

February 18, 2020

Bureau of Reclamation
Attn: Ed Warner, Area Manager
445 West Gunnison Ave, Suite 221
Grand Junction, CO 81501

Letter sent via email to: paradoxeis@usbr.gov

Re: Paradox Valley Unit Draft Environmental Impact Statement

Dear Mr. Warner,

American Whitewater appreciates the opportunity to provide comment on the Paradox Valley Unit of the Colorado River Basin Salinity Control Program Draft Environmental Impact Statement.

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954 with approximately 6,000 members and 100 local-based affiliate clubs, representing whitewater enthusiasts across the nation. American Whitewater's mission is to protect and restore America's whitewater rivers and to enhance opportunities to enjoy them safely. The organization is the primary advocate for the preservation and protection of whitewater rivers throughout the United States and connects the interests of human-powered recreational river users with ecological and science-based data to achieve the goals within its mission. Our vision is that our nation's remaining wild and free-flowing rivers stay that way, our developed rivers are restored to function and flourish, that the public has access to rivers for recreation, and that river enthusiasts are active and effective river advocates.

Starting in 2003, American Whitewater has been invested in a collaborative effort to protect and restore natural attributes of the Dolores River watershed. Our comments provided herein pertain to the temporary and permanent negative impacts described in Alternative B to the Dolores River Canyon and the outstanding recreational opportunities it provides. In addition, our comments include concerns the cultural, social, recreational, economic, and wildlife resources of Alternative C and D.

Purpose and need for action:

The Colorado Basin Salinity Control Act authorizes the Paradox Valley unit as "this initial stage of the Colorado River Basin salinity control program".¹ From our understanding, the efficiency of the PVU has decreased significantly over the past year due to increased seismicity in the region of the injection well. It would be most advantageous to reviewers for the DEIS to provide a baseline assessment of the benefit of the past 24 years of operation of the Paradox Valley Unit

¹ The Salinity Control Act (1974). Available at:
<http://www.onthecolorado.com/Resources/LawOfTheRiver/SalinityControl1974.pdf>

of the Colorado River Basin Salinity Control program. How have salinity levels at Imperial Dam corresponded to these changes in operations of the past few years of the PVU? Each alternative shows the salt reduction expected at Imperial, but is not qualified by the current levels at which the PVU is reducing salinity. It is our recommendation that the BOR not decide on one of the action alternatives unless the need for the project can be clearly identified.

Goals and objectives:

Four of the stated DEIS project goals are as follows:

- Avoid and minimize adverse impacts on physical, biological, social, economic, cultural, and tribal resources in the affected environment
- Minimize the use of nonrenewable resources, including land and energy
- Be consistent with existing BLM resource management plans (RMPs), where applicable
- Be in the best interest of the public, including considerations of health and safety and the local community's desired future conditions.

Each action alternative described fails one or all these stated goals. Below we identify the failures of each action alternative as they relate to the above goals. It is our recommendation that the Bureau of Reclamation (BOR) either select Alternative A, no action, or complete a more holistic analysis of the need for the Paradox Valley unit within the entire Colorado River Salinity Control Program and include a cost benefit analysis when developing a different range of alternatives.

Additional alternatives could include non-structural options like modification of Dolores River flows, or alternative structural options with less impactful locations or approaches. Reduced stream flows lead to higher concentrations of salinity. This has especially compounded the salinity issue for the Dolores River. Since the construction of the Dolores Project, the magnitude, frequency, and duration of flushing flows have decreased by annual flows from 30% before McPhee to 69% after McPhee.² We understand that increased flows in an overallocated system are difficult. However, the efficiency of use of water within the Dolores Project could be analyzed in a subsequent suite of alternatives. This alternative would additionally help the BOR meeting whitewater boating mitigation measures described in the 1977 Dolores Project Environmental Impact Statement.³

Alternative A – No Action:

American Whitewater supports no action over B1, B2, C and D. The impacts to wild and scenic rivers, wilderness study areas, wildlife, cultural resources, and energy resources of each action alternative do not meet the state goals of the project and would do long-term damage to public resources for short-term salinity mitigation.

² Core Science Report for the Dolores River Dialogue, 2005. Available at: <http://ocs.fortlewis.edu/drd/pdf/coreScienceReport.pdf>

³ Bureau of Reclamation. Dolores Project Colorado Final Environmental Impact Statement. 1977. Chapter D Mitigation Measures and Air and Water Quality Aspects

Alternative B – New Injection Well:

American Whitewater has particular concern with Alternative B, specifically the location identified in B1. The Bureau of Reclamation's Alternative B1 would not only physically impact the river corridor below Wild Steer Canyon, it would significantly change the character of the experience farther upstream as boaters float down from La Sal Creek with the horizon before them criss-crossed by powerlines, roadways, traffic, chain link fences, storage tanks, buildings, and lights. The DEIS makes unsubstantiated claims that these impacts would only have a minor affect the river segment's recreation and wild classification.

