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By Internet Submission

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Re: Comments on the U.S. Army Corps of Engineers' Final EIS for the Northern Integrated Supply Project in Colorado

On behalf of several national, regional, and local non-profit conservation organizations including Save The Poudre: Poudre Waterkeeper (“STP”); Sierra Club, Save the Colorado, Waterkeeper Alliance, WildEarth Guardians, and Fort Collins Audubon Society (“Conservation Organizations”), we hereby submit comments on the U.S. Army Corps of Engineers’ (“Corps”) Final Environmental Impact Statement (“FEIS”) for the Northern Integrated Supply Project (“NISP” or “the Project”). These comments incorporate by reference all previous comments individually and collectively submitted by Conservation Organizations and their officers. Although the Conservation Organizations continue to view the length of the comment period as highly inadequate to allow the public and topical experts to fully engage in the many new issues raised in the Corps’ FEIS—let alone to sufficiently analyze them under federal law and the best available scientific evidence—these comments provide a general overview of the organizations’ primary concerns with the FEIS. Towards that effort, the Conservation Organizations incorporate by reference the following expert reports addressing specific aspects of the FEIS and other relevant materials:

- Attachment A: Water Demand Analysis Report (LRB Hydrology & Analytics)
- Attachment B: CV of Lisa Buchanan (LRB Hydrology & Analytics)
- Attachment C: Alternatives Analysis Report (Gordon McCurry)
- Attachment D: CV of Dr. Gordon McCurry, P.G. (McCurry Hydrology LLC)
- Attachment E: Water Quality Report (Woodling Aquatics)
- Attachment F: CV of Dr. John Woodling, Ph.D.

- Attachment G: Analysis of Agricultural Water Supplies Projected to be Displaced by Development Processes on Colorado’s Northern Front Range (STP)
- Attachment H: Fort Collins Whitewater Park Economic Assessment (Dr. John Loomis)
- Attachment I: Decoupling Article (John Fleck)
- Attachment J: Moffat Decoupling Comments (STP)
- Attachment K: FWMEP Comments (STP)
- Attachment L: Alternative Water Transfers in CO (EDF and WestWater)
- Attachment M: Larimer County Environmental and Science Advisory Board Comments

As discussed below, the FEIS is woefully inadequate to support the issuance of a Section 404 permit for the Project. It fails to demonstrate compliance with the criteria set forth in Section 404 of the Clean Water Act (“CWA”) and its implementing regulations. To the contrary, the FEIS and other materials available to Conservation Organizations establish that, based on the existing record, NISP cannot satisfy the relevant permitting standards under the CWA. In addition, the FEIS fails to adequately analyze a full range of reasonable alternatives, as mandated by the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321-4370m. Further, the Corps has failed to fully comply with the Endangered Species Act (“ESA”) and the Bald and Golden Eagle Protection Act (“BGEPA”), 16 U.S.C. §§ 668-668d (“BGEPA”). Until compliance can be assured, the permit cannot be issued.

DISCUSSION

A. The Purpose and Need Statement is Too Restrictive, and Impermissibly Constrains the Range of Reasonable Alternatives, in Violation of NEPA.

An Environmental Impact Statement (“EIS”) must “briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives.” 40 C.F.R. § 1502.13. The purpose and need statement necessarily dictates the range of “reasonable” alternatives that the agency must consider in evaluating the environmental impacts of a proposed action. Therefore, an agency cannot define its objectives in unreasonably narrow terms. *See, e.g., Colo. Env’tl. Coal. v. Dombeck*, 185 F.3d 1162, 1175 (10th Cir. 1999) (providing that “the statements of purpose and need drafted to guide the environmental review process” may not be “unreasonably narrow”). Moreover, while an agency must take a private applicant’s objectives into account when developing the purpose and need statement, it is the agency’s responsibility to “defin[e] the objectives of an action.” *Id.*

The Corps defined the project purpose and need in the Draft EIS (“DEIS”): “To provide the Project Participants with approximately 40,000 acre-feet of new reliable municipal water

supply annually through a regional project . . . which will meet a portion of the Participants' current and reasonably projected future additional water supply needs." FEIS at 1-5. The 40,000 acre-feet figure was based upon requests for additional firm yield submitted by the Participants. The Corps reported in the Supplemental DEIS ("SDEIS") that it "reviewed these 2011 demand projections . . . and found that 40,000 acre-feet of firm annual yield is still valid for NISP." SDEIS at 2-3. This figure was carried forward into the FEIS, and the Corps relied upon it to dismiss alternative water sources that would generate less than 40,000 acre-feet of annual firm yield.

While the Corps has "a duty to consider the applicant's purpose," it cannot define its purpose so narrowly to preclude the existence of reasonable alternatives. *Cf. Sylvester v. U.S. Army Corps of Eng'rs*, 882 F.2d 407, 409 (9th Cir. 1989) ("[A]n applicant cannot define a project in order to preclude the existence of any alternative sites."). Nor can the Corps formulate its purpose and need such that NISP is rendered a foregone conclusion under NEPA. *See New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 710-11 (10th Cir. 2009) (finding that a project purpose "to determine which lands . . . are suitable for leasing and subsequent development" did not "take development . . . as a foregone conclusion"). The CWA and its implementing regulations give the Corps considerable discretion to regulate discharges into jurisdictional waters under Section 404 of the CWA. Accordingly, the Corps' consideration of NISP necessarily leaves open the question of whether a regional project was indeed the "least environmentally damaging practicable alternative" to meet the Participants' future water demands. Yet, the Corps framed the purpose and need so narrowly as to exclude project components that were not "regional" from detailed consideration. In so doing, the Corps ensured that a regional project was the *only* solution to meeting the Participants' alleged future water supply shortfalls, thus rendering a regional project a "foregone conclusion" in violation of NEPA.¹ *See Richardson*, 565 F.3d at 710-11.

The Tenth Circuit has previously rejected purpose and need statements that narrowly express the project's objectives as requiring the agency to adopt a particular alternative. For example, in *Davis v. Mineta*, 302 F.3d 1104, 1119 (10th Cir. 2002), the court evaluated a purpose and need statement for a traffic project that sought to improve traffic flow in part by building an additional river crossing. *Id.* The court rejected this reading, noting that "[a]lthough the scope of the Project certainly contemplates additional road capacity across the Jordan River, [it] d[id] not believe that a fair reading of the Project purposes and needs requires that this additional capacity necessarily be achieved by" construction of the additional crossing. The court further stated that "if the Project did narrowly express its purposes and needs as requiring a new crossing . . . [it] would conclude that such a narrow definition of Project needs would violate NEPA given the more general overarching objective of improving traffic flow in the area." *Id.* Similarly, the Corps cannot define NISP's purpose so narrowly as to require that the project's objectives be met by a major regional reservoir project. Rather, the "more general overarching

¹ As reported by the EPA, Conservation Organizations, and others in comments on the DEIS and SDEIS, a regional project is not the least practicable—or even the most *efficient*—option to meet future demand. Indeed, the EPA suggested water supply options that it believes "could assist in meeting a greater portion of the future demand, or might enable a smaller NISP project with fewer impacts." FEIS at A-112.

objective,” *see id.*, of NISP is “to provide water,” *see* FEIS at 1-5 (reporting the “basic project purpose” of NISP). To read NISP’s objectives more narrowly violates NEPA.

Throughout the NEPA process, the Environmental Protection Agency (“EPA”), Conservation Organizations, and others repeatedly criticized the Corps’ purpose and need statement and expressed concern that the statement impermissibly constrains the range of reasonable alternatives. *See Davis*, 302 F.3d at 1119 (explaining that an agency cannot “define the project so narrowly that it foreclose[s] a reasonable consideration of alternatives”). Significantly, in its comments on the DEIS, the EPA—which reviews and comments on all Section 404 permit applications and has the authority under the CWA to veto an individual permit, *see* 33 U.S.C. § 1344(c)—stated that NISP’s purpose and need statement “artificially constrained” the alternatives analysis. FEIS at A-81. The EPA repeated this concern in comments on the SDEIS, reporting that it “remained concerned that . . . a narrow purpose and need statement in the SDEIS appear[s] to constrain the alternatives available to meet demand.” FEIS A-112. The EPA suggested that the “basic” project purpose—i.e., “to provide water”—would be a more “appropriate” purpose and need statement for “this type of project.” FEIS at A-111.

Despite the objections of the EPA and many other commenters, the Corps carried the purpose and need statement forward into the FEIS without alteration. Moreover, the Corps failed to give any meaningful response to the concerns raised by commenters, including its sister agency. In its response to the EPA’s comments on the SDEIS, the Corps reaffirmed its decision to retain the 40,000 acre-feet and regional project requirements in the purpose and need statement, asserting that it “independently verified the purpose and need for NISP and exercised independent judgment in defining the purpose and need for the project from both the applicant’s and public’s perspective.” *Id.* The Corps went on to state that it “determined the ‘regional project’ criterion was appropriately formulated and applied.” *Id.* However, these conclusory statements fall far short of a “reasoned explanation” for the agency’s decision. *Motor Vehicle Mfr. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (providing that agencies must articulate a satisfactory explanation establishing a “rational connection between the facts found and the choice made”); *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1575 (10th Cir.1994) (requiring that agencies articulate a “reasoned basis for agency action”). Nor does the Corps provide such an explanation anywhere in the DEIS, SDEIS, FEIS, or supporting documentation.

Instead, the Corps conflates the alleged need for additional water supply generally with the need for obtaining that additional water supply *from NISP* specifically. Based on the report commissioned by the Corps to review the Participants’ water demand projections, the Participants will require more than 40,000 acre-feet of additional water by 2060 to avoid shortfalls. BBC Research & Consulting, *Review of 2017 Demand Projections for NISP Participants Produced by Harvey Economics* 14 (Aug. 2, 2017). The Corps insists that it independently reviewed those projections and found them to be reasonable. However, there is a major difference between assessing the reasonableness of the Participants’ demand projections (which themselves are suspect), and evaluating the reasonableness of the Participants’ insistence that the additional demand needs be fulfilled by NISP. As noted by the EPA and other commenters, there is no reason that the additional water to meet future supply needs must come

from a large regional project. Other supply sources, storage solutions, and conservation methods to reduce the overall shortfall are available, yet were excluded from detailed analysis due to the impermissibly narrow purpose and need.²

Indeed, the EPA urged the Corps to explore specific components (several of which were also suggested by Conservation Organizations)—including alternative agricultural transfer methods (e.g., rotational fallowing, agricultural leasing),³ purchasing additional units from the Colorado-Big Thompson Project (“C-BT Project”), and developing displaced water (“DDW”)—that would reduce or eliminate the need to obtain the full requested amount of annual firm yield from NISP. The Corps relied on the screening criteria developed from its narrow purpose and need statement to dismiss these components out of hand, essentially rendering a regional project such as NISP a foregone conclusion, in violation of NEPA. *See Richardson*, 565 F.3d at 710-11.⁴

² For example, Conservation Organizations submitted an alternative called the Healthy Rivers Alternative (“HRA”), which would have relied primarily on agricultural transfer components to supply 35,000 acre-feet of annual firm yield. The Corps dismissed this alternative because it fell 5000 acre-feet short of the arbitrary floor set by the narrow purpose and need statement. The Corps did not consider whether, as Conservation Organizations report, the annual firm yield of the HRA could be flexibly augmented by other water supply methods readily available to Participants. Nor did it consider whether the 40,000 acre-feet annual firm yield requirement was reasonable. Therefore, its basis for rejecting the alternative out of hand was unsupported and arbitrary.

³ Alternative agricultural transfer methods were also excluded based on the Corps’ screening for proven technology. However, both the EPA and Conservation Organizations vigorously dispute the Corps’ assertions as to the feasibility of this component. As reported by the EPA, “[c]onsiderable efforts to facilitate the development and implementation of [alternative agricultural transfer methods] in Colorado have continued since . . . 2007.” FEIS at A-115. Other states have implemented similar programs, “demonstrat[ing] that agricultural leasing is a proven method that may be a less environmentally damaging practicable alternative for this project, unless demonstrated otherwise by the project proponent.” *Id.* Additionally, a recent economic study conducted by the Environmental Defense Fund and WestWater Research examining alternative water transfer methods *in Colorado* demonstrates that alternative agricultural transfer methods are cost competitive with traditional water acquisition methods, challenging the conventional wisdom in Colorado that it is too expensive and risky to lease water, and further demonstrating that these methods are viable and practicable water supply sources. *See* Attachment L. Neither the Corps, nor Northern Water have provided adequate justification demonstrating that agricultural transfer methods are impracticable under the CWA. *Accord* FEIS at A-115 (EPA comments stating same). Therefore, the Corps must give this component serious consideration before it can issue any permit authorizing the construction of NISP.

