Part II - PROCEDURAL AND LEGAL FRAMEWORK FOR CITY COMMENTS

6. **Because of the DEIS's Failure To Provide Sufficient Analysis of the Impacts of the Proposed Permit and Address Their Avoidance, Minimization and Mitigation, A Supplemental Environmental Impact Statement Is Necessary To Comply With NEPA and the Clean Water Act:** Pg. 34

7. **The Corps May Not Segment or Defer Its Analysis of the Impact of the Glade-Horsetooth Pipeline:** Pg. 37

1. The Corps Has an Obligation to Analyze, Avoid, Minimize and Mitigate Impacts Associated with NISP

1a. Section 404 of the Clean Water Act

The DEIS does not fulfill the requirements and purpose of Section 404 of the Clean Water Act to restore and maintain the integrity of the United States' rivers and other waters. Instead, the DEIS's incomplete and misleading analysis appears designed to facilitate without adequate disclosure a project that would seriously and permanently degrade -- and *reverse restoration* of -- the Cache la Poudre River, as well as the water quality of Horsetooth Reservoir.[2]

The Clean Water Act, 33 U.S.C. §§ 1251, *et seq.*, 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, Section 404 of the Clean Water Act prohibits the discharge of any pollutant, which includes dredged or fill material, *id.* § 1362(6), into navigable waters unless authorized by a CWA permit. *Id.* § 1311.

> The statute and legislative history reflects that Congress' intention in enacting the Clean Water Act was focusing on remedying the cumulative industrial and institutional practices that have spoiled much of the Nation's waters, and its concern was assuring high quality in our waters. *See* S. Conf. Rep. No. 1236, 92d Cong., 2d Sess. 99-100 (1972), 1972 U.S. Code Cong. & Admin. News 3668 (conference report explaining that in § 101 of the Clean Water Act, 33 U.S.C. § 1251, congressional intent was to eliminate pollutant discharge, *restore chemical, physical, and biological integrity of the Nation's waters*, set water quality goals, prohibit toxic discharges, and develop waste treatment projects and plans), *reprinted in* 1 *Legislative History of the Federal Water Pollution Control Act Amendments of 1972*, at 282-83 (1973).

James City County v. EPA, 12 F.3d 1330, 1332 (4th Cir. 1993) (emphasis added).

Pursuant to the mandate of Section 404(b) of the Clean Water Act, the EPA and the Army Corps of Engineers (Corps) have jointly issued mandatory guidelines ("the Section 404 Guidelines") that must be followed by the Corps in its permitting decisions under section 404. *See* 40 C.F.R. Part 230.

Under the Section 404 Guidelines the Corps must not issue permits to projects that will have a significant adverse impact on the environment. 40 C.F.R. § 230.11. To fulfill its permitting duty, the Corps is required to assess and calculate adverse impacts by analyzing the short and long term consequences of proposed discharges on the "physical, chemical, and biological components of the aquatic environment." 40 C.F.R. § 230.11. *See Environmental Defense v. Corps of Engineers*, 515 F. Supp.2d 69, 77 (D.D.C. 2007).

[2] Throughout these comments, references to the DEIS implicitly incorporate the Section 404(b)(1) Analysis included in the DEIS, unless otherwise stated.

The Corps may also approve a project only if:

1. It is the least damaging practicable alternative;

2. Its discharges do not cause or contribute to *significant degradation* of the waters of the United States, including the following types of effects;

    a) Human health or welfare, such as municipal water supplies, fish, wildlife and wetlands. [Section 230.10(c)(1)]

    b) Life stages of aquatic life and other wildlife dependent on aquatic ecosystems. [Section 230.10(c)(2)]

    c) Aquatic ecosystem diversity, productivity and stability. [Section 230.10(c)(3)]

    d) Recreation, aesthetic and economic values. [Section 230.10(c)(4)]

3. All appropriate and practicable steps have been taken to **minimize** potential adverse impacts to aquatic ecosystems.

40 C.F.R. § 230.10.

A description of the possible ways to satisfy the above-cited requirements can be found in Subpart H of the Guidelines. *See* Section 230.10(d); and NOTE to Subparts C, D, E and F. In some cases, minimization of the impact may actually require **avoiding** it altogether. *See* Subpart H of the Guidelines; *see also* 33 C.F.R. § 320.4(e) ("Action on permit applications should, insofar as possible, be consistent with, and avoid significant adverse effects on the values or purposes for which those classifications, controls, or policies were established"); and Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act 404(b)(1) Guidelines (Feb. 7, 1990). Any unavoidable impacts have to be **mitigated**.

The DEIS and 404(b)(1) Analysis fail to demonstrate that the Corps has fulfilled the duty to avoid, minimize and mitigate project impacts; accordingly, the documents are not adequate to support issuance of a 404 permit. Rather than make the point repeatedly in these comments that avoidance, minimization and mitigation have not been implemented in the plans for NISP, the City raises it here, with the qualification that it applies throughout. 40 C.F.R. § 230.10, quoted above, imposes this duty. It applies broadly to short-term and long-term effects of the discharge itself and -- importantly -- to secondary effects of the discharge. *Id.* at § 230.11.

Subparts C through F of the Guidelines describe the scope of the impacts subject to the duty to avoid, minimize and mitigate. The Guidelines require the Corps, in the DEIS and 404(b)(1) Analysis, to implement measures that avoid, minimize and mitigate numerous impacts, including "changes in normal water fluctuations [that] … can change *adjacent, upstream, and downstream areas*" (§ 230.24(b)) and activities that affect riffle/pool ratios and "reduce the aeration and

filtration capabilities at the discharge site *and downstream*, … retard repopulation of … *downstream waters* through creation of unsuitable habitat" (§ 230.45) (emphasis added). *See Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1192 (10th Cir. 2002) (Corps violated section 404 by failing to address impacts to wildlife more than 1,000 feet from the discharge site). The scope of the duty to address indirect impacts is discussed in more detail below. The Guidelines call for the Corps to make "factual determinations" and "findings of compliance or noncompliance" that considers the effects described in Subparts C through F, of which the two examples just cited are illustrative. *See* NOTE to Subparts C through F. This the DEIS and 404(b)(1) Analysis fail to do and, as a result, the Corps has failed in its duty to implement all appropriate and practicable steps to minimize potential adverse impacts of NISP. *See also* NOTE to Subparts C, D, E and F ("possible actions *to minimize adverse impacts* … can be found in Subpart H." (emphasis added).

In addition, no discharge may be permitted if it: (1) causes or contributes to violations of any state water quality standards; or (2) jeopardizes the continued existence of a federally threatened or endangered species or adversely affects critical habitat for such a species. 40 C.F.R. §§ 230.10(b)(1), 230.10(b)(3). As discussed in detail in Section III of these comments, all available evidence shows that the proposed NISP project would trigger or exacerbate violations of state water quality standards on the Cache la Poudre River and Horsetooth Reservoir. If so, the permit cannot be approved by the Corps.

Under the Section 404 Guidelines, the Corps also may not issue a permit for NISP if it determines that doing so would be contrary to the public interest based on a "careful weighing" of the probable impacts of the project. 33 C.F.R. § 320.4(a). As is discussed throughout these comments, the current record is inadequate for the Corps to undertake this analysis, because it fails to account for the economic and noneconomic negative impacts of NISP, while exaggerating its benefits.

1b. Section 401 of the Clean Water Act

The City intends to raise specific concerns about water quality impacts of NISP before the Colorado Department of Public Health and Environment (CDPHE) during its consideration of a request for Section 401 certification under the Clean Water Act. *See* 33 U.S.C. § 1341. The City reserves its right to file additional comments during the Section 401 process, any further Section 404 proceedings and any other proceedings relating to NISP.

The City understands that the applicant Northern Colorado Water Conservancy District (NCWCD or District) submitted a request to CDPHE for a Section 401 certification on June 2, 2008. The CDPHE deemed the application insufficient for not providing the information necessary. Letter from Steven Gunderson, CDPHE, to Carl Brouwer, Project Manager, July 30, 2008. Mr. Gunderson's letter stated that "once the EIS is final and all project plans are final, the Division will take the time necessary to properly review the application, review public comments, and make the final decision on the 401 certification."

