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Working to protect and restore Western Watersheds and Wildlife

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Via email to kevin.c.little@usace.army.mil

Objections of Western Watersheds Project to the Alkali Creek Reservoir Project Section 404 Permit, application number NWO-2016-01459

Dear Mr. Little:

The following are the objections of Western Watersheds Project to the Alkali Creek Reservoir Project Clean Water Act permit. In this objection, we reference the Bureau of Land management Draft Environmental Impact Statement ("DEIS") which provides the NEPA analysis for the project. Irrigation is primarily for the purpose of alfalfa, hay, and livestock pasture. DEIS at 115. We object to the further disruption of natural watershed function with the installation of still more infrastructure to suck even more water out of this desert stream system, in order to subsidize agricultural practices on lands otherwise unsuitable for them. Existing irrigation is already more than enough of an environmental problem, without compounding the problems with even more water withdrawals and depletions, and newly created water rights (*see* DEIS at 116), and expanded irrigation acreage. The DEIS fails to establish baseline conditions for important resources, fails to take the legally mandated 'hard look' at impacts both direct and cumulative to sensitive resources, and fails to consider a range of reasonable alternatives. This project should not move forward, but if it does, better alternatives must be considered and adopted.

The Purpose and Need for the project is improperly narrow

The Purpose and Need for the project is defined as follows: "The overall purpose of the project (i.e., the Proposed Action), as preliminarily determined for the USACE permitting process, is to provide a firm yield of 5,638 acre-feet of late-season irrigation water 8 out of 10 years to lands in the lower portion of the Nowood River watershed, including the Paint Rock Creek watershed. The project is needed to meet a portion of the late-season irrigation water shortages within the service area of the proposed reservoir." DEIS at i. We object to this illegally limited range of alternatives, designed to limit the specific outcome of the alternative selected to the agency's preference to approve a dam in this location.

A secondary aspect of the Purpose and Need to provide public recreation. DEIS at i. However, far superior public recreation opportunities in a reservoir setting are already available in close proximity to the Project Area at Bighorn Canyon National Recreation Area. We object to the fact that the BLM has not made any finding that the recreation opportunities at Bighorn Canyon NRA are somehow limited or unavailable, nor that a new (much smaller and with less spectacular scenery) reservoir would provide a significant improvement in local recreational opportunities. BLM lists several other irrigation reservoirs in the local area. DEIS at 154. What is the level of recreation use on these reservoirs, if any, and how would the addition of Alkali Creek Reservoir provide a new and different need for recreational opportunities currently unmet by existing irrigation reservoirs?

The Purpose and Need for the project is to provide for late-season irrigation and public recreation. DEIS at i. BLM elaborates that "Chapter 1 of this draft EIS discusses the purpose of and need for the project (i.e., the Proposed Action)…." DEIS at 1. BLM asserts that the Wyoming Water Development Office (WWDO) has identified "locations in Wyoming that need reservoirs." DEIS at 1. We object: It is important to note that locations do not need reservoirs, and indeed, if locations could speak for themselves, the locations would undoubtedly tell us that they are happier as they are, and would prefer not to be encumbered by reservoirs. But locations cannot speak for themselves, so it is up to public interest nonprofits that speak on behalf of natural systems to speak out on their behalf. With this in mind, Western Watersheds Project will endeavor to speak on behalf of natural stream systems, natural habitats that stand to be drowned by the impoundment, and native species that will be negatively impacted by the proposed project. The WWDO's goals, which are not (and should not) necessarily to be construed as the goals of a federal land management agency (or the USACE), are to construct a reservoir of a certain capacity to address presumed shortfalls in irrigation water at certain times of year (DEIS at 5), shortfalls that the agriculture industry has worked under for more than a century. The Purpose and Need as formally defined are to supply a US Army Corps of Engineers Section 404 permit under the Clean Water Act, to provide a BLM right-of-way permit for the proposed reservoir, and to satisfy Wyoming Department of Transportation concerns regarding travel safety. DEIS at 5-6. This Purpose and Need is unreasonably narrow and constrained such as to preclude reasonable alternatives including not expanding agricultural diversions from the Nowood watershed at all, and requiring agricultural water users to implement water efficiency measures that could potentially eliminate the need for an additional reservoir.

