

# LIVING RIVERS

## COLORADO RIVERKEEPER®

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February 18, 2019

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Submitted via email to: [matthew.S.Wilson@usace.army.mil](mailto:matthew.S.Wilson@usace.army.mil)

RE: Public Comments on Utah Board of Water Resources / Utah Division of Water Resources' Lake Powell Pipeline Project (SPK-2008-00354) Application for Clean Water Act 404 Permit

Dear Mr. Wilson,

Please accept these comments on the U.S. Army Corps of Engineers (Corps) permit application number SPK-2008-00354 submitted by the Utah Board of Water Resources (UBWR or "Applicant") for its Lake Powell Pipeline Project ("the Project"). We request that Corps deny the Clean Water Act 404 permit and Section 10 Rivers and Harbors Act permit (hereafter "CWA 404 permit" or "404/10 permit") requested by the applicant because the Project violates the Clean Water Act and the Rivers and Harbors Act. The Project does not comply with the guidelines of 40 CFR Part 230 et seq, Section 404(b) (1). Its purpose and need are not adequately described and the Project would result in numerous impacts, including a massive water diversion from the already stressed Colorado River that will result in modification to critical habitat of protected endangered species, negatively affect water quality and availability for existing water users, and threatening wetlands. Commenters urge the Corps to deem the application legally and factually insufficient and to find that overall, the Project is not in the public interest because it will impose significant environmental and economic harm to the region. For the reasons detailed below, the Corps should deny the 404/10 permit for this Project.

With this transmittal, we are also providing our comments to the following agencies: U.S. Environmental Protection Agency, and the Water Quality Divisions of Arizona and Utah (see CC: list on the signatory pages of this letter).

We submit these comments on behalf of Living Rivers & Colorado Riverkeeper, Waterkeeper Alliance, Center for Biological Diversity, Utah Rivers Council, Save The Colorado, Green River Action Network, Upper Green River Network, and Las Vegas Water Defender.

Members of the above mentioned organizations have direct and personal interest in the proceeding, including reliance on the waters of the Colorado River for drinking, fishing, recreating, and for the

ecosystem services that the river provides, as well as an interest in preserving the rural aesthetic values along the pipeline route. Members also live in Utah, some in Washington County, and would be impacted by taxpayer and/or ratepayer financing of the Lake Powell Pipeline. Living Rivers and other commenters here have been recognized as parties to the proceedings and have submitted lengthy, substantive comments during other rounds of public comment for the Project. Our past comments are detailed in Table 1.

Commenters have also participated in relevant and related Colorado River

management proceedings. From 2000 to 2005, Living Rivers, Colorado Riverkeeper and Center for Biological Diversity participated in the National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) process in regards to re-operations at Flaming Gorge Dam.<sup>1</sup> We participated fully in the NEPA process for the 2007 Interim Guidelines EIS.<sup>2</sup> In 2010, we provided comments on the Green River Pumping Project

**Table 1: History of Living Rivers Comments on the Lake Powell Pipeline**

Date	Comments or Intervention	Archival Hyperlink
1/2/2008	Motion to Intervene	<a href="#">LPP Coalition</a> <sup>1</sup>
7/7/08	Initial Scoping (SD1)	<a href="#">Living Rivers</a> <sup>2</sup>
7/7/08	Initial Scoping (SD1)	<a href="#">LPP Coalition</a> <sup>3</sup>
11/19/08	Initial Scoping (SD2)	<a href="#">LPP Coalition</a> <sup>4</sup>
1/5/09	Revised Study Plan	<a href="#">LPP Coalition</a> <sup>5</sup>
5/6/11	Study Reports	<a href="#">LPP Coalition</a> <sup>6</sup>
8/3/18	BLM AZ Strip Amended RMP	<a href="#">Living Rivers et al.</a> <sup>7</sup>
11/2/18	Green River Block EA	<a href="#">Living Rivers et al.</a> <sup>8</sup>
11/16/18	Motion to Intervene	<a href="#">Living Rivers</a> <sup>9</sup>
11/19/18	Ready for Environmental Analysis Scoping Comments	<a href="#">Living Rivers et al.</a> <sup>10</sup>

<sup>1</sup> <http://www.livingrivers.org/archives/article.cfm?NewsID=90>

<sup>2</sup> <http://www.livingrivers.org/archives/article.cfm?NewsID=766>

Environmental Assessment (EA).<sup>3</sup> Since 2012, we have jointly participated in the EIS for the Long-Term Experimental Management Plan for operations at Glen Canyon Dam.<sup>4</sup> We also participated in the 2012 Water Supply and Demand Study (Basin Study),<sup>5</sup> authorized by the 2009 SECURE Water Act.

### Hyperlinked Sources for Table 1:

1. [www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/MotionToInterveneLPPcoalition2January2008.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/MotionToInterveneLPPcoalition2January2008.pdf)
2. [www.livingrivers.org/pdfs/LR.FERC.LPP.pdf](http://www.livingrivers.org/pdfs/LR.FERC.LPP.pdf)
3. [www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/ScopingCommentsCoalition7July2008.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/ScopingCommentsCoalition7July2008.pdf)
4. [www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/Scoping02CommentsCoalition19November2008.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/Scoping02CommentsCoalition19November2008.pdf)
5. [www.livingrivers.org/pdfs/LPPcoalitionJan2009.pdf](http://www.livingrivers.org/pdfs/LPPcoalitionJan2009.pdf)
6. [www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/StudyReportsComments6May2011.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/StudyReportsComments6May2011.pdf)
7. [www.riversimulator.org/Resources/BLM/AZstrip/ProposedArizonaStripResourceManagementPlanAmendment2018LivingRivers.pdf](http://www.riversimulator.org/Resources/BLM/AZstrip/ProposedArizonaStripResourceManagementPlanAmendment2018LivingRivers.pdf)
8. [www.riversimulator.org/Resources/USBR/ExchangeContracts/LRcommentsDEAgrbWEC2018Nov.pdf](http://www.riversimulator.org/Resources/USBR/ExchangeContracts/LRcommentsDEAgrbWEC2018Nov.pdf)
9. [www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/LivingRiversIntervention16November2018.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LPPadmin/LivingRiversIntervention16November2018.pdf)
10. [www.riversimulator.org/Resources/Pipelines/LLP2018/LRcommentsLPPEISscoping2018FINAL.pdf](http://www.riversimulator.org/Resources/Pipelines/LLP2018/LRcommentsLPPEISscoping2018FINAL.pdf)

## PART I: INTRODUCTION

### Part I. A. Project Description

The Lake Powell Pipeline Project as proposed by the Utah Board of Water Resources (UBWR) would move up to 82,249 AFY (acre-feet per year) of water from Lake Powell through northern Arizona and southern Utah to Sand Hollow Reservoir (which stores water from the Virgin River watershed) to be used primarily in Washington County, Utah. Additionally, up to 4,000 AFY of water will be transported for use in Kane County near the county seat of Kanab, Utah. A contract between the State of Utah and the Bureau of Reclamation (Reclamation) will outline the agreements on water released from Flaming Gorge Dam, operated by Reclamation, for use by the Project. The release from Flaming Gorge Dam would flow down the Green River and into Lake Powell; the water would be diverted at a proposed pumping station near Glen Canyon Dam in the state of Arizona. The Project would involve the construction of a 140 miles of a 69-inch diameter pipeline from the Lake Powell to Sand Hollow Reservoir in Washington County; six lateral intake tunnels at the pumping station, a forebay, an afterbay, a regulating

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<sup>3</sup> <http://www.livingrivers.org/pdfs/LRletterGreenRiverPumpingProject.pdf>

<sup>4</sup> <http://www.riversimulator.org/Resources/NGO/LTEMP/LTEMPeisCommentsLivingRivers31Jan2012.pdf>

<sup>5</sup> <http://www.livingrivers.org/pdfs/LivingRiversCBDComments2013.pdf>

tank, and a power transmission line (including substations and switch stations). This water conveyance system would also include booster pump stations to lift the water up-and-over watershed divides and will generate hydropower electricity at hydro stations when the water in the pipeline falls to lower elevations.

## **Part I. B. Colorado River Watershed**

The Colorado River Basin provides water for roughly 40 million people in seven U.S. States as well as two Mexican States. It supplies water to over 5 million acres of agricultural land and supports a thriving recreation economy, as well as one of the most unique and beautiful ecosystems in the world.

In the Colorado River Basin, climate change is already taking a toll on water supplies. This can be seen in a myriad of ways: from the first ever curtailment for water users along the Yampa River<sup>6</sup> to the scrambling by the states of the Colorado River Basin (CRB), beginning in 2014<sup>7</sup>, to update and adopt Drought Contingency Planning (DCP) documents by January 31, 2019.<sup>8</sup> Data used by Reclamation for Glen Canyon Dam operations is useful in understanding this:

“During the 19-year period between 2000 to 2018 the unregulated inflow to Lake Powell, which is a good measure of hydrologic conditions in the Colorado River Basin, was above average in only 4 out of the past 19 years. The period 2000-2018 is the lowest 19-year period since the closure of Glen Canyon Dam in 1963, with an average unregulated inflow of 8.54 maf, or 79 percent of the 30-year average . . . In water year 2018 unregulated inflow volume to Lake Powell was 4.6 maf (43 percent of average), the third driest year on record above 2002 and 1977. Under the current most probable forecast, the total water year 2019 unregulated inflow to Lake Powell is projected to be 7.6 maf (70 percent of average).”<sup>9</sup>

Lake Powell and Lake Mead are at risk of dropping to critically low levels before 2026 as seen by the graph (next page) entitled “Historical and Future Projected Lake Mead End-of-December Elevations” produced by Reclamation.<sup>10</sup> It is important to look at the

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<sup>6</sup> Hasenbeck, Eleanor. Sept. 5, 2018. “Yampa River is placed on call for 1st time ever.” Steamboat Pilot and Today. Accessed at [www.steamboatpilot.com/news/yampa-river-is-placed-on-call-for-1st-time-ever/](http://www.steamboatpilot.com/news/yampa-river-is-placed-on-call-for-1st-time-ever/).

