UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Utah Board of Water Resources,)
Lake Powell Pipeline Project) P-12966-004
)

LAKE POWELL PIPELINE COALITION'S COMMENTS ON THE NOTICE THAT THE PROJECT IS READY FOR ENVIRONMENTAL ANALYSIS

Pursuant to the "Notice of Application Accepted for Filing, Soliciting Motions to Intervene and Protests, Ready for Environmental Analysis, and Soliciting Comments, Recommendations, Terms and Conditions, and Prescriptions," eLibrary no. 20171211-3022 (Dec. 11, 2017), as modified by the "Notice Suspending Procedural Schedule," eLibrary no. 20180111-3085 (Jan. 11, 2018), the Lake Powell Pipeline Coalition ("the Coalition") hereby comments on the Utah Board of Water Resources' Division of Water Resources' ("Utah") final license application.

The Coalition¹ consists of: Conserve Southwest Utah, Glen Canyon Institute, Grand Canyon Wildlands Council, Grand Canyon Chapter Sierra Club, The Wilderness Society and the Wildlands Network. We have been commenting on the LPP for over ten years.

The Federal Energy Regulatory Commission (FERC), is the lead federal agency for the development of the Lake Powell Pipeline's (LPP) Environmental Impact Statement (EIS). FERC gave Notice that it has determined that the LPP application meets FERC's requirements and that the approved studies have been completed, any deficiencies in the application have been cured, and no other additional information is needed.

Despite the Commission's Notice, the Coalition is concerned that FERC will be preparing a Draft EIS using outdated data and studies that dismiss the benefits of conservation and cheaper alternatives and fail to address the effects of a rapidly changing climate on the long-term water supply availability for the LPP. These comments raise concerns related to the adequacy of the information included in the record that will serve as the basis for the FERC's environmental review under the National Environmental Policy Act (NEPA) and ultimate licensing decision under the Federal Power Act (FPA). These comments follow, and in some

Lake Powell Pipeline Coalition's NREA Comments

Conserve Southwest Utah (formerly Citizens for Dixie Future) *et al.*, Intervention eLibrary no. 20080102-5057 (Jan. 1, 2008); "Comments of the Lake Powell Pipeline Coalition on Scoping Document 1 and Pre-Application Document, and Additional Study Requests," eLibrary no. 20080707-5206 (Jul. 7, 2008); Citizens for Dixie's Future *et al.*, "Lake Powell Pipeline Coalition's Comments on Study Plans and Draft Study Reports," eLibrary no. 20110506-5125 (May 6, 2011); Citizens for Dixie's Future *et al.*, "Lake Powell Pipeline Coalition's Comments on Modified Draft Study Reports," eLibrary no. 20120323-5005 (Mar. 23, 2012); Comments Coalition eLibrary no. 20160229-5176 (February 29, 2016).

cases reiterate, the comments we submitted regarding the Preliminary Licensing Proposal on February 29, 2016, *see* eLibrary 20160229-5176.

The LPP would increase the diversion from the Colorado River at a time when existing water supply diversions and as ecological needs already result in a functional deficit due to overallocation and declining snowpack and stream flows. We are concerned that the project would worsen water deficits for other beneficial uses of the Colorado River and Lake Powell, and otherwise cause significant, immitigable impacts on such uses.

Based on our review of the record, the Coalition is concerned that the Project as proposed is legally, hydrologically, and economically infeasible. For example, the record does not contain sufficient information to address the following issues:

- Whether the project is needed to meet existing or forecasted demand;
- Whether Utah has sufficient water rights under the Law of the River to effectively operate the project over the term of license. Utah's Colorado River Compact rights are only a percentage of water left after senior water rights holders' obligations have been met.
- Whether the proposal to divert water from Lake Powell is in accordance with the Law of the River. According to the Colorado River Compact Utah's Upper Basin water rights cannot be used in the Lower Basin where the project is located.
- Whether, and if so to what extent, likely effects of climate change will limit the availability of water for Project uses. Utah incorrectly claims that it can divert water in dire conditions, and that, therefore, it does not have a responsibility to address the risk of climate change.
- Whether Utah has sufficient resources to construct, operate, and maintain a project of this scale for the term of any new license.

I. <u>HISTORY</u>

Many changes have occurred since the LPP idea was conceived in the early 1990s when Washington County's 2060 population was projected to be 860,000,² the LPP's costs were estimated to be \$257 M,³ the benefits and costs of conservation were relatively unknown, and the risk of diminishing stream flows in the Colorado River was relatively unknown. By 2006, when the Lake Powell Pipeline Act was passed by the Utah legislature, the cost was estimated at \$500 million.

_

Study Report #19 Water Needs Assessment 2011, Table ES-1 GOBP Population Projection 2060.

Water Supply Needs for Washington and Kane Counties and Lake Powell Pipeline Study, Boyle Engineers, (Dec. 1998), page13

In 2018 things have changed even more: over allocation of the state's water is becoming known, the 2060 population is projected to be about 1/3 less, the LPP costs are projected to be at least 10 times more including (operations, maintenance and debt service), the benefit and cost of conservation is much better known, and the risks of diminishing water supplies from the Colorado River are much clearer. Given these changes, the Coalition believes that less costly, less risky alternatives involving incremental implementation of improved local water management should be considered before the LPP. Such alternatives will position our county and the state much better economically.

II. PURPOSE AND NEED

Utah's purposes for the LPP are noted in the PLP, chapter 2 page 2.2. of the license application, included:

- 1. To deliver 86,249 acre-feet of the UBWR's Colorado River water rights on an annual basis from Lake Powell to Washington County (82,249 acre-feet) and Kane County (6,000 acre-feet of diversion or 4,000 acre-feet of depletion) to meet future municipal and industrial (M&I) water demands in southwest Utah.
- 2. To develop hydropower generating works and incidental electrical facilities along the Lake Powell Pipeline to sell the electric energy not needed for project operation to public utilities.

On Friday November 16, 2018, Utah filed this new purpose and need statement. It states that The LPP meets the following Utah needs:

- The development of additional water supplies legally available from the Colorado River system to meet the water demands of the existing and projected future population of Kane and Washington counties through 2060, with a necessary margin of safety, while simultaneously maximizing the use of existing available and identified water supplies.
- Diversification of the primary Municipal and Industrial (M&I) water sources for the counties, adding necessary resiliency and reliability to the water delivery system given the risks of variability associated with both water supplies and water supply delivery systems.
- The development of clean, renewable energy sources wherever possible.

Based on projected population growth in the region, water demands will exceed Virgin River Basin surface and groundwater supplies, resulting in shortages.

The UBWR identified Utah's Colorado River water right as the best source to meet rising water demands, while also providing needed source diversity to the regional water portfolio.

Risks associated with infrastructure failure and climate variability in the Virgin River Basin underscore the need for the project.

Conservation efforts in the region have significantly reduced per capita water use, and continued efforts are predicted to further reduce per capita use between now and 2060. However, conservation alone will not be adequate to meet existing and future demands and reduce supply risks.

However, Utah does not provide a date as to when the LPP is needed. Furthermore, the LLP's purpose in the final application doesn't correctly describe the primary purpose or the environmental impact of allowing Utah to draw its Ultimate Phase Central Utah Project (CUP) water right of 158,890 AFY depletion and about 320,474 AFY of diversion from Flaming Gorge reservoir under water use exchange agreements with the Bureau of Reclamation's (BOR). BOR's Green River Block (GRB) draft Environmental Assessment (EA)⁴ stated:

Reclamation received a letter dated January 5, 2016, from the State requesting two contracts for the use of its assigned water right (total of 158,890 AF depletion). One contract represents 86,249 AF depletion to be used for the LPP proposed to be constructed by the State; the second contract, called the Green River Block, or simply GRB, represents the remaining amount of the assigned water right (72,641 AF depletion) to be used for development along the Green River. The purpose of the Exchange Contract is to facilitate a water exchange of 72,641 AF of depletions annually under the 1996 Assignment, which was previously included as part of a CRSP participating project water right. This contract is needed to resolve a long standing disagreement between Reclamation and the State regarding use of the water right assigned in 1996.

An accurate purpose and need statement is important to an accurate and adequate environmental document under NEPA. *See* 40 C.FR. §1502.13.

The Coalition is concerned that the purpose of developing Utah's Ultimate Phase CUP water right is not included in the Purpose and Need statement of the final application. The information UBWR has provided thus far is not concise or clear about how these BOR's proposed service contracts will really work. Moreover, Utah has not provided any evidence that it has sufficient senior water rights to implement these contracts or build the LPP.

III. <u>ALTERNATIVES</u>

The Coalition is concerned that NEPA regulations were not followed in Utah developing the proposed alternatives to the LPP in the study reports. Utah did not explain how the

_

⁴ GRB EA 1.4 Purpose of and Need for Proposed Action, page 5.

alternatives were determined or if they were feasible. Under NEPA, an EIS must consider a reasonable range of alternatives to the proposed action. 42 U.S.C. § 4332(2)(C). Typically the lead agency and any Cooperating Agencies are responsible for determining which alternatives are reasonable. They must explain the rational for that determination.

The final application does not provide UBWR's rationale for how the alternatives were selected or accurate descriptions of the Proposed Action and Action Alternatives for the LPP.⁵

The final application describes the No LPP Alternative as follows:

The No Lake Powell Water Alternative would involve a combination of developing remaining available surface water and groundwater supplies, developing reverse osmosis treatment of existing low-quality water supplies, and eliminating residential outdoor potable water use as a conservation measure in the (Washington County Water Conservancy District) WCWCD service area. This alternative could provide a total of 86,249 acre-feet of water annually to WCWCD and KCWCD for (Municipal and Industrial) M&I use without diverting Utah's un-allocated water rights from Lake Powell. ⁶

1. Comment

Utah continues to a make an error in its description of the No LPP Alternative. Therefore, the analysis throughout the final application is erroneous. We determined there is plenty of water⁷ in the county not being considered as future supply, therefore, the claim that residential outdoor potable water use has to eliminated is not based on the facts. If the Project was not built, there would be no need to eliminate residential outdoor water use because Utah only is uses about 17,219 AF of culinary water in the No LPP Alternative. The remaining water Utah contends in the No LPP Alternative has to be treated by reverse osmosis. Therefore, outdoor potable water use would not need to be eliminated because it is such a small amount of culinary water in the alternative.

For example, The No LPP Alternative has changed over the years:

In Alternatives Study Report #22 March 2011, page 6-1 the amount of water treated with RO and restricted culinary water are much different when the alternatives were developed.

FERC eLibrary 20160229-5176 on February 29, 2016, The PLP Section 3.5.

⁶ PLP Section 3.5, (emphasis added).

⁷ CSU presentation on water supplies Sept 17, 2018 Finance Board see at: https://conserveswu.org/wp-content/uploads/Finance-Board-2018-Sept-17-FINAL-pp.pdf; and audio (start at 43:38 into the audio) https://www.utah.gov/pmn/files/429905.MP3.

36,279 AF Reverse Osmosis (RO) & reuse 32,721 AF restricting outdoor watering 69,000 ac ft to meet demands by 2037 However, no costs were included

Then the Alternative Study report #22--- 2015, page 4-2 changed to these costs an amount of water:

Alternative Study Report # 22, 2016

4.4.2.1. and 6.1

Cost Opinion

It does not include how the costs were derived.

57,883 AF reverse osmosis (RO)

19,030 AF reuse \$2,545,030,000 both

5,336 AF residential outside watering \$3,306,260,000

82,249 AF (27 years in \$2016) total cost \$5,851,290,000

(annually by 2050)

In the final application, the No LPP Alternative is described as follows:

The No Lake Powell Water Alternative would involve a combination of developing remaining available surface water and groundwater supplies,

- developing reverse osmosis treatment of existing low-quality water supplies, and
- eliminating residential outdoor potable water use as a conservation measure in the (Washington County Water Conservancy District) WCWCD service area.

This alternative could provide a total of 86,249 acre-feet of water annually to WCWCD and KCWCD for (Municipal and Industrial) M&I use without diverting Utah's unallocated water rights from Lake Powell.