The BLM has Failed to Examine in Detail a Range of Reasonable Alternatives

The EIS considers only a No Action alternative, and two alternatives so similar as to be virtually indistinguishable, that would approve constructing the reservoir in question in the same location, with the same dam height and area. The fact that these two action alternatives are substantially identical can be seen in DEIS Table 3.15-3, in which impacts of the Modified Proposed Action are consistently "Same as the Proposed Action." DEIS at 112-113, *and see* 126, 140. We object to the inadequate range of alternatives considered in detail under the DEIS.

The BLM instructed its consultant (SWCA) to screen potential alternatives according to a series of criteria, which include "Reliability/Yield: Is the reservoir storage site (singly or in combination) large enough to meet the need? Is there an adequate water supply to satisfy the purpose and need?" DEIS at 12. This explicitly excludes any alternative that does not involve

the construction of a reservoir, and also renders the No Action alternative outside the scope of acceptable alternatives. BLM's dismissive approach to the No Action alternative is summed up in the following statement: "Although the No Federal Action does not achieve the overall project purpose of addressing late-season irrigation shortages in the lower portion of the Nowood River watershed and the Paint Rock Creek watershed, NEPA requires that this alternative be analyzed in detail as a baseline for comparison." DEIS at 13. The other two options considered are the Proposed Action (DEIS at 13) and a Modified Proposed Action, which would entail building essentially the same reservoir in the same location with a slightly modified auxiliary spillway and a different fill rate (DEIS at 27).

We object to the alternative of having agricultural irrigators improve their water efficiency as a means of making up the water shortfall not having been been considered. In the Bighorn Basin, many irrigators are still using 19th Century irrigation practices, with unlined canals, flood irrigation, and/or other methods that unnecessarily squander water to evaporation or runoff. Unlined canals (*see* DEIS at 115) increase the evaporative loss of diverted water, and also lose significant water underground to the surrounding soils. In addition, halting the flow of naturals streams through impounding them also increases the surface area of water and further accelerates evaporative loss. Replacing existing open canals and channels with pipelines is an alternative likely to result in substantial water savings, potentially equal to or greater than the water that could be removed from an irrigation reservoir on Alkali Creek, to address the irrigation water needs during late-season without constructing a dam and reservoir. Also, the potential for simply withdrawing the water from a pipe intake in the Nowood River should be considered in detail. Also, what about having irrigators produce the desired water from underground aquifers, which entails little or no impacts to streams and wetlands? Under guidelines for Section 404(b)(1) of the Clean Water Act, only the least environmentally damaging alternative may be permitted, and these would seem to be much less damaging alternatives to produce the same irrigation water. We object to the fact that the least damaging alternative is not proposed for adoption, nor even considered, and therefore the USACE may not legally grant the permit.

We object to the fact that the connected action of additional irrigation of thousands of acres will convert native habitats to disturbed areas, without analysis. The proposed reservoir would have a capacity of 7,994 acre-feet (AF) of water, and cover an expanse of 294 acres, and entail the construction of two permanent access roads. DEIS at 2. The reservoir would divert from both Paint Rock and Medicine Lodge Creeks, in addition to water impounded from natural flows along Alkali Creek. DEIS at 104. There would be surface disturbance on 602.9 acres, between temporary and permanent disturbances associated with the project. Id. Current irrigation use in the project analysis area is 18,400 AF (DEIS at 97); the proposed reservoir would increase that by a third. In addition to this withdrawal, there would be an annual loss of 515 AF of water from evaporation of water from the reservoir surface. DEIS at 103. BLM projects a net increase of 4,500 AF of water as a result of the Proposed Action. DEIS at 103. The increased irrigation-water availability would result in the conversion of additional lands to irrigated agriculture. DEIS at 103. This irrigation would affect (and increase human degradation of) 3,150 acres of land, including 2,400 in the lower Nowood River valley and 750 acres adjacent to Medicine Lodge and Paintrock Creeks. DEIS at 134.