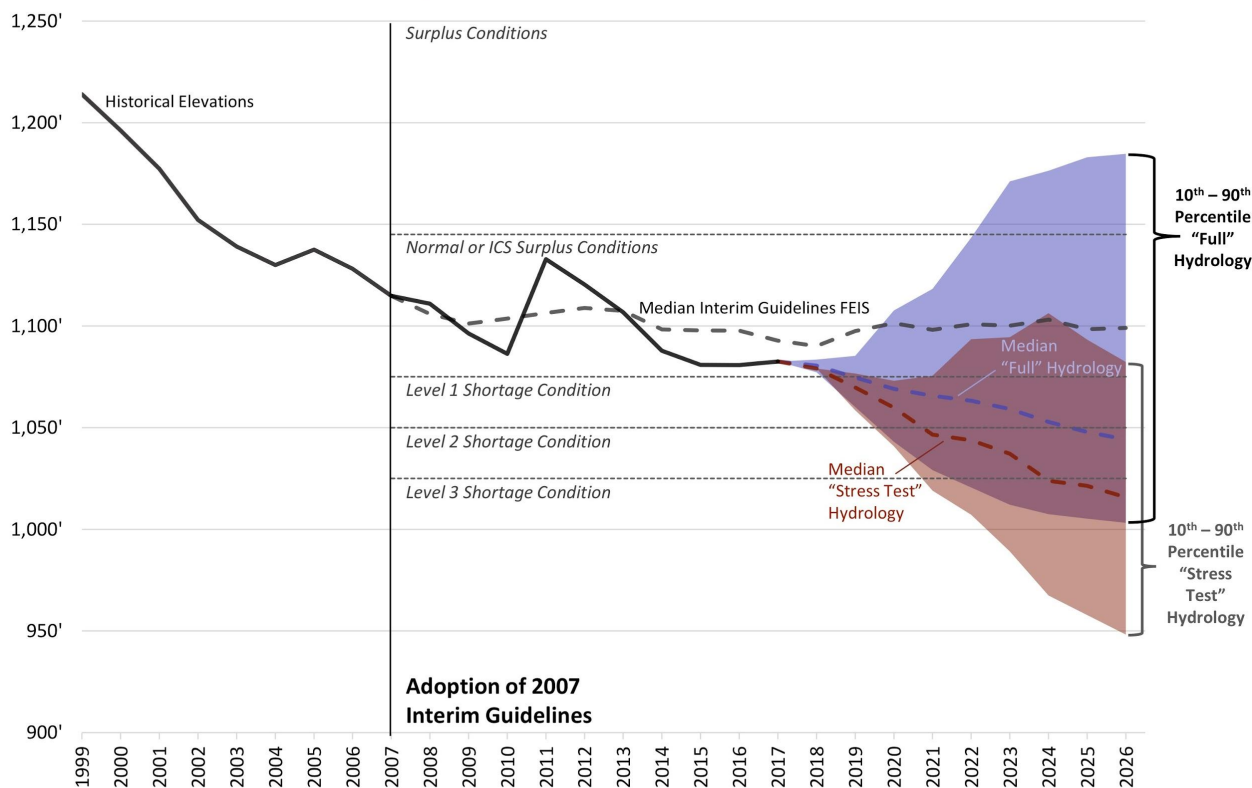
<sup>7</sup> <http://www.riversimulator.org/Resources/States/McClowCWCBMemoToStakeholdersFeb2014.pdf>

<sup>8</sup> Romeo, Jonathan. Oct. 12, 2018. “Drought plan aims to curtail water loss at Lake Powell, Lake Mead.” The Journal. Accessed at [www.the-journal.com/articles/113368-drought-plan-aims-to-curtail-water-loss-at-lake-powell-lake-mead](http://www.the-journal.com/articles/113368-drought-plan-aims-to-curtail-water-loss-at-lake-powell-lake-mead).

<sup>9</sup> Bureau of Reclamation, Upper Colorado Region. “Glen Canyon Dam” Accessed on Nov 2, 2018 at <https://www.usbr.gov/uc/water/crsp/cs/gcd.html>.

<sup>10</sup> Bureau of Reclamation. <http://www.riversimulator.org/Resources/States/ContingencyPlanning/Reclamation/MasterPresentationLBDCPandReclamationJune2018.pdf>

### Historical and Future Projected Lake Mead End-of-December Elevations<sup>1,2,3</sup>



<sup>1</sup> Median Interim Guidelines FEIS from June 2007 CRSS projections using 100 hydrologic inflow sequences based on resampling of the observed natural flow record from 1906-2005.  
<sup>2</sup> "Full" Hydrology from April 2018 CRSS projections modeled using 110 hydrologic inflow sequences based on resampling of the observed natural flow record from 1906-2015.  
<sup>3</sup> "Stress Test" Hydrology from April 2018 CRSS projections modeled using 28 hydrologic inflow sequences based on resampling of the observed natural flow record from 1988-2015.



"stress-test" hydrology based on flows from recent history (1988-2015) which many scientists agree more accurately reflect our current and future state than "full hydrology" which includes an abnormally wet time early in the historical record. Stream flows are extremely likely to continue to decline throughout the century, impacting power generation and water delivery schedules. The states of the Colorado River Basin have yet to adapt to the existing water delivery schedules, as demonstrated by the Bureau of Reclamation's Commissioner Brenda Burman's mandate for the Basin States to adopt DCPs before March 4th of this year.<sup>11</sup> Adding the unnecessary Lake Powell Pipeline to this already strained system, at the same time that Upper Basin States are engaging in DCP for the first time, is not in the public's best interest.

When the Central Arizona Project, a 336-mile system that brings Colorado River water to central and southern Arizona, was unwisely pushed through Congress and financed, Arizona agreed to take a junior water right. Today, with ongoing drought, Arizona is reckoning with that choice, and it has repercussions around the entire Colorado River Basin. Eighty percent of the population of Arizona is served by the Central Arizona Project, and with the new DCPs being put in place, people who have become dependent

<sup>11</sup> <http://www.riversimulator.org/Resources/Press/DCP/FRNoticeDroughtContingencyPlanningUS-BR2019February.pdf>

on that water, will lose their lifeline;<sup>12</sup> the economy will suffer. It is not responsible to knowingly repeat the same mistake with the Lake Powell Pipeline while making the ratepayers and taxpayers bear the enormous economic burden of this Project. Like Arizona, UWRB has agreed to subordinate the water right for the Project to the Central Utah Project.<sup>13</sup>

The decisions we make in the critical years to come will hold incredible importance for our future here in the deserts. The Corps, and the other Cooperating Agencies, must acknowledge and adapt to the unique challenges of our time, including the overallocation of the Colorado River. The facts we present below, will clearly demonstrate this Project is not in the public's best interest, and therefore the applicant, UBWR, should not be granted a Clean Water Act 404 Permit for this Project.

### **Part I. C. History of Utah's Ultimate Phase Water Right**

The water rights for Lake Powell Pipeline were originally held in Flaming Gorge Reservoir by Reclamation as part of the "Ultimate Phase" of the Central Utah Project. This water was initially intended to supply the Uintah Unit (partially completed) and the Ute Indian Unit (never completed) of the Central Utah Project. In 1992, Congress signed the Central Utah Project Completion Act which deauthorized the Ultimate Phase, compensated the Northern Ute Tribe for construction projects not completed by the United States, and encouraged the tribe to quantify their water rights for future settlement and development. Thus far, a Ute Water Compact has not been ratified by the Northern Ute Tribe and their federally reserved water right decree, is still pending.

Reclamation held the Ultimate Phase water rights until 1996, when it transferred those rights to UBWR who, instead of granting them to the Northern Ute Tribe as originally intended, made these rights available to be developed in Utah. Some water has been put to use by private users along the Green River and in the Colorado River watershed in Grand County and San Juan County. Some of the rights are set aside for public water suppliers along the main rivers. These rights are collectively referred to as the Green River Block water rights. All of the undeveloped and unclaimed rights from the Ultimate Phase have transferred back to the Utah Board of Water Resources, and they are planning on using them to supply the Lake Powell Pipeline for consumptive use in Washington and Kane Counties. According to Reclamation, all of the undeveloped

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<sup>12</sup> Potter, Allie. January 15, 2019. "Gov. Ducey says Drought Contingency Plan will help Arizona's water crisis." KOVA News for Tucson. Accessed here <https://kvoa.com/news/local-news/2019/01/15/gov-ducey-says-the-drought-contingency-plan-will-help-arizonas-water-crisis/>

<sup>13</sup> <http://www.riversimulator.org/Resources/Pipelines/FedAgreementWithUtah2011.pdf>

Ultimate Phase water rights were supposed to lapse on October 6th, 2009.<sup>14</sup> Instead of extinguishing these water rights from the Utah's over-allocated ledger,<sup>15</sup> Utah Division of Water Rights granted extensions of time to put the water to beneficial use to all the public water suppliers holding undeveloped Ultimate Phase water rights.

## **PART II: COMPLIANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**

It is incumbent on the Corps to also consider the issues raised throughout the Federal Energy Regulatory Commission (FERC) NEPA process. We are troubled by the fact that the Corps has issued a CWA 404 permit public notice before FERC and other cooperating agencies have produced a Draft Environmental Impact Statement (DEIS) on the Project. A DEIS would disclose important details on issues and impacts highly relevant to the CWA 404 permit and is an essential resource for the public in drafting comments. The decision to issue a Section 404 public notice before releasing a Draft DEIS undercuts and harms the public's ability to comment on the impacts of the Project, including commenting on CWA § 404(b)(1) Guidelines. For this reason, we encourage the Corps to suspend the processing of this application until a DEIS has been prepared. At a minimum, the Corps must incorporate all comments received on the Project during NEPA review in its decision-making concerning the Section 404 permit. In addition, we expect that past comments filed with FERC from stakeholders and intervenors be adopted in full as they relate to the Corps permitting process, and request that those FERC comments be included in the record of this CWA 404 permit application.

## **PART III: THE CLEAN WATER ACT, RIVERS AND HARBORS ACT AND IMPLEMENTING REGULATIONS**

### **Part III. A. The Clean Water Act**

The purpose of the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq., is to restore and maintain the chemical, physical, and biological integrity of waters in the United States. Permits for the projects must be denied if the project activities involve 404 discharges

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<sup>14</sup> Reclamation's Area Manager for the Provo Area Office, Bruce Barrett, lodged several protests to water rights from this block. In a protest letter to the Utah Division of Water Rights he states, "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 (ending on October 6, 2009) would lapse."