However, the Coalition is concerned because the cost of the No LPP Alternative has changed significantly over the years (see above) Utah has not disclosed data that supports their conclusion that the cost of No LPP Alternative is more than the LPP. It has been clearly shown in many comments to FERC there are cheaper alternatives. Western Resource Advocates estimates

their alternative, *The Local Waters Alternative*⁸ costs much less at \$410.3 million plus infrastructure costs. ⁹ But, thus far Utah has ignored them and is not willing to consider it in an alternative. However, NEPA regulations state that there should be a range of reasonable alternatives should be considered:

40 CFR §1502.10. Environmental Impact Statement Content, on alternatives states that:

- (b)Alternatives. The environmental impact statement shall document the examination of the range of alternatives (paragraph 46.420(c)). The range of alternatives includes those reasonable alternatives (paragraph 46.420(b)) that meet the purpose and need of the proposed action, and address one or more significant issues (40 CFR 1501.7(a)(2-3)) related to the proposed action. Since an alternative may be developed to address more than one significant issue, no specific number of alternatives is required or prescribed. In addition to the requirements in 40 CFR 1502.14, the Responsible Official has an option to use the following procedures to develop and analyze alternatives.
- (1) The analysis of the effects of the no-action alternative may be documented by contrasting the current condition and expected future condition should the <u>proposed action</u> not be undertaken with the impacts of the <u>proposed action</u> and any <u>reasonable alternatives</u>.

In addition, Utah's proposed alternatives were not comprehensively compared as NEPA regulations require. *See* 40 C.F.R. §1502.14, 1502.16. ¹⁰ It is important that Utah provide the

This section forms the scientific and analytic basis for the comparisons under § 1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in § 1502.14. It shall include discussions of:

- (a) Direct effects and their significance (§ 1508.8).
- (b) Indirect effects and their significance (§ 1508.8).
- (c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See § 1506.2(d).)
- (d) The environmental effects of alternatives including the proposed action. The comparisons under § 1502.14 will be based on this discussion.
- (e) Energy requirements and conservation potential of various alternatives and mitigation measures.
- (f) Natural or deplete able resource requirements and conservation potential of various alternatives and mitigation measures.

⁸ https://westernresourceadvocates.org/publications/the-local-waters-alternative/

⁹ elibrary no,2018116-5033, page 10,(Nov 16, 2018).

¹⁰ Environmental Consequences.

basis for its selection and analysis of alternatives to help inform the federal agencies' alternatives analysis under the relevant regulations implementing NEPA.

IV. IMPROVED LOCAL WATER MANAGEMENT ALTERNATIVE

The Coalition describes concepts for reliable, affordable water alternatives to support Washington County's growth. The Coalition is concerned that relying on water from the LPP project is unsustainable and the risks have not been disclosed to the public or the decision makers. We describe this alternative to the LPP (Improved Local Water Management) below and the LPP's risks (water right and finances). Addressing these points will require additional data, and analysis be completed before the LPP draft EIS is formulated.

There is enough local water to grow without the LPP using an Improved Local Water Management (ILWM). ILWM is a concept that includes continuously improving conservation and comprehensive accounting and management of all water supplies in the county, including extensive secondary water distribution and use and water recycling. This requires concrete executable planning, implementation and monitoring. The concept was born from our research indicating the Lake Powell Pipeline carries an unacceptable risk and is unnecessary if we improve the management of our local water. Many of the initial ideas for ILWM were included in the Local Waters Alternative paper formally submitted to FERC as an LPP alternative.

1. Local Waters Alternative

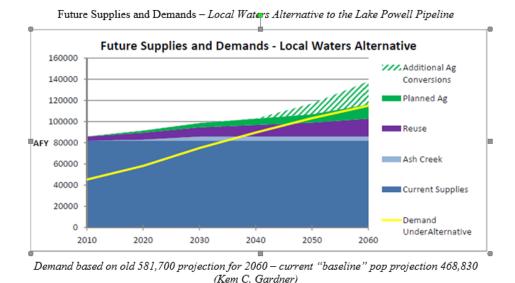
In 2012, Conserve Southwest Utah (then Citizens for Dixie's Future) asked Western Resource Advocates to study the LPP and the "Local Waters Alternative to the Lake Powell Pipeline" (LWA). It concluded that our local water supply, if managed more completely, would support our projected growth into the distant future and that we are in no danger of running out of water, even if you don't consider more supplies listed below.

2. Our Local Water Supply Can Meet the Demand

The following chart from the 2012 *Local Waters Alternative*, though outdated, illustrates the feasibility of this alternative. It shows the demand (yellow line) easily within the supply. It is based on a demand of 176 gallons per capita day (GPCD) for a population of 581,700 in 2060 and with a water supply of between 116,000 acre-feet a year (AFY) to 138,000 AFY.

⁽g) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

⁽h) Means to mitigate adverse environmental impacts (if not fully covered under § 1502.14(f)).



3. Demand for Water Can Be Significantly Reduced

The demand for water is determined by population and the average use of water in gallons per capita daily (GPCD). It is primarily driven by growth and mitigated by conservation. The following chart shows the demand for Municipal & Industrial water based on different per capita use (demand) rates. This concept identifies that 85,000 AFY could support a population of 508,952 using 150 GPCD in 2065. 150 GPCD is the approximate current target for conservation-minded Southwest communities, and that number does not represent extraordinary conservation. Water budgeting programs ¹¹ alone have been shown to save 40% to 50% in water use with a short-term return on investment. See Conserve Southwest Utah's web page/water conservation for more information on creating water budgets.

Year	Population	Demand @ 300 GPCD AFY	Demand @ 200 GPCD AFY	Demand @ 150 GPCD AFY
2050	391,468	131,550	87,700	65,775
2065	508,952	171,030	114,020	85,515

Notes:

- 1. Population is per recent Kem C. Gardner Policy Institute population projections
- 2. 300 GPCD is the current demand in Washington County.

See http://conserveswu.org/programs/water-conservation/.

- 3. Albuquerque, NM supports 600,000 people on less than 100,000 AF, which is approximately 150 GPCD.
- 4. Reports show Washington County could have more water supply than 85,515 AFY by 2065.

There are plenty of local water supplies uncounted by Utah. Estimates for available local water have been widely variable. Early LPP studies estimated a supply of 134,000 acre-feet a year (AFY) (culinary and secondary water) could be available in Washington County by 2060. Their current estimate of water supply is that only 60,000 AF of culinary water is available, with very little added by 2060; secondary water is not mentioned. The Water District underestimates many existing local water sources and those that could be developed in the future. Our analyses show that local supplies could provide enough water for growth.

Undeclared or underutilized water sources include:

- Increased yield from currently identified future sources (e.g., wells)
- Appropriate accounting of agricultural water conversions to culinary and/or secondary
- Inclusion of water rights from private landowners that convert with development
- Increased reuse and treatment of abundant brackish water
- Increased conservation
- Increased use of secondary water for M&I irrigation
- Inclusion of undeveloped city water rights that can still be developed in the future
- Rainwater capture
- Increased yield from the Virgin River and local reservoirs and underlying aquifers

4. Underground Water Rights

The Division of Water Rights stated: "there are 332,760 AF of approved water rights in the Navajo/Kayenta and upper Ash Creek aquifers." The community water supply systems coming from Navajo Sandstone wells and springs were only 41,470 42 acre-feet (AF) which represent a small percentage of this total supply. Some of these rights will convert to culinary use by 2020-2060 and should be included in the draft EIS. Utah is ignoring these water rights because they don't have access to them. However, future development will use these rights so they don't need the LPP water right.

5. Surface Water Rights

The Water District built a 100 foot high dam on the Virgin River below the Town of Virgin and it created a reservoir. A diversion pipe was built in the dam so it can divert water all of the time to the reservoirs. A diversion pipe 66 "in size can convey 150 cfs continuously for

Washington County Water Conservancy District (WCWCD), Petition for classification of the Navajo/Kayenta and Upper Ash creek aquifers (July 2005).

Lake Powell Pipeline Coalition's NREA Comments

Page 10

one full year, it would translate to 108,595.04 AF/year."¹³ Some water is returned to the river for the benefit of the fish through the hydropower plants. In the summer some water is piped to the local irrigation companies. In the winter all the water goes to the reservoirs. If it is flooding the water just goes downstream as the Water District does not want muddy water in the hydropower plants. The Water District claims they can only use about 30,000 AFY to 2060. In other words, there may be more efficient ways to gain more water yield than only 30,000 AFY. Therefore, a full accounting of where the water goes and how much is counted in the water supply should be in the draft EIS.

6. Criticisms of a Conservation Alternative Are Unfounded:

The following are claims that relying on local water supplies is not feasible or wise:

- Sand Hollow and Quail Lake reservoirs and Sand Hollow aquifer, fed from the Virgin River, can only provide about 30,000 AFY as annual supply to 2060.
 - O The Coalition believes this is underestimated. The Division of Water Resources projects an 113,000 AFY Virgin River water right depletion to 2050, more than triple the claim of 30,000 AFY. This is not identified in future supplies and in spring high water flows that can be stored in reservoirs.
- "Washington County must have a second source of water to ensure a reliable supply."
 - The sections below address the risks involved with using Lake Powell as a second source. It appears that local water sources carry much less risk and cost than the LPP. Since pioneer settlement, wells and springs have provided water to communities because the water quality of the Virgin River was poor. In 1980 the Quail Creek Reservoir was built and water could be treated for culinary use. Thus, the Virgin River is not the only source of water for the county. Wells and springs provide the majority of water to communities.
- "The state of Utah must get its share of the Colorado River before some other state gets it. Washington County can be more aggressive with conservation later, when required."
 - Oue to the over-allocation, reduced snow pack and stream flows, Utah may not have a remaining share left to develop (see the section below). It is unclear how Utah could lose its legal share of the Colorado to another state. It is, however, very clear that conservation will be required at some point, and it makes sense to address the low cost and low risk elements of Improved Local Water Management before the high cost, high risk LPP. The county claims:

_

John M. Muhlfeld, Principal Hydrologist, River Design Group, Inc., 5098 Highway 93 South, Whitefish, MT 59937 http://www.riverdesigngroup.ne

¹⁴ Utah Perspectives Colorado River, page 8, *see* https://water.utah.gov/InterstateStreams/PDF/TheColoradoRiverart.pdf

"The county will run out of water by 2024, the only alternative is to treat the remaining available water using expensive reverse osmosis; yards would have to be converted to hardscapes of rocks and concrete. It would cost more than LPP."

However, there is no evidence provided for this claim. Our analysis reveals we are not running out of water in 2024, even without improving our local water management.

- "All agricultural water in the county would have to be converted to culinary."
 - We do not advocate the development of agricultural land; it merely recognizes that wherever development occurs, agricultural water could convert to culinary, or secondary. It is recognized that some agricultural water is more expensive than others to convert to culinary use. More analysis is required to account for agricultural water, estimate its conversion rate, and determine its treatment costs in the draft EIS.

7. Relying on Our Local Water is Less Costly and Less Risky than the LPP

Improved Local Water Management projects to increase supply and decrease demand can be addressed incrementally as growth and demand requires. Their costs and benefits are fairly well known. These projects would be small (in comparison to the LPP), requiring much less capital and much shorter financing periods with less state support. This is a much more fiscally conservative approach, involving much less risk, while protecting the state's bond rating.

Utah's and Washington County's growth and economic potential can be supported with Improved Local Water Management, more so than the LPP, considering the interest payment savings. The LPP's debt, not to mention its risk, may be a limiting factor to Utah's economic growth. Our local water will allow us to achieve our potential without encumbering our state and county with unnecessary debt and a water supply vulnerable to drought, litigation, political conflict, controversy and uncertainty.

V. CONNECTED ACTIONS

Since 2016, Utah has been negotiating two 50-year service contracts with the BOR to put its remaining portion of the Central Utah Project's "Ultimate Phase" 1958 water right to beneficial use. In 1958 this water right consisted of the Uintah and Ute Units, and only the Uintah Unit was partially developed. This water was intended for the Ute tribe, but this is no longer the case as Utah wants to use the portion that is left instead. Since the Ultimate Phase was never built in 1958 by BOR they assigned this water right back to Utah in 1996. Utah filed an application on May 2, 1995 Water Right No. 41-3479 to draw 156,000 acre feet year (AFY) depletion and about 320,474 AFY diversion from Flaming Gorge reservoir (FGR) for development. In 2009, this 1958 water right needed to be extended. The BOR mentioned in their

protest letter of this water right extension in 2009 that there was an understanding that if Utah did not develop this water within a 50 year period it would lapse. But, this did not happen. Now 60 years later Utah has to put this water right to beneficial use by 2020.

