



Mr. Jared Baxter
U.S. Bureau of Reclamation, Provo Area Office
Provo, Utah

November 2, 2018

sent via email to greenriverblock@usbr.gov

Western Resource Advocates'
Comments on
Draft Environmental Assessment for Green River Block water exchange contract

Western Resource Advocates (WRA) appreciates the opportunity to comment on the Draft Environmental Assessment (EA) on the proposed Green River Block (GRB) water exchange contract.

WRA's interest in the Green River includes our 15-year experience as an active partner in the Upper Colorado River Endangered Fish Recovery Program (Program), where we are a member of the Program's Implementation Committee and Water Acquisition Committee and coordinate closely with The Nature Conservancy who staffs the Program's Management Committee. We were involved in the process that led to the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for re-operation of Flaming Gorge dam to meet Flow and Temperature Recommendations to benefit endangered fish.

First, we want to thank the Bureau of Reclamation (BOR or Bureau) for its work on this Draft EA, and support the overarching purpose of having future development of the GRB avoid impacts to the recommended flows. We are encouraged that the BOR's analysis to date suggests the proposed action could improve flow conditions, at least in the summer months during drier years. It is not yet clear that the analyses in the Draft EA support the BOR's conclusion that the Action Alternative would have no significant impact. We believe the Final EA could better support that conclusion through addressing our comments and questions below.

Flow recommendations—peak flows and base flows:

Although a close reading of other sections of the EA makes it clear the BOR has analyzed the proposed action's impacts on both recommended base flows and peak flows for Reaches 1 and 2 of the Green River, the description of the 2005 FGFEIS, 2006 FGROD, and 2000 Flow and Temperature Recommendations (section 1.7.2 on page 8) could be edited to include the fact these documents prescribe high peak flows **and** base flows for Reaches 1, 2 and 3 of the Green River, as evidenced in Table 2-1 from the FGFEIS (included in the Draft EA at "Appendix A to Appendix A"). The impacts to high peak flows and to base flows in Reach 3 should be disclosed, using the same kind of flow duration curves as were presented for Reaches 1 and 2.

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Flaming Gorge Dam operations' ability to offset depletions:

We are encouraged the Draft EA notes the intent to maintain the flow targets in the FGFEIS and ROD. The Draft EA states the exchange contract will allow Flaming Gorge (FG) dam to be operated “within the parameters of the FGROD” (pages 5 and 9). But the Draft EA is confusing when it notes “[a]dditional releases may be necessary to meet target flows in Reach 2 as a result of depletions under the Proposed Action” (page 10) but elsewhere states the “GRB depletion maintains FGROD operations and *no change in operations are made* under the GRB alternative” (page 14—emphasis added).

We suggest the BOR could most cleanly address the issue by clarifying a commitment to continue recent/current efforts to meet 2000 Flow and Temperature recommendations for Reaches 1, 2 and 3—as embraced in the 2005 FGFEIS and 2006 FGROD—through adjusting Flaming Gorge releases to directly offset the impacts that additional water development along the Green River would have on meeting the flow recommendations.

More specifically, because the flow recommendations include a flow range inside each of several year types, to truly offset the impacts of any future GRB water development, BOR could maintain recently managed levels of base flows, rather than let flows drop significantly inside the base flow ranges; recent studies suggest that maintaining flows at the higher end of the base flow range in the summer of average and drier years benefits Colorado pikeminnow, so this distinction is important.¹ For example, if a specific new water development outside of Reach 1 began to consistently divert 100 cfs during the irrigation season, BOR could offset those specific diversions through changed releases from FG to keep flows in the river whole. Because the number and volume of potential future developments have been narrowed to include a relatively small set of entities (see Table 3-2 on Draft EA page 49), monitoring and responding to any future depletions would appear to be feasible.

Modeling assumptions:

We agree with TNC that the cumulative impacts analysis is very challenging to decipher, as several assumptions of future development are not made clear. We incorporate by reference their comments on the subject. Similarly to TNC, we would like to see more details explaining the modeling assumptions and rule logic for Flaming Gorge Dam releases in July (which can be a peak and baseflow month) as well as August and September (baseflow months). Without

¹ Bestgen, K. R., and A. A. Hill. 2016. Reproduction, abundance, and recruitment dynamics of young Colorado pikeminnow in the Green River Basin, Utah and Colorado, 1979-2012. Final report to the Upper Colorado River Endangered Fish Recovery Program, Project FW BW-Synth, Denver, CO. Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins. Larval Fish Laboratory Contribution 183.

these additional details, it is difficult to understand how and when GRB exchange releases are triggered and at what flow rate.

Future depletions:

We agree with TNC that the EA would benefit from greater specifics about exactly what are the reasonably foreseeable new depletions. Whatever is NOT on that list will, of course, trigger additional NEPA if later proposed.

Future hydrology:

It does not appear that the Bureau's modeling considers the more frequent, drier natural inflows under climate change.² To avoid under-estimating the amount and frequency of additional releases needed to maintain the current range of baseflows in the Green River, we encourage including an assessment of proposed FG operations under drier future hydrologies.

Thank you for your attention to these comments.

Sincerely,

A handwritten signature in black ink that reads "Bart P. Miller". The signature is written in a cursive, flowing style.

Bart Miller
Director, Healthy Rivers Program
Western Resource Advocates

² See Bradley Udall & Jonathan Overpeck, *The Twenty-First Century Colorado River Hot Drought and Implications for the Future* (Feb. 17, 2017), available at <https://doi.org/10.1002/2016WR019638>.