Because the City of Fort Collins has serious concerns about the water quality impacts of NISP, it has a direct interest in participating in a full and fair 401 certification process. Under the CDPHE regulations, 5 CCR 1002-82 (Regulation 82), this includes public notice and an opportunity to comment on a draft certification decision. As CDPHE has made clear in Mr. Gunderson's letter, this process can only take place after the District submits all information required to reach a certification decision.

Accordingly, it is important to the protection of the City's and the public's interest that the District make a complete submission at the appropriate time. The one-year period for CDPHE review of the request for certification pursuant to 33 U.S.C. § 1341(a) starts to run as of the time that the District makes the required submission. *City of Fredericksburg v. FERC*, 876 F.2d 1109 (4th Cir. 1989). The Corps regulations require a "valid" application to be submitted in order to trigger the one-year period. 33 C.F.R. § 325.2(b)(ii). For the application to be valid, it must contain the information that the certifying agency (CDPHE) needs to conduct certification review. *Bangor Hydro-Elec. v. Board of Environmental Protection,* 595 A.2d 438 (Me. 1991); *Long Lake v. New York State Department of Energy Conservation,* 164 AD 2d 396 (N.Y.A.D. Dept. 3, 1990); *In Re Washington County Hydro Development Associates,* 28 FERC P 61341, 1984 WL 57796 (F.E.R.C.) If the Corps treats June 2, 2008 (or some other date prior to the District's submittal of a complete application as deemed by CDPHE) as a trigger date, it will be in violation of 33 C.F.R. § 325.2(b)(ii) and the other authorities cited above.

1c. National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires the Corps to prepare an Environmental Impact Statement analyzing the impacts of and alternatives to the proposed permitting action under Section 404. NEPA mandates that the Corps take a hard look at the environmental consequences of the proposed action, including any indirect, secondary and cumulative impacts. NEPA specifically requires a "detailed statement" of the environmental impact of the proposed action. 42 U.S.C. § 4332(2)(C). The primary function of this detailed statement is to ensure "a fully informed and well-considered decision." *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc*., 435 U.S. 519, 558 (1978).

NEPA, like the Clean Water Act, requires the Corps to avoid, minimize and mitigate impacts. NEPA defines this duty as follows:

"Mitigation" includes:

> (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
>
> (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
>
> (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.20.

1d. Summary

As discussed in detail in Parts III-V of these Comments, the DEIS is woefully deficient in its (1) analysis of impacts from the proposed NISP project pursuant to NEPA and the Clean Water Act and (2) avoidance, minimization and mitigation of these impacts under the Clean Water Act. As a result, the Corps cannot proceed to a final EIS or issue a permit pursuant to Section 404 based on this inadequate DEIS. If the project proponent wishes to proceed with the project, a supplemental DEIS (SDEIS) and considerable additional analysis under Section 404 will be necessary.

"The burden of proof to demonstrate compliance with the § 404(b) permit Guidelines rests with the applicant; *where insufficient information is provided to determine compliance, the Guidelines require that no permit be issued*. 61 Fed. Reg. 30,990, 30,998 (June 18, 1996) (citing 40 C.F.R. § 230.12(a)(3)(iv))." *Utahns for Better Transportation v. USDOT*, 305 F.3d at 1187) (emphasis added). The inadequate state of the DEIS shows that the burden of proof regarding compliance is not and cannot be met for the NISP project on the current record.

2. The Corps Must Evaluate Impacts To City of Fort Collins Drinking Water and the Cache la Poudre River, Including Special Aquatic Sites and Other Specially Protected Resources under the Clean Water Act. The EIS Must Examine Indirect, As Well As Direct, Impacts of the Project

2a. Legal Requirement To Study Indirect Impacts in the DEIS

Both NEPA and the Clean Water Act require the Corps to develop complete and scientifically valid analyses of the impacts of the proposed action, as well as the effectiveness of any proposed steps to avoid, minimize and mitigate these impacts. For NISP, this must include thorough and defensible review of (1) the effects of diverting Glade Reservoir water to Horsetooth Reservoir and (2) the serious ecological damage that would be caused by reducing Cache la Poudre River flows by up to 71 percent. However, the DEIS fails to provide adequate analysis of these critical effects on the aquatic environment.

As noted above, the Corps is required to prohibit discharges which result in "significant degradation to waters of the United States." 40 C.F.R. §230.10(c). To determine whether a proposed discharge will result in significant degradation, the Section 404 Guidelines require the Corps to make detailed factual determinations regarding the effects of the discharge on the aquatic ecosystem. *Id.* at §230.10(c). *See also* §230.11. As part of these factual determinations, the Section 404 Guidelines require the Corps to include all "secondary effects" of the proposed fill. 40 C.F.R. § 230.11(h). Secondary effects are effects 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." *Id.* at §230.11(h)(1). An example of a secondary effect included in the Section 404 Guidelines is "fluctuating water levels … downstream associated with the operation of a dam," explicitly requiring review of the effects of Glade Reservoir operation on the Cache la Poudre River. *Id.* at §230.11(h)(2).

The Corps must also consider the "cumulative effects" on the aquatic ecosystem, *i.e.*, changes attributable to the collective effect of a number of different actions and discharges (*e.g.*, the wide array of different dam and diversion projects that affect or will affect the Cache la Poudre watershed). *Id.* § 230.11(g). *See also Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1190 (10th Cir. 2002) ("The permitting authority is to collect and solicit information about the cumulative impacts on the wetlands, and this information is to be documented and considered during the decisionmaking process concerning the evaluation of the permit application.").

Courts have applied the Section 404 Guidelines' requirement that a Section 404 permit must be denied when secondary impacts are inadequately analyzed, minimized or mitigated. For example, the Tenth Circuit Court of Appeals upheld the Corps' denial of a permit for a proposed earthen dam because of indirect effects of the dam on whooping crane habitat downstream. *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985). As with NISP, the impacts on the habitat were not a direct result of discharge of fill material; rather, they were the anticipated result of increased use of water that the reservoir would bring about.

> The question in this case is how broadly the Corps is authorized to look under the CWA in determining the environmental impact of the discharge that it is authorizing … In the present case, the depletion of water is an indirect effect of the discharge, in that it results from increased consumptive use of water facilitated by the discharge. … To require [the Corps] to ignore the indirect effects that result from its actions would be to require it to wear blinders that Congress has not chosen to impose … There is no authority for the proposition that, once it is required to consider the environmental impact of the discharge that it is authorizing, the Corps is limited to consideration of the direct effects of the discharge.

Id. at 512-13.

The federal district court for the district of Colorado similarly upheld an EPA veto of the §404 permit issued by the Corps for construction of the Two Forks Dam on the upper South Platte River based on indirect impacts to recreational and fishery conditions rather than to water quality

per se resulting from direct discharge of fill material into the river. *Alameda Water & Sanitation Dist.*, 930 F. Supp. 486, 491 (D. Colo. 1996).

Noting that the Section 404 Guidelines "require an accounting of secondary effects on the aquatic ecosystem in addition to direct effects," another federal district court set aside five Section 404 permits granted by the Corps for mountaintop mining and the consequent burial of streams. *Ohio Valley Environmental Coalition v. United States Army Corps of Engineers*, 479 F. Supp. 2d 607 (S.D. W.Va. 2007) (citing 40 C.F.R. §230.11(h)(1)). The court found that the studies in the Corps documents failed to assess properly the effect of the loss of headwater streams on the downstream aquatic ecosystems, a secondary effect of the discharge of fill material.

As explained in detail below, the DEIS is particularly deficient in addressing key indirect impacts, including but not limited to the effects of reduced flows on riparian wetlands and vegetation and the effects of reduced flows and a changed hydrograph on the proposed new watercraft course in Fort Collins. The case law is very clear on the need to do thorough disclosure and analysis of indirect impacts, and this the DEIS fails to do.

2b. Legal Requirements To Study Impacts on City Natural Areas

Further, the Section 404 Guidelines call for special consideration of the numerous special aquatic sites and other protected resources along the Cache la Poudre River. As detailed in Part IV of these comments, the City owns considerable property along the Poudre that it manages for habitat, recreation, and aesthetics. Its Natural Areas and Parks include significant riparian habitat, wetlands, a pedestrian and bike trial, and park land adjacent to the river. Subparts E and F of the Guidelines list specific potential effects that the Corps must consider in assessing whether a proposal complies with the Guidelines and regulations. 40 C.F.R. Part 230, Subparts E and F. Many of these provisions are applicable to the entire reach of the Cache la Poudre through the City.

