American Rivers
RIVERS CONNECT US®

February 15, 2019

Via electronic and first class mail

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Re: Public Notice SPK-2008-00354 Lake Powell Pipeline Project

Mr. Wilson:

American Rivers provides these comments in response to Public Notice SPK-2008-00354 Lake Powell Pipeline, which the U.S. Army Corps of Engineers Sacramento District (Corps) posted in response to the Utah Board of Water Resources' (UBWR) application for authorization under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act (CWA) to discharge into waters of the United States.

UBWR seeks authorization for its proposal to construct the Lake Powell Pipeline (LPP) Project, which it generally describes as follows:

> The … Project would deliver a portion of the State of Utah's Colorado River water from Lake Powell to the service areas of Washington County Water Conservancy District (WCWCD) and Kane County Water Conservancy District (KCWCD) and would include energy recovery through hydropower generation (Figure 1-1). The Applicant's proposed project would include six lateral intake tunnels from Lake Powell, 140 miles of a 69-inch-diameter steel pipeline (starting at Lake Powell and terminating at Sand Hollow Reservoir), a forebay, an afterbay, hydro stations, booster pump stations, a regulating tank, and a power transmission line ….[1]

[1] UBWR, "Lake Powell Pipeline Project Department of the Army Permit Application, Corps File No. SPK-2008-00354" (Nov. 16, 2018) (Application), p. 1.

In addition to seeking authorizations from the Corps, UBWR also has applied to the Federal Energy Regulatory Commission (FERC) for a license under the Federal Power Act, and other authorizations for use of federal lands and waters under the administration of agencies within the Department of Interior. FERC is the lead agency for purposes of preparing an Environmental Impact Statement (EIS) that is intended to satisfy the federal agencies' obligations under Section 102 of the National Environmental Policy Act (NEPA).[2] The Corps is a cooperating agency in the preparation of the EIS.[3] American Rivers understands that the Corps has agreed with FERC "to assume responsibility for analyses in the issued EIS that pertain to [its] respective jurisdictional authority."[4] The Corps is responsible for exercising its independent judgment in determining whether the EIS meets the Corps' responsibilities, in addition to carrying out its substantive mandates under the CWA and Rivers and Harbors Act.[5]

I.
DESCRIPTION OF AMERICAN RIVERS

American Rivers is a national, non-profit, 501(c)(3) conservation organization with an office in Denver, Colorado, offices nationwide, and headquarters in Washington, D.C. It serves more than 200,000 members and supporters nationwide, and over 20,000 members in the seven-

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2 42 U.S.C. § 4332.

3 *See* letter from Michael S. Jewell (Corps) to Timothy Konnert (FERC), eLibrary no. 20181019-5011 (Aug. 16, 2018); letter from Vince Yearick (FERC) to Michael S. Jewell (Corps), eLibrary no. 20181218-3004 (Dec. 18, 2018).

4 Letter from Vince Yearick (FERC) to Michael S. Jewell (Corps), eLibrary no. 20181218-3004 (Dec. 18, 2018).

5 40 C.F.R. § 1503.3(c).

state Colorado River Basin region. It is dedicated to protecting wild rivers, restoring damaged rivers, and conserving clean water for people and nature.

In the Colorado River Basin, American Rivers is focused on advancing sustainable water supply solutions so cities, farms, and fish and wildlife can thrive. Core to this objective is working to promote alternatives to large trans-basin diversion projects, like the proposed LPP Project, which tend to be costly and environmentally destructive. Throughout the Colorado River Basin, American Rivers is actively involved in system conservation in order to maintain water levels in Lake Powell and Lake Mead adequate to serve hydropower generation, water deliveries for municipal and agricultural uses, and flows for endangered species recovery.

