

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 4, 2020

Decided January 26, 2021

No. 20-5197

STANDING ROCK SIOUX TRIBE, ET AL.,
APPELLEES

v.

UNITED STATES ARMY CORPS OF ENGINEERS,
APPELLANT

DAKOTA ACCESS LLC,
INTERVENOR

Consolidated with 20-5201

Appeals from the United States District Court
for the District of Columbia
(No. 1:16-cv-01534)

James A. Maysonett, Attorney, U.S. Department of Justice, argued the cause for appellant United States Army Corps of Engineers. With him on the briefs were *Jeffrey Bossert Clark*, Assistant Attorney General, *Jonathan D. Brightbill*, Principal Deputy Assistant Attorney General, *Eric A. Grant*, Deputy

Assistant Attorney General, and *Andrew C. Mergen* and *Erica M. Zilioli*, Attorneys.

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Jared R. Wigginton and *Kent Mayo* were on the brief for *amici curiae* North Dakota Farm Bureau, et al.

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Douglas P. Hayes was on the brief for *amici curiae* Sierra Club, et al. in support of appellees.

Kenneth Rumelt and *James G. Murphy* were on the brief for *amicus curiae* Members of Congress in support of appellees.

Mary Kathryn Nagle was on the brief for *amicus curiae* National Indigenous Women's Resource Center, Inc. in support of appellees.

Before: TATEL and MILLETT, *Circuit Judges*, and SENTELLE, *Senior Circuit Judge*.

Opinion for the Court filed by *Circuit Judge* TATEL.

TATEL, *Circuit Judge*: Lake Oahe, created when the United States Army Corps of Engineers flooded thousands of acres of Sioux lands in the Dakotas by constructing the Oahe Dam on the Missouri River, provides several successor tribes of the Great Sioux Nation with water for drinking, industry, and sacred cultural practices. Passing beneath Lake Oahe's waters, the Dakota Access Pipeline transports crude oil from North Dakota to Illinois. Under the Mineral Leasing Act, 30 U.S.C. § 185, the pipeline could not traverse the federally owned land at the Oahe crossing site without an easement from the Corps. The question presented here is whether the Corps violated the National Environmental Policy Act, 42 U.S.C. § 4321, by issuing that easement without preparing an environmental impact statement despite substantial criticisms from the Tribes and, if so, what should be done about that failure. We agree with the district court that the Corps acted unlawfully, and we affirm the court's order vacating the easement while the Corps prepares an environmental impact statement. But we reverse the court's order to the extent it directed that the pipeline be shut down and emptied of oil.

I.

“In order to ‘create and maintain conditions under which man and nature can exist in productive harmony,’ the National Environmental Protection Act (NEPA), 42 U.S.C. § 4331(a),

requires any federal agency issuing a construction permit, opening new lands to drilling, or undertaking any other ‘major’ project to take a hard look at the project’s environmental consequences, *id.* § 4332(2)(C)” *National Parks Conservation Association v. Semonite*, 916 F.3d 1075, 1077 (D.C. Cir. 2019). “To this end, the agency must develop an environmental impact statement (EIS) that identifies and rigorously appraises the project’s environmental effects, unless it finds that the project will have ‘no significant impact.’” *Id.* (quoting 40 C.F.R. § 1508.9(a)(1)). “If *any* ‘significant’ environmental impacts might result from the proposed agency action[,] then an EIS must be prepared *before* agency action is taken.” *Grand Canyon Trust v. FAA*, 290 F.3d 339, 340 (D.C. Cir. 2002) (quoting *Sierra Club v. Peterson*, 717 F.2d 1409, 1415 (D.C. Cir. 1983)). Preparing an EIS is a significant undertaking, requiring the agency to “consult with and obtain the comments of” other relevant agencies and publish a “detailed statement” about the action’s environmental effects. 42 U.S.C. § 4332(2)(C).

“Whether a project has significant environmental impacts, thus triggering the need to produce an EIS, depends on its ‘context’ (regional, locality) and ‘intensity’ (‘severity of impact’).” *National Parks*, 916 F.3d at 1082 (quoting 40 C.F.R. § 1508.27 (2018)). The operative regulations (since amended, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020)) enumerate ten factors that “should be considered” in assessing NEPA’s “intensity” element. 40 C.F.R. § 1508.27(b) (2019). “Implicating any one of the factors may be sufficient to require development of an EIS.” *National Parks*, 916 F.3d at 1082. This case concerns the fourth factor— “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial.” 40 C.F.R. § 1508.27(b)(4) (2019).

The Dakota Access Pipeline (DAPL), nearly 1,200 miles long, is designed to move more than half a million gallons of crude oil from North Dakota to Illinois each day. *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock III)*, 255 F. Supp. 3d 101, 114 (D.D.C. 2017). DAPL crosses many waterways, including Lake Oahe, an artificial reservoir in the Missouri River created when the Corps constructed a dam in 1958. The dam's construction and Lake Oahe's creation flooded 56,000 acres of the Standing Rock Reservation and 104,420 acres of the Cheyenne River Sioux Tribe's trust lands. *Id.* The Tribes now rely on Lake Oahe's water for drinking, agriculture, industry, and sacred religious and medicinal practices. *Id.* As the Standing Rock Sioux Tribe explained:

Lake Oahe is the source of life for the Tribe. It provides drinking water for over 4,200 people on the Reservation. It is the source of water for irrigation and other economic pursuits central to the Tribal economy. And it provides the habitat for fish and wildlife on the Reservation upon which tribal members rely for subsistence, cultural, and recreational purposes. Moreover, the Tribe's traditions provide that water is more than just a resource, it is sacred—as water connects all of nature and sustains life.

Letter from Dave Archambault II, Chairman, Standing Rock Sioux Tribe, to Lowry A. Crook, Principal Deputy Assistant Secretary for Civil Works, Office of the Assistant Secretary for the Army, and Col. John Henderson, P.E., District Commander, U.S. Army Corps of Engineers—Omaha District (Mar. 24, 2016), Appendix (A.) 318.

Oil pipelines crossing federally regulated waters like Lake Oahe require federal approval. *See Standing Rock III*, 255 F. Supp. 3d at 114. In June 2014, Dakota Access, formed to construct and own DAPL, notified the Corps that it intended to construct a portion of DAPL under Lake Oahe, just half a mile north of the Standing Rock Reservation. *Id.* To do so, Dakota Access needed, among other things, a real-estate easement from the Corps under the Mineral Leasing Act (MLA), 30 U.S.C. § 185.