Subpart E of the Section 404 Guidelines ("Potential Impacts on Special Aquatic Sites") describes impacts to "be considered in making the factual determinations and findings of compliance or non-compliance in subpart B." "Special Aquatic Sites" are defined in Section 230.3(q-1) of the Section 404 Guidelines as:

> geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Specific examples include, in addition to wetlands, wildlife sanctuaries and refuges, and riffle and pool complexes – all of which are present in or along the Cache la Poudre in the City's Parks and Natural Areas. 40 C.F.R. §§ 230.40-45; 40 C.F.R. §230.54.

Similarly, as detailed in Part III, IV and V of these Comments, the action alternatives described in the DEIS would drastically reduce flows in the Cache la Poudre River (by as much as 71 percent), resulting in major impacts to, among other things, stream morphology, riffle and pool complexes, recreational fisheries, wetlands, refuges, terrestrial and aquatic wildlife, boating recreation, birdwatching, trails, parks and aesthetics. *Id.*

The DEIS gives short shrift to these indirect impacts, providing much less analysis in areas away from the Glade Reservoir dam. This renders the DEIS inadequate for public use and for decisionmakers under NEPA and the Clean Water Act. *See Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1180 (10th Cir. 2002) (FEIS inadequate when it failed to consider indirect effects on migratory birds).

2c. Legal Requirements To Address Impacts To City Water Supplies, Parks and Recreation

Subpart F of the Section 404 Guidelines describes potential effects on "Human Use Characteristics" that are applicable to the Cache la Poudre River in the City. It specifically requires that the Corps consider effects on municipal water supplies, recreational and commercial fisheries, water-related recreation, aesthetics, and parks and "similar preserves." 40 C.F.R. §§ 230.50-54. The subsections require the Corps to consider the possible loss of values in all these types of areas; substantial adverse impacts should be considered to exist when the Corps determines the proposal will result in significant degradation, and what kind of avoidance, minimization or mitigation must be attached to a permit, if one is issued. Among the impacts that must be avoided, minimized or mitigated are:

- impacts to municipal water supplies by rendering them unpalatable or unhealthy (*Id.* §230.50);
- impacts to recreational fisheries by, among other things, interfering with the reproductive success of aquatic species or chemical contamination (*Id.* §230.51);
- impacts to water-related recreation such as hunting, fishing, canoeing, and sight-seeing by changing aesthetics of resource area or by changing water qualities like turbidity, dissolved materials, and quality of habitat (*Id.* §230.52);
- impacts to aesthetics by degrading water quality, creating "distracting disposal sites," inducing inappropriate development, or adversely affecting particular features like trails, vegetation, air quality, mood, and noise levels (*Id.* §230.53);
- impacts to parks (including "areas designated under … local ordinances to be managed for their aesthetic, historical, recreational and/or scientific qualities, thereby reducing or eliminating the uses for which such sites are set aside and managed") (*Id.* § 230.54).

As detailed in Part III of these Comments, the DEIS fails to address the impacts of the proposed action on the municipal drinking water supplies of the City, insofar as the proposed Glade to Horsetooth Pipeline would add water to Horsetooth Reservoir from Glade Reservoir – immediately adjacent to the inlet for the City's drinking water supplies – that would have much

higher Total Organic Carbon levels. This high TOC water would impair the quality of the City's water and cause the need for extensive, expensive improvements to the City's drinking water treatment infrastructure. *See* Section III.1 of these Comments.

3. An Essential Predicate for Avoiding, Minimizing and Mitigating Impacts Is Proper Identification and Analysis of Impacts, which the DEIS Fails To Provide; the Corps Must Provide a Scientifically Rigorous Analysis

As detailed in Sections III-V of these Comments, the DEIS has failed to properly assess the impacts of the proposed permitting action and is riddled with missing analyses, inconsistent positions, incorrect or incomplete data, and methodological errors. Section 404 requires the Corps to make detailed and scientifically defensible findings analyzing the short and long term consequences of discharges on the "physical, chemical, and biological components of the aquatic environment." 40 C.F.R. § 230.11. *See Environmental Defense v. Corps of Engineers*, 515 F.Supp.2d 69, 77 (D.D.C. 2007).

"A § 404(b) permit cannot be issued if the proposed discharge will result in significant degradation of the aquatic ecosystem *or if there is insufficient information to make a reasonable judgment as to whether the discharge will result in significant degradation*. 40 C.F.R. §§ 230.12(a)(3)(ii), (iv)." *Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1191 (10th Cir. 2002) (emphasis added). Failure to adequately consider the impacts associated with the proposed action is arbitrary and capricious under both NEPA and the Clean Water Act. *Id.* at 1192.

"Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1. "For this reason, agencies are under an affirmative mandate to 'insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements [,] identify any methodologies used and ... make explicit reference by footnote to the scientific and other sources relied upon for conclusions[.]' 40 C.F.R. § 1502.24." *Environmental Defense*, 515 F.Supp.2d at 78.

Failure to meet these requirements for scientific integrity and adequacy in NEPA documents undermines the Corps' ability to meet the requirements of Section 404. "*Unless the effects of the activity are properly identified, the agency has not met its legal obligation and any proposed mitigation measures dependant upon an incomplete environmental impact analysis necessarily fail…" Ohio Valley Envtl. Coalition v. United States Army Corps of Eng'rs*, 479 F.Supp.2d 607, 627 (D.W.Va.2007) (emphasis added). For example, failure to demonstrate that proposed mitigation addresses substantial harm to the aquatic ecosystem nullifies compliance with Section 404. *Id.* at 84.

Courts hold the Corps to these requirements. For example, in *Environmental Defense*, the court found that the Corps violated both Section 404 and NEPA when it failed to provide an adequate methodology and facts to support its conclusions regarding impact and mitigation.

> The agency's failure to incorporate known [fish] access issues into its mitigation calculation and to identify evidence supporting its determination that reduced access will be insignificant amounts to a failure to present a "complete analytic defense of its [habitat] model," *Sierra Club v. Costle*, 657 F.2d 298, 333 (D.C.Cir.1981) (internal quotations omitted) *rev'd on other grounds*,463 U.S. 680, 103 S.Ct. 3274, 77 L.Ed.2d 938 (1983). *This omission violates NEPA (requiring "scientific integrity" in environmental impact statements, 40 C.F.R. 1502.24), and undermines the Corps' conclusion that the project complies with CWA* (mandating "appropriate and practicable steps ... [to] minimize potential adverse impacts ... on the aquatic ecosystem,"40 C.F.R. 230.10(4)).

Id. at 81 (emphasis added). "The agency cannot reliably conclude that the selected project has minimized adverse impacts on aquatic ecosystems to the extent practicable when its habitat mitigation calculations are infected with an underestimate of the floodplain habitat impacted. 40 C.F.R. § 230.10(d). … The finding of full mitigation in spite of this omission was arbitrary and capricious." *Id.* at 83. "The agency's discrepant treatment of project impact and project mitigation in this area was therefore unsupported by the record and 'internally inconsistent,' undermined the conclusion that project impacts are minimized to the extent practicable as required by the CWA, and violated NEPA's regulation mandating the scientific integrity of environmental impact statements. *Id.* at 84 (citing *Air Transp. Assn. v. DOT*, 119 F.3d 38, 43 (D.C.Cir.1997).

Similarly, the United States Court of Appeals for the Tenth Circuit also invalidated the Corps' issuance of a Section 404 permit in *Utahns*, where the Corps failed, among other things, to provide a reasonable justification for its omission of an analysis of the impacts of the project at issue on migratory birds. *Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1180 (10th Cir. 2002).

Where a benefit-cost test is used to evaluate a proposed project, NEPA requires agencies to include that test in its environmental impact statement. 40 C.F.R. § 1502.23. The benefit-cost test is therefore subject to the NEPA regulations regarding accuracy and scientific integrity. 40 C.F.R. § 1502.24. As discussed in detail in Section V of these Comments, the DEIS has included some benefit-cost information in its assessment of the public interest test under Section 404, but the benefit-cost analysis is incomplete, biased towards approval and riddled with error. Had all of the elements of cost been included, including extensive costs for water treatment, wastewater treatment upgrades, and recreational costs, the City believes the DEIS would show that Alternative 2 would fail the benefit-cost review and, therefore, the public interest test under Section 404.

