

FILED
United States Court of Appeals
Tenth Circuit

PUBLISH

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

September 15, 2026

Christopher M. Wolpert
Clerk of Court

SAVE THE COLORADO, a Colorado
nonprofit corporation; THE
ENVIRONMENTAL GROUP, a Colorado
nonprofit corporation; WILDEARTH
GUARDIANS, a nonprofit corporation;
LIVING RIVERS, a nonprofit corporation;
WATERKEEPER ALLIANCE; SIERRA
CLUB,

Petitioners - Appellees,

v.

Nos. 25-1137, 25-1231 & 25-1299

LIEUTENANT GENERAL WILLIAM H.
GRAHAM, JR., in his official capacity as
Chief of Engineers of the U.S. Army Corps
of Engineers; DOUGLAS J. BURGUM, in
his official capacity as Secretary of the
Interior; PAUL SOUZA, in his official
capacity as Acting Director of the U.S. Fish
and Wildlife Service,

Respondents.

CITY AND COUNTY OF DENVER,
acting by and through its Board of Water
Commissioners (Denver Water),

Intervenor Respondent - Appellant.

26 FORMER EPA OFFICIALS; CITY OF
BOULDER; CITY OF LAFAYETTE;

CITY OF AURORA, COLORADO;
SOUTH METRO WATER AUTHORITY;
BOARD OF WATER WORKS OF
PUEBLO, COLORADO; CITY OF
ARVADA; CHAMBER OF COMMERCE
OF THE UNITED STATES OF
AMERICA; NATURAL RESOURCES
LAW PROFESSORS,

Amici Curiae.

**Appeal from the United States District Court
for the District of Colorado
(D.C. No. 1:18-CV-03258-CMA)**

Kyle Glynn, Attorney, (Adam R.F. Gustafson, Principal Deputy Assistant Attorney General, and Robert N. Stander, Deputy Assistant Attorney General, with him on the briefs), Environment and Natural Resources Division, United States Department of Justice, Washington, DC, for Federal-Appellants.

Amanda Shafer Berman, Crowell & Moring LLP, Washington, DC (Elizabeth B. Dawson and Tara M. Derbis, Crowell & Moring LLP, Washington, DC; and Jessica R. Brody and Crystal J. Easom, Denver Water, Denver, Colorado) with her on the briefs, for Intervenor-Appellant.

William S. Eubanks II (Matthew R. Arnold with him on the briefs), Eubanks & Associates, PLLC, Washington, DC, for Petitioners-Appellees.

Dulcinea Z. Hanuschak, Steven O. Sims, and Katherine J. Duncan, Brownstein Hyatt Farber Schreck, LLP, Denver, Colorado; Gabriel Racz, Clark Hill PLC, Boulder, Colorado; and Karl Ohlsen, Carlson, Hammond & Paddock, L.L.C., Denver, Colorado, filed an Amici Curiae Brief on behalf of the City of Aurora, Colorado, South Metro Water Supply Authority, and the Board of Water Works of Pueblo, Colorado, in Support of Intervenor-Respondent-Appellant, the City and County of Denver, and Reversal of the District Court's Decision.

Steven P. Jeffers, Attorney for Amicus Party, City of Arvada, Lyons Gaddis, PC, Louisville, Colorado, filed an Amicus Curiae Brief on behalf of the City of Arvada in Support of Appellant Denver Water's Opening Merits Brief.

Andrew R. Varcoe and Stephanie A. Maloney, United States Chamber Litigation Center, Washington, DC and Jeremy C. Marwell, Counsel of Record, and Adam Kleven, Vinson & Elkins LLP, Washington, DC, filed an Amicus Curiae Brief on behalf of the Chamber of Commerce of the United States of America in Support of Appellants and Reversal.

Cale Jaffe, Director, Environmental Law & Community Engagement Clinic, University of Virginia School of Law, Charlottesville, Virginia, filed an Amici Curiae Brief on behalf of 26 Former EPA Officials.

Sarah A. Matsumoto, Getches-Green Natural Resources, Energy, and Environmental Law Clinic, University of Colorado Law School, Boulder, Colorado, filed an Amici Curiae Brief on behalf of Natural Resources Law Professors in Support of Petitioners-Appellees and Affirmance.

Teresa Taylor Tate, City Attorney, Luis A. Toro, Senior Counsel, and Jessica L. Pault-Atiase, Senior Counsel, City of Boulder, Boulder, Colorado; Erin E. Poe, Deputy City Attorney, City of Lafayette, Lafayette, Colorado; and David F. Bower, Johnson & Repucci LLP, Louisville, Colorado, filed an Amici Curiae Brief on behalf of the City of Boulder and City of Lafayette in Support of Appellant City and County of Denver Supporting Reversal.

Before **HOLMES**, Chief Judge, **TYMKOVICH**, and **MORITZ**, Circuit Judges.

TYMKOVICH, Circuit Judge.

In 2002, Denver Water predicted it would soon face a water shortage. To address this problem, it proposed the Moffat Collection System Project, which would increase the holding capacity of the Gross Reservoir (a large reservoir southwest of Boulder) by raising the height of the Gross Dam. Since the proposal would affect wetlands at the base of the dam structure, Denver Water applied for the necessary wetlands permit from the Army Corps of Engineers in 2003. And after an extensive process, the Corps issued the permit in 2017. In 2026, Denver Water completed a

\$600,000,000 construction project¹ that raised the Gross Dam 131 feet, and the Reservoir stands ready to hold an additional 77,000 acre-feet of water.

But Denver Water cannot fill the Reservoir. Save the Colorado and other environmental groups sued the Corps for violating the Clean Water Act and the National Environmental Protection Act (NEPA), alleging deficiencies in the Corps's fourteen-year review process. The district court agreed and enjoined Denver Water from diverting water to the Reservoir.

Exercising jurisdiction under 28 U.S.C. § 1291, we reverse. The district court found that the Corps violated the CWA and NEPA because it (1) too narrowly defined the Moffat Project's purpose, and (2) failed to adequately consider project costs and climate change's impact on the project's feasibility. We conclude the Corps may include a project's multiple related purposes when defining the project's purpose. And we also find that the Corps's determinations on cost and climate change were reasonable and supported by the record.²

¹ The record shows that the project cost around \$600,000,000, but counsel for the Environmental Groups represented at oral argument that the project has cost over \$800,000,000.

