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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No. 14-cv-02749-PAB

AUDUBON SOCIETY OF GREATER DENVER, a Colorado non-profit corporation,
Petitioner,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, Omaha District,
Respondent,

CASTLE PINES METROPOLITAN DISTRICT,
CASTLE PINES NORTH METROPOLITAN DISTRICT,
CENTENNIAL WATER AND SANITATION DISTRICT,
CENTER OF COLORADO WATER CONSERVANCY DISTRICT,
TOWN OF CASTLE ROCK, and
COLORADO DEPARTMENT OF NATURAL RESOURCES,
Intervenor Respondents.

PETITIONER'S OPENING BRIEF FOR
REVIEW OF AGENCY ACTION
(Oral Argument Requested)

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STATEMENT OF ISSUES PRESENTED FOR REVIEW

1. Whether the U.S. Army Corps of Engineers, Omaha District ("Corps") violated Section 404 of the Clean Water Act, 33 U.S.C. § 1344, by failing to select the least environmentally damaging practicable alternative for the Chatfield Reallocation Project.

2. Whether the Corps violated the National Environmental Policy Act, 42 U.S.C. §§ 4321–4370h, by failing to evaluate reasonable alternatives to the Project including enhanced water conservation, upstream gravel pit water storage, and the Rueter-Hess Reservoir.

3. Whether the Corps violated NEPA's informed decision-making and public participation requirements by relying on incorrect water rights assumptions and using confusing and misleading terminology to describe potential water yield, which is the main justification for the Project.

INTRODUCTION

Chatfield State Park is a unique outdoor laboratory and recreational sanctuary for over a million visitors each year. It is a one-of-a-kind natural refuge for residents of metro Denver seeking to escape the constraints of urban life along the Front Range. Because of its close proximity to the metropolitan area, those who value the outdoors and desire a peaceful respite in nature are able to reap many recreational opportunities without traveling several hours into the mountains.

Chatfield is situated at the juncture of the plains and the foothills, and its ecosystem is unlike any other park in Colorado. Mature riparian forest offers a cathedral-like beauty, with ancient cottonwoods that create alternations of light and shadow over walking paths.

Century-old cottonwoods, willows, red twig dogwood, box elder, snowberry and chokecherry shrubs, herbaceous ground cover, and soaring tree trunks all contribute to Chatfield's visual diversity. The sounds of wind in the branches and water trickling in the river combine with smells of vegetation and damp soil to create a rich sensory experience.

On May 29, 2014, the Corps issued a Record of Decision ("ROD") approving the reallocation of 20,600 acre-feet in the Chatfield Reservoir from flood control to water storage for municipal and industrial use. ("Chatfield Reallocation Project" or "Project"). The Project was conceptualized as a solution to anticipated pressure on water providers in the Denver metro area. However, it will radically alter the aesthetics and recreational opportunities available at Chatfield and wholly fails as a solution to anticipated water demands, offering only a dependable yield of zero water supply to the region. Because so many water providers have dropped out of the project, state taxpayers will bear much of the environmental mitigation costs.

In order to store water, the Project requires the clear-cutting of 269.5 acres of trees in the Park, including 26.8 acres of hundred-year-old mature cottonwoods that make Chatfield State Park so unique and desirable. The Project's anticipated flooding will cause many of them to die, and water-logged trees are a potential hazard to boaters and dam operations. Thus, the trees will be removed before inundation occurs. Denver Audubon members are particularly concerned with this activity. Because the reservoir will not operate full time at the high water level, unsightly, treeless mudflats will emerge around the reservoir during low water levels, impeding visitors' enjoyment of the park. The Corps admits that this Project, compared to the other alternatives it considered, will cause the

water level to fluctuate the most, making mudflats and shoreline rings more visible than with any other alternative. The trees proposed to be removed also provide shade, contribute to the beautiful aesthetics along the edge of the reservoir, enhance the riparian environment, and are a refuge for important bird species. The Park and its ecosystem will be irreparably disrupted by this activity. Further, planned mitigation to offset the environmental impacts of the Project will occur largely on private lands. These lands are inaccessible to the public, resulting in a striking loss of opportunity for the public and Denver Audubon members to experience the Park's critical aesthetic and recreational values.

This case presents an issue of first impression: whether the Corps, in choosing the least environmentally damaging practicable alternative ("LEDPA") under Section 404(b)(1) of the Clean Water Act ("CWA"), may ignore the broad evaluation of alternatives under the National Environmental Policy Act ("NEPA") and instead focus on a small segment of the broader project. Specifically, the Corps failed to evaluate alternatives to the Project as a whole and select the least environmentally damaging option. Rather than comply with the CWA requirements and relevant federal agency guidelines, the Corps arbitrarily segmented the Project into smaller parts in order to secure approval for its preferred alternative. The Corps would not let a private party harm the waters of the United States in this way. We respectfully ask the Court to hold the Corps accountable for this violation of the CWA.

Additionally, the Corps violated NEPA by disregarding several viable and significantly less environmentally damaging alternatives to the Project, such as enhanced water conservation, upstream gravel pit storage,, and storage of water at the Rueter-Hess

reservoir. The Corps further violated NEPA by failing to supplement the environmental impact statement ("EIS") after its initial assumptions regarding what water would be stored at the project were proven to be inaccurate, and also by using terminology different from the industry standard in order to hide the fact that the Project would not increase reliable water supplies. Each of these deficiencies prevent the Corps from meeting the twin aims of NEPA to foster informed decision making and public participation.

Denver Audubon respectfully asks the Court to require the Corps to adhere to the same strict standards as any CWA 404 permit applicant. Denver Audubon also requests the Court to enjoin the Project from moving forward until: (1) a complete analysis of alternatives is performed, and (2) the project is reevaluated with proper water provider and water yield information available to the public. Denver Audubon therefore asks this Court to vacate the ROD approving the Chatfield Reallocation Project.

STATUTORY AND REGULATORY BACKGROUND

I. CLEAN WATER ACT

Section 404 of the CWA authorizes the Corps to issue permits to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. 33 U.S.C. § 1344. The permitting program is premised on the legal mandate that no discharge of dredged or fill material be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters would be significantly degraded.

Under Section 404(b)(1), the Corps *shall not* permit a discharge that would result in significant degradation of the waters of the United States, or where a less environmentally

damaging practicable alternative exists. 40 C.F.R. § 230.10. This alternative is referred to as the "least environmentally damaging practicable alternative," or LEDPA. *Id*.

While the Corps does not issue Section 404 permits for its own activities, regulations co-developed by the EPA and the Corps nonetheless mandate that the Corps abide by the same steps and analysis as if it were *actually issuing* itself a permit, including explicitly the 404(b)(1) guidelines requiring selection of the LEDPA. 33 C.F.R. § 335.2. Similarly, the Corps itself acknowledges in its own internal guidance documents that it must comply with the 404(b)(1) guidelines "[to] incorporate water quality policies embodied in Sections 102, 401 and 404 of the Federal Water Pollution Control Act…which are applicable to Corps of Engineers feasibility studies and preconstruction planning and engineering." U.S. Army Corps of Eng'rs, Dep't of the Army, *Planning Guidance Notebook*, Appendix C, C-6 Water Quality and Related Requirements, Page C-41.[1]

When selecting the LEDPA, relevant guidance states that mitigation measures determined to be appropriate should be planned for concurrent implementation with other major project features where practical. U.S. Water Res. Council, *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*, IV 1.6.1(g)(3) (March 10, 1983) ("Principles & Guidelines").[2] *See also* AR016811. Though the Corps applies the Principles & Guidelines in civil works projects, the CWA requirements, including the Section 404(b)(1) Guidelines, still apply. AR018022. To comply with the Guidelines, alternatives must be considered **prior to**

[1] *Available at* http://planning.usace.army.mil/toolbox/library/ERs/a-c.pdf.
[2] *Available at* http://planning.usace.army.mil/toolbox/library/Guidance/Principles_Guidelines.pdf

mitigation when identifying the LEDPA. *Id.* Stated differently, the Guidelines require avoidance and minimization of adverse impacts and the selection of the LEDPA **before** requiring compensatory mitigation for any unavoidable impacts. *Id.*

Additionally, the *Memorandum of Agreement between the EPA and Department of the Army Concerning the Determination of Mitigation Under the CWA Section 404(b)(1) Guidelines* ("MOA") clarifies this same sequencing requirement of selecting the LEDPA before considering the compensatory mitigation for a project. (ECF No. 33-2, at 16). According to the MOA's Q&A, the Department of the Army intended integration of this sequencing framework into **all** Corps activities, including civil works projects. *Id.*

II. NATIONAL ENVIRONMENTAL POLICY ACT.

The National Environmental Policy Act ("NEPA") is our nation's basic charter for environmental protection, "enacted in recognition of the profound impact of man's activity on the interrelation of all components of the natural environment." *Utah Shared Access Alliance v. Carpenter*, 63 F.3d 1125, 1130-31 (10th Cir. 2006). NEPA imposes a duty on agencies to "use all practicable means...to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. § 1500.2(f). Before taking "major Federal actions significantly affecting the quality of the human environment," agencies must take a "hard look" at potential environmental impacts by means of an environmental impact statement (EIS). *See* 42 U.S.C. § 4332(2)(C). The EIS evaluates the environmental impact of the proposed action, as compared with the impact of alternative courses of action. *Fuel*

Safe Wash. v. FERC, 389 F.3d 1313, 1323 (10th Cir. 2004). When an agency prepares an EIS, its purpose is to:

> serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.