We object to the failure of the DEIS to make an apples-toapples comparison of reasonable alternatives in terms of their monetary cost. The cost of an alternative is an explicit criterion

for alternative evaluation. DEIS at 12. The BLM has not produced cost estimates for the proposed Action as well as the various alternatives dismissed from detailed consideration. This is an important oversight. This project has the look of a bloated federal porkbarrel project for irrigators. What proportion of the costs will be borne by the taxpayer (at both the state and federal levels), and how much of the project will be paid for by the irrigators who appear to be the sole beneficiaries (discounting, of course, the trivial and speculative recreational benefits to the public, unlikely to amount much value). BLM also should state costs for all alternatives, both those considered in detail and those dismissed from consideration, so the public can see the differences.

Impacts to Surface Water

We object to the fact that this project will result in exacerbating surface water quality problems. The Clean Water Act requires that all projects approved for a 404 permit must not contribute to exacerbating water quality degradation. A number of streams around and downstream from the project area are impaired from a water pollution standpoint, particularly with regard to fecal coliform. DEIS at 100. How will the reductions in streamflows further concentrate pollutants and contaminants downstream, during periods of water diversion and storage? What are the current *E. coli* loads for all streams downstream from the proposed project and its diversions? What will be the loads throughout the year, below the facilities? These are important 'hard look' issues to address. BLM asserts that *E. coli* loads in spring runoff from Medicine Lodge and Paint Rock Creeks would be low, but does not provide sampling to back up this assertion with any data. In addition, there is no analysis of how stored water might or might not enable the growth and increase of *E. coli* loads while water is stored throughout the hot months of summer, as a result of nutrient or suspended solids in reservoir waters. One would also expect that livestock would congregate along the reservoir shorelines, potentially concentrating fecal deposition along the shoreline and increasing *E. coli* loads. In addition, waterfowl and shorebirds would be expected to congregate in and adjacent to the reservoir, adding *E. coli* contamination. Also, there does not appear to be an adequate analysis of the potential of thermoclines to form, which could potentially result in anaerobic environments and reduced decomposition which ultimately leads to algae blooms and lowered dissolved oxygen levels, either in the reservoir itself or downstream, when reservoir waters are released. A comprehensive analysis of projected dissolved oxygen, pH, bacterial levels, algae densities, and total dissolved solids is needed for the reservoir and downstream stream reaches to satisfy NEPA's baseline information and 'hard look' requirements. In particular, changes in water quality for 303(d) impaired waters and Total Maximum Daily Loads (TMDLs) under the Clean Water Act need to be carefully evaluated.

We object to the alteration of natural water flows under the project. The proposed reservoir would reduce spring flows in Paint Rock Creek by up to 33%, in Medicine Lodge Creek by up to 16%, and in Alkali Creek by up to 100%. DEIS at 104. However, it does not appear that the BLM has considered the range or pre-project streamflows, from drought years to high-water years. BLM should be modeling water flows before and after the project not just for average flows, but also for floods of various magnitudes resulting from rainstorms or snowmelt events. The releases from the reservoir in late summer would increase flows in Alkali Creek below the reservoir by more than 500%. Id. However, in Paint Rock and Medicine Lodge Creek, "irrigation diversions by exchange" would reduce streamflow in

Medicine Lodge Creek by up to 52% in September and in Paint Rock Creek by 20% in August, in order to irrigate currently-unirrigated acres. Id. This is a net loss for aquatic ecosystems and the wetlands they support.

