

COLORADO Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street, Room 718 Denver, CO 80203

P (303) 866-3441 F (303) 866-4474 Jared Polis, Governor Dan Gibbs, DNR Executive Director Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Amy Ostdiek, Interstate, Federal, and Water Information Section

DATE: March 11-12, 2020

AGENDA ITEM: 14 - Paradox EIS Comments Update

Staff Recommendation: This is an information item, with no formal Board action requested.

Background: On February 19, 2020, the State of Colorado provided comments on the Draft Environmental Impact Statement (DEIS) relating to the Paradox Valley Unit (PVU) of the Colorado River Basin Salinity Control Program released by the Bureau of Reclamation. The Salinity Control Forum, of which Colorado is a member, also provided comments on the DEIS.

The PVU is a salinity control project in western Montrose County, Colorado. It extracts naturally occurring brine groundwater in Paradox Valley, which prevents it from entering the Dolores River, a tributary to the Colorado River. The brine is then injected deep underground into a permeable, porous rock formation, which improves water quality in the Dolores and the Colorado Rivers. The PVU is the largest single contributor to the Colorado River Basin Salinity Control Program and provides important financial and water quality benefits to downstream states. The PVU is one of several facilities authorized under the 1974 Colorado River Basin Salinity Control Act, and has been injecting brine into the Mississippian Leadville Limestone Formation since 1996. The PVU is nearing the end of its useful life, and Reclamation is investigating alternatives to replace the project. The State of Colorado River Basin States, also participates in the Colorado River Salinity Control Forum, a regional, multi-stakeholder advisory group.

The Draft EIS identified four alternatives:

- Alternative A No action: closure of PVU
- Alternative B New deep injection well
- Alternative C Evaporation ponds
- Alternative D Zero-liquid discharge technology



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The Colorado Department of Public Health and Environment (CDPHE), Colorado Parks and Wildlife (CPW), and the Colorado Water Conservation Board (CWCB) submitted comment letters under Department of Natural Resources cover. CDPHE's comments requested a more thorough consideration of permitting needs and costs and expressed concern over taking any action that would increase salinity levels. CPW's letter focused on analysis and mitigation of negative impacts on wildlife and aquatic resources. CWCB submitted comments relating to the following issues:

- Compliance with state law: CWCB requested that Reclamation ensure ongoing compliance with state law, including going to water court to obtain additional augmentation water as needed, or curtailing PVU uses as necessary.
- Funding for the Colorado River Basin Salinity Control Forum: The Salinity Control Program is funded by federal appropriations and by Basin States cost sharing. The cost-share amount is a percentage of the federal appropriations amount, and the funds come from hydropower revenues. As any alternative will create a large cost-share obligation for the Basin States, Colorado supports the Basin States' efforts to find solutions to ongoing funding issues.
- Authority for operation of existing well: CWCB requested additional language in the DEIS authorizing continued operation of the existing PVU injection well at a level that does not induce seismic activity, at least until a preferred alternative is constructed.
- Role of the Salinity Control Forum: CWCB urged Reclamation to work collaboratively with the Forum in the development and implementation of any preferred alternative.
- Additional analysis needed: Additional analysis will be required before any preferred alternative is implemented. CWCB reserved the right to raise any additional comments and concerns as this analysis moves forward.

Additionally, the Salinity Control Forum submitted comments indicating support for the evaporation pond alternative, with appropriate mitigation to wildlife impacts and appropriate scaling of the facilities. Colorado worked cooperatively with the other Colorado River Basin States in submitting these comments.

Both the State of Colorado's and the Salinity Control Forum's comments are attached.