American Rivers is concerned that the proposed LPP Project is inconsistent with efforts throughout the Colorado River Basin to reduce consumptive uses of water in order to defend against potential shortage, meet future demand, and adapt to climate change. It is also concerned that the construction and maintenance of hundreds of miles of pipeline will adversely affect riparian habitats that support wildlife and imperiled species like the endangered Southwest willow flycatcher.

II.
COMMENTS

A. The Corps should seek clarification of the Project purpose.

According to the Application, the purpose of the LPP Project is "to bring a necessary second source of water to Washington and Kane Counties to meet future water demands through 2060."[6] UBWR has developed specific demand projections that it states must be met to achieve

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[6] Application, p. 36.

the project purpose. It has revised its demand projections several times since filing its draft license application with FERC. It filed its latest demand projections in November 2018.[7]

In previous filings, UBWR estimated that WCWCD's use in 2060 would be 285 gallons per capita daily (gpcd), taking into account conservation.[8] According to its November 2018 filing, specifically, "Table 3. WCWCD Per Capita Total System Water User Projections," UBWR now anticipates significantly lower per capita use over the coming decades, as shown below:

Year	**WCWCD Total System GPCD with 20% Conservation**
2010	325 (actual)
2015	302 (actual)
2020	296
2030	271
2040	250
2050	240
2060	240

[7] UBWR, "Water Needs Assessment: Demand and Supply Update," eLibrary no. 20181116-5124 (Nov. 16, 2018) (2018 Water Needs Assessment); UBWR, "Reply of the Utah Board of Water Resources and Washington County Water Conservancy District to Comments, Recommendations, and Preliminary Terms and Conditions," eLibrary no. 20190118-5151 (Jan. 18, 2019) (UBWR Reply to NREA Comments).

[8] UBWR, "Water Needs Assessment," p. 3-5; *see also* UBWR, "Draft Water Needs Assessment," eLibrary no. 20110314-5094 (Mar. 2011), p. ES-11 (forecasting WCWCD's demand in 2060 as 295 gpcd).

Although reduced from UBWR's prior estimates, these numbers are still significantly higher than Western Resource Advocates' (WRA) estimates, which project 192 gpcd in 2060.[9]

In addition to reductions in projected gpcd, UBWR has reduced its population projections. Previously, UBWR estimated that population in Washington County would exceed 575,000 in 2060.[10] It now estimates the population will be between 419,269 and 501,382 in 2060.[11]

Despite reductions in projected gpcd and population growth, UBWR's "WCWCD Water Demand Projections" remain roughly the same as its previous estimates.[12] UBWR states that this is due to its integration of system losses and planning reserve needs into the demand projections.[13] Its November 2018 filing, "Table 4. WCWCD Demand Projections," includes the following projections:

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[9] WRA, "Comments on the Original Licensing Proceeding for the Lake Powell Pipeline Project," eLibrary no. 20181116-5033 (Nov. 16, 2018) (WRA's NREA Comments), p. 11; *see also* https://westernresourceadvocates.org/projects/lake-powell-pipeline/ (last accessed Feb. 15, 2019).

[10] UBWR, "Water Needs Assessment," eLibrary no. 20160502-5386 (April 30, 2016), p. 2-16; *see also* UBWR, "Draft Water Needs Assessment," p. ES-6 (forecasting WCWCD's population in 2060 as 860,378).

[11] UBWR, "Water Needs Assessment: Demand and Supply Update," p. 1.

[12] UBWR, "Water Needs Assessment," p. 3-5 (estimating total projected water demand with conservation of 184,250 ac-ft/yr).

[13] UBWR, "Water Needs Assessment: Demand and Supply Update," p. 3.