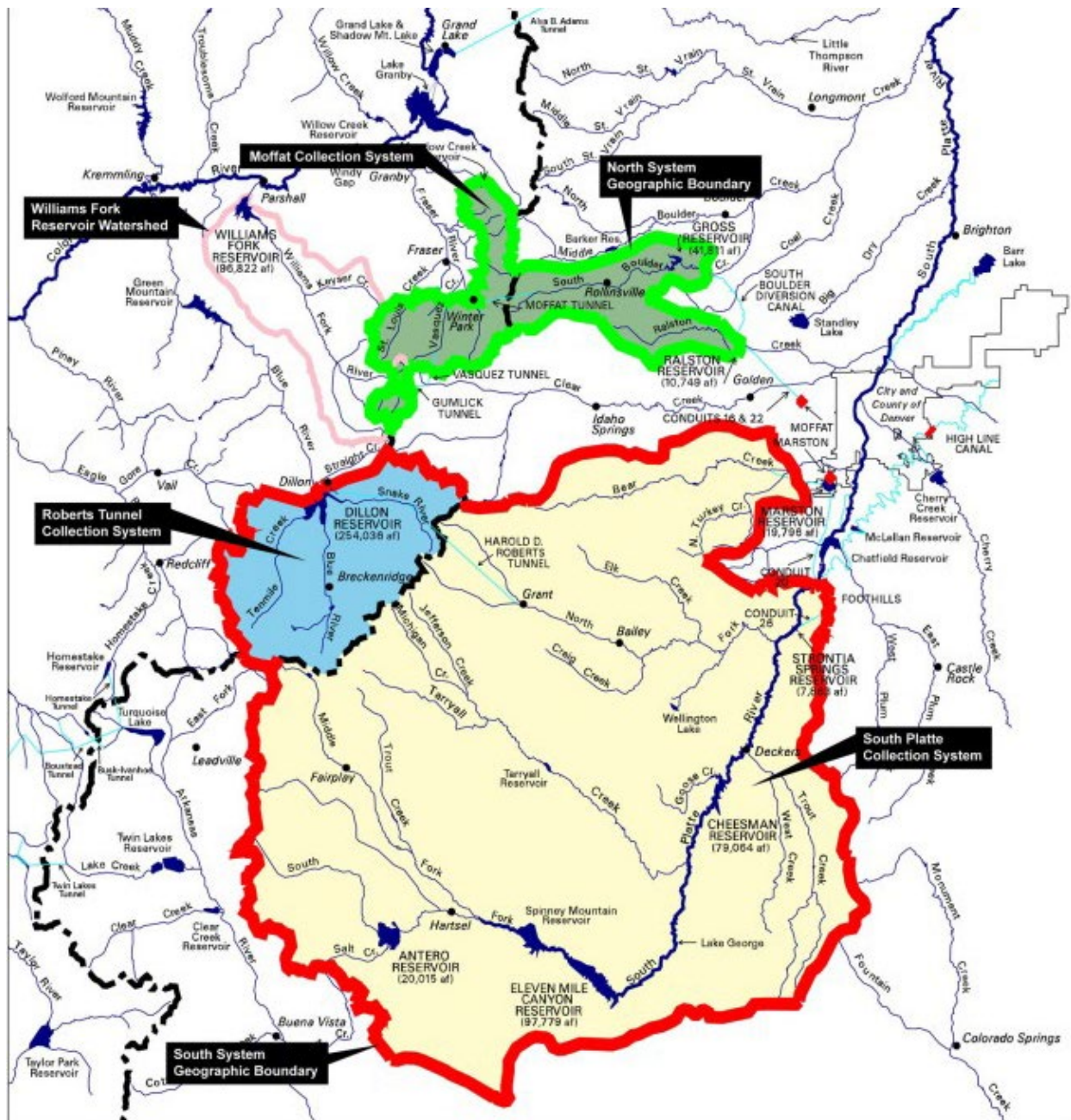
² Denver Water moved to expedite these consolidated appeals. *See* Doc. 139, 25-1137; Doc. 118, 25-1231; Doc. 103, 25-1299. We grant the motion.

I. Background

We begin with a brief description of the Moffat Project and then discuss the regulatory framework governing this appeal. Next we recount the Corps's review process, and finally, we chronicle the lengthy history of this litigation.

A. Denver Water's Proposed Project

Denver Water is a municipal water utility. Its infrastructure comprises two delivery systems: the North System (the Moffat Collection System) and the South System. These two systems are not connected. The Moffat System serves 10% of Denver Water's customers; the South System, 90%. The following map shows the systems' relative sizes.



App. 224.

In 2002, Denver Water hired a consulting group, BBC Research and Consulting, to update Denver Water’s water management plan. The group issued a “2002 IRP demand forecast,” which predicted that the demand of Denver Water’s customers would exceed Denver Water’s water supply by 2016. Denver Water also feared that its water system faced a different vulnerability: overreliance on the South System. This overreliance left Denver Water (and its customers) vulnerable to a water shortage if the South System was taken offline—because of a natural disaster, malfunction, or otherwise.

To prevent a future water shortage, Denver Water proposed an expansion of the Gross Reservoir, a dammed reservoir northwest of Denver that was built in 1954. The Expansion would raise the Gross Dam by 131 feet, increasing the holding capacity of the Reservoir. Denver Water could then fill the additional capacity by diverting water from the Fraser River and Williams Fork River on the Rocky Mountain’s Western Slope—part of the Colorado River’s drainage basin—through the Moffat Tunnel, a tunnel that cuts through the mountains near the Winter Park ski area.

Raising the Gross Dam would require placing a new foundation at the base of the dam expansion. The location for that new foundation would be in South Boulder Creek—the stream at the foot of the existing Gross Dam. Placing fill in that location required a permit from the Army Corps of Engineers. So before Denver Water could

move forward with the Gross Reservoir Expansion, it needed to secure a fill permit from the Corps.

B. Regulatory Framework

The Clean Water Act regulates water pollution in the United States by prohibiting “the discharge of any pollutant” except as authorized by the Act. *See* 33 U.S.C. § 1311(a). The Act defines “pollutant” broadly. The term encompasses not only conventional contaminants, like “sewage sludge” and “chemical wastes,” but also “rock,” “sand,” and “cellar dirt.” 33 U.S.C. § 1362(6). Thus, any project (like Denver Water’s proposed project) that plans to discharge “dredge or fill material into” the waters of the United States must obtain a permit, called a § 404(b) permit. 33 U.S.C. § 1344(b). The § 404(b) permitting process is guided by the § 404(b) regulations, which are promulgated by the EPA. The key § 404(b) regulation here—40 C.F.R. § 230.10—allows the permit to issue only if the proposed action is the least environmentally damaging practicable alternative (the LEDPA). 40 C.F.R. § 230.10(a).³ Applying that language here, the Corps could issue Denver Water’s

³ The relevant portion of the regulation reads in full: “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a).

permit only if no alternative project existed that was both practicable and less environmentally damaging than Denver Water’s proposed project.

