













Mr. Norm Evenstad Natural Resources Conservation Service 125 S. State Street Room 4420 Salt Lake City, UT 84138-1100 norm.evenstad@ut.usda.gov

Mr. Brian Parker Transcon Environmental 1745 South Alma School Road Suite 220 Phoenix, Arizona 85210 bparker@transcon.com

Comments sent via email and attachments provided via link

December 31, 2020

Dear Mr. Evenstad & Mr. Parker,

We are writing to express our opposition and serious concerns about the proposed Cove Reservoir project and its failures to comply with federal law, including the statute governing funding for NRCS-related projects. Our diverse team of organizations has carefully reviewed the proposed Environmental Assessment (EA) for the project and found an array of major problems which have been carefully summarized in our accompanying comments. We are submitting these comments to the National Resource Conservation Service (NRCS) and to the U.S. Department of Agriculture.

We are concerned that this project has been rushed in an obvious attempt to take advantage of an outgoing administration, and that the rush has led to highly problematic contradictions of federal laws. Whether these violations of federal law are intentional or an oversight warrant careful review. Our concerns are detailed in depth in the following document, and all relevant attachments can be accessed at the following link:

https://drive.google.com/drive/folders/1tzE1351DBGjd43UsImCyQ1vCXs3uPYCs?usp=sharing

Chief among our concerns is the EA's failures to comply with various federal laws, for what appears to be the express purpose of attaining more generous financing terms courtesy of the U.S. taxpayer by cloaking the true purpose of the project.

1) The proposal is a municipal water project, yet it has been cloaked as an agricultural project. The EA wildly exaggerates that acreage of agricultural project lands in Washington County and lists the areas as being used for agriculture, which has allowed project proponents to receive generous financing terms from the NRCS as per the Watershed Protection and Flood Prevention Act, PL 83-566. These exaggerations contradict the public interest and that of federal taxpayers.



The "agricultural" lands of the proposed Cove Reservoir in Washington County allow the Washington County Water District to receive extremely generous financial terms to construct a municipally-purposed reservoir, courtesy of the federal taxpayer.

These generous terms include having most of the project costs paid for by federal taxpayers, evading repayment for project costs, and having to pay a much smaller percentage of the project costs in total. This amounts to a \$22 million gift from federal taxpayers to the Washington County Water District and the Kane County Water District.

However, of these 4,900 acres in question in Washington County, just 2,000 acres of lands have actually been identified in the EA documents in Washington County, and the vast majority of these "agricultural" lands slated to receive project water are actually being used for municipal purposes, including as subdivisions, parking lots, municipal schools, and other non-rural, non-agricultural uses. Even a basic review of these lands via Google interface demonstrates that most of these lands are municipal, suburban lands. This "agricultural" area also includes land already being developed into a new LDS Temple.

This means the Cove Reservoir is a municipally-purposed project, which under federal guidelines established by Congress in the Watershed Protection and Flood Prevention Act are subject to additional provisions and financing restrictions. The NRCS, therefore, should be prohibited from funding nearly 75% of this municipal project under the claim it is agricultural in nature. This raises major questions as to how this project could get so far down the permitting road with such a glaring flaw. One explanation is that this project is being rushed during this holiday period to get it approved by the Trump Administration, as was attempted by these same two water agencies one year ago for the proposed Lake Powell Pipeline debacle.



Although one might point to the agricultural lands in Kane County as justification for the Cove Reservoir's supposed agricultural nature, a closer inspection of those lands raises more questions than are answered in the EA. Appendix B of the EA shows that much of the Kane County agricultural lands are actually upstream of the proposed Cove Reservoir, meaning reservoir water cannot get to the lands for irrigation. The EA lists these Kane County lands because the water rights *can* be used in some of these areas. However, that doesn't mean these lands *will* be used by this irrigation water.

If these upstream lands were irrigated with reservoir water, then the water would have to be pumped upstream to Kane County farmers, which come with significant energy costs that would deflate the value of subsequent crops grown with this water below profitable market values. The EA also notes that the Kane County Water District doesn't actually own the water rights associated with these lands, raising major questions about the legitimacy of the agricultural test required under the Watershed Protection and Flood Control Act to confer these generous financial benefits to project partners, most notably the Washington County Water District. This also raises legitimate questions as to why the Kane County Water District is involved in this project if the water rights supposedly being used for agriculture in Kane County are not owned by this water district.

Because the Kane County Water District does not own the irrigation water rights to be used inside Kane County, what assurances does the public have whatsoever the project water would be used for irrigation? Why does the EA have no substantive information about the water rights holders inside Kane County, and why are there no formal agreements with them regarding this proposed use of federal funding?

The EA does make vague references to the idea that water flowing into the reservoir would be exchanged for water used on upstream irrigation lands, but if this was truly the case, then a formal exchange agreement must be created between the NRCS and irrigators that formalizes the exchange of water rights to allow upstream lands to be irrigated. Such exchange agreements are not uncommon in Utah and have been entered into and are being executed across the Salt Lake Valley, particularly between local irrigators and municipal water suppliers in Salt Lake County. Why has the NRCS failed to construct such an agreement to ensure that USDA funding is not used inappropriately?

It appears the lands in Kane County are included as project lands to count as agricultural benefits to justify the generous agricultural financing being offered as a gift to the Washington County Water District, courtesy of the U.S. taxpayer. But the public and its decision makers are offered no substantive information to ensure these funds are being used appropriately.

2) This municipal project and its financing is in violation of the agricultural financing requirements of the Watershed Protection & Flood Control Act. The EA's failure to address any population growth or document the obvious urbanization of Washington County agricultural lands has created the appearance that the WCWD and the KCWD attempted to cloak a municipal project in the sheep's clothing of an

agricultural project in an attempt to hoodwink local and federal taxpayers into paying agricultural financing rates for a municipal project. This is an obvious violation of the Watershed Protection and Flood Prevention Act (Public Law 83-566).

The proposed use of \$22 million in federal agricultural funding for a municipal project raises many questions about why the USDA and the NRCS would entertain using such a large sum of its precious \$148 million funding stream for a municipal reservoir. In past years, the NRCS financed 48 projects with PL 83-566 funds, averaging roughly \$3 million per project. The fact that the NRCS is now proposing to spend \$22 million on this single municipal project, raises questions about equity and basic fact checking on the part of the U.S. Department of Agriculture.

Possible clues about the background of this project can be gleaned from a recent water district meeting. At the December 10, 2020 Kane County Water District Board Meeting, the board members of the water district and its executive director held a discussion about the proposed Cove Reservoir and fielded questions from the public. Critical details were revealed about the Cove Reservoir, including the primary role the Washington County Water District has played for several years in the planning for the proposed project. This discussion supports criticism that this project has been planned for a long time as a municipal water project, but is being cloaked as agricultural by hiding behind the more rural water agency, the Kane County Water District.

This December KCWD board meeting revealed that the WCWD's involvement is more than just tangential as was conveyed by the executive director of the Kane County Water District, Mr. Mike Noel, who noted that:

Washington County has dealt with this for years and years – they've really led this entire effort.

Because the Washington County Water District is currently sitting on more than \$200 million in cash reserves, one wonders why the federal government would entertain having the NRCS fund nearly 75% of the Cove Reservoir project costs. We believe a full review of how this financing proposal was negotiated would be in the public interest, particularly given all the other many qualified applicants across the U.S. who are competing for the NRCS's \$148 million in project financing. This review should include details of who was involved in this negotiation, what if any due diligence was conducted, and what if any political pressure might have been brought down upon NRCS officials to endorse the proposed course of action in the Cove Reservoir EA.

These observations raise many questions about why the Washington County Water District is effectively calling the shots on the proposed Cove Reservoir, but is only listed

as being a cooperating agency, just like several federal agencies. Statements made regarding cost-sharing for project costs in the EA indicate that both Washington County Water District and the Kane County Water District are both paying for local project costs, approximating \$8 million.

This raises additional questions that merit consideration by the USDA. If the Washington County Water District is only a cooperating agency, why should they pay anything for a proposed agricultural project given that they are a municipal water supplier? Perhaps more important, why is the EA entirely silent on the proportion of local costs to be paid by these two water districts? Has an agreement already been made between these two entities without public noticing requirements, as per Utah law, at their respective board of director meetings? Would Washington County Water District pay for a larger portion of the projects costs because of the service performed by Kane County Water District in framing the proposal as being agricultural in nature?

3) Because the Cove Reservoir is actually being proposed for the benefit of municipal water users, the entire NEPA process must be reinitiated from the scoping phase and include the preparation of a full EIS, to alert the region's residents to the municipal purpose of the proposed reservoir. Proponents of the Cove Reservoir project, the Washington County Water District and the Kane County Water District, have spent the better part of the last 15 years trying to convince state and federal decision makers that both counties need more municipal water because of population growth. These water districts have invested millions of dollars and thousands of hours in state and federal meetings trying to convince the public and its decision makers that the proposed Lake Powell Pipeline was essential to their future because of rampant population growth occurring on agricultural lands.

In 2020, the Lake Powell Pipeline underwent a federal permitting process conducted by two separate federal agencies, which generated more than 10,000 letters of opposition, including by six other Colorado River Basin states and some of America's largest municipal water suppliers. One of the many concerns cited by critics of these two Utah water agencies' Lake Powell Pipeline proposal was their failure to embrace basic water conservation practices to reduce their wasteful municipal water demand – above 300 gallons per person per day according to Pipeline proponents themselves.

We find it particularly disconcerting that the proposed Cove Reservoir plans entirely avoid any discussion of municipal water use. It gives the appearance that project proponents sought to avoid more controversy about their wasteful municipal water waste by cloaking this project as an agricultural water project. Using agriculture as a shield to avoid criticism and secure more generous financing is offensive to the many residents who support local agricultural operations and wish to see more agricultural

open space protected for future residents. Compounding this offense is the fact that this municipal reservoir used this agricultural disguise to receive a disproportionately large amount of federal funding from the NRCS, effectively raiding funds from the many other very worthy applicants who truly seek to protect their agricultural operations and who exercise more integrity in submitting their applications for funding to the NRCS.

4) The project would harm threatened and endangered species, in contradiction to vague and unsupported claims of habitat benefit by project sponsors. Although the proponents of the Cove Reservoir have devoted substantial marketing resources to the claim that the reservoir would benefit threatened and endangered species, the science and information presented in the EA paints a completely different story, as do statements made by the sponsoring agency.

This marketing appears to be an attempt by the WCWD and the KCWD to grease the wheels with the incoming Biden Administration by ameliorating concern over impacts to threatened and endangered species. This is a major benefit to the Washington County Water District since the East Fork of the Virgin River just downstream of the new proposed dam and reservoir flows through Zion National Park and a congressionally-designated wild and scenic river. Statements made in the December 2020 KCWD board meeting support the criticism that the Washington County Water District and its water rights would not generate benefits to threatened and endangered fish species. It's also clear from these statements that the Kane County Water District would use its water rights for instream flow benefits.

During this meeting, a member of the public asked for more detail about the potential benefits from water flows to fish and wildlife and one of the board members of the KCWD answered:

Member of the public: Could I just ask a question about the fish flows? ... There's actually no water delivery schedule in the EA. There's one email citing information estimating cfs flows, but there's no real information about when the water is going to be released and what controls are going to exist to make sure that will benefit these fish.

KCWD Board Member: You're right...The only way that there is a benefit downstream is when Washington County releases water from the reservoir in the summer. Otherwise there is only 2 cfs of water going down the stream...But the only time that benefits – at least from increased flow – would happen during the summer is if Washington County starts releasing water.

The executive director Mr. Noel joined in to confirm this fact, and added further details regarding the project's nonexistent fishery benefits to the downstream threatened and endangered fish and the designated wild and scenic river inside Zion National Park. His confirmation also provides further evidence that the Cove Reservoir's local sponsor, the Kane County Water District, is not providing meaningful environmental benefits whatsoever:

That's absolutely right, Merlin, and one of the things that Washington County wanted to review with us – and I went down with Zachary Renstorm [General Manager of the Washington County Water District] and another gentleman from the district here...The one thing you will see, for the potential for water flows, is the EA talks specifically about seepage and evaporation. It is anticipated the seepage would actually return to the channel. So you would get a constant seepage of water over the summer and that would be the part that would benefit – we don't know how much that would be, but there's always some seepage from the reservoir that is part of the way they build the dam structure.

Since the water in this reservoir would mostly go toward municipal purposes, it would likely be drawn down year-round, resulting in miniscule additional river flows that would provide effectively no habitat benefits to the endangered Virgin River woundfin or chub. In fact, there is nothing in the EA that commits either Washington or Kane County Water District to deliver an adequate amount of water to these endangered fishes' habitat, and the executive director of the Kane County Water District even said in a public meeting that the EA's espoused fish benefits are likely overstated. It appears that the EA vaguely stated that this project would benefit these endangered fish as a means to placate public concern and ease the passing of this project.

The EA is intentionally vague on water project delivery schedules, which allows project proponents to alter their use of said water without violating any of the standards of a National Environmental Policy Act (NEPA) permitted decision. This is not our interpretation of the purpose of NEPA.

This is made all the worse by the fact that the biggest threat to the continued existence of these fish is widely considered to be water diversions, something the EA effectively ignores. Both these endangered species rely heavily on adequate and appropriately timed spring runoffs to successfully spawn. This project, which would divert water during this critical spring flow period in order to fill the reservoir (and potentially thereafter), could significantly harm these species' ability to reproduce, thereby driving them further toward extinction. A full EIS is required to properly evaluate the effects this project would have on these fish.

Furthermore, any NEPA work for the Cove Reservoir should be based on actual data analysis or published studies. Instead, the EA cites to personal emails summarizing private phone calls from paid project consultants does not rise to the level of suitable NEPA analysis. If the NRCS cannot oversee or are unwilling to establish a minimum level of transparent data analysis that is cited in NEPA documents, it should no longer involve itself in this project and the Cove Reservoir should not be considered further.

5) Project proponents are proposing to create a new hydropower dam and reservoir, yet they have failed to consider their requirements to receive an operating license, conduit exemption, or a small hydro exemption from the Federal Energy Regulatory Commission (FERC). The EA states that the proposed project includes plans to move and re-operationalize an old, currently inoperable hydroelectric power plant, named the Glendale plant, thereby generating between 200,000 and 540,000 kW of power. However, the EA does not mention that the project needs to receive a license or exemption from the Federal Energy Regulatory Committee (FERC) to construct and improve these new and existing hydropower plants. In fact, the EA entirely avoids any mention of FERC.

A FERC exemption does not mean that Cove Reservoir project applicants need not contact FERC and may proceed forward with their project. An exemption means that project applicants must notify the public and FERC to request an exemption, and these details must be disclosed in advance in the Cove Reservoir project NEPA permitting.

Only FERC can determine whether or not a project is allowed an exemption, meaning that the KCWD and NRCS must engage both the public and FERC in this permitting process. The EA's failure to identify the steps necessary to receive an exemption constitutes a serious permitting oversight and a significant failure by the permitting agency and local organization. It is a clear example of arbitrary and capricious action. Since more detailed permitting must be pursued, a full EIS should be conducted.

6) The proposed reservoir should be rejected outright for its gross failures in complying with federal laws and no further consideration should be made without a detailed Environmental Impact Statement. Unfortunately, the five major failures summarized above are just the tip of the iceberg and raise major questions of propriety for the proposed reservoir. The many pages that follow here detail many other issues in the Cove Reservoir EA. The scale and scope of these problems indicates that this project would have significant immediate and cumulative impacts on the natural and human environment. For this reason, a full EIS should be conducted. A project with such potential impacts cannot be approved with a cursory and flawed EA. Doing so would

constitute a violation of NRCS's duty and would be a major disservice to every taxpaying American.

Thank you for the opportunity to provide comments on the proposed Cove Reservoir. We hope these comments can be considered in the context of how they were prepared – with the utmost respect for and service to the public interest. Should you have any questions or seek additional input we would welcome the opportunity to discuss our concerns with you in a virtual format or via teleconference.

Sincerely,

Zachary Frankel

Executive Director
Utah Rivers Council

Jen Pelz

Rio Grande Waterkeeper & Wild Rivers Program Director WildEarth Guardians

John Weisheit

Conservation Director Colorado Riverkeeper Living Rivers

Steve Erickson

Policy Advocate
Utah Audubon Council

Douglas W. Wolf

Senior Attorney
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Gary Wockner, PhD

*Director*Save the Colorado: Colorado River
Waterkeeper Network

Kyle Roerink

Executive Director
Great Basin Water Network

Eric Balken

Executive Director
Glen Canyon Institute

I. The proposed agricultural purpose and need for the Cove Reservoir, as described in the Environmental Assessment, is contrived and highly questionable because the majority of project agricultural lands are actually suburban lands.

The Cove Reservoir Environmental Assessment (EA) is presented as an agricultural project to benefit local area farmers in both Washington and Kane Counties. A number of additional purposes, benefits and amenities of this proposed project are based on this precept – that the proposed reservoir is being pursued for the benefits of agriculture and local farmers and ranchers. However, this appears to just be marketing by some of the project partners to avoid proper consideration and full disclosure of the real purpose of the proposed Cove Reservoir, which is clearly for municipal and industrial development.

The purpose and need for the proposed reservoir are listed on page 9:

The purpose and need for this project is to improve agricultural water management by allowing for reliable water storage and irrigation water delivery for approximately 1,110 acres of agricultural lands located in western Kane County and 4,958 acres in Washington County, Utah, representing a potential crop increase of up to 25 percent.¹

The sponsoring local organization is the Kane County Water District (KCWD) in cooperation with the Washington County Water District (WCWD). These proponents have described, in public online meetings and in their media statements to the public, this project as agricultural. However, this purpose appears to be contrived because the agricultural benefits of the project lack the minimum threshold as defined in the Watershed Protection and Flood Prevention Act. This revelation requires some background explanation.

For the last 15+ years, both the KCWD and the WCWD have been integrally involved in a massive new proposed water project in the Cove Reservoir project area, the Lake Powell Pipeline. These entities, alongside the Utah Division of Water Resources, have invested some \$40 million of public funding in preparing studies and documents for the proposed Lake Powell Pipeline.

The Lake Powell Pipeline was proposed to address what these two Cove Reservoir project participants have repeatedly called a looming municipal water crisis, in repeated public hearings, legislative presentations and correspondences, to the public and the news

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¹ EA page 9.

media and in social media channels. Both the WCWD and the KCWD claim that the municipal population growth of Washington and Kane Counties merits water development of the Colorado River through the Lake Powell Pipeline to avoid a forthcoming water crisis.

In June 2020, the Bureau of Reclamation released the Draft Environmental Impact Statement (DEIS) for the proposed Lake Powell Pipeline, a project for which the WCWD is the chief sponsor. In describing the purpose for this 140-mile-long pipeline, the Bureau framed the municipal growth occurring in Washington County, including in the "agricultural" lands listed as project area in the Cove Reservoir, as likely to experience a deficit of future water supply by virtue of population growth.

