MONTANA TROUT UNLIMITED

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13 May 2014

Gary Campbell
Regional Deputy Director
Bureau of Reclamation Office
P.O. Box 30137
Billings, MT 59107

Re: Supplemental draft to 2010 Intake Diversion Final EA (submitted electronically 5-15-14)

Dear Mr. Campbell:

Thank you for the opportunity to comment on the draft supplement to the Final EA for potential modification of the Intake Diversion Dam on the lower Yellowstone River. Montana Trout Unlimited represents 3,900 conservation-minded anglers spread across Montana. All have an abiding interest in conservation of the Yellowstone River and its aquatic communities. We also have a demonstrated interest in seeing implementation projects that reasonably accommodate traditional water users and important conservation. This project as proposed does not do this.

Though Montana TU supports resolving fish passage issues posed by the current structure at Intake, we strongly oppose the bypass channel alternative favored by the BOR and the U.S. Army Corps of Engineers. We believe if this alternative was implemented there is a high probability an investment of $59 million of federal funding – including possibly up to $40 million authorized by the Water Resources and Development Act – would not only fail to meet objectives to help restore populations of endangered pallid sturgeon in the upper Missouri system, but it will likely jeopardize these fish. Other native fish species whose life histories require movement above Intake could also be harmed, including important populations of sauger, paddlefish, and blue suckers. We believe our reasons for opposing the preferred alternative are compelling.

1. The proposed alternative doesn't satisfy fundamental screening criteria cited in the supplemental EA (Appendix A1).

- It does not provide reasonable scientific certainty that upstream passage for adult pallid sturgeon will be served. The BOR, COE and USFWS have provided no empirical, field-based evidence that these fish will navigate a long bypass channel, let alone one at this location at the stream discharges proposed.

- Since upstream passage for sturgeon is not guaranteed, the proposed alternative does not ensure that the Lower Yellowstone Project as authorized will be in compliance with the Endangered Species Act.

- Because the project will completely eliminate main-channel upstream movement of all fish species at all stages, and depends solely on speculation that the bypass channel will be functional and biologically useful for other native fishes, including paddlefish, blue suckers, goldeye and sauger, it doesn't necessarily contribute to "restoration of the Lower Yellowstone River ecosystem."

- There is a high probability the alternative will not work for upstream passage of pallid sturgeon, so it isn't necessarily "not prohibitively greater in cost" than other alternatives. An alternative that doesn't work or which ultimately must be abandoned or subject to additional retrofitting at great cost is not necessarily the best investment.

This proposal simply does not meet one of its two primary objectives, which is to, *"…improve fish passage for the endangered pallid sturgeon and other native fishes."* (2010 EA on Intake Diversion modifications).

2. The BOR admits in several places in the supplemental EA that the utility of the bypass channel for upstream movement of pallid sturgeon is speculative and not empirically based.

For instance, the BOR says*: "There is increasing information about pallid sturgeon use of side channels during spawning migrations, but the information is incomplete. The percentage of river flow in the bypass channel and the complex flows at the downstream entrance to the bypass channel create uncertainty about the ability of pallid sturgeon to locate and enter the bypass channel."* (2-18). On the same page (2.5.7), the document lists the risks and uncertainties this alternative poses, including the attraction flows won't work, that "*there is no evidence pallids use* side-*channels the length of the proposed bypass channel,"* the channel could very well be damaged in high flows, or filled with debris, thereby *"eliminating passage."*

Much of the document actually argues ***against*** *s*electing the bypass channel alternative as the best approach to facilitating upstream passage of pallid sturgeon and other fish.

3. Selection of the Bypass Channel Alternative with assurances for the COE, as proposed, that if it invests in this venture it won't be required to implement recovery actions elsewhere in the upper Missouri basin, could actually reduce the probability that wild pallid sturgeon will persist.

This approach runs completely against the grain of conservation biology for rare species because it does not spread risk. Instead, it focuses recovery in a limited part of the fish's range in the upper Missouri River basin. This also runs counter to the Pallid Sturgeon Recovery Plan (Jordan 2013), which recommends conservation actions occur for these fish in all the recovery units in the upper basin. The latest Biological Opinion (BiOp) for Pallid Sturgeon produced by the FWS is similarly flawed because it ignores its findings from previous BiOps in 2000 and 2003 that continued operations at Fort Peck Dam are contributing to jeopardize persistence of pallid sturgeon. The 2013 recovery plan estimates 50 wild adult pallid sturgeon remain the Missouri River system above Fort Peck Dam, and that another 125 live in the system below the dam, including some who use the lower Yellowstone River. It makes little sense to shift most, if not all the conservation focus to resolving passage at Intake. The Intake project as proposed includes too much uncertainty as to whether it will work, and the bulk of the population of these fish use other parts of the upper Missouri River Basin. Yes, fix Intake, but don't relieve the COE from its obligation to help recover pallid sturgeon elsewhere in the upper Missouri River basin.

4. The use of hydraulic criteria instead of biological criteria for determining the appropriateness of the Bypass Channel alternative is wrong.

BOR, apparently with the support of the FWS, is selecting the Bypass Channel alternative as appropriate for upstream movement of pallid sturgeon. However, in the absence of in-situ biological data, as well as published literature on the swimming ability of these fish or their propensity to use long-side channels for seasonal movement, the agency has no rationale basis for selecting this alternative. Montana TU knows of no other instance where a BiOp states that survival or recovery of a fish species, as well as granting of assurances that conservation to avoid jeopardy will not have to occur elsewhere, is based primarily on a project meeting engineering criteria instead of biological criteria.