COLORADO Department of Natural Resources 1313 Sherman St., Room 718 Denver, CO 80203

February 19, 2020

U.S. Bureau of Reclamation Attention: Mr. Ed Warner, Area Manager 445 West Gunnison Ave. Grand Junction, CO 81501

RE: Public Comments Paradox Valley Salinity Unit Draft EIS

Dear Mr. Warner,

The Colorado Department of Natural Resources values the opportunity to submit comments regarding the Bureau of Reclamation's (Reclamation) draft environmental impact statement (DEIS) for the Paradox Valley Salinity Unit (PVU), on behalf of its divisions, Colorado Water Conservation Board (CWCB) and Colorado Parks and Wildlife (CPW), along with the Colorado Department of Public Health and Environment (CDPHE) and its divisions, Hazardous Materials and Waste Management Division (HMWMD), Water Quality Control Division (WQCD), and Air Pollution Control Division (APCD).

CDNR and CDPHE have provided input at various stages during the preparation of this DEIS as cooperating agencies representing the state of Colorado, one of the seven Colorado River Basin States, and as participants in the Colorado River Salinity Forum.

As such, our departments appreciate the PVU's important contribution to controlling salinity levels within the Colorado River system downstream from its site along the Dolores River, in southwestern Colorado. Although we recognize the difficulties involved in identifying a solution to the existing facility's limited operational lifespan, we agree with other stakeholders that a No Action alternative would have detrimental, long-term water quality implications and is not a viable option. However, we urge Reclamation to make clear in the EIS that limited, continued operation of the existing well facility is not intended to be



foreclosed upon and to consider the appropriate sizing and scaling of any preferred alternative.

While each of the Basin States has a stake in the outcomes of this process and would share in the cost of its implementation, Colorado, as the state that houses both the existing facility and the proposed project area, stands to be the most directly impacted by the ultimate project design selection. In reviewing the DEIS through this particular lens, we conclude that all Action Alternatives, as presented, may be problematic in light of other important resource values in our state and/or could ultimately prove cost prohibitive to implement.

For instance, seismic concerns stemming from the new injection wells described in Alternatives B1 and B2 and water treatment concerns associated with the Zero Liquid Discharge option in Alternative D both seem to present significant cost implications. The evaporation ponds in Alternative C might seem to offer the most balance between cost effectiveness, resource conflict, and efficacy. However, as detailed in CPW's comments, Alternative C might entail budgetary and design implications not accounted for in the DEIS.

Specifically, as proposed, the evaporation ponds in Alternative C would curtail public access to federal lands and present substantial risks to wildlife. Among these is the potential for direct or indirect impacts to aquatic, avian, and terrestrial species, including impairments to sensitive habitat for iconic big game species, such as elk, bighorn and mule deer, as well as Gunnison sage grouse, a federally listed threatened species. While these risks were acknowledged in the DEIS, they remain inadequately analyzed and/or mitigated.

CDNR and CPW are charged with managing Colorado's wildlife and responding to Governor Jared Polis' 2019 executive order to big game protect migration corridors, production areas, and declining winter range. As the implementation of evaporation ponds - at any scale - could impede the state's ability to carry out this and other wildlife management priorities, we respectfully request a more thorough examination of wildlife impacts relevant to the final proposed project design, accompanied by a more thorough evaluation of the efficacy and cost of recommended avoidance and mitigation options, including compensatory measures.

Our divisions also highlight the need for the EIS to clarify plans in the preferred alternative for complying with state water law; securing any additional augmentation water required for the project though Colorado water courts; and avoiding temperature increases; and deterring condition impairments for aquatic species in the Dolores River caused by depletions stemming from the project. Additionally, we highlight a concern that the DEIS may have overlooked water quality permitting compliance expenditures.

Colorado encourages Reclamation to continue to explore the feasibility of an appropriately scaled alternative, with an eye toward evaluating its prospects for meeting downstream

Colorado River system water quality needs, but also to account for a full spectrum of cost and resource conflict considerations.

More detailed feedback on the DEIS can be found in the attached technical comments from the following divisions:

Attachment 1 - CDPHE Divisions HMWMD and WQCD Attachment 2 - CDNR Division CWCB Attachment 3 - CDNR Division CPW

We look forward to continuing to work with Reclamation, as well as other Basin States and stakeholders, in developing the best path forward in the PVU EIS process.