Letter from Bureau of Reclamation to Utah Division of Water Rights. December 7, 2009. Accessed at: [www.waterrights.utah.gov/asp\\_apps/DOCDB/DocImageToPDF.asp?file=/docSys/v920/y920/y92000nr.tif](http://www.waterrights.utah.gov/asp_apps/DOCDB/DocImageToPDF.asp?file=/docSys/v920/y920/y92000nr.tif)

<sup>15</sup> <http://www.riversimulator.org/Resources/States/UtahStateEngineerCurrentStatus2009.pdf>

that would not comply with EPA's Section 404(b)(1) Guidelines found in 40 CFR Part 230 et seq. These Guidelines are binding to the Corps.<sup>16</sup>

**1.** These regulations prohibit the Corps from issuing any permit "if there is a practicable alternative . . . which would have less adverse impact on the aquatic ecosystem."<sup>17</sup> An alternative is "practicable" if it is "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes."<sup>18</sup>

**2.** In addition, the Guidelines prohibit permitting a discharge that will violate state water quality standards, violate of toxic effluent standards, jeopardize a species currently protected under the ESA, or violate of any requirement designed to protect a marine sanctuary under the Marine Protection, Research, and Sanctuaries Act.<sup>19</sup>

**3.** The 404 guidelines further provide that the Corps may not issue a dredge and fill permit "which will cause or contribute to significant degradation of the waters of the United States."<sup>20</sup> Such effects include adverse impacts to human health and welfare, the life stages of aquatic life or other wildlife dependent on a site, the overall integrity of an aquatic ecosystem, and human use such as recreation or economic values.<sup>21</sup>

**4.** Where impacts are unavoidable, the Guidelines require that there be appropriate and practicable steps taken to minimize harm to aquatic ecosystems by the discharge activity.<sup>22</sup> EPA separates into seven broad categories the factors the Corps must assess in regard to impact minimization: location of discharge, the material to be discharged, controlling the material after discharge, methods and technology used to disperse material, impacts to plant and animal populations, and impacts to current and potential human use.<sup>23</sup>

Any permit that does not conform to the Guidelines is invalid. The degree of analysis required under the Guidelines is commensurate with the impacts to the aquatic environment. As will be discussed throughout these comments, the Corps should not

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<sup>16</sup> 33 CFR § 320.4(a) (1).

<sup>17</sup> 40 CFR § 230.10(a)

<sup>18</sup> Id. at § 230.10 (a) (2).

<sup>19</sup> Id. at § 230.10(b).

<sup>20</sup> Id. § 230.10(c).

<sup>21</sup> Id. at §§ 230.10(c) (1)-(4).

<sup>22</sup> Id. § 230.10(d).

<sup>23</sup> Id. at §§ 230.70-76.



authorize the Section 404/10 permit for the Project because project activities involve 404 discharges that would not comply with EPA's 404(b)(1) guidelines.

### **Part III. B. The Rivers and Harbor Act**

Under Section 10 of the Rivers and Harbors Act, which has this requirement, the "decision whether to issue a permit will be based upon an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest."<sup>24</sup> The Section 10 review is intended to be broad, capturing all relevant issues that could impact the environment, human health and natural resources, and is guided by the implementing regulations promulgated by the Corps itself, 33 C.F.R. Parts 320- 330, which state:

"Pursuant to the Corps regulations, a permit "is issued following a case-by-case evaluation of a specific project involving the proposed discharge(s) ... and a determination that the proposed discharge is in the public interest pursuant to 33 CFR part 320."<sup>25</sup> In performing the review of an application, the Corps is required to undergo a "public interest review," which requires a determination of the "extent of public and private need for the proposed work," "the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed ... work," and "the permanence of detrimental effects."<sup>26</sup> In making these determinations, the Corps must consider "[a]ll factors which may be relevant to the proposal," including "the cumulative effects" of the project."<sup>27</sup>

Proposed projects must align with the public interest requirement found in Section 10. This "public interest" review lies at the heart of the Corps' analysis and must guide the agency's review of the project.

The Corps must apply the following criteria when determining if the project is in the public interest:

- The relative extent of the public and private need for the proposed structure or work;
- Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative location and methods to accomplish the objective of the proposed structure or work; and

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<sup>24</sup> 33 CFR § 320.4(a) (1)

<sup>25</sup> 33 CFR § 323.2(g).

<sup>26</sup> 33 C.F.R. §§ 320.1(a) (1), 320.4(a) (2) (i)-(iii).

<sup>27</sup> 33 CFR § 320.4(a) (1).

- The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.<sup>28</sup>

The Corps' regulations include a non-exhaustive list of factors that may be relevant for each individual project. 33 CFR § 320.4(a)(1) states in part:

"All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people."<sup>29</sup>

Consistent with the mandate that the Corps consider "all those factors that become relevant," this non-exhaustive list of factors includes issues beyond those directly related to the impacts of in-water work.<sup>30</sup> By requiring an analysis of "cumulative impacts" and by including a non-exhaustive, but far reaching, list of factors, the Corps' regulations clearly require a broad analysis of the public interest that captures all impacts associated with the project and not just those that result directly from the permitted activities.

The Corps must deny the 404 permit because the Project is not in the public interest. For the reasons stated below, the Project fails to comply with the CWA, Rivers and Harbors Act, and their implementing regulations and therefore can not be granted a 404/10 permit.<sup>31</sup>

#### **PART IV: THE CORPS MUST DENY THE PERMIT BECAUSE THE PROJECT IS NOT IN THE PUBLIC INTEREST UNDER SECTION 10 OF THE RIVERS AND HARBORS ACT AND FAILS TO COMPLY WITH CORPS REGULATION 33 C.F.R. PART 320**

The Corps must deny the 404 permit because the Project is not in the public interest. According to Corps general policies, the public interest review "will be based on an evaluation of the probable impacts, including cumulative impacts" of the proposal "on the public interest." This evaluation requires a "careful weighing of all those factors

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<sup>28</sup> 33 CFR § 320.4(a) (2).

<sup>29</sup> 33 CFR § 320.4(a)(1).

<sup>30</sup> Id.

<sup>31</sup> 33 CFR § 320.4(b) (4); 40 CFR §§ 230.1-230.80.

which become relevant” to the particular case. The regulation enumerates several factors which must be considered by the Corps, each of which is addressed below. The permit must be denied if it does not comply with the 404(b)(1) EPA guidelines, or if the district engineer determines it would be contrary to the public interest.

The Corps must apply the following criteria when determining whether the Project and its components are in the public interest and reiterated here:

- The relative extent of the public and private need for the proposed structure or work;
- Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative location and methods to accomplish the objective of the proposed structure or work; and
- The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.

#### **Part IV. A. The Described Purpose and Need of the Project is Flawed**

The purpose and need for action for the Lake Powell Pipeline as stated by the Utah Board of Water Resources (UBWR) was summed as follows,

“UBWR proposes building LPP in order to bring a needed second source of water to Washington and Kane Counties in order to meet future water demands, to diversify the regional water supply portfolio and enhance its reliability, and to develop a clean, renewable energy source to meet area power demands.”<sup>32</sup>

The UBWR and Washington County Water Conservancy District (WCWCD) have not satisfactorily proved that there is indeed a need for the 82,249 AFY of water coming from the Lake Powell Pipeline, and that they have not accurately accounted for future water supply, conservation or demand. In addition, we will demonstrate that the water right from the Lake Powell Pipeline is far from a “reliable” secondary source and that developing a “clean renewable energy source” cannot be considered in the purpose and need at all.

##### **1. Future Water Demands Can Be Met With Alternatives**

The need for the Lake Powell Pipeline has been controversial since 1996, when the extension for the Ultimate Phase water right was approved by the state engineer. Water conservation and development of local water sources can almost certainly fulfill the water needs of Washington and Kane Counties through 2060 as examined by a citizen’s

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<sup>32</sup> Utah Board of Water Resources. “Lake Powell Pipeline - Refinements to Purpose and Need for Action.” Submitted to FERC November 16, 2018.

alternative from Western Resource Advocates called, "The Local Waters Alternative to the Lake Powell Pipeline."<sup>33</sup> In order to account for conservation, the UBWR application simply examines the impact of eliminating all future outdoor water use, which is a highly unpopular and unconventional water conservation measure, rather than using a robust assortment of proven techniques used by similar desert municipalities to successfully decrease water demand.

Las Vegas, a nearby city with even warmer weather than Washington County, can serve as a good metric for what can be achieved through water conservation. Conservation efforts in the Las Vegas region have reduced the community's use of the Colorado River by 28 billion gallons (86,000 acre-feet) between 2002 and 2017. In this same time, the population has actually increased by 660,000 residents. Southern Nevada residents now use 127 gallons of water per capita per day.<sup>34</sup> For comparison, Washington residents use 293 gallons of water per person per day, or 2.3 times the amount of water used in Las Vegas per person.<sup>35</sup>

Furthermore, calculations used by the applicant to predict future water demand scenarios have been examined by a state audit and found to be insufficient. A High Country News article covering the issue states,

"On May 5 [2015], Utah's Legislative Auditor General released a damning report revealing that the water agency's forecasts are based on unreliable data and failed to adequately account for the possible contributions of conservation and irrigation water freed up as new homes consume farmland. "By excluding this added water supply," the auditors write, "the projections accelerate the timeframes for developing costly, large-scale water projects."<sup>36</sup>

In addition, the Kane County Water Conservancy District (KCWCD) has not officially agreed to take the water from the Project. Originally, the Project included 13,000 AFY for Iron County, but this county has since withdrawn its request for water from the Project because of high costs. We believe that the KCWCD might do the same after being presented with the a true cost estimate and considering that they have very little need for project water. In the 404 permit application, UBWR states, "There would be a projected water shortage of approximately 1,334 AFY in 2060 within the KCWCD service

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<sup>33</sup> Nuding, Amelia. 2013. The Local Waters Alternative to the Lake Powell Pipeline. Western Resource Advocates. Available at <https://westernresourceadvocates.org/publications/the-local-waters-alternative/>

<sup>34</sup> Southern Nevada Water Authority. "Conservation facts and achievements." Accessed in Nov. 2018 at [www.snwa.com/importance-of-conservation/conservation-facts-and-achievements/index.html](http://www.snwa.com/importance-of-conservation/conservation-facts-and-achievements/index.html)

<sup>35</sup> USGS. "Water Use Data for Utah." [https://waterdata.usgs.gov/ut/nwis/water\\_use/](https://waterdata.usgs.gov/ut/nwis/water_use/)

<sup>36</sup> Sarah Gilman. 2015, May 7. "Utah vastly overstating future water shortages." High Country News. Accessed at [www.hcn.org/articles/utah-may-be-overstating-future-water-shortages](http://www.hcn.org/articles/utah-may-be-overstating-future-water-shortages).

area under the No Action Alternative."<sup>37</sup> This is telling because it mentions no water conservation measures, nor does it demonstrate a need for 4,000 AFY of water by Kane County. In fact, without any conservation measures taken, it appears that Kane County would only use one third of its full allocation under this application by 2060.