40 C.F.R. § 1502.1.

To comply with NEPA, an agency must rigorously explore all reasonable alternatives to a proposed project. 40 C.F.R. § 1502.14(a). For those alternatives that are eliminated from detailed study, the agency must briefly discuss the reasons for their elimination. *Id.*; *Utahns for Better Transp. v. U.S. Dep't of Transp*., 305 F.3d 1152, 1166 (10th Cir. 2002). The consideration of alternatives to a proposed action is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14; *see also Fuel Safe Wash.*, 389 F.3d at 1323.

Additionally, Congress enacted NEPA with twin objectives that procedurally govern how an agency satisfies its statutory obligations. 42 U.S.C. § 4332. The twin aims of NEPA require agencies to consider the environmentally significant aspects of a proposed agency action, and to let the public know that the agency's decision-making process included evaluating environmental concerns. *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983).

Under these aims, NEPA requires an agency to actively foster public participation and informed decision-making by obtaining and disclosing all information that is necessary and relevant to the agency decision. 40 C.F.R. §§ 1502.1, 1506.6, 1502.22; *Friends of Marolt Park v. U.S. Dep't of Transp.*, 382 F.3d 1088, 1095 (10th Cir. 2004). The agency must include

in an EIS "information relevant to reasonably foreseeable significant adverse impacts if it is essential to a reasoned choice among alternatives." 40 C.F.R. § 1502.22(a).

STATEMENT OF FACTS

In 1967, the Corps began construction of the Chatfield dam pursuant to the Flood Control Act of 1950. AR036125. The purpose for creating the reservoir included flood control, recreation, fish and wildlife habitat, and water supply. AR036125. In July 1974, the Corps leased 5,378 acres of land and water to the state of Colorado for what is now known as Chatfield State Park. AR036142.

Since its creation, Chatfield has blossomed into the most popular state park in State of Colorado, hosting over 1.5 million visitors annually. AR036126. Accordingly, Chatfield is the highest grossing state park in Colorado, and much of its revenue now serves as financial support for other state parks. AR036126. The park boasts a beautiful, sweeping landscape that encompasses a variety of ecosystems including prairie, mature cottonwood forest, and pristine wetlands. These habitats support 375 species of birds, fourteen of which are listed as protected at the state and federal level, as well as thousands of other species of flora and fauna. AR037487-94.

For the last fifteen years, monthly "Walk the Wetlands" hikes have offered park visitors a unique experience to view the rare birds that migrate through the park. (Ex. 4, Hugh Kingery Decl. ¶10.) This monthly hike alone has resulted in the identification of 184 species of birds, ranking Chatfield as one of the three highest locations in the nation in terms of breeding bird density. (*Id*.) It is impossible to find any other riparian area in the state of Colorado with as numerous cottonwood trees as Chatfield. (Ex. 5, Urling Kingery

Decl. ¶5.) An entire ecosystem has evolved around the nature and wildlife within the Park with diverse species such as beaver, elk, coyotes, and a seemingly endless variety of birds. (*See* Ex. 6, Bob Stocker Decl. ¶3.)

Outdoor enthusiasts, as well as casual visitors, can take advantage of the unique aesthetics at Chatfield through diverse recreational opportunities. A leisurely stroll down one of the Park's twenty miles of meandering paved paths, a rigorous hike on a remote dirt trail, boating, kayaking and fishing along the South Platte, as well as many other activities, are available to fit the interests of any individual at the park. *See* AR036365.

Denver Audubon was invited to establish its offices and a nature center at Chatfield in 1999. (Ex. 2, Polly Reetz Decl. ¶6.) Denver Audubon relies on Chatfield State Park to further its mission of conservation, education, and research. (*Id.*)

Initially, the Project was proposed as a means of providing water storage for sixteen water providers in the Denver metropolitan area, in an effort to account for the growing population anticipated along Colorado's Front Range. AR036152. The Project would allow water providers to store water at levels up to 5,444 feet above mean sea level, 12 feet higher than the reservoir currently operates. AR036150. By the time the Project was approved in 2013, it had only eleven participants. *See* AR036152. The Colorado Water Conservation Board ("CWCB"), which itself has no water rights, acquired the shares from water providers who had dropped out. *Id*.

The stated purpose and need of the Project is to increase the availability of water, providing an additional average year yield of up to approximately 8,539 acre-feet of municipal and industrial water, sustainable over a 50-year period. AR036126. The average

year yield is the average amount of water per year that fourteen water providers estimate they could have stored in Chatfield for the years 1942-2000 if Chatfield had existed during the entire 59-year period.[3] AR036153. Calculations for each water provider were based on inflows during each year, the effective date of each water provider's water rights, and whether the water providers had effluents from water rights upstream that could be recaptured in Chatfield for later use. AR036153; AR036929. Due to a combination of low inflows in most years, and low seniority of water rights held by the water providers, the projected maximum volume of 20,600 acre-feet would have been stored in Chatfield in only 16 of the 59 years (i.e. 27% of the time). AR036153. This means that if the water rights were similar for the next half century, for 73% of the years, the Reservoir will be operating at the low water level, with unappealing and unusable mudflats surrounding it.

The Corps considered in detail four possible alternatives to meet the purpose and need of the proposed project. AR036132. Alternative One is the No-Action alternative. AR036132. This alternative entails no action at Chatfield Reservoir, instead requiring the construction of a new reservoir combined with downstream gravel pits to accommodate the water providers. AR036132. Alternative Two would require the use of non-tributary groundwater ("NTGW") combined with downstream gravel pit storage to meet the needs of

[3] It is important to note that this definition of average year yield in the Purpose and Need Statement included water providers who had dropped out or were in the process of dropping out. On the previous page, it is listed that Hock Hocking, Parker WSD, Perry Park, City of Brighton, City of Aurora, and Roxborough WSD were no longer going to be part of the Project, yet the average year yield calculation only excluded two of the six entities that were dropping out. Therefore, the average year yield in the EIS reflects data from fourteen water providers, even though there were only eleven water providers committed to the project at the creation of the EIS. The average year yield throughout the document is therefore inaccurate.

water providers. AR036132. Alternative Three, the agency's preferred alternative, entails reallocation of 20,600 acre-feet of potential water storage to Chatfield Reservoir. AR036132-33. Alternative Four involves a partial reallocation to Chatfield Reservoir to allow for up to 7,700 acre-feet of storage, combined with NTGW use and gravel pit storage. AR036133.

The Corps considered these four alternatives in detail in both the draft and final EIS. *See* AR036104-656. The Corps ultimately selected Alternative Three as the preferred alternative. AR036134; *see also* AR036235-45. This alternative results in the most severe impacts to Chatfield State Park, including the removal of 269.5 acres of trees, 26.8 acres of which are hundred-year-old cottonwoods. AR039036. Moreover, after tree removal, Alternative Three calls for the flooding of 586 acres of parklands and wildlife habitat, along with dredging and filling 6.89 acres of natural wetlands. AR038984.

After completion of the draft EIS in June 2012, the public was allowed to comment on the Corps' analysis, methodology, and conclusions for approximately a one month period. AR036562. Five overarching concerns were raised by Denver Audubon during public commenting on the draft EIS: (1) the CWA § 404(b)(1) analysis was improperly performed, by means of segmentation (AR037268-69); (2) the Corps did not sufficiently explain its reasoning for eliminating viable alternatives, including enhanced water conservation, upstream gravel pit storage, and water storage at the Rueter-Hess reservoir (AR037268); (3) the Corps identified a "dependable yield" of **zero** acre-feet for the Project, which was hidden in an appendix within the EIS rather than disclosed in the executive summary (AR036926; AR037192-93); (4) the Corps' use of the terms "average year yield"

and "dependable yield" were used arbitrarily instead of terms that are generally accepted for these types of projects (AR037294); and (5) the specific water rights and associated allocation were not disclosed, which is the only way to determine how much water might be stored at the reservoir (AR037294).