Section 230.10(a)(2) explains how the Corps must assess practicability. “An alternative is practicable if it is available and capable of being done after taking into consideration *cost, existing technology, and logistics in light of overall project purposes.*” 40 C.F.R. § 230.10(a)(2) (emphasis added). The Environmental Groups’ challenge focuses on the italicized portions of the regulation.

The § 404(b) Regulations also assign a standard of proof. By default, the Corps must determine that the proposed action is the least environmentally damaging practicable alternative. But if the project is non-water dependent,⁴ then the Corps bears a heavier burden; it must *clearly demonstrate* that the proposed project is the LEDPA. As the § 404(b) Regulations put it, “practicable alternatives” that are less environmentally damaging are “presumed to be available, unless clearly demonstrated otherwise.” 40 C.F.R. § 230.10(a)(3). The parties here agree that Denver Water’s project is non-water dependent and that the Corps needed to *clearly demonstrate* that Denver Water’s proposed project was the LEDPA.

In addition to the CWA, the National Environmental Policy Act imposes certain procedural requirements on federal agencies before they may “buil[d], fund[], or approve[]” “certain infrastructure projects.” *Seven Cnty. Infrastructure Coal. v.*

⁴ A project is non-water dependent if its “basic purpose” can be achieved without “access or proximity to or siting within the special aquatic site in question.” 40 C.F.R. § 230.10(a)(3).

Eagle County, 605 U.S. 168, 172 (2025). NEPA’s procedural obligations arise for “major Federal actions,” 42 U.S.C. § 4332(c), and the Corps’s issuance of a § 404(b) permit is a major federal action. Thus, before issuing a § 404(b) permit, the Corps must typically prepare an EIS,⁵ which “must address the significant environmental effects of a proposed project and identify feasible alternatives that could mitigate those effects.” *Seven Cnty.*, 605 U.S. at 172. Relevant here, the EIS must evaluate “a reasonable range of alternatives to the proposed agency action . . . that are technically and economically feasible, and meet the purpose and need of the proposal.” 42 U.S.C. § 4332(c)(iii). The EIS requirement imposes no substantive standards; it is meant only “to inform agency decisionmaking, not to paralyze it.” *Seven Cnty.*, 605 U.S. at 173.

C. The Corps’s Permitting Process

In 2003, the Corps began consideration of Denver Water’s application for a § 404(b) permit. After a comprehensive review that included its use of in-house

⁵ If an agency determines that the proposed project will not “significantly affect[] the quality of the human environment,” it does not need to issue an EIS; it instead issues a finding of no significant impact. 42 U.S.C. § 4332(c)(iii); *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 757–58 (2004).

experts and outside consultants, the Corps approved the application and issued the permit in 2017.

During that fourteen-year evaluation, the Corps underwent a multi-step analysis of Denver Water's application. In broad outline, the process's timeline looks like this:

- in 2003, the Corps issued a scoping notice and summary
- in 2009, the Corps released the draft EIS
- in 2014, the Corps published its final EIS, and
- in 2017, the Corps issued its record of decision (ROD) and granted Denver the permit.

At each step, the Corps explained its decision. The Final EIS alone spanned ten volumes, and the full record stretched to nearly 200,000 pages. And at each step the Environmental Groups took issue with the Corps's analysis of the alternatives to Denver Water's proposed project. Throughout the process, the Environmental Groups identified the following primary deficiencies: (1) the Corps defined the proposed project's purpose too narrowly, causing the Corps to exclude practicable alternatives that could meet the project's general purpose; (2) the Corps failed to adequately measure the costs of the proposed project and the alternatives; and (3) the

Corps failed to account for climate change's effects on the feasibility of Denver Water's proposed project.

1. Scoping Notice and Summary

Once Denver Water applied for a permit, the Corps issued a scoping notice in September 2003. The scoping notice is an agency's first step in taking agency action under NEPA and the CWA. The scoping process determines what needs the proposed action will target and what alternatives should be considered.

The notice listed two primary needs: (1) to increase the firm yield in the Moffat Collection System and (2) correct imbalances in the Moffat and South systems. Denver Water proposed to meet those needs by increasing the capacity of Gross Reservoir, which would allow Denver Water to meet future water needs by diverting more water from the Fraser River and the Williams Fork River, and to better allocate available water from the Moffat and South systems to control for and improve the ability of the Moffat system to provide reliable water delivery in the future.

Environmental groups objected to the Corps's combining both needs together. They wanted them considered separately, so that more alternatives to a dam would be practicable. For example, one proposed project was "Conduit X," which would bridge the Moffat System and the South System by a pipeline. That would satisfy the need to correct imbalances in the system but not the need to increase firm yield.

In December 2003, the Corps issued a scoping summary, agreeing with Denver Water that the agency action should solve *both* the firm-yield and imbalance issues.

The scoping summary breaks the imbalance issue into three subparts—ensuring “reliability” of the Moffat System; fixing the “vulnerability” of the entire system due to overreliance on the South System; and adding “flexibility” to shift water-delivery burdens to the Moffat System. App. 1490.

2. Draft EIS

Following the scoping process, the Corps began the EIS review of Denver’s proposed project in December 2003. The Corps decided to prepare an EIS that would satisfy the reviews required by both the CWA and NEPA, rather than performing separate analyses. The Corps was the lead agency responsible for preparing the EIS, though input was also provided by other cooperating agencies that would approve various components of Denver Water’s proposed project. These cooperating agencies were the EPA, FERC, the Colorado Department of Public Health and Environment, and the Colorado Department of Natural Resources.

In October 2009, the Corps released the Draft EIS. The Draft’s purpose-and-need statement included both the firm-yield and imbalance purposes. The statement defined the project’s purpose as “develop[ing] 18,000 acre-feet per year of new, annual firm yield to the Moffat Treatment Plant and raw water customers upstream of the Moffat Treatment Plant pursuant to the Board of Water Commissioners’ commitment to its customers.” App. 1145.

The Draft then detailed the Corps’s alternatives analysis. The analysis began with a screening process, which proceeded in two stages. *First*, the Corps screened 303 alternative proposals based on “Purpose and Need, existing technology, logistics,

costs, and environmental consequences.” App. 1173. That initial screening removed possible water sources and components that were “not capable of meeting” the project’s purpose; so an alternative was excluded if it could not (1) “provide new firm yield,” (2) “supply water to Moffat Collection System,” or (3) “produce a solution within the necessary . . . timeframe.” App. 1150. The second criterion was one of the more “significant criteria used to eliminate” alternative proposals. *Id.*

Next, the initial screening excluded alternative proposals based on their relative costs. To estimate a project’s expected total cost, which the Corps called the project’s “relative development cost” (RDC), the Corps added together the project’s expected *capital costs*—called the “rough order of magnitude” (ROM)—and the project’s estimated *contingent costs*. The capital costs included expenditures on the project’s infrastructure—components like “surface storage components,” pipelines, pump stations, and “water treatment facilities,” App. 1161—while the contingent costs included expenditures like “[l]and acquisition,” “[p]redesign and design engineering,” and “[l]egal and financial services.” App. 1366. The Corps estimated that a project’s contingent costs would amount to 50% of the capital costs, so it applied a 50% multiplier to the project’s capital costs in order to estimate the project’s total cost. The Corps explained that using this formula produced “a more representative cost estimate that is suitable for use in comparing alternatives.” App. 1161. Having excluded alternative proposals based on their inability to satisfy the

project's purpose and their costs, the Corps's initial screening left 34 projects for consideration.