## **2. The Project Would Not Enhance Reliability of Water Supply**

As mentioned in Part I.B, the Colorado River is a fully appropriated system and reservoir surplus has been exhausted to the degree that emergency contingency planning is underway. All of the water that flows down the river is used by the seven Basin States and Mexico. We will now describe how the system of allocation is currently imbalanced, and how the contingency plans that will likely affect all water users in the next five years.

**a. Baseline Data:** Currently, the states of the Upper Basin Division are using a model (Colorado River Simulation System; CRSS) based on 20th century data which, according to 1,200 years of gathering tree-ring data, was the wettest century for that time-period.<sup>38</sup> Neither does the model reflect updated science about the negative impacts that global warming is having on the basin's hydrology. This dubious data baseline decides the water allocation for each state in the basin and how dam operations will perform to deliver those allocations. When the Colorado River Compact was signed in 1922, the average annual natural flow<sup>39</sup> at the Compact Point near Lee's Ferry, 16 river miles below Lake Powell, was 18 MAFY; at Imperial Dam the annual natural flow in 1922 was 19.6 MAFY. Today, it is understood that this annual average is off by 3.2 MAFY at Lee's Ferry and by 3.6 MAFY at Imperial Dam (18% decrease).

**b. Consumption Data:** The most recent Hydrological Determination, completed by Reclamation in 2007 (used to determine the available consumptive use of the Upper Basin), was based on the last 100-years of records (1906 to 2005) and doesn't account for the persistent aridity of the last 13-years. This report states that there is 5.76 MAFY of water to be used in the Upper Basin and assumes 7.5 MAFY for the Lower Basin and a 1.5 MAFY for Mexico for a total of 14.76 MAFY.<sup>40</sup> The Upper Basin consumption total includes reservoir evaporation, which is not accounted for in the Lower Basin. The incidental system evaporation in the Lower Basin (the "structural

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<sup>37</sup> Insert to Application for Individual Permit Lake Powell Pipeline Coconino and Mohave Counties, Arizona Kane and Washington Counties, Utah Corps File No. SPK-2008-00354. P. 38 Accessed at [www.spk.usace.army.mil/Media/Regulatory-Public-Notices/Article/1716369/spk-2008-00354-lake-powell-pipeline-project/](http://www.spk.usace.army.mil/Media/Regulatory-Public-Notices/Article/1716369/spk-2008-00354-lake-powell-pipeline-project/)

<sup>38</sup> <http://www.riversimulator.org/Resources/ClimateDocs/Woodhouse2005.pdf>

<sup>39</sup> <https://www.usbr.gov/lc/region/g4000/NaturalFlow/current.html>

<sup>40</sup> 2007 Hydrologic Determination: <http://www.riversimulator.org/Resources/USBR/2007HydrologicDetermination.pdf>

### Live Storage Capacity of All Colorado River Basin Reservoirs by Percentage and by Decade

Water Year	Capacity %	Water Year	Capacity %	Water Year	Capacity %	Water Year	Capacity %
1980	90.3	1990	72.76	2000	85.1	2010	55.46
1981	82.07	1991	70.75	2001	77.87	2011	64.86
1982	89.49	1992	69.21	2002	63.54	2012	57.05
1983	97.74	1993	81.2	2003	57.13	2013	50.21
1984	95.03	1994	75.48	2004	50.03	2014	50.37
1985	91.98	1995	86.36	2005	58.59	2015	50.83
1986	92.14	1996	84.83	2006	56.21	2016	50.62
1987	90.98	1997	92.53	2007	53.88	2017	55.2
1988	87	1998	93.65	2008	57.12	2018	46.97
1989	80.38	1999	93.65	2009	57.38	2019	
<b>Average</b>	<b>89.65</b>		<b>82.04</b>		<b>61.69</b>		<b>53.51</b>
<b>Note:</b>	Impacts to hydropower production may occur at capacities near or below 35 %						
<b>Note:</b>	Impacts of low capacity reservoirs include degradation to water quality						
<b>Note:</b>	1980 is the year that Lake Powell filled for the first time; filling of the reservoir began in 1963						

deficit”) is estimated by Reclamation to be 1.2 MAFY. The total demand under this scenario to 15.92 MAFY. The average natural supply between 1906 and 2016, according to Reclamation’s Natural Flow Data Spreadsheet, tallies the total yield of the Colorado River at Imperial Dam to be 16.07 MAFY.<sup>41</sup> This system, designed under the generous climate regime of the 20th century, should be working but it is not. The reservoir system has been steadily trending downward since 1980 (see table above) and the Law of the River and its operating criteria has failed to adequately address this very different situation.

**c. Consequences:** Climate researchers Udall and Overpeck state: “Between the start of the drought in 2000 and the end of 2014, our analysis period, annual flow reductions averaged 19.3% below the 1906–1999 normal period.”<sup>42</sup> For context, a 20% decrease in naturalized flow near Lee Ferry is 12 MAFY. The research scientists go on to say that,

“[C]ontinued business-as-usual warming will drive temperature-induced declines in river flow, conservatively 20% by midcentury and 35% by end-century, with support for losses exceeding 30% at midcentury and 55% at end-century.”<sup>43</sup>

<sup>41</sup> <https://www.usbr.gov/lc/region/g4000/NaturalFlow/current.html>

<sup>42</sup> Udall, B. and J. Overpeck (2017), The twenty-first century Colorado River hot drought and implications for the future, *Water Resource. Res.*, 53, 2404– 2418, [doi:10.1002/2016WR019638](https://doi.org/10.1002/2016WR019638).

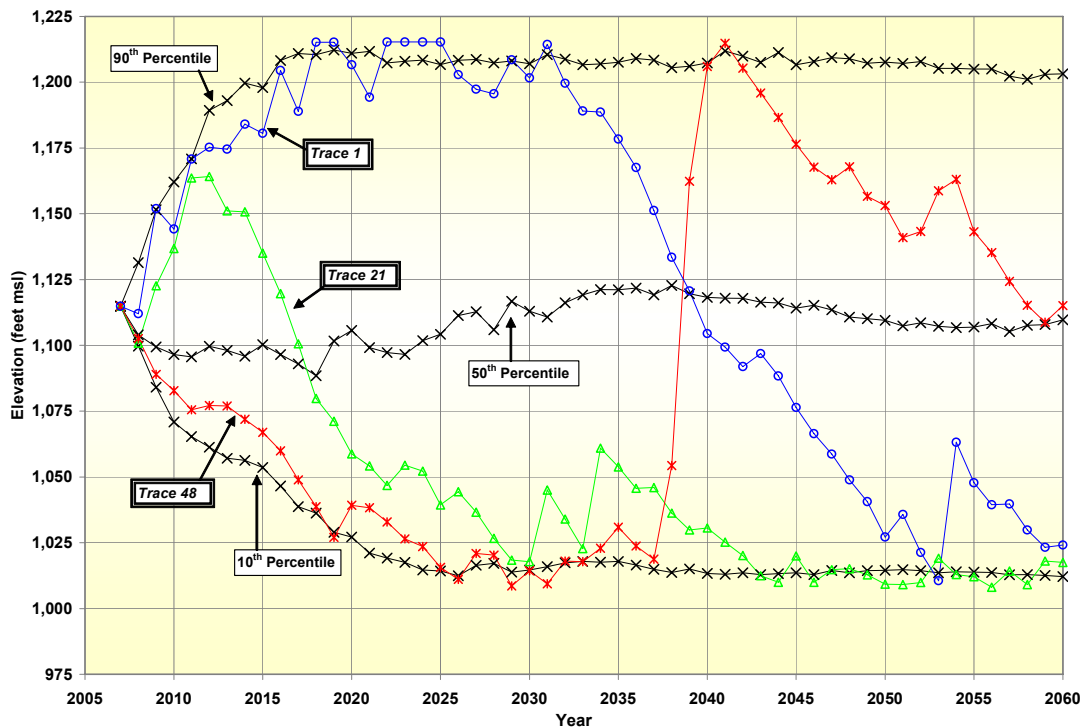
<sup>43</sup> Ibid.

As presented here, there is a disconnect between how states are accounting for their shares of the Colorado River with the actual current and future hydrology. The only reason this system of division has worked so long is that the dams along the Colorado River are capable of storing huge amounts of water, but that surplus is now gone surplus and it is unlikely to see it restored in the near future, except maybe sporadically, which is a situation that is not reliable for any planning review.

## Chapter 4

## Environmental Consequences

Figure 4.2-2  
Lake Mead End-of-December Elevations Under the No Action Alternative  
90<sup>th</sup>, 50<sup>th</sup> and 10<sup>th</sup> Percentile Values



We present the following graphic (above) from the Final EIS of 2007 Interim Guidelines, Figure 4.2-2, which models the future condition of Lake Mead under business-as-usual (No Action Alternative) to Year 2060. Possible scenarios of future conditions at Lake Mead are detailed above by Trace 1, Trace 21 and Trace 48, which are known flow regimes from the 20th century. This graphic indicates Lake Mead will be empty and for time-periods that are decadal in length. The subsequent analysis of increasing aridity in the 21st century makes the future even more consequential, then this graphic. Water conservation measures to mitigate the current supply deficit would have to amount to 3 million acre-feet annually (20%) to alleviate this problem immediately. When the 50-year license renewal is due for the Project, the deficit will be 4.5 MAFY (30%). Satisfying the permitting process for this Project is clearly a betrayal of the public trust and restraint is the appropriate need and purpose.