The following table from Appendix B of the DEIS for the Lake Powell Pipeline estimated the extent of future water deficits inside Washington County under various climate change scenarios.²

Table 7.2-1 Projected Water Supply Deficit in 2060 for Washington County Water Conservancy District WCWCD 2060 Reliable Climate WCWCD 2060 WCWCD 2060 Climate Change Annual Water Supply Demand and Supply Deficit Change Type Scenario^(h) (acre-feet)(4) Reserve (acre-feet) (acre-feet) 71,516 112,997 10th Hotter, Drier 88,022 30ds 96,492 98,727 Median 184,513 85,786 50th 112,196 72,318 70th Warmer, Wetter 130,888 53,625 90sh

Figure 1: LPP DEIS Water Deficit in Washington County

Notes:

(a) Average yield with up to 10 percent shortage represents reliable yield for WCWCD projects.

(b) Virgin River natural streamflow scenarios provided by Reclamation (2014).

Key

WCWCD = Washington County Water Conservancy District

The deficit of water inside Washington County is a function of increasing municipal development, including through the development of existing agricultural lands. It would be hard to cite the number of times this claim of future water shortage by virtue of municipal growth has been made in local media stories and legislative meetings. Most recently the general manager of the WCWD noted on November 28, 2020 in the St. George News that:

"We've gotten to the point that we've conserved a big chunk of water already, and we're still 10 years out from the [Lake Powell] pipeline," Renstrom said.

² Lake Powell Pipeline Draft Environmental Impact Statement, Appendix B, Bureau of Reclamation. (2020). https://cdxnodengn.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=297778.

"When we start projecting 10 years out, it shows we're going to get to a critical situation that will require us to have the Lake Powell Pipeline."

Yet the Cove Reservoir EA and NRCS have failed to identify the decline of agricultural lands inside Washington County in the face of this municipal growth. The conversion of agricultural lands to municipal development in Utah and the U.S. is a major problem for farmers and ranchers seeking to continue their agricultural operations. There are some 1,800 land trusts in the U.S., seeking to protect the working lands for future agricultural uses through an array of administrative tools including the dedication of conservation easements. The NRCS itself is often approached for funding of conservation easement proposals to protect existing agricultural operations, including inside Utah.

It is therefore ironic that the majority of lands inside Washington County identified as being agricultural in nature are actually mostly municipal lands have already been developed at the time of this publication of the EA. In fact, so much land has been developed through existing municipal growth that the proposed project fails to meet the minimum standard of agricultural benefits, as defined in the Watershed Protection and Flood Prevention Act (explored further in Section II).

A. The majority of agricultural lands in the Cove Reservoir project area, as defined in the Environmental Assessment, have already been converted to municipal uses, thereby violating both letter and spirit of National Environmental Policy Act and the Watershed Protection and Flood Prevention Act.

The amount of agricultural acreage to be served by the Cove Reservoir EA is a critical measurement in determining the agricultural benefits of the project. If a proposed project does not accrue a minimum threshold of agricultural benefits, the generous financing terms offered by the NRCS through the Watershed Protection and Flood Prevention Act do not apply. The Cove Reservoir EA has fundamentally overestimated the benefits to agriculture, raising major questions about why the NRCS has entertained extending generous agricultural financing terms for a municipal water development project.

Appendix B of the Cove Reservoir EA shows the project area inside Washington County that would receive the "agricultural" water from this project. This land area straddles the municipal boundary of St. George and of Washington City, both cities that have been proposed to receive water from the Lake Powell Pipeline because of municipal growth occurring in their city boundaries, including inside the Cove Reservoir project area.

These project lands are listed in the EA as constituting a total acreage of some 4,900 acres of agricultural project lands.

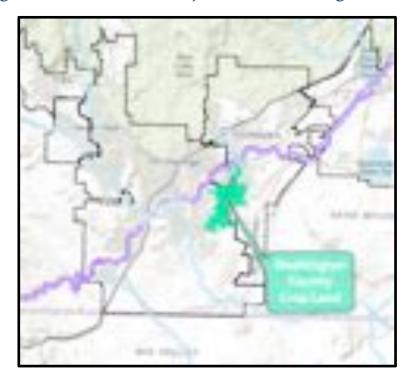


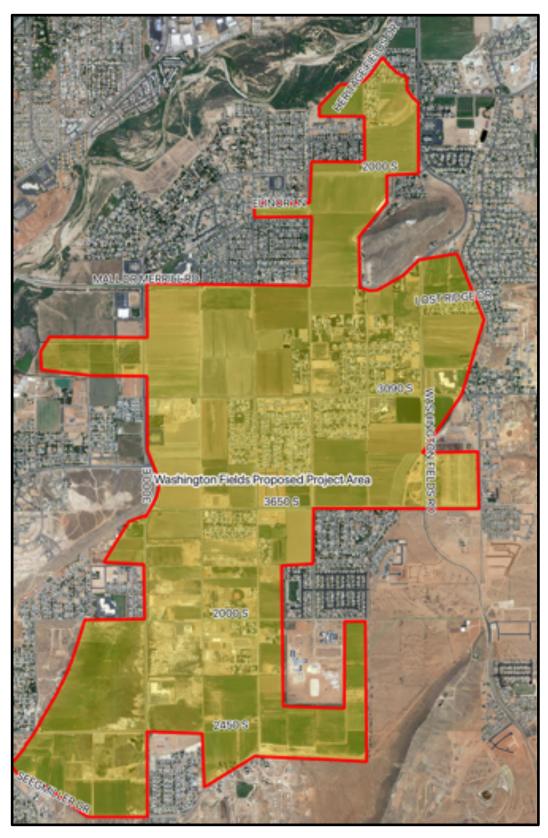
Figure 2: Cove Reservoir Project Area in Washington County

However, review of the lands in question demonstrates that this acreage claim is erroneous and the agricultural uses of these lands are greatly exaggerated. The layer of these lands was acquired in a GIS map and overlaid in Google. The following image is a map of the proposed project area in Washington County overlaid onto a satellite image from Google Earth, taken in 2020.

The proposed Washington County agricultural project area is outlined in red and highlighted in yellow. The EA claims that this area is agricultural land. However, it is evident from the map that much of this land has already been converted into subdivisions, strip malls, and parking lots.

After measuring the GIS layer of the Cove Reservoir lands, it is clear that there are not 4,900 acres of agricultural lands inside the Washington County project area. In fact, there are just 2,022 acres of project lands for the Cove Reservoir area inside Washington County, assuming that 100% of this contiguous area shown by red boundary lines is in agricultural land holdings. Unfortunately, this assumption is itself erroneous, as one can clearly see the abundance of municipal development accruing inside the project area from the Google Earth imagery.





This reduction in agricultural land square footage is easy to determine. Google's measurement tools allow a user to ascertain how much area of these Washington County Cove Reservoir lands are actually in agricultural operations. This is how the project area was measured. Since Google also allows users to build a customized, measurement of square footage using its onscreen controls, it is also easy to remove the existing municipal developments of the Cove Reservoir agricultural project lands, as shown below.

Figure 4: Google allows users to measure square footage of landsat imagery which was utilized to document the conversion of agricultural lands to new municipal uses and estimate total acreage losses inside Washington County.



After removing the obvious subdivisions, schools, parking lots and other developments as indicated in the google images above, the actual remaining agricultural lands remaining in the Washington County portion of the Cove Reservoir project area are greatly diminished. Current developments inside the project lands, at least as of the time of this Google Earth image, reduce the apparent agricultural lands remaining in the project area down to just 1,616 acres, a 3,300-acre reduction in project area from what is erroneously described in the Cove Reservoir EA as 4,900 acres.

However, it would be unwise to rely entirely upon this landsat imagery shown in Google to determine compliance with NEPA and the Watershed Protection and Flood Prevention

Act and the generous financing terms extended by NRCS to the Washington County Water District. Because land development can happen quickly, field work was conducted in December of 2020 to visit and document the state of "agricultural lands" presented by project sponsors in the Cove Reservoir EA. Supplemental research was also conducted regarding known development of project lands, which revealed that much of the project land is now being used for municipal purposes. Some of the lands that appear to be agricultural fields in the satellite image are in fact lands that have been purchased and will soon be converted to non-agricultural use.

1. The LDS Church announced in June 2020 that a portion of the "agricultural" lands in question would be developed as the site of a new Temple.

The LDS church announced they will soon construct a new temple on lands currently in the proposed project area (on a space just to the right of the 3000 E label in the map above).³ The figure below shows the location of the new temple and demonstrates a concrete example of encroaching development.



Figure 5: New Temple Site in Washington County Project Area

³ LDS Church. "Washington County Utah Temple Site Announced." https://newsroom.churchofjesuschrist.org/article/temple-site-announced-for-washington-county-utah-temple



Figure 6: Photograph of New Temple Site from Field Survey

2. A new public middle school has already been developed inside the "agricultural" lands of the Cove Reservoir EA.

This school is currently operating and has been constructed for some time, raising major questions about the due diligence the NRCS, the Washington County Water District and the Kane County Water District have been conducting regarding this proposed agricultural project. The Washington Fields Intermediate School has clearly developed a portion of the land mass previously associated with agriculture. In figure 3 above, this area appears to be open field. However, simple due diligence reveals that it is clearly not agricultural land.





Figure 8: Washington Fields Middle School

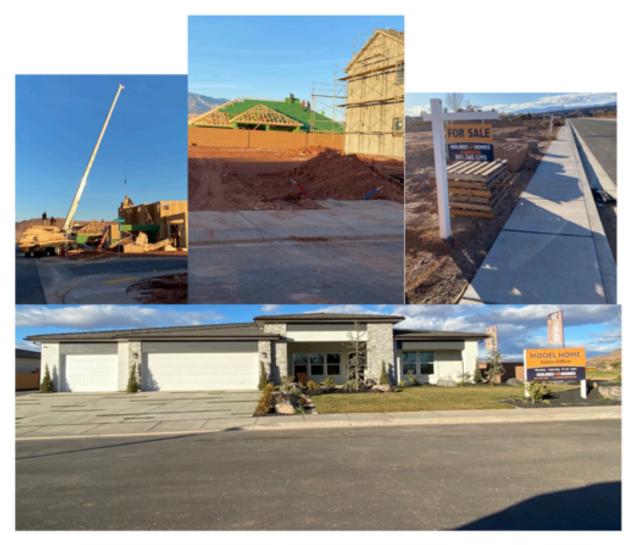


3. A series of subdivisions have already been constructed across several portions of the 1,616 acres of "agricultural" project lands, which undermine the claim that Cove Reservoir is being constructed for the purpose of agriculture, as described in the EA.

Casual visits to the project lands shown in Appendix B of the Cove Reservoir EA and overlain with Google Earth imagery clearly demonstrate that there is immense pressure

on these lands to be converted to municipal development. Several regions of the agricultural lands of the EA demonstrate a variety of municipal development in different stages of construction, with much of it have already been converted to suburban development and in many cases residents have moved into their new homes. These developments are happening so quickly that even Google's satellite image did not show them. Yet, our field survey revealed that these developments do exist and have converted what used to be agricultural lands inside the project area.





We were not able to estimate the amount of agricultural land acreage that has been developed through the developments described above. Our estimate is that less than 1,000 acres of land inside the Washington County Project area remain agricultural. The EA fails to consider, evaluate or analyze the conversion of agricultural lands inside

Washington County, raising major questions about the competency of project proponents to properly comply with both NEPA and the Watershed Protection and Flood Prevention Act in order to qualify for generous agricultural financing terms for a municipal development. This failure to address the municipal development of lands by project proponents, who themselves have actively claimed that current and future municipal land development merits future water development, raises major questions that the NRCS and the Department of Agriculture have failed to consider.

Although one might at first think that the WCWD and the KCWD "didn't know" that these lands are being rapidly developed, this presumption strains credulity. Since the WCWD is the Washington County project partner, in light of its active engagement in trying to convince Utah legislators that there is a looming municipal water crisis inside Washington County it is unlikely this entity could feign ignorance about this municipal development.

B. Of the minority of agricultural lands remaining in the Cove Reservoir "agricultural" project area, the vast majority are under immense development pressure that will lead to their imminent municipal conversion, thereby violating both the letter and spirit of National Environmental Policy Act and the Watershed Protection and Flood Prevention Act.

The EA assumes that the life of the project would be 100 years,⁴ thereby meaning that the EA expects there to be over 6,000 acres (or at least some similarly high quantity) of agricultural land in the Kane and Washington County project areas up until the year 3020. This is pertinent to the project's purpose and need because, as described above, the EA states that the purpose of the project is to meet agricultural water demand. Yet, the EA does not provide any documentation or analysis to demonstrate that farmland would exist in the proposed project areas throughout the life of the project, meaning that the NRCS failed to ensure the objectivity and accuracy of its analysis. Since the NRCS entirely failed to consider an important aspect of the problem, its analysis was arbitrary and capricious.

This is particularly troubling because even a cursory look at the evidence demonstrates that farmland is disappearing quickly in both Washington and Kane Counties, thereby eliminating the need for the proposed project. The amount of agricultural lands lost in the Google image since the time of acquisition of the satellite image and publication of the Cove Reservoir EA demonstrates how quickly urban lands are being converted to

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⁴ EA page S-4

municipal lands. The wishful claim that the agricultural project duration for these same agricultural lands is 100 years is hard to imagine and is completely undocumented in the Cove Reservoir EA by any data, studies or evidence of any kind.

The conversion of farmland to suburban/urban land is common across the state. It has been shown by the American Farmland Trust that Utah is rapidly losing farmland due to population expansion.⁵ Furthermore, the Kem C. Gardner Institute projects that Washington County will experience some of the greatest population growth in the state in the next four decades,⁶ meaning that Washington County will continue to rapidly lose farmland. This is especially true for prime development areas like the proposed project area. It is unlikely that much farmland will exist in the proposed project area in 10 years, much less so in 100 years like the EA anticipates.

This fact, which was ignored by the EA, constitutes a serious problem for the proposed project's purpose and need. Since agricultural lands are disappearing quickly in the proposed project areas, it is factually incorrect to say that there will be a need for additional agricultural water in these same areas throughout the lifetime of the project. Therefore, the EA provides an incorrect purpose and need statement and does not rely on objective and accurate information.

Furthermore, the NRCS entirely failed to consider an important aspect of the Cove Reservoir project (the rapid depletion of agricultural lands in the project area), thereby acting arbitrarily and capriciously.⁷

This is especially egregious because the NRCS's own guidelines direct them to use both "aerial photos and published maps" and map overlay methods when evaluating projects.⁸ These are the two exact techniques we used to identify a problem with the EA (the rapid depletion of agricultural lands in the project area) and should have been used by the NRCS in the EA. The NRCS's failure to do this proves they acted arbitrarily and capriciously and proves that they did not make a special effort to present data accurately and objectively.

A casual visit to these "agricultural" lands clearly demonstrates that there are additional plans and activities currently being implemented to convert the Cove Reservoir project lands into municipal development.

⁵ American Farmland Trust. "Farms Under Threat: The State of the States" (2020). https://farmlandinfo.org/publications/farms-under-threat-the-state-of-the-states/

⁶ University of Utah Kem C. Gardner Policy Institute (Gardner Institute). 2017. Utah's Long-term Demographic and Economic Projections. University of Utah, Salt Lake City, Utah.

⁷ The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008)

⁸ NRCS. Guide for Environmental Assessment. (1977). Pages 7 and 13.

Figure 10: A Proposed Development Site in the Washington County Project Area, Identified During Field Survey



This is also true for agricultural lands in Kane County, where the East Zion Initiative would likely increase development pressure. The East Zion Initiative is a public-private partnership that embraces the "opportunity to protect the integrity of the greater Zion experience on the east side of the park that extends and connects to existing visitor services in our Springdale and Kanab gateway communities" and highlight the unique agricultural heritage of the area. The project would provide much needed visitor services and orientation for over 1 million visitors approaching Zion National Park through its east entrance and provide hands-on agricultural experiences.

The project vision includes construction of Applecross Station, a 7,000-square-foot East Zion Visitor Contact Station, where visitors can get park information and backcountry permits and access new trails envisioned on land adjacent to the park. The Contact Station would include a museum, food, a theater, restrooms and a park store.

The feasibility of a park and ride and shuttle service between Applecross Station and the visitor center in Zion Canyon is being explored as part of the project to alleviate parking and traffic congestion inside the park and through the Zion-Mount Carmel Tunnel.¹⁰ The broader vision is to connect Kanab to St. George through Applecross Station and Zion Canyon via an electric shuttle and transit system. The figure below demonstrates what the planned transit system looks like.

⁹ https://zionpark.org/projects/founding-zions-next-100-years-through-the-east-zion-initiative/

¹⁰ http://utahcleancities.org/evzion-2/

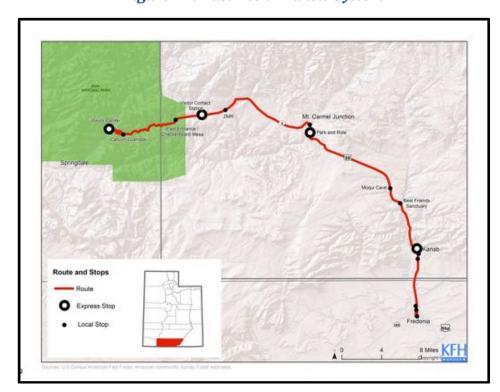


Figure 11: East Zion Transit System

The McLaws family, founders of Zion Mountain Ranch, are working with leaders from Kane County, the Kanab BLM Field Office, the Utah Department of Transportation, the Governor's Office of Economic Development, the Utah Office of Tourism, Zion National Park, and the Zion Forever Project.

Although the East Zion Initiative is intended to be a sustainable economic development project within a conservation framework, it has the potential to draw more visitors to the east entrance of the park and create development pressure/economic opportunities in the gateway communities between Applecross Station and both Bryce Canyon National Park and Kanab. This would likely lead to the conversion of farmland in the Kane County project area as local towns begin capitalizing on new tourist based industries (i.e. food, lodging, etc.).

This unaddressed fact will significantly affect the quality of the human environment by potentially eliminating any need for the proposed project, thereby requiring a full EIS.¹¹ The EIS should examine how many agricultural lands will remain in the proposed project areas during the lifetime of the proposed project and whether there are enough remaining lands to still require the proposed project.

¹¹ 7 CFR § 650.7

C. Because the Washington Fields agricultural area is being rapidly urbanized, the conversion of agricultural water to municipal uses in Washington County should be carefully considered and analyzed to determine how much water is available to the new municipal uses through the completion of an EIS.

The 1993 Virgin River Basin Plan, the State of Utah's most current Water Plan for the region of the Cove Reservoir, summarizes the water usage of the region quickly:

Total water diversions are culinary, 20,330 acre-feet; secondary, 15,960 acre-feet and irrigation, 123,300 acre-feet for a total of 159,590 acre-feet.

This Water Plan was prepared by the Utah Division of Water Resources, which indicates clearly that in 1993 there were a total of 123,300 acre-feet of water being used by irrigated agriculture at the time. The 1993 Plan reported that agricultural water use in Washington County alone was 87,800 acre-feet. This estimate aligns with data from the USGS that puts the Washington County's 2010 irrigated water use at roughly 87,000 acre-feet and their 2015 irrigated water use at roughly 55,000 acre-feet. The 2017 Census of Agriculture released by the Department of Agriculture states that in 2017 there were 12,984 irrigated acres in Washington County. Here

These data points support the clear observation of the challenges facing agriculture, particularly in regions experiencing rapid municipal growth, such as Washington and Kane Counties. Agricultural lands are being rapidly converted to municipal uses and the water from these lands is being acquired for municipal uses. This conversion has been documented repeatedly by a number of credible institutions.