Year	**WCWCD Water Demand (acre-feet)**		**WCWCD Water Demand Plus 15-Year Planning Reserve (acre-feet)**	
	Baseline Population Growth	High Population Growth	Baseline Population Growth	High Population Growth
2010	56,923	56,923	78,483	79,363
2020	69,791	69,963	94,289	97,483
2030	86,370	88,128	107,999	114,610
2040	101,326	106,407	130,399	139,161
2050	118,909	126,702	155,250	165,997
2060	142,408	152,296	184,513	192,953

American Rivers generally supports the integration of reserve planning into demand forecasts. However, UBWR has not provided adequate information regarding its methods for calculating system losses and reserve planning, and incorporating them into demand projections. For example, UBWR estimates that "Washington County water systems loses approximately 15 percent of supplied water due to pipe leakage and overflows, meter inaccuracies, and data/calculation errors."[14] It is not clear whether it assumed a flat, 15% rate of loss over the entire period of study or whether it considered actions by municipal customers to reduce system losses over time. UBWR references WCWCD's "policy of maintaining a planning reserve equal to the estimated water demand for fifteen years."[15] It does not explain how it quantified this general policy for purposes of including it in the demand projections.

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[14] *Id*.

[15] *Id.* at 4.

The Application states that UBWR "considered five alternatives to meet the project purpose."[16] UBWR rejects the two alternatives that would not require Lake Powell water – the No Action Alternative and No Lake Powell Water Alternative – arguing they would not provide the additional water supply needed to meet the 2060 demand projections.

The lack of clarity and supporting documentation regarding how the latest demand projections were developed adds to ongoing concern that UBWR's demand projections, which have changed repeatedly and significantly since UBWR initiated the licensing proceeding before FERC, are not reliable. We are concerned that integration of those demand projections into the statement of project purpose would be unreasonable and interfere with the consideration of a reasonable range of alternatives.

Under NEPA regulations, an EIS must include a statement of purpose and need.[17] That statement informs the range of reasonable alternatives that will be considered in the EIS.[18] Similarly, in determining whether to issue a 404 permit, the Corps has an obligation to consider the applicant's objectives when evaluating alternatives, but only to the extent the applicant's objectives are "legitimate."[19]

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16 Application, p. 38.

17 40 C.F.R. §1502.10.

18 40 C.F.R. §1502.13. An agency cannot define the purpose and need in such narrow terms that would prevent consideration of a reasonable range of alternatives. *City of Carmel–By–The–Sea v. U.S. Dept. of Transp.,* 123 F.3d 1142, 1155 (9th Cir.1997).

19 *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1270 (10th Cir. 2004). *See also Nat'l Wildlife Fed'n v. Whistler,* 27 F.3d 1341, 1346 (8th Cir.1994) (the Corps should not permit developers to "artificially constrain the Corps' alternatives analysis by defining the projects' purpose in an overly narrow manner").

To the extent the Corps and other federal agencies intend to incorporate 2060 demand projections into the EIS's purpose and need statement, and use them to develop and evaluate alternatives, the agencies must independently verify those demand projections and demonstrate the projections are supported by record evidence.

B. The Corps should undertake independent analysis to determine the least environmentally damaging practicable alternative.

According to its Application, UBWR has rejected alternatives that would not require Lake Powell water (arguing that they would not provide adequate supply to meet projected demand[20]), would cause other impacts related to elimination of potable water for outdoor use, and would be costly.[21] In separate filings, UBWR similarly has rejected the *Local Waters Alternative*[22] proposed by Western Resources Advocates.[23] As stated above, American Rivers is

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[20] According to UBWR, "[t]he WCWCD demand is projected to exceed supply by about 85,520 ac-ft per year in 2060, with the shortfall projected to start in about 2028."[20] Application, p. 37.

[21] Application, pp. 42, 45-47.

[22] The *Local Waters Alternative* as updated describes alternative sources of water that would "supplant the need" for the LPP Project:

- Advanced Treatment of Existing Supplies: Treatment of Virgin River water supplies and wastewater reuse effluent by reverse osmosis (RO).
- Water Conservation: Water rates that encourage efficiency, land use policies to substantially increase water efficiency in new construction.
- Development of Local Supplies: Conveying available groundwater from Kane County to Washington County by pipeline. Transferring a more realistic volume of water from agricultural uses to municipal uses.
- Water Data Management: Universal metering of all culinary and secondary water deliveries, and improved tracking to inform water management and conservation efforts.

