WESTERN RESOURCE
ADVOCATES

Submitted via FERC's eFiling system

May 6, 2011

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

RE: Comments and Proposal to Modify Draft Study Reports for the Lake Powell Pipeline – Hydroelectric Project No. P-12966.

Dear Secretary Bose:

Western Resource Advocates ("WRA") appreciates the opportunity to submit these comments and proposal to modify the Draft Study Reports for Lake Powell Hydroelectric Project ("LPP"), filed with the Federal Energy Regulatory Commission ("FERC") on May 6, 2011. WRA is a nonprofit conservation organization dedicated to protecting the Interior West's land, air, and water. WRA seeks to mitigate the impacts of climate change to the West's communities and rivers, and promotes a sustainable energy and water future.

Many of the Draft Study Reports for the LPP are fundamentally flawed, do not meet the objectives of the Approved Study Plan, and therefore should be revised. Most significantly, the Draft Study Reports should properly consider:

(i) the LPP participants' true need for water,
(ii) reasonable conservation alternatives to the proposed pipeline,
(iii) the impacts of climate change and legal constraints to water availability,
(iv) the LPP's indirect greenhouse gas emissions and other indirect air emissions impacting air quality,
(v) a rigorous and realistic cost/benefit analysis that is based upon substantiated and quantified data, and

COLORADO • 2260 Baseline Road, Suite 200 • Boulder, CO 80302 • 303.444.1188 • Fax: 303.786.8054 • Email: info@westernresources.org
NEVADA • 204 N. Minnesota Street, Suite A • Carson City, NV 89703 • 775.841.2400 • Fax: 866.223.8365 • Email: info@westernresources.org
NEW MEXICO • 409 E. Palace Avenue, Suite 2 • Santa Fe, NM 87501 • 505.820.1590 • Fax: 505.820.1589 • Email: info@westernresources.org
UTAH • 150 South 600 East, Suite 2AB • Salt Lake City, UT 84102 • 801.487.9911 • Email: utah@westernresources.org
WYOMING • 262 Lincoln Street • Lander, WY 82520 • 307.332.3614 • Fax: 307.332.6899 • Email: info@westernresources.org

www.westernresourceadvocates.org

(vi) the potential impacts of aquatic disease and invasive species to endangered fish species in the Virgin River.

FERC should require the Utah Division of Water Resources to modify the Draft Study Reports, consistent with these comments.

I. There is Good Cause to Modify the LPP Draft Study Reports.[1]

a. The Draft Studies fail to comport with the Approved Study Plan.

Under FERC regulations, "good cause" justifying modification of an ongoing study includes, but is not limited to, that "[a]pproved studies were not conducted as provided for in the approved study plan," 18 C.F.R. § 5.15(d). For the reasons stated below, there is ample good cause to modify at least the following Draft Reports:

- Draft Study Report 1 – Air Quality
- Draft Study Report 2 – Aquatic Resources
- Draft Study Report 10 – Socioeconomics and Water Resource Economics
- Draft Study Report 19 – Climate Change
- Draft Study Report 19 – Water Needs Assessment
- Draft Study Report 22 – Alternatives Development

FERC should require the Utah Division of Water Resources to revise the Draft Reports, consistent with these comments.

b. The Draft Study Reports must aid FERC's preparation of an environmental impact statement under the National Environmental Policy Act.

The purpose of Draft Reports is, among other things, to aid FERC's development of an environmental impact statement for the LPP under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 to 4370f. LPP Revised Study Plan ("Study Plan") at ii (Dec. 2008); *Hydroelectric Licensing Under the Federal Power Act*, 106 FERC P 61037 at 2, Docket No. RM02-16-001 (Jan. 23, 2004); *see also* 18 C.F.R. § 5.6(b)(2) ("[A] potential applicant must exercise due diligence in determining what information exists that is relevant to describing the existing environment and potential impacts of the project proposal (including cumulative impacts), obtaining that information if the potential applicant does not already possess it, and describing or summarizing it[.]"). Accordingly, FERC should evaluate the sufficiency of the Draft Study Reports against regulations and case law interpreting NEPA.

NEPA is the "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). "NEPA's intent is to 'focus[] the agency's attention on the environmental

[1] The terms "Draft Study Reports" and "Draft Reports" are used interchangeably throughout this proposal to modify.

consequences of a proposed project,' [and] to 'guarantee[] that the relevant information will be made available to the larger audience that may also play a role' in forming and implementing the agency's decision.'" *Davis v. Mineta*, 302 F.3d 1104, 1114 n.5 (10th Cir. 2002) (quoting *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 349-50 (1989)) (alterations in original).

To fulfill these purposes, NEPA requires that federal agencies prepare a detailed environmental impact statement ("EIS") before undertaking "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). An EIS must include a rigorous analysis of alternatives to the proposed action that "sharply defin[es] the issues and provid[es] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. 1502.14. This alternatives analysis "is at the heart of the environmental impact statement." *Id.*

II. Study Report 19 – Water Supply

a. The participants' estimates of future water demands appear invalid and should be revised.

Population projections form the core basis for water supply planning, therefore accurate population growth forecasts are essential. Study Plan at 216 (study objectives include "Determine the validity of the participants' water supply requests based on estimates of future supplies and demands."). The March 2011 Draft Water Needs Assessment (herein "WNA") projects future populations based on forecasts generated in 2008 by Utah's Governor's Office of Planning and Budget (GOPB). These population growth forecasts overstate future population growth, do not reflect impacts of the recent economic slowdown, and do not provide an adequate basis for "robust" water supply planning. As a result, the validity of the participants' purported demands should be seriously questioned.

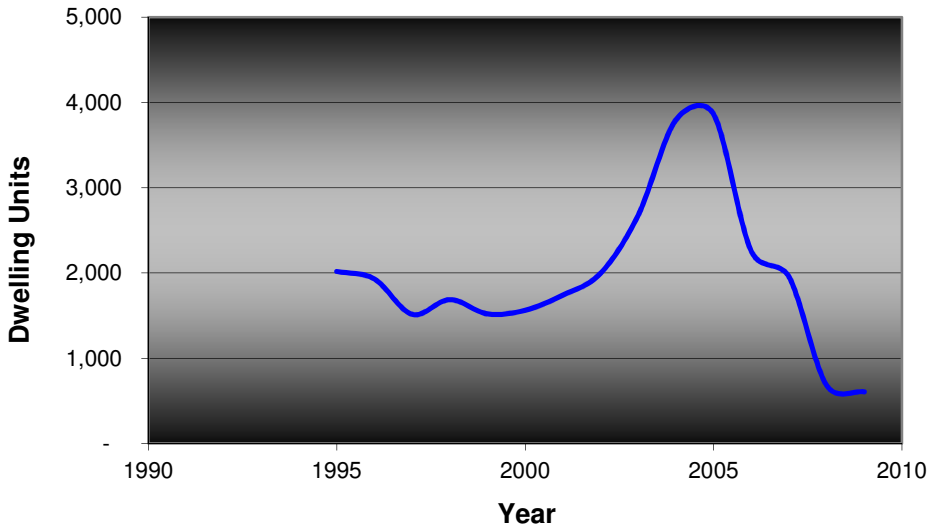
The WNA uses old, 2008 GOPB data, and has not incorporated the more up-to-date and accurate population projections available from GOPB and the U.S. Census. For instance, the GOPB estimated the 2009 population of Washington County at 145,466 residents, almost 10% lower than the WNA's estimate of 159,880 residents.[2] Perhaps more striking, the 2010 U.S. Census estimated the population of Washington County at 138,115, nearly 18% lower than the WNA estimate of 168,078 – which when combined with the 2009 data actually indicate a declining population in Washington County between 2009 and 2010.[3]