Second, the Corps screened the remaining projects based on their “environmental consequences to the aquatic environment, other ecosystems, and other natural environmental values.” App. 1164. This second step left five alternative projects that the Corps would analyze more extensively in the EIS. *Id.*

The Corps also discussed how climate change could impact Denver Water's proposed project. The Corps observed that some scientific studies have predicted that climate change will cause stream flow to “peak earlier” and to diminish in quantity because of increased “evapotranspiration” and longer droughts. App. 1213. These changes to streamflow, the Corps noted, could affect Denver Water's ability to divert water to an expanded Gross Reservoir. If the streamflow volume diminishes, then the amount of water that Denver Water can divert will be limited. And if the streamflow peaks earlier, then the water levels may not peak when Denver Water has priority rights, preventing it from diverting the water to the Gross Reservoir. As the Corps put it, climate change's effect on stream flow could “decrease Denver Water's [firm] yield.” App. 1213.

Though the Corps discussed climate change's effects, it did not quantify or model the effects on stream flow. The Corps explained why: “there is no accepted

scientific method of transforming the general concept of increasing temperatures into incremental changes in stream flow or reservoir levels.” App. 1213.

The Draft elicited extensive public comment. The EPA, for example, objected to the Draft’s purpose-and-need statement because it incorporated several “underlying project proponent needs,” which excluded “alternatives that may otherwise be ‘practicable’ considering the basic/overall project purpose” of increasing water supply. App. 1061. Other comments criticized the Corps’s cost methodology because it employed “[b]road assumptions” rather than more particularized estimates. App. 1069. Still more comments took issue with the Corps’s choice not to quantify the effects of climate change on stream flows, given the existence of a model showing that “firm yield decreased between 7% and 14% with increases in temperature of 2 to 5 degrees Fahrenheit.” App. 1073.

3. Final EIS and ROD

The Corps published its Final EIS five years later in April 2014. The Final EIS was substantially similar to the Draft, but it added some information in response to the public comments. In response to the EPA’s comment about the purpose-and-need statement, the Corps justified incorporating Denver Water’s multiple needs into one purpose because “the multiple needs . . . are not ‘independent’ but rather are interconnected in the water supply issues that Denver Water is facing.” App. 1059. The Corps defended its cost methodology by pointing out that it calculated the 50% multiplier based on “[c]omparisons . . . with other projects for which planning-level cost estimates have been prepared,” and also had its “third-party consulting team

ma[k]e comparisons with other projects.” App. 1070. Finally, the Corps rejected streamflow models proposed by the comments because “there is a considerable amount of uncertainty inherent in the various climate and hydrology models and associated input data set used in” the study. App. 1075.

After issuing the Final EIS, the Corps published its Record of Decision (ROD) in July 2017. The ROD concluded that the EIS satisfied NEPA and incorporated its findings. App. 437–38. The ROD also found that Denver Water’s proposed project was the least environmentally damaging practicable alternative. Having made those findings, the Corps issued Denver Water’s § 404(b) permit in August 2017.

Denver Water then secured the necessary permitting from other agencies, and with those permits in hand, Denver Water began construction in 2022 to raise the Gross Dam and expand the Gross Reservoir, completing major construction in 2026. But Denver Water has yet to clear the trees surrounding the Reservoir and to divert water to fill the Reservoir’s newly increased capacity.

D. The Litigation

Save the Colorado and other Environmental Groups sued the Corps in December 2018. Denver Water intervened a few months later. The Environmental Groups alleged violations of the CWA and NEPA.⁶ They first alleged that the Corps violated the CWA by issuing Denver Water’s permit without clearly demonstrating

⁶ The Environmental Groups also brought a challenge under the Endangered Species Act against the Department of the Interior and the United States Fish and Wildlife Service. The district court dismissed that claim, and the Environmental Groups do not appeal that decision.

that Denver Water’s proposed project was the LEDPA. The Environmental Groups alleged three errors with the Corps’s LEDPA determination: (1) the Corps defined the project’s purpose too narrowly, which resulted in excluding otherwise practicable alternatives; (2) the Corps’s cost methodology was not particularized to each project; and (3) the Corps failed to adequately evaluate climate change’s effects on stream flows. The Environmental Groups’ NEPA challenge is similar. They alleged that the Corps acted arbitrarily by (1) defining the EIS’s purpose-and-need statement too narrowly, (2) failing to accurately estimate project costs, and (3) choosing not to conduct a quantitative analysis of climate change’s effects on stream flow.

As a remedy, the Environmental Groups sought (1) a declaration that the Corps violated the CWA and NEPA; (2) vacatur of the Final EIS, the ROD, and Denver Water’s § 404(b) permit; and (3) an injunction stopping the Corps “from taking any further actions in furtherance of this project until” the Corps “complied with federal law.” App. 104. They did not seek a temporary restraining order or seek other emergency or interim relief.

The district court held a hearing on the petition in September 2024.⁷ The court agreed with the Environmental Groups and found that the Corps had violated both the

⁷ The tortuous history of this litigation explains the six-year span between the Environmental Groups’ initial filing and the district court’s ruling. Two years elapsed before the Environmental Groups filed a supplemental petition for review in 2020. The Corps and Denver Water moved to dismiss the petition for lack of jurisdiction, which the district court granted. The court reasoned that the courts of appeals have exclusive jurisdiction over challenges to FERC decisions, and because the Environmental Groups challenged FERC’s approval of Denver Water’s amended license, the suit had to be brought in the circuit. We disagreed, finding the

CWA and NEPA. The court found that the Corps’s analysis failed to clearly demonstrate—as required by 40 C.F.R. § 230.10(a)—that Denver Water’s proposed project was the LEDPA for the reasons identified above. The court further found the EIS did not comply with NEPA for substantially the same reasons. After deciding for the Environmental Groups on the merits, the court postponed ruling on the issue of remedy.