⁴ In response to concerns about impacts to the headwaters of the Colorado River that might arise from use of West Slope Colorado water in the NISP system, the FEIS states that due to changes to planned operations, the only West Slope water under consideration would be from the C-BT project: “C-BT water was only retained to the extent that a portion of the Participants’ C-BT water could potentially be used for reservoir first fill and State Engineer Office dam testing.”

The fact that NISP was never intended to meet *all* of the Participants' future water needs only further illustrates the absurdity of the Corps' position. The Participants will already have to develop plans to obtain water to meet their remaining needs from other sources. Yet, the Corps never discussed why those other sources could not provide additional annual firm yield so as to allow some flexibility in the 40,000 acre-feet annual firm yield "need" for NISP. In fact, the record demonstrates that Participants will need to develop alternative water supply sources *during NISP's construction*, presumably introducing flexibility into the 40,000 acre-feet figure, and deferring the "need" for NISP. The Corps alleges that "Participants will need the yield from NISP no later than 2020, and these Participants will need additional supplies from that time forward." Harvey Economics Rep. at 46. Even assuming *arguendo* that the Corps' projections are accurate, it will be *more than a decade* before the main reservoir is constructed. See FEIS at 2-100 (reporting that "[i]n total, the period activity from detailed design of the main reservoir to completion of the entire project is estimated to take about 13 years"). Therefore, it is illogical to maintain that Participants require NISP to meet demand needs after 2020 when NISP will not be constructed until 2031 at the absolute earliest. Thus, the Corps' projected "need" for a regional project is unexplained and contradicted by the Corps' own statements, and as a result, is arbitrary and capricious under NEPA and the Administrative Procedure Act ("APA"). See *Olenhouse*, 42 F.3d at 1575.

Finally, as a practical matter, serious flaws in the Corps' population analysis and demand projections undermine the Corps' position that there is even a "need" for NISP. In comments on the DEIS and SDEIS, experts voiced serious concerns with the Corps' arbitrary selection of 40,000 acre-feet of projected need. In fact, the EPA criticized the fact that the screening criteria for alternatives were based on this figure, stating that the "alternatives analysis may be artificially constrained" as a result. FEIS at A-81. The EPA noted that the Corps' methodology used to project future water demand—i.e., multiplying historic water use factors by projected population growth—"tend[s] to overestimate future water demand." *Id.* Therefore, 40,000 acre-feet of projected need is likely an inaccurate estimate, and its use as a screening criterion "could have eliminated viable alternatives." *Id.* In response, the Corps insists that, "[i]f water use factors decreased over time, the Participants would still need the 40,000 AF of firm yield from NISP;

FEIS at A-111. The FEIS further states that the amount would be capped at 20,000 acre-feet (presumably, but not explicitly stated, per year). *Id.* Finally, the response to comment concludes without support that because "NISP would not increase nor change the timing of withdrawals of water from the West Slope, effects on West Slope resources were not described in the FEIS." *Id.* This assertion that either providing storage for or use of (depending on your interpretation) of 20,000 acre-feet of water from the C-BT system would have no impact on the operations of the C-BT system, including in the amount of water that could be diverted from the West Slope fails to pass the straight face test. At the very least, transfer of the C-BT water to Glade Reservoir opens up additional storage somewhere else in the system and could provide the opportunity for additional diversion of the Colorado's flow in wet years when physical and legal water is available. The Corps' must either provide a meaningful defense for its assertion of no change to amount or timing of C-BT operations or must model the impacts on the Colorado River of the transfer of 20,000 acre-feet to Glade Reservoir over a variety of hydrologic conditions, in order to comply with NEPA's "hard look" standard and the CWA.

additional future water needs in addition to NISP may be less.” *Id.* This response is circular; if the Participants’ future water demand is in fact less than projected, then alternatives that would provide a lower annual firm yield with fewer adverse environmental impacts are both feasible and practicable to meet the purpose and need of the project, which under the CWA would prohibit the Corps from adopting NISP at the conclusion of its decisionmaking process. The Corps’ continued adherence to the 40,000 acre-feet and “regional project” requirements prevents the Corps and the public from seriously considering those options. Such an approach contravenes NEPA’s purpose—i.e., “to require agencies to consider environmentally significant aspects of a proposed action, and, in so doing, let the public know that the agency’s decisionmaking process includes environmental concerns,” *Utahns for Better Transp. v. U.S. Dep’t of Transp.*, 305 F.3d 1152, 1162 (10th Cir. 2002)—and is antithetical to NEPA’s command to take a “hard look” at “all reasonable alternatives” to a proposed action, 40 C.F.R. § 1502.14(a).⁵

Turning to the analysis itself, the FEIS still fails to present a realistic picture of likely future water demand within the NISP service area. *See* Attachment A. First, the Corps’ *own* analysis has been inconsistent throughout the NEPA review process. In fact, each iteration of water demand projection—from the DEIS through the SDEIS to the FEIS—has substantially lowered the end demand. *See id.* at Fig. 1. Second, as demonstrated by the expert analysis conducted by LRB Hydrology & Analytics (“LRB Demand Analysis”), the water use intensity—i.e., the rate that water is used by each person within the service area—has also steadily declined since 2000. *See id.* at Fig. 3. Despite this clear downward trend in water use intensity, the FEIS projects future water use demands based on an average of past intensity, incorporating only currently planned conservation activities as a downward pressure on water use. *See id.* 11-13. Indeed, the SDEIS’ projections based on average historic water use intensity have proven to be substantially higher than the actual use for the periods for which data for comparison is available (2010 and 2015). *See id.* at Fig. 5. Further, the projections presented in the FEIS easily outstrip a simple linear extension of the recent water use record, ignoring the long-running downward trend in water use intensity. *See id.* at Fig. 5. In sum, the FEIS projections of future water demand fail to accurately reflect the changing nature of water use in the service area and Colorado in general, and substantially overstate the amount of water that the participants will need to meet their needs over the planning period.

⁵ Another reason the Corps’ arbitrary adoption of the need for 40,000 acre-feet of water resulting from this federal action—not a drop more, not a drop less—is unlawful is that it illegally segments the analysis of impacts under NEPA and the CWA for this 40,000-acre-foot action from the impacts that will necessarily occur if and when Northern Water seeks to meet additional demand it asserts will exist in the future. Especially where the Corps acknowledges that “[b]y 2040, the excess of combined demands over current firm supplies is predicted to exceed the 40,000 AF firm annual yield from NISP, and by 2060 projected demand over current firm supplies is projected to be almost 75,000 AF,” FEIS at S-3, the Corps has not provided any legal or logically justification for failing to analyze the fully array of options available to meet the *entire* demand needs of the Participants through 2060 or some other date for which demand is reasonably foreseeable at this time. *See, e.g., Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (“An agency impermissibly ‘segments’ NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and impact of the activities that should be under consideration.”).

Relatedly, the downward trend in water use intensity is reflective of a phenomenon seen throughout the Colorado River Basin, known as decoupling. Indeed, as demonstrated by John Fleck, a well-respected expert on water issues in the American Southwest and the Director of the Water Resources Program at the University of New Mexico:

Overall consumptive use of Colorado River water in the U.S. and Mexico peaked in 2002 and has declined by 6 percent since then, even as population and agricultural productivity have risen. . . . [T]his pattern suggests growth of population and economic activity is no longer necessarily linked to growing water use, creating opportunities for water managers attempting to cope with declining reservoirs and the threats of long term drought and climate change.

See Attachment I. Although increasingly recognized by experts and extensively documented by empirical evidence from municipalities across the region, the Corps failed to even *mention* decoupling in the FEIS. Instead, the Corps simply assumed that water demand will increase in parallel with population growth. The Corps' failure to address the most significant trend in water management and use in the Southwest in the past two decades undermines its demand projections, again calling the "need" for NISP into question.⁶

B. The Corps Unlawfully Avoided its Obligation to Consider a Full Range of Alternatives Under NEPA, Including Those that Would Reduce Adverse Environmental Impacts.

NEPA requires that the Corps "[r]igorously explore and objectively evaluate *all* reasonable alternatives" to the proposed action, including a "no action" alternative. 40 C.F.R. § 1502.14(a) (emphasis added); *see also id.* § 1508.9(b); *Custer Cty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1039 (10th Cir. 2001). Because NEPA's overriding purpose is to "help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment," 40 C.F.R. § 1500.1, NEPA's implementing regulations, which are binding on all federal agencies, provide that the consideration of alternatives for reducing adverse impacts "is the heart of the environmental impact statement." 40 C.F.R. § 1502.14. Accordingly, EISs "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." *Id.*

1. The FEIS Fails to Include a True "No Action" Alternative Because Cactus Hill Reservoir Requires a Section 404 Permit.

The no action alternative serves as "a baseline for measuring the effects of the proposed action." *Biodiversity Conservation All. v. U.S. Forest Serv.*, 765 F.3d 1264, 1269–1270 (10th Cir. 2014). "[N]o action" means that "the proposed activity would not take place and the

⁶ Save the Poudre previously submitted comments to the Corps discussing decoupling and its importance in developing accurate demand projections during the environmental review for the Moffat Collection System Project. See Attachment J. Those comments apply equally here, and are therefore incorporated along with the attachments by reference herein.

resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.” FEIS at 2-42. The Corps’ NEPA Implementation Procedures further provide that the “no action” alternative is one that results in no activities requiring a Corps permit. *See* 33 C.F.R. § 325, app’x B.

The Corps regulates the discharge of dredge or fill material into wetlands and other waters of the United States under Section 404 of the CWA. Federal agencies have additional responsibilities to avoid, minimize, and mitigate unavoidable impacts on wetlands under Executive Order 11990. Corps regulations define wetlands as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” 33 C.F.R. part 323.2(c). Wetlands subject to the Corps’ jurisdiction (i.e., jurisdictional wetlands) meet the Corps’ definition of wetlands and are adjacent, neighboring, or have a surface tributary connection to interstate or navigable waters of the United States.

In the DEIS, the Corps gave a preliminary evaluation of a “conceptual” no action alternative “intended to represent the possible water supplies that each Participant could obtain” if NISP was not permitted. DEIS at 2-20. The Corps assumed that the Participants would develop various smaller projects—individually or in small groups—that would meet individual storage needs without a large reservoir project. The Cactus Hill Reservoir was proposed as a component of *action* alternatives 3 and 4. The DEIS acknowledged that while “the determination of the jurisdictional status of wetlands” for the proposed project area and alternatives had not yet been made, “[d]uring a preliminary review, the Corps determined that *all of the project alternatives* would have activities that would involve the discharge of dredge or fill material into jurisdictional wetlands and/or waters of the United States.” DEIS at 3-48 (emphasis added). Moreover, “although some wetlands and other waters in the study area may not fall under the Corps’ jurisdiction under Section 404, they still are aquatic resources that will be addressed by the Corps under Section 404 and NEPA.” *Id.* A preliminary review of the Cactus Hill Reservoir Study Area reported 45.1 acres of potential jurisdictional wetlands, and 7.3 acres of other waters potentially falling under Section 404 of the CWA. *Id.* at 3-50.

The no action alternative underwent sudden, significant, and unexplained revision in the SDEIS. The Cactus Hill Reservoir, a large-scale construction project with “major” permanent effects, *see* SDEIS at D-12, was included as a component of the *no action* alternative because, according to the SDEIS, construction of the reservoir would not require a Section 404 permit to move forward. This assertion is directly contradicted by the Corps’ own statements later in the SDEIS, where it identified fifty acres of potentially jurisdictional wetlands and waters of the United States within the proposed project area related to Cactus Hill Reservoir. *See* SDEIS at D-54. Moreover, the Corps stated that the Cactus Hill Reservoir would directly impact, among other things, 31.8 acres of wetlands and 6.5 acres of waters (e.g., ponds, lakes, canals), and will indirectly impact 218.6 acres of wetlands. *See* SDEIS at D-12. Thus, the Corps’ conclusion in the SDEIS that Cactus Hill Reservoir did not require a Section 404 permit is, at best, contradicted by the agency’s own statements and evidence provided elsewhere in the SDEIS.