Population projections are heavily dependent on the initial estimate of population *and* the rate of population growth, where errors in the first few years are compounded greatly over time. The current economic slowdown in Utah will play a significant role in

[2] Utah Governor's Office of Planning and Budget. 2011. Population Estimates: The State of Utah and Counties 1940-2009. Available at http://www.governor.state.ut.us/dea/popestimates.html.
[3] U.S. Census Bureau. 2011. 2010 Census Data. Accessed April 18, 2011: http://2010.census.gov/2010census/data/.

reducing estimated future water demands by decreasing population growth rates over the next few years. Importantly, foreclosures in Washington County are the second highest in the state (1 in every 168 homes)[4] and building permits have decreased precipitously since 2005 (Figure 1),[5] strongly indicating that future growth rates should be much lower than those projected in the WNA. Future demands will not be as high as currently projected, even if growth continues at the expected rate ten or more years from now, because growth is held up at this time.

Figure 1. Residential building permits in Washington County.



An example for Washington County illustrates the compounding effect of using unsupportably-high growth rates on population projections. According to the WNA, Washington County has a population of 168,000 in 2010 and grows at upwards of 5% per year for the first 20 years, and then at a slower rate to 2060. In 2060, the population is projected to be approximately 860,000 (Table 1). However, by using the Washington County population as determined by the 2010 U.S. Census, and using a more moderate growth rate of 3% in the first 20 years – still impressive growth by any measure – while maintaining equivalent growth rates in the latter 30 years, population by 2060 is only 623,000 residents. By changing the initial starting point, and using growth rates more consistent with the influence of an economic slowdown, Washington County could see nearly 240,000 fewer residents by 2060. Using an average per capita water use of 302 gpcd[6], this translates into 81,000 acre-feet less demand in 2060.

[4] RealtyTrac. 2011. Utah Foreclosure Rate and Foreclosure Activity Information. Accessed April 18, 2011: http://www.realtytrac.com/trendcenter/default.aspx?address=UT&parsed=1&stc=ut.

[5] University of Utah, Bureau of Economic and Business Research. 2011. Utah Construction Information Database. Accessed April 22, 2011: http://webapps.utah.edu/bebr/report/table3.tpl?_max=50&_Cosort=1&_CoSumm=T&_Motype=num&_YRtype=num&_Cotype=num&_leModatarq=12&_eqYRdatarq=2010&_eqCodatarq=27&_ShowDetails=county&submit=Submit.

[6] Draft Water Needs Assessment, Table 3-10 (p. 3-14).

Table 1. Washington County population growth comparing WNA projections with a lower starting population and slower growth in the first 20 years.

	2010	2020	2030	2040	2050	2060
Population - WNA	168,078	279,864	415,510	559,670	709,674	860,378
Growth Rate	5.00%	5.10%	3.95%	2.98%	2.37%	1.93%
Population - Revised	138,115	185,615	249,451	367,477	492,900	622,997
Growth Rate	3.00%	3.00%	3.95%	2.98%	2.37%	1.93%

b. The participants' estimates of future viable local water supplies appear invalid and incomplete and should be revised.

The WNA does not fully investigate several opportunities for additional supply available to Washington County, namely aquifer storage and recovery, agricultural transfers, and increased conservation. Study Plan at 216 (study objectives include "Determine the validity of the participants' water supply requests based on estimates of future supplies and demands.").

Aquifer Storage and Recovery

Conjunctive management of surface water and groundwater can provide additional supplies to Washington County. In conjunctive management, utilities store water in underground aquifers when surplus supplies are available and withdraw it in periods of shortage. As an example, the Washington County Water Conservation District (WCWCD) currently uses the Navajo Sandstone Aquifer for recharge in their Quail Creek/Sand Hollow system. WCWCD estimates that the Navajo Aquifer currently holds approximately 50,000 AF of groundwater and has 110,000 AF of additional storage capacity.[7]

Optimizing conjunctive management of the Virgin River and Sand Hollow system by capturing and recharging greater flow volumes has the potential to provide additional water supply for WCWCD. A report from the Utah Department of Water Resources on conjunctive use also suggests other areas of the central Virgin River have the potential to store winter flows and flood flows.[8]

Agricultural Transfers

The WNA dismisses agricultural transfers (not associated with urban sprawl) as a viable supply because of the cost associated with reverse osmosis water quality treatment. A financial and energy analysis comparing the cost of reverse osmosis treatment of local agricultural water to the Lake Powell Pipeline should be made before eliminating this opportunity.

[7] Personal communication with WCWCD engineers, April 2009.
[8] State of Utah, Natural Resources, Division of Water Resources. 2005. Conjunctive Management of Surface and Ground Water in Utah. July.

Water Conservation
As described further in our comments on Study Report 22: Alternatives Development (Section V), water conservation opportunities are not fully investigated or optimized in the WNA. The potential for water conservation to increase future supply should be pursued much more aggressively.

Washington County is aiming for an 18% reduction in water use over the next 50 years, resulting in a per capita water use of 242 gpcd in 2060. Unfortunately, this goal sets an extremely low bar that neither promotes nor maximizes the water savings achievable through conservation. Water providers in Washington County achieved a 13% reduction in water use between 2000 and 2009 – it is highly unrealistic to assume that providers will only gain another 18% reduction over the next 50 years.

Many utilities throughout the West expect to reduce per capita water use by 1% per year over the next decade or two. This represents a reasonable estimate of what is achievable for Washington County as well, especially considering water use has been reduced by 3 to 4 percent per year over the past decade. A target to reduce per capita water use 40% by 2060 is a more appropriate and achievable conservation goal.

In general, current conservation efforts focus on education and outdoor water use in Washington County; however, every provider has *many* additional conservation opportunities. Specifically, providers can:

- Meter all water - culinary and secondary - so that they can document and track where water is used. With this information, providers can identify leaks or other sources of unaccounted for water, and should take measures to reduce these losses
- Implement a conservation rate structure that sends a true price signal to customers
- Expand appliance and fixture rebate programs for all sectors
- Enact – and enforce – ordinances that limit water-thirsty landscapes in new development and prohibit waste of water
- Promote outdoor water efficiency programs targeted to HOAs and large landscape customers
- Adopt landscape retrofit incentives ("cash for grass"), similar to the Southern Nevada Water Authority's program
- Expand funding for water conservation staff, programs, and activities.