The court later issued its first remedies order. The court ordered vacatur and remand of the Final EIS, the ROD, and Denver Water’s § 404(b) permit; it also permanently enjoined “enlargement of the Gross Reservoir, including tree removal, water diversion, and impacts to wildlife.” App. 361–62. And because construction of the dam was partially complete at the time, the court preliminarily enjoined further construction of the dam pending a hearing on what additional construction would be necessary to ensure the dam’s structural integrity.

The court then issued its second remedies order. The court concluded that public safety required Denver Water to finish constructing the dam, so it vacated its

Environmental Groups attacked the Corps’s issuance of the fill permit, not FERC’s approval of the license. *Save the Colorado v. Spellmon*, 50 F.4th 954, 971 (10th Cir. 2022). We thus reversed the dismissal and remanded to the district court for further proceedings. On remand, the parties submitted extensive briefing and a voluminous administrative record, all requiring a lengthy review.

preliminary injunction against further dam construction. But the court left intact its prior permanent injunction and remand with vacatur.

Denver Water appealed from the first remedies order and the court’s final judgment, and the Corps appealed from the final judgment. We consolidated these three appeals for argument and disposition.⁸

II. Discussion

The Corps and Denver Water argue the district court erred by finding CWA and NEPA violations based on the three alleged deficiencies identified above.

⁸ A prior panel of this court identified a possible jurisdictional defect in Denver Water’s appeal from the final judgment below—namely, that the judgment is not final under the administrative-remand rule. The administrative-remand rule usually applies when (1) the challenged agency action is adjudicative and (2) the district court remands to the agency for further proceedings. *See Rocky Mountain Wild v. Dallas*, 98 F.4th 1263, 1283 (10th Cir. 2024). The first requirement is met here. *See id.* at 1283–84 (finding that an agency’s issuing an ROD on a right-of-way application was adjudicative); *W. Energy All. v. Salazar*, 709 F.3d 1040, 1048 (10th Cir. 2013) (“[A]gency permitting ‘falls closer to the traditional concept of adjudication’” (quoting *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 699 n.17 (10th Cir. 2009))). The second, however, presents a closer question since it is unclear whether the district court’s order “remand[ing] with vacatur” required the Corps to conduct any further proceedings. App. 361.

But even assuming the administrative-remand rule applies, we nevertheless conclude that the practical-finality exception to the rule allows the appeal to proceed. “[W]e have applied the practical finality rule to review important legal questions which a remand may make effectively unreviewable.” *Rocky Mountain Wild*, 98 F.4th at 1284 (citation modified). This can occur “when an agency was directed to implement a particular outcome rather than recommence a proceeding.” *Id.* (citing *Ausmus v. Perdue*, 908 F.3d 1248, 1252 (10th Cir. 2018)). Such is the case here where the district court permanently enjoined “enlargement of the Gross Reservoir, including tree removal, water diversion, and impacts to wildlife.” App. 362. Even if the district court’s remand directed the Corps to redo its EIS and permitting process, the agency would still be permanently enjoined from authorizing Denver Water to complete the Project and would be without an avenue for appellate review.

Denver Water also argues the case is both constitutionally and prudentially moot because the activity authorized by the § 404(b) permit—discharging fill at the foot of the dam—is complete, so this court is powerless to remedy the Environmental Groups’ injuries.

We find that this case is not constitutionally moot because a remand back to the Corps could still partially remedy the Environmental Groups’ injuries: the Corps could impose additional mitigation measures or other special conditions. And we need not address prudential mootness because we find the Environmental Groups’ claims fail on the merits. The touchstone for judicial review of agency action is deference, and nowhere is deference more appropriate than when an agency exercises its expertise to make technical and scientific judgments. The Corps’s three determinations—which the district court found arbitrary and capricious—fall easily within that zone of discretion, and none of those determinations were arbitrary or capricious.

A. Mootness

We review de novo the issue of constitutional mootness. *Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096, 1109 (10th Cir. 2010). Courts may exercise judicial power only over “cases” or “controversies.” U.S. Const. art. III, § 2. To satisfy that case-or-controversy requirement, a plaintiff must have standing to sue, which in turn requires that the plaintiff’s injury be redressable by a favorable judicial decision. *Audubon of Kan., Inc. v. U.S. Dep’t of Interior*, 67 F.4th 1093, 1102 (10th Cir. 2023). The injury must remain redressable throughout the litigation;

if, through intervening circumstances, the court can no longer redress the plaintiff's injury, the case is moot. *Id.* Thus, the key question for mootness is “whether granting a *present* determination of the issues offered will have some effect in the real world.” *Rio Grande Silvery Minnow*, 601 F.3d at 1110 (quoting *Wyoming v. U.S. Dep’t of Agric.*, 414 F.3d 1207, 1212 (10th Cir. 2005)). The party asserting mootness bears the burden of showing mootness. *WildEarth Guardians v. Pub. Serv. Co. of Colo.*, 690 F.3d 1174, 1183 (10th Cir. 2012).

The mootness requirement applies equally to the alleged NEPA and CWA violations here. *See Caddo Nation of Okla. v. Wichita & Affiliated Tribes*, 877 F.3d 1171, 1176–77 (10th Cir. 2017). “These claims ordinarily no longer present[] a live controversy when the proposed action has been completed and when no effective relief is available.” *Id.* (quoting *Airport Neighbors All., Inc. v. United States*, 90 F.3d 426, 428 (10th Cir. 1996)). But even if full relief is no longer available, partial relief will still save a case from being moot. *Id.* Thus, “courts still consider NEPA claims after the proposed action has been completed when the court can provide some remedy if it determines that an agency failed to comply with NEPA.” *Airport Neighbors*, 90 F.3d at 428–29. For example, if a court can enjoin *use* of a project until the agency reevaluates the project, the case is not moot—even if the project’s construction is complete. *Id.*; *see also Sierra Club v. U.S. Army Corps of Eng’rs*, 803 F.3d 31, 43 (finding a NEPA case not moot because “an order wholly or partly

enjoining operation of the pipeline, pending further analyses of the pipeline's environmental impact, would provide" partial relief).

The Environmental Groups allege two main injuries: (1) procedural harm from the Corps's uninformed decision making, and (2) aesthetic, recreational, and scientific harms from a further depleted Colorado River and construction at the Reservoir. *See* App. 43–49; Wockner Decl., Dkt. No. 134-1; Kurtz Decl., Dkt. No. 134-2.