Sincerely,

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Dan Gibbs Executive Director Colorado Department of Natural Resources

CC: Daniel Prenzlow, Colorado Parks & Wildlife; Cory Chick, Colorado Parks & Wildlife; Rebecca Mitchell, Colorado Water Conservation Board; Aimee Konowal, Colorado Water Quality Control Division; Patrick Pfaltzgraff, Colorado Water Quality Control Division



February 19, 2020

Attachment 1 CDPHE (WQCD, HMWMD) Comments PVU DEIS

U.S. Bureau of Reclamation Attention: Mr. Ed Warner, Area Manager 445 West Gunnison Ave. Grand Junction, CO 81501

RE: Paradox Valley Salinity Unit Draft EIS

Dear Mr. Warner,

The Colorado Department of Public Health and Environment (CDPHE) appreciates the opportunity to review and submit comments regarding the Bureau of Reclamation's (Reclamation) draft environmental impact statement (DEIS) for the Paradox Valley Salinity Unit (PVU).

CDPHE has worked closely with the Colorado Department of Natural Resources and support the comments from the Colorado Parks and Wildlife and the Colorado Water Conservation Board.

CDPHE has provided input at various stages during the preparation of this DEIS as cooperating agencies representing the state of Colorado, one of the seven Colorado River Basin States, and as participants in the Colorado River Salinity Forum. The Colorado Department of Public Health and Environment (CDPHE) consists of three environmental divisions. The three divisions are Air Pollution Control Division (APCD), Hazardous Materials and Waste Management (HMWMD), and Water Quality Control (WQCD). These specific comments reflect the technical comments on the Paradox Valley Unit alternatives provided in the Draft Environmental Impact Statement.

The Hazardous Materials and Waste Management Division (HMWMD) covers its costs for reviewing permit applications through assessment of document review fees. HMWMD has concerns that the fees for this certification will not be covered. The full cost of permitting needs to be recognized, including paying any county certificate of designation application fee and state review fees necessary to get the landfill permitted. The review of a certificate of designation application can consume significant resources that could total in the tens of thousands of dollars. This issue should be worked out between the two agencies in advance, perhaps in the form of an interagency agreement. (Section 2.8, Table 2-7, Line 7)

The State of Colorado does not have salinity or total dissolved solids (TDS) standards for surface water. However, Regulation No. 39 does implicate Colorado in a basin-wide approach for controlling salinity in the Colorado River Basin such that numeric salinity targets are met at specific locations in the Colorado River. Regulation No. 39 thus demonstrates the State of Colorado's interest in ensuring that activities in the Colorado River Basin protect those designated uses of surface water in this basin that can be impacted by increased levels of salinity. Caution should be taken when considering any activities that could increase salinity in the river because of its potential impacts on water quality. Of primary concern is the potential impacts on aquatic life and agriculture in this area.



The Dolores River is listed on the 303(d) list of impaired waters for temperature. Many alternatives that are being considered could release heat into the river or reduce flows. These activities could have an impact on the temperature of the river thus affecting the aquatic communities. The mitigation of these effects should be considered before a preferred alternative is selected.

If you have any questions or need additional information, please contact me at <u>Robert.hillegas@state.co.us</u> or (303) 692-3137.

Sincerely,

Robert Hillegas Watershed Section, Water Quality Control Division Colorado Department of Public Health and Environment





COLORADO

Colorado Water Conservation Board

Department of Natural Resources 1313 Sherman Street, Room 718 Denver, CO 80203 Attachment 2 CWCB Comments PVU DEIS

February 19, 2020

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

Dear Mr. Warner:

The Colorado Water Conservation Board (CWCB) thanks you for the opportunity to comment on the Paradox Valley Unit of the Colorado River Basin Salinity Control Program Draft Environmental Impact Statement (DEIS) released by the Bureau of Reclamation (Reclamation) in December 2019. The CWCB has a substantial interest in the Colorado River Basin Salinity Control Program, as well as the potential impacts of program activity within the state.