In December 2015, the Corps published and sought public comment on a Draft Environmental Assessment (EA) finding that the construction would have no significant environmental impact. *Standing Rock III*, 255 F. Supp. 3d at 114–15. The Tribes submitted comments voicing a range of concerns. Relevant here, the Tribes contended that the Corps had insufficiently analyzed the risks and consequences of an oil spill.

Two federal agencies also raised concerns. The Department of the Interior requested that the Corps prepare an EIS given the pipeline’s potential impact on trust resources, criticizing the Corps for “not adequately justify[ing] or otherwise support[ing] its conclusion that there would be no significant impacts upon the surrounding environment and community.” Letter from Lawrence S. Roberts, Acting Assistant Secretary—Indian Affairs, U.S. Department of the Interior, to Brent Cossette, U.S. Army Corps of Engineers, Omaha District (Mar. 29, 2016), A. 385–86. The Environmental Protection Agency (EPA) registered its concern that the Draft EA “lack[ed] sufficient analysis of direct and indirect impacts to water resources,” though it requested additional information and mitigation in the EA rather than preparation of an EIS. Letter from Philip S. Strobel, Director, NEPA Compliance and Review Program Office of Ecosystems

Protection and Remediation, EPA, to Brent Cossette, U.S. Army Corps of Engineers, Omaha District (Jan. 8, 2016), Reply Supplemental Appendix 1. But after becoming aware of the pipeline's proximity to the Standing Rock reservation, EPA supplemented its comments to note that, while it agreed with the Corps that there was "minimal risk of an oil spill," it worried, based on its "experience in spill response," that a break or leak could nonetheless significantly affect water resources. Letter from Philip S. Strobel, Director, NEPA Compliance and Review Program, Office of Ecosystems Protection and Remediation, EPA, to Brent Cossette, U.S. Army Corps of Engineers, Omaha District (Mar. 11, 2016), A. 389–90.

On July 25, 2016, the Corps published its Final EA and a "Mitigated Finding of No Significant Impact" (Mitigated FONSI). The Mitigated FONSI explained that, given the Corps's adoption of various mitigation measures, including horizontal directional drilling, the Lake Oahe crossing would not "significantly affect the quality of the human environment" and that an EIS was therefore unnecessary.

Shortly after the Final EA's release, Standing Rock sued the Corps for declaratory and injunctive relief under NEPA (and several other federal laws not at issue in this appeal). *Standing Rock III*, 255 F. Supp. 3d at 116–17. Dakota Access and the Cheyenne River Sioux Tribe intervened on opposing sides, and Cheyenne River filed a separate complaint adding additional claims. *Id.* at 117. Though the district court denied the Tribes' request for a preliminary injunction on September 9, 2016, the Departments of Justice, Interior, and the Army immediately issued a joint statement explaining that the Corps would not issue an MLA easement and that construction would not move forward until the Army could determine whether

reconsideration of any of its previous decisions was necessary.
Id.

Following that statement, Standing Rock submitted several letters to the Assistant Secretary of the Army for Civil Works, who oversees the portion of the Corps's mission that includes issuing permits for pipelines like DAPL. Those letters raised concerns about the EA's spill risk analysis. The tribe also submitted an expert review of the EA from an experienced pipeline consultant who concluded that the assessment was "seriously deficient and [could not] support the finding of no significant impact, even with the proposed mitigations." Accufacts Review of the U.S. Army Corps of Engineers Environmental Assessment for the Dakota Access Pipeline (Oct. 28, 2016), A. 837–46. Following the Corps's internal review, the Assistant Secretary stood by her prior decision, but nonetheless concluded that the historical relationship between the affected tribes and the federal government "merit[ed] additional analysis, more rigorous exploration and evaluation of reasonable siting alternatives, and greater public and tribal participation and comments." Memorandum from Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works) (Dec. 4, 2016), A. 260; *see Standing Rock III*, 255 F. Supp. 3d at 117–18.

During the ensuing review, both Standing Rock and the Oglala Sioux Tribe submitted additional comments and analysis. The Corps solicited Interior's opinion on the pipeline, Interior's Solicitor responded with a recommendation that the Corps prepare an EIS, and the Secretary of the Army for Civil Works issued a memorandum directing the Army not to grant an easement prior to preparation of an EIS. *See Standing Rock III*, 255 F. Supp. 3d at 118–19. On January 18, 2017, the Assistant Secretary of the Army for Civil Works published in the Federal Register a notice of intent to prepare an EIS. *See*

Notice of Intent to Prepare an EIS in Connection with Dakota Access, LLC's Request for an Easement to Cross Lake Oahe, North Dakota, 82 Fed. Reg. 5,543 (Jan. 18, 2017).

Two days later, a new administration took office, and the government's position changed significantly. In a January 24 memorandum, the President directed the Secretary of the Army to instruct the Corps and the Assistant Secretary for Civil Works to expedite DAPL approvals and consider whether to rescind or modify the Notice of Intent to Prepare an EIS. Memorandum of January 24, 2017, Construction of the Dakota Access Pipeline, 82 Fed. Reg. 8,661 (Jan. 30, 2017). The Army in turn concluded that the record supported granting an easement and that no EIS or further supplementation was necessary.

The Corps granted the easement on February 8, 2017, and after the district court denied Cheyenne River's motion for a preliminary injunction and temporary restraining order, both the Tribes and the Corps moved for partial summary judgment on several claims. The district court concluded that the Corps's decision not to issue an EIS violated NEPA by failing to adequately consider three issues: whether the project's effects were likely to be "highly controversial," the impact of a hypothetical oil spill on the Tribes' fishing and hunting rights, and the environmental-justice effects of the project. *Standing Rock III*, 255 F. Supp. 3d at 111–12. It accordingly remanded the matter to the agency to address those three issues. *Id.* at 160–61.

After the Corps completed its remand analysis in February 2019, the parties again moved for summary judgment, with the Tribes arguing that the Corps failed to remedy its NEPA violations and pressing several other non-NEPA claims. *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*

(*Standing Rock V*), 440 F. Supp. 3d 1, 11 (D.D.C. 2020). Based on its examination of four topics of criticism out of “many . . . to choose from,” *id.* at 17, the district court concluded that “many commenters in this case pointed to serious gaps in crucial parts of the Corps’[s] analysis,” demonstrating that the easement’s effects were “likely to be highly controversial,” *id.* at 26 (internal quotation marks omitted). It therefore remanded to the agency for it to complete an EIS but reserved the question whether the easement should be vacated during the remand. *Id.* at 29–30. Following additional briefing, the court concluded that vacatur was warranted, *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock VII)*, 471 F. Supp. 3d 71, 87 (D.D.C. 2020), and ordered that “Dakota Access shall shut down the pipeline and empty it of oil by August 5, 2020,” Order, *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 16-cv-01534-JEB, at 2 (D.D.C. July 6, 2020), ECF No. 545.