The State of Utah's Water Plan recommends all of these measures, which, importantly, are almost always cheaper and faster to implement than new supply projects.[9] Conservation programs offer an additional benefit – they remain under the direct control of local organizations, and are not subject to interstate compacts or climate change. New development in the region deserves special attention, as the potential conservation savings for new residential development is tremendous. New, denser developments place much less demand on the water distribution system than traditional suburbs with large

[9] Western Resource Advocates. 2008. Smart Savings Water Conservation: Measures that Make ¢ents.

irrigated areas; and plumbing codes that require installation of efficient appliances, such as EPA-certified WaterSense products, can reduce indoor per capita use to less than 45 gallons per day. Example "water-smart" developments across the southwest show that water use reductions of 35-50% are readily attainable by comparison to existing homes in the local area.[10] Future development in the region will have lower water demands than current developments, especially considering local planning efforts such as Vision Dixie.

Finally, comparing water use in other Southwest communities to Washington County provides valuable insight into the potential for water conservation. Tucson, Albuquerque, and Las Vegas have similar average temperatures and rainfall as southwestern Utah.[11] The significant differences between these communities are their rates of water use and approach to water conservation.

Washington County does not have the highest temperature, lowest rainfall, or highest evapotranspiration rate when compared to Albuquerque, Tucson, or the Las Vegas Valley, but it does have the highest residential water use, highest outdoor water use, and highest system-wide water use (Table 2). Washington County outdoor water use is almost triple that of Albuquerque, and system-wide water use is almost double that of Tucson. Achieving a 40% reduction in water use for Washington County by 2060 would bring water use in line with these other community's *current* water use.

Table 2. Water Use and Climatic Comparison of Washington County to Other Southwest Communities.[12]

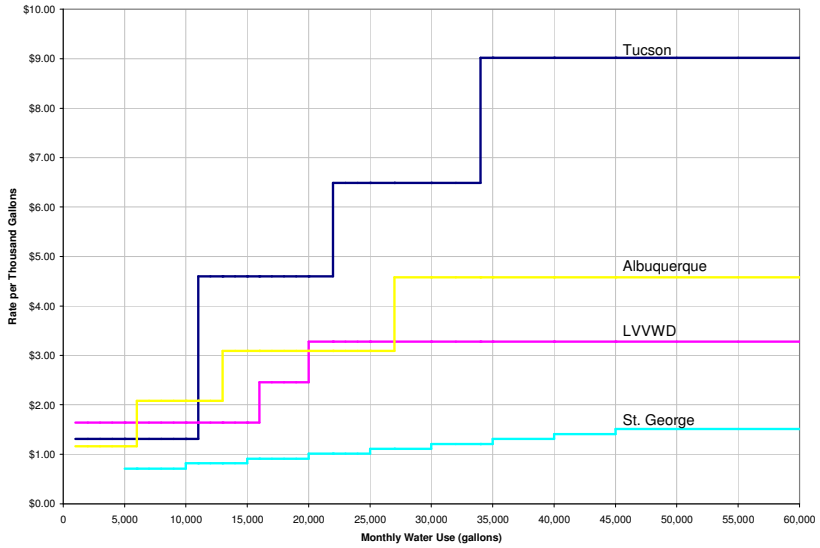
Entity	Total Res. Use (gpcd)	Outdoor Use (gpcd)	System-wide Use (gpcd)	Avg. Annual Temp (F)	Avg. Annual Precip. (in)	Annual ET (in)
Albuquerque	110	42	173	56.0	8.9	38.1
Tucson	114	57	156	68.4	12.0	58.0
Las Vegas	174	105	276	68.0	4.5	74.8
St. George	183	113	316	62.0	8.0	55.0
Washington County	185	113	302	61.8	8.0	55.0

Adopting an effective conservation rate structure has been a key strategy for reducing water use in these other Southwest communities. Water rates are one of the most effective – and cost effective[13] – conservation measures. When designed properly, conservation rate structures provide a stable revenue stream for the utility and encourage efficient use of water.

[10] Western Resource Advocates. 2009. New House, New Paradigm: A Model for How to Plan, Build, and Live Water-Smart. Boulder, CO.
[11] Western Resource Advocates. 2006. Water in the Urban Southwest: An Updated Analysis of Water Use in Albuquerque, Las Vegas Valley, and Tucson.
[12] DWR 2009; WRA 2006; Washington County Water Conservancy District. 2007. 10-Years of Water Conservation, 1995-2005. September.
[13] Mayer, P. 2009. Cost/Benefit Analyses for Water Conservation Planning. Presentation to Colorado WaterWise Conference: The Water Conservation Yardstick, April 2-3.

As one local example, St. George's increasing block rate structure does not provide an adequate conservation price signal (Figure 2). Because the price differential between blocks in St. George's water rate structure is small and the fixed price is high, customers receive no financial signal when they consume excessive amounts of water. This is in direct contrast to customers in Tucson or Albuquerque which see the average price of water increase dramatically as their water use increases.

Figure 2. Marginal Price Curve of Water Rate Structures for Southwest Communities.[14]



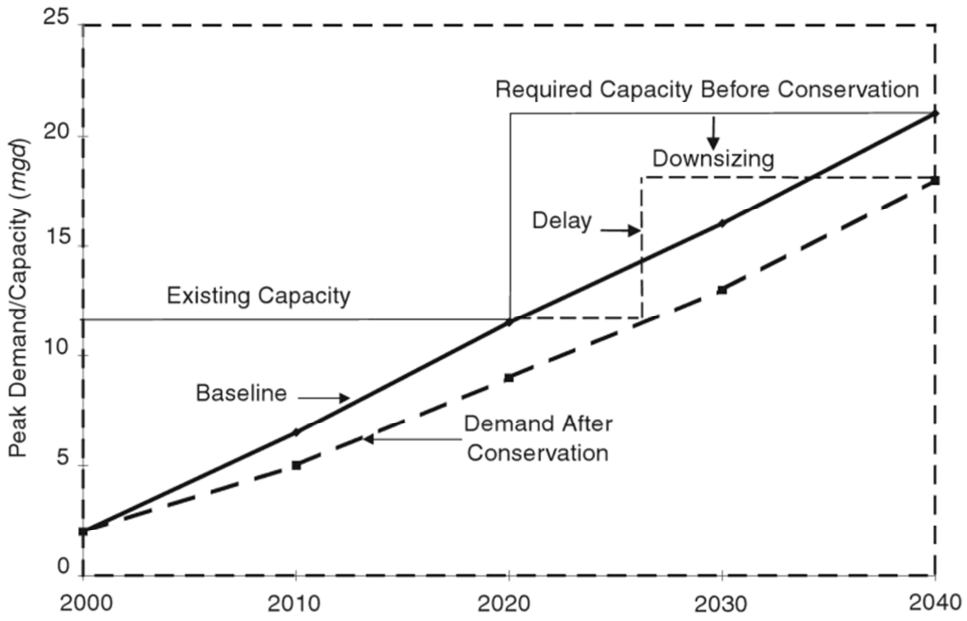
c. The Draft Report misstates the timing of the participants' need for additional water supplies.