The CWCB's comments consist of two parts. First, Colorado joins the Salinity Control Forum's February 2020 Comments, submitted under separate cover. Second, the CWCB submits the following general comments to the DEIS to address concerns specific to Colorado. These comments are as follows:

- <u>Compliance with State law</u>: CWCB appreciates Reclamation's consideration of its comments submitted on the Administrative Draft EIS relating to compliance with state water law. As Reclamation moves forward in its analysis of alternatives and selection of a preferred alternative, it should ensure ongoing compliance with state water law. Specifically, Reclamation must go to water court to obtain additional augmentation water as needed. Additionally, if sufficient augmentation water is not available for PVU uses, curtailment of PVU wells may occur in order to satisfy senior water rights. Specifically relating to Alternatives C and D, Sections 3.4.2.3 and 3.4.2.4 should note that Reclamation will consider curtailing operations at times when augmentation would otherwise be required in lieu of providing augmentation supplies for the pumping.
- <u>Funding for the Colorado River Basin Salinity Control Forum</u>: The Salinity Control Program is funded by federal appropriations and by Basin States cost-sharing. The cost-share amount is a percentage of the federal appropriations amount, and funds for the cost-share come from hydropower revenues. Higher federal appropriations in recent years have triggered higher cost-share requirements, while low reservoir levels have resulted in reduced hydropower generation and revenues. Therefore, maintaining the solvency of the cost-share portion of the Program has been challenging.



Implementing any of the action alternatives in the Paradox DEIS will create a large cost-share obligation for the Basin States, compounding the existing funding issues. As further detailed in the Basin States' letter regarding available funding for the Colorado River Basin Salinity Control Forum, CWCB supports efforts to find solutions to the ongoing funding issues.

- <u>Authority for operation of existing well</u>: The DEIS is unclear relating to continued operation of the existing PVU injection well. Nothing in the Final Environmental Impact Statement (FEIS) should suggest preclusion of continued operation of the PVU injection well, pending Reclamation's ongoing seismic investigation. The FEIS should assume, and clearly indicate authority for operation of the existing PVU injection well at a level that does not induce seismic activity, at least until a preferred alternative is constructed, and potentially beyond, as appropriate. CWCB urges Reclamation to edit the language in the DEIS so that the FEIS clearly authorizes continued operations of the existing injection well, assuming it can be operated without inducing seismic activity.
- <u>Role of the Salinity Control Forum</u>: The Salinity Control Forum plays a unique and important role in the coordination, development, implementation, and funding of salinity control projects throughout the Basin. Given the Forum's role and importance in the Colorado River Basin, Reclamation should work collaboratively with the Forum in development and implementation of any preferred alternative.
- <u>Additional analysis needed</u>: As recognized in the DEIS, additional analysis will be required before a preferred alternative is constructed and implemented. CWCB requests that Reclamation work cooperatively with the Salinity Control Forum, the State of Colorado, and other cooperating agencies as it completes this analysis. CWCB reserves the right to raise additional comments and concerns relating to the alternatives as further analysis is completed.

In the course of reviewing the material in the DEIS, CWCB focused on factual or legal assertions specific to the PVU. We did not think it necessary or relevant to take issue with or highlight descriptions or representations that did not materially affect the purpose or analyses of the DEIS. CWCB's decision to avoid raising such concerns in these comments, or to correct what it may believe to otherwise be an inaccurate assertion, shall not be construed as an admission of any factual or legal issue, or a waiver of any legal rights or positions in other forums or future proceedings.

CWCB appreciates Reclamation's efforts in evaluating potential alternatives for brine disposal at the PVU facility and looks forward to working closely with Reclamation in the development and implementation of the preferred alternative.