The Corps and Dakota Access now appeal the district court’s order remanding for preparation of an EIS, as well as its separate order granting vacatur of the pipeline’s MLA easement and ordering that the pipeline be shut down. While this appeal was pending, a motions panel denied the Corps’s request to stay the vacatur of the easement but granted its request to stay the district court’s order to the extent it enjoined the pipeline’s use. Order, *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 20-5197, at 1 (D.C. Cir. Aug. 5, 2020) (August 5 Order).

II.

The Corps, together with Dakota Access, challenges the district court’s conclusion that the effects of the Corps’s easement decision were “likely to be highly controversial” under NEPA. A decision is “highly controversial,” we explained in *National Parks Conservation Association v.*

Semonite, if a “substantial dispute exists as to the size, nature, or effect of the major federal action.” 916 F.3d at 1083 (internal quotation marks omitted). But not just any criticism renders the effects of agency action “highly controversial.” Rather, “*something more* is required for a highly controversial finding besides the fact that some people may be highly agitated and be willing to go to court over the matter.” *Id.* (internal quotation marks omitted).

In *National Parks*, we clarified what more is required. There, we considered the Corps’s decision to forgo an EIS before approving a permit authorizing an electrical infrastructure project in a historically significant area. “[T]he Corps’s assessment of the scope of the Project’s effects ha[d] drawn consistent and strenuous opposition, often in the form of concrete objections to the Corps’s analytical process and findings, from agencies entrusted with preserving historical resources and organizations with subject-matter expertise.” *Id.* at 1086. Because those criticisms reflected “the considered responses . . . of highly specialized governmental agencies and organizations” rather than “the hyperbolic cries of . . . not-in-my-backyard neighbors,” we found the effects of the Corps’s decision “highly controversial.” *Id.* at 1085–86. “[R]epeated criticism from many agencies who serve as stewards of the exact resources at issue, not to mention consultants and organizations with on-point expertise, surely rises to more than mere passion.” *Id.* at 1085. And while the Corps “did acknowledge and try to address [those] concerns,” that was not enough to put the controversy to rest. *Id.* at 1085–86. “The question is not whether the Corps attempted to resolve the controversy, but whether it succeeded.” *Id.* Indeed, an EIS is perhaps especially warranted where an agency explanation confronts but fails to resolve serious outside criticism, leaving a project’s effects uncertain. “Congress created the EIS process to provide robust information in situations . . . where, following

an environmental assessment, the scope of a project's impacts remains both uncertain and controversial." *Id.* at 1087–88.

The Corps and Dakota Access advance two arguments: that, in relying on *National Parks*, the “district court applied the wrong legal standard,” Appellant’s Br. 14, and that the Corps adequately addressed the four specific disputes on which the district court relied in finding the effects of the Corps’s easement decision likely to be highly controversial. We disagree as to both.

The Corps offers two bases for distinguishing this case from *National Parks*. First, it argues that here, in contrast to *National Parks*, “the Corps’[s] efforts to respond to the Tribes’ criticisms were not ‘superficial.’” Appellant’s Br. 19. That distinction, however, rests on an inaccurate description of *National Parks*. Contrary to the Corps’s claim that we deemed “superficial and inadequate” the Corps’s response to criticisms, we pointedly explained that we took “no position on the adequacy of the Corps’s alternatives analyses.” *National Parks*, 916 F.3d at 1088. Instead, we noted only that other agencies had expressed concerns about the superficiality and inadequacy of the Corps’s efforts. *Id.* Furthermore, the Corps’s position that a response to criticism suffices so long as it is not “superficial” is hard to square with our statement in *National Parks* that “[t]he question is not whether the Corps attempted to resolve the controversy, but whether it succeeded.” *Id.* at 1085–86. The decisive factor is not the volume of ink spilled in response to criticism, but whether the agency has, through the strength of its response, convinced the court that it has materially addressed and resolved serious objections to its analysis, a matter requiring us to delve into the details of the Tribes’ criticisms—to which we shall turn momentarily.

As a second basis for distinguishing *National Parks*, the Corps emphasizes that the “opposition here has come from the Tribes and their consultants, not from disinterested public officials.” Appellant’s Br. 20. But the Tribes are not, as Dakota Access suggested at oral argument, “quintessential . . . not-in-my-backyard neighbors.” Oral Arg. Tr. 97:17–18. They are sovereign nations with at least some stewardship responsibility over the precise natural resources implicated by the Corps’s analysis. “Indian tribes within Indian country are,” the Supreme Court has declared, “a good deal more than private, voluntary organizations.” *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 140 (1982) (internal quotation marks omitted). Rather, they are “domestic dependent nations that exercise inherent sovereign authority over their members and territories” and the resources therein. *Oklahoma Tax Commission v. Citizen Band Potawatomi Indian Tribe of Oklahoma*, 498 U.S. 505, 509 (1991) (internal quotation marks omitted); *see also New Mexico v. Mescalero Apache Tribe*, 462 U.S. 324, 335 (1983) (“We have held that tribes have the power to manage the use of [their] territory and resources by both members and nonmembers”); *Merrion*, 455 U.S. at 140 (“Indian tribes are unique aggregations possessing attributes of sovereignty over both their members and their territory.” (internal quotation marks omitted)).

The Tribes’ unique role and their government-to-government relationship with the United States demand that their criticisms be treated with appropriate solicitude. Of course, as the Corps points out, the Tribes are not the federal government. But in *National Parks*, we emphasized the important role played by entities other than the federal government. There, criticism came from “highly specialized governmental agencies and organizations,” including the Virginia Department of Historic Resources and several conservation groups. *National Parks*, 916 F.3d at 1084–85; *see*

also *North Carolina v. Federal Aviation Administration*, 957 F.2d 1125, 1131–33 (4th Cir. 1992) (finding “legitimate controversy” present where “[s]tate, local and federal officials, interested individuals,” and a federal agency “expressed concern”); *Foundation for North American Wild Sheep v. U.S. Department of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982) (finding that criticism from “conservationists, biologists,” two state agencies, and “other knowledgeable individuals” demonstrated the existence of “precisely the type of ‘controversial’ action for which an EIS must be prepared”); *Friends of the Earth, Inc. v. U.S. Army Corps of Engineers*, 109 F. Supp. 2d 30, 43 (D.D.C. 2000) (finding that a project was “genuinely and extremely controversial” where “three federal agencies,” “one state agency,” and the public “all disputed the Corps[’s] evaluation”). The Tribes are of at least equivalent status.