Given the overestimate of demands and lack of rigorous analysis of supply opportunities, the timing of need for the Lake Powell Pipeline in the WNA is inaccurate. *Compare* LPP Study Plan at 216 (study objectives include "Determine the likely timing of the need for the LPP supply when integrated with other potential supplies."). Using a correct estimate of current population and more realistic growth rates for the region will significantly decrease the need for the pipeline. Developing aquifer storage and recovery, utilizing agricultural water, and maximizing water conservation opportunities will provide additional supply not currently considered.

Maddaus Water Management– the same consultant used to perform the water conservation work for Phase II of the WNA – has produced an illustration of how increased conservation can delay the onset and decrease the need for addition water supply developments that serves to illustrate why the WNA is inaccurate (Figure 3).[15] As shown, conservation reduces demands (from solid line to dashed line), which delays the need for additional supply (from 2020 to 2025 in this example), and decreases the overall need at the end of the planning period (from 21 to 18 mgd in this example).

[14] Tucson Water 2009 water rates; Albuquerque Bernalillo County Water Utility Authority 2009 water rates; Las Vegas Valley Water District 2009 water rates; City of St. George 2009 water rates.
[15] Maddaus, W. 1999. *Estimating Benefits from Water Conservation*.

Figure 3. Conservation can shift the projected demand curve, reducing the size of supply and shifting the timing for when a project might be needed.



The Draft Report's consideration of water supply and demands should be modified, consistent with these comments.

III. Draft Study Report 19 - Climate Change

a. The Draft Report should be consistent with Council on Environmental Quality's "Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions."

Under NEPA, agencies are required to consider climate change and all reasonably foreseeable greenhouse gas emissions that result from agency's action. Pursuant to NEPA's "hard look" requirement, 42 U.S.C. § 4332(2)(C), agency "assessment of all 'reasonably foreseeable' impacts ***must occur at the earliest practicable point***, and must take place before an 'irretrievable commitment of resources' is made." *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 718 (10th Cir. 2009) (emphasis added) (holding that the Bureau of Land Management failed to comply with NEPA in its plan-level analysis); *see also* 40 C.F.R. § 1501.2 ("Agencies shall integrate the NEPA process at the earliest possible time to insure that planning and decisions reflect environmental values."). '[D]ilatory or ex post facto environmental review cannot cure an initial failure to undertake environmental review." *Pit River Tribe v. U.S. Forest Serv.*, 469 F.3d 768, 785 (9th Cir. 2006). Under NEPA, "the fact that climate change is largely a global phenomenon that includes actions that are outside of the agency's control does not release the agency from the duty of assessing the effects of *its* actions on global

warming within the context of other actions that also affect global warming." *Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008) (emphasis in original; internal quotations omitted).

In recognition of agencies' obligation to consider climate change under NEPA, the Council on Environmental Quality's ("CEQ") issued its "Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions," ("Draft Guidance") on February 18, 2010.[16] The Draft Guidance provides a critical framework for both evaluating the greenhouse gas ("GHG") emissions of a proposed action and alternatives, and the potential climate change effects to a proposed action and its alternatives. The Draft Guidance:

> [A]dvise[s] Federal agencies that they should consider opportunities to reduce GHG emissions caused by proposed Federal actions and adapt their actions to climate change impacts throughout the NEPA process and to address these issues in their agency NEPA procedures.

Draft Guidance at 1. The Draft Guidance will assist FERC in ensuring that it selects an alternative that minimizes GHG emissions and promotes adaptation to the impacts of climate change.

b. The Draft Report fails to adequately consider water availability in light of climate change.

"Availability" of water should include a quantification of the water that is physically and legally available to be released through the pipeline. One of the stated goals in Section 19.6.3 of the Study Plan is to "Determine a reasonable range of future hydrologic conditions in the Colorado River Basin and Lake Powell, and assess the availability of water for the LPP diversion under these hydrologic conditions. This will include use of the Bureau of Reclamation's CRSS hydrologic simulation model to simulate effects of different hydrologic scenarios on LPP diversions" (emphasis added). The CRSS model results show the probabilities for which water in Lake Powell would exceed or fall below the pipeline intake level (3,375 ft). However, the physical ability of water to flow through the pipeline due to its elevation is not equivalent to determining the availability of water for the LPP diversion.

In the event of a water shortage due to periodic hydrologic fluctuations and/or climate change, the LPP is not guaranteed to receive water even if the water can physically flow through the pipeline. A Compact Call could place mandatory restrictions on Utah's Colorado River water users. Such a call could reduce the volume of water available for delivery through the LPP. This is also critically important to the cost-benefit analysis: the cost of the pipeline per acre foot of water delivered will increase if the amount of water available decreases. While it is not possible to definitively predict the outcome of a Compact Call or Utah's allocation under other severe drought conditions, it is important

[16] *Available at* http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa.

to estimate to some degree how much water will be availability for the pipeline under these scenarios. Thus, we recommend that the Draft Report include a range of volumes of water both physically and legally available for delivery through the Lake Powell Pipeline under climate change scenarios.

Climate change impacts are an additional influence that should be factored into the CRSS model and future water predictions. Another goal in Section 19.6.3 of the Study Plan is to "Estimate potential effects on Colorado River streamflow associated with the combined influence of climate change and the proposed LPP diversion. This will include use of the Bureau of Reclamation's CRSS hydrologic simulation model" (emphasis added). Chapter 4 in the Draft Report shows the difference between the observed hydrologic record (DNF) and the paleo-conditioned inflows (NPC) CRSS models, but it does not apply the effects of climate change to those hydrologic scenarios. The NPC model is not a proxy for climate change impacts, but rather it is a model of potential future river flows based on historical fluctuations. The Draft Report's failure to include climate impacts is inconsistent with the Study Plan.

The Draft Report also misrepresents the impact of climate change in Chapter 5 by stating that "…Lake Powell is likely to decline in the future, either because of predicted climate change or to natural reversion toward the long-term historical mean determined from the tree ring studies" (emphasis added). This is not an either/or situation. Many statements in the literature review (see, e.g. Chapter 3 of the Draft Study) properly reflect the potential for the combined influence of climate change and historic hydrologic variation, but Chapter 4 does not present modeled results of this combined influence.

Because climate change impacts are not accounted for, the probabilities of Lake Powell elevations and water releases as presented in this Report are not reliable. In order to adequately meet the study plan goals, the State of Utah must evaluate the impacts of climate change on the long-term historical runoff patterns. Ideally these would be integrated into the USBR's CRSS model, but an acceptable alternative would be the USBR's forthcoming Basin Study Report, which will more thoroughly incorporate the effects of climate change on water availability in the Colorado River Basin.

In addition, not enough information about the CRSS was provided in a readily available and comprehensible format, and does not sufficiently address the goal in Section 19.6.3 of the Study Plan to:

> Summarize potential climate change effects in a Climate Change Technical Report. This technical report will include a description of the assumptions made for the Bureau of Reclamation's CRSS modeling. Additionally, CRSS model output will be provided in the technical report.