Sincerely,

ebecca mitchell

Rebecca Mitchell Director, Colorado Water Conservation Board



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COLORADO

Parks and Wildlife

Department of Natural Resources

Southwest Region Office 415 Turner Drive Durango CO81303 P 970.375.6707 Attachment 3:

CPW Comments PVU DEIS

February 19, 2020

Mr. Ed Warner Area Manager Department Of Interior Bureau of Reclamation 445 West Gunnison Ave, Suite 221 Grand Junction, CO 81501

RE: Paradox Valley Unit of the Colorado River Basin Salinity Control Program Draft Environmental Impact Statement

Dear Mr. Warner,

Thank you for the opportunity to provide comments on the Bureau of Reclamation's (Reclamation) Paradox Valley Unit (PVU) Draft Environmental Impact Statement (DEIS). The proposed action is to construct, operate, and maintain facilities for the collection and disposal of saline water within the Paradox Valley. The DEIS evaluates the potential impacts of five (5) alternatives to achieve salinity reductions within the Dolores River. CPW has reviewed and evaluated the five alternatives and their potential impacts to the environment, recreational opportunities, terrestrial and aquatic wildlife.

CPW wishes to express concern that all of the alternatives put forth in the DEIS, except the No Action alternative, present potentially significant impacts to Colorado's wildlife and natural resources, as well as the withdrawal of publicly accessible federal lands. The action alternatives involve Reclamation's acquisition and closure of federal lands currently under Bureau of Land Management jurisdiction, ranging from 40 to 1,300 acres.

The alternatives presented would also result in the loss, conversion, degradation, or fragmentation of wildlife habitat within the project area for a number wildlife species including: elk, deer, desert bighorn sheep, river otters, birds, bats, raptors, reptiles, and Gunnison sage-grouse (GUSG). Our conclusion is that, among the Action Alternatives as proposed, Alternative C presents the most direct mortality risk to wildlife, as well as the most significant loss of wildlife habitat, and has the greatest potential to displace big game. While the DEIS offers limited impact avoidance and minimization measures, in our estimation, a number of the potentially significant impacts are not adequately considered or addressed.



Summary of Alternatives

Alternative A-No Action

The existing underground injection well would be plugged and abandoned and all facilities would be repurposed. Reclamation would retain its water rights in Water Divisions 4 and 7 (Case Nos. 83CW14 and 83CW45, respectively) and explore other beneficial uses for the augmentation water reserved to augment out-of-priority depletions from the PVU. This area is mapped by CPW as a desert bighorn sheep (DBHS) winter concentration area, DBHS production area, severe mule deer winter range, and elk severe winter range.

Alternative B - Area B1- A new deep injection well would be drilled within 360 acres of existing Reclamation lands and would also require the acquisition of 80 acres of BLM lands. There would be approximately 26 acres of new surface disturbance including surface facilities, access road, and construction of two bridges over the Dolores River, power line extension, and pipeline corridor. This area is mapped as by CPW as a DBHS winter concentration area, DBHS production area, severe mule deer winter range, and elk severe winter range.

Alternative B - Area B2 - This alternative would require the construction of a new deep injection well, surface facilities, access road, power line extension, pipeline corridor, pipeline pump stations. It would require the acquisitions of 616 acres of BLM lands and 49 acres of non-federal land. Area B2 would require the construction of 24-mile pipeline parallel to State Highway 90 and county roads from the valley floor to the top of Monogram Mesa. Portions of the project area overlap with USFWS designated Critical Habitat for Gunnison sage-grouse. The proposed project area and associated roads and pipelines for this alternative are >4 miles from the nearest known lek. The Fawn Springs Bench and the Monogram Mesa options for Alternative B2 both require use of the county road and a new pipeline through GUSG occupied USFWS critical habitat. Additionally, Area B2 project area is mapped as severe winter range for deer and elk.