In 2015, the Legislative Auditor General completed an 18 month-long audit of the Utah Division of Water Resources. Among their many concerns, the auditors noted that the agency failed to document the conversion of agricultural lands to municipal development and the growth in municipal water supply occurring as a function of this land transfer. Auditors went so far in forecasting the growth in municipal water sources as to title Chapter 4 of the Audit in a manner offering clear direction to an agency with a

¹² Utah Board of Water Resources. "Utah State Water Plan Kanab Creek/Virgin River Basin." (1993).

¹³ United States Geological Survey. (2019). Water Use Data. Retrieved from https://water.usgs.gov/watuse/data/index.html

USDA, National Agricultural Statistics Service. 2017 Census of Agriculture – County Data, Utah, Table 10.
 https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1, Chapter 2 County Level/Utah/s
 t49 2 0010 0010.pdf

demonstrable track record of fabricated data and failing to communicate facts to decision makers:

The Growth in Water Supply Should Be Reported to Policy Makers.

Auditors noted that the Division of Water Resources had failed to account for the growth in municipal water supply as cities urbanize onto farmland, thereby converting the agricultural water supply to urban uses. The conversion of irrigated agricultural lands to municipal landscapes is a common occurrence in western landscapes and is happening across the State of Utah. It has been estimated by the American Farmland Trust that Utah loses 30 acres of farmland each day due to development from population expansion.¹⁵

This growth in municipal water was documented in the 2015 Audit:

The state's municipal water supply routinely grows each year. The main source of additional supply for M&I will come from converting agriculture water to municipal use, however, some water providers also have the ability to expand their current capacity. ¹⁶

This Chapter is pivotal to findings by the Auditors that the Division of Water Resources staff have intentionally been ignoring this growth in water supply occurring as irrigated farmlands are developed into urban lands:

The division has not attempted to identify the incremental growth in supply that will occur as municipalities develop additional sources of water. That additional supply will mainly come from agriculture water that is converted to municipal use as farmland is developed.¹⁷

It appears the proponents of the Cove Reservoir have taken a playbook from the Utah Division of Water Resources in seeking to advocate for a costly spending proposal for an "agricultural" water project, which in truth is a municipal water project. It would be relatively easy for these proponents to calculate the amount of water that agricultural conversion would provide in the future.

The 2016 Lake Powell Pipeline Water Needs Assessment prepared by the Utah Division of Water Resources states that:

¹⁵ American Farmland Trust. "Farms Under Threat: The State of the States" (2020). https://s30428.pcdn.co/wp-content/uploads/sites/2/2020/05/AFT FUT StateoftheStates-1.pdf

¹⁶ Legislative Auditor General. (2015). A Performance Audit of Projections of Utah's Water Needs (Report No. 2015-01).

¹⁷ Legislative Auditor General. (2015). A Performance Audit of Projections of Utah's Water Needs (Report No. 2015-01).

The portion of Washington County most likely to be developed has a duty value of 6 ac-ft per year per acre of irrigated land.¹⁸

The duty amount is the multiplier used as designed by the Utah State Engineer to calculate water use conferred to beneficial use in Utah. Therefore, via simple multiplication and using the acreage figure from the 2017 Census of Agriculture, the rough amount of water used for irrigation in Washington County can be calculated:

$$12,984$$
 acres \times 6 acre-feet per acre = 77,904 acre-feet

Some of the irrigators inside Washington County are clearly using more than this water duty since they have senior water rights and are irrigating multiple crops with their water in a given year.

This agricultural water would not be used for agriculture in the future inside Washington County if the agricultural lands themselves are sold off in coming years and converted into municipal landscapes. The Cove Reservoir EA should have estimated how many acres of farmland, and specifically irrigated farmland will be converted to urban landscapes in the coming decades inside Washington and Kane Counties.

Utah's farmland protection efforts are widely criticized for their lack of state funding and Washington County does not have a dedicated open space bond to acquire farmlands in the face of rampant development. Although efforts to protect farmland inside Washington and Kane Counties are admirable, there is no data to convince readers of the Cove Reservoir EA these efforts are sufficient to protect the farmland inside the region.

The Bureau of Reclamation in the 2020 DEIS for the Lake Powell Pipeline estimated that the population of Washington County will expand by 300,000 – 400,000 new residents. This will create immense pressure upon existing agricultural landscapes, as has been observed in Washington County, in Utah and across the United States. Yet Cove Reservoir project proponents have conveniently failed to even consider this suburban growth. It is almost a certainty that all but a small acreage of today's agricultural lands in both Washington and Kane Counties will be converted to municipal landscapes including subdivisions, strip malls, parking lots, roads, sidewalks and other urban development in the next several decades.

Outside of lands protected through permanent conservation easements and other farmland protection programs, the likelihood that Washington County can double, triple or even quadruple in population size with a concomitant increase in urban landscapes

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¹⁸ Final Water Needs Assessment. Utah Division of Water Resources (2016). Pg. 2-15.

while simultaneously maintaining all its current farmland acreages is simply not realistic. A full EIS is warranted to document the new municipal purposes of the Cove Reservoir, given that it is clear that the project is not an agricultural water project.

The observations identified above as documented in photographs of the Washington Fields subdivision development inside the Cove Reservoir "agricultural lands," demonstrate the NRCS, the Washington County Water District and the Kane County Water District have failed to contemplate the conversion of agricultural lands to municipal landscapes. Every indication is that this municipal growth will continue, thereby hastening the conversion of agricultural lands. The failure to even address urban development of agricultural lands raises many questions about why this has been omitted from consideration.

D. The EA fails to prove that the Cove Reservoir would generate any agricultural benefits whatsoever because it lacks data, studies or professional analysis.

NEPA and the NRCS's own guidelines requires that the NRCS rely on objective and accurate information and make special efforts to ensure the integrity of their analyses when conducting an environmental review. ¹⁹ Yet, the EA fails to do this when discussing what benefits the proposed project would create. The EA states the following to support its conclusion that there is an agricultural need for this project:

Agricultural water users in the East Fork Virgin River drainage basin routinely experience water shortages during late summer months when the East Fork Virgin River flows are depleted. Irrigation water demand during this time is not being met by the current systems. Existing irrigation facilities have limited capabilities to divert water from the river, and there is currently no capacity for storage during non-use and high-flow periods. As a result, this water is not available to local users; therefore, the need exists to provide for enhanced conservation and beneficial use of water by increasing water availability through collection and storage during non-use periods to provide adequate flows during the irrigation season.²⁰

However, the EA provides virtually no documentation to support these claims. The only "evidence" the EA produces to back the above claims come in the form of three emails found on page 16 of Appendix D. All three emails were sent by Brent Gardner of Alpha

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¹⁹ NRCS. Guide for Environmental Assessment. (1977). Pages 2 and 9.

²⁰ EA page S-1

Engineering, a consultant for the proposed project, and second-handedly recount conversations he had with various people. The two emails that supposedly prove that there is a need for the project in Kane County state:

[Kevin Heaton] indicated that having the additional supply of water in the later summer months would allow the irrigators in Kane County to go from 2 1/2 cuttings to 4 cuttings and increase production by 1 1/2 tons per acre.²¹

I talked with Merlin Esplin last night and he indicated with the right amount of water and fertilizer he has no problem getting 5 to 6 tons per acre but when he is short of water at the end of the year he can't get 4 cuttings and ends up with 3 or less.²²

These two emails do not constitute objective data, accurate information, or scientific evidence. Neither cite any studies or provide any verifiable data, and both could easily be no more than the interviewees opinion or "guestimates" as to whether and how much additional water could benefit farmers in the project area. These two emails provide, at best, sparse and weak anecdotal evidence.

Additionally, Merlin Esplin is a Kane County Water Conservancy District board member and local landowner/rancher who would receive water from the proposed project. This water would likely increase the value of his properties, thereby conferring a direct benefit to himself. Since Esplin stands to personally benefit from the project, it highly likely that his account is biased. Using his remarks as "proof" that the project is needed is especially egregious and demonstrates that the NRCS did not make a special effort to ensure the accuracy and objectivity of the analysis in this EA.

Similarly, the EA provides a third email to "prove" that there is an agricultural need for this project in Washington County. It states:

It is difficult to establish the increased crop production from the increased water supply but it was felt the dilution of salts would be as much benefit as the increased water supply. It would not be difficult to say that the combined benefit of reduced salinity and increased water supply during the critical growing season would provide for an increase of up to 1 ton per acre.²³

²¹ EA, Appendix D page 16

²² EA, Appendix D page 17

²³ EA, Appendix D page 17

This email contains the same issues as the above two. It too fails to cite any studies or provide any verifiable data, and could be no more than the interviewees opinion or "guestimate." In addition, this email contains language that indicates that the conclusions drawn here are simply "guestimates." Phrases like "it was felt," "it would not be difficult to say," and "up to" indicate that this email is little more than the interviewees opinion of the matter and that there is little objective or reliable data backing these statements. This email too does not constitute objective, accurate, or scientific evidence and further shows that the NRCS did not make a special effort to ensure the objectivity and accuracy of the analysis in the EA.

In effect, the EA forgoes the use of any real evidence for unsupported claims that there is a need for the project. Simply stating, without documentation or proof, that the water users in the drainage basin "routinely experience water shortages," or that "irrigation water demand ... is not being met by the current systems" does not constitute reliable analysis or objective and accurate information. Similarly, three unsupported emails from potentially biased sources also do not constitute reliable analysis or objective and accurate information.

Without proof, these claims are unsupported and could easily represent no more than an individual's opinion. The EA has failed to sufficiently prove that there is a real agricultural need for the proposed project. The question of whether the project is even needed would certainly and significantly affect the quality of the human environment, thereby requiring full EIS.²⁵ The EIS should include real scientific evidence and adequately study whether there is an actual agricultural need for this proposed project.

II. The NRCS and/or the KCWD have apparently attempted to subvert the purposes and regulatory funding constraints of the Watershed Protection and Flood Prevention Act, PL 83-566, by claiming that the proposed project would benefit agricultural users when in reality it would mostly benefit municipal users.

The Cove Reservoir project EA states that the project is for the benefit of agriculture, which allows project sponsors to receive very generous financing terms. Specifically, this assignment allows the NRCS to provide nearly \$22 million in federal funding without requiring repayment. This is nearly 75% of the Cove Reservoir project's costs. These generous financing terms offered by U.S. Department of Agriculture (USDA) through Congressional appropriation are much better financing terms than are available in the private lending arena or via the municipal bond market.

²⁴ EA page S-1

²⁵ 7 CFR § 650.7

The Watershed Protection and Flood Prevention Act has different financing terms for agricultural and municipal projects. If the project in question is agricultural, USDA financing terms under PL 83-566 allow foregoing repayment of much of the project costs and allow USDA to pay a majority of the project costs, courtesy of federal taxpayers. However, if a project is for a municipal purpose, PL 83-566 requires that the majority of project costs be paid for by project sponsors and funds paid by USDA must be repaid with interest.

Since the proposed Cove Reservoir is a municipal water project masquerading as agricultural, the funding scheme described in the EA, which grants the project PL 83-566's agricultural financing terms, is in violation of PL 83-566. Using USDA agricultural financing provisions to pay for a municipal project is wholly inappropriate, and the proposed EA is in violation of federal law. This raises major questions about how the municipal nature of this project was cloaked from the public and from taxpayers.

As demonstrated in the previous section, the vast majority of project lands in the project area, particularly in Washington County, have already been converted into municipal subdivisions. The project sponsor, the Kane County Water District, indicated at a public meeting that the Washington County Water District, a municipal water supplier, owns a majority of the water rights that would be stored at the proposed Cove Reservoir. In other words, most of the water rights for the proposed reservoir are owned by a municipal water supplier, and a majority of the lands that would receive water from the project are currently or soon will become municipal. Therefore, the Cove Reservoir project's true purpose is to supply municipal water.

The proposed Cove Reservoir is in conflict with the guidelines of the Watershed Protection and Flood Prevention Act because the act prohibits offering agricultural financing terms to municipal water projects. This is made more egregious by the fact that the WCWD has the ability to self-finance 100% of the \$30 million in project costs through its existing \$200 million cash reserves.

A. By cloaking a municipal reservoir as an agricultural project, the proposed project financing is in violation of the statutory criteria of the Watershed Protection and Flood Prevention Act (Public Law 83-566).

Much of the land in the proposed project area in Washington County is no longer agricultural, and of the few remaining agricultural lands in the Washington County project area shown in Appendix B, most of these agricultural lands will become municipal

as Washington County's population grows in the future. This not only invalidates the EA's claims that the proposed project is needed to meet agricultural demand, ²⁶ and would generate additional crop revenues from extending the irrigation season, these claims may also constitute a violation of the Watershed Protection and Flood Prevention Act (Public Law 83-566).

PL 83-566 grants the Secretary of Agriculture the ability to provide financial and technical assistance to local organizations to design and construct works of improvement, including flood prevention measures and land conservation projects. However, the act states:

Each project must contain benefits directly related to agriculture, including rural communities, that account for at least 20 percent of the total benefits of the project.²⁷

Given that agricultural lands in Washington County, which represent roughly 82% of the total agricultural lands proposed for the project (4,900 of 6,000 acres), have already largely been converted from agricultural into municipal purposes, the proposed project may no longer satisfy the 20% agricultural threshold as required by PL 83-566. The majority of lands in the Washington County project area are not 'rural' and should clearly be classified as being suburban or urban in nature. Although the EA claims that 4,900 acres of lands in Washington County are agricultural in nature, in truth only 2,000 acres of lands have been identified in Washington County in Appendix B of the EA, and the majority of these 2,000 acres of lands are currently used for municipal purposes. The acreage of land in Washington County's portion of the project area remaining in agricultural uses is less than 1,000 acres, with immense pressure on these remaining lands to convert them into municipal uses. The rate of urban development in this area is rampant, and December 2020 field visits to the project area demonstrate that much of the undeveloped land shown on Google Earth have already been converted to municipal uses. This municipal purpose disqualifies the proposed project from PL 83-566 agricultural financing.

It also raises major questions as to why project proponents could so dramatically fail to understand the most basic aspect of their own project. Since these same project proponents – the Kane County Water District and the Washington County Water District – have been heavily involved in promoting the need for additional municipal water over the last 15 years in both counties in scores of meetings and presentations vis a vis the proposed Lake Powell Pipeline, it seems unlikely this is a matter of lacking basic

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²⁶ EA page S-1

²⁷ Watershed Protection and Flood Prevention Act (Public Law 83-566)

understanding. Something more deliberate appears to be at work in the Cove Reservoir EA.

The fact that the project sponsor, the Kane County Water District, is aware of the municipal nature of the project and appears unconcerned about the conversion of lands and water from agriculture to municipal uses is telling. At a public Cove Reservoir project open house conducted online in December 2020 by the NRCS, project proponents were asked about the competing purposes of agriculture versus municipal and industrial (M & I). Members of the public raised a number of concerns, and the moderators generally only fielded questions that were not critical of the project. When asked about the dueling purpose of agriculture versus municipal uses, the executive director of the Kane County Water District was cavalier about converting an agricultural project to municipal use:

Moderator: There's a question as it is worded here, is there a prohibition on use of the project for M&I, for any period, for example is there adequate justification on agricultural grounds for the \$20 million dollars?

Mr. Noel did not hesitate to immediately jump in to answer this question.

Mr. Noel: I can answer that. There is nothing that would preclude the use of that water for M&I. That would be up to the shareholders, the water right shareholders. So there is nothing that would preclude them from – right now they could sell that water for M&I water anytime they want.

Mr. Noel's interpretation of Utah law regarding the water rights in question and their conversion from agricultural use to municipal use is accurate and further cause for concern. However, the question was specifically addressing the use of \$20+ million in federal taxpayer funding intended for agricultural financing and whether converting water to municipal uses in Cove Reservoir was justifiable. This statement by the project sponsor for the Cove Reservoir also raises major questions for both federal taxpayers and farmers and ranchers across the country competing for funding from PL 83-566 for their own worthy projects.

We can find no language of PL 83-566 and its agricultural financing provisions that allow the immediate conversion of project benefits from agricultural to municipal. In fact, PL 83-566 makes a clear delineation of the two kinds of project purposes and their very different financing terms. If the Utah office of the NRCS has a different interpretation of this statute, or if the project proponents do, it should make this explicit in the permitting process. We would love to see such an interpretation, as would the many other applicants who are seeking funding from the NRCS.

The public is left with major questions about how the proposed Cove Reservoir municipal project could get so far in the permitting process and in this EA, given that any web visitor using Google can clearly see that Cove Reservoir water is not going to agricultural lands in Washington County.

The agricultural financing stipulations of PL 83-566, which encumber the U.S. Department of Agriculture and the NRCS, were not intended to be used to offer generous financing terms to municipal water projects. PL 83-566 allows for some M&I water development projects but imposes additional restrictions. Specifically, the act states:

...the Secretary may pay for any storage of water for present or anticipated future demands or needs for municipal or industrial water included in any reservoir structure constructed or modified under the provisions of this chapter as hereinafter provided: Provided further, That the cost of water storage to meet future demands may not exceed 30 per centum of the total estimated cost of such reservoir structure and the local organization shall give reasonable assurances, and there is evidence, that such demands for the use of such storage will be made within a period of time which will permit repayment within the life of the reservoir structure of the cost of such storage...²⁸

Therefore, even if there was sufficient proof to show that the proposed project does and always would satisfy PL 83-566's 20% agricultural benefit threshold, the proposed project may still be in violation of PL 83-566. Given that a large and increasing share of the lands identified in the proposed project area are M&I, it is likely that the proposed project's water would be used in M&I settings and for M&I purposes by this M&I water supplier. This would effectively make this project an M&I water project, not an agricultural water project as the EA claims.

The Cove Reservoir EA establishes that the NRCS would provide roughly \$22 million of the project's total \$30 million cost, or 73% of the cost. If this is truly an M&I water project, as is suggested above, then the NRCS must reduce the amount of funding the Department of Agriculture is putting into this project in order to comply with PL 83-566.

B. It appears that the proposed Cove Reservoir has been described as agricultural in part to avoid the lack of justification for a municipal water project.

PL 83-566 requires that the local organization (in this case the Kane and Washington County Water Districts) must demonstrate with evidence that there is enough demand

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²⁸ Watershed Protection and Flood Prevention Act (Public Law 83-566)

for the project's M&I water such that the local organization is able to repay the cost of the project. The EA has not provided this evidence.