Based on this information, it is evident that Cactus Hill Reservoir requires a Section 404 permit under both CEQ and Corps regulations, and therefore cannot lawfully serve as a

component of the no action alternative. *See e.g., Ramsey v. Kantor*, 96 F.3d 434, 444 (9th Cir. 1996) (“If a federal permit is a prerequisite for a project with adverse impact on the environment, issuance of that permit does constitute major federal action and the federal agency involved must conduct an EA and possibly an EIS before granting it.”); 33 C.F.R. § 325, app’x B (defining “no action” alternative in the Section 404 permitting process as one that results in no activities requiring a Corps permit). In an attempt to avoid this inevitable conclusion, the Corps insists that while the construction of the smaller Cactus Hill Reservoir would involve the discharge of fill material into drainages and wetlands, those wetlands “do not *appear* to be subject to jurisdiction under Section 404 of the CWA.” FEIS at A-131 (emphasis added). This conclusory assertion does not adequately explain or support the Corps’ sudden change in position regarding the proposed reservoir’s impacts on jurisdictional wetlands. Moreover, it seems that such evidence will not be forthcoming—while the Corps states that it will issue an approved jurisdictional determination for the Glade Reservoir, Upper Galeton Reservoir, and the U.S. 287 realignment study area before issuing the ROD, it remains silent on the Cactus Hill Reservoir site. *See* FEIS at A-131. Without an official determination of the Cactus Hill Reservoir’s impacts to jurisdictional wetlands and waters of the United States, the Corps cannot definitively conclude that the reservoir’s construction would not require a Section 404 permit, especially in light of evidence presented in the DEIS and SDEIS.⁷ Therefore, the Corps’ no action alternative in the FEIS contravenes basic NEPA principles, and is not a genuine “no action” alternative because it requires action by the Corps under Section 404 of the CWA.

As a practical matter, the use of Cactus Hill Reservoir as the no action alternative skews the Corps’ entire analysis of alternatives. The no action alternative is a measuring stick that allows for meaningful comparison between the purported benefits of the proposed action, and its environmental impacts. *See Ctr. for Biological Diversity v. U.S. Dep’t of Interior*, 623 F.3d 633, 642 (9th Cir. 2010) (providing that the no action alternative is intended to “provide a baseline against which the action alternative” is evaluated). Without “[accurate baseline] data, an agency cannot carefully consider information about significant environment impacts ... resulting in an arbitrary and capricious decision.” *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1085 (9th Cir. 2011); *see also Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1038 (9th Cir. 2008) (holding an agency’s no action alternative invalid because it improperly

⁷ Prior to submitting these comments, Conservation Organizations attempted to ascertain whether the proposed Cactus Hill Reservoir site contained jurisdictional wetlands. Conservation Organizations submitted several requests to visit the proposed site; however, both the Corps and Northern Water denied the requests, asserting that they lacked the legal authority to grant access to the property. Conservation Organizations also submitted a request to the Corps for any documentation relevant to jurisdictional wetland determinations for the proposed reservoir sites. Although the Corps provided Conservation Organizations with wetland delineation maps in GIS formats, the Corps declined to provide documents involving the Corps’ development of jurisdictional determinations. By email dated September 17, 2018 the Corps informed Conservation Organizations that any further records related to jurisdictional determinations would only be provided through FOIA. Given the abbreviated timeline—comments on the FEIS are due by October 4, 2018—and the mandated twenty-day deadline for FOIA responses, Conservation Organizations would be unlikely to obtain a response from the agency in time to incorporate the records into their comments.

defined the baseline). This is precisely what occurred here, where the use of Cactus Hill Reservoir as the no action alternative deprived the Corps and the public of a meaningful opportunity to assess the impacts of a regional project against those of less environmentally destructive projects. *Accord* FEIS at A-116 (EPA comments noting that the no action alternative “miss[ed] the opportunity to incorporate alternatives that were screened out due to not being regional in nature”). Thus, the current alternatives analysis for NISP is fundamentally flawed. To comply with NEPA, the alternatives analysis must be revised to include a true no action alternative that accurately serves as the baseline for its NEPA analysis.

This point is further reinforced by the fact that, as of the date of these comments, the Corps cannot definitively state whether Cactus Hill Reservoir can even serve as the no action alternative. As noted above, the Corps previously reported the likely presence of jurisdictional wetlands at the Cactus Hill Reservoir site. Therefore, the Corps *knew* that any proposed project at the site may require a Section 404 permit, precluding its use as the no action alternative under both NEPA and Corps regulations. *See* 40 C.F.R. § 1502.14(a); 33 C.F.R. § 325, app’x B. As a practical and logical matter, where the Corps relies on the absence of jurisdictional wetlands to justify a particular no action alternative, the Corps should make the relevant jurisdictional determinations *prior to* undergoing the NEPA process both to provide a legally adequate baseline, and an accurate analysis and comparison of the proposed project’s impacts. This is especially true here, where the NEPA process has spanned over ten years and consumed a significant amount of agency resources. The Corps’ failure to consider such a highly relevant factor—i.e., the presence of jurisdictional wetlands at a site it proposes to use as its no action alternative—is arbitrary and capricious, and therefore, renders its analysis legally inadequate.

If it is the Corps’ position that Cactus Hill Reservoir would not require a Section 404 permit, then at minimum the Corps must provide a comprehensive explanation and factual basis for this conclusion— including a delineation of the wetlands on the proposed site, and an official jurisdictional determination as to whether those wetlands fall within the waters of the United States. *See Olenhouse*, 42 F.3d at 1575 (“In addition to requiring a reasoned basis for agency action, the ‘arbitrary or capricious’ standard requires an agency’s action to be supported by the facts in the record.”). In the absence of a formal jurisdictional determination finding otherwise, the evidence presented in the DEIS and SDEIS that Cactus Hill Reservoir will, in fact, require a Section 404 permit renders the Corps’ current formulation of the no action alternative arbitrary, capricious, and contrary to NEPA and its implementing regulations.⁸

2. Because the Action Alternatives are Substantially Similar, the FEIS Fails to Analyze a Reasonable Range of Alternatives.

NEPA imposes a clear-cut procedural obligation on the Corps to take a “hard look” at alternatives that would entail less significant impacts on resources affected by the project. *Balt.*

⁸ Additionally, the Corps’ failure to consider a no action alternative that does not contemplate the construction of a large-scale reservoir project suggests that the Corps skewed the analysis to require the selection of Northern Water’s preferred alternative. *See Davis*, 302 F.3d at 1119 (explaining that an agency cannot “define the project so narrowly that it foreclose[s] a reasonable consideration of alternatives”).

Gas & Elec. Co. v. Nat. Res. Def. Council, 462 U.S. 87, 100 (1983). EISs must “[r]igorously explore and objectively evaluate all reasonable alternatives” and, in particular, “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. The regulations further mandate that the EIS must “[i]nclude reasonable alternatives not within the jurisdiction of the lead agency,” but that may nonetheless meet the overall objectives of the action while ameliorating environmental impacts. *Id.*

The FEIS violates these requirements. The *only* alternatives afforded “rigorous” treatment—i.e., a *comparative* analysis of impacts, thus affording a “clear basis for choice among options,” *id.*—are those that involve the construction of the Upper Galeton reservoir, which will have a capacity of 45,624 acre-feet, and one other large-capacity reservoir. The Corps considered only two options for the second reservoir—Cactus Hill Reservoir, a component of the no action alternative, Alternative 3, and Alternative 4; and the Glade Reservoir, a component of Alternative 2 and the preferred alternative (Alternative 2M). As the EPA observed, there is not “a major environmental impact difference among the action alternatives.” FEIS at A-98.

The Corps’ failure to rigorously explore a single action alternative that would result in lower impacts on wetlands, the Poudre River, and other resources⁹—e.g., an alternative that would not require the construction of large reservoirs—is a flagrant violation of NEPA. Importantly, a central purpose of the proposed action (issuance of a 404 permit) is (and, under the CWA, *must* be) to evaluate whether less environmentally damaging practicable alternatives are available for non-water dependent projects. This definition of the “purpose” of the proposed federal action *necessarily* requires the Corps to consider reasonable action alternatives that would *better* protect wetland and riparian habitat, and minimize the adverse impacts on these important habitats, than Northern Water’s preferred approach. *Cf. Union Neighbors United, Inc. v. Jewell*, 831 F.3d 564, 577 (D.C. Cir. 2016) (“Accordingly, because the Service in these circumstances did not consider any other reasonable alternative that would have taken fewer Indiana bats than Buckeye’s plan, it failed to consider a reasonable range of alternatives and violated its obligation under NEPA.”).

Courts have rejected precisely this type of avoidance approach by agencies in the past. *See Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 813 (9th Cir. 1999) (concluding that the EIS violated NEPA when the two action alternatives considered in detail were “virtually identical”). Indeed, “the evaluation of ‘alternatives’ mandated by NEPA is to be an evaluation of alternative means to accomplish the general goal of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals.” *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986). While an agency must take a private

⁹ For example, as the Corps admits, “[a]ll alternatives would have a reservoir site, either Cactus Hill or Upper Galeton, where past oil and gas development has occurred.” FEIS at S-44. Thus, all alternatives will expose water users to potential contamination from past oil and gas development, heightening the need to explore alternatives with fewer adverse environmental impacts.

applicant's objectives into account when developing the purpose and need statement, it is the agency's responsibility to "defin[e] the objectives of an action and then provide legitimate consideration to alternatives that fall between the obvious extremes." *Colo. Envtl. Coal.*, 185 F.3d at 1175. Here, however, it appears that the Corps merely accepted Northern Water's objectives as its own,¹⁰ and developed alternatives that skewed the analysis towards the applicant's preferred alternative.

The Corps' analysis is devoid of *any* meaningful consideration of alternatives that fall between the "obvious extremes"—i.e., a regional project involving the construction of large reservoirs, and smaller local projects involving less environmentally damaging alternatives. Even the *no action* alternative contemplated the construction of a 120,000 acre-foot reservoir, and deprived the FEIS of a meaningful baseline against which to measure NISP's anticipated impacts. Moreover, by considering only alternatives that involved large-scale reservoir projects with no "major environmental impact difference," the FEIS essentially considered *only* the impacts from alternatives representing *one* of the extremes. Such an approach cannot satisfy the agency's obligations under NEPA to examine "*all* reasonable alternatives," including those that lie outside the jurisdiction of the agency. See *Citizens for Envtl. Quality v. United States*, 731 F. Supp. 970, 989 (D. Colo. 1989) ("Consideration of alternatives which lead to similar results is not sufficient under NEPA[.]"); *Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1038 (9th Cir. 2008) (finding that SEIS "lacked a reasonable range of action alternatives" because "the [three action] alternatives are essentially identical" and thus are "not varied enough to allow for a real, informed choice"). NEPA does not prohibit the Corps from ultimately adopting a proposal to build a regional water diversion project; however, it is deeply "troubling that the [agency] saw fit to consider from the outset only those alternatives leading to that end result." *California v. Block*, 690 F.2d 753, 768 (9th Cir. 1982).

While NEPA does not require the Corps to "consider every possible alternative to a proposed action, nor must it consider alternatives that are unlikely to be implemented or those inconsistent with its basic policy objectives," *Seattle Audubon Soc'y v. Moseley*, 80 F.3d 1401, 1404 (9th Cir. 1996), it is particularly troubling here that the Corps failed to consider *any* alternatives that were more consistent with the basic policy objectives of the CWA and its Guidelines than the alternatives subjected to detailed consideration. As the Corps acknowledged, NISP is not a "water dependent" project. Therefore, there is a presumption that "practicable alternatives that do not involve special aquatic sites" exist, and that these alternatives "have less adverse impact on the aquatic ecosystem." 40 C.F.R. § 230.10(a)(3). These presumptions hold unless "clearly demonstrated otherwise." *Id.* Yet, the Corps failed to examine in detail *a single alternative* that would not involve the construction of a large reservoir, the destruction of jurisdictional wetlands, and large-scale water diversion.¹¹ Accordingly, the Corps' alternatives

¹⁰ Indeed, as discussed *supra* at page 4-5, it appears that the Corps conflated the need for additional water with the need to obtain that water *from NISP*, and merely accepted Participants' request for 40,000 acre-feet of annual firm yield from NISP without meaningful evaluation of the reasonableness of that request.

¹¹ The Corps' actions are especially egregious in light of comments from the EPA, Conservation Organizations, and others suggesting specific alternatives that would have fewer adverse impacts

analysis fails to present a reasonable range of alternatives, and violates NEPA. *See Muckleshoot Indian Tribe*, 177 F.3d at 813-14 (holding that consideration of only “two virtually identical” action alternatives was inadequate).

3. The Corps Cannot Rely on Overly Restrictive Screening Criteria to Artificially Constrain the Range of Alternatives and Preclude Reasonable Alternatives from Detailed Consideration.

The Corps developed screening criteria to assist in the development of its range of alternatives. The purpose and need screening process used two primary screening criteria to determine whether alternatives could satisfy the project’s purpose and need: firm yield and “regional” project. FEIS at 2-3. The firm yield criterion required that “viable water sources must be able to provide at least 30% of the total requested firm annual yield of 40,000 [acre-feet], which is 12,000 [acre-feet].” FEIS at 2-3. According to the Corps, reducing the number of potential water sources to four is “logistically reasonable for a water supply project of this magnitude.” FEIS at 2-3. Notably, the Corps did not provide any support for this assertion. The regional project criterion required that project components considered “assist in providing the Participants with a common solution” to their water supply needs. FEIS at 2-3 to -4.