We find those injuries could be partially remedied by a remand back to the Corps for further consideration. On remand, the Corps could, for example, require Denver Water to take additional mitigation measures. *See Hillsdale Env't Loss Prevention, Inc. v. U.S. Army Corps of Eng'rs*, 702 F.3d 1156, 1167 (10th Cir. 2012) (explaining that “new information revealed” and considered on remand “could motivate the Corps to revise its decision” and order “additional mitigation”). Those additional mitigation measures could offset the aesthetic, recreational, and scientific harms alleged by the Environmental Groups. Moreover, the Corps might strengthen the special conditions already in the permit—for example, the condition that Denver Water “keep the use of machinery in the waterway to a minimum” and “prevent any petroleum products, chemicals, or other deleterious materials from entering the water.” App. 313. Those conditions could ensure that any further work Denver Water performs to complete the project does not harm jurisdictional waters. The ability of the Corps to impose additional mitigation or special conditions keeps this case live, even if the Corps no longer can conduct a meaningful alternatives analysis.

Hillsdale, 702 F.3d at 1167 (finding partial relief available because the Corps could impose additional mitigation after conducting a proper NEPA analysis); *Sierra Club*, 803 F.3d at 43.

Unlike constitutional mootness, prudential mootness derives from the court’s remedial discretion. *Winzler v. Toyota Motor Sales U.S.A., Inc.*, 681 F.3d 1208, 1210 (10th Cir. 2012). Though constitutional and prudential mootness overlap, prudential mootness poses a different question: whether “the anticipated benefits of a remedial decree no longer justify the trouble of deciding the case on the merits.” *Id.* Denver Water argues this case is prudentially moot, even if it is not constitutionally moot. But because we find that the Environmental Groups’ CWA and NEPA claims fail on the merits, we need not address prudential mootness. *Sierra Club, Inc. v. Bostick*, 787 F.3d 1043, 1047 n.4 (10th Cir. 2015)).

B. Merits

We review the Environmental Groups’ CWA and NEPA claims under the APA’s deferential arbitrary-and-capricious standard.⁹ An agency acts arbitrarily when it (1) “entirely fail[s] to consider an important aspect of the problem,” (2) “offer[s] 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

⁹ The Environmental Groups brought their claims under the APA, alleging the Corps’s decision to issue the permit was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” because the decision was arbitrary and violated the CWA and NEPA.

product of agency expertise,” (3) “fail[s] to base its decision on consideration of the relevant factors,” or (4) “ma[kes] ‘a clear error of judgment.’” *Am. Wild Horse Campaign v. Raby*, 144 F.4th 1178, 1188 (10th Cir. 2025) (quoting *Richardson*, 565 F.3d at 704)).

In the context of a CWA claim, arbitrary-and-capricious review has an additional feature when the non-water-dependent presumption applies. The inquiry shifts to asking whether it was arbitrary and capricious for the Corps to find that it had clearly demonstrated that Denver Water’s proposed project was the LEDPA. We do not ask, in the first instance, whether *we* think the Corps clearly demonstrated the proposed project was the LEDPA. *See Hillsdale*, 702 F.3d at 1166.¹⁰ To clearly demonstrate an alternative should be excluded, the Corps need only take “a hard look at the proposals and reach[] a meaningful conclusion based on the evidence.” *Id.* In the context of a NEPA claim, arbitrary-and-capricious review carries even more deference. *Seven Cnty.*, 605 U.S. at 180 (requiring “substantial deference to the agency” when reviewing for compliance with NEPA).

1. Project Purpose

The Corps’s definition of the Moffat Project’s purpose was neither arbitrary nor capricious. Recall that 40 C.F.R. § 230.10(a)(2) instructs the agency to evaluate practicability in light of “overall project purposes.” And the regulations apply the

¹⁰ The district court seemed at times to lose sight of this distinction. *See, e.g.*, App. 272 (finding “the Corps has not met its burden of ‘clearly’ demonstrating that the Proposed Action is the LEDPA” because the Corps “fail[ed] to prove the financial feasibility of the Proposed Action”).

non-water-dependent presumption if the project does not need to impact jurisdictional waters “to fulfill its basic purpose.” § 230.10(a)(3). The Corps assigns these phrases independent meaning. The Corps views a project’s “basic purpose” as its “fundamental, essential, or irreducible purpose.” App. 410. The Corps determined that the Moffat Project’s basic purpose is “to provide supplemental water supply,” and it accordingly applied the non-water dependent presumption. But the Corps understands “overall project purposes” as “more specifically describ[ing] the applicant’s goals for the [p]roject.” App. 411. The Corps defined the Moffat’s overall purposes as “develop[ing] 18,000 [acre feet per year] of new, firm yield to the Moffat Treatment Plant and raw water customers upstream of the Moffat Treatment Plant.” App. 411. This formulation incorporated Denver Water’s dual goals of increasing water supply and correcting overreliance on the South System.

The Environmental Groups argue that § 230.10(a) uses “overall project purposes” and “basic purpose” interchangeably. To the Environmental Groups, the phrases mean the same thing: the single, most general purpose the project aims to achieve. And, the Environmental Groups argue, because the Corps defined the Moffat Project’s *basic purpose* as increasing water supply, the Corps had to define the project’s *overall project purposes* as increasing water supply; it could not define them according to Denver Water’s two underlying purposes—to increase water supply *and* to correct overreliance on the South System.

The regulation’s text does not support the Environmental Groups’ cramped view of a project’s overall purposes. “Overall project purposes” unambiguously

allows the Corps to assess a project’s multiple, related goals; not simply the project’s most general purpose. First, the regulation’s text unambiguously gives the terms independent meaning. Start with the presumption that different language implies different meaning. *See* Antonin Scalia & Bryan A. Garner, *Reading Law*, 170–72 (2012). And the dictionary defines “basic” and “overall” differently. *Compare Basic*, Am. Heritage Dictionary (5th ed. 2022) (“[a]n essential, fundamental element or entity.”); *Basic*, Webster’s New Collegiate Dictionary (1979) (“of, relating to, or forming the base or essence,” “constituting or serving as the basis or starting point”); *with Overall*, Am. Heritage Dictionary (5th ed. 2022) (“Including everything; comprehensive”). But whatever might be said about the difference between “overall” and “basic,” the text uses the plural—“overall project *purposes*.” § 230.10(a)(2). The plural construction supports reading the phrase to encompass several different purposes, rather than one single gist of the project. *See Del. Riverkeeper Network v. U.S. Army Corps of Eng’rs*, 869 F.3d 148, 157–158 (3d Cir. 2017); *Friends of Santa Clara River v. U.S. Army Corps of Eng’rs*, 887 F.3d 906, 912 (9th Cir. 2018).