First, it is not clear which document is meant to serve as the "Technical Report." Second, not enough detailed information is provided in Study Report 19 - the diversions from the Colorado River that were included in the model are not listed or quantified. This is especially relevant for potential, future diversion such as the proposed Regional

Watershed Supply Project ("Million Pipeline"). Although more detailed information about the CRSS model is supposedly available in multiple attachments to Report 18, no attachments are in fact included.

c. <u>The Study Report should incorporate USBR's SECURE Water Act Section 9503(c)- Reclamation: Climate Change and Water 2011.</u>

A recent report published by the USBR – *SECURE Water Act Section 9503(c)- Reclamation: Climate Change and Water 2011* has particular relevance to this proposed project, and though released after the Draft Reports, should be included in any subsequent revisions or updates. The Climate Change and Water 2011 report is intended as an assessment with a consistent methodology for eight Reclamation River basins, one of which is the Colorado River. It may be seen as a precursor to the Basin study, which intended to be a more detailed assessment of future water supply and demand in the Colorado Basin. When the Basin Study becomes available, we also recommend that it be incorporated into the Climate Change Study.

The Climate Change and Water 2011 report presents results for the years 2020, 2050 and 2070. Most relevant to the Lake Powell Pipeline are the results that indicate an annual decrease in runoff at Lees Ferry of about 3% in 2020, 9% in 2050 and 7% in 2070, as shown in Figure 11 in their report. We recommend that this new study be incorporated into the Climate Change Study, and also apply the results of decreased runoff levels to the availability of water for the Lake Powell Pipeline.

d. Draft Report 19 inadequately considers climate change and should be revised.

In summary, Draft Report 19 does not sufficiently address the goals set forth in the Study Plan to make the connections between Colorado River stream hydrology, climate change, and Lake Powell Pipeline diversions. The availability of water for the Lake Powell Pipeline is not sufficiently considered under climate change conditions or under legal constraints which may arise during severe shortages. Also, the influence of climate change is not sufficiently applied to the hydrologic models of Colorado River streamflows and reservoir storage levels, and more detailed information about these models should be made available.

IV. Draft Study Report 1 – Air Quality

Draft Study Report 1 fails to consider the indirect impacts of the LPP to air quality. Specifically, The Draft Study should:

1) Include air quality impacts from power generation facilities;
2) Include GHG emissions in the air quality impacts assessment;
3) Define "impact corridor" more clearly; and
4) Clearly explain and define (spatially) exceedances of the NAAQS.

The Draft Report improperly disregards the LPP's significant impacts to air quality. *Compare* Study Plan at 1 (air quality objectives include, "quantify Project operation emissions and the associated air quality impacts including ancillary facilities and structures"). Section ES-3.8 of the Draft Report states that the "LPP project would not cause indirect air quality impacts resulting from new power generation emissions" because new facilities do not need to be built to supply the power. This sleight of hand has no factual support.

The energy demands of LPP are new and additional demands that will result additional emissions. Even if existing facilities are used to generate power for the pipeline, they will be operated during a greater portion of time. The power source for the electricity is not stated, but is likely to be coal-fired power plants, since the majority of Utah's electricity generation is coal-fired.[17] Air emissions from coal-fired power plants include sulfur oxides (SO_x) and nitrogen oxides (NO_x), of which the NO_2 and SO_2 emissions which are criteria pollutants and thus subject to NAAQS. The net energy consumption of the pipeline is over 500 GWh annually, which, with an average emissions rate, would result in approximately 2.3 million pounds of carbon dioxide, 13,000 pounds of sulfur dioxide and 6,000 pounds of nitrogen oxides.[18] These are significant air quality impacts and must be included in the analysis.

The emissions associated with energy demand should be taken seriously by the project proponents. First, FERC must report emissions associated with increased energy demand in the Draft Environmental Impact Statements (DEIS) during the NEPA process, should that come to pass. *See*, *e.g.*, *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549-50 (8th Cir. 2003) (agencies must look at the reasonably foreseeable indirect adverse effects of a major federal action, including an increased demand for energy). This precedent has already been set by other, recently proposed water supply projects like the Southern Delivery System (SDS) and the Northern Integrated Supply Project (NISP), both in Colorado.[19] Secondly, the evaluation of greenhouse gas emissions from the proposed project and the alternatives has been proposed as a mandatory inclusion in the NEPA process. Thus to prepare for this pending regulation, it is important that all emissions, including greenhouse gas emissions, from energy demand be accurately quantified.

Surprisingly, greenhouse gases emissions were not addressed in this Draft Report, despite the fact that in the record of comments at the St. George meeting on March 22 it was noted that "the gas pipeline alternative will include an evaluation of greenhouse gases and how much CO2 would be emitted." Since these emissions will be evaluated for the gas pipeline alternative, they should be evaluated for the other potential power generation sources, as well as for the No Lake Powell Water and No Action Alternatives. The

[17] US Energy Information Administration. 2009. Utah Electricity Profile, Table 1 Summary Statistics. Available at http://www.eia.doe.gov/cneaf/electricity/st_profiles/utah.html.
[18] US EPA, Emissions and Generated Resource Integrated Database. (http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html)
[19] The US Bureau of Reclamation was the lead agency in the NEPA process for the SDS, and the Army Corps of Engineers is the lead agency for the NISP NEPA process.

difference in emissions levels between these alternatives is likely to be significant, as explained below.

Energy is embedded in nearly every stage of water provision and use. Pumping water requires significant amounts of energy - for this proposed pipeline it is an approximate value of 3,570 kWh/AF.[20] Groundwater pumping can require anywhere from 100 – 650 kWh/AF for extraction depending on the depth to water, and water which flows by gravity requires 0 kWh/AF. The energy for water treatment depends on both the water quality and technology employed, and can range anywhere from as little as 5 kWh/AF for simple conventional chlorine treatment of high quality water, up to about 1,500 kWh/AF for desalination of brackish water (reverse osmosis would certainly be at the higher end of this range). The distribution of water requires energy for pumping when it is not gravity fed, and the use of water by the end user also requires some energy for pumping, and significantly more energy for heating - approximately 50,000 kWh/AF to heat water to 123 ºF. Finally, wastewater treatment processes requires energy in the range of 100 – 2,500 kWh/AF depending on the quality of water received, the required level of treatment, and the technology employed.[21]

Thus, a change in the system configuration for the provision of new water supplies can lead to dramatically different energy requirements. The No Lake Powell Water Alternative would result in high energy use from the reverse osmosis operations and additional groundwater pumping, but would also result in energy decreases from water conservation measures due to the reductions in treatment, delivery, heating and wastewater treatment requirements. Under the No Action Alternative, the change in energy demands is likely negligible if no major changes in water supply or usage occur. And each of the energy demands have an associated air quality impact, depending on the source of energy (e.g. coal, gas, or renewable power plant). A full, proper comparison of all the propose pipeline and all alternatives should take into account the energy demands from the entire water system configuration.