As described *supra* at Section A, the Corps narrowly defined the project purpose and need such that viable, less environmentally damaging alternatives were improperly excluded from detailed analysis, in violation of NEPA. The Corps’ screening criteria, designed to eliminate alternatives that fail to meet the overly restrictive purpose and need, violate NEPA for the same reasons. NISP is premised on the false assertion that a regional project providing 40,000 acre-feet of annual firm yield is the *only* way to meet the Participants’ future water needs. Accordingly, the Corps’ purpose and need screening criteria are designed to ensure that only large regional water projects are given serious consideration. *See* FEIS at 2-3 to -4. For example, the 12,000 acre-feet requirement is designed to limit the number of water supply sources, but does not leave any room for considering a combination of lower-yield water supply sources, or combining a lower-yield supply source with two or three higher-yield water supply sources.¹²

on the environment, while meeting the overarching purpose and need of the project. *See, e.g.*, FEIS at A-113. For example, the EPA criticized the Corps’ failure to consider conservation methods and agricultural transfer methods as components for reasonable and feasible alternatives. Far from giving the EPA’s comments serious consideration, the Corps instead relied on its impermissibly narrow purpose and need statement and arbitrary screening criteria to dismiss these suggestions from detailed analysis. *Id.* at A-113 to -114.

¹² For example, the HRA proposed by Conservation Organizations was dismissed because it only supplied 35,000 acre-feet of annual firm yield. Additionally, two of the components of the HRA were dismissed in part because they did not meet the firm yield criteria. However, as discussed *supra* at page 3, the 40,000 acre-feet firm yield “need” was derived not from an actual quantitative determination of need, but from the Participants’ requests for additional water. Moreover, as Conservation Organizations noted in their comments on the SDEIS, the small difference between the annual firm yield of the HRA and the desired firm yield goal could be “flexibly augmented” in a variety of ways, including aggressive conservation measures,

The Corps does not explain why combining water sources in this way is infeasible. Nor does it explain why limiting the number of supply sources to four is more “logistically reasonable” than five, six, or even more.¹³ Without such explanations, the Corps’ firm yield screening criterion is arbitrary. As a result, the Corps’ use of the criterion to constrain the range of alternatives considered violates NEPA.

Similarly, the Corps automatically excluded project components that were not “regional” in nature from detailed consideration. *See* FEIS at 2-4 (“[A]lternatives that would not assist in providing the Participants with a common solution were eliminated from further review.”). The only justification the Corps gave for relying on the “regional project” criterion was that “NISP is a regional water supply project addressing a portion of the current and anticipated water supply needs of the Participants.” *Id.* at 2-3. However, this circular logic cannot suffice as an explanation for *why* a regional project is necessary where viable—and less environmentally impactful—“local” solutions to meeting the Participants’ collective future water needs exist. For example, the Healthy Rivers Alternative (“HRA”) proposed by Conservation Organizations incorporated the use of development displaced water (“DDW”) as a potential water supply source for the Participants. The Corps applied its screening criteria to DDW to determine whether it could serve as a feasible component of an alternative. *See* Hydros, *Evaluation of the “Healthy Rivers Alternative” Proposed by Save the Poudre: Poudre Waterkeeper Using the NISP Alternatives Screening Criteria* (Oct. 18, 2012) (“HRA Evaluation”). The Corps’ analysis indicated that DDW was a viable solution to meeting the Participants’ future water demand needs. In fact, the Corps reported that “NISP Participants *anticipate* DDW as a supply source of water.” HRA Evaluation at 47. However, because DDW is “local in its nature and would not constitute a regional project,” the component was excluded from detailed analysis *even though* its inclusion could lessen the demand on NISP and reduce the negative environmental impacts from the Project.¹⁴ *Id.* By setting such an arbitrary floor, the Corps screened out feasible alternatives that were less environmentally damaging, in violation of NEPA.

purchases of water rights in existing reservoirs, and agricultural transfers. SDEIS Comments at 16-17. Yet, because these reasonable alternatives did not satisfy the arbitrary firm yield screening criterion, they were excluded from detailed consideration altogether.

¹³ By its own assertion, Northern Water’s boundaries include 960,000 people and 1.6 acres, and in the growing season “Northern Water also delivers water to more than 120 ditch, reservoir, and irrigation companies serving thousands of farms and more than 640,000 acres.” N. Water, *Who we are*, <http://www.northernwater.org/AboutUs/WhoWeAre.aspx> (last visited Oct. 4, 2018). Thus, considering Northern Water’s extensive experience managing a complex system of multiple water sources and storage facilities on both sides of the Continental Divide, developing a project with a mere handful of additional components would not be an impossible task.

¹⁴ The Corps’ failure to adequately assess the utilization of farmland irrigation water displaced by land development—which in nearly all cases is purchased and converted out of agricultural use and into developed land use—was also arbitrary for its complete failure to account for demonstrated development and population trends in Northern Colorado, even as it relied on flawed population trends to justify the purported “need” for NISP. In assessing the feasibility of water supply sources, the Corps neglected to analyze how the vast majority of farmland in

Additionally, the Corps' screening criteria were not uniformly imposed, with favored alternatives allowed to inappropriately pass. For example, the "Practicable Screening Criteria" are intended to eliminate alternatives that, among other standards, are located on designated hazardous material sites or abandoned mineral or coal mines. FEIS at 2-5. Despite these criteria, all of the alternatives that are advanced to final consideration, including the preferred alternative, "have a reservoir site, either Cactus Hill or Upper Galetton, where past oil and gas development has occurred." FEIS at S-44. The Corps proposes to "minimize adverse effects of oil and gas development on reservoir water quality" without presenting a complete analysis of the current conditions of the abandoned wells at these sites, instead relying on a review of reported spill incidents." FEIS at S-44, 4-559, 4-561 – 562. Further, in its discussion of Alternatives 3 and 4, the FEIS states that, "[i]t is not known if Northern Water would be successful in changing the point of storage for these water rights to Cactus Hill Reservoir." FEIS at 2-90. Consequently, two of the action alternatives that were given final consideration are speculative at best and should have been eliminated as not meeting the standard of "capable of being done." 404 (b)(1).

The FEIS clearly states that "[t]he firm yield screening criterion requires that viable water supply sources must be capable of providing a firm annual water yield." FEIS at 2-3. Firm yield is further defined as "[t]he annual yield that is available during a defined drought period." *Id.* at xxxiv. The defined drought period is the drought period in the hydrologic record developed for hydrologic modeling. *Id.* Inexplicably, however, the FEIS selected as the basis for its drought standard a less severe drought period (1954–1956) than has been recently recorded. The Corps explains that the alternatives selected for detailed consideration "are not sized to meet full firm yield requirements during more severe droughts, such as the recent drought (2000–2005)." FEIS at 2-76. Therefore, the NISP Participants would need to pursue other water supply options including interruptible water supply agreements implemented on a temporary basis. *Id.* These statements illustrate the bias in the FEIS that results from the Corps' adherence to a drought standard based on periods of less severe historic drought. *See* Attachment C at 3. Indeed, the

northern Colorado will be sold off, subdivided, and developed through 2060. STP conducted an independent analysis of the growth patterns in the Northern Front Range Metropolitan Planning Organization ("NFRMPO") Growth Management Areas ("GMAs") to determine the amount of water that would be made available following the conversion of irrigated agricultural land to developed land. *See* Attachment G at 1-2. STP's analysis demonstrates that the DDW available to Participants is far greater than the FEIS predicted. *Id.* at 1. In fact, the analysis predicted that by 2060, DDW could supply between 85,071 acre-feet and 152,812 acre-feet of water, which is 188% to 338% of the projected "need" under the No Action Alternative. *Id.* at 2. Further, the development that NISP is *intended to support* will inevitably result in the transfer of agricultural water and "dry-up" of farmland. *Id.* Thus, contrary to the Corps' insistence that without NISP, Participants will have to "buy and dry" thousands of farm acreage, land development will displace a large amount of water independent of NISP, and that water will be sold on the open water market. *Id.* In other words, NISP will not cause the largescale "buying and drying" of agricultural lands. The FEIS fails to consider DDW as a viable, less environmentally impactful water supply source, and as such, is arbitrary and capricious, and fails to support the conclusion that the preferred alternative is the least environmentally damaging practicable alternative.

Corps' use of the outdated drought standard led to the detailed consideration of project concepts that would not meet the water supply goals stated in the Purpose and Need based on *recent* observed hydrologic conditions. *Id.* Therefore, it would be inappropriate for the Corps to approve the Preferred Alternative and any of the actionable alternatives based on the recent hydrologic record and on the uncertainty in future hydrologic conditions based on climate change. *Id.* The Corps must provide a reasoned and well-supported justification for its use of this screening criteria when it appears to be based on an arbitrary selection of the hydrologic cycle, and further, does not appear to screen for alternatives that actually accomplish the Participants' objectives.

In sum, the Corps' screening criteria were too restrictive and eliminated from detailed consideration reasonable alternatives that would meet the project's basic purpose and inflict less damage on sensitive areas and resources. The goal of NEPA is not to reinforce a predetermined conclusion. Rather, NEPA is designed to provide a range of alternatives—including, but expressly not limited to, the applicant's preferred alternative—that present decisionmakers and the public with a reasoned choice. *See Colo. Envtl. Coal.*, 185 F.3d at 1172 (noting that NEPA “prohibits uninformed . . . agency action, and to further that goal, an EIS' form, content, and preparation must “foster both informed decision-making and informed public participation”). By creating a screening method designed to preclude consideration of any alternative that deviated significantly from Northern Water's desired project—yet would still satisfy Northern Water's overarching objective—the Corps artificially constrained the range of alternatives and failed to present the information necessary to make a reasoned choice. *See id.* (“What is required [in an alternatives analysis] is information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned.”).

Accordingly, for all of these reasons, it is clear that the Corps cannot issue a permit for NISP until the serious flaws in its NEPA analysis are corrected.

C. The Corps' Issuance of a Section 404 Permit Authorizing Construction of NISP Will Violate the CWA.

The CWA is a comprehensive statute designed to “restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” 33 U.S.C. § 1251(a). To this end, the CWA generally prohibits the discharge of dredged or fill materials into waters of the United States unless authorized by a permit (“Section 404 permit”). *Id.* § 1311. When reviewing Section 404 permit applications, the Corps must follow binding guidelines jointly established by the Corps and the EPA (“404 Guidelines” or “Guidelines”). These Guidelines are codified at 40 C.F.R. part 230.

The Guidelines prohibit the Corps from issuing permits for projects where there “is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a). The Guidelines further prohibit the Corps from issuing a permit where it “will cause or contribute to significant degradation of the waters of the United States,” which includes adverse effects on the “life stages of aquatic life and other wildlife dependent on aquatic ecosystems,” “loss of fish and wildlife habitat,” and “loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy.” 40 C.F.R. §

230.10(c). The Corps is also prohibited from issuing a permit where it “[c]auses or contributes . . . to violations of any applicable State water quality standard.” *Id.* § 320.10(b).

In applying these criteria, the Corps must make detailed factual determinations as to the potential environmental effects of the proposed action, *see id.* §§ 230.11, 230.12(b) and it must indicate whether the project complies with the Guidelines in the record of decision based on the FEIS. *See* 33 C.F.R. § 325.2(a)(6). For the reasons discussed below, the FEIS utterly fails to demonstrate the Corps’ compliance with these Guidelines. Accordingly, the Corps cannot lawfully permit the Project.

1. Because the Corps Failed to Demonstrate that Less Damaging Practicable Alternatives to NISP Do Not Exist, It Cannot Lawfully Issue the Permit.

The Corps’ burden in finding the least damaging practicable alternative under the Guidelines is heaviest for non-water dependent projects planned for a “special aquatic site,” such as a wetlands area. *See Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1524 (10th Cir. 1992). To be “practicable,” an alternative must be “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” 40 C.F.R. § 230.10(a)(2).

Where projects are not water dependent, there is a presumption that “practicable alternatives that do not involve special aquatic sites” exist, and that these alternatives “have less adverse impact on the aquatic ecosystem.” 40 C.F.R. § 230.10(a)(3). These presumptions hold unless “clearly demonstrated otherwise.” *Id.* The Tenth Circuit has explained that in such a case, the Corps may not issue a § 404 permit unless the applicant, “with independent verification by the [Corps] , . . . provide[s] detailed, clear and convincing information proving ” that an alternative with less adverse impact is “impracticable.” *Utahns for Better Transp.*, 305 F.3d at 1186-87 (requiring denial of a permit “where insufficient information is provided to determine compliance”); *see also Greater Yellowstone Coal. v. Flowers*, 321 F.3d 1250, 1262 n.12 (10th Cir. 2003) (“[U]nder the CWA, it is not sufficient for the Corps to consider a range of alternatives to the proposed project: the Corps must rebut the presumption that there are practicable alternatives with less adverse environmental impact.”).