Context also supports our reading. The regulation uses “basic purpose” to assess whether the project is water dependent. 40 C.F.R. § 230.10(a)(3). So the Corps only needs a very general idea of what the project’s purpose is; it just needs to decide whether the project must discharge fill into the proposed aquatic site (e.g., building a dock) or not. But the Corps assesses the project’s overall purposes to evaluate alternatives, an evaluation that calls for a more specific understanding of what the project is meant to achieve. *See Greater Yellowstone Coal. v. Flowers*, 359

F.3d 1257, 1270 (10th Cir. 2004) (recognizing the Corps “has a duty to take into account the objectives of the applicant’s project” in the alternatives analysis (quoting *Sylvester v. U.S. Army Corps of Eng’rs*, 882 F.2d 407, 409 (9th Cir. 1989))).

The Environmental Groups suggest that § 230.10(a)(2)’s use of both “overall project purposes” and “basic purpose” in the practicability subsection implies they are interchangeable. Apparently, under their view, the EPA did not mean to give “overall project purposes” independent meaning; it just wanted a synonym for “basic purpose.” In any event, the Environmental Groups’ argument overlooks the presumption that different language implies different meaning, and indeed, the phrases’ proximity more strongly suggests the regulation envisions their different meanings. If the EPA did not want the Corps to consider multiple “overall project purposes” in the practicability analysis, it could have used the phrase near at hand: “basic purpose.” It did not, and we respect that decision. *Cf. Ysleta Del Sur Pueblo v. Texas*, 596 U.S. 685, 698 (2022) (rejecting interpretation that defied the “usual presumption that ‘differences in language like this convey differences in meaning’” (quoting *Henson v. Santander Consumer USA, Inc.*, 582 U.S. 86 (2017))). We do not doubt that drafters sometimes use different phrases interchangeably, but the Environmental Groups have not overcome the presumption to contrary.

Finally, the statute does not undercut our reading in the way the Environmental Groups contend. They say that the CWA provision authorizing the Corps to issue permits is silent on whether the Corps can narrowly define a project’s purpose according to its multiple, underlying goals. 33 U.S.C. § 1344. And, they continue,

our interpretation would thus inject a “non-statutory factor[.]” into the permitting analysis. Appellees’ Br. at 34. But that is how regulations like this work; they gloss the statute. *See* 33 U.S.C. § 1344(b) (instructing EPA Administrator to develop regulations to guide the permitting process). Indeed, under the Environmental Groups’ argument, we would have to reject all of § 230.10(a)(2)’s considerations—cost, existing technology, or logistics—because none are explicitly stated in the statute.

We conclude that § 230.10(a)(2) unambiguously allows the Corps to define overall project purposes with more specific reference to the applicant’s multiple, related purposes.¹¹ The Corps’s definition of the Moffat Project’s overall project purposes rested on a sound interpretation of § 230.10(a)(2). That definition was therefore not arbitrary, capricious, or otherwise contrary to law.

The Environmental Groups next argue that the Corps arbitrarily concluded that the Moffat Project’s dual purposes should be incorporated into a single project, instead of separate projects. But the Environmental Groups overlook the deference we owe to the Corps’s determination to address both purposes in a single project. And the Corps explained why it made sense to address Denver Water’s goal of

¹¹ The Environmental Groups invoke *Auer* deference and urge us to defer to the EPA’s interpretation, which up to January 2026 read “overall project purposes” and “basic purpose” interchangeably. But the EPA now interprets § 230.10(a)(2) to supply two different meanings to those phrases, just as a plain reading of the text supports. In any event, *Auer* deference has no role to play when a regulation is unambiguous, as § 230.10(a)(2) is. *See Kisor v. Wilkie*, 588 U.S. 558, 573–74 (2019).

increasing water supply to the Moffat Treatment Plant: “the multiple needs . . . are not ‘independent’ but rather are interconnected in the water supply issues that Denver Water is facing. Failing to address any one of the issues would jeopardize Denver Water’s ability to meet projected demand needs.” App. 1059. “Therefore, supplying water to the Moffat Collection System was appropriately used as a criterion for alternative screening.” App. 1062. That explanation satisfies us that the Corps did not “entirely fail[] to consider an important aspect of the problem.” *Am. Wild Horse Campaign*, 144 F.4th at 1188.

The Environmental Groups’ final argument fails, too. They suggest the Corps’s narrow definition predetermined the alternatives analysis by “defin[ing] a project in order to preclude the existence of” all practicable alternatives, leaving Denver Water’s project as the only viable choice. Appellees’ Br. at 47 (quoting *Sylvester*, 882 F.2d at 409). But the 34 alternatives remaining after the first-step screening, only ten of which required expanding the Gross Reservoir, tell a different story. Indeed, the requirement that the proposal deliver water to the Moffat

Treatment Plant eliminated only 19 potential water sources and components—out of 303 total. App. 802.

In sum, the Corps did not act arbitrarily or otherwise contrary to law by screening out proposed alternatives that could not increase water supply to the Moffat Treatment Plant.

2. Project Cost and Climate Change

Next, the Environmental Groups argue that the Corps’s analysis of the alternatives’ costs and climate change’s effects on feasibility was arbitrary and capricious. We disagree.

The § 404(b) regulations require the Corps’s alternatives analysis to consider the alternatives’ cost and logistics.¹² And because the non-water-dependent presumption applied to the Moffat Project, the Corps had to *clearly demonstrate* that the alternative should be excluded. Still, a reviewing court is deferential to the Corps’s analysis. *Hillsdale*, 702 F.3d at 1156 (explaining that to “clearly demonstrate” an alternative should be excluded, the Corps need only take “a hard look at the proposals and reach[] a meaningful conclusion based on the evidence”). And under NEPA, the Corps was entitled to significant deference. *See Seven Cnty.*, 605 U.S. at 180. The Environmental Groups’ CWA and NEPA challenges fail

¹² We assume for this appeal that a project’s “logistics” includes climate change’s impact on a project’s feasibility.

because the record shows the Corps adequately considered cost and climate change and sufficiently explained its decision.

To estimate a potential alternative's total cost, the Corps calculated an alternative's estimated capital costs and then applied a 50% multiplier, which accounted for contingent costs. Though Denver Water proposed using that cost methodology, the Corps did not blindly adopt it. The Corps reviewed the methodology along with a third-party consultant and concluded the methodology produced "a more representative cost estimate that is suitable for use in comparing alternatives." App. 808. To be sure, the consultant explained that this cost methodology could produce an initial cost estimate very different from the project's final, actual cost, so the results should be used "with caution" and should not form the basis of a project budget. App. 1352. But even that consultant still concluded that the methodology produced "a good estimate of the project cost for *comparison of [a]lternatives*." App. 1351 (emphasis added).