In fact, the Washington County Water District and the Kane County Water District have been heavily engaged in a public campaign to convince state and federal decision makers to approve the Lake Powell Pipeline for municipal purposes. However, this proposed new water project has not satisfied basic NEPA requirements and has suffered over 10 years of permitting delays at the request of project applicants, who have failed to demonstrate a need for more municipal water. This contentious permitting process has generated acrimony and opposition from across the American West, including from six other western states in the Colorado River Basin and several of America's largest municipal water suppliers including both Metro Water District of California and the Southern Nevada Water Authority.²⁹

Chief among critics' concerns is the very high rate of municipal water use by project sponsors – over 300 gallons per person per day – twice the U.S. average of municipal water use. This raises questions about why project proponents wouldn't simply lower their nation-leading high water use since reducing water demand through basic water conservation programming likely would cost much less money than the proposed Cove Reservoir.

It is therefore unlikely that project proponents could satisfy the test of both NEPA and PL 83-566 if the purpose of the Cove Reservoir were municipal. In fact, the Cove Reservoir sponsor, the Kane County Water District, was effectively removed from further Lake Powell Pipeline permitting consideration by the U.S. Bureau of Reclamation, which found that Kane County had ample water supplies to meet even the most aggressive projected growth scenarios.³⁰

In regards to Washington County, the Bureau avoided any discussion of future municipal water needs and conservation opportunities in the LPP Draft EIS by specifically narrowing the purpose of the LPP to exclude water conservation alternatives or any discussion about the region's very high municipal water use. If the purpose of the Cove Reservoir is acknowledged by project proponents to be municipal in nature, there is similarly no justification for its permitting or construction.

Another reason project proponents sought to avoid any discussion of municipal water needs was because of the immense opposition to the Lake Powell Pipeline from

²⁹ See LPP Comments from the Seven Basin States, the Southern Nevada Water Authority, and the Metro Water District of California.

³⁰ Lake Powell Pipeline Draft Environmental Impact Statement, Bureau of Reclamation. (2020). https://cdxnodengn.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=297778. Page 3.

thousands of critics and water supply institutions, which generated immense controversy and made media headlines across the country. This controversy was fueled by disdain for the Washington County Water District because it is one of America's biggest municipal water wasters yet was proposing to forego inexpensive water conservation alternatives to construct unnecessary and expensive water development options that are not justifiable.

Numerous organizations, including the URC, have presented hundreds of pages of evidence to show that there are ample water supplies currently in Washington County and that additional M&I water projects like the LPP or the Cove Reservoir project are unnecessary. These correspondences have also been included in these comments to demonstrate this fact.³¹ To comply with NEPA's cumulative analysis requirements, a full EIS for the Cove Reservoir municipal water project is warranted, and the affected environment and array of alternatives should consider a robust set of water conservation programs. These alternatives are listed in the accompanying LPP comments submitted by the URC et al.

Cove Reservoir project proponents appear to have attempted to avoid a similar controversy regarding the wasteful use of municipal water in the Cove Reservoir EA by hiding behind an agricultural façade. The WCWD has no need for additional M&I water and the municipal financing terms for a municipally-purposed Cove Reservoir, even under the generous terms set by PL 83-566, still don't pencil out. For a municipal water supplier whose customers use 304 gallons per person per day to consider indebting itself with \$30 million for just 800 acre-feet of water, translates into a cost of nearly \$40,000 per acre-foot. With Washington County <u>retail</u> water rates set at just \$600 per acre-foot, the Cove Reservoir municipal water project just doesn't make financial sense – unless one can get the USDA to pay for it.

C. Using excessive NRCS funds on the Cove Reservoir project is not in the public interest, which the Secretary of Agriculture is required to uphold by PL 83-566.

PL 83-566 section 1003 states the following:

The portion of such costs, including labor, to be shared shall be that part which the Secretary determines is appropriate and in the public interest for the carrying out of the practices and measures set forth in the agreement, except that the Federal assistance shall not exceed the rate of assistance for similar practices and measures under existing national programs.³²

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³¹ See URC's LPP DEIS Comments

³² Watershed Protection and Flood Prevention Act (Public Law 83-566).

In other words, PL 83-566 requires that the Secretary of Agriculture financially assist local organizations with their proposed projects only to the extent that it is in the public interest. As currently written, the EA commits over \$21 million in federal funding to the Cove Reservoir project. The NRCS funded 48 projects with \$148 million, an average of roughly \$3 million per project. The Cove Reservoir project is seven times more expensive than these projects and would consume nearly 15% of the NRCS's total budget for this program.

This is particularly egregious because the water rights being proposed for storage in the Cove Reservoir are held by the Washington County Water District, which is currently sitting on gigantic financial reserves. The Washington County Water District currently has more than \$200 million in cash reserves and could pay 100% of the Cove Reservoir project costs. It is entirely inappropriate for the Department of Agriculture to use funds set aside for agricultural projects and conservation to finance a municipal water project for a local municipal water supplier that can self-finance its own reservoirs.

As it stands, the Cove Reservoir project is consuming an unjustified amount of the NRCS's budget for a municipal water project. This is especially true when considering that this proposal has no real purpose or need given that the agricultural lands this project is supposed to support have already largely disappeared. The NRCS and the Secretary of Agriculture could better serve the public interest by redirecting all of these funds toward projects with a demonstrated need for agricultural funding assistance. By committing such a large portion of these funds to this unneeded project, the USDA is violating its duty as stated by PL 83-566 to only fund projects to the extent that they serve the public interest.

D. Given the many problems with the use of federal funding, the failure to comply with PL 83-566, and the failure to identify the lack of project purpose of the Cove Reservoir, a full EIS should be produced that is forthright about the declining nature of agricultural lands in Washington and Kane Counties.

The proposed Cove Reservoir would significantly affect the human environment, which thereby requires the completion of a full EIS.³⁴ The EIS should include a study on whether the proposed Cove Reservoir project meets PL 83-566's 20% agricultural benefit threshold and whether it should be classified as an M&I project rather than an agricultural project.

³⁴ 7 CFR § 650.7

³³ EA page 79.

A full EIS needs to be conducted to determine whether the Cove Reservoir project is in fact eligible and would remain eligible for PL 83-566 funding as agricultural lands continue to be converted to municipal uses. An EIS should be conducted to examine whether this is an M&I water project and therefore, whether project economics merit approval by the USDA for a municipal project. Such a consideration must include an array of viable alternatives, including robust water conservation program currently being implemented in many of America's 3,200 counties.

Furthermore, this assessment should be made based on actual data analysis or published studies, which should be referenced in a future NEPA document. The current standard as represented in the EA of citing personal emails summarizing private phone calls from paid project consultants and other non-experts does not rise to the level of suitable NEPA analysis. If the NRCS and the USDA cannot oversee or are unwilling to establish a minimum level of transparent data analysis in NEPA documents, it should no longer involve itself in this project and the Cove Reservoir should not be considered further.

III. The Cove Reservoir requires a full EIS because the EA failed to identify and analyze that the proposed project would require Congressional action, would significantly affect the human environment, and would have significant cumulative impacts.

The Cove Reservoir EA states:

Potential environmental effects associated with implementation of the Preferred Alternative would not be significant, and the preparation of an EIS is not required.³⁵

However, this is not correct. 7 CFR § 650.7 states that the NRCS must prepare an Environmental Impact Statement (EIS) when one of the four following criteria are met:

- (1) Projects that include stream channel realignment or work to modify channel capacity by deepening or widening where significant aquatic or wildlife habitat exists. The EE will determine if the channel supports significant aquatic or wildlife habitat;
- (2) Projects requiring Congressional action;

³⁵ EA page 72. The EA language has a typo such that it originally states "would be not be significant," which has been corrected in the quote here for clarity.

- (3) Broad Federal assistance programs administered by NRCS when the environmental evaluation indicates there may be significant cumulative impacts on the human environment (§ 650.7(e)); and
- (4) Other major Federal actions that are determined after environmental evaluation to affect significantly the quality of the human environment (§ 650.7(b)). If it is difficult to determine whether there is a significant impact on the human environment, it may be necessary to complete the EE and prepare an EA in order to decide if an EIS is required.³⁶

The proposed Cove Reservoir project meets criteria 2-4, thereby requiring a full EIS.

First, the proposed project would require Congressional action as per the Watershed Protection and Flood Prevention Act (Public Law 83-566). PL 83-566 states:

No appropriation shall be made for any plan involving an estimated Federal contribution to construction costs in excess of \$5,000,000, or which includes any structure which provides more than twenty-five hundred acre-feet of total capacity unless such plan has been approved by resolutions adopted by the appropriate committees of the Senate and House of Representatives.³⁷

The proposed project, as currently written, would receive over \$21 million in federal contributions from the NRCS³⁸ and would construct a reservoir with over 6,000 acre-feet total capacity,³⁹ thereby requiring Congressional action. Therefore, 7 CFR § 650.7 requires that a full EIS be conducted for this project.

Second, the proposed project would create a number of impacts that would significantly affect the quality of the human environment. Many of these, including a number of negative impacts to endangered fish species, impacts on access to Zion National Park, and a number of other consequences were not considered or evaluated in the EA. Since these impacts exist, as shown in the subsections below, a full EIS should be conducted as per 7 CFR § 650.7.

Third, if the EA had included the full lifetime (100-year) cumulative effects analysis of the project, including greenhouse gas emissions (GHG) associated with construction, recreation, and the reservoir itself, the EA would have found that there are significant cumulative effects, thereby requiring a full EIS. This is expanded on in a subsection

³⁶ 7 CFR § 650.7

³⁷ PL 83-566, section 1002.

³⁸ EA page S-4.

³⁹ EA page S-2.

below.

Many sections of the EA rely on unscientific and unsubstantiated claims, factually inaccurate opinions lacking any analysis and personal opinions presented as data. The EA routinely cites personal emails from paid consultants as "data," without any review of scientific literature or published studies by state and federal agencies. This is problematic because the NRCS's *Guide for Environmental Assessment*, which the NRCS is directed to use by 7 CFR § 650.5, states:

The most important characteristics of a good assessment are objectivity, reliability of data base, and accuracy of impact prediction.⁴⁰

And that the NRCS must:

Make a special effort to present data clearly, concisely, accurately, and objectively.⁴¹

Additionally, 7 CFR § 650.1 states:

NRCS-assisted actions are to be supported to the extent possible by accurate scientific analyses that are technically acceptable to NRCS.⁴²

And, The Lands Council v. McNair states:

[W]e will reverse a decision as arbitrary and capricious only if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.⁴³

Accordingly, an environmental analysis cannot rely on outdated or stale data.⁴⁴ As currently written, the EA fails to meet these requirements and, therefore, is in violation of NEPA and the NRCS's guidelines. As will be shown in the subsections below, the NRCS "entirely failed to consider" important aspects of the Cove Reservoir project, thereby acting arbitrarily and capriciously. A full EIS should be conducted to verify the factual accuracy of the EA's analyses and conduct the studies the EA overlooked.

⁴⁰ NRCS. Guide for Environmental Assessment. (1977). Page 2.

⁴¹ NRCS. Guide for Environmental Assessment. (1977). Page 9.

^{42 7} CFR 8 650 1

⁴³ The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008).

⁴⁴ N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1086 (9th Cir. 2011).

A. The EA fails to prove that additional water releases would benefit endangered species far downstream from the proposed project and entirely fails to address important aspects of the project including potential negative effects to endangered species.

The EA does little to support its claims that the proposed project would benefit the endangered Virgin River chub and woundfin. In fact, it is shown below that if the water is used for municipal purposes (which is likely) it would contribute an unnoticeable amount of water to these species critical habitats, providing effectively no benefits and could impact these species. At the same time, the EA failed to identify the project's significant effects on these species' critical spring spawning periods, thereby acting arbitrarily and capriciously. A full EIS and an updated 5-year review is needed to properly study the effects this project would have on these endangered species.

The EA states that water releases from the proposed Cove Reservoir would dilute salts and warm waters from the Pah Tempe hot springs, thereby improving habitat for the endangered Virgin River chub and woundfin. Specifically, the EA says:

[P]rojected increased East Fork Virgin River flows during the summer months could indirectly affect Virgin River chub, woundfin, and southwestern willow flycatcher designated critical habitat approximately 50 river miles downstream beginning at the La Verkin (Pah Tempe) Hot Springs area. This increased flow could improve habitat by providing additional, cooler, water to the area during low-flow periods and augment riparian vegetation along the river.⁴⁵

However, this statement is far from conclusive. It uses "could" multiple times, indicating that any purported benefits to these endangered species are, at best, speculative. This is again seen by the EA's vague claims regarding fish benefits. Specifically:

The proposed reservoir would provide up to 882 acre-feet of water annually during the summer months to augment endangered fish and flycatcher habitat.⁴⁶

The conditional text of "up to" indicates that 882 acre-feet is the ceiling or greatest amount of water that may be used for this ESA listed species purpose. However, the EA does not disclose whether there is any floor or minimum amount of water that must be released each summer. Nor does it present the analytic models used to purportedly provide this increase in water.

⁴⁵ EA page 75.

⁴⁶ EA page 28.

In fact, Mike Noel, executive director of the KWCD, said during a December 10th board meeting that the EA's endangered species benefits claims are overstated. Specifically, he said:

We at one time thought that we could release water during some of this time so that we wouldn't have to run the pumps and could save energy. But I'm not sure if that's going to be something that's possible. So that may be a bit of an overstatement.⁴⁷

For context, Noel is referencing WCWD's current practice of pumping water from a nearby reservoir up to the Pah Tempe hot spring to dilute its warm saline waters. He thought the pumping could be replaced by downstream flows from this new reservoir but now doubts that such actions would be possible. In other words, the leader of the local sponsoring organization directly contradicts claims made in the EA, casting significant doubt on the validity of the EA's claims that the project would benefit endangered fish.

The EA's claims are further strained by the fact that the EA does not commit either the KCWD or the WCWD to any flow delivery schedule whatsoever, meaning that there are no guaranteed flows to actually benefit fish. The EA provides no description of when flows would be delivered, nor any consideration of how such flows might coincide with the lowest flows experienced on the Virgin River during the course of a year. Given this, it's hard to determine that flows would come when fish need them the most, if flows come at all. This is particularly true given the municipal purpose of this proposed reservoir.

If the project was truly designed for the benefit of T&E fish, there would be a credible MOU with another entity, like USFWS. This would ensure that if the WCWD and KCWD ever err in their future flow releases (which seems likely given there's no delivery schedule), some external agency would be able to ensure that the Cove Reservoir has a benefit to T&E fish, as the EA repeatedly claims. In other words, the EA claims it would benefit T&E fish, but it never commits to deliver water from the reservoir during any period whatsoever. This calls into question whether the project's supposed habitat benefits would ever materialize and in fact whether these claims are actually real or simply additional marketing efforts designed to mislead the public and its decision makers especially when such a large subsidy by federal taxpayers is required for this local, highly speculative project.

Additionally, the EA shows that fish benefits would only occur if the WCWD decides to draw down water in the summer, because the only water that would flow through fish habitat from the reservoir would be water travelling downstream to Washington County.

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⁴⁷ Mike Noel at the KCWD Board Meeting. December 10, 2020.

Kane County's water would be used upstream of the critical fish habitat. Merlin Esplin, KCWD board member, stated this explicitly during the KCWD's December 10, 2020 meeting. Specifically, Merlin said:

The only time there's more of a benefit, at least from increased flow, that would happen during the summer is if Washington County starts releasing water.⁴⁸

This is problematic because it effectively leaves the endangered species' habitat benefits up to the whims of the WCWD. Given that there is no guaranteed flow release schedule, the WCWD is able to withdraw water whenever it sees fit. This may not coincide with the time periods when these fish actually need additional flows.

For example, the EA assumes that the WCWD would draw down their Cove Reservoir water over a 45-day period in the late summer months, creating a flow of 10 cfs.⁴⁹ However, there is no guarantee that WCWD does this as they are free to decide how and when to release their share of water, particularly if it is intended for municipal users on municipal lands.

If the WCWD decides to instead use most of their Cove Reservoir project water to support the rapid municipal growth occurring in the Washington Fields area (which they would likely do), then the WCWD may decide to release water over a much longer period (8 months to a year). This lengthened release schedule would occur because municipal demand exists all year long. Such a release schedule would result in a much smaller additional rate of flow, which would not provide any tangible benefit to endangered fish species. The table below, created by the Utah Rivers Council, shows a rough estimate of how much additional flow would be created if WCWD's 882 acre-feet were released over a longer period than the EA's assumed 45 days.

Days of 90 120 150 180 210 270 300 330 60 240 360 Release Resulting Additional 7.4 4.9 3.7 3.0 2.5 2.1 1.9 1.7 1.5 1.2 1.4 cfs

Figure 12: Additional cfs from Various Release Periods

As can be seen, if the WCWD decides to release their Cove Reservoir water over longer time periods (which would happen if the Cove Reservoir water was being used for municipal purposes), the amount of flow added to the river to benefit endangered fish

⁴⁸ Merlin Esplin at the KCWD Board Meeting. December 10, 2020.

⁴⁹ EA, Appendix D page D-17

drops dramatically. In fact, if the WCWD released water over just a three-month period, the amount of additional flow drops from 10 to 4.9 cfs, effectively a negligible amount. If they release water over a year, the additional flow is an unnoticeable 1.2 cfs. These flow estimates even use the generous assumption that no water is lost during the 50-mile journey from the reservoir to the Pah Tempe Hot Springs. If loss was accounted for, these flow estimates would likely be substantially lower. This all goes to show that the proposed Cove Reservoir project would not likely benefit these endangered fish in any meaningful way. It is wrong of the EA to claim otherwise.

Importantly, the proposed project would likely negatively impact these species, a fact that was not addressed in the EA. These effects should have been studied in detail as the woundfin and chub are in precarious positions, which is growing more uncertain each day by virtue of climate change and other pressures.

The 1995 Virgin River Fishes Recovery Plan provides some important details regarding these fish's histories and endangered positions. The woundfin has been teetering on the edge of extinction for just over 50 years, having been listed as an endangered species on October 13th, 1970.⁵⁰ Similarly, the chub was listed as endangered on August 24th, 1990 and has remained on the list for thirty years.⁵¹

The woundfin historically ranged from as far as the junction of Salt and Verde Rivers near Tempe, AZ to the mouth of the Gila River and was present in much of the mainstem Colorado River. However, as of 1995, the woundfin was "extirpated from almost all of their historical range except the mainstem Virgin River." Since that time, the woundfin's range has decreased even further, with the 2008 5-year review noting that woundfin was "functionally extirpated throughout its critical habitat." This means that the Virgin River, the last habitable area for the woundfin, is already struggling to support this near-extinction species making it a critically important ecosystem. Any change to this final sliver of habitat could lead to significant and damaging results to the woundfin as a species.

This is especially true given the fact that woundfin also have very specific breeding conditions, with the breeding season being triggered by a combination of increasing water temperatures, lengthening daylight, and spring runoffs. The recovery plan makes a special effort to state the importance of adequate spring runoffs to woundfin spawning by noting:

⁵⁰ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 1.

⁵¹ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 1.

⁵² USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 3.

⁵³ USFWS. The Virgin River Fishes 5 Year Review. (2008). Page 15.

[S]pawning success increased as the magnitude of flows during the spawning period increased from 2.83 m3/s to 22.66 m3/s (100 cfs to 800 cfs).⁵⁴

In cases where there were insufficient spring runoffs to adequately support a successful spawning period, the woundfin population suffered significantly. The recovery plan notes that even a single poor spawning year can seriously harm the species.⁵⁵

However, it is not enough to just have sufficient quantities of river flows for the woundfin to successfully spawn. The timing of the river flows is also critically important. This is because woundfin have a one year generation time and must reach an adequate size (larger than 66mm in length) before the spring spawning period to contribute to the next generation. ⁵⁶ If spawning occurs too late, the woundfin may be too small to contribute to the following year's spawning period.