We object to stream channel morphology resulting from the project. What are the current pool/riffle/run ratios, and how will these be affected by reservoir construction and operation? What are the current sediment loads, how do they relate to TMDLs, and how will these be altered by reservoir construction and appurtenant irrigation operations? The EIS does provide some descriptive listing of types of impacts of sedimentation as a result of the project, but fails to quantify and describe the consequences of the reservoir, irrigation diversions, and changes in flow regime on flow conditions, streamcourse substrate, and resulting changes to aquatic communities that would be expected to result from these changes. The DEIS states that erosion control measures would be emplaced during construction operations, but does not explain the nature or effect of these mitigation measures, or the extent to which they might (or might not) mitigate sediment loading during construction. The reservoir and associated diversions would reduce downstream flows of water, increasing stream width-to-depth ratios, and preventing overbanks (flood) flows. DEIS at 108. This would result in warmer water temperatures downstream, harmful to trout, and would prevent flooding that is important to bottomland nutrient deposition and cottonwood seedling recruitment, which depends on scouring flows. In addition, downstream erosion would increase during the delivery period with unnatural increases in water flow. DEIS at 113.

We object to the DEIS's failure to include a credible cumulative effects analysis. The cumulative effects analysis is inadequate because it does not consider the cumulative effects of current irrigation withdrawals and water level changes with the added changes to be approved as a result of the Alkali Creek Reservoir project. The CIAA properly includes the project area downstream to the confluence of the Nowood and Bighorn Rivers (DEIS at 148), but also should include all waters downstream from the Anita Ditch and Anita Supplemental Ditch and all reservoir outlets associated with irrigation water storage and diversions in the affected watersheds, to account for the cumulative impacts of this diversion. Unfortunately, the BLM then fails to venture any cumulate impacts analysis of past and proposed water withdrawals and additions on the streams within this boundary. See DEIS at 158. Similarly, surface water quality fails to take into account past impacts on water quality from pre-existing irrigation, roads, agricultural land uses, and other human impacts. DEIS at 158. The BLM should also quantify the relative contributions of livestock grazing versus septic systems, which would seem to be a relatively minor contributor to *E. coli* contamination given the sparse residential development in the area.

The irrigation withdrawals, acreage of irrigated lands, and historic impacts of irrigation within these stretches of waterway should be available, and historic, pre-irrigation photographs as well as accounts and records of streamflows and patterns should be available to BLM. It is necessary to undertake this historical research as part of the cumulative impacts analysis to determine the extent to which stream and river flow patterns deviate from pre-settlement, natural patterns, so that the additive alterations resulting from the construction and operation of the Alkali Creek Reservoir can be evaluated in the context of cumulative impacts on waterways, fisheries, and land uses.

Impacts to Wetlands

We object to the impacts of the proposed project to wetlands, and the failure to provide for no net loss of wetlands. A number of identified wetlands would either be directly eliminated by the reservoir, of affected by changing hydrology downstream. DEIS at 123, 125. However, there is no clear delineation of where these wetlands are located with respect to the project footprint. *See* Figure 3.17-1. The direct effects on wetlands (including springs) are not evaluated in the context of a cumulative effects analysis, because the BLM has made no attempt to evaluate the extent to which wetlands along Alkali Creek, Paint Rock Creek, Medicine Lodge Creek, and the Nowood River have already been impacted or eliminated as a result of past irrigation practices, farming and ranching, land conversion, or construction of roads, pipelines, and overhead or buried telephone or power lines. DEIS at 160. BLM also does not appear to have conducted an impact analysis on wetlands downstream from the project area, which also would be expected to be impacted based on the projected changes to water flow regimes. BLM states that the project will entail a USACE Section 404 permit under the Clean Water Act, which requires offsetting mitigation. DEIS at 160. However, the agency fails in its obligation to disclose and evaluate the environmental impacts (positive and negative) of this offsetting mitigation, which is clearly a connected action to the project. There also appears to be no attempt of a cumulate effects analysis on wetlands, in which the agency describes the wetlands that already have been lost as a result of past irrigation and diversion practices, past fill of wetlands or creation of stock reservoirs, road or pipeline projects, and other human activities that may have destroyed, reduced, or altered wetlands within the watersheds impacted by this project.