According to a BOR official there is 165,000 AF of unallocated water left in Flaming Gorge Reservoir (FGR). that will be allocated on a first come, first serve basis. Colorado and Wyoming could apply for this water and put it to beneficial use.

Utah is proposing two service contracts to utilize their water rights of the Ultimate Phase Central Utah Project and draw water from FGR. The two service contracts include:

- One, BOR 50-year service contract is for Utah to draw out 72,641 AFY from FGR to use for development along the Green River, known as the Green River Block (GRB.) (a portion of application Water Right No. 41-3479).
- The other, is a BOR 50-year service contract to develop the LPP that will draw 86,249 AFY from FGR and let the water flow downstream about 500 miles to Lake Powell for the benefit of the endangered fishes. Then draw water for LPP from Lake Powell reservoir (the remaining portion of application Water Right No. 41-3479). This service contract will be evaluated in the LPP's draft EIS.

Utah is proposing in these two BOR 50-year service contracts ¹⁵ that Utah will not develop unperfected seasonal high-water Green River tributary flows and leave them in the Green River for the endangered fishes as long as Utah can withdraw this same amount of water out of FGR reservoir for development. However, the seasonal spring high-water Green River tributary flows may not be available to exchange because there are undeveloped senior water rights holders and others who may already be using them, such as Central Utah Project. This Water Right No.41-3479 is also junior to the Central Utah Project. Most importantly, the most senior water right holder of the water in the Green River tributaries is the Ute Tribe of the Uintah and Ouray Indian Reservation with water rights on many Green River streams that have priority dates of 1882 and 1861. These are significant water rights of 470,594 AF of diversion and 258,943 AF of depletion on many tributaries. ¹⁶ Utah has been trying for many years to negotiate a settlement of the tribe's water rights whereby the tribe would forfeit some of their Green River tributary water rights to the state, ¹⁷ but thus far the tribe has not agreed. The Ute Tribe has not been identified to get any of the remaining water from FGR.

In addition, "The Ute Tribe is suing the U. S. Government Bureau of Indian Affairs. The Tribe's claims against the United States focus, in large part, on the Uintah Indian Irrigation Project ("UIIP"), a Congressionally-authorized Indian irrigation project designed to irrigate

.

See https://www.usbr.gov/uc/provo/pdf/DRAFT GR ExchangeContract.pdf.

See https://www.waterrights.utah.gov/wrinfo/policy/compacts.asp.

See https://le.utah.gov/xcode/Title73/Chapter21/C73-21_1800010118000101.pdf.

nearly 88,000 acres of Reservation land. The UIIP is a trust asset owned and operated by the United States for the benefit of the Tribe. Today, the UIIP is only delivering irrigation water to about 61,000 acres. The Tribe alleges that this disparity is the result of various breaches of the United States' fiduciary obligations." ¹⁸

Moreover, Utah has not disclosed where these undeveloped high-water Green River tributary flows are located. More information is needed to verify what amount of water supply is available for Utah to exchange for these long-term 50-year service contracts. Utah has not provided any evidence that it has a large amount of undeveloped water supply from high seasonal water rights in the Green River tributaries for these exchanges. Furthermore, Utah has not provided any proof that a junior 1958 LPP water right can be left in the river from FGR and travel about 500 miles to Lake Powell for 50-years to benefit the endangered fishes without being diverted by the senior water rights holders. Thus far, there is nothing in FERC's study reports that address the problem that Utah may not have the necessary water rights for the LPP. In other words, Utah's water rights are not in the Lake Powell Reservoir where they can be withdrawn for the LPP Project.

Furthermore, months ago, we sent a GRAMA records request to the Utah Division of Water Resources to ask for details on where these undeveloped high water Green River tributary flows were located. We were told that the information provided by the Utah Division of Water Rights records was inconsistent with the records of the Utah Division of Water Resources. We are still waiting to obtain this information.

VI. EXCHANGE OF WATER USE IN BUREAU OF RECLAMATION'S SERVICE CONTRACT

A contract negotiation meeting for this proposed service contract was held December 2017 in St. George. *See* Contract No.17-WC-46-655. Technical draft provisions October 5, 2017. The BOR and Utah were negotiating some of the terms of contract, such as how much Utah was willing to pay for water from the reservoir. They agreed on \$19 per acre foot annually. There was not a public discussion of how the terms of contract would work and what they were agreeing to do.

Furthermore, there is an interesting comparison for the price of water that is higher at \$250 per AF being negotiated by the Colorado River Indian tribes:

For some, an offer last week from the Colorado River Indian Tribes to store additional water in Lake Mead to help stave off drought has renewed hope that a deal can be worked out. On November 9, the tribes offered Arizona 50,000 acre-feet of water per

Lake Powell Pipeline Coalition's NREA Comments Page 14

See https://www.sltrib.com/news/environment/2018/03/13/ute-tribe-takes-us-government-to-court-over-theft-of-land-and-water-in-historic-uncompahgre/

year, starting in January of 2020, for \$250 per acre-foot. 19

The contract is with the United States of America Department of the Interior Bureau of Reclamation Colorado River Storage Project Flaming Gorge Storage Unit Contract for the exchange of Green River Block water between the United States of America and the State of Utah. The purpose of the contract was to put Utah's Ultimate Phase CUP water right to benefical use and included this section h.:

This Contract is one of two contracts that will satisfy the Assignment Provision; The Board is requesting to enter into two separate contracts for the Assigned Water Right: this contract is for the depletion of 72,641 acre-feet (AF) and is intended for the development along the Green River (Green River Block), and the remaining 86,249 AF will be addressed under a separate and distinct contract, and is intended to be used in the Lake Powell Pipeline Project. ²⁰

1. Scoping

These contracts, although integral to Utah's development of its "Ultimate Phase" water rights and construction and operation of the LPP have not been subject to full public review. For example, FERC's scoping process did not expressly address the water exchange contract with BOR. The proposed exchange concepts with the BOR are described below in these comments. Scoping for the LPP Project occurred in 2008. Therefore, this exchange concept did not go through FERC's 10 year licensing process of study plans, and study reports with public and federal agency comment. Thus far, there was no participation of federal agencies or the public in this process and very little specific information on how this exchange will work.. Similarly, the BOR only held one meeting on for the Green River Block (GRB) Environmental Assessment (EA) in Vernal, Utah, and gave short notice for that meeting.

NEPA's scoping regulations state that the purpose of scoping is to identify the issues to be addressed in the study and provide sufficient evidence for project analysis, But the public was not given this type of information and nor were they given a meaningful chance to participate in a scoping process for these proposed water use exchange service contracts .The regulations state that:

40 CFR 1501.3 and 1508.9, 43 CFR 46.300-325

An EA is a concise document prepared with input from various disciplines and interested parties that provides sufficient evidence and analysis for determining whether to prepare

See https://www.phoenixnewtimes.com/news/arizona-drought-negotiations-at-breaking-point-11025741;; and <a href="https://www.inkstain.net/fleck/2018/11/should-arizona-not-get-its-act-together-hints-of-a-six-state-colorado-river-drought-contingency-plan/.

See https://www.usbr.gov/uc/provo/pdf/DRAFT_GR_ExchangeContract.pdf.

an EIS or a FONSI. This conclusion cannot be reached without having knowledge of what the issues are, as determined by appropriate Federal, tribal, State, local, and public entities, as well as the general public.

40 CFR § 1501.7 Scoping also states that:

There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process shall be termed scoping. As soon as practicable after its decision to prepare an environmental impact statement and before the scoping process the lead agency shall publish a notice of intent (§ 1508.22) in the FEDERAL REGISTER except as provided in § 1507.3(e).

- (a) As part of the scoping process the lead agency shall:
- (1) Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds), unless there is a limited exception under § 1507.3(c). An agency may give notice in accordance with § 1506.6.
- (2) Determine the scope (§ 1508.25) and the significant issues to be analyzed in depth in the environmental impact statement.
- (3) Identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (§ 1506.3), narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere.
- (4) Allocate assignments for preparation of the environmental impact statement among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement.
- (5) Indicate any public environmental assessments and other environmental impact statements which are being or will be prepared that are related to but are not part of the scope of the impact statement under consideration.
- (6) Identify other environmental review and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies concurrently with, and integrated with, the environmental impact statement as provided in § 1502.25.
- (7) Indicate the relationship between the timing of the preparation of environmental analyses and the agency's tentative planning and decision making schedule.

The Coalition is concerned because none of these regulations have been followed.

Furthermore, in Scoping Document 2 (SD2) FERC stated that scoping was intended to serve as a guide to issues and alternatives to be addressed in the Environmental Impact Statement

(EIS).²¹ The public expressed concerns in the scoping process that should be addressed in the draft EIS. FERC's comments read: "As shown in both the transcripts of the scoping meetings and in Appendix A, many individuals have provided either oral or written scoping comments, or both, concerning the Lake Powell Pipeline proposal. Many of the public comments express similar concerns or issues:

- 1. increased water conservation can delay the need for the pipeline or other water supply projects .
- 2. supplying water to allow the predicted population growth will diminish the quality of life in the region;
- 3. the estimated cost of the pipeline is increasing and little is known about how the final cost of the pipeline will affect fees and the taxes and rates paid by water users;
- 4. continued droughts and climate effects from human activity could put the supply of water from Lake Powell Reservoir at risk.

These important issues should have been addressed in the study reports and were not. These are the core issues that should be the basis of the draft EIS and they have been dropped out. Utah reinterpreted and discounted these issues in the study reports. The study reports have fallen short and should not be considered as complete by FERC as ready for environmental review, because they did not address adequately these core controversial public issues of the LPP project. Our comments in the following sections re-emphasize the importance that the environmental studies for the draft EIS be revised and completed with high quality data. We address these concerns in more detail below.

2. BOR's Green River Block (GRB) Water Exchange Contract Draft Environmental Assessment PRO-EA-16-020

BOR explains the service contract provisions and the purpose of this exchange concept is to put Utah's remaining share (1996 asignment) of its Ultimate Phase CUP water right of 72,641 AFY to benefical use for (development) and leave water in the river for the endangered fishes (ESA goals), the contract states:

Reclamation and the State propose entering into an exchange contract for the GRB that would allow Reclamation to: meet ESA Recovery Program goals in the Green River, continue to operate FG dam within the parameters of the FGROD, and provide the State with a reliable water supply for development of the 1996 Assignment.

FERC eLibrary 20080821-3005, Scoping of Environmental Issues for the proposed Lake Powell Pipeline Project, August 21, 2008, p.7

The remaining portion of the 1996 Assignment currently held by the Board has a diversion limit of 320,474 AF and a depletion limit of 86,249 AF. This portion is being reserved by the State to be used by the Lake Powell Pipeline Project (LPP) which would divert water from Lake Powell and deliver it through a pipeline to Washington and Kane counties in southwestern Utah. This portion of the 1996 Assignment is referred to as the LPP Block. ²²

3. Comment

Utah claims that there will be no adverse effects due to this exchange because of Flaming Gorge ROD. They describe the exchange this way:

"The proposed project will not change the releases of Flaming Gorge stored water to the Green River, which will continue to occur as specified in the 2006 ROD. Therefore, effects of Flaming Gorge releases to the Green River will remain the same as those previously analyzed in existing Reclamation models and covered by the 2005 Flaming Gorge EIS."

However, the Coalition is concerned that there may not be enough water in Flaming Gorge reservoir for the Ultimate Phase CUP water right. This is due to over-allocation, reduced snowpack and stream flows and using a hydrological model from the Flaming Gorge ROD that does not consider a changing climate. The Flaming Gorge ROD was in 2005. But, according to a 2007 letter²³ from the BOR it is uncertain how much water is available in FGR. The letter reads, in part:

A certain degree of uncertainty always surrounds yield studies. This analysis used an unusually long and accurate historic record. The modeling was also at a relatively high level of detail. The water supply may be further reduced or impacted by the outcomes of the future National Environmental Policy Act and Endangered Species Act processes associated with this project, and all water supply numbers should be considered preliminary until that process is completed. As one would expect, there is a degree of uncertainty beyond the original 40-year term of the water service contract. The potential contract for this water would reflect this uncertainty and the need for reevaluation at the time of contract renewal.

Our total estimated amount of water available from Flaming Gorge for the next 40 years is relatively small at 165,000 acre-feet per year. Please find enclosed our draft analysis for your review and comment. Mr. Dave Trueman, Manager of the Resources Management Division, is available at 801-524-3759, if you have questions or would prefer a briefing.