The Corps did not substantively address the public comments to the Draft EIS noted above in the Final EIS issued in July of 2013. *See* AR036175-7303. The Corps summarily restated its underlying rationale being questioned rather than responding to the specific concerns brought up to that underlying rationale. AR037268-69. Subsequently, the Corps issued a ROD approving the Project on May 29, 2014. AR041877. Denver Audubon filed this appeal in October of 2014.

STANDING

While not challenged by the Defendants or Interveners, Denver Audubon is cognizant of its duty to demonstrate its standing to bring suit.

> An association has standing to bring suit on behalf of its members when: (a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization's purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

Wyo. Timber Indus. Ass'n v. U.S. Forest Serv., 80 F. Supp. 2d 1245, 1252 (D. Wyo. 2000). Denver Audubon meets the organizational standing requirements in this case.

Many of Denver Audubon's members can demonstrate standing to sue in their own right. To establish standing, a party must show that (1) it has suffered an injury-in-fact that is concrete and particularized and actual or imminent; (2) the injury is fairly traceable to

the challenged action; and (3) a favorable decision will likely redress the injury. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-561 (1992).

The Supreme Court has long held that harm to the environment will support standing, "if that harm in fact affects the recreational or even the mere esthetic (sic) interests of the plaintiff" *Summers v. Earth Island Inst.*, 555 U.S. 488, 494 (2009) (citing *Sierra Club v. Morton*, 405 U.S. 727 (1972)). An agency's failure to comply with the procedural requirements of NEPA creates a risk that environmental impacts will be overlooked. *City of Davis v. Coleman*, 521 F.2d 661, 670-71 (9th Cir. 1975). Such a failure provides "sufficient injury in fact to support standing." *Id*.

Denver Audubon is an independent and autonomous chapter of the National Audubon Society, with the mission of advocating for the environment and connecting people with nature through conservation, education, and research. Denver Audubon members have been actively working to keep Chatfield State Park as a pristine recreational area for the public since 1975. Denver Audubon's members' declarations demonstrate the environmental, recreational, and aesthetic harm that would result in injury to the interests of the organizations and members. Specifically, as discussed in the attached declarations, members such as Ann Bonnell, the Reetzes, the Stockers, and the Kingerys will be directly injured by the Reallocation Project if it proceeds as currently prescribed.

Every year, approximately four thousand people visit the Audubon Center at Chatfield to explore, learn, and revel in the beauty of the park. Many come to participate in "Walk the Wetlands," started by Denver Audubon members Hugh and Urling Kingery. (Ex. 4, Hugh Kingery Decl. ¶10.) Not only do individuals and families come to the park, but

Chatfield has been a place for many local corporations and groups to hold "work days in the park" as well. (Ex. 2, Polly Reetz Decl.¶7.) The impacts of the project will severely limit the experiences available and result in a decrease in public interest and attendance at the park. (Ex. 2, Polly Reetz Decl. ¶9.) This ultimately will affect Denver Audubon's ability to attract participants to attend its educational programs. (*Id.*; Ex. 1, Gene Reetz Decl. ¶6.)

Audubon member Ann Bonnell's recreational and aesthetic interests will also be injured as a result of this Project, and she shares Mr. and Mrs. Reetz's sentiments about losing the Park as it is today. (*See* Ex. 3, Ann Bonnell Decl. ¶5.) Ms. Bonnell has been an active supporter of the Chatfield basin since before Chatfield State Park was created. (Ex. 3, Ann Bonnell Decl. ¶7.) While Ms. Bonnell has enjoyed all areas of the park throughout the years, of particular importance to her lately have been the twenty miles of paved trails unique to Chatfield. AR036365. (Ex. 3, Ann Bonnell Decl. ¶8.) Ms. Bonnell is 78 years young, but unfortunately broke her femur and wrist in the winter of 2015. (*Id.*) As part of her rehabilitation, she walks on the wide, flat paved areas of Chatfield. (*Id.*) This both soothes her soul by being able to participate in her life-long passion of birdwatching, and helps her to physically recuperate from her surgery. (*Id.*).

Chatfield is a place of rejuvenation and healing for many individuals from all walks of life. (*See* Ex. 7, Nancy Stocker Decl. ¶¶2-4.) Audubon members sincerely believe that a second look at the potential impacts of the Project is critical to ensure the Park continues to serve such a special role in the Front Range community. (Ex. 1, Gene Reetz Decl. ¶7; Ex. 3, Ann Bonnell Decl. ¶16; Ex. 6, Bob Stocker Decl. ¶3.) If removed, no amount of mitigation

will be able to restore the century-old vegetation and growth that defines the character of Chatfield State Park. (Ex. 1, Gene Reetz Decl. ¶7.)

STANDARD OF REVIEW

The Administrative Procedure Act ("APA") provides the standard of review for final agency action. *See, e.g., Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1572 (10th Cir. 1994). Under the APA, agency action must be set aside if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A). An agency's action is arbitrary and capricious if the agency:

(i) entirely failed to consider an important aspect of the problem;
(ii) offered an explanation for its decision that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise;
(iii) failed to base its decision on consideration of the relevant factors; or
(iv) made a clear error of judgment.

See New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 704 (10th Cir. 2009).

Further, an agency's action is not in accordance with the law if the action:

(i) fails to meet statutory requirements;
(ii) fails to meet procedural requirements;
(iii) fails to meet Constitutional requirements; or
(iv) is unsupported by substantial evidence.

Olenhouse, 42 F.3d at 1574.

Review of an agency's decision is generally confined to the administrative record compiled by the agency and presented to the reviewing court. *See Fla. Power & Light Co. v. Lorion*, 470 U.S. 729, 743-44 (1985). However, courts must nevertheless conduct a searching and thorough review of the agency action. *Olenhouse*, 42 F.3d at 1574.

Finally, in cases where a party is challenging an agency's determination of the LEDPA, agencies bear the burden of proving that the chosen alternative is the LEDPA by explaining how other practicable alternatives are more environmentally damaging. 40 C.F.R. § 230.10; *Alliance to Save the Mattaponi v. U. S. Army Corps of Eng'rs*, 606 F. Supp. 2d 121, 130 (D.D.C. 2009).

ARGUMENT

The Corps violated the CWA by failing to select the least environmentally damaging practicable alternative and, instead, arbitrarily segmented the Project. Additionally, the Corps acted unlawfully when it failed to follow the Section 404 Guidelines in the LEDPA process. The Corps violated NEPA by failing to consider reasonable alternatives including enhanced water conservation, upstream gravel pit storage, and water storage at the Rueter-Hess Reservoir. The Corps also violated NEPA by failing to ensure informed decision making and public participation when the agency relied on incorrect water rights assumptions and used confusing and misleading terminology in drafting the EIS.

I. THE CORPS VIOLATED THE CLEAN WATER ACT BY FAILING TO SELECT THE LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE.

This case presents a question of first impression: whether the Corps, in approving its own action under Section 404 of the Clean Water Act, is held to the same standard as it would apply to any permit applicant. The Corps should have relied on the extensive NEPA alternatives analysis when choosing the least environmentally damaging practicable alternative under the CWA. The Corps will ask this Court to ignore regulations and guidance documents clearly applicable to all Section 404(b)(1) analyses and instead allow the Government to achieve a convenient and desired outcome by breaking the Project into

smaller segments. This approach defies not only EPA and Corps regulations and guidance, but also common sense. The relocation of recreational facilities, as well as the habitat and environmental mitigation, are an integral part of the Project. The Project and associated activities triggering the Section 404(b)(1) analysis are inextricably linked.

The Corps' Section 404(b)(1) analysis is flawed for two key reasons. First: the Corps failed to use the NEPA Project alternatives in evaluating the LEDPA as required by the law. 40 C.F.R. § 230.10(a)(4). Had the Corps properly compared Project Alternative 3 to Project Alternatives 1, 2, and 4 during its dredge and fill analysis, Alternative 3—as the **most** environmentally damaging alternative—could never have been selected as the LEDPA. Second, the Corps unlawfully segmented the Project. Asserting that two segments of the Project (the relocation of recreational facilities and habitat/environmental mitigation) are merely "incidental" to the reallocation of water storage, the Corps limited its Section 404(b)(1) analysis only to "alternatives" to these narrow segments. AR041043. Such artificial division of the Project runs afoul of the "anti-segmentation" rule, rendering the Corps' action arbitrary, capricious, and not in accordance with the law.

A. The Corps Violated the CWA by Failing to Use the NEPA Alternatives in the EIS as the Basis for Evaluating and Selecting the LEDPA.

The 404(b)(1) guidelines make clear that, except in rare situations, alternatives considered under NEPA provide the basis for evaluating alternatives to select the LEDPA. 33 C.F.R. § 230.10(a)(4). The record is devoid of any evidence that the Project is one of those rare situations, because the activity requiring fill of wetlands is an integral part of the entire Chatfield Reallocation Project. Because the Corps failed to utilize the alternatives in

the EIS as a basis for evaluating and selecting the LEDPA, the Corps failed to meet the requirements of the Clean Water Act.