Impacts to Cultural Resources

We object to the DEIS's short shrift given to analysis of impacts to cultural resources. We are concerned that BLM has not taken seriously its obligation to take a hard look at the impacts of the project to archaeological and cultural resources. The proposed reservoir is sited in very close proximity to the Medicine Lodge Archaeological Site. In addition, there is a known 11,000-year-old Clovis culture site quite close to the proposed reservoir. DEIS at 36. BLM states that it consulted with a number of tribes concerning this project. DEIS at 35, 38. What was the nature of this consultation, and was there actually information received from these tribes? Or did BLM simply send the various tribes a letter inviting input, without following up in cases where no response resulted? Consultation requires more than a one-way solicitation of input, it requires actual dialog with the tribes. BLM references SWCA field investigations (DEIS at 36). Did these investigations involve a thorough and comprehensive field inventory of the area to be subjected to surface disturbance by a qualified archaeologist?

Impacts to Land Use

We object to the insufficient Cumulative Impacts Analysis area and concomitant failure to adequately analyze cumulative impacts. The Cumulative Impacts Analysis Area (CIAA) for the project is absurdly restricted to "the project area with a 0.25-mile buffer." DEIS at 151. This is entirely inappropriate. The effects of irrigation on land use extend throughout the entire Paint Rock, Medicine Lodge, Alkali Creek, and Nowood watersheds. This is therefore the appropriate CIAA for the project on land use. Past conversion of native habitats to irrigated pasture or tilled croplands for hay, alfalfa, or human food crops has resulted in

major impacts to native wildlife, in addition to the obvious impact that stream dewatering and changes in flow patterns stemming from irrigation have resulted in major losses of aquatic habitat and biodiversity over the century-plus history of irrigated agriculture in the Bighorn Basin. The instant project will result in additional irrigation of thousands of acres, and this conversion of habitats must be fuly evaluated, both directly and cumulatively with all the other habitat losses within these watersheds that result from the conversion of native plant communities to irrigated pasture or cropland. What are the current land and habitat statuses of the thousands of acres into which irrigation will expand as a result of this project? What will the impacts of converting these habitats to irrigated croplands or pastures be on the native wildlife that may depend on them for habitat? These are critically important 'hard look' questions that the DEIS makes no attempt to answer. And what are the cumulative effects of past land conversion through irrigation on wildlife habitats, on lands both public and private? The DEIS (see 151-152) makes no effort at a cumulative effects analysis.

Impacts of Noise

We object to the inadequate noise impacts analysis. BLM states, "Based on the isolated setting and land use described for the analysis areas and the proximity of these areas to WY 31, the estimated ambient noise level in the analysis areas is approximately 48 dBA (ANSI 2013)." DEIS at 50. This is a startlingly, perhaps ridiculously, high estimate. How was it derived? Did BLM place noise meters anywhere in the Project Area to measure actual background noise? Compare to 54 dBA estimated ¾ mile away from a bulldozer and scraper, working together. DEIS at 51. Elsewhere in Wyoming, ambient noise ranges from 15 to 19 dBA. Noise is very harmful to sage grouse.

Impacts to Terrestrial Wildlife

We object to the inadequate 'hard look' at impacts of the project to wildlife. BLM states, absurdly, that "No past or present actions have contributed to any cumulative effects for raptors and big game." DEIS at 160. Domestic livestock have been introduced throughout the watersheds of the CIAA, and each cow-calf pair is equivalent in its forage use to 10 pronghorn, a little more than two elk, or 5.88 mule deer (Ogle and Brazee 2009). This means that a substantial population of native ungulates has already been displaced from the CIAA due to competitive exclusion by livestock. In addition, roads have been built through the CIAA. Each major road displaces elk for an 0.5-mile distance on either side of the road, and causes stress and elevated energy use for those that remain. Similar, but smaller effects for mule deer and pronghorn would be expected, particularly since both are also hunted species. The conversion of native habitats to irrigated pasture, alfalfa fields, hayfields, or food crop fields within the watersheds of the CIAA will have had impacts on these species of big game.