This exact situation occurred in the early 2000's. The year 2005 was a particularly good water year for the Virgin River. The USGS gauge near Virgin, UT showed flows in excess of 4,000 cfs from October 2004 to July 2005, providing excellent spring flow conditions and producing the most successful woundfin breeding period since 1984.⁵⁷ However, the spawning period occurred late in the season resulting in many undersized fish during the following season. This resulted in a suboptimal spawning season the following year.⁵⁸

It is therefore evident that the woundfin is in a particularly perilous position. It has been teetering on the verge of extinction for nearly 50 years, has been extirpated from most of its previous habitat, is only surviving in the Virgin River today because of human intervention, and is difficult to recover because it has very specific breeding conditions, relying heavily on adequate and appropriately timed spring runoffs. Much of this is true for the Virgin River chub as well, although it is slightly more resilient due to its longer generation time.⁵⁹

Despite these species' precarious positions, the EA fails to analyze what negative effects filling the reservoir would bring. The EA states that the 6,000-acre-foot reservoir would be filled by spring runoffs, thereby substantially decreasing river flows during that time. 60 Since these species, especially the woundfin, rely heavily on large and appropriately timed spring runoff events to successfully reproduce, this 6,000 acre-foot diversion

⁵⁴ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 7.

⁵⁵ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 13.

⁵⁶ USFWS. The Virgin River Fishes 5 Year Review. (2008). Page 12.

⁵⁷ USFWS. The Virgin River Fishes 5 Year Review. (2008). Page 18.

⁵⁸ USFWS. The Virgin River Fishes 5 Year Review. (2008). Page 18.

⁵⁹ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 10.

⁶⁰ EA page 38.

during the critical spring breeding period would likely cause a number of poor spawning events. This would further imperil these already nearly-extinct species.

Even after the reservoir has been filled initially, it would continue to capture spring runoffs, presumably for the project's entire 100-year lifetime. Although the amount of water captured during the reservoir's operating period would be less than its initial filling period, the decreased flows still have the chance to interfere with these species spawning events. This would produce long lasting effects on these species and would adversely affect recovery efforts as long as the reservoir is in operation (100 years).

The recovery plan and the 5-year review even go to great lengths to emphasize that the largest threat to these species are water diversions. Specifically, the recovery plan notes the following:

When habitats are impacted by water diversions and other habitat modifications spawning success will be reduced.⁶¹

And:

The construction of reservoirs affects the Virgin River by reducing water flows, altering natural flow patterns, and affecting water quality.⁶²

Similarly, the EA acknowledges that these species have been imperiled by "water flow alterations," in other words, by water diversions in the past. See:

The chub have been drastically reduced in numbers and distribution from historic times, primarily due to water flow alterations and the presence of exotic fish, such as the red shiner (Cyprinella lutrensis). The distribution of the woundfin also has been substantially reduced from historic ranges due to water flow alterations, reductions, and the presence of exotic fish.⁶³

But, in a baffling move, the EA determines that more diversions and specifically the Cove Reservoir water diversion would not likely affect either the sensitive woundfin or chub in any negative way. It is unclear how the EA could conclude that this particular new water diversion would not negatively affect these species when it acknowledges that in previous instances, diversions have harmed these species. Furthermore, by claiming that there would be no negative impacts, the EA's conclusion flies in the face of accepted science as published in these species' official recovery documents, which clearly

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⁶¹ USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 8.

⁶² USFWS. Recovery Plan for the Virgin River Fishes. (1995). Page 13.

⁶³ EA page 19.

demonstrate that new diversions would affect spring spawning periods and harm the species.

The EA's failure to address this problem is an example of arbitrary and capricious action.⁶⁴ Additionally, it is clear that the project would have significant negative effects on these species, thereby warranting a full EIS.⁶⁵

It is also worth noting that the most recent 5-year review for these species was published in 2008, 12 years ago. A new 5-year review is past due and should be conducted by the USFWS before any further permitting is even considered for this proposal. Failure to do so would mean that future permitting documents (which would in part be based on an EIS) would be relying on stale and outdated data, thereby undermining the validity of such an analysis.⁶⁶

Furthermore, Conserve Southwest Utah (CSU) aptly identified in their comments that the EA failed to identify the project's impacts on the Virgin River spinedace, desert sucker, and speckled dace. CSU further pointed out that these species are part of the Virgin River Resource Management and Recovery Plan, which is being cooperatively implemented by the USFWS, BLM, NPS, UDNR, and WCWD. The potential effects on these imperiled species should have been identified in the EA.

The EA does little to support its claims that the proposed project would benefit the endangered Virgin River chub and woundfin. In fact, it was shown that if the water is used for municipal purposes (which is likely) it would contribute an unnoticeable amount of water to these species critical habitats, providing effectively no benefits. At the same time, the EA has failed to identify the project's significant effects on these species critical spring spawning periods, thereby acting arbitrarily and capriciously. A full EIS and an updated 5-year review from USFWS is needed to properly study the negative effects this project would have on these endangered species. Additionally, the EA should have studied the effects on Virgin River spinedace, desert sucker, and speckled dace.

B. The EA excludes important costs and miscalculates major benefits in its discussion of the proposed project's socioeconomic effects, thereby leading to the false conclusion that the project is economically feasible.

⁶⁴ The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008)

^{65 7} CFR § 650.7

⁶⁶ N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1086 (9th Cir. 2011).

The EA states that the proposed project would create just over \$1 million in agricultural, recreational, and energy benefits annually, while incurring roughly \$850,000 in annual costs. Since the majority of project area lands in question are not in agricultural lands, the financial calculations of the agricultural benefits are intrinsically flawed. The EA also excludes at least one major cost from its calculation, and uses questionable methodology and false assumptions to calculate the project's estimated benefits. If these errors were corrected, the NRCS would find that the project is not economically beneficial. A full EIS should be conducted to address these issues because these errors would significantly impact the quality of the human environment.

The EA includes benefits from electricity generation in its cost benefit analysis, assuming that the revamped Glendale Hydropower station would generate \$11,200 per year. ⁶⁹ However, the EA does not include the cost of restoring the currently inoperable Glendale hydropower station in the project's cost estimate. ⁷⁰ The cost estimate does include the cost of upgrading pipes leading to the hydropower station, but not of restoring the hydropower station itself. ⁷¹

It is wrong for the EA to tout the benefits created by one aspect of the project while at the same time ignoring the costs of developing that same portion of the project. By doing this, the NRCS acted arbitrarily and capriciously.⁷² A full EIS should be conducted to determine the how much it would cost to revamp the Glendale hydropower station and what effect this added cost would have on the project's cost-benefit ratio.

Additionally, the EA estimates that the project would generate \$837,300 in agricultural benefits annually throughout the life of the project.⁷³ The EA arrives at this number by estimating the marginal value of additional agricultural water per acre and multiplying by the project's assumed total acreage (just over 6,000 acres).⁷⁴

By doing this, the EA assumes that the project would always service over 6,000 acres. It was shown above that the EA overestimated the number of agricultural lands in the project area by at least 3,000 acres and failed to acknowledge the rapid rate at which agricultural lands are disappearing in the project area. The financial benefit claims in the EA thereby dramatically overestimate the project's agricultural benefits. A full EIS should be conducted to determine how many agricultural lands currently exist in the

⁶⁸ 7 CFR § 650.7

⁶⁷ EA page 84.

⁶⁹ EA page 84, table 6-5.

⁷⁰ EA, Appendix E-18.

⁷¹ EA, Appendix E-21.

⁷² The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008).

⁷³ EA page 84, table 6-5.

⁷⁴ EA, Appendix E-39.

project area and estimate how many would be converted over the project's proposed 100-year lifetime. The EIS should then use this information to recalculate the project's agricultural benefits and determine what effect this has on the cost-benefit ratio.

However, since the project is really a municipal water project, the EIS should be honest and straightforward about the purpose of this municipal reservoir and evaluate the municipal water demand purpose and concomitant municipal water delivery costs and benefits.

The EA claims that the proposed project would generate \$176,000 of recreational benefits annually. Yet, this was estimated by comparing visitation rates at four state parks: Coral Pink Sand Dunes, Gunlock, Sand Hollow, and Quail Creek. Two of these locations (Sand Hollow and Quail Creek) are located near the much more populous cities of St. George and Washington, Utah. The other two locations (Gunlock and Coral Pink Sand Dunes) are home to unique natural resources, including rare pink sands and sandstone waterfalls. The figures below portray these resources.



Figure 13: Gunlock State Park Waterfalls⁷⁷

⁷⁵ EA page 84, table 6-5.

⁷⁶ EA, Appendix E-43.

⁷⁷ Photo from rypoints.com. Retrieved from https://rypoints.com/utah-state-parks-listing/gunlock-state-park



Figure 14: Coral Pink Sand Dunes⁷⁸

These two locations have unique natural resources and aesthetic features that the proposed Cove Reservoir would lack. Therefore, it is not valid to use visitation statistics from these sites, or from the much more populated Sand Hollow and Quail Creek sites, to estimate visitation at the proposed Cove Reservoir site.

Also, the EA does not make clear how it moves from the number of visitors per campsite to the final \$176,000 annual recreation value.⁷⁹ The EA should explicitly state what assumption it is using to monetize these visitation rates so the public can verify the accuracy of claims made by paid consultants. These problems should also be addressed by a full EIS.

1. The EA fails to analyze the KCWD's strained financial state, even though this water district is listed as the project sponsor.

The KCWD has very few financial reserves and appears to be struggling to balance previous financial commitments. This indicates that they would likely be hard pressed to repay their portion of the project, even with the NRCS's \$21 million subsidy. In fact, the KCWD recently approved a \$5 per month water bill increase to attempt to raise additional

⁷⁸ Photo from zionnationalpark.com. Retrieved from https://www.zionnationalpark.com/about/southern-utah/other-areas/

⁷⁹ EA, Appendix E-43.

funds during this pandemic economy, and this rate increase was unrelated to the financing costs of the proposed Cove Reservoir.⁸⁰

This relatively small water supplier has \$38 million in long term indebtedness⁸¹ and recently had to call an emergency board meeting to attend to its financial challenges on existing debt. With just over \$2 million in annual gross revenues,⁸² it remains unclear how this agency would pay for the Cove Reservoir. The EA fails to provide any financial details about how this sponsoring agency intends to finance this project, nor what role the WCWD would play in the project financing. Whether these omissions are intentional or not is hard to determine.

The KCWD has a very small and limited service area inside Kane County and does not deliver the majority of water to Kane County's residents, who are served by other local water suppliers like the city of Kanab. It is not clear that the agricultural lands of the Cove Reservoir project area in Kane County are actually inside the service area of the Kane County Water District, and this lack of detail raises major questions about whether the KCWD can actually service local agricultural water users in the Long Valley area.

Increasing rates to repay their portion of the proposed Cove Reservoir project would impose substantial financial burdens on KCWD residents and could make Cove Reservoir project water unaffordable. Yet, the EA failed to consider either of these facts. Since these are important aspects of the problem, the NRCS acted arbitrarily and capriciously. A full EIS is needed to determine whether this project is financially feasible and needed for the WCWD and KCWD.

⁸⁰ Jorgensen, Helene. "KCWD board approves water rate increase for Cedar Mountain." (December 17, 2020). https://www.sunews.net/article.cfm?articleID=2885

⁸¹ KCWD. Audited Financial Statement. (2019).

https://reporting.auditor.utah.gov/servlet/servlet.FileDownload?file=0151K000003dhc7QAA

⁸² KCWD. Audited Financial Statement. (2019).

https://reporting.auditor.utah.gov/servlet/servlet.FileDownload?file=0151K000003dhc7QAA

2. The EA fails to analyze the WCWD's strong financial position, which could easily pay the entire project cost for its proposed municipal-purposed Cove Reservoir using its cash reserves, which exceed \$200 million.

The WCWD's engagement in the Cove Reservoir municipal water project raises many concerns. WCWD is delivering municipal water to a variety of Washington County municipalities and the EA is effectively portraying it as delivering irrigation water to "agricultural" lands. This raises many concerns, including questions of why the NRCS is using an agricultural program to finance and construct a municipal water project.

Although many agricultural communities are starved for much-needed capital to continue their farming operations, the WCWD is awash in funding reserves that rivals that of other Utah water suppliers. The WCWD has enormous reserves, thereby calling into question their need for a \$21+ million federal government subsidy. The WCWD's available cash on hand is so rare among municipal water suppliers that Moody's cited their cash reserves as "extraordinary" during a recent WCWD bond rating determination.

As of 2019, the WCWD had nearly \$350 million stored up in reserves.⁸³ Of these reserves, more than \$200 million is "cash on hand" or funds that are able to be used for new spending.⁸⁴ This indicates that the WCWD has more than enough funds to finance the entire Cove Reservoir project on their own, without requiring rate increases or negatively affecting their current programs or services. It is therefore questionable that the NRCS would give federal money to an entity that is more than capable of funding this project on its own.

C. The EA failed to analyze the full consequences of a dam failure, thereby acting arbitrarily and capriciously.

The EA does not adequately analyze the potential consequences of a dam failure. Page 74 notes that the dam would be classified as a "High Hazard" dam and that failure could result in the loss of life and destruction of property, including damages to "important public utilities and US-89..." However, the EA does not analyze what impact a dam failure would have on stream flows, including flows through the protected portion of the

⁸³ WCWD. Audited Financial Statement. (2019). https://www.wcwcd.org/wp-content/uploads/2020/08/2019- Audited-Financial-Statements.pdf

⁸⁴ Legislative Auditor General. (2019). A Performance Audit of the Repayment Feasibility of the Lake Powell Pipeline (Report No. 2019-05).

⁸⁵ EA page 74

river and its Wild and Scenic River and the Outstandingly Remarkable Values in Zion National Park, downstream infrastructure, or park visitors. This is a consequential oversight as the effects of a dam breach would likely be substantial.

The EA states that in the result of a breach, the dam would let out water at a remarkable rate: 205,000 to 243,000 cfs. ⁸⁶ This would create a large flood area, depicted in the figure below. ⁸⁷

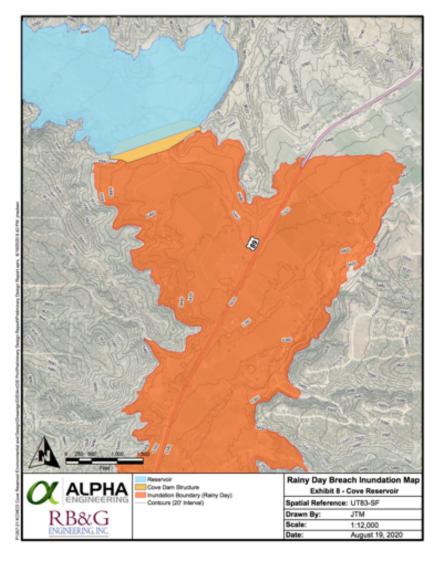


Figure 15: Flood Area from Dam Breach

Nearly all of this water would surge down onto US-89, likely causing significant community and infrastructure damage. US-89 is a major thoroughfare that connects Zion and Bryce Canyon National Parks and transports an average of 2,700 cars per day.⁸⁸ It

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⁸⁶ EA, Appendix E-12 page 16

⁸⁷ EA, Appendix E-12

⁸⁸ EA page 62.

also connects to the east entrance of Zion National Park, the same area where the park is planning a new visitor center and gateway community to service the 1 million people who utilize this entrance each year. ⁸⁹ The Orderville and Mt. Carmel communities also benefit economically from the visitors travelling to the East Entrance of the park who stop for food, gas, and other goods and service along their way. Significant damage to this road, like that which would occur from a dam breach, would seriously inhibit visitation and operations at Zion National Park and would likely economically harm the Orderville and Mt. Carmel communities. Yet, these effects are not studied in the EA. This demonstrates that the NRCS acted arbitrarily and capriciously, and that a full EIS is needed.

Additionally, nearly all the water from a dam breach would flow down the East Fork of the Virgin River into Zion National Park, where the river is protected as Wild under the Wild and Scenic Rivers Act. This section of the river is colloquially known as Parunuweap Canyon and is home to rare cultural resources, USFWS candidate threatened and endangered species, and remarkable beauty. The Wild designation was made with the following Outstandingly Remarkable Values (ORVs): cultural, geologic, ecological processes, wildlife, and fish, and the area has been closed to recreation for research and preservation purposes since 2001. Needless to say, this is a precious and sensitive environment.

A dam breach could decimate this protected area by surging far more water through its narrow corridors than has ever been recorded. According to USGS stream gage data, the East Fork of the Virgin River averages a flow of 56 cfs, with occasional spikes as high as 4,000 cfs. ⁹³ As mentioned above, a dam breach would release flows at 203,000 to 243,000 cfs. This would likely destroy precious and unrecoverable cultural resources, harm threatened and endangered species, and cause significant structural/geologic damage, thereby violating the river's Wild protection under the Wild and Scenic Rivers Act.

Furthermore, the EA explains that the 1996 Zion National Park Water Rights Settlement Agreement states:

...cumulative releases from the new reservoir(s) shall not increase the flow measured at the U.S. Geological Survey gauge on the river near Spring[dale],

91 BLM. "Parunuweap Canyon WSA." https://www.blm.gov/visit/parunuweap-canyon-wsa

⁸⁹ Shoup Mikayla. "'Gateway community' planned for east entrance to Zion National Park." (2019). https://www.stgeorgeutah.com/news/archive/2019/05/14/mks-gateway-community-planned-for-east-entrance-to-zion-national-park/

⁹⁰ EA page 17.

⁹² EA page 17

⁹³ USGS 09404900 East Fork Virgin River Near Springdale. Data period: October 10, 1995 to December 12, 2020. https://nwis.waterdata.usgs.gov/ut/nwis/uv/?cb_00060=on&format=gif_stats&site_no=09404900&period=&begin_date=1995-10-01&end_date=2020-12-10

Utah, by more than 25 cfs during any 7-day period and shall not exceed the long-term monthly average at the Spring[dale] gauge by more than 15 cfs. 94

A dam breach and a release of water at 203,000 to 243,000 cfs would raise the average flow of the river so much that it would violate this agreement. Yet, these effects are not studied in the EA. This demonstrates that the NRCS acted arbitrarily and capriciously, and that a full EIS is needed.

Additionally, there is a substantial amount of infrastructure both on and near the Virgin River below the proposed project. A dam breach would release a tremendous amount of water, potentially leading to significant infrastructure damage in Zion National Park, Springdale, Rockville, La Verkin, Washington, St. George, and a number of other communities along the river. Yet, no mitigation measures, such as a community evacuation plan, were presented in the EA. These effects were not studied in the EA, thereby requiring a full EIS.

Finally, the EA notes that two endangered species, the Virgin River chub and woundfin, live in the Virgin River near La Verkin. ⁹⁵ The significant amount of water released from a dam breach would likely harm these species and their habitat. The EA failed to study this and so a full EIS should be conducted.