The FEIS does not demonstrate that the preferred alternative would be the least damaging practicable alternative. To the contrary, the Corps itself acknowledged that the basic purpose of the project—to provide water to the Participants—is not “water dependent,” and therefore, practicable alternatives to NISP “are (1) presumed to exist and (2) presumed to be less environmentally damaging than the proposed action, unless clearly demonstrated otherwise.” FEIS 1-5. The FEIS fails to rebut this presumption, and is therefore the Corps’ approval of this project would be unlawful under the CWA.

As discussed *supra* at Section A, the Corps adopted a narrow statement of purpose and need, impermissibly constraining the Corps’ analysis of practicable alternatives and rendering it inadequate under NEPA and under the CWA. As reported in the FEIS, the Corps and Northern Water jointly developed NISP’s purpose and need statement. While the Corps “has a duty to take into account the objectives of the applicant’s project,” those objectives must be “legitimate.”

Greater Yellowstone Coal. v. Flowers, 359 F.3d 1257, 1270 (10th Cir. 2004) (citations omitted). The Corps cannot permit developers to “artificially constrain the Corps’ alternatives analysis by defining the projects’ purpose in an overly narrow manner.” *Nat’l Wildlife Fed’n v. Whistler*, 27 F.3d 1341, 1346 (8th Cir. 1994). Yet, that is precisely what happened here. Neither the agency, nor Northern Water, ever explained *why* a regional solution to meet individual Participants’ water needs was necessary to meet the overarching purpose of the project, i.e., to meet a portion of the Participants’ future water needs.

Moreover, the Corps relied on narrow screening criteria to arbitrarily exclude less environmentally damaging practicable alternatives to meeting the Participants’ future water needs from detailed consideration. *See supra* Section B. By screening out alternatives that do not provide 12,000 acre-feet of annual firm yield, or are not regional in nature, the Corps ensured that the only alternatives given meaningful consideration are large-scale regional projects. However, it is clear from comments by Conservation Organizations, local governments, and the EPA that a regional project is not the *only* alternative that could meet the Participants’ water needs, nor are such projects the least damaging practicable alternatives that could satisfy the project’s basic purpose. *See, e.g., supra* Section B; STP, *Healthy Rivers, Healthy Communities: A Balanced Proposal for the Cache la Poudre River in Colorado* (2011) (“Healthy Rivers Alternative” or “HRA”); City of Fort Collins, Resolution 2015-082 Directing the City Manager to Submit to the U.S. Army Corps of Engineers the City’s Comments on the Supplemental Draft Environmental Impact Statement for the Northern Integrated Supply Project (Sept. 1, 2015) (“Fort Collins Comments”);¹⁵ FEIS at A-112 to -113.

Indeed, the EPA, which has special expertise and jurisdiction over Section 404 permits, repeatedly criticized the Corps’ use of a narrow purpose and need and screening criteria to preclude alternatives from detailed consideration. In comments on the DEIS, the EPA protested the Corps’ use of “regional project” in the purpose and need statement and screening criteria, noting that the term “has the effect of eliminating several alternatives” prematurely. FEIS at A-83. The EPA also requested that rotational fallowing and conservation measures be given serious consideration as alternatives. *Id.* at A-84. The Corps dismissed the EPA’s concerns and retained the purpose and need and the screening criteria because “Northern Water is a regional water supply entity with responsibilities for water supply planning and management for the region and they are proposing a regional water supply project to meet the water supply needs of the [] Participants.” FEIS at A-82. However, this circular logic—NISP is a regional project, and therefore a regional project is necessary—cannot satisfy the Corps’ obligation to provide a reasoned explanation for its actions, nor does it demonstrate that other, less damaging alternatives do not exist. Moreover, “[t]he CWA test is not, however, whether features of a proposal would make a more desirable project. Rather the Applicant and the [Corps] are obligated to determine the feasibility of the least environmentally damaging alternatives that serve the *basic* project purpose.” *Utahns for Better Transp.*, 305 F.3d at 1188-89. Thus, the

¹⁵ The Fort Collins City Council recently voted unanimously to send its comments of nonsupport of the FEIS to the Corps. *See* Nick Coltrain, *Fort Collins Won’t Support NISP Reservoir Project*, COLORADOAN (Oct. 2, 2011), *available at* <https://www.coloradoan.com/story/news/2018/10/02/fort-collins-wont-support-nisp-reservoir-project/1507391002/>.

Corps cannot exclude practicable alternatives from its analysis under the CWA simply because Northern Water wants to build a regional project.

The EPA raised the same concerns in its comments on the SDEIS, stating that it “remain[s] concerned that the selected screening criteria and a narrow purpose and need statement in the SDEIS appear to constrain the alternatives available to meet demand. These constraints may result in exclusion of potentially less damaging practicable alternatives.” FEIS at A-111. The EPA again urged the Corps to consider conservation measures, rotational fallowing,¹⁶ and acquisition of water units from the C-BT, and DDW as less damaging, practicable alternatives. *Id.* at A-113 to -116. However, again, the Corps brushed aside the EPA’s concerns, asserting simply and without support that “[t]he purpose and need statement did not unreasonably limit the range of alternatives,” and reiterating its determination that “the ‘regional project’ criterion was appropriately formulated and applied.” *Id.* at A-112. However, these conclusory statements do nothing to address the EPA’s substantive, *repeated* concern that flaws in the alternatives analysis render it inadequate to demonstrate that NISP is the least damaging practicable alternative under the CWA. The Corps’ failure to meaningfully engage with the EPA—a federal agency with expertise in interpreting and applying the CWA to projects of this kind—to consider and address the EPA’s criticisms preclude the Corps from relying on the FEIS to demonstrate its compliance with the CWA. *See All. to Save the Mattaponi v. U.S. Army Corps of Eng’rs*, 606 F. Supp. 2d 121, 132 (D.D.C. 2009) (holding that the Corps must “demonstrate that it has considered significant comments and criticisms by explaining why it disagrees with them; it may not dismiss them without adequate explanation”).

In sum, Conservation Organizations and others—including the EPA—proposed several alternatives that would be objectively less environmentally damaging and would also meet the portion of the Participants’ future water needs for which they seek coverage in this Section 404 permit. Yet, those alternatives were never analyzed in any meaningful way. Nor did the Corps or Northern Water provide sufficient information as to why the proposed alternatives would be impracticable, beyond the empty assertion that they did not meet the arbitrary screening criteria. As a result, the Corps cannot overcome the strong presumption that practicable alternatives to NISP exist, and are less environmentally damaging. *See Utahns for Better Transp.*, 305 F.3d at 1187 (“[W]here insufficient information is provided to determine compliance, the Guidelines require that no permit be issued.”).

¹⁶ The Corps also rejected rotational fallowing as a viable alternative—or component of an alternative—as “unproven technology” because it does not provide a firm yield. *See* FEIS at 2-9. As discussed *supra* note 3, both the EPA and Conservation Organizations vigorously dispute the Corps’ assertions as to the feasibility of this component. Additionally, the Corps’ statement regarding rotational fallowing seriously misconstrues the “firm yield” and “proven technologies” standards. Although individual rotational fallowing projects may be interruptible, a provider could chain a number together to generate a firm supply.

2. The Corps Did Not—and Cannot—Demonstrate that Issuance of the Permit Will Not Result in the Significant Degradation of Wetlands.

Under the 404 Guidelines, the Corps may not permit discharges of fill material that will “cause or contribute to significant degradation” of wetlands. 40 C.F.R. § 230.10(c). Effects contributing to significant degradation include “significantly adverse effects” on: “the life stages of aquatic life and other wildlife dependent on aquatic ecosystems”; “aquatic ecosystem diversity, productivity and stability” including “loss of fish and wildlife habitat”; and “recreational, aesthetic, and economic values.” *Id.* The Corps is directed to make factual findings on the potential short-term and long-term effects of the proposed discharge on various physical, chemical, and biological components of the aquatic environment. *Id.* § 230.11. The extent and duration of the impacts on wetlands, as well as the wetlands’ uniqueness, are relevant considerations. *See Bering Strait Citizens for Responsible Res. Dev. v. U.S. Army Corps of Eng’rs*, 524 F.3d 938, 949 (9th Cir. 2008). If the Corps finds that the project would significantly degrade wetlands, it may issue a permit conditioned on minimization of, or compensation for, impacts. *See City of Olmstead Falls v. EPA*, 435 F.3d 632, 637-38 (6th Cir. 2006); *Ohio Valley Env’tl. Coal. v. U.S. Army Corps of Eng’rs*, 674 F. Supp. 2d 783, 790 (S.D. W. Va. 2009). However, inadequacies in plans for minimization or compensation may invalidate the decision to allow discharge. *See All. to Save the Mattaponi*, 606 F. Supp. 2d at 134.

As a practical matter, it is clear that the Corps’ preferred alternative will permanently destroy or degrade aquatic habitat that is crucial to the survival of the threatened Preble’s meadow jumping mouse, and will destabilize the Poudre River’s ecosystem, precipitating an ecological regime shift that will adversely impact hundreds of acres of high-functioning wetland and riparian habitat. The overwhelming evidence to these effects alone requires denial of the permit. *See* 40 C.F.R. §§ 230.10, 230.11, 230.30 (404 Guidelines); *Olenhouse*, 42 F.3d at 1575 (requiring agency decisions to be supported by substantial evidence in the record). As a legal matter, the Corps’ failure to adequately analyze these impacts, meaningfully respond to expert comment, and satisfactorily explain its decision render the FEIS legally inadequate to support the issuance of the permit. *See Wyo. Outdoor Council v. U.S. Army Corps of Eng’rs*, 351 F. Supp. 2d 1232, 1238 (D. Wyo. 2005) (providing that when issuing decisions under the CWA, agencies must “examine[] all relevant data and articulate[] a satisfactory explanation for its action, including a rational connection between the facts found and the choice made”); *Friends of the Earth v. Hall*, 693 F. Supp. 904, 945-46 (W.D. Wash. 1988) (noting that where the Corps’ decision to issue a permit relies on a NEPA document, flaws in the underlying analysis may call into question the Corps’ finding that the project would not result in significant degradation of wetlands).

First, NISP will have significant adverse effects on the conservation and recovery of the Preble’s jumping mouse. 40 C.F.R. § 230.10(c) (prohibiting the issuance of a permit where it would adversely affect the life stages of wildlife). Specifically, the construction and operation of NISP will cause the “impairment or destruction of habitat” to which the Preble’s meadow jumping mouse is limited. 40 C.F.R. § 230.30(b)(2) (directing the Corps to consider the proposed discharge’s impacts to habitat for endangered and threatened species). The construction and operation of NISP will permanently destroy over 40 acres of Preble’s jumping mouse habitat, all of which is “occupied.” FEIS at S-33; FEIS at 4-383. NISP will also result in the “temporary”

degradation of over 25 acres of habitat, *id.*; however, it must be noted that “areas that have been disturbed in the past have often failed to recover.” Comments on NISP DEIS Treatment of Preble’s Meadow Jumping Mouse from Save the Poudre, to U.S. Army Corps Eng’rs 4 (2015) [hereinafter STP Comments]. Therefore, it is likely that the “temporary” disturbance of habitat will nevertheless result in permanent loss.

Important wetland and riparian habitat will also be impaired by the indirect effects resulting from the construction and operation of NISP. Reductions in flow from the Poudre River will impact the composition, density, and health of the riparian vegetation on which the Preble’s meadow jumping mouse depends. Indeed, in the Service’s Draft Recovery Plan for the Preble’s meadow jumping mouse, it acknowledges that “[c]hanges in the timing and abundance of water may be detrimental to the persistence of Preble’s in these riparian habitats,” and warns that the depletion of groundwater via water diversion projects results in the conversion of habitats from the “mesic, shrub-dominated systems” suitable for Preble’s mice to “drier grass-dominated systems [that] would preclude Preble’s from these areas.” STP Comments at 2. The loss of this habitat will have dire consequences for the conservation of the species. These consequences will only be compounded by NISP’s impacts on hydrology and water quality—e.g., changes in water temperature, increases in pollution and sewage, and reductions in the habitat’s capacity to dilute pollutants and move sediment—which will impair and destroy not only habitat of the Preble’s meadow jumping mouse, but may also impact the habitat of other aquatic obligate species in and downstream of the Poudre River.

As discussed *infra* at Section C.2.2, the Corps’ analysis of water quality and hydrology are fundamentally flawed. As a result, NISP’s impacts on the *occupied habitat* of the Preble’s jumping mouse were never accurately analyzed in the FEIS or the 2007 Biological Opinion. For the same reason, NISP’s impacts on the four listed, aquatic obligate species that occur downstream of the project and that the Corps acknowledges will be adversely affected by the project—namely, the whooping crane, the least turn, the piping plover, and the pallid sturgeon—were not accurately assessed. Without such an analysis, the Corps cannot demonstrate that NISP will not result in significant adverse effects to wetland and riparian habitat. Accordingly, the Corps cannot issue the permit.