Similarly, for raptors, roads in particular but also overhead powerlines would have impacted local populations, potentially displacing them from preferred nesting habitats, reducing nest success for those that remained, and/or causing direct mortality through electrocutions and vehicle collisions that result from roadkill along roadways. These latter unnatural mortality factors make roadways and powerlines "ecological trap" habitats, attracting raptors to areas where their odds of survival are significantly impaired.

BLM must consider all of the impacts of past human activities in the CIAA on big game and raptor populations, and on the populations of all Sensitive Species (state or BLM), in order

to credibly conduct a cumulative effects analysis that places the impacts of the Alkali Cree Reservoir impacts in meaningful context. BLM must also provide distribution and population trends for BLM and state-listed Sensitive Species, which is important baseline information. Instead of undertaking a cumulative effects analysis, BLM merely lists the additive effects of the project, without considering the degree to which these add to pre-existing effects from foregoing projects and pre-existing human structures, land uses, and activities. DEIS at 161. This is flatly inadequate.

Impacts to Sage Grouse

We object to impacts to sage grouse, and inadequate consideration of these impacts through a legally-required 'hard look.' There are five sage grouse leks within 4 miles of the project area, the closest of which is 2.9 miles from the proposed reservoir. DEIS at 129. But important baseline information, like lek counts and lek count trends over the past several decades, is omitted. The project would eliminate about 105 acres of Priority Habitat Management Area for sage grouse. DEIS at 135. Direct surface disturbance is listed at 10.33 acres; the EIS needs to explain this discrepancy. Using the 10.33 acre figure, BLM has conducted a DDCT analysis for the project, which results in a 3.31% surface disturbance within the project area. What exactly is BLM counting as "surface disturbance" in this DDCT analysis? Are irrigated cropfields included? While flood-irrigated pasturage does not necessarily entail surface disturbance, any crop fields that are plowed or disked should be counted as "surface disturbance" for the purposes of calculating the DDCT surface disturbance cap, and we are concerned that BLM has neglected to do this. In addition, additional irrigation fields of significant acreage (see above) will result from this impoundment project; to what extent will these be disked or plowed, entailing surface disturbance? These additional acres of plowed or disked irrigated land that fall within the PHMA DDCT area must be added to the surface disturbance for the project.

In addition, while the Bighorn Basin RMP incorporates a DDCT surface disturbance limit of 5%, this limit has no basis in the best available science. There has never been a scientific article that concludes that a disturbance level of 5%, the threshold set in the Bighorn Basin RMP, is sufficient to prevent significant decreases in sage grouse populations. According to BLM's own expert review of the science (NTT 2011: 21), "we believe the conservation strategy most likely to meet the objective of maintaining or increasing sage-grouse distribution and abundance is to exclude energy development and other large-scale disturbances from priority habitats, and where valid existing rights exist, minimize those impacts by keeping disturbances to 1 per section with direct surface disturbance impacts held to 3% of the area or less." BLM's experts recommended no new surface occupancy on valid existing leases, with the following exception relevant to surface disturbance percentages: "If the lease is entirely within priority habitats, apply a 4-mile NSO around the lek, and limit permitted disturbances to 1 per section with no more than 3% surface disturbance in that section." In addition, no scientific study ever has tested whether watering down the disturbance by extrapolating it over a large area equivalent to a DDCT analysis area is a legitimate way to calculate surface disturbance. Scientific studies on the subject (i.e., Knick et al. 2013) calculate disturbance percentages over a much smaller area, and no scientific study has ever evaluated the disturbance thresholds that cause sage grouse declines at the DDCT level. BLM itself (NTT 2011: 9), "If a project proponent agrees to site proposed anthropogenic surface disturbance within areas of existing development or areas

of non-suitable habitat in a priority area, and the resulting localized total surface disturbance exceeds 3% (but the anthropogenic surface disturbance of the entire priority area does not exceed 3%), the need for offsite mitigation should be evaluated on a case-by-case basis." Thus, while the DDCT output is compliant with the State of Wyoming's EO 2015-4, and the BLM's Bighorn Basin RMP, it is out of step with the best available science.