Though the supplemental EA does indicate that some future judgment of biological response – at least eight years after project construction – will occur, the enumerated biological criteria that will be targeted for determining success are a mystery. Further, the draft EA does not detail what will happen and who will do it should the bypass channel prove unsuccessful. Finally, eight years is not sufficient time to determine conservation success at the population level of a long-lived species such as pallid sturgeon. It is for these reasons and others, that the COE should not be relieved of its current obligations to invest in actions that both prevent extirpation while recovering these fish in sufficient numbers to ensure long-term persistence in the wild.

5. Important geomorphological information in the supplemental EA is either inadequate or absent.

The supplemental EA concludes the proposed bypass channel can be engineered to resist damage from main-stem channel movement or avulsion. Montana TU sees no evidence of this. The channel migration zone in the vicinity of Intake is fairly large (4-3), the river is fairly active there at high flows, and the analysis detailing the function of the plug and culvert proposed for prevention of hydraulic problems or a geomorphological shift with the high water channel is sketchy. There is nothing in the supplemental EA that leads to the conclusion that the main channel and the constructed side-channel will continue in an easily maintained, long-term, steady state condition.

There is nothing in the EA that discloses how much bed load and debris could migrate into the proposed bypass channel, how often maintenance will occur to keep the channel functional nor how much it will cost. Further, data demonstrating expected sediment transport that will occur through the channel at a maximum of 15 percent of the median high-flow of the river is insufficient.

6. The Supplemental EA downplays, or ignores, who will be responsible and what could be the future costs of side-channel maintenance.

These issues are simply dismissed as in: *"It is possible that additional protection could be required in the future if assumptions about channel stability are proven incorrect and excessive channel migration or degradation begins to impact passage effectiveness."* (2-8).

Further, the supplemental EA states, *"Funding responsibility for O & M, monitoring and any necessary adaptive management measures would depend on a number of factors, including*

applicable laws, regulations and policies; opportunities for cooperative funding; the nature of the activity; and likely other factors…"

BOR is therefore recommending construction of a $59 million project, that in high probability won't achieve its primary objective, and yet it cannot say who will be responsible to fund and implement future monitoring and maintenance. Nor does BOR say who will be responsible for ensuring an alternative is funded and implemented should this project fail to meet its primary objective.

It is important to note that both the COE and project water users have publicly stated they do not want to be responsible for future maintenance and monitoring of the bypass channel.

The BOR arbitrarily selected only the Rock Ramp and Bypass Channel alternatives to re-evaluate.

The BOR appears to have arbitrarily selected only the Rock Ramp alternative, the previous preferred alternative, for re-evaluation of costs in the supplemental EA. The BOR should also have re-evaluated other alternatives, especially those that have a higher-probability of meeting the primary objective of the project, successful upstream passage of pallid sturgeon at Intake. This includes re-evaluation of costs of alternatives that don't require river-wide dams on the Yellowstone River, such as the pumping alternatives. Montana TU notes that BOR only produced "preliminary estimated costs" for the Single Pumping Alternative in the original EA (Appendix A-1). It also included only a "conceptual design" for a multiple pumping-station alternative. BOR summarily dismissed these alternatives – which better accommodate fish AND water users – based on challenges that are readily dealt with at irrigation pump systems all over the state. If debris and sediment accumulation, seasonal changes in flows and fish entrainment are cost-prohibitive challenges at Intake, then they should also be cost-prohibitive at many other sites. But they aren't.

It is also worth noting that BOR did not evaluate alternatives to reduce O and M costs of the pumping alternatives, including using alternative energy sources such as wind turbines or low-head hydro turbines in the canal system. Another option would be to use photovoltaic-driven pumps, which Montana TU and its partners have installed at well sites throughout the state for irrigation or stock water. Further,, there is little discussion about water or power conservation that might reduce annual operation costs. Moreover, BOR dismisses the pumping options because of other potential costs, such as providing road access or purchases of real estate. But little of this was quantified.

Finally, BOR also dismisses pumping options by citing annual O and M costs, such as an estimated (but not quantified) $315,000/year cost for power needs. This need, it seems, could be met through establishment of a trust fund using appropriated dollars.

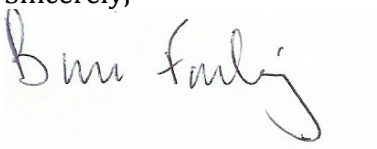
Montana TU believes upstream passage for pallid sturgeon and other fish at Intake is best accomplished by eliminating the need for a river-wide dam. Water needs of project irrigators can be made whole by developing an alternative using pumps, and by addressing annual pumping costs through establishment of a trust fund through federal appropriation. It might be that the initial capital costs of this alternative exceed those of the Bypass Alternative, but it will at least guarantee the primary objective of the project, which is to open up 165 miles of the middle Yellowstone River for pallid sturgeon spawning. Further, alternatives not requiring a dam obviate the still-to-be calculated future costs for perpetual monitoring and maintenance of the bypass channel (as well as maintenance costs for the dam). Further, they

eliminate the risk of going back to the drawing board should the Bypass Alternative, as is highly probable, fails to accommodate upstream fish movement**. Selecting an alternative that does not include a river-wide dam is by far the most fiscally prudent alternative.**

Coupled with requiring the COE to maintain its recovery obligations elsewhere in the basin, an alternative that doesn't require a river-wide dam will significantly increase the odds for recovery of endangered pallid sturgeon in the upper Missouri River system.

Thank you for your consideration.

Sincerely,



Bruce Farling
Executive Director

cc.
Montana FWP
USFWS
Congressman Steve Daines
Senator Jon Tester
Senator John Walsh