Second, NISP will adversely impact the diversity, productivity, and stability of the aquatic ecosystem in several significant ways. 40 C.F.R. § 230.10(c). Specifically, the construction and operation of NISP will lead to the significant degradation of riparian habitat, alter and degrade water quality and circulation, contribute to the loss of significant environmental values, and adversely affect recreational and economic opportunities in the region. The proposed mitigation measures are insufficient to offset these substantial impacts.

1. Degradation of Riparian Habitat

As an initial matter related to the above, NISP will severely degrade hundreds of acres of high-functioning riparian habitat, including occupied habitat for several listed species. For example, occupied habitat for the Preble’s meadow jumping mouse will be adversely affected by the construction and operation of the project. However, NISP’s adverse impacts to riparian habitat are not limited to Colorado. As reported in the 2007 Biological Opinion appended to the

FEIS, the water depletions associated with NISP are likely to reduce flows on the Platte River *through Nebraska*. Thus, the construction and operation of NISP will harm four threatened and endangered species in addition to the Preble's meadow jumping mouse: the whooping crane, the least turn, the piping plover, and the pallid sturgeon. FWS maintains that the continued existence and recovery of these four species depends upon protecting and restoring water flows to the central and lower Platte River ecosystems. See FWS, *Programmatic Biological Opinion on the Platte River Recovery Implementation Program* 11 (2006) ("The committee is firmly convinced that upstream storage, diversion, and distribution of the river's flow are the most important drivers of change that adversely affect species habitat along the Platte River."); accord Nat'l Res. Council, *Endangered & Threatened Species of the Platte River* 243 (2005) ("The committee is firmly convinced that upstream storage, diversion, and distribution of the river's flow are the most important drivers of change that adversely affect species habitat along the Platte River."). If built, however, NISP will cause water depletions and decreased peak flows in the Platte River Basin. Constructing a new water diversion project that will instead *decrease* water flows to those ecosystems is antithetical to the meaningful recovery of listed species, and to the statutory purpose of the CWA—i.e., to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," 33 U.S.C. § 1251(a).

These impacts were given short shrift in the FEIS. Indeed, the Corps' analysis of NISP's impacts on the Preble's meadow jumping mouse primarily relied on the very outdated 2007 Biological Opinion, which was written prior to the designation of critical habitat in the Project's analysis area. Moreover, the FEIS *does not even address* impacts to listed species that occur downstream, despite the fact that reductions in flows to the Platte River threaten those species' recovery. These impacts are clearly secondary effects, and must be disclosed to the public and to the decisionmaker before a Section 404 permit can be issued. See 40 C.F.R. § 230.11(h) (defining secondary effects as those effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material"). A full picture of the impacts to riparian habitat is required before the Corps can issue a permit that will have serious direct, indirect, and cumulative impacts on the aquatic environment.

2. Alterations to Water Circulation, Fluctuation, and Salinity

The construction and operation of NISP will degrade the overall water quality throughout the analysis area. 40 C.F.R. § 230.11(b). The proposed discharge will dramatically alter water flows and temperature, which will alter the composition of vegetation communities along the Cache la Poudre River. The proposed reservoirs would also seriously increase the salinity of water in the Poudre and South Platte Rivers, leading to deleterious impacts to water quality and riparian habitat.¹⁷ As a result, the ecosystem services provided by wetlands and riparian vegetation and habitat will be jeopardized.

¹⁷ The increased salinity of the water in the Poudre and South Platte Rivers caused by NISP will also negatively impact the region's agricultural industry. See Farm Fact Sheet. Due to several factors—including the replacement of water from the Poudre River with water from the far saltier water from the South Platte River, the diversion of saline water into the Galeton Reservoir for use by farmers who are now using water from the less saline Poudre River, and the

In response to comments critiquing the water quality analyses in the DEIS and SDEIS—including comments from the EPA, *see* FEIS at A-103 to -104—the Corps updated its analysis. However, the severe, chronic analytical problems that were present throughout the DEIS and SDEIS remain present in the FEIS, and render the analysis woefully inadequate to support the issuance of a Section 404 permit. To begin with, “[t]he NISP FEIS water quality analysis section fails to describe the water quality environment of the Poudre River that will be potentially impacted, and to describe and measure the impacts to the Poudre River.” Attachment E at 2. While the FEIS describes the quantitative changes to water quality that will result from the construction and operation of NISP, it does not meaningfully *describe* how those changes will *impact* the aquatic environment.¹⁸ *See id.* As a result, the FEIS failed to provide a meaningful benchmark analysis to aid the public and the agency in determining how specific changes in water quality would impact the aquatic environment. *See id.* at 2-3.

Additionally, the Corps’ water quality analysis is littered with internal inconsistencies—e.g., conflicting data in different chapters, and conclusions that conflict with statistics and analyses completed in the FEIS and its supporting documents. There are multiple places in the FEIS where different quantitative values for water quality measures are reported with an insufficient—or absent—explanation for the discrepancy. *See id.* at 3. *Compare, e.g.,* FEIS at 4-111 (reporting a total phosphorous concentration at the Fossil Creek Outlet in Segment 12 of the project of +0.05 to +0.26 mg/L from May to July), *with* FEIS at 5-68 (citing a total phosphorous concentration of +0.07 to 0.38 mg/L at the Fossil Creek Outlet in Segment 12 of the Project over the same period). The public and expert commenters were unable to determine which values were accurate and why. *See* Attachment E at 3. Consequently, the FEIS fails to provide information vital to establishing the Project’s compliance with the Section 404 Guidelines, i.e., whether the Project will degrade water quality.

Exacerbating this issue is the fact that many of the fundamental analyses about key water quality measures are entirely missing, grossly lacking, or blatantly inaccurate, and further, seriously obfuscate the actual impacts of the proposed project. The issues with the Corps’ analysis of specific water quality measures is thoroughly discussed in the Aquatic Resources Assessment of the U.S. Army Corps of Engineers’ FEIS for NISP (“Aquatic Resources Assessment”), which are attached to these comments and incorporated by reference. *See* Attachment E. A particularly egregious omission cited in the Aquatic Resources Assessment is

exacerbating effect that evaporation will have on the salinity of the water in Galeton Reservoir—will lead to crop yield issues and the permanent salinization of up to 20% of fields receiving water from Galeton Reservoir. *Id.* As previously reported by Conservation Organizations, “this could lead to a significant decrease in crop yields and the loss of over 3,000 acres of irrigated agriculture.” *Id.*

¹⁸ Such a perfunctory analysis is also forbidden under NEPA, which requires that impact analyses “provide a useful analysis of the . . . impacts” of an action. *See Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1075 (9th Cir. 2002) (quoting *Muckleshoot Indian Tribe*, 177 F.3d at 810); *see also Nat. Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988) (“These perfunctory references do not constitute analysis useful to a decisionmaker in deciding whether, or how, to alter the program to lessen cumulative environmental impacts.”).

the Corps' failure to include "a fact-based discussion . . . that describes dissolved oxygen levels or patterns in [the] Poudre River." *Id.* at 6. "Dissolved oxygen is one of the most important water quality constituents," *id.* at 17, yet the FEIS utterly fails to provide an accurate baseline against which to evaluate NISP's impacts. Nor does it provide any data with regard to how NISP will impact the attainment of dissolved oxygen standards in certain affected segments of the Poudre River. *Id.* Similarly, the Aquatic Resources Assessment lays plain that the FEIS' conclusions regarding periphyton growths—i.e., the algae, Cyanobacteria, fungi, protozoans, and inorganic and organic debris that cover the surface of a river's substrate—are not only unsupported by the scientific literature, but are *specifically refuted* by the literature. *See* Attachment E at 20-26. In particular, the FEIS alleges that a flow rate of 0.3 m/sec was sufficient to disrupt periphyton accumulation on the river substrate, thereby preventing the long-term water quality degradation associated with undisrupted periphyton accumulation. However, the available literature demonstrates that much higher flow rates are necessary to slough periphyton from the river bottom.

Finally, the Corps repeatedly cited a "lack of data" as the reason for its failure to include key water quality analyses in the FEIS. *See* Attachment E at 4. The Corps has had fourteen years from the initial project proposal to the issuance of the FEIS during which the project and analyses have undergone multiple iterations and revisions. Thus, the Corps had ample time within which to consider and fill the data gaps that preclude its ability to fully analyze NISP's impacts on water quality. Yet, it failed to do so. In the past decade, sensor and datalogger technology has continued to improve, and it is inexcusable that the Corps and/or Northern Water failed to collect the data required to adequately disclose NISP's impacts. Accordingly, given these and the other deficiencies in the Corps' water quality analysis identified in the Aquatic Resources Report and comments previously submitted by Conservation Organizations and others, it is once again clear that the FEIS is insufficient to support the issuance of a Section 404 permit.

Throughout the NEPA process, Conservation Organizations exhaustively catalogued the flaws in the Corps' effects analysis, and communicated their expert findings to the Corps. However, these efforts were to no avail; the Corps dismissed Conservation Organizations' concerns with little to no meaningful analysis. Significantly, Conservation Organizations are not alone in their concerns regarding the Corps' water quality analyses. Indeed, in comments on the SDEIS, the EPA noted that the Phase I water quality analyses were inadequate to predict the magnitude of NISP's effects on water quality. EPA further noted that "without adequate mitigation, the project's flow reductions *are likely to cause or contribute to temperature impairments on the Poudre River*, and may exacerbate other water quality impairments through loss of dilution flow." FEIS at A-98. EPA reminded the Corps that "[u]nderstanding the magnitude of water quality effects is necessary to demonstrate the project can be implemented consistent with [CWA] requirements," and concluded that "[a]t this time, the EPA is not able to determine whether this project can avoid objectionable or unacceptable impacts to water quality." *Id.*

The Corps claims that the FEIS corrected the flaws in its water quality analysis; however, as demonstrated here, those analyses remain woefully inadequate to support a finding that NISP will not cause significant degradation to wetlands. As a result, the FEIS cannot support the

Corps' conclusion that NISP will not result in significant degradation to wetlands. *See Friends of the Earth*, 693 F. Supp. at 945-46. Although the Corps is only obligated to "consider and respond" to expert agencies' and scientists' comments, the Corps still "must demonstrate that it has considered significant comments and criticisms by explaining why it disagrees with them; it may not dismiss them without adequate explanation." *All. to Save the Mattaponi*, 606 F. Supp. 2d at 132 (citing *ARCO Oil & Gas Co. v. FERC*, 932 F.2d 1501, 1504 (D.C. Cir. 1991) ("[C]onclusory statements cannot substitute for the reasoned explanation that is wanting in this decision[.]")). Before it issues any permit, the Corps must fully address the comments raised by the EPA, Conservation Organizations, and other experts.

3. *Loss of Environmental Values*

Moreover, the FEIS failed to capture the full extent of the "loss of environmental value" caused by NISP. 40 C.F.R. § 230.11(e). Reductions in flow volume alter riparian vegetation and habitat, adversely impacting the life cycles of species such as the Preble's meadow jumping mouse. Likewise, NISP's impacts to water quality, which include higher water temperatures, will combine with lower water flows and higher water pH, which will likely result in increased concentrations of ammonia, decreases in dissolved oxygen, and adverse effects to other water quality constituents. These impacts could be so severe as to place multiple affected segments of the Poudre River on Colorado's list of impaired waterways. Even small surface water drawdowns can have dire consequences for ecosystems during the driest months of the year. Yet, the FEIS failed to meaningfully discuss these impacts.

4. *Loss of Recreational and Economic Value*

As noted in comments by Conservation Organizations and corroborated by comments from local governments, NISP will also result in significantly adverse effects on "recreational, aesthetic, and economic values" in the region. Pursuant to the 404 Guidelines, the Corps must take into account both the impacts of the proposed discharge on human use of the impacted waterway, 40 C.F.R. § 230.10, and the secondary effects (i.e., the indirect effects) of the proposed discharge, 40 C.F.R. § 230.11. *See also Fox Bay Partners v. U.S. Army Corps Eng'rs*, 831 F. Supp. 605 (N.D. Ill. 1993) (approving of the Corps' reliance on impacts to recreational use of the lake that would result from a proposed marina project to deny a Section 404 permit). However, the Corps' analysis of NISP's impacts to recreational opportunities in the region fails to properly disclose the full extent of the anticipated effects.