Within this context, every state in the basin has vastly over-appropriated its stated water rights to the Colorado River. Pursuant to the 2007 Hydrological Determination and “the Law of the River,” Utah has 1,369,000 AFY of water available for use. In 2009, the Utah Division of Water Resources claimed that Utah had already depleted 1,007,500 AFY. Approved applications awaiting development in the state of Utah amount to 493,100 AFY, which includes Lake Powell Pipeline with a priority date of 1967. The water rights for the Lake Powell Pipeline are junior to the vast majority of rights in Utah including the rights held by the Central Utah Project and the pending federally reserved water rights of the Northern Ute and Navajo Tribes. Because of the substantial over-allocation of both Utah’s water rights, and the water rights of the Colorado River Basin as a whole, the junior status of the Lake Powell Pipeline water rights leaves the project in danger of being impacted by future drought contingency measures and re-negotiations of the 2007 Interim Guidelines, which will start in January of 2021 and finalized in December of 2025.

Beyond all this, we recognize that there is legal uncertainty surrounding the use of water released from Flaming Gorge Dam, in the Upper Basin Division, and conveyed by pipeline to Washington County, Utah, which is in the Lower Basin. The Colorado River Water Conservancy District, on page four of their Notice to intervene<sup>44</sup>, stated a transfer from the upper basin to the lower basin “raises issues of fact and law under the (1922) Compact.” We concur with this statement.

For all of the above mentioned reasons, these rights cannot be reasonably considered “reliable” and thus do not fulfill the expressed purpose or need of the applicant. The applicant would be better served enhancing reliability through developing the diverse “Local Waters Alternative” submitted by the Western Resource Advocates to FERC, which we officially submit to the record (see attachments).

### **3. Hydroelectricity Generation is incidental to the Project, not a Purpose or Need**

Production of hydropower is considered by the applicant to be part of the expressed purpose of the Project. Nowhere in the Project description is it explained how much electricity would actually be generated after deducting the power required for the pumps. The applicant uses the total electricity generated at full capacity over a 2,691 foot run to make it seem like the Project would have more of an effect on the power grid than it really would. The Project would use electricity in pumping stations to transfer the water from the lowest intake (3,375 feet mean sea level (MSL)) to a high point (5,691 feet MSL) where it can then generate electricity as gravity pulls it down to

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<sup>44</sup> <http://www.riversimulator.org/Resources/Pipelines/LLP2018/MotionToInterveneCRWCD2018November.pdf>



Sand Hollow Reservoir (3,000 ft MSL)<sup>45</sup>. Due to the laws of thermodynamics, if water is being pumped up to a high point, it cannot possibly generate more energy on its way back down to that same elevation than was used to pump the water up to the high point, and actually would generate less electricity than was used because of friction on the water in the pipe. Given this, 375 feet (the net difference from of the intake to the outlet) is the total maximum run of water where more electricity could be generated than was used pumping. Using basic ratios, we can assume that if a 2,691 foot run at maximum capacity could generate 146.21 gigawatt-hours (GWh) yearly,<sup>46</sup> that a 375 foot net run would generate less than 14% of that, or 19.2 gigawatt-hours yearly at full capacity, and that is not subtracting any extraneous energy needs of the system or inefficiencies. Given that the Project description does not describe the net electricity generated, just the total electricity generated at maximum capacity, it is misleading and misconstrues the impact on the regional power grid, as well as the purpose and need for the Project.

Furthermore, water going through the Lake Powell Pipeline would otherwise be flowing through Glen Canyon Dam hydroelectric facility at some point, which supplies power to St. George. Considering that the water used for the Project could otherwise be available for another, greater capacity hydroelectric system, or perhaps more if the potential of also generating electricity at the Hoover Dam is included, the production of power cannot be considered as a purpose or a need for the Project.

#### **Part IV. B. The Project Fails to include Practicable Alternatives**

The Project fails to include practicable alternatives to the Lake Powell Pipeline. It does not realistically examine the impact that conservation, water pricing, and planning and zoning measures could have on the need for the Lake Powell Pipeline, nor does it fully explore the safe yield of the deep Navajo Sandstone aquifer. The applicant should be required to re-work the models used to predict future demand to fully incorporate a price driven demand use scenario as well as to accurately account for the conversion of irrigation waters to culinary use, as is done in the Local Waters Alternative. The burden is on the Applicant to show that there are no practicable alternatives.

#### **Part IV. C. Detrimental Effects and Cumulative Impacts of the Project**

In evaluating the probable impact of the proposed activity on the public interest, the Corps is directed to determine the extent and permanence of detrimental effects, including the cumulative effects of the Project. Corps' regulations include a list of factors that if relevant to the proposal, must be considered:

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<sup>45</sup> [Utah Division of Water Resources. Preliminary Licensing Proposal for the Lake Powell Pipeline. 2015. \(large file\)](#)

<sup>46</sup> Ibid.

“All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, considerations of property ownership and, in general, the needs and welfare of the people.”

The Corps’ regulations clearly require a broad analysis of the public interest that captures all impacts associated with the Project, and not just those that result directly from the permitted activities. The Corps’ analysis, therefore, is not limited to the region directly adjacent to the Project. Nor is the review limited to short-term impacts, but it must also consider the long-term impacts for the Project’s proposed 50-year license. In evaluating the probable impact of the proposed activity on the public interest, the Corps is directed to determine the extent and permanence of detrimental effects, including the cumulative effects of the Project. Corps’ regulations include a list of factors that if relevant to the proposal, must be considered:

“All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, considerations of property ownership and, in general, the needs and welfare of the people.”<sup>47</sup>

The Corps’ regulations clearly require a broad analysis of the public interest that captures all impacts associated with the Project, and not just those that result directly from the permitted activities. The Corps’ analysis, therefore, is not limited to the area directly adjacent to the Project. Nor is the review limited to short-term impacts. The review must also consider the long-term impacts both local and regional.

### **1. Concern for spread of invasive Quagga Mussels and the Impact on Fish and Wildlife**

In 2012 larvae, or veligers, of the invasive quagga mussel (*Dreissena rostriformis bugensis*) were found in Lake Powell. By 2013, adults had been detected, and by last year the lake shore, canyon walls, and the control gate of the Glen Canyon Dam were

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<sup>47</sup> 33 CFR § 320.4(a).

covered with layers of thousands and thousand of adults.<sup>48</sup> The adult mussels adhere to hard surfaces, causing physical blockages in fish screens, water intakes, pipes, tanks, and other drinking water infrastructure. By creating a buildup of sharp, smelly objects on docks and shorelines, the mussels also cause a significant decrease in the recreation experience.

Quagga mussels also have an impact on the environment, fish, and wildlife by altering the ecological food web and water quality.

“Infestation of source water bodies by dreissenid mussels can negatively affect water supply, water quality, and food web ecology within these systems. Heavy mussel infestations occasionally create conditions that promote blue-green algae blooms and negatively affect recreational fisheries and water treatment facilities that depend on these source waters.”<sup>49</sup>

We are very concerned that if the Lake Powell Pipeline is constructed, it will lead to quagga mussel infestation in Sand Hollow Reservoir. The National Park Service states, “It is crucial to keep the mussels from moving from Lake Powell to other lakes and rivers.”<sup>50</sup> The mussels could spread if any veligers survive transport through the pipeline. The applicant refers to chemical treatment stations as a way to mitigate this, but other entities trying to control mussel infestation in water treatment plants have had to use a multi-pronged effort including mechanical scrubbing and chemical treatments to keep water plants functional.<sup>51</sup> We do not believe the chemical treatment of veligers in the boosting stations will be enough to ensure that quagga mussel veligers do not ever enter Sand Hollow Reservoir and establish a colony.

## **2. Kaibab-Paiute Tribal Sovereignty**

It is important that the government heavily weigh tribal sovereignty and interests in its public interest analysis. The U.S. government has an obligation in this process to honor those rights and interests. The Corps must consult directly with the Kaibab-Paiute Tribe because they are a cooperating agency and all of the possible pipeline alignments extend into their traditional and sacred homelands. The applicant has identified three

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<sup>48</sup> Hollenhorst, John. June 2, 2018. “Mussel Beach: Lake Powell has ‘trillions and trillions’ of these things.” Deseret News. Accessed at [www.deseretnews.com/article/900020372/mussel-beach-lake-powell-has-trillions-and-trillions-of-these-things.html](http://www.deseretnews.com/article/900020372/mussel-beach-lake-powell-has-trillions-and-trillions-of-these-things.html)

<sup>49</sup> Chakraborti et al. August 2016. Costs for controlling dreissenid mussels affecting drinking water infrastructure: Case studies. Journal- American Water Works Association <http://dx.doi.org/10.5942/jawwa.2016.108.0104>

<sup>50</sup> “Mussel Update.” Glen Canyon National Recreation Area Website. Accessed Jan 2019 at [www.nps.gov/glca/learn/nature/mussel-update.htm](http://www.nps.gov/glca/learn/nature/mussel-update.htm)

<sup>51</sup> Chakraborti et al. August 2016. Costs for controlling dreissenid mussels affecting drinking water infrastructure: Case studies. Journal- American Water Works Association <http://dx.doi.org/10.5942/jawwa.2016.108.0104>

pipeline routes in the Arizona Strip. Consultation with the Tribe is necessary in order to identify a route that would not impair sacred sites, burials and other cultural values. The Corps must evaluate all three pipeline alternatives in this process. It should be noted that the applicant's proposed alternative, the South Alternative Alignment, is preferred because according to the applicant, it "avoids effects on the Kaibab-Paiute Indian Reservation."<sup>52</sup> This is concerning and perhaps alarming given that in the last round of comments to FERC, the Kaibab-Paiute Indian Tribe specifically requested that "the EIS must fully and objectively analyze and consider the existing highway alternative,"<sup>53</sup> which would cross the reservation. The Tribe's comments are extensive and detail many issues with the preferred alignment which crosses the BLM administered Kanab Creek Area of Critical Environmental Concern (ACEC). We request that the Tribe's comments be added to the record (see attachments below). This Project is not in the public interest because of its disproportionate negative impacts on tribes. A project cannot be in the "public interest" if it violates fundamental obligations to tribes.

### **3. Economic impacts of the Project cannot be fully understood because the applicant has failed to fully and accurately disclose Project costs**

In determining whether the applicant's project is in the public interest, the Corps must consider economic impacts. A key component of economic impact is the direct and indirect costs of the Project. The applicant failed to produce a sound cost estimate for the Project that accurately reflects the complex design, and mitigation requirements, and demonstrates how the water users and taxpayers of the State of Utah will be impacted by the payback structure of the debt incurred for the Project.

