



July 7, 2007

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E., Room 1A  
Washington, DC 20426

Re: FERC Project No. 12966-002. Scoping of environmental issues for the proposed Lake Powell Pipeline Project, Utah and Arizona.

Dear Ms. Bose,

Thank you for this opportunity to provide scoping comments concerning environmental impacts from the proposed Lake Powell Pipeline (LPP), which would convey Colorado River water to counties in southwestern Utah.

Living Rivers is a nongovernmental organization whose mission is to restore the biological integrity of the Colorado River. We have been working on Colorado River issues since our founding in 2000 at Moab, Utah, which is next to the Colorado River and 60 miles above Lake Powell.

### **Introduction**

In this scoping letter we will explain to the Federal Energy Regulatory Commission (FERC) that this proposed project is not feasible, because the seven basin states of the Colorado River and Mexico, continue to operate under a situation of over-appropriated water supplies.

The annual yield of Colorado River water has declined over 2 million acre-feet since the Colorado River Compact was initiated in 1922, and federal scientists have alerted the nation that this decline is expected to continue, which includes the 50-year term of this license now under FERC review. It is highly likely before this term expires, the water in storage at Lakes Mead and Powell will be completely exhausted despite new federal guidelines (described below).

**PO Box 466 • Moab, UT 84532 • 435.259.1063  
Fax 435.259.7612 • [www.livingrivers.org](http://www.livingrivers.org)**

Unfortunately, this imbalance of demand over supply with continued atmospheric warming, will keep these reservoirs empty in the subsequent 50-year term.

Contrarily, the assessment of federal engineers at the Bureau of Reclamation (Reclamation), as published in their most recent Environmental Impact Statement (EIS) for the coordinated operations of Glen Canyon and Hoover dams (Shortage Criteria), indicate that proposed water development projects for the upper basin states of the Colorado River can move forward without any cumulative impacts to the water storage capacity of Lakes Mead and Powell.

It must be fully understood that Reclamation's EIS did not address excessive evaporation losses as a direct result of human-induced atmospheric warming, nor did Reclamation comprehensively address the conditions of severe and sustained drought as revealed in the paleoclimate record provided by a scientific assessment of tree-rings (dendrochronology).

Before we explain our concerns in greater detail below, we respectfully insist FERC must conduct an EIS that transparently engages long-term climate modeling (past and future) of the Colorado River and its reservoirs, and not just according to the modern-day instrument record, which is the data source directly responsible for the current over-appropriation problem.

FERC's main objective should be to provide the comprehensive and bold determination that Reclamation was reluctant to do. Otherwise, additional burden and harm will come to existing wildlife, federal reserve lands, people and the economy.

Furthermore, FERC must also analyze any proposed plans by the seven basin states to augment the Colorado River with water imports from the ocean and distant rivers, such as the Columbia and the Mississippi. The situation of impending water scarcity for the entire nation, combined with extraordinary energy demands for such projects to become operational, will have considerable cumulative impacts beyond the boundaries of the Colorado River basin. Such projects are controversial, because the public recognizes the federal government must provide leadership toward achieving long-term energy and water resource sustainability, without causing further dependency on finite natural resources from outside sources.

### **Institutional History**

In the arid west the situation of over-extending water supplies was brought to the attention of water managers by John Wesley Powell in 1893. This message was also presented to Congress during hearings for the Colorado River Project Storage Act (1956) and the Colorado River Basin Storage Act (1968). Sadly, this message continues to be ignored and will ultimately result in lawsuits over water rights, because surplus water in the basin simply does not exist anymore.

The LPP is not the only upper basin project being proposed (or under construction) in the upper basin. For example: Flaming Gorge Reservoir Pipeline, Animas-La Plata Project, Navajo-Gallup Pipeline, Western Navajo-Flagstaff Pipeline, nuclear power plants near Green River, Utah, and various oil shale and uranium processing projects. The cumulative investment of these projects is in the billions of dollars, yet are completely dependent on the availability of useable Colorado River water, which is anything but assured according to the results of scientific modeling delegated by various administrative agencies.