With the proper legal framework in mind, we turn to the four disputed facets of the Corps’s analysis that the district court found involved unresolved scientific controversies for purposes of NEPA’s “highly controversial” factor.

DAPL’s Leak Detection System

The district court found that serious unresolved controversy existed concerning the effectiveness of DAPL’s leak detection system. Specifically, it found that the 2012 Pipeline and Hazardous Materials Safety Administration (PHMSA) study submitted with Standing Rock’s expert report “indicated an 80% failure rate in the type of leak-detection system employed by DAPL.” *Standing Rock V*, 440 F. Supp. 3d at 18. The court went on to note that “the system was not even designed to detect leaks that constituted 1% or less of the pipe’s flow rate,” which could amount to 6,000 barrels a day. *Id.* Because the Corps “failed entirely to respond to” those deficiencies, the court found that the Corps had not succeeded

in resolving the controversy presented by the study. *Id.* at 17–18.

On appeal, the Corps correctly points out that the 2012 PHMSA study does not reflect an 80% “failure rate.” Rather, the study indicates that in 80% of all incidents where it was in use and “functional,” the “computational pipeline monitoring” (CPM) system used by DAPL was not the first system to detect a leak. That the CPM system was commonly eclipsed by visual identification, however, casts serious, unaddressed doubt on the Corps’s statement that the system will “detect the pressure drop from a pipeline rupture within seconds.” Appellant’s Br. 21 (internal quotation marks omitted). As the PHMSA study explains, “CPM systems by themselves did not appear to respond more often than personnel . . . or members of the public passing by the release incident.” U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Final Report Leak Detection Study 2-11 (Dec. 10, 2012). The Corps has failed to address the apparent disconnect, suggested by the PHMSA study, between the CPM system’s historic performance and the agency’s representations about its future utility. Indeed, the Corps acknowledges that it “did not explicitly discuss the 2012 PHMSA report” in its review. Appellant’s Br. 22. The consequences of that oversight are especially significant since DAPL is buried deep underground and visual identification is therefore unlikely to make up for deficiencies in the CPM system, as it apparently has in the incidents included in the PHMSA study.

Attempting to discount the significance of the Corps’s failure to consider the 2012 PHMSA study, the Corps and Dakota Access observe that the study included older pipelines and that the type of pinhole leaks the study suggests the CPM system might initially miss are rare. But as the district court noted, the Tribes’ expert observed that “more recent

investigations” corroborated the study’s leak detection data. *Standing Rock V*, 440 F. Supp. 3d at 17 (internal quotation marks omitted). The Corps’s failure to address the study cannot be justified by the mere fact that the study’s data set includes *some* older pipelines.

As for the rarity of pinhole leaks, the Tribes pointed to “numerous examples of pipelines that leaked for hours or days after similar detection systems failed.” Appellees’ Br. 27. In one such instance, DAPL’s own operator spilled 8,600 barrels of oil during a 12-day-long slow leak in 2016, even though the monitoring system in use there showed the exact same type of “detectable meter imbalance” that the Corps here claims will quickly alert DAPL’s operators to a slow leak. *See* Supplemental Appendix (S.A.) 317–18. That same year, at another pipeline buried deep underground in North Dakota, an operator’s leak detection system “registered an imbalance” and “notified the control room”—but the control room “misinterpreted its own data[.]” PHMSA, Post-Hearing Decision Confirming Corrective Action Order, Belle Fourche Pipeline Co. 5 (Mar. 24, 2017), https://primis.phmsa.dot.gov/comm/reports/enforce/documents/520165013H/520165013H_HQ%20Post%20Hearing%20Decision%20Confirming%20CAO_03242017.pdf. That led to a slow release of more than 12,600 barrels of oil into a nearby creek over at least a two-day period, until it was discovered by a rancher at the release site. *Id.* at 1–2; S.A. 711. So there is ample reason to believe that the magnitude of harm from such a leak could be substantial.

Appearing to acknowledge those troubling examples, the Corps discounts their significance by asserting that leaks will eventually be found. But how rapidly such leaks would be detected and their potential severity are key factors underlying the Corps’s EA and precisely the issues called into question by the Tribes’ unaddressed criticism. We also note that the volume

of a one percent spill from a pinhole leak would double if the volume of oil placed in the pipeline were itself to double. And DAPL's operator has represented to its investors that it intends to double the amount of oil it places in the pipeline as early as this coming summer. *See Illinois approves expansion of Dakota Access oil pipeline*, Reuters, Oct. 15, 2020, <https://www.reuters.com/article/us-energy-transfer-oil-pipeline-illinois-idUSKBN2702DL>. In any event, when asked why the EA did not evaluate the potential consequences of an undetected slow pinhole leak, the Corps responded that "there was no particular reason" it did not do so. Oral Arg. Tr. 12:8–9, *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 16-cv-01534-JEB (D.D.C. Mar. 18, 2020), ECF No. 498. The Tribes' criticisms therefore present an unresolved controversy requiring the Corps to prepare an EIS.

DAPL's Operator Safety Record

The district court found that the Corps's decision to rely in its risk analysis on general pipeline safety data, rather than DAPL's operator's specific safety record, rendered the effects of the Corps's decision highly controversial. We agree.

To analyze the Corps's risk assessment, Standing Rock retained as an expert "an attorney, investigator, and process safety practitioner with many decades of experience." Holmstrom Decl. ¶ 1, S.A. 79–80. The expert explained that "PHMSA data shows Sunoco," DAPL's operator, "has experienced 276 incidents in 2006–2016," which the expert described as "one of the lower performing safety records of any pipeline operator in the industry for spills and releases." *Id.* ¶ 9.

Here, as in the district court, "[t]he Corps focuse[s] its responses on defending the operator's performance record itself rather than on justifying its decision to not incorporate that record into its analysis." *Standing Rock V*, 440 F. Supp. 3d

at 19. In so doing, the Corps and Dakota Access make two arguments.