GRB EA. 1.3 Background, page 5.

See http://www.riversimulator.org/Resources/UCRC/UCRCflamingGorgeWaterAvailibilityReclamation2007.pdf.

Moreover, this hydrological modeling used to make the assumption of how much water is left in the Flaming Gorge reservoir's water availability analysis is flawed because it used the 100 year historical average of 15 MAFY at Lees Ferry and recent studies. ²⁴ However, more recent studies have shown there has been 15% less water in the last 100 years. Therefore, a current analysis should be completed before the project is ready for environmental review for the draft EIS. BOR, has begun to run what is being referred to as a "stress test" approach to modelling utilizing the 1988 to 2015 hydrology, which includes the current historic drought. BOR should use this model to evaluate water availability in FGR for the LPP for the term of the service contract.

The BOR is using a piecemeal approach by trying to approve signing a 50-year service contract for the GRB using a flawed EA before the LPP EIS is approved. This GRB concept of a water use exchange with BOR should be included in the LPP's EIS since both of BOR's proposed service contracts, the GRB and LPP Block are connected, such as:

- They both depend on water from Flaming Gorge Reservoir
- Both seek to exchange use of spring high water Green River tributary flows for the endangered fishes to complete their proposed actions.²⁵
- Both are using the same water in same section of the Green River.
- Federal actions are requested from the same entity, the Utah Board of Water Resources.
- Segregated from the same Ultimate Phase CUP Water Right application No. 41-3479.

The Coalition is concerned that Utah's request for 72,641 AFY of water from Flaming Gorge reservoir to develop the GRB water rights will lead to another deficit in an already overallocated Colorado River basin. The development of water for the GRB may require more damaging diversions on the Green River.

This EA did not consider the impact to endangered fishes due to development of GRB's water rights. Specifically, it did not state where the proposed diversions would be located or what

impact statement. Actions are connected if they: (i) automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their iustification. (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement. (3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

Mu. Xiao, Udall, Lettenmaier, On the causes of declining Colorado Stream Flows, 2018 see at: https://agupubs.onlinelibrary.wilev.com/doi/abs/10.1029/2018WR023153.

⁴³ CFR § 1508.25 Scope. Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (§§ 1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

⁽a) Actions (other than unconnected single actions) which may be:

⁽¹⁾ Connected actions, which means that they are closely related and therefore should be discussed in the same

amount of water would be diverted. How will water be identified and measured in these Green River tributaries before it is released from Flaming Gorge Reservoir?

Furthermore, the EA does not address Utah's diminishing water supply or the overallocation of its water rights. For example, the BOR is not using hydrological modeling scenarios that reflect diminishing snowpack and stream flows from a warming climate. This outdated approach puts our environment and the water supplies that we rely on at risk.

Additionally, Utah should disclose the source of the water supply it wants to exchange. This supply should remain physically available for the endangered fishes to assure that it stays in the system for the 50-year term of the service contract. Utah should also be required to show proof of this claim so it can be evaluated against claims of senior water right holders and the remaining water supply. A study of water supply availability in Green River tributaries needs to be included in the draft EIS.

The GRB EA identifies two alternatives: No Action and Proposed Action (defined as the "preferred alternative"). However, the EA does not provide adequate information to show that Reclamation's preferred alternative, i.e., the Proposed Action, is appropriate or feasible. More specifically, the EA does not include any inquiry into whether Utah has the water rights necessary to implement the Proposed Action for the 50-year term of the service contract. As discussed in these comments, BOR needs to reveal how it determined that Utah has the 72,641 AFY seasonal high Green River tributary flows to exchange with BOR to protect the endangered fishes. Also, the BOR needs to disclose how it made the decision that the GRB's 1958 junior water rights, which have to show proof of beneficial use by 2020, can be given a 50-year service contract for 72,641 AFY from FGR. As such, there is insufficient information in the record to show that the Proposed Action is appropriate or feasible. We again request that Reclamation provide information that demonstrates Utah has the water rights necessary to implement the Proposed Action.

The Coalition suspects that Utah does not have these spring high-water Green River tributary water rights to exchange for development and that this is another deficit in an overallocated Green River Basin. We suggest that before BOR makes a decision to approve these two service contracts it should do more studies, such as:

- Require Utah to provide proof it has undeveloped seasonal high water rights in the Green River tributaries to exchange with the BOR for water out of FGR for the LPP.
- Provide current hydrological climate modeling that could provide more realistic future projections on water supply availability for the LPP. Because, this new information is not accounted for in current studies that will be used to prepare the draft EIS. The draft EIS is the document that will be used to make the decision on the LPP.²⁶

-

See http://www.inkstain.net/fleck/2018/06/new-usbr-modeling-suggests-a-bigger-risk-ofcolorado-river-shortage-than-yall-might-think/.

• Complete a comprehensive study, such as a Hydrological Determination, that uses less than the historical 100 year average of 15 MAFY at Lees Ferry. This could determine if Utah has a sufficient water supply for the Lake Powell Pipeline. See information on a Hydrological Determination for the Jicarilla Navajo reservoir service contract.²⁷ The Colorado River Basin Water Supply and Demand Study states that the Basin faces a wide range of plausible future long-term imbalances between supply and demand.²⁸

In summary, the GRB, EA does not contain sufficient or accurate information to enable stakeholders to fully understand the proposed action's impact on the environment and make an informed decision. There is no certainty that there is 72,641 AFY physically available for the endangered fishes. This decision should be studied in an EIS.

Moreover, the GRB Block water exchange contract should be analyzed in the draft EIS as a connected and cumulative action. The Coalition submitted comments on the draft EA for that project. One of the issues we raised was the draft EA's failure to demonstrate that Utah has sufficient water rights for the contract, which is central to the feasibility of the proposed contract as the preferred alternative.

VII. UTAH'S WATER LAWS

The BOR did not consider Utah's water right laws in these water use exchange concepts.

The *Doctrine of Prior Appropriation* states the fundamental principle by which water rights are managed within the western states and Utah; is "first in time, first in right." This doctrine is not used in allocations in the Colorado River Compact between the states, but it is the basis for Utah's water laws. This means that those holding a water right with the earliest priority date, and who have continued to make beneficial use of the water, have the right to water from a certain source before others with water rights having later priority dates. As water supplies decline, this principle will decide whose water supply gets shut off and who can continue to access the water. Once the water supply limit is hit the system is managed by priority date. The LPP's 1958 water right 41-3479 is junior to many senior water right holders and is at high risk of being shut off. Utah is ignoring this risk. As Colorado River flows diminish over time, Utah's junior priority LPP's water rights of 1958 will be subordinate to those of senior water rights holders.

http://www.ose.state.nm.us/Legal/settlements/NNWRS/Initial%20Disclosures/Settlement%20Documents/Summary%20of%20the%202007%20Hydrologic%20Determination%20re%20Navajo%20Settlement%20110507.pdf.

²⁷ See

See https://www.usbr.gov/lc/region/programs/crbstudy/FactSheet_June2013.pdf.
Lake Powell Pipeline Coalition's NREA Comments
Page 21

Utah's water laws and water rights should be made part of this draft EIS decision-making process, but thus far, they have not been considered. All of the Ultimate Phase CUP water rights have to show proof of beneficial use by 2020. This includes the LPP's water right. It seems like the BOR is changing the LPP's water right proof of beneficial use dates past 2020 by ignoring this provision by including the water right in a 50-year service contract. This gives LPP's water right a senior position above all others. Furthermore, Utah's water law concerning instream flows may also have to be updated to accommodate this exchange concept, so that water can be left in a stream for the fishes and not diverted or developed. Thus far, the study reports do not include an analysis of how Utah's water rights laws will govern the exchange of water use in these 50-year service contract.

Utah is not entitled to a specific amount of water. Utah's water rights are not fixed; as water supplies go down its water right goes down proportionally. Utah has 23% of the Upper Basin Colorado River flow. The 1958 Lake Powell Pipeline water right, which was allocated from the Ultimate Phase of the CUP, is a "junior" water right. It is junior to many senior water right holders and is at high risk of being shut off as the water supply is reduced. The State of Utah is ignoring this risk. As Colorado River flows diminish over time the LPP water right will be outranked by senior water right holders. Furthermore, the Utah Division of Water Rights indicated that the state has over-allocated its Colorado River water rights. In litigation, "junior water rights" holders will go wanting. Precedent in water law shows that "paper" rights and "wet water" can be very different. The LPP water right is junior to the following water right holders:

- Central Utah Project
- Lower Basin states
- Ute Indian Tribe
- Navajo and other tribal rights
- Other Federal Reserved water rights; not yet determined
- Mexico.
- other water rights established before 1958

All of these risks to this LPP's water rights need to be evaluated in the draft EIS.

The Coalition was told by BOR's staff that the LPP's water right's 1958 priority date would not change, and it would remain junior to the CUP. The Coalition is concerned that the BOR intends to give a service contract for 50 years that could be subject to being shut off when water supplies decline. This would happen if Utah's water rights laws are followed.

The Coalition does not understand how BOR's own goals from its Colorado River Water and Demand Study recommendations would be met in this proposed exchange concept. It doesn't solve any of over-allocation of the Green River basin, and it is unclear whether sufficient water would remain available to protect the endangered fishes. The exchange also does not seem to appear in keeping to Utah's previous pledge to not issue water rights or do any change applications in this section of the Green River. In this 2009 proposed Green River Water Rights Policy Agreement, Utah had been tasked with providing legal protections for the endangered fish flows from Flaming Gorge Reservoir to Lake Powell under the *Recovery Implementation*

Program Recovery Action Plan (RIPRAP).²⁹ Also, the Department of Interior recommends that each action be consistent with the goals of BOR.

"Interior's regulations at 43 CFR 46.420(a)(1) indicate that, in accordance with 40 CFR 1502.13, "purpose" and "need" may be described as distinct aspects defining the underlying situation that the agency is responding to. The "need" for action is the underlying problem the agency wants to fix or the opportunity to which the agency is responding with the action. The "purpose" is the goals or objectives that the agency is trying to achieve."

The Coalition does not think this proposed action meets the goals of BOR to try the solve the long-term imbalance between supply and demand. It certainly meets Utah's goals—but at what expense to the environment and the public good.

GRB, EA page 5. Purpose:

"This contract is needed to resolve a long standing disagreement between Reclamation and the State regarding use of the water right assigned in 1996."

The Coalition does not understand how this EA would solve the core issue that BOR faced in 2009: that the Green River was over-allocated. This Ultimate Phase CUP Water Right No. 41-3479 should have lapsed in 2009, as the state agreed to do. Rather than resolving the over-allocation of the Green River, these service contracts make it worse.

In 2009, the BOR had a different position about the Ultimate Phase CUP Water Right No. 41-3479. BOR stated in their protest letter that this water right should have lapsed due to the over-allocation of senior water rights holders in this region. ³⁰ The GRB and LPP's are portions of this same water right. This letter reads as follows:

Water Right No. 41-3479 is a segregated portion of the Flaming Gorge water right, Application to Appropriate No. A30414. This appropriation originally included both the storage of water in Flaming Gorge Reservoir and the beneficial use thereof for the "Ultimate Phase" of the Central Utah Project. After the "Ultimate Phase" was deauthorized, Reclamation assigned this portion of the appropriation to the Utah Board of Water Resources with the understanding that any portion of this water right not developed within 50 years of the original approval date (October 6, 2009) would lapse.

https://www.waterrights.utah.gov/asp_apps/DOCDB/DocImageToPDF.asp?file=/docSys/v921/b921/B921002N.TIF

²⁹ https://www.waterrights.utah.gov/meetinfo/m20090820/policy-upcorviMC09L.pdf an

³⁰Letter from BOR to State Engineer Dec 17, 2009 see at:

Reclamation is concerned that further extensions on the undeveloped portions of the Flaming Gorge appropriation could jeopardize the future of the Central Utah Project (CUP). To date, over \$2 billion dollars have been spent to develop the CUP, which supplies agricultural, municipal, and industrial water to millions of Utah residents in the Uintah Basin, Heber Valley, and Wasatch Front corridor. The key right for the CUP, Water Right No. 43-3822, has a priority date of November 11, 1964. If all the senior undeveloped water rights in the Green River and San Juan River Basins are developed, Utah would exceed its portion of the Colorado River Compact and the Central Utah Project water rights would be adversely impacted.