For example, the City of Fort Collins has spent a significant amount of money investing in conserving and restoring the segment of the Poudre River that runs through its boundaries. It has also developed a Master Plan to guide future development of recreation and economic opportunities, including a proposed "whitewater park." These opportunities will be significantly adversely affected by a major water diversion project such as NISP. An analysis completed in 2011 by Dr. Loomis at Colorado State University indicated that maintaining river flows in the downtown segment where the Whitewater Park is being constructed supports total economic activity up to \$745,000 per year. *See Attachment H at 10*. Increasing river flows could increase annual revenues by an additional \$83,000 per year above that value. *See id.*

Moreover, the FEIS fails to meaningfully consider impacts to recreational activities other than boating. The Corps assumes that NISP will not result in “discernable visual effects on the recreation experience along the Poudre River and Poudre River Trail,” and concludes without support that “effects on the recreation value of the Poudre River Trail would be negligible.” FEIS at 4-482. However, this statement ignores the significant impacts that reduced flows will have on wetland and riparian habitat. To the contrary, it is far more likely that as wetland and riparian habitat along the Poudre River degrade, the recreation value of the Poudre River Trail will decrease. Indeed, as reported by Fort Collins in its comments on the SDEIS, a reduction in peak flow of 50% would reduce visitation to the Poudre River for recreational opportunities (other than boating) by 33%. *See* Fort Collins Comments at 11. The loss of these visitors and the economic value they bring to the city cannot fairly be categorized as negligible or minor. At minimum, the Corps should quantify the economic consequences of approving NISP using well-established methodologies for measuring lost recreational opportunities and the associated reduction in spending in the community.

The Corps’ assessment of the impacts of NISP on the recreational and economic opportunities provided by the Poudre River is cursory, inaccurate, and inadequate. Accordingly, the Corps cannot demonstrate compliance with the Guidelines, and cannot issue the permit.

5. Inadequate Mitigation Plan

Nor are the proposed mitigation measures sufficient to avoid the significant degradation of wetlands. A finding that NISP will not cause or contribute to the significant degradation of the waters of the United States requires that the Corps ensure that the loss of wetland functions and values caused by the Project are adequately compensated. However, the Conceptual Mitigation Plan appended to the FEIS, *see* FEIS at App’x B,¹⁹ fails to satisfy this obligation. The record is replete with letters from experts—including the EPA—expressing serious concerns with the effectiveness and adequacy of the Corps’ “conceptual” mitigation. The failure to adequately offset project impacts is grounds for the denial of a permit application, *see Norfolk v. U.S. Army Corps of Eng’rs*, 968 F.2d 1438, 1449 (1st Cir. 1992) (providing that the basic proposition of CWA law is that if mitigation measures are insufficient the permit should be denied), and it is not clear from the FEIS that Northern Water is able to fully compensate for NISP’s impacts.

The Corps’ regulations require that “mitigation measures will be clearly assessed” in an EIS. 32 C.F.R. § 651.15(b). Such an assessment requires a clear disclosure of potential mitigation measures and a thorough review of their practicability, coupled with details on monitoring and enforcement to ensure implementation 32 C.F.R. 651.15(b), 32 C.F.R. 651.15(h). The proposed Conceptual Mitigation Plan (“CMP”) fails to meet those standards. In fact, the CMP cannot possibly provide a clear assessment of mitigation for impacts that are not understood. *Ohio Valley Env’tl. Coalition v. United States Army Corps of Eng’rs*, 479 F. Supp. 2d 607, 627 (S.D. W. Va. 2007). Until the Corps completes a competent environmental impact

¹⁹ Because the Conceptual Mitigation Plan (“CMP”)—appended as Appendix B to the FEIS—is not consecutively numbered with the other appendices, these comments reference the CMP’s page numbers as reflected in that document. It should be understood that references to the CMP are to Appendix B of the FEIS.

analysis, addressing the concerns raised by the Conservation Organizations and many others, any consideration of mitigation must be seen as hypothetical at best. The vague measures presented in the CMP do little to advance a meaningful review of NISP.

In general, although potential mitigation measures are listed and some level of description is provided, there is little to no attempt to assess the practicality of these measures. For example, the CMP asserts that “Northern Water commits to developing, establishing and maintaining the compensatory wetlands sites in a timing and manner that maintains the need for no more than a one-to-one ratio.” CMP at 32. However, no analysis accompanies this assertion, and no basis for the consideration of the applicable standard is provided. The CMP itself indicates that the ability to meet the standard is based on “the likelihood of success, differences between functions, temporal losses, difficulties in restoring, or long distances between the affected and replacement sites are expected,” CMP at 32, yet provides no investigation into the impact of any of these factors on mitigation.

The lack of critical examination of the mitigation measures is illustrated throughout the CMP:

- “Northern Water will remain in contact and coordinate with the [oil and gas] operators as these activities progress,” CMP at 25, without any indication of how Upper Galeton Reservoir might be impacted by changes of the operators plans or how this might impact the overall NISP;
- “For the wetlands along the Poudre River south of CO Highway 14, *it is likely* that ground water associated with the Poudre River is close to the surface in this location” CMP at 31 (emphasis added), without any attempt to groundtruth the likelihood of this statement (with a similar statement concerning Cactus Hill wetlands at 32);
- “The riparian areas would be surrounded by upland habitat that would be restored to near native conditions for Preble’s habitat,” CMP at 31, without any examination of the potential effectiveness of habitat restoration or presentation of a monitoring regime to determine such;
- “Northern Water would continue to work with the ditch companies to determine both instantaneous and long-term blending ratios that significantly reduce the potential for crop yield reduction that could be caused by the SPWCP,” CMP at 41, without any consideration of how such blending ratios might be achieved or how such an effort would impact NISP operations;
- “Northern Water will investigate opportunities to augment ditch company diversions to compensate for potential losses in crop yield,” CMP at 42, without any discussion of how the potential sources of water listed might impact NISP operations or how the project’s impacts on the environment as described in the FEIS.

These examples of the CMP’s failure to establish the practicality of the proposed mitigation measures clearly illustrate that the CMP fails to meet the basic standards required by the CWA

and NEPA. As it stands, the CMP is little more than speculation of what might be done if it were to be shown to be possible and the resources to implement it were found.

Moreover, the CMP relies heavily on the State of Colorado's 2017 Fish and Wildlife Mitigation and Enhancement Plan ("FWMEP") to flesh out the meager offerings in its pages; indeed, 52 of 72 listed mitigation measures come directly from the FWMEP. *See* CMP at 3, 4; *see also* FEIS at S-9, 1-23, 2-65, 4-418. But the FWMEP is itself fatally flawed.

As STP has explained in prior comments on the FWMEP:

[T]he draft plan proposed by the NCWCD fails to include required elements, and the elements it does include are not grounded in the best available scientific information or best professional judgment [...] does not present a complete discussion of the impacts of the NISP, including both direct and indirect impacts, and cumulative impacts [and] the mitigation proposed in the draft plan is not certain to occur 'concurrently with or prior to project development;' it is not proportional to project impacts; and it is not proposed to last for the entire period in which impacts to wildlife resources persist.

Attachment K at 2.

In addition to providing an expert review that found that the plan's implementation of adaptive management could not meet the goals of that process, STP also specifically identified the following shortcomings:

- The draft plan makes promises, but extensive loopholes implemented at the discretion of the NISP applicant, NCWCD, provide no assurances to the public that essential mitigation actions will be implemented when necessary. Consequently, *the draft plan fails to provide any meaningful enforcement or accountability for mitigation outcomes* and is instead structured to support NCWCD's desired water yield.
- *The draft plan offers no analysis of the likelihood of success, or the benefits of the proposed mitigation actions, in relation to the impacts of the project.* Although the draft plan presents a number of proposed actions, it fails to establish that any actions, individually or collectively, would meaningfully mitigate the impacts of the proposed project. Further, the draft plan repeatedly states that it is mitigating impacts described in the NEPA process Draft Environmental Impact Statement (DEIS) and the Supplemental DEIS (SDEIS) documents, but those documents do not fully describe the impacts of NISP and are highly controversial.
- *The draft plan proposes mitigation for water quality and water temperature impacts even though such impacts have not been fully analyzed or even disclosed in the NEPA process.* Further, the SDEIS, the most current NEPA documentation, is based on a river flow analysis that ignores the most recent ten years of flow data collected on the river. If the analysis had incorporated all of the best available data – as is required by law – the SDEIS' statistical findings and expected impacts would have been dramatically altered.

The draft plan fails to explain how effective mitigation can be implemented for impacts that are not yet fully understood.

- *The draft plan does not consider the effects of ongoing and accelerating climate change effects on NCWCD's ability to achieve its mitigation goals.* Without such an analysis, the draft plan fails to account for how the proposed mitigation actions will function in the real world.
- HB 1158 requires that NISP “maintains a balance between the development of the state's water resources and the protection of the state's fish and wildlife resources,” but *the draft plan completely fails to address the fact that 63% of the flow in the Cache la Poudre River has already been diverted out of the river before the river reaches downtown Fort Collins.* Thus, the river is already terribly out of “balance.”
- The proposed “conveyance realignment” mitigation in the draft plan [now the basis of the preferred alternative] stops at the Timnath Inlet which is just past Lemay Avenue in Fort Collins. As such, *the entire downstream stretch of the Poudre River—including at the Colorado State University “Environmental Learning Center” and out to the confluence with the South Platte River near Greeley—would not be mitigated with any base flow and suffer the extreme negative impacts of NISP.*

Attachment K at 2-3.

To the extent that the FWMEP is incorporated by the Corps' into its evaluation of the alternatives and the mitigation of those impacts, the Corps' must consider the attached comments on the FWMEP. This is especially true given that the FWMEP was adopted prior to release of the FEIS and could not have fully considered the impacts that are described in the recently released FEIS. The State of Colorado failed to meet the standards of its own laws (*see* Attachment K at 1-2), but the Corps must not compound that error by uncritically accepting this fatally flawed mitigation plan and adopting the FWMEP as its own. Although the state adopted the plan, the Corps has an independent duty to develop and analyze a robust and enforceable mitigation plan under the CWA, and reliance on the state's deficient FWMEP as proposed in the FEIS fails to meet the overarching legal requirements imposed on the Corps. Additionally, the Corps must adopt permit conditions that require updates to the FWMEP that would ensure that it is an effective and enforceable plan that fully considers the impacts identified in the FEIS and subsequent analyses identified through public comment and subsequent review.

Importantly, the CMP fails to adequately address the most significant impact that would result from implementation of the Alternative 2M —the nearly complete loss of the peak flows that are critical to river health. The CMP relies on FWMEP to address this issue; STP has provided an informed critique of that approach in earlier comments. *See* Attachment K at 5-6. Due to this reliance on the state's incompetent mitigation proposal, the CMP fails to provide any meaningful mitigation for these impacts even though there is no controversy that Alternative 2M will significantly curtail these flows.

Reliance on the FWMEP also removes certainty from the mitigation proposal by the FEIS's statements that the FWMEP may be modified following adoption of an alternative or due to the Corps' permit conditions. *See, e.g.*, FEIS at 2-80, 2-85, 2-88, 2-93. The CMP does not clarify if the measures it incorporates would remain even if modified or struck from the FWMEP. Consequently, it is impossible for a reviewer to know which of the proposed measures will actually be executed in the future.

Similarly, although a proposal is presented for compensatory mitigation, the CMP asserts that "Northern Water will develop a final wetlands and Preble's mitigation plan for review and approval by the Corps between the Final EIS and the record-of-decision. . . . The wetlands and Preble's mitigation areas and plans may be adjusted from the descriptions provided below depending on final mitigation requirements, site conditions, and other factors." CMP at 28. This will obviously eliminate the opportunity for public review of that final plan and renders consideration and comment at this point moot, in violation of NEPA and the CWA.

The CMP further obfuscates the final real-world impact of the various alternatives by limiting the application of several of the measures incorporated from the FWMEP to only the preferred alternative. *See, e.g.*, CMP at 35 ("Because the comprehensive mitigation and enhancement package presented in the FWMEP was developed specifically for Alternative 2M as described in the FWMEP, it is not included as mitigation for the other alternatives"). Although some of the measures constrained to this alternative are specific to Glade Reservoir, at least three are not and could be applied to all of the alternatives including the No Action Alternative. *Id.*; CMP at 36 (identifying AG-03, AG-05, and WQ-05). The CMP fails to provide any justification for restricting the application of these measures to the preferred alternative, other than that they are classified as "enhancement" in the FWMEP. *Id.* If these measures are not credible mitigation for impacts of the project to the river, and instead are enhancement that instead corrects past damage, the benefits of the measures must either be considered for all alternatives or for none. If Northern has the capability of conducting these measures, they should be implemented regardless of which alternative is ultimately adopted by the Corps.

A theme of failing to take mitigation seriously pervades the CMP. Seemingly without a sense of irony, the CMP claims as avoidance and/or minimization components of the project that have been removed from the consideration by the applicant prior to development of the CMP.

Two of the most significant changes in the NISP/Glade Reservoir that avoid environmental effects are the movement of the proposed reservoir from an on-channel reservoir site to an off-channel reservoir site, and the elimination of a potential point-of-diversion that would have been upstream of the North Fork confluence with the Poudre River.