The definition of the "impact corridor" is not sufficiently defined in the Draft Report despite the fact that one of the goals of the Study Plan as stated in Section 1.2.1 is to "determine and explain the appropriateness of width of impact corridor." Section 3.1 in the Draft Report attempts to define the impact area by stating that it "encompasses the areas surrounding the LPP Project features shown in Figures 1-1 through 1-9," but there is no discernable area shown on the maps, nor is a quantified area provided (e.g. as distance from the pipeline, measured in meters). Thus, neither the definition nor the "appropriateness" are stated clearly enough in the Draft Report.

We recommend that the area of impact be more fully explained, and that it be expanded to include emissions from generating stations. In addition, it will be important to address

[20] This value was derived from the PAD I document, in which the energy consumption was estimated for the 100,000 AF/yr that were expected to be delivered. Though the volume of water has decreased since the release of that document, we do not have updated energy figures to use, and so use this as a proxy.
[21] All energy intensity figures are derived from research and studies previously conducted by Western Resource Advocates and are available upon request.

whether these power plants are located in non-attainment areas. These recommendations are fully within the purview of the stated goals in the Study Plan, which aims to "quantify Project operation emissions and the associated air quality impacts including ancillary facilities and structures."

Sections 3.3.12, 3.3.13 and 3.3.1.4 of the Draft Report indicate that emissions from the project would not exceed NAAQS levels, and that the maps show the extent of the projected pollution concentration above the NAAQS levels. This is not in fact shown on the map, nor is there substantive discussion of the exceedance levels and their locations. Particularly with respect to potentially impacted Class 1 airsheds, this section needs to be more clearly explained.

V. Draft Study Report 22 – Alternatives Development

After review of the Alternatives Draft Report, we recommend that this report:

1) Amend the "Recommended No Lake Powell Water Alternatives" to balance proposed water conservation measures between indoor and outdoor use.
2) Present a detailed explanation of the costs and relative costs of the alternatives as compared with the proposed pipeline.

Under NEPA, an EIS must include a rigorous analysis of alternatives to the proposed action that "sharply defin[es] the issues and provid[es] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. 1502.14. This alternatives analysis "is at the heart of the environmental impact statement." *Id.*

The Draft Report fails to explain why it does not include a reasonable and well-balanced conservation alternative. *Compare* Study Plan at 244 (Study objectives include: "Document deficiencies of the alternatives considered inappropriate for inclusion in the environmental document prepared for the FERC license application."). The conclusion that, under a No Lake Powell Alternative, Washington County would have to virtually eliminate residential outdoor watering is not justified because it assumes that no additional indoor water conservation measures are possible. The Water Needs Assessment (WNA) and the Alternatives Draft Report state that water demand is projected to be about 298 gpcd in 2037 and 276 gpcd in 2060, for both indoor and outdoor uses in the M&I sector. However, these numbers are significantly higher than other arid, western regions, many of which have water use rates between 100-200 gpcd (e.g. Albuquerque, NM[22] and many communities in Arizona[23] and Colorado[24]). The Draft Report fails to explain why so much water is necessary per capita, and why the proposed

[22] Pacific Institute and Western Resource Advocates, 2007. "Hidden Oasis: Water Conservation and Efficiency in Las Vegas."
[23] Western Resource Advocates, 2010. "Arizona Water Meter: A Comparison of Water Conservation Programs in 15 Arizona Communities." Boulder, CO.
[24] Western Resource Advocates, 2007. "Front Range Water Meter: Water Conservation Ratings and Recommendations for 13 Colorado Communities." Boulder, CO.

reductions must come exclusively from outdoor uses. The Recommended No Lake Powell Alternative is needlessly alarmist and its inclusion in an EIS would unfairly prejudice consideration of far more reasonable and balanced conservation alternatives.

The Alternatives assessment should include a range of pathways for reducing an additional 119 gpcd from a combination of indoor or outdoor uses in 2037, because this quantity is equivalent to 69,000 AF/yr – the quantity of water that would otherwise be supplied by the Lake Powell Pipeline. This would bring demand down to about 179 gpcd, which is an achievable goal as evidenced by other cities. A combination of reductions in both indoor and outdoor water use is likely to have better public acceptance than a nearly complete cessation of outdoor water use. Moreover, the proposed method of reducing outdoor water use through regulation and enforcement is not the only, nor is it necessarily the most effective method, of reducing water use. Other methods, like conservation rate structures, have proven to be more effective at reducing water use, and are less burdensome and costly to implement.

This Draft Report also does not articulate that recycled water, of non-potable standards, can be used in place of potable water for outdoor uses. The volume of water available from RO treatment of Virgin River water in 2020 (Section 3.3.1.1), would be equivalent to about 38 gpcd in 2060. Thus, if this water was provided for outdoor use and not treated to potable standards, it would be less costly to produce and would allow for a gpcd value of 217.

Section 3.3.1.5 does not include the full range of possible combinations of alternative water supplies, and does not meet the needs of the Study Plan identified in section 22.4.3, which aims to determine:

> What combinations of existing and future possible water supplies could be conceived to meet the projected water demands described in Phase I of the Water Needs Assessment as described by MWH (2008) and updated in Phase II of the Water Needs Assessment (Study Plan 19, Water Supply and Climate Change)?

The Alternatives Draft Report presents scenarios in which only the maximum value of water from each alternative is produced, as opposed to smaller volumes of water from multiple alternatives. For example, the first alternative solution presented uses the maximum volume of water from the Virgin River and from RO of effluent, and only a 1.6 gpcd restriction on outdoor watering. The second alternative presented uses the maximum volume of water from the Virgin River and a maximized restriction on outdoor watering. There is a middle ground among these alternatives that is likely more favorable to residents; one example could be a 25 gpcd restriction on indoor/outdoor watering, and some combination of RO water from each the Virgin River and wastewater effluent to meet remaining demands. Table 5-1 in Section 5.2.1 presents three combinations of alternatives, but the volume of water from each source is not defined, nor is a rationale provided for including those options and not any other “middle ground” options.

The data in Section 3.3 that pertains to Washington County should be made clearer and more consistent; the volumes of water available from each alternative are listed for different years, which make it difficult to make a full and proper comparison of the alternatives. That is, the volume of water from the Virgin River water that would be treated by RO is only provided for the year 2020, the volume of effluent water treated by RO is provided for 2020, 2037 and 2060, and the water available from reduced outdoor watering is estimated for 2020 and 2037.

Finally, the Draft Report does not sufficiently explain its claimed costs of the alternatives. Study Plan objective 22.2.2, aims to:

> Summarize the characteristics of each water supply alternative considered, including the capacity of meeting projected water demands, technical feasibility, water supply reliability, cost, and environmental and land use considerations.

To underscore the importance of this cost analysis, it is mentioned a second time in the Study Plan in Section 22.4.3, which aimed to address "What would the total cost (capital and operation and maintenance) be for the potential project alternatives?" Despite this importance, the Draft Report does not present costs of each alternative in a dollar value, nor are the relative costs sufficiently explained.

The "relative cost" is defined in Section 5.1.1.3 as the:

> total present worth probable cost of an alternative relative to the total present worth probable cost of the LPP Proposed Action. The relative cost rating incorporates an inverse function to allow each relative cost to be compared on a 0 to 5 rating scale.