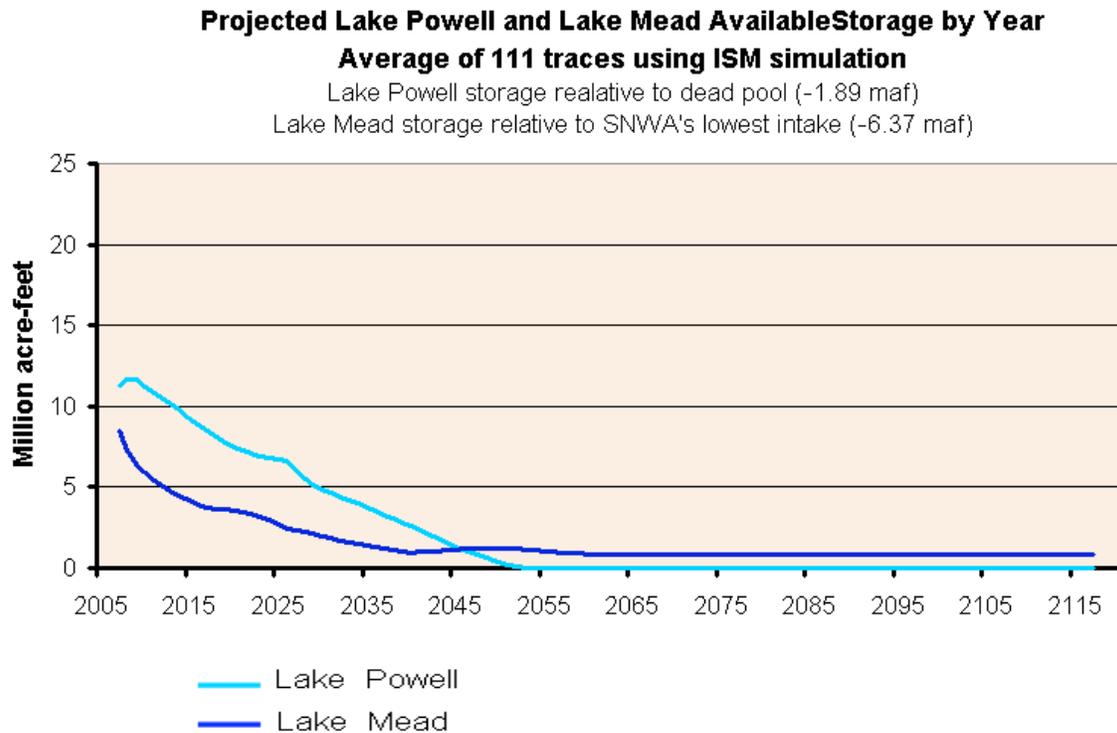
There are also other situations that remain unresolved by water managers in the discussion of future water rights. For example, adjudicating federal reserve rights, instream flows for the Colorado River delta, water for sediment removal from reservoirs, water for recharging human-depleted aquifers, and water to keep salinity levels in compliance.

### **Reduction of Water Quantity**

A warming atmosphere due to human-caused air pollution is exasperating the problem of water scarcity in the Colorado River basin. While some physical provinces on the planet will receive more precipitation than normal, the consequence of warming for the Colorado River basin will be increased evaporation that significantly reduces its annual streamflow.

For example, the managers of Navajo Generating Station at Lake Powell have already demonstrated that the elevation of the reservoir will likely drop to dead pool (no active water storage) through their planning to relocate their water intake below 3370 feet, which is the dead pool elevation at Glen Canyon Dam. The Southern Nevada Water Authority has planned the same relocation for their intake at Saddle Island, Lake Mead.

In February the Scripps Institute produced a peer-reviewed paper that provided compelling evidence that our warming atmosphere would cause both Lakes Mead and Lake Powell to empty despite the guidance of Reclamation's Shortage Criteria, and also provided a timetable: 10% chance by 2013, 50% chance by 2021, and 100% by 2036. The report is based on an annual reduction of Colorado River flows at 10% for the present and 30% by 2060, which is displayed as a graphic below according to the open source simulator CROSS found at [www.onthecolorado.org/Cross.cfm](http://www.onthecolorado.org/Cross.cfm) .



As can be observed by the simulation above, by the time the LPP is fully operational, the water for the intended communities will not be available. This will cause an unnecessary legal and financial burden for all the water users of the Colorado River basin, but especially for the Utah residents of Washington, Kane and Iron counties.

### **Reduction of Water Quality**

Even if the water managers could legally eke water for conveyance from a diminished Lake Powell, the water quality of the reservoir as it approaches dead pool may be unsafe for the public to drink unless treated; this potential water quality problem must be determined in this analysis by FERC.