WRA NREA Comments, p. 6. WRA has explained how WCWCD's implementation of water conservation, reuse, and conversion could meet future water needs while avoiding the high costs and impacts of the LPP Project. *Id.* at 7.

[23] UBWR, "Reply of the Utah Board of Water Resources and Washington County Water Conservancy District to Comments, Recommendations, and Preliminary Terms and Conditions," eLibrary no. 20190118-5151 (Jan. 18, 2019).

concerned that UBWR's rejection of non-Lake Powell water alternatives is based on unreliable demand projections that have been incorporated into UBWR's statement of project purpose. In the case of the *Local Waters Alternative*, it is also concerned that UBWR has mis-represented the alternative.

Under the Corps' regulations, "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."[24] This is a substantive mandate, not only a procedural one as under NEPA.

LPP Project construction as proposed would entail 266 waterbody crossings.[25] Many of these crossings are due to the construction of the water conveyance and hydro system pipelines. According to the Application, "the Water Conveyance and Hydro systems pipelines would result in temporary direct effects on 259 waters of the U.S., totaling 6.29 acres and 19,066 linear feet of impacts."[26] The Corps' duty to consider alternatives is increased if the crossings required for the construction of the water conveyance and hydro systems pipelines are not water-dependent:

> The Corps burden in finding the least damaging practicable alternative under the CWA guidelines is heaviest for non-water dependent projects planned for a "special aquatic site," such as a wetlands area. *See Holy Cross Wilderness Fund v. Madigan,* 960 F.2d 1515, 1524 (10th Cir.1992). There, the presumption is that there are "practicable alternatives that do not involve special aquatic sites" and that these alternatives do "have

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24 40 C.F.R. § 230.10 (a).

25 Application, pp. 5-12.

26 *Id.* at 53.

> less adverse impact on the aquatic ecosystem." 40 C.F.R. § 230.10(a)(3). These presumptions hold unless "clearly demonstrated otherwise." *Id.*[27]

Western Resources Advocates first filed the *Local Waters Alternative* with FERC on March 13, 2013, and has updated the supporting documentation based on new information since then.[28] The alternative is largely driven by increased water conservation, in line with other water agencies in the Colorado River Basin:

> The distinguishing feature of the Local Waters Alternative is the emphasis on greater conservation. Future per-capita demand is modeled to decline by 1% per year – that is, every year per capita water use will decline by 1% based on each previous year's level of per capita water use, through 2060. This is a conservation rate that has been achieved by numerous water agencies in the Colorado River Basin, and results in a per capita water use rate in Washington County in 2060 that is comparable with water use rates in other municipalities *today* in the Colorado River Basin.[29]

Western Resources Advocates' analysis shows that, "[a] 1% rate of conservation in Washington County would result in a total demand of 115,000 AFY in 2060, with a system-wide water use rate of 176 gallons [gpcd]."[30]

The strategy relies on "reductions across all sectors and identifies numerous pathways to achieve the 1% goal overtime [sic]."[31] Contrary to UBWR's arguments, the *Local Waters Alternative* would <u>not</u>:

> require onerous lifestyle changes or landscape modifications beyond those already implemented in many communities across the Mountain West, including many in Washington County. Published literature and technical studies indicate that 35 gpcd

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27 *Greater Yellowstone Coal. v. Flowers*, 359 F.3d at 1269.

28 *See* WRA NREA Comments, pp. 6-10.

29 WRA, "The Local Waters Alternative to the Lake Powell Pipeline," eLibrary no. 20130314-5010 (Mar. 13, 2013), pp. 6-7 (emphasis in original) (WRA *Local Waters Alternative*).

30 *Id.* at 8.