Furthermore, the likelihood of a dam breach is significant. Southwestern Utah is known for receiving severe local cloudburst events and even regional atmospheric river events. He earliest historical record for a major flood begins with the Flood of 1862 and caused by a persistent atmospheric river event that started in December of 1861 and ended in February of 1862. John Doyle Lee lived in New Harmony, Utah when this event occurred and his diary provided an excellent first-hand testimony to the magnitude of this precipitation event. The USGS calculated the discharge of the 1862 snowmelt, for the Colorado River at Grand Canyon to have a maximum flow of 500,000 cfs. The fivemonth volume of this snowmelt has not calculated by USGS or Bureau of Reclamation, but it is not unreasonable to assume the total capacity was at least 50 million acre-feet. The five-month volume of the 1884 snowmelt was calculated by Reclamation in 2008 to

95 EA page S-7.

⁹⁴ EA page 16.

⁹⁶ Cloudburst Floods in Utah. Woolley, USGS, 1946.

http://www.riversimulator.org/Resources/USGS/WoolleyUtahCloudburst1946.pdf

⁹⁷ John Doyle Lee. Juanita Brooks, USU Press, 1962.

http://www.riversimulator.org/Resources/Floods/JohnLeeDiarySummary1862Brooks.pdf

⁹⁸ Colorado River Basin Probable Maximum Floods Hoover and Glen Canyon Dams. USBR, 1990. http://www.riversimulator.org/Resources/USBR/MaxProbableFloods.pdf

be 30 million acre-feet at Black Canyon (Hoover Dam) with a maximum flow of 300,000 cfs. 99

Flooding caused a dam failure at Quail Creek Reservoir in 1989. In January of 2005, a cloudburst caused an estimated 200 million dollars in damages, and the total volume of this flood flow into Lake Mead was about 2 million acre-feet. In 2011, a flood damaged Winsor Dam on the Shivwits Indian Reservation.¹⁰⁰

The citizens of Glendale and Orderville have occupied the historic floodplain of the East Fork Virgin River, so the community-at-large has a significant risk when a 100- or 500-year event does finally arrive. A comprehensive flood analysis is required for all the communities of this watershed and not just at the dam site. Please consider that a flood management plan might save the proposed off-site reservoir, and yet lose all the community assets from a major flood occurrence along the East Fork Virgin River, instead.

D. The EA fails to provide basic information pertaining to the proposed project's water rights, raising the question of whether enough water exists to fill the reservoir.

While the EA provides some references regarding the water rights that are going to fill the Cove Reservoir, it lacks suitable substance, details or basic information to begin even a cursory analysis of the reliability of this water supply. With so many financial benefits ascribed to storing water at this reservoir, this represents a serious failure to provide basic transparency in regards to understanding the purpose for the Cove Reservoir. The EA fails to adequately back up that information with verifiable data. This matter needs to be examined, especially given that the U.S. Department of Agriculture is effectively proposing to use federal taxpayer dollars to finance this project.

The Kane County water rights contributing to the Cove Reservoir include Glendale Irrigation Company, Orderville Irrigation Company, and Mt. Carmel Irrigation company. It is said in the EA that these companies have a water right to "irrigate roughly 1,110 acres of ground between them." However, Conserve Southwest Utah managed to track down these companies' water right numbers (information the EA failed to provide). The water rights are 81-1673 for the Glendale Irrigation Company, 81-1141 for the Mt. Carmel Irrigation Company, and 81-1139 for the Orderville Irrigation company. These rights have a combined allocation of more water than naturally exists in the East Fork of

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⁹⁹ Evolution of Hoover Dam Inflow and Flood Study. Robert Swain, 2008.

http://www.riversimulator.org/Resources/USBR/EvolutionOfHooverDamInflowDesignAndFloodStudySwain.pdf
100 Website: Floods of Washington County, Utah. https://wchsutah.org/water/floods.php

¹⁰¹ EA, Appendix D.

the Virgin River, demonstrating that there are questions around whether or not these companies actually have enough wet water to fill the reservoir.

Additionally, all water rights come with a disclaimer saying:

THIS WATER RIGHT IS BEING PROTESTED IN A PROPOSED DETERMINATION BOOK. 102

This raises serious questions about the validity of any water claims being made by these companies. This basic lack of information makes it impossible to confirm their supposed allotment of 1,110 irrigated acres that is listed in the EA.

Furthermore, in a public board of directors meeting of the Kane County Water District on December 10th, 2020, the executive director of the KCWD was asked about the water flows to be used to benefit fish species. The executive director noted that the majority of water rights available for reservoir storage were actually held by the WCWD, not the KCWD. ¹⁰³ Since the agricultural lands associated with the Washington County portion of the project are largely municipal, these water rights would likely be called upon to water suburban grass landscapes, with the water demand beginning in March of each year and continuing through September, when outdoor municipal watering declines. We openly question how NRCS could fail to confirm the municipal use of water for this reservoir, especially given that a majority of the reservoir water rights appear to be held by WCWD, not KCWD.

The EA refers to WCWD's water right as Washington Fields and lists its "group use number" as 610649. Washington Fields is said to have the water right of 4,958 AF for irrigation use, which means a significant portion of the water stored in the proposed reservoir would be used for Washington County Irrigation. When the provided group use number is used to search for Washington County Fields on the Utah Division of Water Rights website, no results are found. This makes it impossible to confirm how much water Washington County Fields is allocated from the Virgin River and what the usage records of these rights are. Given that the majority of lands in Washington County are not agricultural but municipal in nature, we wonder whether the failure to provide basic information about the water rights in question was an intentional omission to avoid transparency.

¹⁰² UDWR. "Water Right 81-1673." https://www.waterrights.utah.gov/asp_apps/wrprint/wrprint.asp?WRNUM=81-1673

¹⁰³ Mike Noel at the KCWD Board Meeting. December 10, 2020.

¹⁰⁴ EA, Appendix D.

The Cove Reservoir project revolves around the supposed need for more irrigation water storage, yet the entities that would use this water are obscurely referenced and hardly verifiable. Without accurate and accessible references to the Orderville Irrigation Company, Glendale Irrigation Company, Mt. Carmel Irrigation Company, and Washington Fields Group, the EA loses credibility when making claims that the multimillion-dollar Cove Reservoir project is necessary.

If these entities do hold water rights to what would be stored in the reservoir, the NRCS should clearly state and cite the size, source, and status of these water rights within the EA, along with their water rights numbers, seniority, and metered usage records. Gathering this information is necessary when evaluating this project and requires further analysis in the form of an EIS.

E. The EA does not adequately account for the roles and findings of cooperating agencies, causing it to fall short of NEPA's criteria regarding interagency involvement.

Although the EA does list the National Park Service (NPS) and Bureau of Land Management (BLM) as cooperating agencies on the Cove Reservoir project, it does not provide ample evidence regarding the involvement of those agencies in the assessment process. NEPA requires that "lead agencies shall determine, by letter or memorandum, which agency will be the lead agency and which will be cooperating agencies." Within the same section, NEPA requires that lead agencies "request the participation of each cooperating agency in the NEPA process at the earliest practicable time." 106

The EA describes this sequence of agreement occurring with the BLM, but notes no such occurrence with the NPS:

On February 11, 2019, NRCS submitted a letter to the BLM Kanab Field Office Manager to formally request that the BLM become a Cooperating Agency for the proposed Cove Reservoir Project. On February 27, 2019, the BLM Kanab Field Office Manager signed an MOU, formalizing Cooperating Agency status for the project. NRCS signed the MOU on February 28, 2019. 107

When describing the role of the NPS as a cooperating agency, the EA notes only this:

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¹⁰⁵ NEPA Redline, page 13.

¹⁰⁶ NEPA Redline, page 14.

¹⁰⁷ EA, page 68.

Contact has been maintained with NPS personnel during the development of the project. 108

It cannot be concluded whether or not any formal agreement between the NRCS and NPS has been made regarding the Cove Reservoir project, nor can it be concluded that this agreement was formulated at the "earliest practicable time" as necessitated by NEPA. 109 The EA clearly accounts for the early consent of the BLM, but it gives no such evidence regarding the NPS's status as a cooperating agency on this project. This raises serious questions about the level at which the NPS has been involved in a project within which it is considered a cooperative agency. The lack of evidence regarding interagency cooperation is a failure by this EA to adhere to NEPA guidelines. The complexity of these issues requires them to be pursued within an EIS.

Additionally, the administrative record for this project indicates that none of the states in the Lower Basin were consulted. This is problematic as the water for this proposed reservoir is supplied by the headwaters of the East Fork Virgin River. The Virgin River terminates at Lake Mead Reservoir near Overton, Nevada. This watershed is in the Lower Basin Division of the Colorado River and the full inventory of water in this massive reservoir is shared with Nevada, Arizona, California and the nation of Mexico. Additionally, there are about two dozen sovereign tribes in the Lower Basin Division. All these stakeholders deserve a proper consultation about the goals and objectives of this DWPEA for the Cove Reservoir Project.

The Lower Basin Division and Mexico have fully utilized their legal apportionments and for over three decades now. In other words, new opportunities to consume surplus water in the Lower Basin simply do not exist anymore. Right now the water users of the Lower Division are voluntarily using less water for reasons that reservoir levels at Lake Mead are approaching a 50% chance of receiving forced water curtailments, and possible cessation of hydropower production at Hoover Dam.

The risk of curtailments in the Lower Basin is not a temporary situation, because human demands and increasing rates of natural evaporation will increase exponentially for generations to come. These water saving strategies are compromised when new storage projects in the Lower Basin are proposed for development, such as Cove Reservoir in Kane County.

In fact, the prediction of facing the problem of over-allocated water resources in the Lower Basin was identified in the decade of the 1960s. At that time, the consideration of a proposed federal dam project for the Virgin River, which was called the Dixie Project,

¹⁰⁸ EA, page 68.

¹⁰⁹ NEPA Redline, 14.

was never authorized by Congress. If this proposed federally financed project wasn't authorized 60-years ago, it most certainly would not be authorized today.

The water users of the CRB crossed the line of storage facility redundancy when Congress authorized the Colorado River Storage Project Act of 1956. When Congress authorized the Colorado River Basin Project Act in 1968, the problems associated with reservoir redundancy were further compounded. The remedies to address the redundancy, by Congress, include Criteria for Coordinated Long-range Operation of Colorado River Reservoirs of 1970, Endangered Species Act of 1973, and the Salinity Control Act of 1974.

Two generations have passed since the 1970s, and the remedies to counteract the redundancies of excessive reservoir construction have become tenuous. The purposes of upstream reservoirs are now shifting away from the primary purpose of producing food for the nation. Today the purposes of upstream reservoirs have been modified to protect hydropower production contracts at the high dams of Glen Canyon and Hoover, and to satisfy the thirst of urban development. While this shepherded water is moved hither and thither throughout the basin, reservoir and transit losses from evaporation have not been reduced. Additionally, the ability to dilute natural salt and heavy metal inputs has been seriously marginalized and, and the recovery programs for endangered fish are now dependent on hatcheries that manufacture brood stock.

This oversight is another instance in which the public record must be perfected. It is appropriate to request that the scoping process for this project should be re-initiated immediately in order to provide the necessary due process that must occur for downstream stakeholders.

F. The EA does not recognize the need for the project to obtain an exemption or license from FERC nor does it justify the need for additional hydropower.

The EA states that the proposed project includes plans to move and re-operationalize an old, currently inoperable hydroelectric power plant, named the Glendale plant, thereby generating between 200,000 and 540,000 kW of power. The proposed project would also provide additional water to an already operating hydroelectric power plant, named the Orderville plant, generating an additional 440,000 kW of power. Specifically, the EA states:

The existing Glendale hydroelectric power plant, which is currently inoperable, would be relocated to a point near the existing Orderville Diversion Dam. The power production of the new plant would be between 200,000 and 540,000 kW per year. A transmission line would be extended from the new hydroelectric

plant location to an existing transmission line. The Orderville hydroelectric power plant would continue to operate at its present location and would not be modified. However, releases from the proposed reservoir could allow the plant to produce an undetermined amount of energy during the summer months when it is normally inactive. This energy production would replace normal production times in the spring and fall. It is anticipated that the Orderville plant would produce approximately 440,000 kW hours per year resulting in average annual gross revenue of \$19,000.¹¹⁰

However, the EA does not mention that the project needs to receive a license or exemption from the Federal Energy Regulatory Committee (FERC) to construct and improve these new and existing hydropower plants. In fact, the EA entirely avoids any mention of FERC. In its section on permits and compliance, the EA mentions that work needs to be done with the USFWS and the USACE but fails to identify that FERC involvement is needed as well.

FERC makes very clear that all hydropower projects need to go through a licensing process unless they are subject to one of two exemptions. FERC says that the following two types of projects need not seek a license:

Small hydropower projects, which are 10 megawatts or less, that will be built at an existing dam, or projects that utilize a natural water feature for head or an existing project that has a capacity of 10 megawatts or less and proposes to increase capacity.

Conduit exemption that would be issued for constructing a hydropower project on an existing conduit (for example irrigation canal). Conduit exemptions are authorized for generating capacities 40 megawatts or less. The conduit has to have been constructed primarily for purposes other than power production.¹¹¹

It is not clear to us whether this project qualifies for either of these exemptions. However, even if it does, the project needs to receive an official exemption from FERC, which should be documented in the environmental permitting process. An exemption does not mean that Cove Reservoir project applicants need not contact FERC and may proceed forward with their project. An exemption means that project applicants must notify the public of a request for exemption from FERC, and these details must be disclosed in advance in the Cove Reservoir project NEPA permitting.

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¹¹⁰ EA page S-2

¹¹¹ FERC. "Exemptions from Licensing." (Feb 19, 2020). https://www.ferc.gov/industries-data/hydropower/licensing/exemptions-licensing

Only FERC can determine whether or not a project is allowed an exemption, meaning that the KCWD and NRCS must engage both the public and FERC in this permitting process. The EA's failure to identify the steps necessary to receive an exemption constitutes a serious permitting oversight and a significant failure by the permitting agency and local organization. It is a clear example of arbitrary and capricious action. Since more detailed permitting must be pursued, a full EIS should be conducted.

Additionally, FERC and the NRCS may be prohibited from constructing projects that may affect wild and scenic rivers. This is explained by the following Congressional Research Service report:

In addition to using reserved water rights to protect the flows of designated rivers, the [Wild and Scenic Rivers Act (WSRA)] provides protection for a designated river by limiting the licensing of dams, reservoirs and other water project works on, or adversely affecting, protected segments. The WSRA prohibits the Federal Energy Regulatory Commission (FERC) from licensing "the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act ... on or directly affecting any river" designated as part of the national wild and scenic rivers system. Likewise, no other federal agency may "assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which [a designated] river was established."

The prohibitions on water and power projects are very broad in the WSRA. The prohibitions generally limit federal agencies from recommending authorization of such projects, or appropriations to begin construction on such projects, that would have an adverse effect on the purpose of the designation. The restrictions placed on FERC and other federal agencies regarding rivers designated under the WSRA extend to rivers designated as potential additions to the wild and scenic rivers system, at least to some degree. The same prohibition on licenses for construction or assistance for construction applies for a period of three complete fiscal years following any congressional action that designates a river as a potential addition. However, if, during that period, the relevant administering agency determines that the river should not be included in the wild and scenic river system and provides appropriate notice to Congress, the agency may proceed with project plans.

The act does not prohibit "licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic.

recreational, and fish and wildlife values present in the area on the date of designation" as an addition or potential addition to the wild and scenic rivers system. 112

It is unclear from the EA whether this project would affect the wild portion of the East Fork. Given this, and given that no FERC consultation appears to have taken place, it is clear that this EA has entirely failed to address important aspects of this project. Therefore, a full EIS should be conducted to examine these issues.

1. The EA consistently labels the relocation and upgrade of the Glendale hydroelectric power plant as a way that the Cove Reservoir project would fulfill local energy demands, yet fails to provide any evidence that these energy demands exists or that this project is the most efficient way to address them.

The Purpose and Need section of the EA establishes the relocation and upgrade of the Glendale hydroelectric power plant as one of the reasons that the Cove Reservoir project is necessary:

An opportunity exists to provide additional renewable energy for local communities whose populations are expected to continue to increase in the near future (Kane County 2017, 2018). The existing Glendale hydroelectric plant does not meet the needs of the community, and the Orderville plant currently only generates power during the fall, winter, and early spring months. New facilities and the availability of water during the summer months would provide opportunities to help meet these energy needs. ¹¹³

These points are stressed throughout the EA, yet the local community's supposed energy need never receives any factual support, documentation, or formalization whatsoever. The details of who would deliver future electricity is left outstanding, as is a comparison with the efficacy of competing power sources most notably solar power generation. These energy claims are sophomoric, hollow, and lack substance and appear to be designed for marketing impact than actual power benefits.

While the EA says that local communities are growing, it never gives evidence that this growth necessitates increased hydropower in order to keep up with energy demands. In fact, it never established *which* local communities would be benefiting from the power plant. It is logical that the construction of the new power plant, coupled with increased

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¹¹² Brougher, Cynthia. "The Wild and Scenic Rivers Act (WSRA): Protections, Federal Water Rights, and Development Restrictions." (2010). Congressional Research Service. Page 9.

¹¹³ EA, page S-1.

flows at the existing Orderville power plant, could increase the overall production of energy, but an overall increase in energy is not justification for a project with potentially substantial environmental, cultural, and hydrologic consequences. The EA's failure to demonstrate the details about the water rights and future possible reservoir storage raise questions about how often power production would actually be performed. This failure to document the absolute basics of power production means that operation and maintenance costs cannot be evaluated, which represents another failure to provide basic transparency about claims made by third parties that are totally wishful.

The overall increase in energy must fill an existing demand for said power, that should be more financially competitive with other new power sources including both rooftop solar and large array PV projects coming into existing in the near and long term future. Without these considerations, there can be no justification for the financial and environmental burdens of the project. The EA gives no empirical evidence to demonstrate any future power demand whatsoever, which is ironic given that this region is regarded as one of America's highest-ranking potentials for solar power production.

When new hydropower plants are permitted, plant operators evaluate a range of physical constraints including plant capacity, turbine capacity, actual generation, O&M costs and a variety of other financial constraints. These metrics are needed by permitting agencies and the general public to understand how a hydropower plant might affect in-river operations. Yet the Cove Reservoir makes broad claims unsubstantiated with the most basic of information that in our experience have been part of energy and hydropower permit applications for the last 40 years. We wonder why the EA lacks any specificity that the public can use to understand how their tax money and public resources are to be used.