The BOR protested the Ultimate Phase CUP Water Right No. 41-3479 extension of time, for proof of beneficial use, beyond the 50-year limit (October 6, 2009). For this reason, Utah made all these GRB and LPP water rights junior to the Central Utah Project All of GRB and LPP water rights holders also have to show proof of beneficial use by 2020. The BOR also mentioned in their protest letter that if all senior undeveloped water rights in Green River and San Juan are developed, Utah would exceed its portion of the Colorado River Compact. The BOR also protested every water right that was segregated from the Ultimate Phase Water Right No 41-3479, and Utah made them junior to the Central Utah Project.

This suggests these GRB and LPP water rights are not valid water rights to exchange with the BOR for long-term 50-year service contracts. The BOR has changed its position for an unknown reason and now claims these water rights are a viable, permanent water rights that can be used for an instream flow for the endangered fishes for 50 years. However, the BOR has not addressed the concern that this 1958 GRB and LPP water rights are junior to senior water right holders and will be in jeopardy of being shut off as water supplies decline.

The BOR should explain why they changed their position in this Ultimate Phase CUP water rights. Furthermore, BOR should conduct an analysis of the validity of Utah's water rights and the available projected water supply for these 50-year service contracts before agreeing to these exchanges with Utah.

Utah has about 1.369 Million Acre Feet per Year (MAFY) of depletions from tributary sources to the Upper Basin Colorado River to use, and the balance of water is supposed to go downstream to the Lower Basin states.

Utah estimates that 1,007,500 AFY are being depleted. This is water that is taken out of the watershed and does not return. If you use a natural flow without any diversions at Lees Ferry of 15 MAFY, it leaves about 360,000 AFY left for Utah to use. But, if you have less water at Lees ferry (as shown in Udall's 2017 study,³¹ which identifies a 19% decrease since 2000), this reduces the availability of the Ultimate Phase CUP water rights. Udall and colleagues also

Lake Powell Pipeline Coalition's NREA Comments

-

The Twenty-First Century Colorado River hot drought and implications for the future. See at: http://conserveswu.org/wp-content/uploads/Udall et al-2017-Water Resources Research.pdf.

concluded in another study that the naturalized flow of the Colorado River has decreased about 15% over the last 100 years.³²

Therefore, Utah may not have a remaining share to develop due to declining snowpack and streams flows and the over-allocation of its Colorado River water rights. A validation process should be initiated to resolve Utah's over-allocation of its Colorado River water rights, which are currently in disarray, before the state allocates more water from its diminishing supplies.

For example: The State's web site on the Upper Basin Water Rights lists 2.5 MAFY of approved depletions, but Utah is only supposed to deplete 1.369 MAFY.³³

See where new totals are indicated at the bottom of the page:

- 6,450,413 acre feet diversion; and
- 2,542,092 acre feet depletions.

Most importantly, we filed a GRAMA records request months ago to the Utah Divison of Water Resources and requested the exact water right depletions that are included in the one million acre feet of water they claim they are using of their Colorado River allocation. We are still waiting to get that information.

According to a summary by a water official, there are significantly more approved water right applications than Utah's allocation, which, if developed, could potentially exceed Utah's entitlement.34

Furthermore, in 2009, there was a proposed water rights policy agreement for the Green River. 35 The Nature Conservancy and Western Resource Advocates described the overallocation of the Green River as follows:³⁶

"As the DWR stated in the public meetings, the surface waters in the affected reaches of the Green River are in essence "fully appropriated" and generally not subject to additional appropriation. New groundwater appropriations are limited to "small...applications for 1 family, 1/4 acre of irrigation and up to 10 livestock units." DWR's existing policy is to deny any significant new applications to appropriate water from these reaches. Consequently, we believe

³² Mu. Xiao, Udall, Lettenmaier, On the causes of declining Colorado Stream Flows, 2018 see at: https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018WR023153

³³ see at: https://www.waterrights.utah.gov/distinfo/colorado/WRPriorityDDview.asp,

³⁴ Water Right Issues in the Upper Colorado River Basin of Utah https://www.waterrights.utah.gov/meetinfo/m042005/summary.htm

³⁵ https://www.waterrights.utah.gov/meetinfo/m20090820/policy-upcorviMC09L.pdf

³⁶ https://www.waterrights.utah.gov/meetinfo/m20091014/20091201 WRA-TNC comments final.pdf

that the large "approved" but not yet "perfected" water rights are a much greater challenge for DWR in protecting the recovery flows. The potential reduction in recovery flows resulting from the exemption of approved, but unperfected water rights, needs to be fully addressed by the proposed policy. Additionally, the proposed policy does not account for "approvals" upstream of Reaches 1 and 2. One way to address depletions by approved but unperfected water rights may be to provide for an additional and equivalent increase in releases from Flaming Gorge whenever the perfection of approved water rights will reduce the recovery flows, as discussed above."

1. Comment

In a 2009 proposed Green River Water Rights Policy Agreement, Utah was tasked with providing legal protections for the endangered fish flows from Flaming Gorge Reservoir to Lake Powell under the *Recovery Implementation Program Recovery Action Plan* (RIPRAP). However, Utah now wants to allow many new diversions on the Green River for the GRB's water rights to be able to divert 72,641 AFY from the Green River. This seems to be conflict with this previous agreement. Therefore, there is no certainty that this water right will remain in place for the duration of a 50-year service contract. It is not clear how Utah's water laws and the requirement to put all waters to beneficial use may impact this water use exchange, which changes water use from development to an instream flows.

Moreover, Utah does not provide any information in the study reports on the Green River Basin where the water supply for the LPP project will flow from Flaming Gorge reservoir to Lake Powell reservoir.

Utah's license application does not describe that it needs water for the proposed action from Flaming Gorge Reservoir, or that the proposed exchange of water use with the BOR has to occur to make the LPP project a viable project. Furthermore, the study reports do not describe the resources affected from Flaming Gorge Reservoir to Lake Powell Reservoir such as the endangered Green River fishes.

VIII. FERC REGULATIONS CONTENTS OF APPLICATION

FERC regulations confirm that only the owner of project can apply for a license and Utah will not own or pay for the Hurricane Cliffs Pumped Storage Project (PSP). Therefore it should be deleted from the license application and deleted from cost/ benefit analysis in Study Report #10. This study report claims PSP will bring in \$billions of revenues. Contrary to this assumption the cost of power from this PSP will above market rates. In other words it will be hard to sell this power with so much cheaper power on the market..

FERC regulations describe the required contents of an application, see 18 CFR § 4.4:

(2) "The location of the proposed project is: State or territory: County: Township or nearby town: Stream or other body of water": However, Utah did not include the location of Flaming Gorge reservoir and the Green and Colorado Rivers in its application.

(ii) "The steps which the applicant has taken, or plans to take, to comply with each of the laws cited above are: [provide brief description for each requirement]."

However, the exchange concept on water use with the BOR does not seem to follow Utah's state water laws.

Utah's license application does not describe that it needs water for the proposed action from Flaming Gorge Reservoir, or that the proposed exchange of water use with the BOR has to occur to make the LPP project a viable project. Furthermore, the license application does not describe the resources affected from Flaming Gorge Reservoir to Lake Powell Reservoir such as the endangered Green River fishes.

The Coalition is concerned that all the current environmental reports are not included in the license application in Exhibit E. Utah does not provide any information about the BOR's service contract that take water from Flaming Gorge reservoir and move it about 500 miles to Lake Powell and the environmental consequence of this action that are required in a license application, such as:

the general description of the Flaming Gorge and Lake Powell reservoirs, the Green and Colorado Rivers.

However, FERC regulation CFR 18 § 4.41 describes what needs to included Contents of application continues and a lot of this on the information exchanges are left out:

- "(f) Exhibit E is an Environmental Report. Information provided in the report must be organized and referenced according to the itemized subparagraphs below. See § 4.38 for consultation requirements. The Environmental Report must contain the following information, commensurate with the scope of the project:
- (1) General description of the locale. The applicant must provide a general description of the environment of the proposed project area and its immediate vicinity. The description must include location and general information helpful to an understanding of the environmental setting.
- (i) A description of existing instream flow uses of streams in the project area that would be affected by construction and operation; estimated quantities of water discharged from the proposed project for power production; and any existing and proposed uses of project waters for irrigation, domestic water supply, industrial and other purposes; (ii) A description of the seasonal variation of existing water quality for any stream, lake,
- (ii) A description of the seasonal variation of existing water quality for any stream, lake or reservoir that would be affected by the proposed project, including (as appropriate) measurements of: significant ions, chlorophyll a, nutrients, specific conductance, pH, total dissolved solids, total alkalinity, total hardness, dissolved oxygen, bacteria, temperature, suspended sediments, turbidity and vertical illumination;

- (iii) A description of any existing lake or reservoir and any of the proposed project reservoirs including surface area, volume, maximum depth, mean depth, flushing rate, shoreline length, substrate classification, and gradient for streams directly affected by the proposed project;
- (iv) A quantification of the anticipated impacts of the proposed construction and operation of project facilities on water quality and downstream flows, such as temperature, turbidity and nutrients;
- (3) Report on fish, wildlife, and botanical resources. The applicant must provide a report that describes the fish, wildlife, and botanical resources in the vicinity of the proposed project; expected impacts of the project on these resources; and mitigation, enhancement, or protection measures proposed by the applicant. The report must be prepared in consultation with the state agency or agencies with responsibility for these resources, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service (if the proposed project may affect anadromous, estuarine, or marine fish resources), and any state or Federal agency with managerial authority over any part of the proposed project lands. The report must contain:
- (i) A description of existing fish, wildlife, and plant communities of the proposed project area and its vicinity, including any downstream areas that may be affected by the proposed project and the area within the transmission line corridor or right-of-way. A map of vegetation types should be included in the description. For species considered important because of their commercial or recreational value, the information provided should include temporal and spatial distributions and densities of such species. Any fish, wildlife, or plant species proposed or listed as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service [see 50 CFR 17.11 and 17.12] must be identified;
- (ii) A description of the anticipated impacts on fish, wildlife and botanical resources of the proposed construction and operation of project facilities, including possible changes in size, distribution, and reproduction of essential population of these resources and any impacts on human utilization of these resources;
- (iii) A description of any measures or facilities recommended by state or Federal agencies for the mitigation of impacts on fish, wildlife, and botanical resources, or for the protection or enhancement of these resources, the impact on threatened or endangered species, and an explanation of why the applicant has determined any measures or facilities recommended by an agency are inappropriate as well as a description of alternative measures proposed by applicant to protect fish, wildlife and botanical resources;"

1. Federal Reserved Water Rights

When the United States reserved public land for uses such as Indian reservations, military reservations, National Parks, National Forest lands, or Monuments and other public land reservations, it also implicitly reserved sufficient water to satisfy the primary purposes for which the reservation was created. Reservations made by presidential executive order or those made by an act of Congress have implied Federal Reserved Water Rights. The date of priority of a Federal Reserved Water Right is the date the reservation was established. The United States Supreme Lake Powell Pipeline Coalition's NREA Comments

Court has determined that the measure of a Federal Reserved Water Right is not dependent on beneficial uses to which the water has been historically applied, but should be quantified based on the water needed to accomplish the primary purpose for which the reservation was established.

While some Federal Reserved Water Rights in Utah have been settled many have not. This situation creates the potential for unknown and unquantified Federal Reserve Water Rights to disrupt long established appropriative state water rights if or when the reservation uses are developed even though the rights may have been un-quantified, undeveloped, and unrecorded under state water rights laws for decades. Utah has completed Federal Reserved Water Rights settlement agreements on 10 of the 17 National Parks and Monuments and with other federal reservations. But, Canyonlands National Park and Dinosaur National Monuments have pending Federal water rights claims in the Green River that are not included in the accounting of Utah's remaining water rights. Rainbow Bridge National Monument is also being negotiated. It is uncertain if National Forest Lands have any Federal Water Rights in the Green River. All of these unsettled Federal Reserve Water Rights need to be added to Utah's remaining Compact allocation before the remaining Ultimate Phase CUP water rights are granted.

2. Tribal Water Rights

The U.S. Supreme Court first recognized tribal reserved water rights in a 1908 decision, *Winters vs. United States*, some 14 years prior to the 1922 Compact. In 1963, the Supreme Court ruled that water consumed under tribal rights be counted as part of the allocation made to the state in which the reservation is located.