31 *Id.*

> indoor residential goal, and a 55 gpcd outdoor residential goal, can be achieved within the next 50 years *with current technologies and practices.* If conservation technologies further improve by 2060, these residential gpcd targets will be conservative.[32]

The *Local Waters Alternative's* focus on conservation is consistent with the Corps' policy to support efficient use of public waters:

> Water is an essential resource, basic to human survival, economic growth, and the natural environment. Water conservation requires the efficient use of water resources in all actions which involve the significant use of water or that significantly affect the availability of water for alternative uses including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements.[33]

Western Resources Advocates also has provided information that indicates the cost of implementing the Local Waters Alternative would be approximately one-third the cost of implementing the LPP Project.[34]

American Rivers requests that the Corps undertake a thorough and independent evaluation of practicable alternatives to the LPP Project. In particular, the Corps should consider the evidence that the *Local Waters Alternative* is practicable, cost-effective, and would cause fewer adverse environmental impacts.

C. <u>The Application does not show the LPP Project has been designed to minimize potential adverse impacts of the discharge on the aquatic ecosystem.</u>

The Application states the LPP Project has been designed to minimize impacts:

> The proposed project has been designed to minimize impacts on waters of the U.S. to the greatest extent practicable. Wetlands impacts from the LLP [sic] project would be avoided. In addition to avoiding and minimizing direct impacts on other waters of the

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32 *Id.* at 14 (emphasis in original).

33 33 C.F.R. § 320.4.

34 *See* WRA *Local Waters Alternative*, pp. 28-32.

> U.S., Best Management Practices (BMPs) would be implemented during construction to minimize indirect impacts on waters of the U.S. as well as riparian and upland areas.[35]

It is not clear on the face of the Application *how* the LPP Project has been designed to minimize impacts to aquatic resources. The Corps should direct UBWR to provide specific reference to the documents UBWR relies upon to support this conclusion. For example, American Rivers is concerned that construction of the water conveyance pipeline through the Kanab Creek Area of Critical Environmental Concern will have unnecessary impacts on riparian resources and riparian-dependent species like the Southwest willow flycatcher.

D. The Application does not show the LPP Project is in the public interest.

The Corps' regulations require the district engineer to undertake a public interest analysis prior to making a decision on a permit application:

> The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case.… The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.[36]

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[35] Application, p. 55.

[36] 33 C.F.R. § 320.4(a)(1).

A permit will be denied if the district engineer determines that the proposed project is "contrary to the public interest."[37]

As described in previous comments filed with FERC,[38] American Rivers is concerned the LPP Project is not in the public interest because it would require significant tax-payer investment in a massive infrastructure project dependent on additional diversions from Lake Powell at a time when existing diversions are causing systematic and as yet unresolved shortages. While American Rivers is sympathetic to UBWR's arguments that Utah alone should not bear the burden of unsustainable management of Colorado River basin supplies, it disagrees that constructing the LPP Project in advance of an accurate study and accounting of basin demand and supply given climate change, and enactment of drought-planning agreements is in the public interest. Even if Utah is legally entitled to divert water from Lake Powell as it claims,[39] the efficacy and feasibility of this massive infrastructure project is nevertheless uncertain if that water will not be reliably available over the life of the project.

American Rivers thanks the Sacramento District for its consideration of these comments.

Respectfully submitted,

Matt Rice
Colorado River Basin Director

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37 *Id*.

38 *See* American Rivers, "Comments on the Preliminary Licensing Proposal," eLibrary no. 20160229-5424 (Feb. 29, 2016); American Rivers, "Comments and Requests for Additional Information for the Proposed Lake Powell Pipeline Project," eLibrary no. 20181119-5156 (Nov. 19, 2018) (American Rivers' NREA Comments).

39 American Rivers has disputed UBWR's ability to divert water as proposed from Lake Powell under applicable law. *See, e.g.,* American Rivers' NREA Comments, pp. 17-19.

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FERC official service list, docket P-12966