Alternative C - Evaporation Ponds involves the piping of brine production water to a facility where water would be evaporated in a pond system. Salt would be harvested from the evaporation ponds and disposed of in a 60-acte, onsite landfill. A freshwater wildlife pond would be constructed in the evaporation pond complex and the bittern ponds would be netted. The evaporation pond complex would be located within an approximately 1,500 acre area with approximately 600 acres of surface disturbance. Reclamation would acquire approximately 1,300 acres of BLM lands and approximately 281 acres of non-federal lands. This area is mapped a winter concentration areas and severe winter range for elk and deer.

Alternative D - Zero Liquid Discharge (ZLD)-Involves piping brine water to a centralized treatment facility consisting of a series of thermally driven crystallizers to evaporate and condense the salt. The salt would be transported to a 60 acre landfill and the produced water would be returned to the Dolores River. Reclamation would acquire approximately 270 acres of federal land and 56 acres of non-federal land. The

Alternative D study area is mapped as both an elk and deer severe winter range and winter concentration area.

Considerations and Recommendations

Alternative C – Considerations and Recommendations

Wildlife Access Prevention: As detailed in the DEIS and Appendix J, the salinity ponds in Alternative C would be toxic, and represent a significant entrapment hazard and mortality risk to wildlife including: waterfowl, migratory birds, birds of conservation concern, bats, reptiles, small mammals, and big game. Based on CPW's review, the proposed best management practices (BMPs) are comprised of an 8-foot high perimeter fence, a freshwater wildlife pond, bittern pond netting, and routine patrols. These BMPs alone, are inadequate to reliably prevent access to the ponds by most wildlife species.

Freshwater Pond Efficacy: The efficacy of the proposed freshwater pond needs to be further evaluated in the Final EIS due its proximity to the evaporation ponds (as depicted in Figure 2-4). CPW is concerned that the freshwater pond could serve as an attractive nuisance to the facility for birds, bats, and other animals. Further, the final plan should consider that winter conditions will likely cause the freshwater pond(s) to freeze while the saline ponds likely will not. Additionally, the final plan should examine and address the impacts on native fisheries from annual depletions in the Dolores River that will be needed for the freshwater pond. The FEIS should provide further explanation as to how an onsite freshwater pond would serve to prevent attraction to and mortality from, the saline evaporation ponds, and should clarify potential impacts to aquatic resources in the Dolores River.

The Final EIS should include a **wildlife protection plan** tied to the final project design with the following components:

- 1) Specific objectives and thresholds for allowable wildlife (aquatic, terrestrial, bird, and bat) exposure, injury, and mortality;
- 2) Monitoring criteria, methods, and procedures for detecting and reporting wildlife mortality, injury and exposure;
- 3) A comprehensive evaluation of passive and active deterrence techniques (such as hazing and other methods described in Appendix J, Table 5-1) in light of the final plan design;
- 4) An adaptive management and mitigation strategy detailing how deterrence methods or features aimed at reducing mortality, injury, and exposure will be incorporated into the structural design of and management of the facility;
- 5) Clear triggers for when adaptive management strategies (deterrence techniques) will be implemented to prevent additional wildlife mortality.

Alternative D - Outstanding Considerations

The PVU DEIS contains conflicting water quality information on the potential for pollutants to be discharged in the liquid waste-stream for Alternative D (ZLD), and is missing information on additional potential pollutants that may require additional treatment to prevent harm to Aquatic Life before being discharged to the Dolores River:

Section 2.6.3 describes the operation and maintenance of the Alternative D (Zero-Liquid Discharge). Despite the name, this alternative would produce a liquid waste stream.

"Along with the solid product, the crystallizers would produce 250 gpm (80% of brine flow rate) of high temperature (50 degrees [o] Celsius), low to neutral pH (4.5 to 7.5), and low alkalinity (less than [<] 20 mg/L as calcium carbonate [CaCO3]) freshwater, with an estimated TDS of 500 mg/L. This produced freshwater stream would be released into the Dolores River, pending a discharge permit form CDPHE."