This explanation does not provide the reader with a clear understanding of how these numbers are derived. Furthermore, the relative cost of the Lake Powell Pipeline is stated to be "5," but there is no explanation of the meaning or significance of ascribing this value. The costs for each alternative should be stated in dollar figures with substantiation, along with explanations for the assumptions that go into those estimates. This would provide some explanation as to why all the alternatives are supposedly more costly than the proposed pipeline, and by how much. As is, the Draft Report's contention that the LPP is somehow the least costly alternative appears arbitrary, and therefore should be disregarded.

VI. Draft Study Report 11 – Special Status Aquatic Species and Habitats

The Draft Report fails to acknowledge the threat posed by aquatic disease/invasive species transfers into Sand Hollow Reservoir, and subsequently into the Virgin River. In addition, the distribution of two species identified in the Draft Report, the Virgin River

Chub and Flannelmouth, are not properly characterized. These issues should have been addressed, per the objectives set forth in the Study Plan, section 11.2:

> The goal of this study plan is to… address the potential effects of Project construction, operation and maintenance activities on special status aquatic species and their habitat. The specific information to be obtained is the type, abundance, and general distribution of special status aquatic species within the Project area, required to assess the potential effect of the Project on these species.

In Section 4.3, no acknowledgment is given to the threat of aquatic disease/invasive species transfers into Sand Hollow Reservoir, which would most certainly become a point source of concern for interbasin disease/invasive species transfers. Sand Hollow is approximately 3 miles from the Virgin River proper, and it is our understanding that the Pump Back Project, which was built to deliver from to the Virgin River from the Sand Hollow Reservoir. This proposed pipeline project thus elevates the threat of such transfers through the Pump Back Project and even through inadvertent, or intentional, public "bait bucket" problems. This threat should be explicitly considered in Section 4.3.5, as well as in Chapters 5, 6 and 7. Aquatic disease/invasive species transfers into Sand Hollow Reservoir might also require mitigation measures as well. This issue is conceptually and functionally no different than the leaks/spills described in Chapter 6, and likely is even more of a direct threat.

Section 3.3.8.2 mischaracterizes the Virgin River Chub distribution in the lower Virgin River. Their distribution extends at least to the Bunkerville Diversion, not just to "at least the Mesquite Diversion." Flannelmouth sucker are also found within the Virgin River system, though this is not acknowledged in Section 3.4.1. Use of the Virgin River by this species is not documented throughout this Draft Report, but should be included to the same degree that the other Virgin River fishes are throughout the document, particularly since it is listed as a species of concern within table ES-2. In addition, it should be noted in Section 4.4 that Flannelmouth sucker may also occur within LaVerkin Creek, and so should be described similarly to the other species, unless it can be made certain that the potential for Flannelmouth sucker within that location does not exist.

VII. Draft Study Report 10 – Socioeconomics and Water Resource Economics

The Socioeconomics and Water Resource Economics study has several critical omissions or flaws. Prior to Commission approval of the study, the State of Utah must correct these flaws and modify the study. The following issues are critical errors:

1) The study assumes the full 86,000 AF of water will be available to LPP project participants, regardless of the impacts of climate change;
2) The measures chosen for the LPP alternative artificially inflate the cost of project alternatives; and

3) The study does not accurately evaluate the cost of energy used to power the pipeline.

FERC and the State must evaluate the project's benefit/cost ratio if less water is available than projected, and must develop a benefit/cost analysis of a realistic, grounded alternative.

a. The presumption that Colorado River water will be available in every year skews the economic analysis.

The Socioeconomics and Water Resource Economics study assumes that climate change or additional Colorado River diversions will not reduce the amount of water available to the Lake Powell Pipeline. This is a critically flawed assumption with a direct bearing on the benefit/cost analysis. If climate change reduces runoff in the basin, the *legal* availability of Colorado River water could be reduced, thereby reducing the economic benefits of the project (while costs remain constant). This pertains directly to objectives outlined in study plan Section 10.4.3, including, "An accounting of the State's Colorado River water rights allocated to the Project; any potential water right impairment issues" [emphasis added].

Rather than assume that water will be available in every year, under every hydrologic condition, the analysis should evaluate the benefit/cost ratio under different scenarios of availability (e.g. water is not available in 1 out of 10 years; only a portion of the water is available each year; and water is not available for several years in a row). These scenarios will enable project proponents to accurately assess the risk of investing in the project in a changing climate, and are an essential component of the benefit/cost analysis (outlined in Study Plan Section 10.6.1). The Draft Report acknowledges that climate change may reduce annual runoff. However, the bare assertion that "management may mitigate" is not a sufficient approach to evaluating the economic risks associated with climate change.

The Council of Environmental Quality released *Updated Principles and Guidelines for Water and Land Related Resources Implementation Studies* in 2009. These principles are currently in draft form, but will likely be finalized before FERC releases the Lake Powell Pipeline's Draft EIS. We encourage FERC to follow the standards outlined in the Draft Principles and Guidelines, which emphasize the importance of developing sustainable water supply projects, balancing monetary and non-monetary benefits, and "achieving co-equal goals" of protecting and restoring the environment and improving the economic well-being of the nation.[25] We expect these co-equal goals, and the accompanying economic analysis, to be reflected in the NEPA analysis.

[25] Council on Environmental Quality, 2009. *Proposed National Objectives, Principles and Standards for Water and Related Resources Implementation Studies,* available at http://www.whitehouse.gov/administration/eop/ceq/initiatives/PandG.

b. Project alternatives do not represent a realistic alternative to the LPP, inflating costs.

As described in our comments on Alternatives and the Water Needs Assessment, the proposed LPP alternative represents an unrealistic and unlikely strategy for meeting the region's water needs. The alternative relies exclusively on reductions in outdoor water use, while ignoring potential for reducing indoor water use. Around the region, water utilities are pursuing conservation measures that reduce *both* indoor and outdoor water use. These conservation measures generally cost less than reverse osmosis, the presumed alternative (marginal) water supply for the LPP. According to the Colorado Water Conservation Board (CWCB), reverse osmosis treatment facilities cost approximately $3.75/gallon of treatment capacity, or $1.2 million/AF.[26] In comparison, a recent analysis of the cost of conservation plans in Colorado found that, on average, conservation savings cost approximately $5,200/AF[27] -- less than 1% of the cost of RO.

The Study Plan included tasks that directed the agency and consultants to compile and present the costs of conservation, as reported by reputable agencies from around the region. See, e.g. Study Plan Section 10.2.1 and 10.6.1: "Reviewing existing marginal cost data for West-wide water resources projects, including conservation costs." The study includes a brief note that the cost of conservation varies, with some costs as low as $250/AF.[28] This does not meet the standard established in the study plan. Following the study plan as outlined, the study must include a list of conservation measures and relative costs before it can be accepted by the State as complete. (See, e.g. Study Plan Section 10.6.1, "Reviewing existing marginal cost data for West-wide water resources projects, including conservation costs.")