4. The DEIS Fails To Satisfy the Obligation to Avoid, Minimize and Mitigate Impacts

Sections III-V of these Comments detail manifold ways in which the DEIS has failed to avoid, minimize and mitigate NISP impacts. The failure stems from a two root causes. First, as

discussed immediately above, the DEIS often fails to adequately portray impacts associated with NISP. Second, even when it does suggest "environmental commitments," the DEIS offers vague, unsupported and unreliable measures without any meaningful performance standards or criteria. *See* DEIS Chapter 5.

The failure of the DEIS to demonstrate how and why proposed measures would address impacts undermines compliance with Section 404. *E.g., Ohio Valley Envtl. Coalition,* 479 F.Supp.2d at 627; *Environmental Defense*, 515 F.Supp.2d at 84. Here, the DEIS did not even fully consider the minimization and avoidance measures that must be considered under Subpart H of the Section 404 Guidelines.

Under the Section 404 Guidelines, the Corps must specify whether a proposed discharge complies with the Guidelines outright; if not, the Corps *must* either deny the permit or show that the imposition of appropriate conditions "to minimize pollution or adverse effects to the affected aquatic ecosystems" will bring the discharge into compliance with the Guidelines. 40 C.F.R. §230.12(a). However, the DEIS fails (1) to adequately identify the adverse impacts; (2) to impose appropriate conditions; or (3) show how the vague and uncertain commitments would result in compliance with the Section 404 Guidelines.

4a. The DEIS's "Commitments" Regarding Total Organic Carbon Do Not Comply with the Clean Water Act

As an example, the DEIS completely fails to address the very serious effects of the NISP project on the quality of the City's water supply. As discussed in detail in Part III of these comments, the proposed action covered under the proposed permit would include a pipeline from Glade Reservoir to Horsetooth Reservoir. Water demand and supply patterns indicate that it is almost certain that this pipeline would be built and used.

Part III also shows that such a pipeline would place water with high levels of Total Organic Carbon (TOC) in the immediate vicinity of the City's Soldier Canyon intake to its water treatment system. TOCs lead to disinfection by-products that are regulated under federal drinking water standards because of their role as probable carcinogens. The delivery of Glade Pipeline water to Horsetooth creates a very high probability that disinfection by-product levels in City water would increase beyond acceptable levels under federal drinking water standards without massive upgrades of the City's treatment infrastructure. Increases in disinfection by-products from increased TOC are unacceptable to the City's residential and institutional water customers such as breweries (Anheuser-Busch, New Belgium and Odell) and high-technology companies (like Kodak and Hewlett-Packard). Treatment of higher TOC levels is very difficult and will require huge increases in capital and operational expenditures by the City to reduce levels of this pollutant as part of the water treatment process.

The addition of higher levels of TOC to Horsetooth Reservoir would create a very high probability of violating state non-degradation standards for Horsetooth Reservoir and would constitute a significant degradation of Horsetooth Reservoir, a Water of the United States. To comply with the Section 404 Guidelines, a discharge of dredged or fill material must not "cause

or contribute to any violations of any applicable state water quality standard. 40 C.F.R. §230.10(b)(1). In addition, no discharge may be permitted that would cause or contribute to "significant degradation of the waters of the United States." *Id.* at §230.10(c).

Regulatory Guidance Letter (RGL) 88-12 emphasizes the importance of the prohibitions listed in Section 230.10(b) and (c) of the Section 404 Guidelines. The RGL states that the Corps should terminate evaluation of a permit application if it determines that the proposal would not comply with the provisions of 40 C.F.R. Section 230.10(b) or (c) (that is, that it would cause or contribute to violation of a state water quality standard or would cause or contribute to significant degradation of the waters).[3]

Any discharge that would "significantly degrade" waters "*can never comply with the guidelines*." RGL 88-12 (emphasis added). Thus, "where an applicant is unable or unwilling to mitigate the adverse effects of a discharge to below the threshold of significance, the application must be denied." *Id.* Effects contributing to significant degradation include "significantly adverse effects" on human health or welfare, including but not limited to effects on municipal water supplies … and special aquatic sites," 40 C.F.R. § 230.10(c)(1), on "recreation, aesthetic, and economic values," *id.* at §230.10(c)(4), and on aquatic ecosystem stability, including "loss of the capacity of a wetland to assimilate nutrients [or] purify water, *id.* at §230.10(c)(3). All of these factors are implicated by the NISP proposal, as discussed in Parts III through V of these Comments.

Further, these impacts will be permanent, because NISP represents a long-term investment in infrastructure that would divert high TOC water to Horsetooth for the foreseeable future. The Section 404 Guidelines direct the Corps, when considering whether a project will contribute to "significant degradation," to place "special emphasis on the persistence and permanence of the effects" of the project. *Id.* at §230.10(c).

Section 5.8.1 of the DEIS does not satisfy the requirements of NEPA or Section 404, because it avoids addressing this critical water quality issue and defers it to an unenforceable and ineffective future. Section 5.8.1 provides first that "the District will comply with future Colorado water quality standards for total organic carbon (TOC)." This an unremarkable promise insofar as it simply states that it will be required to comply with the law. It skirts the critical issue of whether the existing non-degradation standards for Horsetooth would apply, which already forbid the addition of higher TOC water. See Part III of these comments. Section 5.8.1 then provides that:

> If TOC is not regulated by the Colorado water quality program, then 5 years prior to constructing the Glade to Horsetooth pipeline, the District will develop a plan for monitoring TOC in Horsetooth and Glade reservoirs. This plan will be submitted to the Corps and Reclamation for their review and approval. If monitoring indicates that the delivery of water from Glade Reservoir to Horsetooth Reservoir will increase the levels of TOC in Horsetooth Reservoir to

[3] Guidance in regulatory letters that have expired, as has RGL 88-12, "generally remains valid after the expiration date." RGL 05-06, "Expired Regulatory Guidance Letters" ¶2(b). The Corps has specifically identified RGL 88-12 as an expired RGL that is still applicable to the Corps Regulatory Program. *Id.*

> levels determined by Reclamation to be unacceptable, the District will develop a TOC mitigation plan for review and approval by the Corps and Reclamation. Mitigation of TOC levels in Horsetooth Reservoir may include treatment to reduce levels of TOC in water coming from Glade Reservoir or limiting deliveries from Glade Reservoir to Horsetooth Reservoir to times when the deliveries will not result in raising TOC levels in Horsetooth Reservoir to unacceptable levels. Reclamation will incorporate any mitigation requirements for TOC into its approval to connect the pipeline to Horsetooth Reservoir.

DEIS at 5-16.

This approach inappropriately seeks to avoid, delegate and defer addressing the very serious threat to water quality that delivering Glade water to Horsetooth would cause. The extensive data regarding TOC levels from the Poudre watershed and water quality modeling for Glade already show that Glade water would contain much higher levels of TOC than the Horsetooth water used for City drinking water. *See* Section 404 Guidelines at Section 230.50 (effects on the palatability and safety of municipal drinking water).

Because it is already challenging to remove and manage TOC, and because increased TOC causes serious harm to the ability of the City to meet drinking water standards and meet the expectations of customers, the increase in TOC attributable to NISP constitutes significant degradation and is unacceptable. The Corps cannot defer analysis of this issue for unspecified future monitoring or to delegate its obligations under NEPA and the Clean Water Act to the Bureau of Reclamation, which has no role under the Clean Water Act in defining water quality standards. TOC is a pollutant with unquestioned impacts on municipal water supplies and human health. Reclamation has no significant or meaningful history in determining standards for raw drinking water in the area, no information regarding the water treatment processes for the City or other entities and no understanding of the specific needs of local water customers. Delivering water with much higher TOC levels from Glade to the input of the City's system constitutes degradation that must be avoided, minimized and mitigated *now* or the permit application must be denied.