In 2014, Dan Cordalis, a tribal water rights expert with the nonprofit environmental law firm Earthjustice in Denver, wrote:

"In addition to the existing over-allocation of the river, another "new," major demand is likely to come from Indian tribes, some of which have established the right to divert significant quantities of water but have not yet developed the infrastructure to do so, and others whose water rights are promised but have yet to be formally quantified. The latter is the case for 12 of the 28 tribes that reside in the Colorado River Basin."

"What we do know is that the 16 tribes in the basin that have quantified their rights have established the right to divert nearly 2.9 million acre-feet of water annually from the Colorado River system. It appears, therefore, the remaining tribal claims leave a significant 'cloud' over the certainty of existing non-Indian water rights and uses." It is important to note that these reserved water rights don't require that the tribes had an actual need at the time of the reservation's establishment, but are instead based upon future uses of the reserved water. A U.S. Bureau of Reclamation study now underway in cooperation with the Ten Tribes Partnership, a

coalition of tribes with Colorado River water rights, is working to determine how much water may be associated with those rights."³⁷

The Indian Tribes were not at the table in the 1922 Colorado River Compact, nor in any later compacts and the compacts didn't change or reduce any of their rights. The states have to settle water rights claims with the tribes who have reservations in Utah because Indian rights have to come out of the Utah's remaining 361,000 acre feet Colorado River water right. As river flows are reduced this could become problematic for the Lake Powell Pipeline water right because tribal rights have priority over the junior water right of 1958 Lake Powell Pipeline.

The Utah Navajo Water Rights Settlement Act was introduced in Congress by Senator Hatch in 2017 see at: (https://www.congress.gov/bill/115th-congress/senate-bill/664). The agreement is for 81,500 acre of feet of water annually from the San Juan River; \$200 million from U.S. Congress; and \$8 million from Utah. Also, the Bureau of Reclamation shall: (1) plan, design, and construct the water diversion, delivery, and conservation features of the Navajo water development projects. This agreement must be approved by Congress and ratified by the Utah legislature and the Navajo Nation before it can be implemented.

The Northern Ute Tribe of the Uintah and Ouray Indian Reservation in Duchesne, Uintah and Grand Counties have Federal Reserved Water Right claims in Utah. Negotiations culminated in a settlement agreement approved by Congress in 1992. But it was never ratified by the tribe. Also, the proposed Ute Indian Water Compact of September 22, 2009 was never ratified either by the tribe. This agreement quantified water rights for the tribe limited to 470,594 acre-feet diversion rights and 258,943 acre-feet of depletion from the Upper Colorado River System of the Uinta and Lake Front Rivers and Duchesne River in Utah. Negotiation with Utah is for 105,000 acre foot of depletion out of Utah's remaining share of Compact water rights. The priority date for the Ute Tribal Water Rights when transferred to the Green River is October 3, 1861. Negotiation is also underway to resolve claims of the Confederated Tribes of the Goshute Reservation in northwestern Utah. A settlement agreement with the Shivwitts Band of Paiute Indians in southern Utah was completed and passed by Congress.

Resolving Indian water right and the other Federal Reserved Water Rights before granting the Ultimate Phase CUP water right would remove significant uncertainty to what Utah's remaining share of Colorado River water should be used for. Federal Reserved Water Rights in the Colorado River have to come out of Utah's remaining share of its Colorado River Compact rights, which is about 361,000 acre feet. With Colorado River flows declining and Utah's share being only 23% of what remains it is uncertain how Utah will meet its obligations to higher priority tribal water rights over the 30-50 year term of LPP's hydropower license and the proposed BOR's service contracts. Similarly FERC should request a study of the remaining tribal water rights in the Colorado River Basin that have been settled and yet to be settled such as the

Page 30

-

³⁷ Managing the Colorado River in the 21st Century: Shared Risks and Collaborative Solutions, see at: https://www.cobank.com/~/media/Files/Searchable%20PDF%20Files/Knowledge%20Exchange/2016/Colorado%20 River%20Report%20%20Mar%202016.pdf
Lake Powell Pipeline Coalition's NREA Comments

Hualapai Tribe's water rights. This study would reveal the amount of remaining water supply and who has priority in the long term.

IX. **USING UPPER BASIN WATER IN LOWER BASIN**

We are further concerned that Utah's proposed use of water for the proposed LPP project may violate the congressional authorizations of the purposes of Flaming Gorge and Lake Powell reservoirs. This is because the LPP project would draw water from Flaming Gorge reservoir in the Upper Basin and then draw water from Lake Powell and use the water in the Lower Basin, in Washington County, Utah, where the project terminates. Flaming Gorge reservoir waters must be used within its congressionally designated purpose for use in the Upper Basin and not in the Lower Basin. 38 Therefore, it may take federal legislation to complete this exchange.

The 1922 Compact clearly separates the two basins. It also specifies that 7.5 MAF is for use by the Upper Basin states and 7.5 MAF for the Lower Basin states. It is not certain all states agreed to Utah using an Upper Basin water right in the Lower Basin where the LPP Project is located.

A 2003 Resolution of the Upper Colorado River Commission does not resolve this issue, stating:

"Whereas, the states of Colorado, New Mexico, Utah and Wyoming all support the proposed Lake Powell Pipeline project, but the states are not in agreement as to whether, under the Law of River, Utah may use a part of its Upper Basin apportionment to serve uses in the Lower Basin portion of Utah, without obtaining the consent of the other states. However in the spirit of comity, and without prejudice to the position of any state regarding these unresolved issues, all the states support and to the extent necessary consent to the Lake Powell Pipeline Project in Utah."39

According to legal scholars Utah cannot use an Upper Basin water right in the Lower Basin as this Project does. 40

For instance, where an allocation is measured is important for the Upper Basin; it is at Lee Ferry, AZ. However, the Lake Powell Pipeline will draw its water above Lee Ferry. The practical necessity of administering the various water rights, apportionments, etc. of the Colorado River has led to definitions of consumptive use or depletions generally in terms of "how it shall be

³⁸ Colorado River Storage Project Act was authorized by Congress in

^{1956;} https://www.usbr.gov/lc/region/g1000/pdfiles/crspuc.pdf.

³⁹ Resolution of the Upper Colorado River Commission, 2003, See at: http://www.riversimulator.org/Resources/LawOfTheRiver/HooverDamDocs/Supplements/2003aUCRCResolutionU seAccountingWaterLakePowellPipeline.pdf

⁴⁰ James S. Lochhead, An Upper Basin Perspective on the California's Claims to Water from the Colorado River Part 1: the Law of the River, pp.322-329, See at: http://citizensfordixie.org/wpcontent/uploads/2015/12/LochheadAn-Upper-Basin-Perspective.pdf Lake Powell Pipeline Coalition's NREA Comments

measured." The Upper Colorado River Basin Compact states that the Upper Colorado Commission is to determine the apportionment made to each state by "...the inflow- outflow method in terms of manmade depletions of the virgin flow at Lee Ferry..." This water diversion for the Lake Powell Pipeline is diverted before it gets to Lee Ferry and is used in the Lower Basin. This diversion and usage conflicts with the Colorado River Compact. It may take federal legislation as well as agreement from the Basin States agreement to legally allow this scenario.

In these charts below, Utah claims to have a share of water in the lower basin. However, the Coalition could not find evidence that Utah has a share in the Lower Basin.⁴²

	2000	2020	2050
Agriculture/Stock	591	650	632
Municipal/Domestic	23	38	62
Power/Industrial/Energy	46	55	75
Indian Settlements	-	58	124
Exports/Imports	154	235	295
Reservoir Evaporation	19	19	19
Total Depletions	833	1,055	1,207
Evaporation Storage Units	120	120	120
Total	953	1,175	1,327
Utah's share of the Upper Colo. River	1,369	1,369	1,369
Remaining water available	416	194	42

Source: Utah Division of Water Resources

Therefore, these Lower Basin water rights of 113,100 AFY may need to be added to Utah's Upper Basin remaining share, which does not leave water rights for the LPP. However, in looking at what is reported to BOR in consumptive use the Virgin River is not included. How Utah's Lower Basin share is accounted for needs to be addressed in the LPP EIS.

Lake Powell Pipeline Coalition's NREA Comments Page 32

-

⁴¹ The Upper Colorado River Basin Consumptive Uses and Losses Report 2011-2015, Terminology, page 4

⁴² see at https://water.utah.gov/InterstateStreams/PDF/TheColoradoRiverart.pdf, 8.

Utah's Lower Colorado River Basin Projected Depletions

(Units in acre-feet per year)

	2000	2020	2050
Municipal/Industrial	13,000	22,000	39,000
Secondary (lawn and garden)	6,000	10,000	17,800
Agriculture/Stock	50,000	45,000	38,000
Exports (to New Castle area)	2,600	2,600	2,600
Reservoir Evaporation	5,300	10,600	11,700
Shivwits Paiute Indian Band	300	2,000	4,000
Total Depletion	77,200	92,200	113,100

Source: Utah Division of Water Resources

The Upper Colorado River Basin is heavily dependent on snowpack, which is expected to decrease as temperatures continue to warm. While the Green River is not as dependent on snowpack as other rivers, less snow in the Basin will likely mean less water in the tributaries to the Green downstream of the Dam, which will deplete the Green as well.

The Green River system downstream of Flaming Gorge Dam in Colorado and Utah is home to four fishes listed as "endangered" under the ESA: the Colorado pikeminnow, humpback chub, razorback sucker, and bonytail. In 1994, FWS designated portions of the Green and the Colorado Rivers, including downstream of the confluence of the two rivers, as "critical habitat" for these fishes. As such, these stretches of river have been deemed "essential" to the species' recovery under the Endangered Species Act.

For these reasons the analysis in the draft EA needs to be integrated into the analysis in the LPP draft EIS, and it needs to include the potential effects of a warming climate on the diminishing water supply for the project as well as the project's impact on the endangered fishes. Thus, there simply may not be enough water to allow this exchange to occur due to the over allocation of the water in the Green River basin.

X. CONSISTENCY WITH COMPREHENSIVE PLANS

The other comprehensive plans include:

 BOR is ignoring its own call to action to deal with the over-allocation of the Colorado River basin. "The Basin faces a wide range of plausible future longterm imbalance between supply and demand." This call to action is outlined in the *Colorado River Basin Water Supply and Demand Study* ⁴³ (Basin Study).

•BOR's Climate Change Adaptation Strategy report in November 2016. The four goals of the Strategy include: an increase in water management flexibility, an enhancement of climate adaptation planning, the improvement of infrastructure resiliency, and the expansion of information sharing. 44

- BOR, in coordination with the Upper Basin River Commission and Basin States, has begun to run what is being referred to as a "stress test" approach to modelling, utilizing the 1988 to 2015 hydrology, which includes the current historic drought.⁴⁵
- The Utah Climate Center is warning of higher temperatures and increasing drought throughout the region. The Western States Water Council counts the Utah Department of Environmental Quality as a member organization and the Utah Division of Water Resources as an executive council member. In March, 2018 the council resolved that it "supports state and federal applied research and hydroclimate data collection programs that would assist water agencies at all levels of government in adapting to climate variability and making sound scientific decisions."

1. Drought Contingency Planning

From the vantage point of late November, 2018 it is clear that an evaluation of drought contingency planning needs to be included in the LPP Environmental Analysis. In 2012 when the initial draft study reports were completed for Utah both the Upper and Lower Basin States were operating under an agreement on potential Colorado River shortages known as the 2007 Interim Guidelines. By 2015, when all of the draft study reports were revised and submitted to

⁴³ Colorado River Basin Stakeholders *Moving Forward*, addressing challenges identified in the Colorado River Basin Water Supply and Demand Study, Phase 1 Report: Executive Summary, Bureau of Reclamation, May 2015. "The Basin faces a wide range of plausible future long-term imbalance between supply and demand. This imbalance computed as a 10-year running average, ranges from no imbalance to 6 million acre-feet (MAF) with a median of 3.2 MAF in 2060."⁴³ Compounding the problem is river flows at Lee Ferry during last 15 years have only been 12.5 - 13 MAFY; lower than the estimated 15 MAFY used in decision making. These lower flows are not being considered by BOR, or Utah in forecasting water availability for the LPP and this omission is making the over allocation worse.