We object to the construction of new fencing in sage grouse habitats because barbed-wire fences guillotine flying grouse. Fencing should not be constructed in sage grouse habitats, either in PHMA or GHMA. BLM's proposal to construct new fences as part of the project, but mitigating this by adding fence markers (DEIS at 142) would only prevent approximately 60% of the collision mortality experienced at an unmarked fence (*see, e.g.,* Christiansen 2009). Additional mortality for low-flying sage grouse should be prevented, not added, as a result of this project. In addition, existing fences within sage grouse habitats of the Hyattville Core Area, particularly within 5.3 miles of leks, should be removed as mitigation should the Alkali Creek Reservoir be approved.

We object to the creation of more mosquito habitat, and failure to adequately consider the impacts pf West Nile virus. We are also concerned that the resulting reservoir will provide Stillwater breeding habitat for the *Culex tarsalis* mosquitoes that carry West Nile virus. See DEIS at 135. We are not convinced that an undefined "mosquito abatement plan" (DEIS at 142) is adequate mitigation, and BLM is not in a position to take a hard look at the impacts of the project on West Nile virus and sage grouse without defining the mosquito abatement plan and its specific provisions in the EIS, and evaluating its effectiveness therein.

Impacts to Aquatic Life

We object to the project's impacts on aquatic ecosystems. Flow changes exceeding 10% in a given month would have a significant effect on aquatic life. DEIS at 133. BLM summarizes that flow changes are important and can have positive or negative effects on various species, altering the composition of stream life assemblages. DEIS at 138. However, the BLM does not take a hard look at the potential consequences of flow changes on any one form of aquatic life. Each would be expected to have different thresholds of tolerance. For the agency to fail to investigate the impacts of flow changes on aquatic species, particularly state or BLM sensitive species and game species, is an oversight of important proportions. What are the most sensitive species to environmental perturbations, how have they been impacted by past human activities, and how will the present project impact them further, or alleviate past impacts?

We object to the DEIS's failure to consider impacts from aquatic invasive species. BLM admits that aquatic invasive species like zebra or quagga mussels could be introduced during the project, but "[n]o best management practices or design features have been defined to require equipment or vehicle washings prior to working in multiple streams with the same equipment." DEIS at 138. The EIS has failed to take a legally required 'hard look' at the potential impacts from these species, and also has failed to consider reasonable alternatives to prevent their spread. This is especially shocking given that local residents with a canoe or rowboat must pay for a tag and get their watercraft checked at checkpoints, yet this major project, which will involve heavy equipment digging directly in stream channels, will not be required to engage in mitigation measures to prevent the spread of aquatic invasives.

There is a dearth of information on distribution of fishes, aquatic invertebrates, and other species of special concern. This is a baseline information failure. There also is no cumulative effects analysis that considers how past irrigation projects and their ongoing consequences will interact with the impacts of the proposed reservoir, making it impossible for the reader (or the agency) to determine whether this particular reservoir with be "the straw that breaks the camel's back" for a particular species or group of species.

Conclusions

We appreciate the opportunity to record our objections to the issuance of a 404 permit for this project. It appears that the NEPA analysis, while lengthy in page numbers, is insufficiently detailed to support the legal approval of this project. Given the myriad environmental impacts to publicly valued resources, and the absence of tangible benefits to the public (this project appears to benefit private irrigators at the expense of the public interest), USACE should decline to issue a Section 404 permit for this project on federal lands. Please inform us directly of all future opportunities to comment on this project.

Very sincerely yours,

Erik Molvar
Executive Director

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