Further, the hypothetical mitigation for TOC identified is just that, hypothetical. The examples of possible mitigation are identified as measures that "may" be included. There is no analysis of whether these measures or others taken could or would eliminate (or even reduce) the detrimental effects of increased TOC water below the threshold of significance (which, the City believes, is degradation from current levels of TOC). There is no analysis of how such measures would affect the cost or benefits of the NISP project. There are no standards to apply and no guarantee that Reclamation would issue standards, let alone ones that address the imperative to protect supplies for City customers. The Clean Water Act requires the Corps to address these issues now, not to issue a permit, see what happens and hope that the criteria of Section 404 are still met.

4b. The DEIS Fails to Meaningfully Address Impacts Associated With Lost Peak Flows

As another example, the DEIS fails to address any of the serious environmental concerns associated with reductions in peak flows in the Cache la Poudre River in Fort Collins. The Supreme Court has confirmed that "reduced stream flow, *i.e.*, diminishment of water quantity, can constitute water pollution" under the Clean Water Act. *PUD No. 1 of Jefferson County and the City of Tacoma v. Washington Department of Ecology* , 511 U.S. 700, 719 (1994). The Court held that the Clean Water Act supports the use of flow requirements as a condition of a Section 404 permit. *Id.* at 724.

> In many cases, water quantity is closely related to water quality; a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, be it for drinking water quantity, recreation, navigation or as here, as a fishery.... This broad conception of pollution – one which expressly evinces Congress' concern with the physical and biological integrity of water – refutes petitioners' assertion that the Act draws a sharp distinction between the regulation of water quantity and water "quality … Moreover, §304 of the Act expressly recognizes that *water 'pollution' may result from 'changes in the movement, flow, or circulation of any navigable waters … including changes caused by the construction of dams'*. (citation omitted) This concern with the flowage effects of dams and other diversions is also embodied in the EPA regulations, which expressly require existing dams to be operated to attain designated uses."

511 U.S. 700, 719 (1994) (citing 33 U.S.C. §1314(f) and 40 C.F.R. §231.10(g)(4)) (emphasis added).

In addition, the Section 404 Guidelines give the Corps not only the authority, but also the duty, to minimize or mitigate adverse impacts to recreation, water quality, fisheries, habitat, flood conveyance, and aesthetics that result from a permitted activity. The Section 404 Guidelines provide that minimization of adverse effects on "human use potential" may be achieved by, among other things, "in the case of dams, designing water releases to accommodate the needs of fish and wildlife" *Id.* § 230.77(b). The timing of diversions to Glade Reservoir falls into the same category.

As discussed in detail in Parts III through V, the reduction of flows during the Spring and Summer will result in a number of types of significant degradation to the Cache la Poudre and resources relating to it, including but not limited to:

- Deterioration in water quality to a level that would cause algal blooms and fish kills in some locations;
- Increases in water temperature that would eliminate some species of fish and macroinvertebrates from portions of the river;

- Accelerated sedimentation that would threaten stream habitat and flood-water conveyance;
- Reduced flows and groundwater recharge, threatening riparian vegetation and wildlife that depends on it;
- Increased threats of invasive weeds and other species;
- Increased risk of trichloroethylene contamination in the river;
- Damaged or lost recreational fisheries; and
- Reduced flows that would impair recreational uses such as boating.

Despite all of these forms of substantial degradation, the DEIS does not offer or analyze adequate avoidance, minimization or mitigation, as required by the Section 404 Guidelines. Even where the DEIS identifies purported mitigation, it falls far short of the Corps' obligations under Section 404.

For example, Section 5.1.6 of the DEIS suggests:

> The District will also develop a plan to be approved by the Corps for periodically curtailing diversions from the Poudre River for at least 24 hours during high flows, which could provide the riparian areas with periodic disturbance and inundation. The diversion curtailment plan will be implemented provided the District and Corps can be assured that the passed water will flow to at least I-25 and not be diverted by junior appropriators.

However, this very general suggestion lacks information regarding the criteria for the development for the plan (e.g., the biological criteria that would indicate success), the ability to meet the I-25 and junior appropriator criteria, any information about the extent and duration of needed flows, the basis for the identified 24-hour period, the duration of possible curtailment of diversions, and other factors that would allow the Corps or the public to evaluate whether the proposed mitigation would have a meaningful effect in reducing the significant degradation to the riparian resources. Further, there is no legal basis for the arbitrary and self-imposed criterion that curtailed diversion flows would need to reach at least I-25. If curtailed diversion would avoid, minimize or mitigate significant deterioration to locations short of I-25, the Corps cannot arbitrarily eliminate the measure.

Similarly, proposals in Section 5.1.6 of the DEIS to "identify areas suitable to plant native woody riparian vegetation and disturb decadent stands of woody riparian vegetation to help compensate for the reduction in disturbance from reduced overbank flows" is incomplete at best. It does not address the root problems associated with the loss of riparian flushing and watering flows that are necessary for a healthy riparian ecosystem and, therefore, risks failure of the proposed plantings. Further, it does not commit to any particular plantings or maintenance that would be necessary to provide any assurance that any mitigation would actually occur. Any plantings and maintenance needed to compensate for the damages from NISP should be paid for by the project proponents. No analysis is provided of the extent to which the measure would be effective or would compensate for the serious harms that riparian vegetation are likely to experience from NISP. *See* Sections IV.3 and IV.4 of these Comments.

In Section 5.2.3, the DEIS makes the following claim in an attempt to partially address the

serious recreational and ecological impacts from reduced flows in the City:

> The District will seek an agreement with the Lake Canal Company to move diversions from the Lake Canal intake on the Poudre River near College Avenue to the Timnath Reservoir Inlet Canal about 3 miles downstream. On average, moving the diversions from the Lake Canal downstream would add about 50 cfs to the Poudre River for 6 weeks from late May to early July. The District does not control the water diverted by the Lake Canal, but will work with the canal company and any opposers to the change in diversion location to accomplish the change. Relocating this diversion point would allow for higher flows in the Poudre River through the City of Fort Collins, which would reduce some of the recreational impacts expected to otherwise result from the action alternatives.
> The District will also explore agreements with other water providers to retime their direct flow rights by temporarily storing water in Glade Reservoir and/or its forebay for release during late July and August. Such agreements would add to the flows of the Poudre River through Fort Collins during the summer.

Again, while this gesture points in the right direction, it falls far short of the Corps' Section 404 and NEPA obligations. All of the suggestions that the District "will seek," "will work" and "will [ ] explore" changes in the location of diversions falls fall short of showing that this partial mitigation would be achieved. There is no guarantee of any additional flows. Similarly, there is no analysis of the levels of flow necessary to preserve recreational options or ecological functions or the extent to which an average of 50 cfs meets this need. While returning 50 cfs would undoubtedly have some benefit, it would fall far short of the up to 71 percent reductions in flows contemplated by NISP and appears insufficient to address impacts to recreation. Again, there is no evidence or analysis of the proposed (unenforceable and unreliable) measure and the recreational, ecological and other values the Corps is obligated to protect.

The DEIS (at Section 5.7) also proposes a "monitoring and adaptive management program" to study various elements of stream morphology; under the adaptive management program "several mitigation measures may be available" – one of which is "regulate flows and utilize exchanges to promote the increase in water level to support adjacent riparian vegetation and other river attributes." DEIS at 5-15. As discussed below in Section II.5, this represents a misuse of the adaptive management concept and does not comply with the Corps' Clean Water Act or NEPA obligations. Even aside from the adaptive management label, the proposal is so vague as to be meaningless. There is no definition of the criteria for stream morphology impact or significance, no criteria for success and no analysis of the extent to which any of the possible – not committed – measures would actually address the serious impacts to stream morphology discussed in Part IV of these Comments. *See* Section IV.1.

4c. Section 101(g) of the Clean Water Act Does Not Diminish the Corps' Obligations under Section 404

Section 101(g) of the Clean Water Act, the so-called Wallop Amendment, does not in any way diminish the Corps' obligations to avoid, minimize and mitigate under Section 404. Section

101(g) provides that the states' water allocation authority "shall not be superseded, abrogated, or otherwise impaired," and nothing in the Clean Water Act "shall be construed to supersede or abrogate rights to quantities of water which have been established by any state."

The Supreme Court considered the meaning of Section 101(g) in *PUD #1*, and held that, while it preserves that authority of each state "to allocate water quantity *as between users*," it does *not* "limit the scope of water pollution controls that may be imposed on users who have obtained, pursuant to state law a water allocation." 511 U.S. at 720 (emphasis added). Moreover, Congress understood full well that protection of aquatic resources would have "incidental effects" on state-authorized water effects. *Id.* at 721 (citing the legislative history of the Amendment: "The requirements [of the Act] may incidentally affect individual water rights … it is not the purpose of this amendment to prohibit those incidental effects").