Releases from the reservoir during the low-flow winter season would extend the yearly operational period of the existing Orderville hydroelectric power plant but would not significantly increase the amount of energy produced. The use of this renewable energy would reduce reliance on traditional fossil fuel sources. It is estimated that power production from the new Glendale plant would increase by approximately 540,000 kW-hours per year.¹¹⁴

The excerpt above is an example of the weak evidence given by the EA to establish a need for the hydroelectric project. Not only does this project do relatively little for the energy production of the Orderville hydroelectric power plant, the energy that is being produced from the new Glendale plant does not have a clear purpose. It is said that the use of this

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¹¹⁴ EA, page 59.

energy would "reduce reliance on traditional fossil fuel sources," but it is not said where and for whom this transition from fossil fuels to green energy would occur. 115

It is not clear that the energy generated from this hydropower plant would be "green" energy. As is discussed in more detail in a following subsection. Numerous scientific studies have shown that reservoirs generate significant amounts of greenhouse gases (particularly methane). In some cases, these GHG emissions have been so enormous that a fossil fuel plant producing the same amount of electricity would have contributed less to climate change. In this light, it would likely be much better to construct an alternate, truly green energy source like a small solar or wind station.

This fact, coupled with the EA's failure to present empirical evidence establishing the need for the new Glendale power plant renders this aspect of the project's need invalid. Constructing the power plant could be financially and environmentally wasteful. There must be an analysis of local energy needs, population growth, and alternative green energy sources prior to spending \$21 million of federal taxpayer money on this project, all of which should be performed within a more extensive EIS.

G. The EA failed to consider the cumulative effects of greenhouse gas emissions stemming from the proposed project, thereby acting arbitrarily and capriciously.

The EA recognizes that the construction of the proposed project would create emissions that would negatively affect the air quality of the local area. However, the EA entirely fails to address how these emissions would contribute to climate change. Additionally, the EA ignores two other potentially significant sources of GHG emissions: recreation and the reservoir itself, also failing to recognize how these emissions would contribute to climate change.

The EA goes to great lengths to establish that the proposed reservoir would be a popular recreation site that would host motorized boaters, RV's, and other carbon-dependent recreational activities. These activities would cumulatively contribute a potentially significant amount of GHGs to the atmosphere over the projected 100-year life of the reservoir, thereby accelerating climate change.

¹¹⁵ EA, page 59.

¹¹⁶ Yang, L., Lu, F., Zhou, X., Wang, X., Duan, X., & Sun, B. (2014). Progress in the studies on the greenhouse gas emissions from reservoirs. *Acta Ecologica Sinica*, *34*(4), 204-212.

¹¹⁷ Giles, J. "Methane quashes green credentials of hydropower." *Nature* 444, 524 (2006). https://doi.org/10.1038/444524a

¹¹⁸ EA page 65.

¹¹⁹ EA page 61.

Additionally, numerous scientific studies demonstrate that reservoirs themselves produce a significant amount of GHGs, primarily in the form of methane (an especially potent GHG). For example, Deemer et al (2016) states:

We estimate that GHG emissions from reservoir water surfaces account for 0.8 (0.5–1.2) Pg. CO₂ equivalents per year, with the majority of this forcing due to CH_4 ¹²¹

In other words, this study found that methane emissions from reservoirs themselves produced 0.8 petagrams (or 800 million metric tonnes) of CO₂ equivalents annually. To be clear, these emissions do not come from industrial operations associated with constructing or operating the reservoirs, nor do they come from recreation on reservoirs (although both of those activities also produce their own GHG emissions). The 0.8 petagrams of emissions referenced above come from the reservoirs themselves and are created through a variety of processes, including the decomposition of inundated organic material.

To put the reservoir's emissions into perspective, the average American produces 19.78 metric tonnes of CO_2 equivalents each year, 122 meaning that reservoirs produce the same amount of GHG emissions as roughly 40 million Americans. Some studies even show that certain reservoirs with hydroelectric generating capabilities have produced more GHG emissions than fossil-fuel plants generating an equivalent amount of electricity. All this says that there is good scientific evidence to show that the Cove Reservoir itself may be a significant source of GHG emissions.

Combined, the three emission sources associated with the proposed project (emissions from construction, recreation, and the reservoir itself) would potentially contribute a significant amount of GHGs to the atmosphere, thereby accelerating climate change. This would undoubtedly have a significant effect on the quality of the human environment, therefore warranting a full EIS. 124 Additionally, the NRCS's failure to study this important aspect of the proposed project constitutes arbitrary and capricious action. 125

¹²⁰ Yang, L., Lu, F., Zhou, X., Wang, X., Duan, X., & Sun, B. (2014). Progress in the studies on the greenhouse gas emissions from reservoirs. *Acta Ecologica Sinica*, 34(4), 204-212.

Deemer, B. R., Harrison, J. A., Li, S., Beaulieu, J. J., DelSontro, T., Barros, N., ... & Vonk, J. A. (2016). Greenhouse gas emissions from reservoir water surfaces: a new global synthesis. *BioScience*, 66(11), 949-964.

¹²² McLean, Ryan. "How Much CO2 Does The Average Person Create Each Year?" (2018). https://slightlyunconventional.com/much-co2-average-person-create-year/

¹²³ Giles, J. "Methane quashes green credentials of hydropower." *Nature* 444, 524 (2006). https://doi.org/10.1038/444524a

¹²⁴ 7 CFR § 650.7

¹²⁵ The Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008).

H. The EA failed to study valid nonstructural alternatives to the proposed project, most notably water conservation.

As currently written, the EA does not include analysis on nonstructural alternatives. This was done intentionally and is justified by the following:

Non-structural alternatives, such as water conservation, water recycling, and other sources of water were considered. These alternatives were determined not to be feasible because they would not meet the purpose and need of the proposed project which is providing sufficient critical water storage capacity, more efficient and reliable water flow (particularly during dry summer months) and increased recreation opportunities. The KCWCD currently implements water conservation measures for their projects in Kane County. 126

However, it is not true that nonstructural alternatives "would not meet the purpose and need of the proposed project." First, as has been discussed elsewhere, the purpose and need for this project is flawed. The EA states that the purpose of this project is to secure reliable summer water supplies for agricultural water users but failed to recognize that agricultural lands in the proposed project areas are quickly disappearing. It appears that this project's water would most likely be used largely for M&I purposes, thereby making this an M&I project. Since that is the case, nonstructural alternatives like water conservation would be valid alternatives to the proposed project and should have been studied in the EA. A full EIS should be conducted to examine these alternatives.

This is especially true given that Washington and Kane Counties currently employ poor conservation practices and have significant potential to save water through conservation, most notably in the municipal sector. Thousands of water suppliers across the United States, and for that matter across the globe, have implemented water conservation and efficiency programs which have greatly reduced water demand among their customers, reduced utility operating expenses, lowered operation and maintenance costs and reduced water rates for customers over the long term by avoiding or deferring the need for additional water supplies. Among many water suppliers in the American West, demand management has become a major component of their operations which include an array of sophisticated water conservation measures designed to reduce the water use of their customers. U.S. per person water use has declined significantly in the last several decades because of the popularity of water conservation programming.

The American Water Works Association (AWWA), is an international non-profit, scientific and educational association founded to improve water quality and supply.

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¹²⁶ EA page 25.

Founded in 1881, the AWWA is the largest organization of water supply professionals in the world. Their membership includes over 4,300 utilities that supply roughly 80 percent of the nation's drinking water.

The AWWA's Manual 52, *Water Conservation Programs, A Planning Manual*, lists a comprehensive overview of why water conservation should be considered by utilities and water planning agencies. It is the foremost publication in the world regarding water conservation. The manual provides peer reviewed insight on conservation, setting goals, water use & water savings, and program planning & execution that is used by cities and towns around the world because as stated on page 3:

Conservation, implemented as a long-term water management practice, is fiscally responsible and can enhance our ability to grow. 127

AWWA begins its 217-page manual with 13 case studies comparing water conservation programs across the United States and Canada. On page 4, the AWWA notes the reasons why water conservation programs should be implemented:¹²⁸

- **Cost savings:** Lowering water production and/or distribution costs will save the utility and its customers (or ratepayers) money in reduced operating costs and possibly deferred capital costs. Conservation is often an important part of a least-cost future water supply plan.
- Wastewater treatment and disposal benefits: Reduction of indoor water use cuts wastewater flows, resulting in cost savings and lessened environmental impacts of treated wastewater disposal.
- **Environmental benefits:** Water removed from a water body for human use could be used for environmental or other purposes. For example, protection of endangered species often requires a reliable source of good quality water, which might be lessened by water withdrawals.

¹²⁷American Water Works Association. *Water Conservation Programs – A Planning Manual (M52)*, December 2017. Retrieved from

¹²⁸ American Water Works Association. *Water Conservation Programs – A Planning Manual (M52)*, December 2017. Retrieved from

 $[\]frac{https://www.awwa.org/Portals/0/Awwa/Publishing/Manuals/M52\%20ed2\%20_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf?ver=202_0-01-07-110651-213_withErrataLookInside.pdf$

- **Competing beneficial uses:** In addition to the environment, water left in place could be used for agriculture, power production, recreation, aesthetic enjoyment, wildlife, and so on.
- Water supply limitations: Few places now enjoy unlimited water supplies. Water conservation can stretch existing supplies, whether supply is from groundwater or surface water.
- Avoiding the need for new supply development: Developing new water supplies is often controversial, and those opposed to supply projects often declare a preference for conservation as an alternative.
- Utility stewardship and sustainability: Utilities that conserve water demonstrate leadership in resource management and are working towards a goal of sustainability. The same water resources can sustain enhanced economic activity.
- **Energy savings:** Reducing water production will save energy and reduce greenhouse gas emissions.
- *Improved supply reliability:* Conservation can reduce or postpone drought water use curtailments by essentially increasing supply (i.e. building a drought reserve).
- **Customer benefits:** Customers who conserve water may enjoy lower water bills and possibly lower wastewater and energy bills.
- **Regulatory compliance:** Some state regulatory agencies require water conservation plans and/or implementation progress to qualify for permits, grants, and loans. Some states have set per capita use reduction targets, which implies the need to increase conservation efforts.

Public perception: The public often insists on demonstrating efficient use of existing water supplies before supporting expansion of supplies to meet new water needs.

Water conservation is a viable alternative to new supply developments projects, such as the proposed Cove Reservoir project. Water conservation can also save both the utility and customer (or ratepayer) money, especially in the long-run and when compared to multi-million-dollar project such as the proposed Cove Reservoir project. The NRCS must consider water conservation as an alternative.

Washington County's water use is exceptionally high. According to the Lake Powell Pipeline DEIS, the WCWD uses 302 gallons per person per day. This rate of use is more than twice the national average, twice the water use of Denver, and nearly three times the per person water use of Las Vegas, itself just 90 miles away from Washington County. The NRCS needs to analyze the potential of significant water conservation achievements in Washington County as an alternative to Cove Reservoir. If enough water could be conserved, then the project would not be necessary.

The Division and WCWD have developed a municipal water conservation goal for the Washington County area, in a document called the 2019 Report on Utah's Regional M&I Water Conservation Goals. The Washington County region is listed as the Lower Colorado River South region by the Utah Division of Water Resources in this document. The following table is taken from this plan, which lists gpcd levels for M&I water use among the various regions of Utah across future periods. These are the potential gpcd numbers under the "With All Aggressive Policy Options" scenario according to the table.

Figure 16: Water Conservation Goals Report

Table 4-11: Total Potential M&I Water Use (gpcd) by Region – With All Aggressive Policy

Options

Region	2015	2030	2040	2065	
Bear River	304	236	221	212	
Green River	284	226	215	213	
Lower Colorado North	284	217	203	194	
Lower Colorado South	305	246	232	222	
Provo River	222	167	153	148	
Salt Lake	210	177	169	161	
Sevier River	400	307	284	281	
Upper Colorado	333	254	236	228	
Weber River	250	189	174	167	
Statewide Average	240	190	178	171	

The table below converts these water conservation levels for the Lower Colorado River South regions (WCWD region) into annual water conservation rates for the 50-year period between 2015 and 2065. This demonstrate a total water use reduction target of

¹²⁹ Lake Powell Pipeline Draft Environmental Impact Statement, Appendix B, Bureau of Reclamation. (2020). https://cdxnodengn.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=297778.

Bowen Collins & Associates. *Utah's Regional M&I Water Conservation Goals*. November 2019. Retrieved from https://water.utah.gov/wp-content/uploads/2019/12/Regional-Water-Conservation-Goals-Report-Final.pdf

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22% by 2065 for the Lower Colorado River South region. This translates into a yearly water demand savings of just 0.50% per year.

Figure 17: Analysis of Water Conservation Goals

URC Analysis of 2019 Conservation Goals Report

Source: Division of Water Resources State Water Plan (Table on Page ES-3)

Region	Baseline (gpcd) from 2015	2030	2040	2065	% Change Over 50 Years	% Change per year
Bear River *	304	249	232	219	-28	-0.65
Salt Lake *	210	187	178	169	-20	-0.43
Weber River *	250	200	184	175	-30	-0.71
Lower Colorado River South **	305	262	247	237	-22	-0.50
Green River	284	234	225	225	-21	-0.46
Lower Colorado River North	284	231	216	205	-28	-0.65
Provo River	222	179	162	152	-32	-0.75
Sevier River	400	321	301	302	-25	-0.56
Upper Colorado River	333	267	251	248	-26	-0.59
Statewide	240	202	188	179	-25	-0.58

^{*} Proposed Bear River Development Recipients

WCWD's water conservation goals are far from aggressive compared to other western communities, which have been able to achieve and reach ambitious water use reduction targets. The image below shows how western communities have achieved annual reductions in water use ranging from 2% per year up to 25% per year. Even 26 years ago, Albuquerque managed to reduce water use by 2.2% per year, in the year 1994. The NRCS must address this level of water conservation programming and goal-setting for the Washington County area.

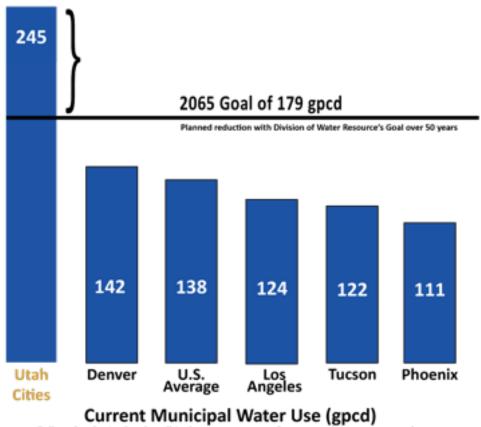
^{**} Proposed Lake Powell Pipeline Recipients





Cities such as Phoenix, Albuquerque, Sacramento, Tucson, Denver, and Los Angeles have managed to save over 2% of water per year for several years. Some cities have saved well over that 2% number as in the case of Los Angeles from 2015 to 2017, which managed to save 7.5% per year. California as a whole managed to reduce water usage by 25% in a single year, five years ago. Yet the Division's methodology projects that, under the most aggressive possible water conservation, the Lower Colorado South region 45 years from now would still use nearly 81% more water than Tucson, Arizona used in 2019:

Figure 19: GPCD Comparison



Gallons Per Capita Day (gpcd) is the meausrement of water used per person per day

As further evidence of how weak the WCWD's conservation goals are, the table below lists a few examples of the many cities inside Utah that currently have water use lower than the 2075 Washington County projection of 240 gpcd. The data was sourced from the Utah Division of Water Resources, which lists water conservation plans produced by each of the cities listed below. All water suppliers below had a gpcd below 206 in 2017. When put in this light, the WCWD's projection that the they will use 240 gallons per person per day in 2075 is foolish.

Figure 20: 2017 Actual GPCD in Utah Cities

Water Supplier	2017 Total GPCD
Salt Lake City	204
Provo City	176
Granger-Hunter	170
West Jordan	162
Ogden	189
Taylorsville-Bennion	154

Logan	192
Kearns	143
Jordan Valley Water District (retail)	158
Herriman	153
Pleasant Grove	205
Eagle Mountain	153
Tooele	154
Magna	125
Clearfield	149
Saratoga Springs	133
Midvale	144
Payson	150
Draper City	182
Santaquin	200
White City Water Improvement District	191
South Salt Lake	156
Vineyard City	79

The WCWD's water conservation goal is clearly inadequate, as dozens of water suppliers in Utah have already surpassed the 2075 water conservation gpcd target.

If WCWD could lower its water use to 149 gpcd, half its current use, it could support twice as many people and alleviate the need for the new projects like the proposed Cove Reservoir, saving millions of dollars in the process. Combined with its existing water supply, the conversion of agricultural water, secondary metering and meaningful inclining water rate structures would easily provide enough water for the future of Washington County under any of its forecasted population growth scenarios. This alternative needs to be reviewed as an alternative to the proposed Cove Reservoir project in a full EIS.

Just 90 miles away from St. George lies the growing metropolis Las Vegas, Nevada. In just 18 years, the Southern Nevada Water Authority has led credible conservation measures that have significantly reduced its water use. According to the chart below from their 2019 Joint Water Conservation Plan, 131 it has lowered its use from 211 gpcd in the year 2000, to just 113 gpcd in the year 2018, a 47% reduction. That's a decline of over 100 gpcd in just 18 years and comes from a community that is geographically and climatically similar to Washington County. In half the time, the Southern Nevada Water Authority has saved double the amount of water that WCWD plans to save over a 45-year period.

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¹³¹ *Joint Water Conservation Plan*, Southern Nevada Water Authority (2019), page 43 Appendix 1 https://www.snwa.com/assets/pdf/reports-conservation-plan-2019.pdf

What's more, two years ago Las Vegas used 63% less water than the WCWD uses today. Even more alarming, is the WCWD's projection that the WCWD will use 240 gpcd in the year 2075, which will still be 13% higher than Las Vegas' water use of 211 gpcd in 2000.

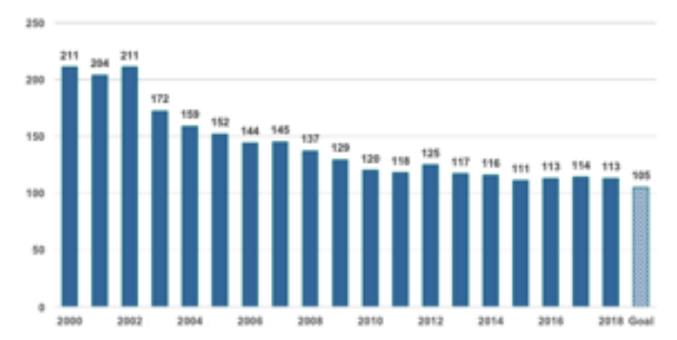


Figure 21: Southern Nevada Water Conservation Successes

Additionally, water efficiency and conservation is widely regarded as the cheapest source of water. As Peter Mayer expressed publicly, "the cheapest water source for a water supplier is the water it already manages."

The true cost of water conservation can be easily seen in any of the many published works on water conservation economics. A trio of respected water researchers in California found that, once you consider savings to maintenance costs, water conservation not only saves consumers water, but saves them money as well. "The cost of alternative urban supply and efficiency options in California" by Heather Cooley, Rapichan Phurisamban, and Peter Gleick offers a good idea of the true financial benefits of water efficiency.

Note that California uses far less water than Utah, so Utah likely has more low-hanging fruit for water conservation available. Therefore, the cost of water conservation in Utah is likely even cheaper than the figures in this paper. Despite starting at a much lower water use baseline than Utah, as stated in Cooley's Report California was able to achieve far more aggressive water conservation than Utah:

California has made considerable progress in implementing water conservation and efficiency, as seen in the decline in residential water use (including both indoor and outdoor) from 620 liters per person per day (lpcd) in 2000 to under 500 lpcd in 2010.