First, the Corps emphasizes that “70% of [DAPL’s] operator’s reported accidents on other pipelines were minor and limited to the operator’s property.” Appellant’s Br. 31. But that does nothing to address the “[t]wo central concerns” on which the district court based its decision: “(1) the 30% of spills—about 80 of them—that were *not* limited to operator property; and (2) the criticism that the spill analysis should have incorporated the operator’s record.” *Standing Rock V*, 440 F. Supp. 3d at 20. For its part, Dakota Access argues that while Sunoco’s number of leaks is high, its number of spills per mile of pipeline operated “is in line with industry averages.” Intervenor’s Br. 22. Not only has Dakota Access failed to identify record evidence supporting that assertion, the relevant evidence that does exist suggests a serious risk that Sunoco’s record is worse than the industry average. The Corps’s own analysis concluded that, industry-wide, there were 0.953 onshore crude oil accidents per 1,000 miles of pipeline in 2016 and 0.848 in 2017. U.S. Army Corps of Engineers, Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe 13 (Aug. 31, 2018). By contrast, Dakota Access’s expert explained that Energy Transfer, Sunoco’s parent company following a merger, experienced 1.42 “reportable incidents per 1,000 miles of pipeline”—*after* a 50% decline in incidents on Sunoco lines since 2017. Second Godfrey Decl. ¶ 7, A. 1612. If anything, comparing that figure to the industry-wide average understates the safety gap between Sunoco and other operators because, as Dakota Access and its expert observe, Sunoco is “one of the largest pipeline operators,” Intervenor’s Br. 22, and its own incidents are included in the average. *See* Appellant’s Br. 32 (“The Corps also considered

PHMSA's historical data on oil spills, which necessarily includes this operator's safety record.").

Nor are we persuaded by the Corps's second argument, that it had no need at all to address the operator safety controversy. Though the Corps may have considered "other objective measures of the operator's safety practices," Appellant's Br. 31, the cited materials—industry-wide spill data and a questionnaire about Sunoco's safety practices—fall short of resolving the controversy. The Corps contends that its "decision to use all data on oil spills, and not just the operator's safety record, is the kind of technical judgment that is entrusted to the agency and entitled to deference from the Court." Appellant's Br. 32. That is not at all clear. For example, it would be strange indeed if we were to defer to the Federal Aviation Administration's decision to renew the operating certificate of an airline with an extremely poor safety record on the basis that the airline industry, on average, is safe. The Supreme Court, moreover, has "frequently reiterated that an agency must cogently explain why it has exercised its discretion in a given manner," *Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 48 (1983), and the Corps has made no effort to do so here. To treat the Corps's unadorned plea for deference as a sufficient basis for ignoring well-reasoned expert criticism would vitiate *National Parks*.

Winter Conditions

The district court found the Corps's response insufficient to resolve criticism of the agency's "failure to consider the impact of harsh North Dakota winters on response efforts in the event of a spill." *Standing Rock V*, 440 F. Supp. 3d at 20. In particular, the Tribes' experts explained that shut-off valves might be more prone to failure and response efforts hindered by freezing conditions. Elaborating, Oglala's expert explained

that “winter conditions create significant difficulties” because, among other things, “workers require more breaks and move slower due to the bundling of clothing,” “daylight hours are shorter,” and “slip-trip-fall risk increases significantly.” Earthfax Report at 7, A. 830.

The Corps argues that it had no need to engage in a quantitative evaluation of a winter spill scenario because its non-quantitative response was adequate. Appellant’s Br. 29–30. In the Corps’s view, it adequately considered winter conditions by noting that ice coverage could “have a mixed effect on efforts to contain an oil spill” and by ordering DAPL’s operator to conduct winter spill response training exercises at Lake Oahe as a condition of the easement. Appellant’s Br. 29. But the Corps’s passing reference to winter conditions’ “mixed” effects, without more, provides little comfort. The Corps’s point might have been more forceful had the agency estimated just how much time during a spill would be saved by the oil-containing properties of ice and compared that to the additional time required to identify oil pockets and adjust work methods to extreme conditions. Indeed, it seems that such an analysis is precisely what the Tribes believe the Corps ought to have done, and such a reasoned weighing of the evidence would have been entitled to substantial deference. But instead, faced with serious expert criticism, the Corps simply declared the evidence “mixed” and offered no attempt at explaining its apparent conclusion that winter’s countervailing effects measured out to zero. Moreover, we agree with the district court that while winter response training may be “prudent and perhaps a good avenue for producing data as to how exactly winter conditions would delay response efforts,” such exercises do “not get to the point of addressing the concern that the spill model does not currently take that kind of data into account.” *Standing Rock V*, 440 F. Supp. 3d at 21.

The Corps next argues that the Tribes failed to present a “specific alternative methodology” for incorporating winter conditions into its spill response modeling. Appellant’s Br. 30. But the fact that an established methodology for assessing the consequences of a unique type of risk is not readily apparent to commenters hardly means an agency can discount relevant, serious criticism of its method of analysis. Although the Corps emphasizes in its brief that “no one has identified any way to calculate exactly how much more difficult” a clean-up would be during winter, Appellant’s Br. 30, our review “is limited to the grounds that the agency invoked when it took the action,” *Department of Homeland Security v. Regents of the University of California*, 140 S. Ct. 1891, 1907 (2020) (internal quotation marks omitted), and the Corps does not suggest that, during its environmental review process, it actually applied its technical expertise to consider whether it was possible to identify such a method. Had the Corps considered the problem and concluded that no comprehensive analysis was possible, that might have amounted to “successfully” resolving the controversy. But the Corps cannot foist its duty to consider such technical matters onto commenters who point out valid deficiencies.

Worst Case Discharge

The district court considered the “largest area of scientific controversy” to be “the worst-case-discharge estimate for DAPL used in the spill-impact analysis.” *Standing Rock V*, 440 F. Supp 3d at 21. The regulations set forth a detailed formula for calculating the worst-case discharge, 49 C.F.R. § 194.105(b)(1), but we need not delve into its specifics here. “The idea,” the district court succinctly explained, “is to calculate the maximum amount of oil that could possibly leak from the pipeline before a spill is detected and stopped.” *Standing Rock V*, 440 F. Supp. 3d at 21.

According to the Corps, we need not consider the Tribes' criticisms because "an accident leading to a full-bore rupture of the pipeline is extremely unlikely" and, in any event, no statute or regulation required the Corps to calculate the worst-case discharge at all. Appellant's Br. 26. The thrust of both arguments is that because the Corps need not have calculated a worst-case discharge in the first place, it is unimportant whether it did so in a reasonable manner. But we agree with the district court that because the Corps chose to perform such a calculation and then relied on it throughout its analysis, it cannot dispel serious doubts about its methods by explaining that it could have forgone such a calculation in the first place. *See Sierra Club v. Sigler*, 695 F.2d 957, 966 (5th Cir. 1983) ("The purpose of judicial review under NEPA is to ensure the procedural integrity of the agency's consideration of environmental factors in the EIS and in its decision to issue permits. If the agency follows a particular procedure, it is only logical to review the agency's adherence to that procedure, not to some altogether different one that was not used."). We therefore turn to the Tribes' criticisms of the Corps's calculations.