In *Riverside Irrigation Dist. v. Andrews*, the Tenth Circuit determined that, in implementing Section 404 of the CWA, the Corps was required to consider impacts on endangered species from reduced flows caused by a new dam could affect whooping crane habitat far downstream of the dam. The court held that Section 101(g) could not "nullify" the clear dictates of the Endangered Species Act or the Clean Water Act: "Congress did not intend to limit 404's scope where it might affect state water-rights law when it enacted §101(g)." 568 F. Supp. 583, 589 (D. Colo. 1983), *aff'd* at 758 F.2d 508 (10th Cir. 1985). Indeed, the issue in the case "is reduced to the Engineer's statutory authority to control of the quantity of water released." *Id.* at 587. And the court held that the Engineer did have authority over water quantity, in the interest of effecting the other obligations imposed by the Clean Water Act:

> Although the [District Engineer]'s actions may have a substantial effect on state water rights, such is the case with many federal laws which particularly preempt state water laws. For example, a congressional designation of a river as wild or scenic under the Wild and Scenic Rivers Act, … will bar most dams and other diversion works from being constructed on the designated section, often limiting the exercise of state water rights. Yet this act has not been successfully challenged as an improper intrusion on state water rights.

Id.

The cases that have examined Section 101(g) have distinguished between "incidental effects" of a permitting decision and actions that are directly intended to affect water rights. In *United States v. Akers*, 785 F.2d 814 (9th Cir. 1986), and again in *PUD #1*, courts held that "incidental effects" on state water rights did not implicate the Wallop Amendment. Senator Malcolm Wallop, the sponsor of the Wallop Amendment, described the purpose of the amendment as follows:

> The requirements of section 402 and 404 permits may incidentally affect individual water rights.... It is not the purpose of this amendment to prohibit those incidental effects. It is the purpose of this amendment to insure that State allocation systems are not subverted, and that *effects on individual rights, if any, are prompted by legitimate and necessary water quality considerations.* This

> amendment is an attempt to recognize the historic allocation rights contained in State constitutions. It is designed to protect historic rights from mischievous abrogation by those who would use an act, designed solely to protect water quality and wetlands, for other purposes. *It does not interfere with the legitimate purposes for which the act was designed.*

3 Leg. Hist. 532 (Senate Debate, Dec. 15, 1977) (emphasis added). Thus, according to the provision's sponsor, Section 101(g) is designed to protect water rights from "mischievous abrogation" by those who would misuse the Clean Water Act's provisions for purposes *other than* protecting water quality and wetlands. The amendment is not intended to interfere with the Clean Water Act's "legitimate purposes." As such, the Corps retains authority – and in this case the obligation – under Section 404 to regulate water *flows* in order to fulfill its obligation to protect water *quality*.

Without addressing the obligations to avoid, minimize and mitigate the extensive and serious impacts of the proposed action, the Corps cannot issue a permit under Section 404. Indeed, the pervasive deficiencies of the DEIS require an SDEIS that would, among other things, adequately address the requirements of the Clean Water Act.

5. The DEIS's Use of Adaptive Management Is Inappropriate and Inadequate

One category of the DEIS's inadequate avoidance, minimization and mitigation "commitments" – adaptive management – merits its own consideration. The DEIS makes extensive use of claimed "adaptive management" approaches in an attempt to avoid any real analysis of the extent to which NISP impacts can be adequately avoided, minimized and mitigated. However, the DEIS's use of adaptive management is improper and inadequate to satisfy the Corps' Section 404 obligations. The proposed "adaptive management" provisions lack any meaningful performance objectives, criteria, implementation guarantees and analysis of effectiveness.

Adaptive management can have a legitimate place as part of an avoidance, minimization and mitigation plan, but it is not mitigation in and of itself. 73 Fed. Reg. 19,594, 19647 (Apr. 10, 2008) ("An adaptive management plan is part of a mitigation plan …, not a substitute for a complete mitigation plan."). Caselaw, agency guidance and technical guidance on adaptive management all make clear that it is not intended to serve as a license for a "trial and error" form of management. *E.g.*, U.S. Dep't. of the Interior, *Adaptive Management Technical Guidance* vii (2007) ("It is not a 'trial and error' process…"). Instead, it is an addition to the early forms of NEPA process that followed a "predict-mitigate-implement" form of management. *See e.g.*, Council on Environmental Quality NEPA Task Force, *Modernizing NEPA Implementation* at 45 (Sept. 2003) ("*NEPA Implementation*"). Adaptive management adds monitoring and adaptation to the end of the process to form a "predict-mitigate-implement-monitor-adapt" process. *Id.*

Nothing about adaptive management minimizes the need for the Corps to fully comply with the critical "predict-mitigate-implement" part of the process that is still required by the Clean Water Act and NEPA.

> To successfully use the "predict, mitigate, implement, monitor, and adapt" model in the NEPA process, the *potential impacts of the proposed adaptive actions must be considered before implementation*. Therefore, the "predict" step of the model must include an analysis of the potential impacts of the proposed adaptive actions. When the actions or new conditions exceed the scope of the original analysis, new or supplemental NEPA review is necessary.

NEPA Implementation at 48. Further, the process requires "[t]echnically and scientifically credible performance measures or thresholds used to assess progress and effects, and quality control measures that ensure the integrity and appropriateness of the adaptive management approach." *Id.* at 49.

> Generally, the NEPA document should describe:
>
> - The proposed adaptive management approach;
> - How the approach is reflected in the alternatives being considered;
> - The monitoring protocol;
> - The desired outcome;
> - The performance measures that will determine whether the desired outcome is being achieved or an adaptive action is needed; and
> - The factors for determining whether additional NEPA review is needed.

Id. at 52. *See also*, Council on Environmental Quality, *Aligning National Environmental Policy Act Processes with Environmental Management Systems* at 13 (Apr. 2007) ("An essential component of the adaptive management model (*i.e.*, predict, mitigate, implement, monitor, and adapt) is monitoring to assess whether predictions of environmental effects are correct, and that any mitigation is functioning as intended."); 73 Fed. Reg. 21468, 21512 (Apr. 21, 2008) (Forest Service national forest planning rule) ("Adaptive management: A system of management practices *based on clearly identified outcomes* and monitoring to determine if management actions are *meeting desired outcomes*…) (emphasis added).

The recently-issued Corps and EPA regulations for compensatory mitigation make clear the necessity of these elements for adaptive management as part of a mitigation plan. 73 Fed. Reg. 19594 (Apr. 10, 2008). "An adaptive management plan is part of a mitigation plan …, not a substitute for a complete mitigation plan." 73 Fed. Reg. at 19,647. "The focus of adaptive management should be on taking measures to *achieve performance* and *satisfy the objectives* of the compensatory mitigation project." *Id.* (emphasis added). Thus, adaptive management depends on having defined impacts (even with acknowledged uncertainty) and a concrete plan for mitigating these impacts. The core focus is on identifying with specificity and ensuring certain objectives and defined through performance measures. *Id.* at 19,648; 33 C.F.R. § 332.5 ("Performance standards must be based on attributes that are objective and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practical manner.").

> Adaptive management means the development of a management strategy that anticipates likely challenges associated with compensatory *mitigation projects*

> and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects and guides *modification of those projects to optimize performance*. It includes the selection of appropriate measures that will *ensure that the aquatic resource functions are provided* and involves analysis of monitoring results to identify potential problems of a compensatory mitigation project and the identification and implementation of measures to rectify those problems.

33 C.F.R. § 332.2 (emphasis added).

The Corps' regulations clarify that adaptive management relies on the monitoring to determine whether the already-committed mitigation project is meeting its objectives as measured by the specific performance standards identified as part of the initial planning and development of a mitigation plan. *Id.* § 332.7(c). The Corps' civil works policies have a similar focus, in which monitoring and adaptive management are aimed at ensuring "predicted" or "proposed outputs." *E.g.*, Engineer Regulation 1105-2-100, § 3-8(b)(8). There is no reasonable, non-arbitrary basis for the Corps to vary the concept of adaptive management among its Section 404 compensatory mitigation program, its civil works policy and the rest of the Section 404 process.