For example, the remobilization (by flowing rivers and storm water) of perched sediment deposits above the reservoir at dead pool will likely taint the water with high levels of turbidity, salts, heavy metals, industrial toxins, hydrogen sulfide, extraordinary nutrients, and low dissolved oxygen. New or improved facilities to treat this kind of tainted water have not been proposed by the Utah water managers for this project, but should be considered since the problem is likely to materialize in the next 50 years as a management consequence of exceeding the real-time supply.

At present, most of the reservoir sediment in Lake Powell is currently stored between the full pool elevation (3700 feet asl) and the dead pool elevation (3370 feet asl), specifically in the uppermost river canyons of Cataract, Narrow, Dirty Devil, Escalante and San Juan.

The storage volume of the reservoir below 3370 feet is 1.9 million acre-feet. As of 1986, the volume of sediment in Lake Powell was estimated by Reclamation to be 800,000 acre-feet. It would be reasonable to assume that an additional 800,000 acre-feet of sediment has entered the reservoir since 1986, for a total of 1.6 million acre-feet of sediment fill. This is the potential amount of sediment that could be mobilized and transported into the dead pool storage as it approaches dead pool. This will cause serious sediment management challenges for all water operations at Lake Powell and why this potential problem should be addressed by FERC in the EIS.

### **Exotic Species**

Though Lake Powell may not harbor an adult population of exotic quagga or Zebra mussels at the present time, it is only a question of time before it does, considering the confirmed presence of exotic mussels in the many reservoirs of the lower basin states. The impacts of controlling these invasive species must be considered in this analysis for the LPP.

### **Enabling Utah's Poor Record of Water Management**

The average consumption of water supplies by citizens of southwest Utah is excessive when compared to other cities in the arid west. For example, the city of St. George, Utah, will consume twice the water per person/day, as does Tucson, Arizona. This statistic clearly indicates that the leadership of Utah State, and Washington County in particular, is not well grounded in the wise use of our natural resources. Such poor leadership should not be indulged by FERC under this review, since they are overtly consumptive, and seem uninterested in improving their current performance as overseers of scarce water supplies. The water managers of the Colorado River basin should not be wasting the water they already have, while implementing more expensive infrastructure for future supplies at the same time. Such managerial inconsistencies should be addressed in this EIS by FERC with the goal of providing instead, a management alternative of water conservation and improved efficiency.

### **Electric Energy Production**

This project provides several opportunities to generate electricity as the water in conveyance falls downhill. This circumstance allows the project to offset a portion of the total energy cost; substantial energy is of course still required to make the project fully operational. The proposed plan is to use traditional fossil fuels for supplemental power generation, which will contribute to the atmospheric warming problem. To be responsible stewards, Utah water managers must demonstrate some creativity and leadership in their planning by providing energy that ultimately reduces harm to the nation by decreasing atmospheric temperatures, which is in their best interest as well.

### **Conclusion**

It is unfortunate that the seven basin states and Congress have created a situation of uncertainty about the availability of water in the future for the Colorado River basin, which will eventually unravel in the court system. Instead of providing leadership to work with the resources we have in affordable and sustainable ways, the government agencies continue to bludgeon the people with their century old playbook of development that forces them to accept excessive consumption as if it were the only alternative.

Though these parties insist that Colorado River water laws have built-in flexibility, the truth is it does not as long as a skewed 100-year instrument record of annual

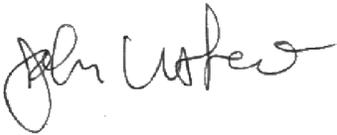
Page 7  
Ms. Kimberly D. Bose

flow remains sacrosanct. This situation, unless quickly changed, is handing unprecedented power to willful water purveyors who are forcing the people to accept yet another stack of complex infrastructure based entirely on the continuation of consuming finite energy resources that are controversial, expensive, and culturally and environmentally demoralizing.

We sincerely hope that FERC will take a hard and thorough look at this proposal because it will have significant consequences and impacts for Utah, Arizona, and the rest of the nation.

If there is anything we can do to assist you, please do not hesitate to contact us.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Weisheit". The signature is fluid and cursive, with the first name "John" being more prominent than the last name "Weisheit".

John Weisheit  
Conservation Director