Supporting documentation explained why the multiplier should be used and why it should be 50%. *See* App. 1269–72, 1364–66. First, exact cost estimates—particularly of contingent costs—were "implausible" during the EIS's early phases when the screening procedures were developed "because of the lack of detailed information and project definition." App. 1364. And that was "particularly true when evaluating a wide variety of potentially applicable Project Alternatives for which a comparable level of detail is not universally available." App. 1364. Given the dearth of information needed to make the tailored, particularized cost estimates

urged by the Environmental Groups, the Corps decided to estimate a project's cost by applying a 50% multiplier to the project's expected capital costs. It arrived at the 50% number by aggregating the typical percentage cost for discrete components—for example, 3–5% for land costs and 5–8% for construction management services. App. 1366. These estimates were based on “verification examples and related project experience.” App. 1351. The supporting documents concluded that the methodology provided a sound basis to estimate cost for “the early stages of alternative development and comparison.” App. 1352.

The Corps's explanation for its cost methodology is sufficient to pass arbitrary-and-capricious muster. *See Hillsdale*, 702 F.3d at 1178 (“An agency has discretion to choose a methodology, so long as it explains why it is reliable.”); *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1166 n.6 (10th Cir. 2002) (noting that “more than nothing” is required for a cost analysis, but not “an extraordinarily detailed cost estimate”). To be sure, the record acknowledged that future information would permit “more detailed project layouts and definition[s]” for the proposed alternatives, which would change the estimates. App. 1351. But “[t]here will always be more data that could be gathered; agencies must have some discretion to decide when to draw the line and move forward with decisionmaking.” *Hillsdale*, 702 F.3d 1169–70 (quoting *Habitat Educ. Ctr., Inc. v.*

U.S. Forest Serv., 673 F.3d 518, 531 (7th Cir. 2012)). We do not think the Corps's choice of cost methodology was arbitrary or capricious.

The Environmental Groups next argue that the Corps failed to adequately consider the Moffat Project's logistics and clearly demonstrate that the Moffat Project was "capable of being done." 40 C.F.R. § 230.10(a)(2). In their view, climate change will lead to reduced and earlier peak stream flows, which will in turn limit the amount of water that Denver Water can deliver to the Moffat Treatment Plant. Reduced stream flows would limit the amount of water able to be diverted from the Western Slope; earlier peak stream flows occurring in a condensed timeframe (rather than being spread out throughout the season) would exceed the Moffat Tunnel's capacity, leaving it unable to transport the required amount of water.

The Corps discounted the second point because the Moffat Tunnel is not the only way the Project would increase water to the Reservoir. App. 847–50. In response to a public comment on the Final EIS, the Corps explained that 10,000 acre-feet per year "is brought through the Moffat Tunnel on an average basis" and "[t]he remainder of the water would come from the reoperation of Denver Water's entire collection system." App. 580. The total 18,000 acre-feet per year would still be "physically stored in" the Gross Reservoir, which could then supply the required firm yield. To show that the 18,000 acre feet of firm yield would be met, the Corps pointed to "decades of data" and "independent analysis" by the Corps. App. 580.

Relatedly, the Corps also rejected using a quantitative model to measure the reductions of stream flow resulting from climate change. That decision falls within

the Corps's discretion. *See Nat'l Audubon Soc'y v. U.S. Army Corps of Eng'rs*, 991 F.3d 577, 585 (4th Cir. 2021). The Corps explained that climate change could affect stream flows in the region, which could in turn impact the amount of water Denver Water can divert to the Gross Reservoir. App. 949. But whether that possibility would come to pass was, in the Corps's view, speculative: "although climate models show general agreement that temperatures are likely to increase in the west, there is less agreement about how this change will influence water resources." App. 950. Indeed, recent studies on climate change's effect on stream flow showed that more research is needed "before estimates on stream flow response to climate change can be utilized with accuracy and certainty." App. 951.

And even the Corps's statement that comes closest to suggesting that climate change would decrease firm yield to the Moffat Treatment Plant is couched in a speculative conditional. App. 949. The Corps said that the Western Water Assessment (a scientific study from 2008) predicted that water runoff would shift earlier in the spring, and citing that study, the Corps speculated that "[i]f this were to occur, it is likely that the yield of the Moffat Collection System would decrease" due to "capacity constraints." App. 949. But the Corps observed that even the Water Assessment itself cautioned that an "assessment and quantification of specific climate change impacts on water resources" was "beyond the scope of the[] study." App. 949. The Corps made a judgment, based on its scientific and technical expertise, that existing scientific research did not show a clear link between climate change and decreased firm yield to the Reservoir. The record thus demonstrates that the Corps

considered and meaningfully evaluated whether climate change would decrease the project's near-term firm yield and render the project impracticable. That determination was not arbitrary or capricious.

The Environmental Groups object that the Corps “ignored climate change data and common sense, refusing to use well-established models” to quantify climate change’s impact on stream flows. Appellees’ Br. at 54–55. But the Corps gave a reasonable explanation for the models’ unreliability. It noted that “hydrological modeling of the impact of rising temperatures on water resources in mountainous western regions vary widely” and that variability is “high in Colorado.” App. 949. “This variation is primarily due to the lack of sufficient water-flow data . . . and difficulty in modeling weather patterns.” App. 949. Accordingly, the Corps concluded that “there is no generally-accepted scientific method to correlate air temperature changes with incremental changes in stream flow or reservoir levels.” App. 949. The Corps meaningfully evaluated these models and chose not to include quantitative modeling of climate change’s effects in its EIS. We owe that reasonable determination deference. *See W. Watershed Project v. U.S. Bureau of Land Mgmt.*, 76 F.4th 1286, 1298 (10th Cir. 2023).

Finally, the Environmental Groups cite the *Colorado River Water Availability Study*, which they say shows that climate change will reduce firm yield to reservoirs. But the Corps considered—and rejected—the reliability of that and similar studies, one of which showed that in the Colorado River Basin, “no consistent trends in annual precipitation have been detected over the last 100 years” and “climate models

do not agree whether annual mean precipitation will increase or decrease in Colorado by 2050.” App. 581. In the end, the Environmental Groups ask us to substitute our judgment for the Corps’s. They point out scientific studies that, in their view, rebut the Corps’s reading of the scientific literature and ask us to opine on what the scientific research establishes. But our job is not to second-guess the Corps’s assessment as long as it rests on a reasoned basis.

* * *

In sum, the Corps’s analyses of cost and climate change deserve deference. The Corps’s decisions to use a 50% multiplier and not to quantitatively analyze climate change’s effects “had a rational basis and considered the appropriate factors.” *Hillsdale*, 702 F.3d at 1178. The Corps therefore did not act arbitrarily or capriciously when evaluating the alternatives’ costs and feasibility.¹³

III. Conclusion

For the foregoing reasons, we reverse the district court, vacate the permanent injunction, and remand with instructions to enter judgment against the plaintiff.

¹³ Because we conclude the Corps did not violate the CWA or NEPA, we do not reach the issues surrounding the scope of the district court’s remedy.