Courts have struck down attempts to insert vague measures that do not meet the "predict, mitigate and implement" requirements of NEPA and the Clean Water Act identified above. For example, the Southern District of New York found that adaptive management in a Corps EA for a harbor deepening project was inadequate:

> The EA also explains that the Corps will follow "adaptive management practices as it moves through construction of its contracts," thus allowing it to change future contracts should the data indicate it is necessary. These promises, however, provide no assurance of as to the efficacy of the mitigation measures. The Corps did not provide a proposal for monitoring how effective "adaptive management" would be.

Natural Resources Defense Council v. Army Corps of Engineers, 457 F.Supp.2d 198, 234 (S.D. N.Y. 2006). *See also, High Sierra Hikers Ass'n v. Weingardt*, 521 F.Supp.2d 1065, 1091 (N.D. Cal. 2007) (Forest Service's use of adaptive management violated Wilderness Act and NEPA; "Forest Service failed to adequately consider warnings from adjacent wilderness areas about its campfire policy and improperly relied on adaptive management to control the campfire policy. This demonstrates that the Forest Service failed to take a hard look as required by NEPA…").

Similarly, the Eastern District of California recently found that the adaptive management provisions in a biological opinion issued by the Fish and Wildlife Service for a water diversion operating plan failed to provide reasonable certainty to assure that mitigation would be implemented, as required by the Endangered Species Act:[4]

[4] The Endangered Species Act requirements are functionally identical for these purposes to the mandatory Clean Water Act avoidance, minimization and mitigation obligations.

> Here, the adaptive management process has *no quantified objectives or required mitigation measures*. Although the process must be implemented by holding meetings and making recommendations, nothing requires that any actions ever be taken. The BiOp asks the court to trust the agency to protect the species and its habitat. Notwithstanding any required deference to expertise, the ESA requires more.
>
> All parties agree that adaptive management can be beneficial and that flexibility is a necessary incident of adaptive management. The law requires that a balance be struck between the dual needs of flexibility and certainty. The [plan], as currently structured, *does not provide the required reasonable certainty to assure appropriate and necessary mitigation* measures will be implemented. … This aspect of the BiOp is arbitrary and capricious as a matter of law.

Natural Resources Defense Council v. Kempthorne, 506 F.Supp.2d 322, 356 (E.D. Cal. 2007) (emphasis added).[5]

In a similar way, the adaptive management provisions in the DEIS fail to comply with the requirements of the Clean Water Act and NEPA. They are vague, lack performance standards and criteria for success, and provide no real mitigation plan that would be managed in an adaptive way. They fail to supply the plan and mitigate portions of the process, which are critical omissions. Thus, the DEIS's proposals are not really adaptive management, but instead deferred management or trial and error management, neither of which are permitted under the Clean Water Act.

For example, as discussed in Section II.4 above, the DEIS (at Section 5.7) proposes a "monitoring and adaptive management program" to study various elements of stream morphology; under the adaptive management program "several mitigation measures may be available" – one of which is "regulate flows and utilize exchanges to promote the increase in water level to support adjacent riparian vegetation and other river attributes." DEIS at 5-15. This proposal represents a misuse of the adaptive management concept and does not comply with the Corps' Clean Water Act or NEPA obligations. As in the provision struck down in *Kempthorne*, there is no definition of the criteria for impact or significance, no criteria for success and no analysis of the extent to which any of the proposed – not committed – measures would actually address the serious impacts to stream morphology discussed in Part IV of these Comments. As discussed in Section IV.1, the DEIS fails even to predict the probable impacts, let alone identifying a plan to address the impact. Without proper diagnosis a proper treatment is very unlikely. An SDEIS must be prepared that (1) fully addresses the impacts associated with

[5] It is instructive to compare these cases to ones in which adaptive management or its equivalent has been upheld. For example, in *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515 (10th Cir. 1992), the Corps issued a Section 404 permit before completion of studies designed to develop a mitigation plan for adverse impact on wetlands, (and, because studies and plan were not completed, issued the permit before full public review of results). The permit was conditioned on a requirement that no wetlands be lost, and on a requirement that a Monitoring and Mitigation Plan be developed to ensure there would be no loss of wetlands. The court rejected a challenge to the permit-first-mitigate-later approach to the 404 permit because the permit "specifically stated that no wetlands losses would be allowed, and that a mitigation plan would have to be developed to ensure that result." There is no comparable commitment to avoid impacts to wetlands and other resources in the NISP context.

sedimentation; (2) provides a real, committed avoidance, minimization and mitigation plan; and (3) analysis of the effectiveness of these measures.

The same deficiencies are present in the DEIS's proposed mitigation of TOC impacts to Horsetooth Reservoir and the City's water supplies. As discussed above in Section II.4b, the proposed "mitigation" measures for TOC defer assessment of impact, identification of thresholds for significance and a mitigation plan until after permit issuance. This approach would not be appropriate adaptive management and would violate the Clean Water Act and NEPA.

6. Because of the DEIS's Failure To Provide Sufficient Analysis of the Impacts of the Proposed Permit and Address Their Avoidance, Minimization and Mitigation, A Supplemental Environmental Impact Statement Is Necessary To Comply With NEPA and the Clean Water Act

NEPA specifically requires a "detailed statement" of the environmental impact of the proposed action. 42 U.S.C. §4332(2)(C). The primary function of this detailed statement is to insure "a fully informed and well-considered decision." *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc*., 435 U.S. 519, 558 (1978). In order to fulfill its role, the EIS must set forth sufficient information for the general public to make an informed evaluation. *Sierra Club v. United States Army Corps of Engineers*, 701 F.2d 1011, 1029 (2nd Cir. 1983).

In so doing, the EIS insures the integrity of the decisionmaking process "by giving assurance that stubborn problems or serious criticisms have not been 'swept under the rug.'" *Silva v. Lynn*, 482 F.2d 1282, 1285 (1st Cir. 1973). This requires a level of detail that makes it possible for the decisionmaker to "consider fully the environmental factors involved and to make a reasoned decision after balancing the risks of harm to the environment against the benefits to be derived from the proposed action." *Sierra Club*, 701 F.2d at 1029 (quoting *county of Suffolk v. Secretary of Interior*, 562 F.2d 1368, 1375 (2nd Cir. 1977).

CEQ regulations governing implementation of NEPA state that a draft impact statement "must fulfill and satisfy to the fullest extent possible the requirements established for final statements in [§4332(2)(C) of NEPA]." 40 C.F.R. §1502.9. Moreover, the regulations require that an insufficiently detailed DEIS be supplemented or revised: "*if a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion*." *Id (emphasis added).*

The Corps has also adopted procedures at 33 C.F.R. Parts 230 and 325 for implementing NEPA, which are intended to supplement the CEQ regulations. *See* 33 C.F.R. §230.1 (Corps regulations supplement and should be used in conjunction with the CEQ regulations). These regulations also require a detailed discussion of the environmental impacts of the proposal and alternatives. *See* 33 C.F.R. Part 325, App. B (citing 40 C.F.R. §1502.16).

Courts have interpreted these regulations to require that an impact statement must contain an adequate compilation of relevant information. *Sierra Club*, 701 F.2d at 1031. Where the statement failed to do this, the agency's subsequent decision lacked a "substantial basis in fact" and "a decisionmaker relying on [the inadequate EIS] could not have fully considered and balanced the environmental factors." *Id.*

Accordingly, courts have rejected environmental impact statements when they fell short of the level of detail required by the statute and regulations. *See e.g.*, *Westlands Water Dist. v. Dept. of the Interior*, 275 F.Supp.2d 11571198 (E.D. Cal. 2002) ("An SEIS is required for the Trinity Dan bypass RPM because Interior did not analyze or address the measure and its impacts on Northern California power supply and reliability in the DEIS."). In *Silva v. Lynn*, the First Circuit found that an FEIS submitted by the Department of Housing and Urban Development ("HUD") fell "far short of what is required," 482 F.2d at 1285, and could not serve to fulfill NEPA's mandate. *Id.* at 1287. The FEIS, concerning a proposed housing project, glossed over some of the department's key decisions without sufficient discussion:

> The project's site contains a low wetland portion in and near an area where the water table is high. Adjacent lower lying areas have historically experienced chronic flooding. This is plainly a major problem. We think it is not too much to ask that the problem be fully depicted, that HUD describe the approach that was taken, and the reasons why the particular mode of control was chosen in preference to others.