When these numbers are translated to gpcd, this quote states that residential use dropped from 163 gpcd to 132 gpcd in 10 years. And as explained before, since 2010 California has become even more aggressive with saving water. To help explain the financial estimates of water conservation numbers given in the paper, Cooley assumes new, water-efficient devices would be purchased:

For most efficiency measures, we assume that the customer is in the market for a new device because the old device has reached the end of its useful life, referred to as natural replacement.

This concept of natural replacement is based on the idea that as appliances and fixtures wear out, the increased costs of replacement (if any) to more efficient devices are less of a detriment to adoption by consumers. Therefore, it is not the total costs of replacement for these fixtures that should be considered but the incremental costs as described by the following:

Annual water savings are then calculated as the difference in water use between the two options, multiplied by the estimated average frequency of use. The incremental cost is the cost difference between a new efficient and a new inefficient device and is based on price surveys of commercially available models.

In fact, water efficiency and conservation programs often save money and many have a negative cost. This occurs because:

Some efficiency measures have a "negative" cost, which means that reductions in operation and maintenance expense that accrue over the lifetime of the device exceed the cost of the water efficiency investment. This is especially true for efficiency measures that save customers energy, but also for those that provide savings in labor, fertilizer or pesticide use, and reductions in wastewater treatment costs—sometimes called "avoided costs." For example, a high-efficiency clothes washer costs more than a less-efficient model; however, over its lifetime it uses less energy and produces less wastewater than inefficient models, thereby reducing household energy and wastewater bills. Over the estimated 14-year life of the device, the reductions in energy and

wastewater bills are more than sufficient to offset the cost of the more efficient model, resulting in a negative cost of conserved water.

Once those savings are included, Cooley's Report shows that the costs for water conservation are extremely low, and if analyzed by the NRCS, would likely show that water conservation is much cheaper than new development like the Cove Reservoir project. Below is a table from Cooley's Report which details residential water conservation measures, converted from cubic meters and liters to acre feet and gallons.

Figure 22: Residential Water Conversion and Efficiency Measures

Efficiency measure	Statewide water saving per year i acre-feet	gs n	Yearly water savings in gallons	Low end cost per acre- foot	High end cost per acre- foot
Toilet	291,857		4,755	-\$629	-\$197
			687	\$1,172	\$4,564
Showerhead	170,250		1,400	-\$3,022	-\$2,837
Clothes washer	267,536		7,133	-\$752	-\$185
Dishwasher	11,350		423	\$11,928	\$19,316
Landscape conversion	891,785 2,026,785	to	19 to 25 gallons per square foot	-\$4,552	-\$2,566
				\$580	\$1,456

Table 7 of Cooley's Report also describes the costs of non-residential water conversation measures.

Figure 23: Non-Residential Water Conversion and Efficiency Measures

Efficiency measure	Yearly water savings (gallons)	Low end cost per acre- foot	High end cost per acre- foot
Toilet	5,283	-\$678	-\$74
	766	\$1,813	\$6,525
Urinal	2,642	\$974	\$1,826
Showerhead	4,227	-\$3,034	-\$2,837
Faucet aerators	1,611	-\$1,221	-\$678

Pre-rinse spray			
valve	6,868	-\$1,715	-\$1,159
Medical steam	449,100 to		
sterilizer	660,430	-\$1,270	-\$1,221
modification	gallons		
Food steamer	52,834	-\$14,012	-\$13,457
Ice machine	12,944	-\$3,602	-\$1,122
Waterless wok	169,070	-\$1,048	-\$876
Clothes washer	36,984	-\$1,604	-\$1,122
Landscape	19 to 25	¢ 4 550	¢ ን ፫ራራ
conversion	gallons per square foot	-\$4,552	-\$2,566
		\$580	\$1,456
	2,087 to		
	3,963		
Rotary nozzle	gallons	\$197	\$1,036

The cost of landscape "conversion" for new development is estimated at \$22 per square meter. The cost of landscape conversion in existing development is estimated at \$54 per square meter. This is why two measures for landscape conversion are listed in the tables above.

Not mentioned on these two tables is storm water capture. However, Cooley did estimate these costs as well in the paper. See the following:

Large stormwater capture projects are among the least expensive of the water supply options examined, with a median cost of \$0.48 per cubic meter.

The table below shows Cooley's estimates of water conservation costs.

Levelized Cost of Alternative Water Supply and Water Conservation and Efficiency Measures, in 2015 dollars per acre-foot Q Landscape Conversion (Low) Residential Showerhead lce Machine Pre-rinse Spray Valve Medical Steam Sterilizer Modification Waterless Wok Stove Residential Clothes Washer Residential Toilet (3.5 gpf) Water Broom Landscape Conversion (High) Urinal Large Stormwater Capture Small Large **Brackish Desalination** Small Nonpotable Reuse Indirect Potable Reuse Small Large Seawater Desalination Small -\$6,000 -\$4,000 -\$2,000 \$2,000 \$4,000 \$6,000 Range of Cost Range of Cost (\$/Acre-Foot)

Figure 24: Cost of Water Conservation

Notes: All values are rounded to two significant figures. Costs for water supplies are based on full-system cost, which includes the cost to integrate the supply into a water distribution system. Ranges for water supplies are based on 25th and 75th percentile of project costs, except for large stormwater projects, which include the full cost range of the two projects. Conservation and efficiency measures shown in this figure represent only a subset of the measures examined in this study due to space limitations. Cost ranges for water conservation and efficiency measures are based on varying assumptions about the incremental cost and/or water savings associated with a measure.

Figure from: Heather Cooley, Rapichan Phurisamban. [2016]. The Cost of Alternative Water Supply and Efficiency Options in California, Calif.: Pacific Institute.



The NRCS must conduct its own analysis, using peer-reviewed documents produced by impartial individuals and organizations on the cost and effectiveness of true water conservation efforts in the EIS. An independent cost-benefit analysis of water conservation by an independent source versus the cost of building the proposed Cove Reservoir project, also conducted by an independent source is what is needed to identify true alternatives in the EIS process. That source should not be a hired lobbyist, marketing firm, or consulting firm employed by either the Washington County Water District, the Kane County Water District, or the Utah Division of Water Resources, ensuring the NRCS's independence.

The degree to which Utah residents, specifically in Washington County, are overusing water for their landscapes is very important, and a topic Utah Rivers Council has

examined for decades. Unfortunately, the EA overlooks this aspect as a potential alternative to the proposed project.

Total efficiency is defined as irrigation efficiency multiplied by delivery efficiency. Delivery efficiency calculates how much water is lost in the transportation of water and the NRCS neglected to address this aspect of water delivery in the EA. Often times secondary water is delivered in open, unlined canals. These canals lose a great deal of water to seepage and evaporation. Water loss rates for unlined canals both for agricultural and secondary water uses, can be anywhere from 20 - 60% depending upon the soil type and terrain. If delivery efficiency is only 50%, then total efficiency is extremely low regardless of how high or low irrigation efficiency is.

The Division has claimed that irrigation efficiency in Southern Utah is currently 92% and projected to reach 99% in 2065. However, it is highly unlikely that Washington County has achieved 92% irrigation efficiency. The district still has many unlined and open canals that are likely losing up to 50% of their water.

The Division explains that 100% efficiency is unlikely to be achieved and that drip-feed systems are more efficient than sprinkler systems, and we agree on both points. It may be challenging to pick an accurate figure for potential irrigation efficiency, but the NRCS must conduct its own independent analysis of the potential future water savings Washington County could achieve through irrigation efficiency. Agriculture makes up 70 – 80% of all water use in the county and has a massive potential to extend current water supplies for future growth.

Figure 25: Water Efficiency Claims by the DWRe

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Table 4-6: In	- Quite	CHIPCHETTO

Baseline - Ratio of Efficiency to Best Expect	ed .			
	Current'	2030	2040	2065
Wasatch Front Population Centers	0.88	0.93	0.96	0.98
Wasafch Back/Rural Areas	0.82	0.90	0.94	0.98
Southern Utah	0.92	0.96	0.97	0.99
Policy Option E1 - Ratio of Efficiency to Bes	t Expected			
~	Current*	2030	2040	2065
Wasatch Front/Population Centers	0.88	0.98	1.0	1.0
Wasatch Back/Rural Areas	0.82	0.97	1.0	1.0
Southern Utah	0.92	0.99	1.0	1.0

We understand that the numbers in the table are an estimated ratio between current irrigation efficiency and potential irrigation efficiency. However, even as a ratio, the numbers the Division used don't make much sense, and the NRCS would be wise to be cautious with other numbers provided by the Division. As shown earlier, with just mild policy changes, the water usage of some Southern Utah cities would go down dramatically. Yet the Division suggests that Southern Utah is 92% efficient. If cities in Southern Utah can achieve such massive water savings with moderate price increases, they clearly can also significantly improve their irrigation efficiency via lining open canals, alternative crops and irrigation systems, and thus the data in this table is erroneous.

The high irrigation efficiency numbers are even more ridiculous in the context of secondary water in Utah. Unmetered secondary systems are so inefficient that merely metering these systems reduces water usage by 30%-50%. We have serious concerns about why secondary water inefficiency was not incorporated into an irrigation efficiency model as a potential alternative to the proposed project in the EA.

¹³² Endter-Wada, J., D.T. Glenn, C.S. Lewis, R.K. Kjelgren, and C.M.U. Neale. 2013. Water User Dimensions of Meter Implementation on Secondary Pressurized Irrigation Systems. Research Report for Weber Basin Water Conservancy District and the US Bureau of Reclamation. April 2013. 75 pages.

This is especially egregious given that the NRCS's own guidelines direct them to study water conservation methods, especially as they apply to agricultural projects. The guidelines state:

Evaluate irrigation water requirements by considering such things as the extent and characteristics of the lands to be irrigated; type and quality of crop to be grown; consumptive use of each crop under the existing climatic conditions; irrigation method to be used; water application efficiency considering proper application depth, rate, and timing of irrigation; reuse of tailwater; and special water uses of conveyance of the irrigation water from the point of supply to the point of use considering such things as the type and extent of the conveyance system; adequacy of control and measuring structures; seepage and management losses.¹³³

Yet, despite all this, EA failed to analyze how efficient current farming practices are in the proposed project areas or what the appropriate amount of water actually is for these same area. Had the EA done this, NRCS may have found that current farming practices are not efficient, and that simple and cheap nonstructural measures like improving agricultural efficiency could reduce or eliminate the need for the project. If farms are overusing water, then updating techniques or making small infrastructure upgrades could reduce the amount of water used to grow the same amount of crop, thereby "stretching" the water supply. This may have been sufficient to allow whatever farms remain in the project area to grow crops even during low flow periods. Since the EA failed to study this, a full EIS should be conducted to examine this alternative.

These water savings, coupled with the high savings from simple municipal water conservation measures, would likely meet the project's purpose and need at a lower total cost, thereby constituting a valid alternative. The NRCS's failure to acknowledge this is arbitrary and capricious as they failed to consider an important aspect of the problem. The NRCS should prepare a full EIS to consider this alternative.

I. The Cove Reservoir project's official planning and execution process commenced long before the 2020 CEQ alterations to NEPA guidelines, and should subsequently abide by the NEPA guidelines that were in affect when the project began.

We recognize that the Council on Environmental Quality (CEQ) recently finalized amendments to its NEPA regulations, which took effect on September 14, 2020.¹³⁴ The

¹³³ NRCS. Guide for Environmental Assessment. (1977). Page D-28.

¹³⁴ 85 Fed. Reg. 43,304 (July 16, 2020)

NRCS should not, however, rely on these amended regulations as an excuse to limit its analysis of any of the issues raised in these comments for several reasons.

The NRCS and Kane County Water Conservancy District began planning the Cove Reservoir project long before the CEQ's NEPA alterations were implemented, and should subsequently abide by the NEPA guidelines that existed prior to the 2020 alterations. Appendix E of the EA cites the feasibility study for the dam which was performed in 2004, which is then included in the Plan of Development Draft for the Cove Reservoir Project that was created in July of 2019. Because the proponents of the Cove Reservoir project began the official planning procedures long before the newest CEQ alterations were put into effect, as shown by the dates of the feasibility study and Plan of Development Draft, they should have been abiding by the pre-2020 NEPA guidelines throughout this entire process. This makes it logical for them to continue to do so as they proceed with the NEPA evaluation.

The new regulations only apply to projects that begin the NEPA process after September 14, 2020, and although agencies have the discretion to apply the new regulations to ongoing NEPA processes, the NRCS should not apply the new regulations here because of the date that the planning for this project began.¹³⁶ The NRCS began the planning process for the Cove Reservoir Project under the previous regulations, so it would therefore be arbitrary and capricious for the agency to subsequently issue an Environmental Assessment that ignores or does not adequately assess the previously required environmental consequence analysis. If the NRCS were to narrow the scope of the Environmental Assessment or brush aside issues midstream in the NEPA process, it would "entirely fail[] to consider an important aspect of the problem" that it had previously identified.¹³⁷

Finally, the amended NEPA regulations are unlawful and numerous parties have filed lawsuits to overturn the amended regulations. ¹³⁸ If the NRCS were to narrow the scope of the Cove Reservoir EA based on the amended regulations, approval of the project may be invalid and set aside if a court overturns the amended regulations. For these reasons, the NRCS should apply the previous CEQ NEPA regulations throughout this NEPA process, and it should issue an EIS that fully analyzes all of the environmental consequences of the Cove Reservoir Project.

¹³⁵ EA, Appendix E page 234.

¹³⁶ *Id.* at 43,339.

¹³⁷ Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

¹³⁸ See, e.g., Complaint, Alaska Community Action on Toxics v. Council on Envtl. Quality (N.D. Cal. July 29, 2020), available at https://earthjustice.org/sites/default/files/files/ceq-nepa-rulemaking-complaint.pdf.

J. The Cove Reservoir EA does not provide sufficient information to comply with NEPA requirements for the unrelated purpose of the newly proposed borrow pits, which were not included in public scoping notices.

The EA states that it also serves as the necessary environmental documentation for the creation of a new borrow pit and expansion of an existing borrow pit on BLM land. Specifically, it states:

This Plan-EA will also serve as the necessary environmental documentation for development of the new Black Knoll borrow pit and potential expansion of the existing Bald Knoll borrow pit located on BLM- administered public lands. Authorized use of these pits will likely extend long term to other projects not associated with development of the proposed Cove Reservoir. The BLM will need to provide the necessary authorization before any material can be removed from the pits. ¹³⁹

However, another commenter on this EA, Richard Spotts, identifies that except for Visual Resource Management (VRM), the EA is missing information that BLM would need as part of its required NEPA analysis. For example, the BLM should not rely on this EA's improper purpose and need, myopic alternatives, and deficient cumulative effects analysis. This NRCS EA also does not describe all of the relevant BLM Kanab Field Office (KFO) Resource Management Plan (RMP) decisions and how the proposed action would conform to those decisions. As such, BLM should not adopt this NRCS EA for the purpose of NEPA compliance for authorization to use or expand these BLM borrow pits.

K. The Cove Reservoir EA does not address how climate change would affect the proposed project.

In the Utah Rivers Council's scoping comments for the Cove Reservoir project, we identified that the EA should include an examination of how climate change would impact this project. However, the EA entirely ignored our concern and failed to include any such analysis.

This is problematic because numerous scientists and management agencies have recently stressed the precarious position of the Colorado River Basin caused by the increasingly worsening effects of climate change. For example, Udall & Overpeck (2017) predict that annual naturalized flows at Lees Ferry could decrease 20% to 30% from the

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¹³⁹ EA page S-2.

1906-1999 average of 15.2 maf. This would bring annual naturalized flows down to 12.16 maf or 10.64 maf respectively.

Similarly, Milly & Dunne (2020) do not exactly quantify what annual naturalized flows at Lees Ferry will likely be in the mid-century but do quantify how climate change will affect annual mean discharge, or runoff, in the Upper Colorado River Basin. Their findings support those of Udall & Overpeck (2017). Specifically, Milly & Dunne (2020) find that mean discharge under RCP4.5 could decrease 5% to 24% and that mean discharge under RCP8.5 could either increase 3% or decrease 40%. To Milly & Dunne (2020), these findings demonstrate that "an increasing risk of severe water shortages is expected."

To confront these challenges, numerous Western States and federal government agencies, chiefly the Bureau of Reclamation, have cooperatively enacted agreements aimed at increasing conservation and raising water levels in Lakes Powell and Mead. For example, in December 2017 the Bureau of Reclamation called on the seven Colorado River Basin states to develop Drought Contingency Plans in response to the noticeable effects of climate change and the likelihood of critical reservoirs falling to dangerously low elevations. In May of 2019, the DCP plans were finalized.¹⁴⁴

The BOR lead this effort because it is well aware of how critically important adequate Colorado River water supplies are for the 35 million residents of the Colorado River Basin, as it helps lead, manage, coordinate and assist with innumerable efforts and programs by states, other federal agencies and a myriad of water users to slow the decrease in water supplies, particularly as a reaction to climate change. For example, the DCP includes a "system augmentation" component, which includes enhanced cloud seeding and removal of tamarisk and other non-native vegetation. The upper basin DCP also includes a "demand management" component, which attempts to incentivize agricultural users and municipalities to use less water.

Additionally, in this EA, there is no reference of the following critical documents related

¹⁴⁰ Udall, B., & Overpeck, J. (2017). The twenty-first century Colorado River hot drought and implications for the future. *Water Resources Research*, *53*(3), 2404-2418.

¹⁴¹ Milly, P. C., & Dunne, K. A. (2020). Colorado River flow dwindles as warming-driven loss of reflective snow energizes evaporation. *Science*, *367*(6483), 1252-1255.

¹⁴² RCP stand for "Representative Concentration Pathways" and come from the IPCC's 5th Assessment Report (AR5). RCP4.5 models a scenario where greenhouse gas emissions peak in 2040 and total global temperature increases reach +2 and +3 degrees C by the year 2100.

¹⁴³ RCP 8.5 is the "worst case scenario" pathway where emissions increase through the year 2100.

¹⁴⁴ Bureau of Reclamation. Drought Contingency Plans. https://www.usbr.gov/dcp/

¹⁴⁵ Colo. River Dist., Colorado River Planning/FAQs, https://www.coloradoriverdistrict.org/supply-planning/colorado-river-planning-2/.

¹⁴⁶ Colo. River Dist., Colorado River Planning/FAQs, https://www.coloradoriverdistrict.org/supply-planning/colorado-river-planning-2/.

to the future hydrology of the CRB: 1) 2007 Interim Guidelines; 2) 2012 Water Supply and Water Demand Study; 3) 2019 Drought Contingency Documents; 4) 2018 & 2020 Colorado River System Mid- to Long-term Projections.

This project, which would divert more water from the Colorado River system for wasteful municipal use in some of the nation's highest water using counties, flies in the face of these large, basin-wide efforts to conserve water and adapt the Colorado River system to the effects of climate change. The NRCS should have heeded the URC's advice presented in our scoping comments and analyzed how climate change would affect this project. Furthermore, the NRCS should also analyze how this project fits into the basin's cooperative demand management goals and the broader agreements aimed at increasing Colorado River resiliency (like the DCP).