⁴⁴ https://www.usbr.gov/climate/docs/2016ClimateStrategy.pdf

⁴⁵ http://www.inkstain.net/fleck/2018/06/new-usbr-modeling-suggests-a-bigger-risk-of-colorado-river-shortage-than-yall-might-think/

⁴⁶ Supporting Federal Research on Climate Adaptation (March 14, 2018) http://www.westernstateswater.org/wp-content/uploads/2018/08/421-WSWC-Resolution-supporting-Federal-Climate-Adaptation-Research.pdf Lake Powell Pipeline Coalition's NREA Comments Page 34

the Utah, the Lower Basin States had just begun a planning process to develop the Drought Contingency Plan (DCP).⁴⁷ The DCP was undertaken to provide a consensus-based policy, in part, to move away from federal intervention that is built into the 2007 Interim Guidelines.⁴⁸ We mention this brief history because the original analyses were built on the best available data at the time, however, with the passage of three years it is important to include the most up to date science in order to address newly relevant policy concerns.

On October 5, 2018 the Bureau of Reclamation published the Upper and Lower Basin DCPs in final draft form.⁴⁹ In section A of the DCP document, which discusses the background of the planning process, it states:

Based on the actual operating experience gained after the adoption of the 2007 Interim Guidelines and emerging scientific information regarding the increasing variability and anticipated decline in Colorado River flow volumes, the Parties recognize and acknowledge that those relying on water from the Colorado River System face increased individual and collective risk of temporary or prolonged interruptions in water supplies, with associated adverse impacts on the society, environment, and economy of the Colorado River Basin. Therefore, the Parties have agreed that it is necessary and beneficial to pursue additional actions beyond those contemplated in the 2007 Interim Guidelines to reduce the likelihood of reaching critical elevation levels in Lake Powell and Lake Mead through the Interim Period.

The Council on Environmental Quality (CEQ) issues regulations regarding provisions that all federal agencies must follow regarding NEPA. These are published in the Code of Federal Regulations (CFR). We believe that two citations in particular are important to our contention that this environmental analysis must align with the modeling and policy provisions in the Upper Basin DCP.

The first CEQ regulation is 40 CFR 1502.16 Environmental consequences.⁵¹ It states that an EIS shall include discussions of eight different points. Of relevance to this comment is 1502.16(c) which states: "Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See 40 CFR 1506.2(d).)". The second, then, is 40 CFR 1506.2 Elimination of duplication with State and local procedures.⁵² 40 CFR 1506.2(d)

_

 $[\]frac{^{47} \ http://www.cap-az.com/documents/meetings/2017-01-05/1604-}{10.\%20DCP\%20and\%20DCP\%20Plus\%20Presentation\%20for\%20January\%20Board\%20meeting.pdf}$

⁴⁸ Abigail Sullivan, Dave D. White, Michael Hanemann,

Designing collaborative governance: Insights from the drought contingency planning process for the lower Colorado River basin, Environmental Science & Policy, Volume 91, January 2019, p 40.

⁴⁹ https://www.usbr.gov/dcp/docs/DCP Agreements Final Review Draft.pdf

⁵⁰ Sarah Langberg. A "Full and Fair" Discussion of Environmental Impacts in NEPA EISs: The Case for Addressing the Impact of Substantive Regulatory Regimes. <u>www.yalelawjournal.org/note/nepa-eiss-and-substantive-regulatory-regimes</u>

www.law.cornell.edu/cfr/text/40/1502.16

⁵² www.law.cornell.edu/cfr/text/40/1506.2

states: "To better integrate environmental impact statements into State or local planning processes, statements shall discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law."

The Coalition contends that the Upper and Lower Basin DCPs are regional plans involving State, Tribal and local laws. Given the economic, social and cultural ramifications at stake, it is important that the CEQ guidance is adhered to in this NEPA process. Such an approach will at least make explicit some of the uncertainty inherent in this multi-billion dollar LPP proposal.

XI. POTENTIAL ENVIRONMENTAL IMPACTS

1. Climate Change

Climate variability increases the risk of an already over-allocated Colorado River. Snowpack, the main source of water for community water systems, is estimated to be reduced greatly by increasing temperatures. Dr. Robert Gilles from the Utah Climate Center found the temperatures of all Utah's cities are going up. Utah has had 9% less snow since 1950 and less winter storms generally. Other studies predict that the Colorado River flows could be reduced by 10-30% over the next 50 years.

In contrast, state and federal studies, which have been cited thus far in support of the LPP, have not included study results that have already been undertaken on the variability of future river flows. The projected impacts of climate change on the declining snowpack and Colorado River flows are widely accepted within the scientific community. They should be included directly in planning for future water supplies for the LPP.

More than two and a half years have passed since our original comments on hydrological modeling used for the PLP. Consider that the most recent modeling and data sets used in in Study Report No. 19 Climate Change (Study 19) were completed in 2012. Advances in modeling science take place consistently and incrementally over time in a variety of ways. These include insights gained from past experience that are built into new modeling protocols, additional years of monitored data to develop and test appropriate model inputs, and the increases in computational power which make it feasible to test model response to a wide variety of assumptions. This makes it imperative that the final application update its modeling approach in order to improve its analysis in the proposed draft EIS.

The discussion of water rights above pertaining to the Green and Colorado rivers indicate that even if water is physically in the river and Utah is not using all of its remaining Colorado River Compact apportionment of 360,000 (AF), it does not guarantee the water is actually available. Before the Colorado River Compact was created in 1922 annual river flows were

originally thought to be in the range of 18-21 million acre feet a year (MAFY) at Lees Ferry, Arizona. Lees Ferry is the dividing line between the Upper and Lower Colorado River Basin States. The Lower Basin States of Arizona, Nevada and California were apportioned 7.5 (MAFY) which are firm allocations and draw their water supply from Lake Mead. The Upper Basin States of Colorado, New Mexico, Wyoming and Utah were apportioned 7.5 (MAFY) and these rights are more uncertain and variable because they are allocated only a percentage of what is left after obligations to the Lower Basin are met and are more dependent on stream flows.

A study by BOR stated that "Apportioned water in accordance with the Law of River exceeds the approximate 100 year average flow of river of 15 MAFY at Lees Ferry and is 16.4 MAFY." However, river flows at Lees Ferry during last 15 years have only been 12.5 (MAFY) and the reservoirs of Lake Powell and Lake Mead are only at 50 percent capacity. In the literature review of Study Report 19 on pages 1&2 there is extensive documentation that due to the rising temperatures from climate change river flows will likely continue to decline. Therefore, even if Utah's claims its remaining water right is secure, in reality, it is not. We explain the reasons in our following comments.

In Study Report 18, Lake Powell Pipeline Hydrologic Modeling Analysis it states:

"Three future depletion scenarios, two potential Lake Powell Pipeline depletion schedules (86kaf and 100kaf) and one no pipeline depletion schedule, were modeled.

For each of the three depletion scenarios, two future inflow hydrology scenarios were modeled. One inflow scenario uses data from the observed streamflow record (1906-2006). The other inflow scenario uses hydrologic data derived from tree rings (762 - 2005) to represent climate variability in the Colorado River basin over the past millennium. These methods are discussed in further detail below. Though the potential impacts of climate change have been studied in the Colorado River basin, the data needed to quantitatively evaluate these potential impacts with CRSS was not yet available at the time of this study. Therefore, the paleo-hydrologic record was chosen as a means to evaluate the potential impacts from a wider range of dry and wet spells in the Colorado River basin than is represented by the observed hydrologic record."⁵⁴

2. Comment

The Coalition believes that two separate improvements could be made to the way that the hydrologic modeling is done for the upcoming draft EIS. The first involves data inputs for the CRSS model itself. The second would address environmental impacts that are more likely to impact the viability of the project than simplistic comparisons of reservoir level as a function of pipeline depletion schedules.

⁵³ Colorado River Basin Stakeholders *Moving Forward* to address Challenges identified in the Colorado River Basin Water Supply and Demand Study, Phase 1 Report: Executive Summary, Bureau of Reclamation, May 2015.

⁵⁴ Study Report 18, Reclamation Colorado River Model Report, Appendix 2, p. 2. Lake Powell Pipeline Coalition's NREA Comments Page 37

Recent modeling by both the BOR and the Colorado River Water Conservation District⁵⁵ has used a hydrologic input data set for the CRSS using a "Stress Test" period of record from 1988-2015. That period of record could now include 2016 and 2017 as well. The benefit of adding this scenario to the analysis of future year projections is that it captures the range of climate variability being used in the current Drought Contingency Planning process for the upper and lower basin states. The inputs are also clearer, easier to understand, and based on historic record as opposed to introducing further uncertainty with the use of a previous generation of climate model (CMIP3) along with reconstructed data sets that span past millennia.

We recognize the fact that NEPA requires an EIS to be structured in a way that allows a definite ranking among competing alternatives. However, given the complex planning and decision making that is currently underway for drought contingencies for the entire Colorado River system it is important also to evaluate this project in the context of water right commitments and water availability from Utah's Colorado River water rights. We believe the most appropriate way to do that is to evaluate the effect of LPP depletions as they relate to a range of potential drought contingencies in the upper basin.

Section 19.2.1 Study Description, it states:

"The study will identify potential impacts of the Project on water supply......and estimate potential effects of climate change and climate variability on Project operations and <u>water</u> deliveries." ⁵⁶

3. Comment

The current Study Report inappropriately excludes this analysis based on the Utah's unsupported assertion that climate change is not a concern. Utah claims it will be able to draw water in dire conditions. There is no conclusive evidence in the record that supports this conclusion. Utah does provide the various climate studies in the Study Report, but fails to relate these studies to water availability for the Project as required in the Study Plan. The statements of UBWR must be supported by reliable scientific evidence in the record which has not been provided in the Study Report. Consequently, FERC needs more accurate information in the Study Report before the draft EIS process begins.

4. ES.1 Executive Summary, Introduction

"The Lake Powell Pipeline Hydrologic Modeling report (Reclamation 2015) compared scenarios with and without the LPP for each of two hydrologic datasets, observed hydrologic record (DNF) and the alternate, more variable, climate change inflows

⁵⁵ June 28, 2018 presentation. https://new.azwater.gov/sites/default/files/LBDCP-Master-Presentation-FINAL-FULL.pdf

Study Plan, p. 215, (emphasis added).
 Lake Powell Pipeline Coalition's NREA Comments
 Page 38

(CC)."57; and

The "Climate Change (CC) Inflow Hydrology – This future inflow hydrology scenario uses climate change projections used in the 2012 Basin Study." (p. 4-1)

5. Comment

The use of the model to evaluate alternatives as they impact upper basin drought contingency plans, in addition to the projected level of Lake Powell, provides more comprehensive information to determine the preferred alternative. A modeling protocol that incorporates the latest improvements in hydrologic inputs and evaluates basin-wide impacts that might impact system water plans is the most conservative analytical approach. An EIS that incorporates this type of regional perspective will encompass a wider range of variables that are important to the decision making process for the project.

6. 4.1.3 CRSS Model Summary

"Unique to this analysis is the model assumption that <u>no new projects or depletions</u> will occur in the Upper Basin.

It is recognized that the Upper Basin States plan to develop their compact allocated Colorado River water and, as such, it is highly unlikely that depletions will remain at the <u>2015 level</u> in the future.."⁵⁸

"Thus, for this analysis the potential effects of the Lake Powell Pipeline project under the Interim Guidelines are evaluated for only three years, the first three years of the pipeline when the project is coming on line and pipeline depletions are lower." ⁵⁹

7. Comment

Utah must consider the over allocation of the Colorado River and the fact that water demand already outstrips supply. FERC must require Utah to prove that the physical water supply is available for the Project for the term of license. Utah's analysis must look at the system as a whole and what the status of river flow would be if all Upper Basin Colorado River Compact water rights are developed. From a modeling perspective the most appropriate way to do this is to use the time that has been afforded by the delay in the draft EIS development to take advantage of new improvements in modeling that provide more realistic drought scenarios for the Colorado River. Modeling scenarios that evaluate the effect of a range of drought contingency measures for the upper basin should be used as an aide in understanding the proper allocation of water rights.

Lake Powell Pipeline Coalition's NREA Comments Page 39

⁵⁷ PLP Study Report, p.ES-3.

⁵⁸ PLP Study Report, p.4.6, (emphasis added).

⁵⁹ Ibid. p. 4-7.