The Corps estimated that, for purposes of a worst-case discharge, it would take 9 minutes to detect a leak and 3.9 minutes to close the shut-down valves. Appellant's Br. 26–27. Before the district court, the Corps suggested that its nine-minute figure included one minute of detection time, with the remaining eight minutes devoted to shutting down the mainline pumps. *Standing Rock V*, 440 F. Supp. 3d at 23. But as the district court observed, the Tribes pointed to "many experts who commented that hours, rather than minutes, were more accurate figures for the [worst-case discharge]." *Id.* The Tribes' expert explained that "[m]ajor spill incidents typically occur with multiple system causes, when people, or equipment, or systems do not function exactly as they are expected to."

Holmstrom Decl. ¶ 11, S.A. 83. The Corps's explanation that its response time estimates were mildly conservative does not begin to explain its choice to ignore the real-world possibility of significant human errors or technical malfunctions, *see supra* at 18–19, in calculating what it claimed was a worst-case estimate. Although the PHMSA formula did not require the Corps to model a complete doomsday scenario in which every possible human error and technical malfunction occurs simultaneously, we agree with the district court that the Corps's failure to explain why it declined to consider any such eventualities leaves unresolved a substantial dispute as to its worst-case discharge calculation.

The Corps also argues that, even if, as the Tribes claim, some aspects of the model are unduly optimistic, the model is nonetheless sufficiently conservative because it assumes the pipeline lies directly on top of the water rather than beneath ninety-two feet of overburden. Appellant's Br. 25–26. In effect, the Corps tries to defend its decision to develop a model that assumes away significant risks by explaining that, despite those omissions, it analyzed an imaginary pipeline of *roughly* equivalent risk to DAPL—one laying directly on top of Lake Oahe, but with superior leak detection and shut-down valve systems. The Corps, however, never explains why its one conservative assumption accurately counterbalances the particular risks the Tribes identify. Accordingly, the model's assumption that DAPL lies directly on the water fails to resolve the controversies raised by the Tribes' criticisms.

* * *

Having determined that several serious scientific disputes mean that the effects of the Corps's easement decision are likely to be “highly controversial,” we turn to one other issue before considering the appropriate remedy. The Corps and

Dakota Access repeatedly urge that, whatever the merits of the Tribes' criticisms, the Corps's easement decision cannot be highly controversial because the risk of a spill is exceedingly low and because the pipeline's location deep underground provides protection against the consequences of any spill. That argument faces two major hurdles.

First, the claimed low risk of a spill rests, in part, on the Corps's use of generalized industry safety data and its optimism concerning its ability to respond to small leaks before they worsen—precisely what the Tribes' unresolved criticisms address. Second, as our court made clear in *New York v. Nuclear Regulatory Commission*, 681 F.3d 471, 478–79 (D.C. Cir. 2012), “[u]nder NEPA, an agency must look at both the probabilities of potentially harmful events and the consequences if those events come to pass.” *Id.* at 148. A finding of no significant impact is appropriate only if a grave harm's “probability is so low as to be remote and speculative, or if the combination of probability and harm is sufficiently minimal.” *Id.* at 147–48 (internal quotation marks omitted). Doing away with the obligation to prepare an EIS whenever a project presents a low-probability risk of very significant consequences would wall off a vast category of major projects from NEPA's EIS requirement. After all, the government is not in the business of approving pipelines, offshore oil wells, nuclear power plants, or spent fuel rod storage facilities that have any material prospect of catastrophic failure. In this case, although the risk of a pipeline leak may be low, that risk is sufficient “that a person of ordinary prudence would take it into account in reaching a decision” to approve the pipeline's placement, and its potential consequences are therefore properly considered here. *Sierra Club v. FERC*, 827 F.3d 36, 47 (D.C. Cir. 2016) (quoting *City of Shoreacres v. Waterworth*, 420 F.3d 440, 453 (5th Cir. 2005)).

III.

This brings us to the Corps's challenge to the district court's remedy, and specifically to its orders (1) requiring that the Corps prepare an EIS, (2) vacating the easement pending preparation of an EIS, and (3) ordering that the pipeline be shut down and emptied of oil.

As already explained, “[i]mplicating any one of the [intensity] factors may be sufficient to require development of an EIS.” *National Parks*, 916 F.3d at 1082. Dakota Access argues that because implicating the “highly controversial” factor does not itself *mandate* preparation of an EIS, the district court erred in ordering the Corps to prepare one. In *National Parks*, however, we ordered the Corps to prepare an EIS where, as here, it “failed to make a ‘convincing case’ that an EIS is unnecessary.” *Id.* at 1087 (quoting *Myersville Citizens for a Rural Community, Inc. v. FERC*, 783 F.3d 1301, 1322 (D.C. Cir. 2015)). *National Parks* thus forecloses the idea that we must ordinarily remand to the agency to weigh the intensity factors anew whenever we find that it improperly analyzed one of them.

That *National Parks* involved multiple intensity factors is at most a superficial distinction between this case and *National Parks*. For one thing, as explained above, the effects of the Corps's easement decision are “highly controversial” in *four* distinct respects, and we see no good reason for treating differently a decision that implicates multiple significance factors and a decision that implicates a single factor in several important ways. Moreover, both *National Parks* and this case present “precisely” the circumstances in which Congress intended to require an EIS, namely “where, following an environmental assessment, the scope of a project's impacts remains both uncertain and controversial.” *Id.* at 1087–88. Finally, as in *National Parks*, the “context” of this case—“a

place of extraordinary importance to the Tribes, a landscape of profound cultural importance, and the water supply for the Tribes and millions of others”—weighs in favor of requiring an EIS. Appellees’ Br. 40–41. And in at least one sense, the case for ordering production of an EIS is stronger here than in *National Parks* or the cases on which Dakota Access relies, Intervenor’s Br. 29–30, given that, unlike in those cases, the district court has already given the Corps an opportunity to resolve the Tribes’ serious criticisms and it failed to do so.

The Corps and Dakota Access next argue that, even if the district court properly ordered the Corps to prepare an EIS, the court abused its discretion by vacating the pipeline’s easement in the interim. “The ordinary practice,” however, “is to vacate unlawful agency action,” *United Steel v. Mine Safety & Health Administration*, 925 F.3d 1279, 1287 (D.C. Cir. 2019) (citing 5 U.S.C. § 706(2)), and district courts in this circuit routinely vacate agency actions taken in violation of NEPA. *See, e.g., Humane Society of the United States v. Johanns*, 520 F. Supp. 2d 8, 37 (D.D.C. 2007) (observing that vacatur is the “standard remedy” for an “action promulgated in violation of NEPA”); *Greater Yellowstone Coalition v. Bosworth*, 209 F. Supp. 2d 156, 163 (D.D.C. 2002) (“[P]laintiffs . . . seek a vacatur of the permit . . . until the [agency] complies with NEPA. As a general matter, an agency action that violates the APA must be set aside. . . . Based on this authority, I shall vacate the permit . . .”).