Id. In addition, the relevant section of the Draft EIS had drawn "heavy fire, as being wholly inadequate," from other federal agencies with more expertise in drainage than HUD, but the FEIS barely acknowledged the comments. *Id.* at 1286. The court also rejected as inadequate HUD's dismissal of some of the alternatives as being "economically unsound." *Id.* The agency "must go beyond mere assertions and indicate its basis for them." *Id.* As with the drainage problems, "what the courts look for is an informed and adequately explained judgment." *Id.* at 1287. *See also Johnston v. Davis*, 698 F.2d 1088 (10th Cir. 1983) (EIS inadequate and must be supplemented because of misleading, unqualified statements about likely economic value of project).

In a previous case involving a proposed dam, the court found the EIS provided insufficient detail regarding geological instability under the dam site, the proposed dam's effect on groundwater quality, and the likely effects on wildlife. *Save the Niobrara River Ass'n v. Andrus*, 483 F. Supp. 844 (D. Neb. 1979). For example, the agency doing the EIS – the Bureau of Reclamation – concluded there would be minimal impact on groundwater quality, but the conclusion was not based on scientific studies, and the court found the discussion and data concerning the expected impact on groundwater to be inadequate under NEPA requirements. *Id.* at 853.

Another court found an EIS regarding a proposed watershed project to have an inadequate discussion of the impact of sediment that would be carried downstream as a result of the project. *NRDC v. Grant*, 355 F. Supp. 280, 287 (D. N.C. 1983). The EIS disclosed the increased sediment load, but did not provide an adequate discussion of its downstream effects: "The Statement merely concludes, without supportive scientific data and opinion, that 'No significant

reduction in quality of the waters [downstream] is expected.' … Having conceded a massive increase in sedimentation, the Statement disposes of its environmental effects in one conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind." *Id.* In addition, the statement suggested there would be some effects on fish in the watershed, but then declared "without any supportive data" that "Most of the fishery resources in the watershed will not be affected …or will be mitigated." *Id.* This fell "far short" of NEPA's requirements. *Id.*

The Clean Water Act also requires the Corps to supplement a DEIS if it does not contain sufficient information in sufficient detail to comply with the requirements of the Section 404 Guidelines. *Utahns for Better Transportation v. USDOT*, 305 F.3d 1152, 1163 (10th Cir. 2002). ("If, however, the NEPA documents do not consider the alternatives in sufficient detail to respond to the requirements of the Guidelines, it may be necessary to supplement NEPA documents with additional information. 40 C.F.R. § 230.10(a)(4)."). *See also Louisiana Wildlife Federation v. York*, 761 F.2d 1044, 1051 (5th Cir. 1985) (supplement necessary where information "presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned").

As detailed in the comments contained in Parts III through V, the DEIS suffers from fatal deficiencies that prevent it from fully disclosing and addressing the impacts of the proposed action. In order to comply with the applicable regulations and to fulfill the requirements of NEPA and the Clean Water Act – to provide sufficient information so that decisionmakers can make a fully informed choice between the alternatives – the DEIS must be supplemented. If the Corps were to proceed directly to an FEIS with no circulation of an SDEIS, the FEIS would itself be inadequate. *Utahns for Better Transportation v. USDOT*, 305 F.3d at 1163; *Louisiana Wildlife Federation v. York*, 761 F.2d at 1051. The full and accurate disclosure of the missing information called for in the City's comments would constitute "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts" and, as such, would mandate that a SDEIS be prepared. 40 CFR § 1502.9(c)(1).

The DEIS and its technical appendices do not contain complete operational plans for the NISP project. The City of Fort Collins made two requests for supplemental information, by letters from its outside counsel dated May 7, 2008 and June 4, 2008, specifically including requests for operations data and delivery schedules for NISP. This data has not been supplied, and thus the operational impacts of NISP have not been fully disclosed or described in the DEIS.

Finally, in an August 19, 2008 meeting between the District, the City and others, the District's project manager for NISP suggested that the District was considering a completely new and different project concept consisting of pumping NISP water from the Poudre River to Glade and releasing water from Glade, then piping the water from the River to Horsetooth. Such a change in project plans, if carried forward, would constitute a "substantial change[s] in the proposed action that [is] relevant to environmental concerns" and therefore require that an SDEIS be prepared and circulated for public review and comment. 40 CFR § 1502.9(c)(1).

7. The Corps May Not Segment or Defer Its Analysis of the Impact of the Glade-Horsetooth Pipeline

Throughout the DEIS, the Corps has sought to defer its analysis of the impacts and compliance with the Section 404(b) Guidelines relating to the construction of the Glade-Horsetooth Pipeline. This is inconsistent with the Corps' obligations under both NEPA and Section 404 and substantively critical, because of the serious degradation to water quality that would result from the pipeline. *See* Section III.1 of these Comments.

The Corps may not segment its analysis of the Glade-Horsetooth Pipeline from the rest of NISP, because it is an integral part of the long-term feasibility of the project. The Northern Colorado Water Conservancy District's Individual Permit Application for NISP explicitly includes the pipeline as part of the overall project. *See* Application for Department of the Army Permit, Northern Integrated Supply Project Supplemental Information for Application for U.S. Army Corps of Engineers Section 404 Individual Permit at 2, 3, Figure 2 and Figure 13 (Apr. 24, 2008). "A pipeline connecting the proposed Glade Reservoir to the existing Horsetooth Reservoir is proposed to be constructed." *Id.* at 2.

The overall project depends on having this pipeline and/or another pipeline to Horsetooth or Carter Reservoirs to deliver project water to participants that cannot draw water from the Poudre River. The DEIS claims that the project may be able to work without the pipeline in the short term due to the potential for Colorado-Big Thompson ("C-BT") water exchanges, whereby current holders of C-BT shares in the Poudre watershed would take project water from Glade instead of C-BT water and their C-BT water taken by NISP participants. However, there will be insufficient water for such exchanges by 2020, so that a pipeline to Horsetooth or Carter Reservoir will be needed to meet the project purpose and need.

The District's April 2008 Water Delivery Report shows that just fewer than 60,000 C-BT units are owned by entities that have C-BT water delivered to the Poudre River. Of this, about 28,000 units are owned by municipalities through ownership of North Poudre Irrigation Company shares. This results in about 32,000 owned units available for delivery of water to the Poudre River. Based on annual delivery quotas from 50% to 100%, this translates into a range of 16,000 acre feet to 32,000 acre feet available for potential exchanges on the Poudre River. In addition to this, there may be a limited amount of municipally owned C-BT water available for rental to agricultural users and delivered to the Poudre. There has been, however, a clear trend of C-BT units being transferred from agricultural owners to municipal owners with less C-BT water becoming available for agricultural use. *See e.g.*, District, *NISP Phase II Alternative Evaluation* at ES-5 (Jan. 2004) (showing reduction in agricultural C-BT units by over 50% after 2020). Considering these factors, there will not be adequate C-BT water available in the Poudre Basin to accomplish the exchange referred to in DEIS Section 2.3.3.1 to meet the 29,500 acre feet of demand by the southern NISP Participants. This will necessitate the Glade-Horsetooth Pipeline or a Glade-Carter Pipeline if NISP is to operate as claimed.

Because the purpose and need for the project is to ensure the firm yield until at least 2050, the pipeline is an essential part of the overall project as it has been defined and must be fully analyzed now. Failure to do so would constitute illegal segmentation under both NEPA and

Section 404. The pipeline is a connected action under the Council on Environmental Quality regulations governing NEPA compliance: the construction of the Glade Reservoir would automatically trigger the need for the pipeline, NISP would not proceed if there were no way to get project water from Glade Reservoir to either Horsetooth or Carter Reservoirs, and the pipeline and Glade Reservoir are interdependent parts of a larger action and depend on the larger action for their justification. 40 C.F.R. § 1508.25(a)(1).

However, as discussed in greater detail in Part III, the DEIS does not provide meaningful analyses of the water quality impacts of the pipeline and completely fails to provide meaningful measures to address these impacts pursuant to Section 404.