The Corps was required to evaluate and compare all practicable alternatives, including at least the NEPA alternatives, in selecting the LEDPA. 40 C.F.R. § 230.10(a)(4). In *Sierra Club v. Van Antwerp*, environmental organizations opposed the issuance of a Section 404(b)(1) permit for mining operations near the Everglades. *Sierra Club v. Van Antwerp*, 709 F. Supp. 2d 1254, 1259 (S.D. Fla. 2009). There, the court explained that while Section 404(b)(1) determinations are governed substantively by CWA, procedurally both NEPA and CWA should govern agency decisions. *Id*. Similarly, in *Utahns*, the court held that the issuance of a Section 404(b)(1) permit by the Corps for a highway project that did not utilize NEPA alternatives in its CWA analysis was arbitrary and capricious. 305 F.3d at 1152.

As in *Sierra Club* and *Utahns*, the Corps' Section 404(b)(1) analysis failed to evaluate the three alternatives that were evaluated in the NEPA analysis. AR038958-84. Rather than looking at alternatives to only small segments of the Project during the Section 404(b)(1) analysis, the Corps should have analyzed at least those alternatives that were deemed reasonable under NEPA. *See* 40 C.F.R. § 230.10(a)(4). The Corps' flawed analysis was inadequate to satisfy the § 404(b)(1) requirements, and made it impossible for the true LEDPA to be selected.

In addition to regulations mandating consideration of NEPA alternatives and well-established case law upholding the requirement, Corps internal guidance also states that "the NEPA process will be integrated with the Corps...planning processes. This integration

is intended to reduce process overlap and duplication. The integrated process will help assure that well-defined study conditions and well-researched, thorough assessments of the environmental...resources affected by the proposed activity are incorporated into planning decisions." *Planning Guidance Notebook*. U.S. Army Corp of Engineers. at 2-16.

For all of these reasons, the Corps was required in this case to use the NEPA alternatives as the inputs for its 404(b)(1) analysis. Case law, the 404(b)(1) Guidelines themselves, and the Corps' own guidance documents all support this conclusion. Because the Corps made no effort to show that the extensive analysis of environmental impacts of the NEPA alternatives was not relevant under the Clean Water Act, its 404(b)(1) analysis was legally flawed and must be vacated.

B. A Proper 404(b)(1) Analysis for Chatfield Would Reveal That the Corps Did Not Demonstrate Alternative 3 As the LEDPA.

In order to fully understand what the Corps did in its 404(b)(1) analysis, it is important to understand in more detail what it should have been done in this case. Thus, this section will give a broad overview of how the Corps should have conducted a LEDPA analysis for the entire Chatfield Reallocation Project. This analysis suggests a possible motive for why the Corps did not want to choose LEDPA from among the NEPA alternatives: Alternative 3 is the most damaging alternative and therefore could not be chosen as the LEDPA. In order to avoid this finding, the Corps would have to eliminate all the other NEPA alternatives as not practicable – essentially revealing its NEPA process to be nothing more than an empty analysis of false alternatives.

Under the Clean Water Act, the Corps should have first evaluated Alternatives 1 through 4 and determined if each was practicable. Determining practicability under CWA

is an independent analysis; therefore, the Corps cannot determine impracticability based solely on the fact that an alternative is not the preferred NEPA alternative. *Utahns*, 305 F.3d at 1176-87; 40 C.F.R. § 230.5(c). The Corps cannot base a determination of impracticability based solely on its own rejection of an alternative under NEPA. Like the project in *Utahns*, the Corps erred by not considering at least the three practicable and reasonable alternatives derived from the NEPA analysis. Doing so would result in a new CWA 404(b)(1) analysis and LEDPA determination. 305 F.3d 1152. Unlike *Alliance*, the Corps also did not attempt to explain why listed alternatives other than the preferred alternative were impracticable. 606 F. Supp. 2d 121. Because the Corps did not determine that any of the other NEPA alternatives were not practicable, it had to then compare the environmental impacts of each alternative.

For the next step of choosing the least environmentally damaging from among all practicable alternatives, agencies bear the burden of proving that the chosen alternative is the LEDPA by explaining how other practicable alternatives are more environmentally damaging. 40 C.F.R. § 230.10; *Alliance to Save the Mattaponi v. U.S. Army Corps of Eng'rs*, 606 F. Supp. 2d 121, 130 (D.D.C. 2009). In *Alliance*, the court reasoned the "Corps must do more than give vague explanations…[and] it must explain fully, based [o]n analysis adequate to the task, why other alternatives are either impracticable or more damaging." *Id*. In *Alliance*, the court found that the Corps' LEDPA determination was arbitrary and capricious because it failed to explicitly define why other alternatives were impracticable and to compare those alternatives against one another. Just like in *Alliance*, the Corps did

not explicitly define why other alternatives were impracticable. Rather, the Corps justified its use of the segmented project in a meaningless analysis. *See* AR041038-68.

When compared to the other NEPA alternatives, Alternative 3 could not be chosen as the LEDPA. Alternative 3 inundates 586 acres of wildlife habitat, destroys a minimum of 42.5 acres of mature cottonwoods, floods 159 acres of wetlands, and is the **most** environmentally damaging practicable alternative. Each other alternative impacts less wetlands, has fewer water quality impacts, and impacts less wildlife habitat, including endangered species habitat. Alternative 3 is by a wide margin the most environmentally damaging alternative.

Table 1 – Project Alternatives' Impacts to the Aquatic Ecosystem[4]

Project Alternative	***Wetlands***	***Water Quality***	***Threatened and Endangered Species***
Alternative 1: No Action	21.26 acres	None	Potential for loss of Preble's habitat; aquatic species could benefit from creation of aquatic habitat at gravel pits
Alternative 2: NTGW + Downstream Gravel Pits	9 acres	Short-term, insignificant impacts from well construction and gravel pit conversion	Aquatic species could benefit from creation of aquatic habitat at gravel pits
Alternative 3: 20,600 acre-foot Reallocation (*Corps' chosen alternative*)	157.2 acres; additional acres potentially impacted by road and recreation facility relocations	Chatfield Reservoir effects (eutrophication, algal blooms, lower metals, increased phosphorous concentrations); potential downstream South Platte River impacts during low-flow periods	454 acres of Preble's habitat flooded, including 155.2 acres of critical riparian habitat; additional 2.54 acres impacted by facilities relocation
Alternative 4: 7,700 acre-foot Reallocation + NTGW + Downstream Gravel Pits	119.8 acres; additional acres potentially impacted by road and recreation facility relocations	Same types of impacts as Alternative 3, but at lower levels	270 acres of Preble's habitat flooded, including 87.6 acres of critical riparian habitat; additional 2.54 acres impacted by facilities relocation

The only potential way that the Corps might argue Alternative 3 is not the most environmentally damaging alternative is to argue that the impacts will all be fully mitigated; however, compensatory mitigation cannot be considered when selecting the LEDPA. The MOA, cited above, between the Corps and EPA makes clear that in projects such as this, the primary emphasis is on avoidance of impacts to wetlands, with compensatory mitigation only considered for unavoidable impacts. (ECF No. 33-2,

[4] AR036196-245.

at 16 (discussing sequencing of mitigation after avoidance and minimization)). The Corps further explained in the MOA that the mitigation framework outlined is intended to apply to all Corps activities, including Civil Works projects. *Id.* at 6. Considering compensatory mitigation would lead to absurd results such that any alternative could be chosen as LEDPA because compensatory mitigation would mean that all projects have a net of no environmental impact. Not only does this defy logic, it also is contrary to Corps and EPA guidance on the matter.

The Corps ignored its own internal guidance when it did not follow the § 404(b)(1) permitting process in selecting the LEDPA. The Tenth Circuit has held that "the failure of an agency to comply with its own regulations constitutes arbitrary and capricious conduct." *Cotton Petrol. Corp. v. U.S. Dep't of Interior, Bureau of Indian Affairs*, 870 F.2d 1515, 1527 (10th Cir. 1989). Additionally, "Agency decisions that depart from established precedent without a reasoned explanation will be vacated as arbitrary and capricious." *Id.* at 1527. Because the Corps failed to conduct a proper LEDPA analysis for the Project, comparing Alternative 3 to the other NEPA alternatives, and because the Corps ignored its own internal guidance, this Court should vacate the ROD and enjoin action on the Project until the Corps had conducted a valid 404(b)(1) analysis.

C. The Corps Unlawfully Segmented the Project to Produce a Favorable Section 404(b)(1) Analysis for Its Preferred Alternative.