The Tres Rios Field Office found the Dolores River eligible for inclusion in the wild and scenic rivers system. The segment of the river from Little Gypsum Bridge to 2.5 upstream of Bedrock was classified as wild and the remaining 2.5 miles to Bedrock were identified as recreational.⁴ Placement of a new injection well and the associated infrastructure as indicated in the DEIS would violate the BLM's nondegradation standard as it would impact both the recreation and scenery Outstandingly Remarkable Values (ORVs). There will also be potential impacts to fish, wildlife and vegetation ORVs. The experience for boaters floating downstream the last couple of miles to the Bedrock boat ramp will be negatively impacted to a significant degree.

Additionally, the new bridges would impose a safety hazard not present elsewhere in the reach. This segment of river is rated class II+⁵, defined as "straightforward rapids with wide, clear channels" by the International Scale of River Difficulty.⁶ The DEIS states no bridge supports or abutments would be constructed below the ordinary high-water mark of the river, nor would any rip rap be placed below the ordinary high-water and thus not negatively affect the free-flowing nature. However, that level of detailed design would not be included in this level of planning and cannot be considered as insurance two new bridges would not create new river hazards. Tres Rios estimated 5300 boaters through the Dolores River Canyon in 2019. According to surveys of our membership who floated the section in 2019, many were family trips with intermediate experience.

From the reports of the existing injection well, this approach to salinity control has a short lifetime. The minimal distance from the existing wells does not provide confidence a new well would be a sufficient long-term solution. This is another reason to assess if other locations would be better for salt removal.

The location in Alternative B2 would destroy habitat for desert bighorn sheep and the Gunnison sage grouse, and potentially create additional earthquakes in the region. Alternative B does not avoid or minimize adverse impacts on physical, biological, social and economic resources in the affected environment. It is inconsistent with existing BLM resource management plans (RMPs), and is not in the best interest of the public, including considerations of health and safety and the local community's desired future conditions.

⁴ https://eplanning.blm.gov/epl-front-office/projects/lup/65211/78936/91213/Appendix_D_WSR_FINAL.pdf

⁵ <https://www.americanwhitewater.org/content/River/detail/id/387/>

⁶ https://www.americanwhitewater.org/content/Wiki/safety:start#vi.international_scale_of_river_difficulty

Alternative C – Evaporation Ponds:

In the context of the project's stated goals to minimize adverse impacts to cultural resources, to be consistent with BLM management plans, and to be in the best interest of the public, Alternative C fails on all counts and must be discarded. BLM's proposed Paradox Rock Art ACEC is adjacent to the large salt evaporation ponds proposed in Alternative C. These would greatly diminish the setting of the Paradox Rock Art ACEC:

The nominated Paradox Rock Art ACEC is located in the eastern part of Paradox Valley. It contains important rock art and archaeological sites, including several outstanding examples of Ancestral Puebloan style petroglyphs, Formative period and earlier occupations, features and isolates, and settled village sites dating more than five hundred to a thousand years old. The site is rare for its northern extent of Anasazi rock art and occupation. (Uncompahgre Proposed RMP FEIS at 4-170).

For cultural resources, a significant adverse impact would be the loss of those elements that make them eligible for listing on the National Register of Historic Places due to the extent or degree to which resources are damaged, their physical integrity is lost, or the setting of the resource is damaged. Siting over a thousand-acre salt evaporation pond facility adjacent to a National Register District site would create significant adverse impacts by enormously modifying the setting of the Paradox Rock Art site.

Additionally, this alternative would have serious impacts to wildlife (i.e. migratory birds) and game habitat. The 600-acre footprint would impair critical habitat for elk and mule deer habitat with increased activity and the presence of evaporation ponds. The proposed location of Alternative C sits on top of the ephemeral East Paradox Creek. It is prone to flashy conditions with recorded of floods of almost 400 cfs at times. These flows could easily flood the site and carry salt directly into the Dolores River.

Alternative D – Zero Liquid Discharge Technology:

The visual impacts from the on-site salt landfill would negatively affect the rural character of the Paradox Valley. However, most concerning with this alternative is the high energy use required.

While the DEIS states that the operations would create carbon dioxide emissions within allowable EPA regulations, the burning fossil fuels to power the crystallizers create a new source of greenhouse gas use in the region, contributing to climate change.

BLM's proposed Biological Soil Crust ACEC is adjacent to the location of the Zero Liquid Discharge facility proposed in Alternative D. Given the omission of analysis of impacts to biological soil crusts, it is not possible to ascertain whether Alternative D would achieve the project goals to minimize adverse impacts to cultural resources, to be consistent with BLM management plans, and to be in the best interest of the public.

Alternative D does not sufficiently avoid or minimize adverse impacts on physical, biological, social, and economic resources in the affected environment. It especially does not minimize the use of nonrenewable resources, including land and energy. It also doesn't seem to be in the

best interest of the public, including considerations of health and safety and the local community's desired future conditions.

We appreciate the effort that went into the evaluation of options for salinity control in Paradox Valley and the substantial technical analysis and review. The DEIS provides an opportunity to analyze impacts to boarder surface values such as recreation, wildlife, scenery, wilderness, and cultural resources. We look forward to the incorporation of these concerns into further analysis and an eventual decision.

Thank you for your consideration of American Whitewater's comments on the DEIS for the Paradox Valley Unit. We have significant concerns about this project and intend to remain involved in all future stages of the planning process. If you have any questions or concerns, please feel free to contact me.

Sincerely,



Hattie Johnson
Southern Rockies Stewardship Director
American Whitewater