In light of the fact that the UBWR has not disclosed its own economic modeling for the Project to the public for peer review, Gabriel Lozada, an economist at the University of Utah, began to examine the issue independently nearly a decade ago. In a recent High Country News article titled "The Precarious Plan for the Lake Powell Pipeline," Emma Penrod provides a comprehensive description of the controversy surrounding the economics of paying for this project. She states that Lozada "now believes the water districts' plan to triple its water rates — potentially increasing residents' costs by more than \$300 per year — may, just barely, pay for the pipeline. But he doesn't believe residents will pay such prices without buying dramatically less water, negating the need for the pipeline."<sup>54</sup> The root of this issue is that thus far, no sound budget has been

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<sup>52</sup> Insert to Application for Individual Permit Lake Powell Pipeline Coconino and Mohave Counties, Arizona Kane and Washington Counties, Utah Corps File No. SPK-2008-00354. P. 39 Accessed at [www.spk.usace.army.mil/Media/Regulatory-Public-Notices/Article/1716369/spk-2008-00354-lake-powell-pipeline-project/](http://www.spk.usace.army.mil/Media/Regulatory-Public-Notices/Article/1716369/spk-2008-00354-lake-powell-pipeline-project/)

<sup>53</sup> The Kaibab Band of Paiute Indians' Comments and Proposed Right-of-Way Conditions, Lake Powell Pipeline Project No. 12966. Accessed at <http://www.riversimulator.org/Resources/Pipelines/LLP2018/KaibabBandPaiuteCommentsROWlpp.pdf>

<sup>54</sup> Penrod, Emma. Oct. 29 2018. "The Precarious Plan for the Lake Powell Pipeline." High Country News. Accessed at <https://www.hcn.org/issues/50.18/water-the-precarious-plan-for-the-lake-powell-pipeline>

presented to the public by the applicant that outlines a complete estimate of Project costs; nor has the economic model needed to repay the debt incurred to finance the Project been released, peer-reviewed, and accepted by the public.

Colorado's Southern Delivery System provides a good proxy for comparison to understand the potential cost of the Lake Powell Pipeline. The first phase of the Southern Delivery System was completed by Colorado Springs Utilities in 2016. It consists of 62 miles of buried 66 inch pipe, 4 pump stations, and a 50 million gallons per day water treatment facility. The total cost for this Project, including financing was \$1.45 billion. The Project was heralded as an example of great fiscal responsibility that brought the Project in under budget.<sup>55</sup> How then, can the Lake Powell Pipeline with its additional pump station, six hydroelectric stations, larger pipe, and more than twice the length, be expected to cost nearly the same amount? Table 2 compares the two projects.<sup>56</sup>

<b>Information</b>	<b>Southern Delivery System</b>	<b>Lake Powell Pipeline</b>
<b>Date Completed</b>	April 2016**	---
<b>Length</b>	62 miles**	140 miles††
<b>Pipe Diameter</b>	66 inch*	69 inch†
<b>Daily Delivery Capacity</b>	50 mgd*	66 mgd
<b>Yearly Delivery Capacity</b>	56,000 AFY	86,429 AFY†
<b>Pump Stations</b>	4*	5†
<b>Hydroelectric Facilities</b>	0	6†
<b>Water Treatment Plant</b>	1 @ 50 mgd capacity*	0 included in plant† Likely 2 required
<b>Construction Costs</b>	\$825 million*	---
<b>Cash funded</b>	\$352 million*	---
<b>Debt funded</b>	\$473 million*	---
<b>Interest</b>	\$618 million over 30 years or more*	---
<b>Total Cost</b>	\$1.45 Billion*	\$1.1-1.8 billion††

<sup>55</sup> Water Finance and Management. August 12, 2016. "How Colorado Springs Funded its Landmark Southern Delivery System." Accessed at <https://waterfm.com/colorado-springs-funding-sds/>

<sup>56</sup> **Sources for the graphic are:**

\* Water Finance and Management. August 12, 2016. "How Colorado Springs Funded its Landmark Southern Delivery System." Accessed at <https://waterfm.com/colorado-springs-funding-sds/>

\*\* Southern Delivery System (SDS) Water Project, Colorado. Water Technology Webpage. Accessed at [www.water-technology.net/projects/southern-delivery-system-water-project/](http://www.water-technology.net/projects/southern-delivery-system-water-project/)

† Utah Board of Water Resources. Preliminary Licensing Proposal. 2015.

†† The Lake Powell Pipeline Website. Washington County Water Conservancy District. Accessed at [www.lpputah.org](http://www.lpputah.org)

It should also be noted that the water intake apparatus at Lake Powell will be far more expensive and complicated than that at Pueblo Reservoir. This clearly demonstrates that the applicant's given estimate for the total cost of the Lake Powell Pipeline is far below what it will likely cost in the real world. Roughly, a more realistic project cost estimate would be between \$3-5 billion dollars.

In addition, in order to provide the Corps with a more accurate cost estimate as the basis for evaluating the Project's economic impacts, the UBWR needs to expand and update their project budget to include the costs outlined above, which are currently not addressed by the budget.

**a. Chemical Unique Water:** The applicant must be required to examine in full the impact of introducing chemically unique Colorado River water into the public utility lines in Washington County. In 1992, the municipal water utility in Tucson, AZ introduced Colorado River water into the drinking supply of nearly half of its customer base. Almost immediately customers began complaining that their water was dirty, foul smelling, containing rust, or had caused their pipes to leak due to entrained salt.

"This new resource exposed Tucson's extensive water system to water with characteristics very different from the groundwater the city had relied upon for decades. Among these differences were a level of total dissolved solids of 650 mg/L, approximately twice that of the average local groundwater, and a more aggressive corrosion potential, primarily related to a pH of about 7.6 in the treated CAP water compared to an average pH of 7.9 in groundwater. In 1994, the Colorado River water supply was discontinued and the utility returned completely to using groundwater. By then, more than 14,000 complaints had been received and the utility ultimately had to pay more than \$2 million in damages to affected customers."<sup>57</sup>

Residents of Tucson passed an initiative blocking the delivery of Colorado River water in the municipal system because of its bad taste. Since then, the Tucson water utility has started injecting the Colorado River water into the ground to mix with naturally occurring aquifer water. It wasn't until 2001 that they delivered a treated blend of Colorado River water and aquifer water to customers.<sup>58</sup>

Like in Tucson, residents of Washington and Kane counties will likely reject the foul tasting Colorado River water given they have better local alternative sources of

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<sup>57</sup> Basefsky, Mitchell. March/April 2006. Southwest Hydrology. p. 24. Accessed at: [www.swhydro.arizona.edu/archive/V5\\_N2/feature4.pdf](http://www.swhydro.arizona.edu/archive/V5_N2/feature4.pdf)

<sup>58</sup> City of Tucson Water Plan 2000-2050. p. 2-8 Accessed at [www.tucsonaz.gov/files/water/docs/water-plan.pdf](http://www.tucsonaz.gov/files/water/docs/water-plan.pdf)

water. The Project budget does not outline the costs of treating or injecting Colorado River water or upgrading municipal plumbing systems to deal with the unique chemical nature of the water.

Chapter 10 of the Preliminary Licensing Proposal (PLP) submitted by the Utah Board of Water Resources refers to a “a future conventional water treatment facility located near the mouth of Johnson Canyon” without ever outlining the cost of this necessary component. The PLP makes no mention of the need for, or the cost of, a water treatment facility at the terminus of the pipeline in Washington County.<sup>59</sup> Omitting these two necessary features in the hydro system is a gross oversight in the project budget and plan and should be required in order to understand the true cost of the Project.

**b. Water Shortages:** The permitting documents also need to also examine the hidden costs associated with water shortages in the Upper Basin. When shortage occurs, Washington County will be in the same predicament as the Front Range of Colorado; they will seek water rights to buy and likely convert agricultural water rights to municipal water rights. Given the high likelihood of future water shortages in the State of Utah, this hidden cost should be included in the economic models.

**c. Cost of Compensatory Mitigation Techniques:** The cost of compensatory mitigation techniques briefly mentioned in the application, such as Virgin River revegetation and riparian area creation around Sand Hollow Reservoir, are also left out of the Project budget. The description of these possible mitigation efforts is brief, vague, and inadequate in order to understand the cost, impact, and scope of the proposed mitigation projects.

**d. Quagga Mussels:** The cost of managing the invasive quagga mussels needs to be considered in the immediate and long term cost of operations for the Lake Powell Pipeline Project. In 2016, the Journal of American Water Works Association reported the following:

“Maintenance of mussels in drinking water infrastructure is not only cumbersome and poses water quality threats that are also expensive. The potential cost for upgrades to 13 hydropower facilities in the Colorado River Basin alone has been estimated to be \$23.6 million, with chemical costs estimated at another \$1.3 million per year.”<sup>60</sup>

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<sup>59</sup> Utah Board of Water Resources. Preliminary Licensing Proposal, Revised Draft Socioeconomics/Water Resource Economics Study Report. 2015. ([hyperlink](#))

<sup>60</sup> Chakraborti et al. August 2016. Costs for controlling dreissenid mussels affecting drinking water infrastructure: Case studies. Journal of American Water Works Association <http://dx.doi.org/10.5942/jawwa.2016.108.0104>

The estimates mentioned above do not consider the cost of containment paid by the State of Utah or Department of Interior (DOI). In fiscal year 2017, the DOI spent \$8.6 million on quagga mussel containment nationwide. The DOI upped that request to \$11.8 million nationwide in fiscal year 2018.<sup>61</sup> At Lake Powell last year, federal agencies set up and staffed inspection checkpoints at docks, decontaminated boats, and led an aggressive public education campaign aimed at boaters. If quagga mussels infested Sand Hollow Reservoir, the state would have to implement a similar program for containing the threat and the cost of this would not be insignificant.

Based on the economic impacts associated with the direct and indirect costs of the Project detailed above, which the applicant has failed to fully and accurately disclose, we urge the Corps to determine the Project is not in the public interest. Moreover, the Corps is required to deny this permit because the applicant has failed to provide sufficient information to enable the Corps to make a reasonable judgement. The applicant has failed to present a project budget including necessary project components, failed to present the public or the cooperating agencies with a detailed economic plan including peer-reviewed debt payback structure, and generally failed to fully disclose the economic impact that this project will have on the public.