The Chatfield project was improperly segmented into recreational facility modifications, rising water levels, and environmental mitigation measures. AR038598. The three segments are inextricably linked because the relocation of recreational facilities and mitigation only occur to offset the harms of raising the water level at Chatfield

Reservoir. By breaking up the integral components of the Project, the Corps' narrow analysis disregards well understood NEPA alternatives that would have completely avoided discharge of dredged or fill material. Avoiding the discharge of dredged or fill material, wherever practicable, is the primary purpose of the 404(b)(1) guidelines. Therefore, the Corps' segmentation of the project into smaller parts for only the CWA analysis renders the entire analysis unlawful.

Throughout the NEPA process the Corps compared distinct, complete alternatives to each other. AR036171. However, when the Corps went through the Section 404(b)(1) analysis, it abruptly segmented Alternative 3 into three parts. The Corps then looked at practicable alternatives to one of these parts, the relocation of recreational facilities. AR038958.

The Corps made clear throughout the EIS, in every part except Appendix W where the 404(b)(1) analysis is supposed to be, that the relocation of recreational facilities is an integral part of the complete Project, including the rising water levels. On the very first page of the EIS, when discussing the list of work to be done as part of the Project, including explicitly the relocation of recreational facilities, the Corps explained that the "proposed CDNR work is integral to the reallocation project, because all the work and features are essential components of the Selected Plan." AR036104, 036560. The Corps reiterated this conclusion in a section specifically about recreation, stating clearly: "The Recreation Facilities Modification Plan is considered to be an integral part of the Selected Plan." AR036568. Similar statements were made regarding mitigation measures. AR036573. The Colorado Water Conservation Board, ("CWCB"), which is funding the relocation of

recreational facilities, agreed with this assessment, stating that "[a]ll of the identified implementation work is integral to the project." AR036564 (explicitly including work on recreational facilities). The only place in the EIS where the relocation of recreational facilities is not treated as an integral part of the whole project is in the 404(b)(1) analysis. AR036582-84; AR038978-82.

Additionally, applicable Federal regulations require the Corps to consider alternatives that would avoid discharge altogether. Corps regulations make clear that it is in the public interest to discourage the "unnecessary alteration or destruction" of wetlands. 33 C.F.R. § 320.4(b). The 404(b)(1) guidelines, codified at 40 C.F.R. § 230, include specific requirements to avoid discharge of dredged or fill material into wetlands. 40 C.F.R. § 230.10(a). The guidelines also instruct that NEPA alternatives should ordinarily provide the basis for review. 40 C.F.R. § 230.10(a)(4).

The Corps' internal guidelines also support the idea of a single, complete project being carried through all phases of analysis. Project planners must "focus on the larger, complete plan(s) even when carrying out specific, individual tasks." U.S. Army Corps of Eng'rs, Dep't of the Army, *Planning Guidance Notebook* at 2-5. The Principles and Guidelines document from 1983 confirms this approach, emphasizing that the entire project, including mitigation, must be considered as an integral plan. U.S. Water Res. Council, *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*, IV 1.6.1 (March 10, 1983).

Other agencies also noticed the flaws in the Corps' CWA compliance. In July of 2009, the Corps Regulatory Branch reiterated the importance for Corps Civil Works to perform its

Section 404(b)(1) analysis on the entire Project, not just segmented parts. AR044710. When the Corps drafted its initial Preliminary Draft EIS ("PDEIS"), EPA sent a letter on May 13, 2009 stating its concern that the analysis should not have "considered the raising of water levels separately from the other associated actions, including the relocation of infrastructure." AR044692; *see also* AR038692. In a response letter dated February 3, 2010, the Corps asserted that the PDEIS was merely preliminary and that, when it did issue a FEIS for public comment, it would demonstrate compliance. AR038695. However, the Corps failed to correct the flaws identified. AR041038. Although the Corps Civil Works program eventually convinced the other agencies to go along with its viewpoint, Denver Audubon respectfully asks the Court to make the ultimate determination of what procedures the Clean Water Act and NEPA require. There is no need to defer to an unreasonable interpretation of the Corps' own regulations and guidance documents.

Lastly, courts have rejected attempts to segment a project based on arguments that smaller portions of the project have an independent utility. Although the Tenth Circuit has not commented on segmentation with regards to a CWA analysis, it has recognized that segmentation of a project is improper in the context of NEPA analysis. *Citizens' Comm. to Save Our Canyons v. U.S. Forest Serv.*, 297 F.3d 1012, 1028 (10th Cir. 2002). "One of the primary reasons for requiring an agency to evaluate 'connected actions'...is to prevent agencies from minimizing the potential environmental consequences of a proposed action...by segmenting or isolating an individual action that, by itself, may not have a significant environmental impact." *Id*. Similarly, in *Utahns,* the Tenth Circuit also stated that "...significant cumulative impacts are not to be made to appear insignificant by

breaking a project down into small component parts." 305 F.3d at 1182 (citing 40 C.F.R. § 1508.27(b)(7)).

Similarly, in a Federal district court in Florida, an attempt to segment a development project in order to avoid greater NEPA review and also to speed up the issuance of the Section 404 permit under the Clean Water Act was rejected. *Fla. Wildlife Fed'n v. U.S. Army Corps of Eng'rs*, 401 F. Supp. 2d 1298, 1313-23 (S.D. Fla. 2005). The court explicitly relied on the "anti-segmentation" rule which prohibits agencies from evading NEPA responsibilities by artificially dividing projects up in order to avoid findings of significant impact. *Id.* at 1313.

The segmentation of the Chatfield Project is even more egregious than the dispute in *Florida Wildlife Federation* because in this case, the Corps engaged in a broad analysis of NEPA alternatives and only narrowed the scope of analysis for the LEDPA determination. The Corps should not have limited its scope of environmental analysis under Section 404(b)(1) to particular segments when it is clear the Chatfield project was conceptualized as an integrated whole. There is no indication that the relocation of recreational facilities has independent utility; instead, it is only being done in order to compensate for the many negative impacts of rising water levels. An agency is not allowed to change the scope of analysis simply to help its preferred or otherwise convenient alternative secure regulatory approval. *Fla. Wildlife Fed'n*,401 F. Supp. 2d at 1318.

Other cases also make clear that in the NEPA context, the overall project should be considered rather than smaller segments of the project. Because NEPA ordinarily provides the inputs for the Section 404(b)(1) analysis, these cases are instructive for this issue of

first impression under the Clean Water Act. One of these cases is discussed in the record, in a memorandum from Corps legal counsel to the Director of Civil Works. The memorandum noted that a case from the Ninth Circuit, *Save Our Sonoran*, required a complete project be included in the permitting analysis. AR016159. Legal counsel stated, "the Corps should continue to apply 33 C.F.R. Appendix B to all cases, and should use precedent—including that in *Save Our Sonoran*—to guide implementation of Appendix B where the particular factual circumstances are easily indistinguishable from the precedential cases' facts." AR016159; *Save Our Sonoran, Inc. v. Flowers*, 408 F.3d 1113, 1126 (9th Cir. Ariz. 2005). If the Corps had followed instruction given by its own legal counsel, they would have arrived at the conclusion that it needed to analyze the Project as a single and complete concept.

In *Save Our Sonoran*, the permit applicant sought to fill portions of braided washes to provide road and utility access to a major residential development. *Sonoran*, 408 F.3d at 1118. The Corps issued the § 404(b) permit by analyzing only the impact of the washes and not the entire project. *Id.* at 1119. The court reasoned that "the Corps must determine the potential impact that a proposed development would have on the jurisdictional waters, and on 'those portions of the entire project over which the district engineer has sufficient control and responsibility to warrant Federal review.'" *Id.* at 1120 (citing 33 C.F.R. Pt. 325, App. B § 7(b)(1)). The court held that any development the Corps permits would have an effect on the entire property, and thus the NEPA analysis should have been carried through for the entire project. *Id.* at 1122. This means that if there are portions of a project which are inextricably linked, a NEPA analysis must be done for the entire project, and not simply a segment.

The Ninth Circuit stated that "each fact situation must be evaluated to determine if there is sufficient federal control and responsibility over the activities occurring in jurisdictional waters and requiring a Corps permit." AR016159. When the Corps is confronted with a situation where the activity requiring a permit is one component merely part of a larger non-federal project, the Corps must identify the specific activity over which it has sufficient control and responsibility to warrant further review under NEPA. AR016160 (citing *Sylvester v. U.S. Army Corps of Eng'rs*, 884 F.2d 394 (9th Cir 1989)). 33 C.F.R. Part 325, Appendix B dictates that if the Government has "sufficient control and responsibility" over the permitted activity and interrelated activities, both activities must be considered for NEPA analysis. AR016161.