8. The Lake Powell Pipeline's Costs Are Undetermined

As stated by the project proponents, the capital cost cannot be determined until the route is finalized. Estimates in early 2018 range from \$1.1 to \$1.8 billion dollars with \$1.4 billion dollars currently being used as an estimated cost. Comparisons to other similar projects indicate the LPP construction costs could be much higher. To give but one example of the range of variables involved consider the "pumped storage project" which is a key component of the project in the FERC cost benefit analysis. The assumption that power will be produced and sold would be a financial benefit to the pipeline. However, regional power costs are cheaper than the power produced by the pumped storage project yet the studies still claim they will make billions of dollars from it.

The \$1.4 billion cost of the pipeline does not include the \$700 million-dollar capital cost of the pumped storage component, nor is there accounting for annual costs of \$57 million. Costs of the pumped storage component are expected to be borne by Washington County and these costs have not been included in discussions about the financial impacts on the county.

In addition, the maintenance costs of quagga mussels coming from Lake Powell in the Lake Powell Pipeline and Washington County reservoirs and pipelines has not been considered.

As we understand it, the state will bond the LPP project and pay interest on it for the bond period. However, Washington County will not be able to fully repay the state during that bond period - it will be a much longer repayment period. This effectively results in an interest-free loan from the state to the county for the difference in the payment periods. Until the costs are known and available funding sources committed for the LPP, the entire state is being asked to commit a significant but unknown amount of their tax dollars for a project whose many risks have not yet been fully addressed.

Governor Herbert created the Executive Water Finance Board to study the cost of the LPP. They have determined the LPP is a \$1 billion state subsidy with annual payments of \$80-120 million that will take funds away from other state needs.⁶⁰

The Coalition is concerned about the costs, how it will paid for and how will residents pay for the LPP has still not been disclosed.

However, FERC regulations state they should be included in the application.

FERC requirement for contents of an application continues:

"(e) Exhibit D is a statement of project costs and financing. The exhibit must contain:

_

https://www.utah.gov/pmn/files/444007.pdf
Lake Powell Pipeline Coalition's NREA Comments
Page 40

- (1) A statement of estimated costs of any new construction, modification, or repair, including:
- (i) The cost of any land or water rights necessary to the development;
- ii) The total cost of all major project works;
- (iii) Indirect construction costs such as costs of construction equipment, camps, and commissaries;
- (iv) Interest during construction; and
- (v) Overhead, construction, legal expenses, and contingencies;"

In Study report 10, Section 10.2.1 Primary Goals and Objectives

- "Provide a clear picture of Project economic benefits and costs
- A comparison to Project alternatives
- Determine the <u>cost-effectiveness of the Project</u>, and compare the relative costs of new water supplies for the alternative configurations; describe the costs and cost effectiveness of the baseline condition.
- Determine Project (and alternatives) marginal costs and cost allocations to the

Water Conservancy Districts."61

The NEPA regulations require:

CFR§ 1502.16 Environmental consequences.

"This section forms the scientific and analytic basis for the comparisons under § 1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in § 1502.14. It shall include discussions of:

- (a) Direct effects and their significance (§ 1508.8).
- (b) Indirect effects and their significance (§ 1508.8).
- (c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See § 1506.2(d).)
- (d) The environmental effects of alternatives including the proposed action. The comparisons under § 1502.14 will be based on this discussion.

⁶¹ Socioeconomics Water Resource Economics Study Plan, p.78, (emphasis added). Lake Powell Pipeline Coalition's NREA Comments Page 41

- (e) Energy requirements and conservation potential of various alternatives and mitigation measures.
- (f) Natural or deplete able resource requirements and conservation potential of various alternatives and mitigation measures.
- (g) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.
- (h) Means to mitigate adverse environmental impacts (if not fully covered under § 1502.14(f)).

9. Comment

Utah did not address these goals and objectives adequately in the Study Report. It is imperative that input from a wider range of stakeholders must be allowed to define an additional alternative for the project EIS. Specifically, the Socioeconomics Study Report #10 falls short in its cost/benefit analysis because the Alternatives Development Study Report #22 mischaracterizes both the cost and scope of local water source development, technological efficiency improvements, and conservation as an alternative to building the pipeline.

Therefore, we seek the inclusion of an "Improved Local Water Management" alternative for the draft EIS outlined in our comments. We do not believe that FERC can complete a valid cost/benefit analysis on the conflicting incorrect data provided by Utah to date. We are also very concerned that Utah has not disclosed its cost/benefit analysis to the ratepayers who will be responsible for paying for this multi-billion dollar water project.

10. Cumulative Effects

Socioeconomic-Water Resource Economics Study Report 10

In terms of addressing the potential regional economic impacts and cumulative effects of this project we find the analysis to be woefully inadequate. Of course, it is possible that by now, November 2018, more work may have been done on this report as it is stated in both the Preface and first sentence in Chapter 10 that the economics studies will be completed at a later time (see Preface, p. P-1 and Chapter 10, p. 10-1). Two issues in particular, however, give us reason to think that adequate time and resources have not been provided to address the cumulative effects analysis in Study Report 10. The first is that the regional, geographic scope of the analysis only focuses on the counties and Paiute Reservation immediately adjacent to the pipeline while economic interests in a much larger region may also be affected. The second is the actual revised study report itself: In the space of a 112-page, 12-chapter report, Chapter 10 "Qualitative Economic Issues and Impacts" is all of ½ page in length and Chapter 11 "Cumulative Impacts" could be generously described as ¾ page long.

Code of Federal Regulation rules that apply to this comment are: CFR 40 1508.7 Cumulative impact⁶²,

⁶² https://www.law.cornell.edu/cfr/text/40/1508.7 Lake Powell Pipeline Coalition's NREA Comments Page 42

"Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

CFR 40 1508.8 Effects (b) Indirect effects⁶³,

"Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of <u>affected</u> ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

CFR 40 1508.14 Human Environment⁶⁴,

"Human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (§ 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental will discuss all of these effects on the human environment.

Usually the term "reasonably foreseeable" is used when we talk about reasonably foreseeable development projects. However, the discussion of indirect effects in CFR 40 1508.8 (b) uses the term to describe impacts that can be reasonably assumed to result from the project itself; "Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still *reasonably foreseeable*." It also states that, "Effects and impacts as used in these regulations are synonymous." We contend that current events, taking place in the Upper and Lower Basin states as these comments are being written, provide the clearest examples of why these issues deserve more study and analysis before significant funds and public tax dollars are committed.

⁶³ https://www.law.cornell.edu/cfr/text/40/1508.8

⁶⁴ https://www.law.cornell.edu/cfr/text/40/1508.14 Lake Powell Pipeline Coalition's NREA Comments Page 43

Currently we see the Upper Basin states evaluating a drought contingency planning (DCP) protocol⁶⁵ at a time when there is still flexibility in the system of reservoir storage to accommodate all of the Upper Basin commitments. We see a different and much more contentious process taking place among the Lower Basin states in part because that flexibility has currently been lost. ^{66,67}.

-

Information in the record for the LPP project's study reports is outdated. The LPP project's analyses, projections, and estimates have changed over time and continue to evolve even now. The need for water has changed and the LPP project water will not be needed by 2030, not certainly by 2020 as previously asserted by Utah in the study reports. There is very little clarity, much less certainty, in previous claims of the project cost, water availability, water supply, and desirability of conservation measures. It is of utmost concern that current data in Utah's studies be updated and made available to those who want a detailed and thorough understanding of this project so that informed decisions can be made before FERC decides the project as ready for environmental review for the draft EIS.

Utah incorrectly claims that it can divert water in dire conditions, and that, therefore, it does not have a responsibility to address the risk of climate change and water availability for the LPP. A revised Climate Change Study Report #19 should include new climate modeling as outlined in our comments.

Washington County Water Conservancy presentation to Utah Executive Water finance Board, June 13,2018. See page 20 at: https://www.utah.gov/pmn/files/404725.pdf

⁶⁵ https://www.usbr.gov/dcp/docs/DCP_Agreements_Final_Review_Draft.pdf

⁶⁶ https://www.phoenixnewtimes.com/news/arizona-drought-negotiations-at-breaking-point-11025741

⁶⁷ https://www.azcentral.com/story/opinion/op-ed/2018/11/17/arizona-brink-setting-off-water-war/2006037002/

XII.

INCOMPLETE STUDY REPORTS AND REQUESTS FOR MORE INFORMATION

Project analyses, projections and estimates have changed over time and continue to evolve even now in the last few days. These include claims of project cost, water availability, water supply and desirability of conservation measures to name but a few. It is of upmost concern that current data be made available to those who want a detailed and thorough understanding of this project in the upcoming draft EIS.

The Coalition is concerned that FERC and the cooperating agencies have not provided current information into the record so that decisions can made about the LPP. FERC should make sure that these items addressed in our comments are included in the analysis and the information be available in their documents and study reports before the draft EIS process begins.

The list of incomplete study reports and the need for more analysis and information are the following:

- 1. Request that Utah disclose what year the LPP will be needed to meet existing or forecasted demand since they changed the purpose in their recent filing and don't include a date any longer. In the Study Report #19 Water Needs Assessment 2016 that year was 2020.
- 2. Request that Utah disclose how the proposal to divert water from Lake Powell is in accordance with the Law of the River to effectively operate the Project over the term of license. According to the Colorado According to the Colorado River Compact Utah's Upper Basin water rights cannot be used in the Lower Basin where the Project is located.
- 3. Request Utah to show proof it has high-water rights in the Green River tributaries of 157,000 AFY and 320,000 AFY to exchange with the BOR for water out of Flaming Gorge reservoir for the Ultimate Phase CUP water right that includes water for the LPP to complete the proposed action.
- 4. The LPP EIS needs to include the proposed exchange of the Green River Block water right because they are, in fact, connected federal actions. This would include the two BOR service contracts for the Ultimate Phase CUP water rights in the EIS
- 5. There are two critical issues that need to be further analyzed in a newly revised Climate Change Study Report #19. How will climate change impact the Colorado River in ways that affect physical water availability for the LPP and implications for the project to operate at full capacity in the future if the flows in the Colorado River continue to decline.

Utah incorrectly claims that it can divert water in dire conditions, and that, therefore, it does not have a responsibility to address the risk of climate change and water availability for the LPP. A

revised Climate Change Study Report #19 should include new climate modeling as outlined in our comments.

- 6. Require Utah to complete an analysis of Utah Water Laws and what laws would have to be changed in order to leave water in the Green and Colorado rivers for 500 miles for an instream flow for the benefit of the endangered fishes from Flaming Gorge reservoir to Lake Powell reservoir.
- 7. Require Utah to update the cost/benefit analysis in Study report #10 with actual figures on the cost of power from the Hurricane Cliffs Pumped Storage Project.
- 8. Include a reasonable Alternative in Study Report #22 that addresses a wider range of water sources in addition to reverse osmosis treatment to meet the goals of study report #10. Request that Utah provide the data used to support their decision in Study Report #22 that assumes a cost of \$5 Billion for the No LPP Alternative. This Study Report #22 needs to be revised for the draft EIS. No LPP Alternative. This Study Report #22 needs to be revised for the draft EIS.

Such impacts must be addressed in a wider geographic area than the narrow range of counties that physically touch on the pipeline route. This geographic range should at least include the upper basin watershed of the Colorado River.

For these reasons the range of cumulative effects considered by the license must be broadened to account for socioeconomic factors that cannot be accounted for by simple comparisons of build/no build alternatives in the draft EIS. In addition, such impacts must be addressed in a wider geographic area than the narrow range.

CONCLUSION

Thank you for considering these comments.

Dated: November 19, 2018 Respectfully submitted,

/s/ Jane Whalen Lake Powell Pipeline Coalition 321 North Mall Dr. b202 St. George, Utah 84790 (435) 215-8619 email@conserveswu.org

DECLARATION OF SERVICE

<u>Utah Department of Natural Resources' Division of Water Resources</u> <u>Lake Powell Pipeline Project (P-12966-004)</u>

I, Emma Roos-Collins, declare that I today served the attached "Lake Powell Pipeline Coalition's Comments on the Notice that the Project is Ready for Environmental Analysis" by electronic mail, or by first-class mail if no e-mail address is provided, to each person on the official service list compiled by the Secretary in this proceeding.

Dated: November 19, 2018

By:

Emma Roos-Collins Water and Power Law Group PC 2140 Shattuck Ave., Suite 801 Berkeley, CA 94704 (510) 296-5591

Emma Roan Collins