CMP at 13 (citation omitted).

In reality, the project proponent gave up on the in-channel reservoir, for its own purposes, two decades ago. *See* CMP at 30 ("Through these processes, Northern Water determined that an on-channel reservoir was not environmentally or publically acceptable, and moved its preferred alternative to its current location at Glade Reservoir"). Further, an in-channel reservoir

apparently would not have passed the Corps' own screening analysis. *See id.* (“All on-channel reservoirs were eliminated through the NISP screening process”). The diversion point change was voluntarily discarded by the proponent. *See id.* (“These options were eliminated due to environmental effects”). The CMP fails to meet the intent and application of mitigation by seeking to claim that actions taken *before* the project has been proposed can be considered as “avoidance” of impacts that will result from NISP. The knowledge that the proposal might have had more environmental impact than it does in its final form cannot be rationally considered as mitigation.

The reconfigured preferred alternative, 2M, is also presented as a form of mitigation. *See id.* 15 (“Conveyance Refinement: Convey 18 cfs (winter) to 25 cfs (summer) of deliveries to NISP participants via the Poudre River by releasing from Glade Reservoir.”). While possibly less impactful than the originally proposed alternative, this remains a component of the *action*, not a mitigation measure. Courts have previously rejected similar attempts to masquerade mitigation measures as baseline data. While “[m]itigation measures may help alleviate impact *after* construction, [they] do not help to evaluate and understand the impact before construction.” *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1084 (9th Cir. 2011). Reliance on mitigation measures to preclude a full discussion of the impacts of a proposed action impermissibly “presupposes approval” because “[i]t assumes that—regardless of what effects construction may have on resources—there are mitigation measures that might counteract the effect without first understanding the extent of the problem.” *Id.* at 1084-85. Compounding this problem in the specific context of NISP, it is unclear to what extent this option will even operate and contribute any beneficial effect.²⁰

Similarly, the CMP cites the proponent's willingness to comply with water court decrees on its water rights and curtail diversions when required to do so. *See* CMP at 37. Such compliance, fundamental to its implementation of the Grey Mountain right to NISP, fails to qualify as meaningful mitigation of the impacts from the diversions that are allowed under the Grey Mountain right.

In short, the Corps must develop a competent mitigation plan through a clear assessment of practicable mitigation measures, and ensure the monitoring and enforcement of any adopted

²⁰ The description of the potential operations of NISP makes it clear that the “conveyance refinement” will not always be in effect and leaves it unclear as to how much difference this will make to stream diversions and downstream river impacts. *See, e.g.,* N. Water, *Draft Operations Plan 20* (Dec. 1, 2017) (“Diversions cannot be made through the Poudre River Intake if there is insufficient demand from the Participants. Therefore, there may individual days when the delivery rates cannot be reached, and deliveries to the Poudre River Intake cannot be made. At full operations, this should not be the case per the design methodologies described above, but could infrequently occur. However, during initial NISP operations before full NISP demands are met, this may happen more frequently. “); *id.* at 37 (“Prior to full buildout conditions, NISP commits to conveying no less than 36 percent of total NISP deliveries through the Poudre River Intake[,]” where this clearly refers to deliveries to participants but not timing or quantities of diversions from the river).

measures, if any of the NISP action alternatives are permitted. The Corps must base such a plan on a thorough environmental impact analysis and must complete and implement the plan in a manner that provides for meaningful public review. Accordingly, the Corps must deny the permit, or at the very least, fully address NISP's impacts and explain how proposed mitigation measures are sufficient to compensate for the anticipated losses.

3. The Corps Cannot Issue the Permit Because NISP Will Contribute to the Violation of Several State Water Quality Standards.

The Guidelines prohibit the issuance of a Section 404 permit where the activity will “[c]ause[] or contribute[] . . . to violations of any applicable State water quality standard.” 33 C.F.R. § 320.10(b). Applicants for Section 404 permits must provide the Corps with a Section 401 certification, made by the state where the discharge will occur, declaring that the discharge will comply with the applicable provisions of the CWA, including state water quality standards. *See* 33 U.S.C. § 1341. States maintain a list (a “303(d) list”) of water bodies that do not meet water quality standards, i.e., “impaired waters.” 33 U.S.C. § 1313(d).

The Corps has not yet provided the results of the state water quality certification required under Section 401 of the CWA. The FEIS further asserts that the water quality models used to assess the Project's predicted impacts to water quality cannot be used to predict compliance with water quality standards. FEIS at 4-95. Therefore, the public lacks sufficient information regarding NISP's impacts on the Poudre River's compliance with state water quality standards to offer informed comment and ensure the Corps has made a reasoned choice.

From the information available, it is apparent that NISP will impact segments of the Poudre River that are on Colorado's 303(d) list of “impaired waters.” Diversions from the Poudre River to NISP are likely to trigger or exacerbate these violations of state water quality standards. These include ammonia, pH, water temperature, phosphorus, dissolved oxygen, and potentially several other indicators of water quality. Therefore, the Corps cannot issue a permit.²¹

D. The Corps Must Undergo Formal Consultation and Obtain an Updated Biological Opinion Assessing the Impacts of NISP on Newly Designated Critical Habitat for the Preble's Meadow Jumping Mouse in the Project Area.

Pursuant to Section 7 of the ESA, before undertaking any action that may have direct or indirect effects on any listed species, an action agency must engage in consultation with the FWS in order to evaluate the impact of the proposed action. *See* 16 U.S.C. § 1536(a). The FWS has

²¹ The Larimer County Environmental and Science Advisory Board also raised concerns with the FEIS's “[i]nadequate data or analysis,” “[i]nadequate presentation of material,” and “[u]nderdeveloped mitigation plan” related to several key water quality issues implicated by NISP. Attachment M at 2. The advisory board concluded that “the language and data figures/tables in the FEIS underestimate the probable adverse impacts and consequences of the NISP upon the Poudre River,” and that “the simple description of models, data figures/tables, and simulations, without interpreting the meaning and impacts, is not sufficient to provide understanding given that the FEIS is intended for public review.” *Id.*

defined the term “action” for the purposes of Section 7 broadly to mean “all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies,” 50 C.F.R. § 402.02, “in which there is discretionary federal involvement or control.” *Id.* § 402.03. An agency may only avoid this consultation requirement for a proposed action if it determines that its action will have “no effect” on threatened or endangered species or critical habitat. *Id.* § 402.14(a).

The purpose of consultation is to ensure that the action at issue “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated] habitat of such species.” 16 U.S.C. § 1536(a)(2). As defined by the ESA’s implementing regulations, an action will cause jeopardy to a listed species if it “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02.

In formal consultation, FWS must analyze “the best scientific . . . data available” on the status of the species, and determine how the species would be affected by the proposed action. 16 U.S.C. § 1536(a)(2). At the conclusion of consultation, FWS issues a biological opinion (“BiOp”) that includes an analysis of the direct and indirect effects of the proposed action and the cumulative effects of, as well as the FWS’ determination as to whether the proposed action is likely to jeopardize the continued existence of a listed species or destroy or adversely modify any designated critical habitat. *See* Consultation Handbook at 4-14 to 4-31. Even after the BiOp is issued, ESA regulations require that formal consultation be reinitiated where “new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered. 50 C.F.R. § 402.16.

The Corps determined that NISP “is likely to adversely affect” the threatened Preble’s meadow jumping mouse, the endangered whooping crane, the endangered interior least tern, the endangered pallid sturgeon, and the threatened piping plover. FEIS at App’x D. Accordingly, on February 5, 2007, the Corps requested to initiate formal consultation with FWS. *See* 50 C.F.R. § 402.14 (requiring action agency to undertake formal consultation when it finds that listed species may be present in the project area and that the proposed action “may affect” listed species or critical habitat); *see also* FWS, Endangered Species Consultation Handbook (“Consultation Handbook”) at 3-13 (1998). Consultation was concluded on October 5, 2007, and FWS issued a BiOp summarizing the direct and indirect effects of the proposed action on the five listed species, the cumulative effects of reasonably certain future state, tribal, local, and private actions, and the FWS’ opinion that NISP was not likely to jeopardize the continued existence of any of the listed species.

However, as discussed extensively above, the Corps’ water quality analyses are fundamentally flawed, and therefore cannot serve as a basis for an effects determination. *See* 16 U.S.C. § 1536(a)(2) (requiring consultation to be based on “the best scientific . . . data available”). Therefore, the BiOp’s conclusion that NISP is not likely to adversely affect listed species is legally inadequate and must be redone using the best—and most accurate—scientific data available.

The Corps has represented that it “will complete Section 7 consultation with the [FWS] before the ROD.” FEIS at A-119. Specifically, the Corps has stated that it will prepare a Biological Assessment to determine whether NISP is likely to adversely affect listed species. However, in light of the flaws in the underlying data on which FWS originally based its conclusion, the Corps must reinitiate *formal* consultation with FWS and obtain a new BiOp *before* any action is taken to approve Northern Water’s permit application. *See* 50 C.F.R. § 402.16 (requiring the reinitiation of formal consultation where “new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered”).

The 2007 BiOp is woefully inadequate, and the Corps is prohibited from making any irreversible or irretrievable commitment of resources that would foreclose “the formulation or implementation of any reasonable and prudent alternatives” until the reinitiated consultation is concluded and a new BiOp is issued. 50 C.F.R. § 402.09. Should the Corps fail to obtain an adequate biological opinion and incidental take statement, any activities taken by the Corps and/or Northern Water in implementing this Section 404 permit that are likely to result in the incidental take of members of listed species are unlawful. 16 U.S.C. § 1538(a)(1)(B). Accordingly, should Northern Water undertake such activities, or should the Corps authorize such activities, *id.* § 1538(g), either entity may be subject to criminal and civil federal enforcement actions, as well as civil actions by citizens for declaratory and injunctive relief, *see id.* § 1540.

E. The Corps Must Ensure that Northern Water Obtains an Incidental Take Permit Under BGEPA Prior to Issuing Any Permit.

BGEPA prohibits the “take” of bald and golden eagles without a permit. 16 U.S.C. § 668(a). “Take” is statutorily defined to include “molest or disturb.” *Id.* § 668c. Regulations promulgated to implement BGEPA elaborate that “disturb” means “to agitate or bother” an eagle “to a degree that causes, or is likely to cause, . . . (1) injury . . . , (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” 50 C.F.R. § 22.3.

The FEIS reports that the construction of Glade Reservoir would permanently affect 8 acres of bald eagle nest buffer. FEIS at 4-385. Additionally, Glade Reservoir would be developed as a recreational site, with public access to a fishery, and opportunities for fishing, boating, hunting, camping, hiking, horseback riding, and biking. FEIS at 4-476 to -477. Northern Water would provide funding for the development of recreational facilities. *Id.* Therefore, it is highly likely that the construction and operation of the reservoir and associated activities will disturb bald eagles. Therefore, the Project cannot lawfully proceed in the absence of a permit issued pursuant to BGEPA by FWS. By the same token, the Corps cannot issue a Section 404 permit authorizing the project without simultaneously insuring that the project will be constructed and operated in such a manner as to comply with BGEPA, including BGEPA’s permitting requirement. Indeed, to do otherwise would place the Corps itself in legal jeopardy under the APA, which prohibits federal agency action that is “arbitrary, capricious, an abuse of

discretion, *or otherwise not in accordance with law.*” 5 U.S.C. § 706(2)(A) (emphasis added).²² Therefore, contrary to the Corps’ representation in the FEIS, *see* FEIS at 4-385 (asserting that compliance with BGEPA is the responsibility of Northern Water), the Corps must ensure that Northern Water complies with BGEPA *prior* to issuing a permit under Section 404.

CONCLUSION

For the foregoing reasons, the FEIS for NISP is legally deficient. If the Corps nonetheless proceeds to issue a Section 404 permit under the CWA, it will be doing so in clear violation of federal environmental law. In lieu of taking that step, the Conservation Organizations urge the Corps (and Northern Water) to explore less environmentally destructive alternatives and to solicit public comment on those additional alternatives, as well as the other issues raised herein.

Sincerely,

/s/ Elizabeth Lewis

Elizabeth Lewis

/s/ William S. Eubanks II

William S. Eubanks II

²² NISP cannot proceed in the absence of a BGEPA permit. To issue an incidental take permit under BGEPA, FWS must find that the taking is “*necessary* to protect a legitimate interest in a particular locality,” and that the “applicant has avoided and minimized impacts *to the extent practicable*,” 50 C.F.R. § 22.26(f) (emphasis added). Thus, BGEPA requires FWS to scrutinize whether there are “practicable” alternative routes that would avoid or minimize eagle impacts. In addition, the issuance of a BGEPA permit is itself a federal action triggering NEPA responsibilities to take a “hard look” at environmentally enhancing alternatives.