In sum, by relying on an unrealistic alternative, the benefit/cost evaluation of the pipeline and its alternative is skewed. Before FERC finalizes the Socioeconomic Study, the State of Utah must develop a more realistic alternative that considers reasonably available conservation measures, and reassess the costs and benefits of this alternative.

c. The study does not accurately assess the future costs of energy.

The Socioeconomics study does not adequately address the economic impacts associated with power losses and generation. Under the Study Plan, the Draft Report must:

> Identify the net economic impacts associated with the loss of power generation at Glen Canyon Dam . . . .

---

[26] Colorado Water Conservation Board. 2010. *Reconnaissance Level Cost Estimates for Agricultural and New Supply Strategy Concepts*, Table 3-7, available at http://cwcbweblink.state.co.us/weblink/0/doc/143892/Electronic.aspx?searchid=bbbbf69b-ff6e-4950-9110-1846bbbaa99e.

[27] Kenney, Douglas, Michael Mazzone, and Jacob Bedingfield. 2010. *Relative Costs of New Water Supply Options for Front Range Cities (DRAFT)*. University of Colorado. Boulder, CO.

[28] Utah Board of Water Resources, 2011. Draft Socioeconomics and Water Resource Economics Study Report, p. 4-4.

- Impact estimates will cover any power losses at the power plant from energy/peaking power losses and the costs of replacement power.
- Impact estimates will be determined for water system pumping and distribution.

Study Plan at 96. The State of Utah should evaluate the benefits and costs under different energy price scenarios. Energy prices have been volatile in the past. Furthermore, over the lifetime of the project, climate change regulation is likely; this regulation would add an additional fee to any carbon-intensive power supplies. As described in our comments on the Air Quality study, Utah relies on carbon-intensive energy. The Socioeconomic analysis should perform the benefit/cost analysis using several different energy costs, including a cost of energy that reflects a cost of carbon.

In addition, we find it improbable that the power generated by the pipeline would qualify for green power premium charges, particularly if the pumping stations use carbon-intensive sources of energy to convey the water to the pipeline's high point. At present, Utah does not require Renewable Energy Credits (RECs), and neighboring states, where RECs might be sold, have varying regulations. For example, in Colorado, Xcel Energy's Cabin Creek pumped-hydro facility does *not* qualify for RECs. Likewise, a hydro facility might qualify for RECs in Nevada, but not in Oregon. The benefit/cost analysis should be performed using a regular electricity rate, *not* the green power rate. In order to use the "green power" pricing premium, the study must provide sufficient data (including states where power could legally be marketed) as justification. Furthermore, the concept that the energy generated would receive a carbon credit[29] implies that carbon is regulated and accompanied by an economic cost. If *carbon credits* are available and modeled, the cost of carbon should also be modeled.

These analyses will allow FERC and project proponents to evaluate the sensitivity of the benefit/cost analysis to different power rates, and are essential for making an informed decision on the project.

VIII. Overarching Concerns

The issues described above, particularly the Draft Reports' failure to adequately evaluate (i) the LPP participants' true need for water, (ii) reasonable conservation alternatives to the proposed pipeline, (iii) the impacts of climate change and legal constraints to water availability, (iv) the LPP's indirect greenhouse gas emissions, and (v) a rigorous and realistic cost/benefit analysis that is based upon substantiated and quantified data, represents critical flaws in the evaluation of the Lake Powell Pipeline. These issues are pervasive throughout the 22 studies, but are particularly relevant to the studies considered above.

[29] Utah Board of Water Resources, 2011. Draft Socioeconomics and Water Resource Economics Study Report, Section ES-1.1.2.

Additionally, we believe it is essential that the NEPA process is transparent and integrate the concerns of affected stakeholders, including the interests of potential project proponents, conservation organizations and the general public. Indeed, the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Resources Implementation Studies (Mar. 10, 1983) specifies that "[i]nterested and affected agencies, groups, and individuals should be provided opportunities to participate throughout the planning process" and that "[r]eview and consultation with interested and affected agencies, groups, and individuals are needed in the planning process." Recently, the Council of Environmental Quality's Draft *Updated Principles and Guidelines for Water and Land Related Resources Implementation Studies* reaffirms this principle and directs Federal agencies to

> collaborate fully on water resources studies with other affected Federal agencies and with Tribal, regional, state, local, and non-governmental entities to realize more comprehensive and better informed problem resolutions.

Standard M, p. 13.

FERC's public outreach in this docket falls far short of the broad collaboration in water and land resource planning contemplated in these guidance documents. FERC appears to have done little to provide stakeholders and the public notice of this opportunity to comment on the Draft Reports. Indeed, most of the pertinent primary-source information regarding this commenting opportunity is found buried in the State of Utah's Initial Study Report Meeting Summary.

Additionally, FERC's website is difficult to use, frequently unavailable, and omits key information. In fact, the LPP is not found in FERC's list of Southwestern regional projects.[30] Only a word or docket number search – thereby requiring prior knowledge of the project – reveals the existence of the LPP preapplication process. But the word search only reveals the notice of the preliminary permit application,[31] and omits this opportunity to comment on the Draft Study Reports. Indeed, the most comprehensive single web address providing information about this comment opportunity appears to be maintained by the non-profit conservation group, Citizens for Dixie's Future.[32] In our view, FERC is far behind its sister agencies in providing accessible information to the public regarding opportunities to comment on application processes.

Finally, FERC and the other permitting federal agencies should reevaluate whether FERC is the proper lead agency to prepare an environmental impact statement for the LPP under NEPA. The Socioeconomics Study admits that the project's benefit/cost ratio is significantly less than 1 if only the hydroelectric components are considered. During the first scoping period, WRA and other conservation groups noted that the project is

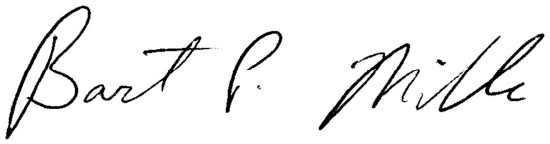
[30] http://www.ferc.gov/for-citizens/projectsearch/SearchProjects.aspx?Region=Southwest (last visited May 4, 2011).
[31] 76 C.F.R. 9770 (Feb. 22, 2011).
[32] http://www.powellpipelinefacts.org/ (last visited May 4, 2011).

primarily a *water supply* project, not a hydroelectric project, and that other federal agencies have greater jurisdiction over the project. We also noted that other federal agencies have more comprehensive knowledge of the associated environmental issues and are better suited to being the lead agency for the NEPA process. *Cf.* 40 C.F.R. § 1501.5(c) (factors for determining the lead agency include the agency's "[e]xpertise concerning the action's environmental effects"). The economic analysis of the hydroelectric project underscores this point. The lead agency should be one with more experience in water supply projects.

IX Conclusion

Thank you again for your consideration. We urge FERC to require the Utah Division of Water Resources to modify the Draft Study Reports, consistent with these comments.

Sincerely,



Bart Miller, Water Program Director
Drew Beckwith, Water Policy Manager
Stacy Tellinghuisen, Senior Water-Energy Analyst
Amelia Nuding, Water-Energy Analyst
Robert Harris, Staff Attorney
Western Resource Advocates