“While unsupported agency action normally warrants vacatur, [a] court is not without discretion” to leave agency action in place while the decision is remanded for further explanation. *Advocates for Highway and Auto Safety v. Federal Motor Carrier Safety Administration*, 429 F.3d 1136, 1151 (D.C. Cir. 2005) (citation omitted). In *Allied-Signal, Inc. v. U.S. Nuclear Regulatory Commission*, 988 F.2d 146

(D.C. Cir. 1993), our court set forth the two factors governing that exercise of discretion: “The decision whether to vacate depends on the seriousness of the order’s deficiencies (and thus the extent of doubt whether the agency chose correctly) and the disruptive consequences of an interim change that may itself be changed.” *Id.* at 150–51 (internal quotation marks omitted). The “seriousness” of a deficiency, we have explained, is determined at least in part by whether there is “a significant possibility that the [agency] may find an adequate explanation for its actions” on remand. *Williston Basin Interstate Pipeline Co. v. FERC*, 519 F.3d 497, 504 (D.C. Cir. 2008). “We review the district court’s decision to vacate . . . for abuse of discretion.” *Nebraska Department of Health & Human Services v. Department of Health & Human Services*, 435 F.3d 326, 330 (D.C. Cir. 2006).

As to the first factor, the district court concluded that the Corps was unlikely to resolve the controversies on remand because the court had previously remanded without vacatur for just that purpose and the Corps had nonetheless failed to resolve them. *Standing Rock VII*, 471 F. Supp. 3d at 79–80. The court also explained that the Corps focused on the wrong question: whether, on remand, it would be able to justify its easement decision rather than its decision to forgo an EIS. *Id.* at 81. (“Looking at the first *Allied-Signal* factor, the Court does not assess the deficiency of the ultimate decision itself—the choice to issue the permit—but rather *the deficiency of the determination that an EIS was not warranted.*” (internal quotation marks omitted)).

With respect to the disruptive consequences of vacatur, the district court understood that shutting down pipeline operations would cause Dakota Access and other entities significant economic harm. But for four reasons it concluded that those effects did not justify remanding without vacatur. First, the

Corps's expedited timeline for preparing an EIS "would cabin the economic disruption of a shutdown." *Id.* at 84. Second, though economic disruption is properly considered, it is not commonly a basis, standing alone, for declining to vacate agency action. *Id.* at 84–85. Third, Dakota Access's approach would subvert NEPA's objectives. "[I]f you can build first and consider environmental consequences later, NEPA's action-forcing purpose loses its bite." *Id.* at 85. And finally, the countervailing risk of a spill—difficult to quantify in part because of the Corps's failure to prepare an EIS—counseled in favor of vacatur. *Id.* at 85–86. The district court discounted as "inconclusive" Dakota Access's evidence that if DAPL were inoperative, more oil would be transported by rail, a riskier alternative. *Id.* at 87.

On appeal, Dakota Access takes primary responsibility for arguing against vacatur. It contends first that the Corps can "easily substantiate its easement decision on remand even if it must prepare an EIS." Intervenor's Br. 33. But that is not the question. As the district court explained, the question is whether the Corps is likely to justify its issuance of a FONSI and refusal to prepare an EIS. Dakota Access argues that *Heartland Regional Medical Center v. Sebelius*, 566 F.3d 193 (D.C. Cir. 2009), supports its contrary view that the *Allied-Signal* factors look to whether an agency can justify the action the court is considering whether to vacate, rather than the challenged procedural decision. There, we sought to determine whether an earlier district court decision had, by declaring a regulatory requirement invalid for failing to consider certain public comments, necessarily vacated the regulation. In making that determination, we concluded that the *Allied-Signal* factors would have directed remand without vacatur. *Id.* at 197–98. But because the agency had not elected to forgo a procedural requirement (in that case, notice and comment), only one agency action—the decision to promulgate the

challenged rule—was implicated at all. *Heartland Regional* therefore says nothing one way or the other about the proper focus of the *Allied-Signal* inquiry in cases, like this one, where we confront a distinct challenge to an agency’s decision to forgo a major procedural step in its path to its ultimate action. *Cf. id.* at 199 (“Failure to provide the required notice and to invite public comment—in contrast to the agency’s failure here adequately to explain why it chose one approach rather than another for one aspect of an otherwise permissible rule—is a fundamental flaw that normally requires vacatur of the rule.” (internal quotation marks omitted)). Besides, the district court’s view is more sensible.

Consider the consequences of Dakota Access’s contrary approach. If, when an agency declined to prepare an EIS before approving a project, courts considered only whether the agency was likely to ultimately justify the approval, it would subvert NEPA’s purpose by giving substantial ammunition to agencies seeking to build first and conduct comprehensive reviews later. If an agency were reasonably confident that its EIS would ultimately counsel in favor of approval, there would be little reason to bear the economic consequences of additional delay. For similar reasons, an agency that bypassed required notice and comment rulemaking obviously could not ordinarily keep in place a regulation while it completed that fundamental procedural prerequisite. *See Daimler Trucks North America LLC v. EPA*, 737 F.3d 95, 103 (D.C. Cir. 2013) (“[T]he court typically vacates rules when an agency ‘entirely fail[s]’ to provide notice and comment” (quoting *Shell Oil Co. v. EPA*, 950 F.2d 741, 752 (D.C. Cir. 1991))). When an agency bypasses a fundamental procedural step, the vacatur inquiry asks not whether the ultimate action could be justified, but whether the agency could, with further explanation, justify its decision to skip that procedural step. Otherwise, our cases

explaining that vacatur is the default response to a fundamental procedural failure would make little sense.

Even were we to consider the Corps's odds of ultimately approving the easement, our case law still instructs that a failure to prepare a required EIS should lead us to doubt that the ultimate action will be approved. In *Oglala Sioux Tribe v. U.S. Nuclear Regulatory Commission*, 896 F.3d 520 (D.C. Cir. 2018), we explained that because NEPA is a “purely procedural statute,” where an agency’s NEPA review suffers from “a significant deficiency,” refusing to vacate the corresponding agency action would “vitiating” the statute. *Id.* at 536 (internal quotation marks omitted). As we made clear, “[p]art of the harm NEPA attempts to prevent in requiring an EIS is that, without one, there may be little if any information about *prospective* environmental harms and potential mitigating measures.” *Id.* (internal quotation marks omitted). Put another way, *Oglala* strongly suggests that where an EIS was required but not prepared, courts should harbor substantial doubt that “the agency chose correctly” regarding the *substantive* action at issue—in this case, granting the easement. *Id.* at 538 (quoting *Allied-Signal*, 988 F.2d at 150–51). The Corps resists the proposition that *Oglala* cautions against applying *Allied-Signal* in NEPA cases, but that is not the point. The point is that *Oglala*’s application of those factors suggests that NEPA violations are serious notwithstanding an agency’s argument that it might ultimately be able to justify the challenged action.