In this case, the segmentation of the Project is similar to the segmentation of the *Save Our Sonoran* facts.. It is clear that the three separate segments are inextricably linked, therefore must be considered as a whole project in accordance with 33 C.F.R. Part 325, Appendix B guidance as well as precedent from *Save Our Sonoran*. The Corps' legal counsel had brought to light the fact that there were regulations and precedent available to guide them in the permitting process including the aforementioned Planning Guidance Notebook, MOA, and P&G. For the Corps to disregard this detailed guidance is arbitrary, capricious, and an abuse of discretion.

Although there is scant law on segmentation of a project under the Clean Water Act, NEPA case law makes clear that projects should not be broken down into smaller parts to avoid significant regulatory requirements. Therefore, the Corps should not avoid the complications of applying 404(b)(1) to the entire Project by segmenting out the relocation

of recreational facilities to ensure more favorable review. Denver Audubon respectfully asks the Court to set important precedent on segmentation with regards to the CWA to definitively provide guidance for future projects in this jurisdiction.

Because the NEPA alternatives ordinarily supply the basis for choosing LEDPA under the 404(b)(1) guidelines, and because the relocation of recreational facilities is an integral part of the Project rather than a distinct segment, the Corps violated the CWA when it failed to identify the LEDPA after comparing Alternative 3 to the other NEPA alternatives.

II. THE CORPS' NEPA ANALYSIS WAS DEFICIENT BECAUSE IT IMPROPERLY EXCLUDED REASONABLE ALTERNATIVES FROM DETAILED STUDY.

The Corps violated NEPA when it failed to consider all reasonable alternatives to the Project including enhanced water conservation, upstream gravel pits for water storage, and the already-existing Rueter-Hess Reservoir for water storage. At a minimum, these actions should have been combined into an additional alternative studied in detail alongside Alternatives 1, 2, 3, and 4. Instead, the Corps relied on three main arguments to screen these alternatives out—arguments which have been rejected by federal courts and are impermissible under NEPA.

First, the Corps improperly screened out alternatives that it deemed could not meet the entire purpose and need standing alone. The Corps is required, however, to consider partial alternatives, perhaps in combination with other actions. Second, the Corps invalidly rejected storage at Rueter-Hess Reservoir because it would require action by a third party. Finally, the Corps built straw man arguments without adequate support by asserting that additional infrastructure would be needed to store water anywhere but at Chatfield,

without adequately explaining this justification for screening out alternatives. Particularly egregious was the screening of Rueter-Hess. As the Corps was well aware, infrastructure to connect the South Platte River to Rueter-Hess Reservoir had been or was planned to be constructed in the near future.

Alternatives including the proposed action are the heart of the EIS. 40 C.F.R. § 1502.14. The Corps failed to rigorously explore and objectively evaluate all reasonable alternatives. It failed to discuss the reasons for eliminating alternatives. It devoted little serious investigation of each alternative to be considered in detail, including the proposed action. It unlawfully included only alternatives within its jurisdiction. 40 C.F.R. § 1502.14(a)-(c). In each foregoing instance, the Corps acted arbitrarily and capriciously, denying the public the ability to evaluate comparative merits.

A. Alternatives cannot be eliminated from detailed study on the basis that they are partial alternatives.

The Corps failed to consider the partial alternatives of enhanced water conservation and upstream gravel pit storage, and is prohibited from using the argument that, standing alone, the options cannot provide for the project need. *Davis v. Mineta*, 302 F. 3d 1104, 1122 (10th Cir. 2002); *Utahns*, 305 F.3d at 1164.

In *Utahns*, the court held that a violation of NEPA occurred rendering the FEIS inadequate, by the failure to consider the integration of two individual actions as a reasonable alternative to a highway project. 305 F.3d at 1170-71. In *Davis*, the court held that rejecting options because, standing alone, they would not meet the purpose and need of the project was one of the most "egregious shortfalls of the environmental assessment."

302 F.3d at 1122-23. Similarly here, the Corps did not consider the reasonable option of enhanced water conservation in combination with existing upstream gravel pit storage.

Neither the Corps, nor the public, has any idea of how much water could be saved by the water providers participating in the Project through enhanced conservation. Nowhere in the FEIS does the Corps conduct any serious or detailed review of how much water could be saved through more aggressive conservation measures. The FEIS does briefly touch on the general topic of water conservation in a subchapter ironically titled "The Concept of Increased Water Conservation." AR036187-93. As this Court has correctly noted, that portion of the FEIS discusses current water conservation measures and current conservation programs. (ECF No. 48 at 10.)[5] But the Corps made no effort in that section to actually analyze how much water supplies could be increased through more aggressive conservation, despite the title indicating that it would discuss "**increased** water conservation." Instead, the Corps made a conclusory and unsupported assertion that "the water shortages of sustainable water supplies faced by the water provides will not be resolved by water conservation measures alone" and thus rejected conservation as a practicable alternative. AR036188. This situation is thus actually worse than the cases in

[5] Denver Audubon acknowledges that the Appendix AA does discuss future water conservation plans for at least some of the water providers. (ECF No. 48 at 10). But these plans are already in existence. The purpose of including a detailed discussion of enhanced water conservation in an EIS would be to push and encourage the water providers to do more than they are already planning to do. Simply noting existing plans for the future or even listing off measures that have been identified for possible future implementation does not replace some sort of rigorous analysis by the Corps of how much water the supply of sustainable water could be increased through conservation and how that could be used, at least in part, to meet the purpose and need of the Project under consideration. By simply paying lip service to the general topic of conservation, the Corps avoided informing itself and the public of how water supply could be increased through conservation.

Utahns and *Davis* because the Corps rejected conservation not as a partial solution to the purpose and need of this Project, but rather to the much broader need for conservation across the entire region. This Court should not sanction such a dramatic expansion of reasoning that has already been rejected in its more limited form by the Tenth Circuit.

Similarly, upstream gravel pits were eliminated from detailed consideration "due to limited storage capacity." AR036201; AR037197. The Titan ARS gravel pit alone provides at least 4,500 acre-feet with the potential to store up to 11,000 acre-feet. AR036183; AR039473. Oddly this alternative was deemed insufficient while downstream gravel pit reservoirs, identified to have a capacity of 7,835 acre-feet of storage volume, were carried forward as part of Alternative 2. AR036183; AR036195.

The justification for treating the upstream gravel pits differently from the downstream gravel pits was incredibly thin. AR036197. According to the Corps, upstream gravel pits have "limited storage capacity" and "logistical difficulties of combining reservoirs to meet the storage requirements of the project." *Id.* No explanation is given for why the Corps drew a line between the 7,835 acre-feet available downstream and the 4,500 acre-feet available upstream at the Titan ARS pit. And the Corps does not even mention in the EIS that evidence elsewhere in the record indicates that the Titan ARS gravel pit could potentially store 11,000 acre-feet, much more than the downstream gravel pits which were examined in more detail. AR039473. Even if the Titan ARS gravel pit could only store 4,500 acre-feet, the Corps did not adequately explain why this partial solution should not have been considered in more detail, as the downstream gravel pits were.

The Corps relied on the invalid justification for excluding enhanced water conservation and upstream gravel pits—specifically that they would not provide a complete solution to the purpose and need. Because the Tenth Circuit and other courts have held this reasoning is not sufficient to screen out an alternative from detailed study in an EIS, this Court should vacate the ROD and remand the EIS to the Corps with instructions that it prepare a Supplemental EIS fully analyzing these partial alternatives.

B. The Corps Cannot Eliminate Rueter-Hess Because It Would Require Action by a Third Party.

The Corps unlawfully eliminated Rueter-Hess Reservoir from full, detailed consideration on the basis that utilizing it requires third-party action. Rueter-Hess Reservoir was listed initially as a potential alternative to the Project in the initial screening process of the EIS. AR036202. It was eliminated before detailed consideration solely because the owner of the Reservoir had not yet made storage available for sale. AR036202. When the abrupt elimination of Rueter-Hess was brought up during the public commenting period, the Corps stated that a pipeline did not yet exist to connect Rueter-Hess to Chatfield.[6] AR037196. Utilization of the Rueter-Hess Reservoir could have been an integral component of the broad problem of the need for local, cost-effective and environmentally sound storage of water.