This waste stream is likely to require some level of additional treatment prior to discharge to the Dolores River. In particular, a significant reduction in temperature will be required in the summer months. In December 2019, the Colorado Water Quality Control Division (WQCD) added the Dolores River to the 303(d) list of impaired waters for temperature. Continuous temperature data at the two USGS gages (Dolores River at Bedrock 09169500, and Dolores River near Bedrock 09171100) show repeated exceedances of the acute summer temperature standard (Figures 1 and 2). In the summer, the temperature of the waste stream will need to be reduced by more than 20°C to meet instream standards, and avoid causing or contributing to an impairment of the Aquatic Life use, which is protected by the temperature standards.



Figure 1. Acute temperatures (2-hour rolling average) in the Dolores River at Bedrock (USGS station 09169500).



Figure 2. Acute temperatures (2-hour rolling average) in the Dolores River near Bedrock (USGS station 09171100).

The discharge may also need to be adjusted for pH prior to release if the projected pH (4.5 to 7.5) is on the low-end of that estimate. The instream pH standard to protect the Aquatic Life use is 6.5 to 9.0.

Section 3.6.2.6 contains a description of the liquid waste stream from the ZLD that conflicts with descriptions elsewhere in the EIS.

"Initial tests have indicated that the produced freshwater stream would be similar to distilled water, which is harmful to aquatic organisms."

The more-specific description of the waste stream in section 2.6.3 says the TDS of the waste stream will be 500 mg/L. This is much higher than distilled water, which has negligible dissolved solids.

The final EIS should resolve this discrepancy. Furthermore, Reclamation should complete laboratory testing of the source groundwater to determine if other pollutants are present that would require additional treatment after the ZLD process to meet water-quality standards. The full suite of standards that apply to the Dolores River can be found in the statewide water-quality standards in Regulation 31.11, and in Regulation 35.

The Final plan should provide additional information on the water-quality of liquid waste-stream the from the ZLD, testing results for all potential pollutants in the source water, and explain how water-quality standards including temperature, pH and other potential pollutants will be met.

General Consideration for All Action Alternatives:

Aquatic Resources

The Dolores River from McPhee Dam to the confluence of the San Miguel River is approximately 122 miles in length. There are significant challenges in maintaining a tail water fishery and native fishery in the Dolores River. CPW requests that the Final PVU EIS include a discussion and consider the cumulative environmental impacts relating to potential depletions to the Dolores River. Each alternative should include a quantification of the potential depletion of the Dolores River, the cumulative impact it may have on the aquatic environment below McPhee Dam, and its cumulative impact on aquatic habitat, including analysis of the reduction in salt loading associated with the alternatives identified.

Additionally, please evaluate potentially impacted ephemeral streams, with consideration to their potential role in the early life histories of native fish of the Dolores River.

Conclusion

On August 21, 2019, Governor Polis signed Executive Order (EO) D-2019-011, Conserving Colorado's Big Game Winter Range and Migration Corridors. This EO recognizes the contribution that big game

species make to the economy and quality of life for every Coloradan. In addition, the CPW Commission is actively expanding public access opportunities in Colorado.

The project alternatives, as proposed, would result in a direct loss of public land access, significant habitat loss, and potential direct mortality for wildlife in Colorado. To that end, CPW requests that Reclamation provide compensatory mitigation to replace and offset the project impacts to wildlife, terrestrial and aquatic wildlife habitat, and public land access commensurate with the alternative selected in the Final EIS and Record of Decision.

Thank you for the opportunity to comment. We looked forward to reviewing the Final EIS to evaluate how the issues we raised in these comment have been address.

Sincerel Cor Southwest Region Manager

Cc: Renze Delpiccolo, Area Wildlife Manager, Brian Magee, SW Region Land Use Coordinator, Ryan Unterreiner, SW Region Water Specialist

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