## **5. The Project will significantly impact the Municipal Water Supply of downstream users and other water users in Utah**

**a. Water Availability:** As we explained in Part I.B, the Colorado River System is a fully appropriated system which has been operating at a deficit for the past two decades, as can be observed by the diminishing water levels of both Lakes Mead and Powell. Currently, the Upper Basin States are in the process of negotiating DCPs that will significantly impact operations at Flaming Gorge Dam, Aspinall Unit, and Navajo Dam. Consumptive use of Project water would decrease water availability in Flaming Gorge Reservoir. Under the new set of Upper Basin DCPs, water from Flaming Gorge, and other Colorado River Storage Project reservoirs will be used to keep Lakes Powell and Mead from approaching dangerous levels that threaten water deliveries to the Central Arizona Project, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority. Therefore, consumptive use of Project water would decrease water availability for more than 20 million people who reside in the region served by the Metropolitan Water Authority,<sup>62</sup> the five million

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<sup>61</sup> Department of the Interior Press Release. February 28, 2018. "Interior Releases Report on Fight Against Invasive Mussels." Accessed at [www.doi.gov/pressreleases/interior-releases-report-fight-against-invasive-mussels](http://www.doi.gov/pressreleases/interior-releases-report-fight-against-invasive-mussels)

<sup>62</sup> <http://www.mwdh2o.com/WhoWeAre/Member-Agencies>



served by the Central Arizona Project,<sup>63</sup> as well as the 2 million residents supplied by the Southern Nevada Water Authority.<sup>64</sup>

**b. Water Rights:** If the Project is approved, although the water rights held for the Project are junior to most in Utah, they do have priority over a small subset of users along the Green and Colorado Rivers in Utah who would stand to lose the water they rely upon if and when the Upper Basin is required to make cuts to water use.

**c. Toxicity:** The Project would negatively affect the municipal water supply of St. George in Sand Hollow Reservoir by contributing large amounts of toxic disinfection byproducts from chemical quagga mussel containment methods.<sup>65</sup> As we've already demonstrated in Part 4.E. (Detrimental Effects) the likely accidental introduction of quagga mussels into Sand Hollow reservoir would also negatively affect the water quality for downstream industrial and municipal water users in Nevada who also depend on the Virgin River.

**d. Salinity and Selenium:** Salt levels have been trending upward since Year 2000 below Parker Dam in the Lower Basin.<sup>66</sup> Selenium levels have been trending upward, as well. Selenium levels increase in the heat of August, when agriculture diversions from the river are operating at peak demand. This month is a critical time-period to ensure good water quality for the nursery habitat that juvenile endangered fish must have to thrive.<sup>67</sup> Diversions in the Upper Basin is the major-most cause of increasing salinity in the Lower Basin and why the Salinity Control Act was authorized in 1974. The goal of Reclamation and the Salinity Control Forum is to remove 372,000 tons of salt from the Colorado River Basin by 2035.<sup>68</sup> The increased, cumulative diversions that would result from approval of this Project would enhance salinity problems in the Lower Basin. This is yet another long-term economic and ecosystem impact that the proposed Project will impose on water quality issues currently under stress due to increasing aridity and the over-consumption of a finite water resource.

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<sup>63</sup> Central Arizona Project Website. "About us." Accessed January 11, 2019 at [www.cap-az.com/about-us](http://www.cap-az.com/about-us)

<sup>64</sup> Southern Nevada Water Authority. May 2014. Water Conservation Plan. Accessed at [www.snwa.com/assets/pdf/reports-conservation-plan.pdf](http://www.snwa.com/assets/pdf/reports-conservation-plan.pdf)

<sup>65</sup> Chakraborti et al. August 2016. Costs for controlling dreissenid mussels affecting drinking water infrastructure: Case studies. Journal- American Water Works Association <http://dx.doi.org/10.5942/jawwa.2016.108.0104>

<sup>66</sup> <http://www.riversimulator.org/Resources/Salinity/ReviewSalinityControl2017.pdf>

<sup>67</sup> <http://www.livingrivers.org/pdfs/Press/StateTurnsAttentionToSeleniumLevelsInRiver.pdf>

<sup>68</sup> <http://www.riversimulator.org/Resources/Salinity/ProgressReport25Reclamation2017.pdf>

## **6. The Project will eventually have impacts on Hydropower Production at Glen Canyon Dam**

Similar to the point made in the above section, Project water would lower the elevation and water availability at Flaming Gorge Dam. Flaming Gorge Dam is a central component in the Upper Basin DCP, and will be used to safeguard hydropower production by keeping Lake Powell at an operational level. If more water is diverted from the Green River in the Upper Basin, such as the proposed Lake Powell Pipeline, Green River Block, and Water Horse Resources (Aaron Million, CEO), this will impact water availability for hydropower production at Glen Canyon Dam due to over-allocations at the same time as rising aridity.

### **Part IV. D. The Project fails the Public Interest Balancing Test**

The proposed Project will have numerous negative, harmful environmental effects, impacts on cultural resources, ramifications to water users across the Colorado River Basin, and an enormous and largely unknown economic burden placed on ratepayers of the district and taxpayers of the state. For all of these reasons, and because there are alternatives to meet the expressed need, the Project is contrary to the public interest.

### **PART V: THE CORPS MUST DENY THE 404/10 PERMIT BECAUSE IT DOES NOT COMPLY WITH 404(b)(1) GUIDELINES, 40 C.F.R. PART 230.**

Section 404 of the CWA prohibits the discharge of fill material without a permit.<sup>69</sup> Permits for the Project must be denied if the Project activities involve 404 discharges that would not comply with EPA's 404(b) (1) guidelines. These regulations prohibit the Corps from issuing any permit, as we summarize here:

- if there is a practicable alternative which would have less adverse impacts;
- if it will harm the aquatic ecosystem;
- if it will authorize a violation of state water quality standards or toxic effluent standard;
- if it jeopardizes a species currently protected under the ESA
- if it will cause or contribute to significant degradation of the waters of the USA;
- if it does not take appropriate and practicable steps to minimize harm.

The Corps cannot authorize the Clean Water Act 404/10 permit for the Lake Powell Pipeline Project because the Project does not comply with multiple requirements of the Corps' 404(b)(1) Guidelines. The following paragraphs in Part V will provide the details of our concerns.

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<sup>69</sup> 33 U.S.C § 1344

## **Part V.A. The Project fails to include Practicable Alternatives**

A critical component of the Corps' review under CWA § 404(b) (1) is the alternatives analysis. The Guidelines require a finding of noncompliance when there is a practicable alternative to the proposed discharge that would have a less adverse effect on the aquatic ecosystem.<sup>70</sup> The Corps must deny the proposed discharge of dredged and fill material because the applicant has failed to demonstrate that there are no practicable alternatives.<sup>71</sup>

As we have detailed in Part IV. C., the applicant fails to consider and fully evaluate, the alternatives to the Project of common conservation measures, the availability of the full amount of water that will result from conversion of irrigation water to culinary use, or a realistic estimation of reduction in future water demand. Therefore, the applicant's alternatives analysis in the Project application is wholly inadequate.

## **Part V. B. The Project will have Significant Adverse Effects on Aquatic Life, Aquatic Ecosystems, and Water Quality**

### **1. The Project Will Negatively Impact Wetlands**

The Project impacts the likelihood of future recovery of the Colorado River Delta. The riparian, freshwater, brackish, and tidal wetlands of the delta once covered 1,930,000 acres.<sup>72</sup> Due to complete appropriation and over-use in Colorado River Watershed, the delta has suffered significantly, losing most of its wetlands. Further development of water upstream can do nothing but harm the remaining wetlands of the Colorado River delta and impede recovery efforts by making surplus water less available.

### **2. The Project will Harm Endangered Species Act (ESA)-Listed Species and Critical Habitat**

The Colorado River is already a strained ecosystem. This fact is demonstrated by the many endangered species found along its stretch. These species include, humpback chub, razorback chub, bonytail chub, Colorado River pikeminnow, Southwestern willow flycatcher and Yuma clapper rail. The effects of further draining of the river's natural flows as a result of this Project will likely be to put these species at further risk.

The applicant's preferred alignment runs through the Kanab Creek ACEC. The applicant requested an amendment to the Kanab Creek ACEC Resource Management Plan in order to allow for the applicant's preferred pipeline alignment. The Final EIS for the Arizona Strip Field Office Resource Management Plan for the Bureau of Land

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<sup>70</sup> 40 CFR § 230.12(a) (3) (i).

<sup>71</sup> 40 C.F.R. § 230.10.

<sup>72</sup> Wikipedia Website. "The Colorado River Delta." Accessed on January 11, 2019 at [https://en.wikipedia.org/wiki/Colorado\\_River\\_Delta](https://en.wikipedia.org/wiki/Colorado_River_Delta)

Management (BLM) states "Designating the Kanab Creek ACEC and following strict management prescriptions associated with that designation would help maintain, possibly improve, water quality in the Kanab Creek area."<sup>73</sup> The EPA commended the BLM for the designation of the ACEC because of this.<sup>74</sup> Studies have shown that humpback chub and razorback sucker have been documented at the mouth of Kanab Creek in the Grand Canyon, which we too have observed and photographed on river patrols.<sup>75</sup> Impacts of construction and disturbance upstream in the Kanab Creek ACEC riparian area may affect the sediment, water quality, and endangered species in lower Kanab Creek.

In addition, likely impacts to endangered species could result from could include the mobilization of perched reservoir sediment when Lake Powell levels diminish due to further over-consumption. Reservoir sediment contains organic material and when mobilized can deplete oxygen in the water column of the reservoir and negatively impact the critical habitat below Glen Canyon Dam. The mobilized sediment can also liberate toxins and heavy metals into the water column and affect water quality for wildlife and humans.

These impacts to endangered species should be studied in depth in the FERC NEPA process which is in its early stages, with respect to which the Corps is a cooperating agency. The NEPA process for the Project should fully examine these impacts, and it is incumbent on the Corps to give full consideration to the studies that will be released during the NEPA process in order to have a complete understanding of the impact that this Project will have on ESA-listed species.