In *Morton*, the court rejected the government's argument that the only alternatives required for discussion were those which the official or agency issuing the statement could

[6] As discussed in the following section, this is also an invalid reason for eliminating Reuter-Hess Reservoir both because it was too conclusory and also because factually it is incorrect, since the Corps has been working on permitting for Project WISE which includes connections from the South Platte River to Reuter-Hess Reservoir.

adopt and put into effect. *Nat. Res. Def. Council, Inc. v. Morton*, 458 F.2d 827, 835 (D.C. Cir. 1972). Rather, the court reasoned that when the proposed action is an integral part of a broad problem, the range of alternatives that must be evaluated is broadened. *Id.*

Like *Morton*, the Corps eliminated Rueter-Hess Reservoir from consideration because Parker Water and Sanitation District ("PWSD") has not yet "made any additional [storage] capacity available for sale." AR036202. Even if PWSD refused to make any additional storage capacity available, that would not be an adequate reason to exclude the alternative from the EIS. But PWSD had not refused to do so, and the Corps should have analyzed the impacts that would have been associated with storing water at Rueter-Hess instead of Chatfield. Even more troubling, the operator of Rueter-Hess Reservoir is not just some random third party—PWSD was actually one of the initial participants in the Project, although they dropped out because they presumably found better alternatives to the Project, such as Rueter-Hess and Project WISE. The Corps' alternatives analysis was thus severely flawed because it was based on an improper rationale for screening out Rueter-Hess Reservoir based on the need for third party action.

C. The Corps did not provide adequate rationale for eliminating Rueter-Hess Reservoir and upstream gravel pits from consideration.

In *Wilderness Soc.*, the court held that the defendant agency did not provide sufficient evidence to support their claim that directional drilling was technically and economically infeasible to support rejection of the alternative for the project in question. *Wilderness Soc., Ctr. for Native Ecosystems v. Wisely*, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007). In the same manner, the Corps has failed to prove that Rueter-Hess Reservoir and upstream gravel pits are infeasible alternatives. AR036201-02.

The Corps stated in the FEIS that Rueter-Hess was eliminated because its owner, PWSD had not made any additional capacity available for sale. AR036198. Public comments noted that in January 2010, the Colorado Public Works Journal indicated that storage space **would be** available after the project was completed. AR037197. The Corps failed to provide a source that would make their statement more than an assumption—there is no evidence in the record that PWSD expressly indicated that there is no more available storage space in Rueter-Hess Reservoir. AR036198.

The Corps also asserted that "current storage commitments" at Rueter-Hess Reservoir precluded it from detailed consideration. AR036198; AR036202. But on the contrary, comments provided to the Corps' draft EIS pointed out that there was in fact, excess capacity that would be for sale. AR037197. In response to public comments, the Corps once again stated that there was no storage for sale without any authority and for the first time asserted that Rueter-Hess Reservoir was precluded from being a viable alternative because it lacked infrastructure. *Id.* Again, the record fails to support this with any evidence and the FEIS directly contradicts this assertion by stating that new infrastructure was constructed to reach at least four of the Chatfield Project participants. AR036516.

The Corps itself had issued a public notice for Section 404 permitting at Rueter-Hess, which showed that existing and planned infrastructure will enable water to be taken from the South Platte River, downstream of Chatfield, to be stored at Rueter-Hess, and that the Corps knew of this. AR041022. Project WISE infrastructure connects the South Platte River to the Rueter-Hess Reservoir, making Rueter-Hess a viable alternative to Chatfield for

the water providers. The Corps asserted different justifications such as the purported need for a pipeline to connect Chatfield and Rueter-Hess Reservoir. AR037196 ("no pipeline is currently proposed to connect Chatfield Reservoir to Rueter Hess Reservoir"). The secondary justification is incorrect, and the Corps should not have alleged it.

Lacking infrastructure was not listed in the Corps' reasons for elimination anywhere in the FEIS, and was subsequently asserted after the fact in responses to comments without evidentiary support. AR036202; AR037195-97. None of the reasons the Corps provided are supported by evidence in the record; therefore, Rueter-Hess should have been considered as a full or partial alternative.

Similarly, the Corps did not provide adequate rationale for eliminating upstream gravel pits. The administrative record demonstrates that the pits were summarily eliminated because use would require diversion to and from the South Platte River and because their storage capacity is limited. AR036201. However, the Corps admits that the Lower South Platte gravel pits are subject to the same diversion limitation, but they were carried forward for analysis. *Id*. The Corps failed to explain why Lower South Platte gravel pits were carried forward while local upstream gravel pits were not. *Id.* Furthermore, the upstream gravel pits are located adjacent to Plum Creek and less than a mile from Chatfield Reservoir, making a diversion to the South Platte River feasible. Additionally, the upstream gravel pits could provide approximately 11,000 acre-feet of storage. AR036183. This represents well over half of the 20,600 acre feet of storage space that the Corps identified as an objective in its purpose and need statement. AR036129. The record does not

support the Corps' assumption that the local upstream gravel pits would be less feasible than other alternatives, and their elimination was inadequately discussed.

III. The Corps Failed to Foster Informed Decision Making and Public Participation as Required by NEPA.

The Corps violated NEPA's requirement to foster informed decision making and public participation when they made incorrect assumptions regarding future water rights holders and used misleading, non-standard terms regarding water yield during the creation of the EIS. Because these deficiencies mean the twin aims of NEPA were not met, this Court should vacate the ROD and remand to the Corps with instructions that the FEIS must be supplemented or revised in a way that does foster informed decision-making and public participation.

A. Neither the Corps nor the public know what water will be stored for a significant portion of the project, with unknown consequences for the environmental impact.

The record before the court makes clear that neither the Corps nor the public know what the environmental impacts of the Project will be, because for over 20% of the water storage, no one has any idea what water rights will be stored there. AR036150. Knowing what water rights will be stored in Chatfield Reservoir, particularly the seniority of those rights, is critical to accurately assessing what the environmental impacts of the Project will be. The purpose of NEPA is to insure a fully informed and well-considered decision. *Amigos Bravos v. U.S. Bureau of Land Mgmt.*, Case No. 09–CV–00037–RB–LFG, 2011 WL 7701433, *5, *10 (D.N.M. Aug. 3, 2011). If the seniority of the water rights to be stored at Chatfield is unknown, the Corps should have analyzed the potential impacts based on the range of reasonable variation in seniority of the water rights. Instead, the Corps simply

relied on outdated assumptions which it knew were not accurate at the time the ROD was approved. Therefore, the FEIS needs to be remanded to the Corps to fully analyze the range of future impacts of the Project.

Additionally, further contradictory information contained in the EIS, which the Corps relied on to make their decision, causes them to violate the informed decision-making requirement of NEPA. The planning section of the FEIS states, "data also considered in this analysis were collected from involved water providers to determine the near term need for water that could be provided by up to a 20,600 acre-foot reallocation at Chatfield Reservoir." AR036175. The FEIS includes a table of water storage rights that was used to explain what the future of Chatfield Reservoir would look like, but a footnote mentioned that this table included water providers that were in the process of dropping out of the project. AR036150. The FEIS explains that beginning in 2004, these entities began discussing how storage at Chatfield was to be allocated, yet the process was very turbulent as these initial participants began dropping out and the percentages had to be changed. *Id.* The table containing the analysis for the average year yield of 8,539 acre feet that is stated in the purpose and need in Appendix BB was based off of the fifteen water providers initially involved in the project. AR036929. As previously stated, this analysis is inaccurate because it includes water providers who were already listed as no longer participating in the project or were in the process of dropping out. AR036152. Thus, at the time the Corps signed the ROD for the Project, it knew that the assumptions made in the FEIS regarding the water that would be stored were incorrect.

The filings by the intervenors in this case highlight the changing and uncertain nature of the storage rights and the water which will be stored in them. Specifically, the Chatfield Participating Entities claim in their Motion to Intervene that they are paying for "approximately 61% of the capacity in Chatfield Reservoir that will be provided by the reallocation of storage space." (ECF No. 17-2, at 1). The remaining storage capacity in the reservoir, nearly 40%, is being paid for by the State of Colorado, primarily the Colorado Water Conservation Board, one of the agencies that is part of the Colorado Department of Natural Resources. (ECF No. 22-1, at 6) (CDNR has sole responsibility for funding the Project, while water providers are paying CWCB for their share of the storage space allocation). However, the CWCB cannot store any water in the Project as it is only authorized to have instream flow rights, and the Project is intended only for Municipal and Industrial water. AR036998. Therefore, a large portion of the storage capacity will have to be sold off to various water providers in the future. No one—not the Corps, nor the public—knows what water rights will be stored in approximately one third of the storage space in the Project.

