce flows over time. These realities are forcing some states to take the drastic steps of reducing their consumptive use, something once thought unthinkable. Allowing this change of water right would be irresponsible because the best data are showing that the water simply won't be available. We ask that a hearing be held in Salt Lake City on the matter.

For the reasons stated above, this water right change application should be denied.

Thank you for your time,

Eric Balken

Executive Director

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