As for vacatur’s consequences, Dakota Access contends that while the district court “acknowledged the severe economic disruption that vacatur would cause,” it “wrongly discounted those severe consequences” and “credit[ed] remote, unsubstantiated harms.” Intervenor’s Br. 35. But in reviewing for abuse of discretion, we “consider whether the decision maker failed to consider a relevant factor, whether he [or she]

relied on an improper factor, and whether the reasons given reasonably support the conclusion.” *Kickapoo Tribe of Indians of Kickapoo Reservation in Kansas v. Babbitt*, 43 F.3d 1491, 1497 (D.C. Cir. 1995) (alteration in original) (internal quotation marks omitted). In doing so, we may not “substitute our judgment for that of the trial court, so we cannot decide the issue by determining whether we would have reached the same conclusion.” *United States v. Mathis–Gardner*, 783 F.3d 1286, 1288 (D.C. Cir. 2015) (citation omitted) (internal quotation marks omitted). Dakota Access believes that the district court’s assessment of a shutdown’s economic impacts was far too rosy and that the court “ignored” a shutdown’s environmental consequences. But the court considered all important aspects of the issue and reasonably concluded that the harms were less severe than the Corps and Dakota Access suggested. In view of the discretion owed the district court and the seriousness of the NEPA violation, Dakota Access has given us no basis for concluding that the district court abused its discretion in applying the *Allied-Signal* factors. See *National Parks Conservation Association v. Semonite*, 925 F.3d 500, 502 (D.C. Cir. 2019) (“[The district] court is best positioned to . . . make factual findings[] and determine the remedies necessary to protect the purpose and integrity of the EIS process.”); *Stand Up for California! v. U.S. Department of Interior*, 879 F.3d 1177, 1190 (D.C. Cir. 2018) (“[T]he district court acted well within its discretion in finding vacatur unnecessary to address any harm the defect had caused.”).

In any event, Dakota Access’s assessment of vacatur’s consequences is undercut significantly by the fact that we agree that the district court’s shutdown order cannot stand.

On August 5, 2020, a motions panel of this court ordered that “to the extent the district court issued an injunction by ordering Dakota Access LLC to shut down the Dakota Access

Pipeline and empty it of oil by August 5, 2020, the injunction be stayed.” August 5 Order at 1. Relying on the Supreme Court’s decision in *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010), the panel explained that “[t]he district court did not make the findings necessary for injunctive relief.” August 5 Order at 1 (“[B]efore issuing an injunction in a [NEPA] case, ‘a court must determine that an injunction should issue under the traditional four-factor test.’” (quoting *Monsanto*, 561 U.S. at 158)).

The Tribes argue that an injunction was unnecessary because vacatur itself “invalidat[ed] the underlying easement,” thus requiring the “suspension of pipeline operations pending compliance with NEPA.” Appellees’ Br. 73–74. That is the view the district court appeared to adopt, *Standing Rock VII*, 471 F. Supp. 3d at 88 (requiring, after vacating the pipeline’s easement, “the oil to stop flowing and the pipeline to be emptied within 30 days”), and that approach finds some support in our case law. For instance, in *Sierra Club v. FERC*, 867 F.3d 1357, 1379 (D.C. Cir. 2017), we vacated a pipeline authorization due to a NEPA violation and appeared to assume that vacatur encompassed an end to construction. Likewise in *National Parks*, we appeared to accept the parties’ assumption that vacating Corps-issued construction permits would require ceasing construction of the challenged electrical towers or tearing them down. See *National Parks*, 925 F.3d at 502.

The Tribes’ approach, however, cannot be squared with *Monsanto*, which should caution against reading too far into our tacit approval of shutdown orders in prior cases. If a district court could, in every case, effectively enjoin agency action simply by recharacterizing its injunction as a necessary consequence of vacatur, that would circumvent the Supreme Court’s instruction in *Monsanto* that “a court must determine that an injunction *should* issue under the traditional four-factor

test.” 561 U.S. at 158. In fact, the Tribes have already moved for a permanent injunction in the district court during the pendency of this appeal, and that motion is fully briefed.

Furthermore, *Sierra Club* and *National Parks* differ from this case in a subtle but important way. Those cases involved challenges to agency authorizations of the very activities the court assumed would end. Vacating a construction permit in *National Parks*, for instance, naturally implied an end to construction. Here, in contrast, we affirm the vacatur of an easement authorizing the pipeline to cross federal lands. With or without oil flowing, the pipeline will remain an encroachment, leaving the precise consequences of vacatur uncertain. In fact, the parties have identified no other instance—and we have found none—in which the sole issue before a court was whether an easement already in use (rather than a construction or operating permit) must be vacated on NEPA grounds. That makes this case quite unusual and cabins our decision to the facts before us.

It may well be—though we have no occasion to consider the matter here—that the law or the Corps’s regulations oblige the Corps to vindicate its property rights by requiring the pipeline to cease operation and that the Tribes or others could seek judicial relief under the APA should the Corps fail to do so. But how and on what terms the Corps will enforce its property rights is, absent a properly issued injunction, a matter for the Corps to consider in the first instance, though we would expect it to decide promptly. To do otherwise would be to issue a *de facto* outgrant without engaging in the NEPA analysis that the Corps concedes such an action requires. *See* Oral Arg. Tr. 36:14–15 (“The Corps’[s] regulations contemplate that an outgrant would require a NEPA analysis.”). Although the district court was attuned to the discretion owed the Corps, *see Standing Rock VII*, 471 F. Supp. 3d at 88 (“Not wishing to

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micromanage the shutdown, [the court] will not prescribe the method by which DAPL must [make the flow of oil cease.]”), we nonetheless conclude that it could not order the pipeline to be shut down without, as required by *Monsanto*, making the findings necessary for injunctive relief.

IV.

For the foregoing reasons, we affirm the district court’s order vacating DAPL’s easement and directing the Corps to prepare an EIS. We reverse to the extent the court’s order directs that the pipeline be shut down and emptied of oil.

So ordered.