### **3. Probable invasive quagga mussel infestation in Sand Hollow Reservoir will have significant adverse effects on the Aquatic Ecosystem**

We demonstrated clearly in Part IV. B. (Detrimental Effects), that the risk is high that invasive quagga mussels would be transported from Lake Powell to Sand Hollow through the pipeline even with chemical treatment. The possible effects include alteration of the food web, promotion of blue-green algae blooms, changes in water quality, and negative effects on fisheries.

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<sup>73</sup> BLM. 2007. Proposed Resource Management Plan and Final Environmental Impact Statement for the Arizona Strip Field Office, the Vermilion Cliffs National Monument, and the BLM Portion of Grand Canyon-Parashant National Monument, and a Proposed General Management Plan/Final EIS for the NPS Portion of the Grand Canyon-Parashant National Monument. p. 4-24

<sup>74</sup> Letter from EPA to Arizona Field Office BLM. 2006, January 30. Accessed at <https://archive.epa.gov/region9/nepa/web/pdf/arizona-strip-deis.pdf>

<sup>75</sup> Argonne National Laboratory. (2009). Annotated bibliography of the Humpback Chub (*Gila cypha*) with emphasis on the Grand Canyon population. Environmental Science Division. [Accessed June 23, 2018]; p. 41. [https://www.gcmrc.gov/library/reports/biological/Fish\\_studies/Goulet2009.pdf](https://www.gcmrc.gov/library/reports/biological/Fish_studies/Goulet2009.pdf)

In conclusion, the applicants have not demonstrated that the Project will not adversely impact aquatic ecosystems because of the proposed activities related to construction and operation of the pumping stations and pipeline that will directly, indirectly, and cumulatively harm the aquatic ecosystem, biological diversity, productivity, and stability. Therefore, the Corps cannot authorize the 404/10 permit under 40 CFR 230.10(c).

### **Part V. C. The Project will cause or contribute to Significant Degradation of Waters of the United States**

- 1.** The proposed action would cause or contribute to significant degradation of the waters of the United States by increasing the levels of salinity and selenium in the lower Colorado River, causing significantly adverse effects on fish, wildlife, downstream municipal water users, irrigators, and special aquatic sites.
- 2.** In addition, the chemical treatment of mussels can put toxic byproducts into drinking water, causing difficulties in water treatment plants. This would surely be the case as constant chemical treatment will be required in the Lake Powell Pipeline. This issue is not addressed by the applicant.

### **Part V. D. The Project will result in significant Adverse Effects on Recreational, Aesthetic, and Economic Values**

- 1. Recreational impacts:** The route of the pipeline, along with transmission lines, pumping and hydroelectric stations are located in a uniquely beautiful region of rural Utah. Many who visit this region are driving the highway to connect wonders of the natural world: Bryce Canyon National Park, Zion National Park, Canyonlands National Park, Grand Staircase-Escalante National Monument, and points between. Further industrialization of this scenic corridor will diminish the recreational value of the area and will thereby cause related economic harm.
- 2. Aesthetic impacts:** Additionally, numerous residents of the neighborhoods near Sand Hollow Reservoir have written comments to FERC detailing complaints about the proposed overhead transmission lines routed through their neighborhoods. These comments cite major concern for changes in quality of life, obstruction of the natural view shed, and concern for diminishing property values because of this impact.
- 3. Economic Impacts:** As discussed in detail in Part IV. D., the UBWR has not been thorough in their economic modeling nor forthcoming with the public about the impact that the Project will have on rate-payers and taxpayers. However, others who have examined the issue have concluded that there is a significant risk that the Project will burden ratepayers and taxpayers with significant costs that have not been fully disclosed by the applicant in their documents. It is of utmost importance to have an accurate cost estimate for the Project in order to understand its full economic impact,

and the economic burden that the Project will put on the residents of Washington and Kane Counties and on the taxpayers of Utah for the better part of a century.

**4. Impacts to Human Health and Welfare:** The Project would also contribute to the ongoing and worsening risk of declining water availability in the Colorado River Basin due to a combination of over use and climate change. The chance of putting the water users throughout the Colorado River Basin in danger of severe water shortages is an unacceptable risk with far reaching ramifications for a situation that is worsening overtime. We have included in depth analysis of these issues from Part I to Part V.

#### **Part V. E. Violations of State Water Quality Standards**

Continuous chemical treatment for invasive quagga mussel veligers could lead to violations of State Water Quality Standards.

“Various chemicals, in particular oxidizing chlorine-based chemicals, have been used to control dreissenid mussels in water infrastructure...[T]hey can adversely affect the water quality of receiving waters (Chakraborti et al. 2013). The formation of disinfection by-products (DBPs) is one of several drawbacks of using oxidizing chemicals such as chlorine. For example, an increase in total organic carbon (TOC) and harmful algal blooms (HABs) mediated by dreissenid mussel activity in source waters may exacerbate DBP levels in the treated water and increase potential complications in treatment processes to eliminate this toxicity. DBP formation depends on TOC levels, water temperature, chlorine, pH, bromide, and contact time. Increased TOC may require altering the water treatment processes in order to meet state and federal regulatory limits for finished water before distribution.”<sup>76</sup>

The applicant completely fails to address this important issue in its application.

#### **Part V. F. The Applicant has failed to Adequately Avoid, Minimize, or Mitigate the Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem**

As mentioned in PART V. B. (ESA-Listed Species), the applicant’s preferred alignment runs through the Kanab Creek ACEC. These potential impacts on the sensitive riparian area within the ACEC and impacts on the razorback sucker and humpback chub downstream would be significantly reduced by following the existing highway alignment, which the applicant has failed to endorse.

In addition, the applicant has not discussed mitigation of impacts associated with the chemical treatment for quagga mussels in the application. Finally, the applicant has

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<sup>76</sup> Chakraborti et al. August 2016. Costs for controlling dreissenid mussels affecting drinking water infrastructure: Case studies. Journal- American Water Works Association <http://dx.doi.org/10.5942/jawwa.2016.108.0104>

failed to provide any detail on the compensatory mitigation techniques mentioned in the application. The applicant briefly outlines a few ideas about revegetation projects on the Virgin River and enhancing riparian areas around Sand Hollow Reservoir, but it does not go into sufficient detail to understand the potential acreage affected, how it might compare to the imprint of the Project, or what the cost would be.

In conclusion, the Project will negatively impact aquatic life, water quality, ESA-listed species, and the recreation and aesthetic values of the remote region it would traverse. The Project applicant has failed to demonstrate a sound purpose and need for the Project and has also failed to adequately avoid, minimize or mitigate identified Project impacts, including the economic impacts associated with the Project costs. For all the reasons outlined above, the Corps must deny the 404/10 permit for this Project because the applicant has failed to demonstrate that the Project will comply with the 404(b)(1) Guidelines, 40 CFR § 230 et seq.

#### **PART VI: THE CORPS MUST DENY THE PERMIT BECAUSE IT LACKS SUFFICIENT INFORMATION TO MAKE A REASONABLE JUDGEMENT**

The application does not include sufficient information for the Corps to make a reasonable judgment regarding compliance with the 404(b)(1) Guidelines, the CWA, or the Rivers and Harbors Act. Therefore, the Corps must deny the 404 permit; 40 CFR § 230.12(a) (3) (IV) requires a finding of noncompliance with restrictions on discharge when the application does not contain sufficient information. The Corps does not have sufficient information on the practicable alternatives, economics, impacts on water users downstream of the diversion, and the impacts of the proposed development on the ecology of the Colorado River. Moreover, as discussed above, several other natural resource agencies have just begun, or not yet begun, their assessments of the Project, and much information concerning the Project and its impacts is not understood fully by any party, nor disclosed to the public at this juncture.

The failure to possess significant information relevant to the Corps' decision-making and public interest analysis casts serious doubt on the Project application as a whole. If the application is incomplete or inaccurate—as this comment letter repeatedly shows—the Corps does not have sufficient information to determine whether the Project complies with the requirements of the 404/10 guidelines. The Corps' choices are to therefore deny the permit or request a new and accurate permit application

#### **PART VII: BEFORE THE CORPS MAY ISSUE THE PERMIT, CORPS MUST CONSULT WITH STATE AND FEDERAL WILDLIFE AGENCIES**

The Corps regulations place special emphasis on the need for consultation and “full consideration” of comments from the US Fish and Wildlife Service (FWS), and state

wildlife agencies.<sup>77</sup> Federal agencies are of course required to consult with the FWS or NMFS under section 7 of the ESA.<sup>78</sup> In addition, impacts to Essential Fish Habitat moreover require consultation with US Fish and Wildlife Service.<sup>79</sup> Moreover, the lack of consultation, and speculation as to its results, render the mitigation measures proposed by the applicant highly suspect and likely to change. Therefore, the Corps must first consult with state and federal wildlife agencies before authorizing the 404/10 permit.

### **PART VIII: REQUEST FOR A PUBLIC HEARING**

Commenters request one or more public hearings regarding the Section 404/10 permit application. Hearings are necessary in this case for meaningful public comment. Public delivery of public comment is a unique and valuable form of input that is not replicated in other settings. We request that this hearing be held in Salt Lake City where a majority of members of the public who would be impacted by taxpayer financing of the project are located and could comment.

### **PART IX: CONCLUSION**

In conclusion, the Corps cannot authorize the Clean Water Act 404 & Section 10 Rivers and Harbor Act permit for Lake Powell Pipeline Project because the applicant has not provided reasonable assurances that the Project complies with multiple requirements of the Clean Water Act and the Corps' 404(b)(1) Guidelines. In addition, the Section 404 permit should be rejected under the Rivers and Harbors Act for failure to meet the requirements of the Corp's public interest balancing test, in particular because the applicant has failed to articulate a sound purpose and need for this impactful Project. Therefore, the Commenters urge the Corps to deem the Lake Powell Pipeline Project application legally and factually insufficient and deny the 404/10 permit for the Project.

Thank you for this opportunity and for your considerations.

Sincerely yours,

(see next page)

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<sup>77</sup> 33 C.F.R § 320.4(c).

<sup>78</sup> 16 U.S.C. §1531.

<sup>79</sup> Id. §§ 1361, 305(b)(2)



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**Attachments:**

Local Waters Alternative. Western Resource Advocates  
<http://www.riversimulator.org/Resources/Pipelines/WRAcommentsFERCMay2011.pdf>

Comments of Kaibab Paiute Tribe  
<http://www.riversimulator.org/Resources/Pipelines/PaiuteCommentsLakePowellPipelineOpt.pdf>