The water rights which will be stored in the Project have a profound impact on the environmental impacts to be expected at Chatfield. If CWCB sells storage capacity to a senior water rights holder, then the Reservoir could be full much more frequently. If it sells the storage capacity to a provider with more junior water rights than the current participants, the Reservoir will be full even less than estimated. Appendix V of the EIS briefly mentions in one sentence that reservoir levels may be affected by reservoir management, but does not give an example of what that situation would look like, even

though it goes through extensive hypothetical analyses of other situations such as dry years or flooding. AR038889. The Corps chose not to analyze the impacts based on a reasonable range of possible future outcomes, but instead based its analysis on data that it knew to be inaccurate at the time the ROD was signed, and even at the time the FEIS was published. The Corps acknowledged that "[m]any of those impacts depend on the timing and duration of pool level fluctuations under the proposed reallocation alternatives (Alternatives 3 and 4) or on other sources of uncertainty." AR036371. The FEIS recognizes that uncertainties could impact numerous environmental resources, such as water quality, aquatic life and fisheries, tree clearing in the fluctuation zone, wetlands, weed control, and more. AR036372-76. However, in a quite long list of uncertainties that might impact those resources, changes in the seniority of the water rights is not mentioned and changes in the Chatfield water providers is only listed with respect to operations of the reservoir and not with respect to the direct environmental impacts. AR036376. In the discussion of the environmental impacts of Alternative 3, the FEIS does not mention potential changes in the water providers or changes in the seniority of the water rights to be stored as part of the Project. AR036378-85. The FEIS only briefly mentions in Appendix V that "it is assumed that the water provider acquiring rights to that space would store and release water in the same manner as the original water provider. Under the current understanding of how water providers would access and store water at Chatfield, there are no expected direct or indirect impacts on upstream areas outside of the Chatfield Reservoir study area." AR038891.

This failure to analyze the effect of water rights in the reservoir means that neither the Corps nor the public were informed about the potential environmental impacts of the Project. At a minimum, the Corps needed to disclose the shortcoming in its analysis of the environmental impacts, which it did not do. *See Lands Council v. Powell*, 395 F.3d 1019, 1032 (9th Cir. 2005). In the public comments, this issue of the impact of water rights on the environment was brought up, and the Corps responded that "if water rights changes lead to significant effects not originally identified in the EIS, a supplement would be warranted. AR037202. At the time of the finalization of the EIS, the list of water providers was not complete, and therefore the conclusion that there would be no direct or indirect impacts to the environment was purely hypothetical and thus arbitrary and capricious. The ROD should be vacated and the Corps instructed to supplement the EIS to assess how the environmental impacts might vary based on the water rights eventually stored, or to place limitations on what water rights can actually be stored in the Project.

B. The Corps used misleading, non-standard terminology to describe yield, to bury the fact that the project will reliably store no additional water at great cost.

The Corps violated NEPA's requirement for informed public participation by substituting standard terms for terms of their own arbitrary creation – specifically using "average year yield" instead of "firm yield" or "safe yield". In the executive summary of the final EIS and the purpose and need statement, critical parts of the document for alerting the public about what the government proposes to do, the Corps chose not to use the standard industry terms safe or firm yield to describe how much water storage the project would provide. They did this because such terminology would have made plain that the project

would reliably increase water storage in the region by **0 acre feet**. Instead, the Corps used an apparently made up term of "average year yield" to present the project in a better light. The damning conclusion that the project would provide 0 acre feet of storage was instead buried on page 2,740 of the EIS, where only the most dedicated of observers would find it. This usage of confusing and non-standard terminology along with burying a key conclusion deep within the appendices contributed to the Corps' failure to promote informed public participation in this case, which is a violation of NEPA.

In *Friends of Earth v. Hall*, the court found that failure to disclose a technical uncertainty in the EIS and relying on its conviction the project would be successful, without assessing the environmental impact of its failure, was a violation of the informed public participation aim of NEPA. *Friends of Earth v. Hall,* 693 F.Supp. 904, 922 (W.D. Wash. 1988). In the Chatfield case, the Corps failed to disclose two important things: (1) the definition of the term average year yield; and (2) how it differed from the standard industry term.

The final EIS uses the term "average year yield" seven times in the executive summary, without defining what it means. AR036126; AR036130; AR036133; AR036137. In the purpose and need statement contained in chapter 1 of the FEIS, the Corps again fails to define the term, although it does explain how the average year yield for the Project was calculated. AR036153. The term is not defined until Chapter 2 of the FEIS, where it is defined in reference to the Project, further highlighting that this is not an industry standard term but rather one made up especially for the Chatfield Reallocation Project. AR036174.

The FEIS finally states on the 450th page that "average year yield" means the average annual amount of water expected to result from the storage of water rights. AR036553.

The second issue of the low dependable yield is mentioned in Chapter 5 without disclosing that the dependable yield is not just low, it is nonexistent or zero. AR036540-41. For an interested member of the public who was able to read the EIS to page 2,740 and see the dependable yield of zero, they would realize that under every measure analyzed, the Project will reliably store 0 acre feet of water per year. AR036926. As a result of the "very low yield to storage ratio, the cost of this project is vastly higher than any other Corps reallocation." AR036926 (Updated Cost of Storage of $14,300 per AF/yr is "[m]ore than 4 times the highest"). However, it was unreasonable to bury such an important conclusion so deep in the EIS Appendices. Had this information been presented prominently in the EIS, the Corps would have done much more to promote informed public participation.

The FEIS does occasionally use the standard terminology, without explaining why the terminology varies or what significance the changes in terminology have, further limiting informed public participation. "Firm annual yield" is mentioned in discussions of converting agricultural water to municipal and industrial use. AR036186. But firm yield is never defined or used elsewhere in the FEIS. "Dependable yield" is referenced as being "low," but similarly is not defined in the FEIS itself. AR036540-41. "Dependable Yield Mitigation Water" was important enough to be included in the list of acronyms, AR036652, but the Corps failed to explain why "dependable yield" was therefore not the appropriate measure to use in analyzing the Project. The more common term "safe yield" is not used in the FEIS. The Corps does not explain in the FEIS why it chose the unusual non-standard

"average year yield" terminology. Denver Audubon can only conclude that the Corps wished to obscure this inconvenient fact from the public and to make the preferred alternative look less unreasonable. However, other parts of the record and Corps guidance documents shed light on how unusual this terminology is. The terms in the FEIS were contrary to the Corps' own practices as stated in the Corp's *Handbook on Water Supply Planning and Resource Management* ("Handbook"). AR000503-906. "Average year yield" is not found anywhere in the Handbook, yet it does refer to "dependable yield," AR000829, "firm yield," AR000849. The Handbook even divides up authority for Water Supply Storage Agreements based on "dependable" acre-feet of storage. AR000534. Most prominently, the Handbook relies on a definition of "safe yield" as "the maximum quantity of water which can be reliably available throughout the most severe drought of record, or some other specified criterion" as well as a slightly less strict definition for "yield" based on 98% dependability. AR000883. Safe yield is the term discussed in the section on "Water Supply Planning and Drought" because planners cannot rely on annual averages to ensure that drought conditions are avoided. AR000622. Safe yield and yield differ substantially from "average year yield" as it is used in the FEIS.

The record sheds scant light into how the Corps decided to use the confusing and unusual term "average year yield," but email correspondence related to the draft EIS also highlights how unusual the terminology is. Back in 2006, an economist for the Corps stated that he had always used the term firm yield, but noted that there was interest in using the alternative term "average year yield." AR005652. Early drafts of the appendices still used the standard industry terminology "firm yield" but objections were raised because that was

inconsistent with the term "average year yield" used in the EIS discussion. AR019827. A subsequent email from the Corps' contractors at Tetratech states that the term "average year yield" was "reached by consensus," with no further explanation of why or how such consensus was reached. AR019826. This email exchange should be contrasted with earlier internal presentations which used the standard terminology for yield: "firm yield and dependable yield is the maximum sustainable flow at some point in time during the most adverse sequence of stream flow." AR010741. Thus on the record before the court, the Corps did not adequately explain why it chose to use confusing and misleading terminology and to bury the critical conclusion of 0 dependable yield many thousands of pages into the appendices of the FEIS.

Because the FEIS used the confusing and unusual term "average year yield" to present the project to the public, and only included the conclusion of 0 dependable yield buried in Appendix BB, the Corps failed to meet NEPA's requirement to promote informed public participation. This flaw is further exacerbated by the Corps' failure to analyze what water rights would actually be stored at Chatfield as part of the Project, given that approximately 40% of the storage space was unaccounted for at the time the ROD was issued.

CONCLUSION

Denver Audubon respectfully requests the Court to vacate the Record of Decision and remand the FEIS to the Corps to reconsider the alternatives chosen and properly choose the LEDPA under the CWA requirements. Additionally the Court should require the Corps to prepare a supplemental EIS to account for the change in water providers and the

environmental impacts of these changes, as well as substantively address the public comments and use terminology that is industry custom.

PETITIONER'S LIST OF EXHIBITS

Exhibit 1	Declaration of Gene Reetz
Exhibit 2	Declaration of Polly Reetz
Exhibit 3	Declaration of Ann Bonnell
Exhibit 4	Declaration of Hugh Kingery
Exhibit 5	Declaration of Urling Kingery
Exhibit 6	Declaration of Bob Stocker
Exhibit 7	Declaration of Nancy Stocker

CERTIFICATE OF SERVICE

I certify that on April 1, 2016, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system, which will send notification of such to the attorneys of record.

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