In the

United States Court of Appeals For the Seventh Circuit

No. 22-1466

NATIONAL WILDLIFE FEDERATION, et al.,

Plaintiffs-Appellants,

v.

United States Army Corps of Engineers, et al.,

Defendants-Appellees.

Appeal from the United States District Court for the Southern District of Illinois.

No. 3:20-cv-00443-DWD — **David W. Dugan**, *Judge*.

Argued March 27, 2023 — Decided August 1, 2023

Before Hamilton, Scudder, and Pryor, Circuit Judges.

HAMILTON, *Circuit Judge*. Since 1910, Congress has authorized the U.S. Army Corps of Engineers to construct "river training structures" on what is known as the Middle Mississippi River to keep the river navigable. The Middle Mississippi is the 195-mile-long stretch of the river from just north of St. Louis, Missouri, where the Missouri River flows into the Mississippi, downstream to Cairo, Illinois, where the Ohio River flows into the Mississippi and more than doubles its

flow. The more-than-century-old project is known as the Regulating Works Project. In 2017, the Corps published a final supplemental environmental impact statement assessing the ongoing project. That statement was used to support the Corps' 2017 decision to continue the overall program of building river training structures to maintain the navigable channel in the Middle Mississippi. Plaintiffs, a coalition of environmental organizations, challenge the Corps' decision to continue with the project. They argue that the supplemental environmental impact statement did not comply with the Water Resources Development Act of 2007 (WRDA), Pub. L. No. 110-114, 121 Stat. 1041 (2007), or the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321, et seq. The district court granted summary judgment for defendants, and plaintiffs now appeal. We affirm.

I. Factual and Procedural History

The Mississippi River watershed drains 1,245,000 square miles—approximately one-third of the continental United States—and includes all or part of thirty-two states. The watershed supports large tracts of forest, wetlands, and aquatic habitats and is home to more than 300 species of birds, 57 species of mammals, 45 species of amphibians and reptiles, and 150 species of fish. The Mississippi River is also a vital artery for commerce.

In the nineteenth century, some areas of the Middle Mississippi measured a depth of only three and a half feet, which was not enough for commercial vessels. The Mississippi River Commission established by Congress recommended in 1881 the construction of permanent structures to deepen the channel. Letter from Robert T. Lincoln, Secretary of War, Transmitting a Progress Report of the Miss. River Comm'n, S. Exec. Doc. No.

47-10, at 18-20 (1881). The Commission recommended that these structures be supplemented with dredging as needed to maintain a navigable channel. *Id.* at 19.

In the Rivers and Harbors Act of 1910, Congress adopted the 1881 plan and authorized the Corps to construct permanent river training structures and to perform supplemental dredging to maintain a channel eight feet deep, sufficient for commercial traffic. Pub. L. No. 61-264, 36 Stat. 630, 659 (1910). In the Rivers and Harbors Act of 1927, Congress modified the Middle Mississippi project by adopting recommendations made by the Chief of Engineers in his letter to Congress dated December 17, 1926. Pub. L. No. 69-560, 44 Stat. 1010, 1012 (1927). In that letter, the Chief recommended that the authorized navigation channel from St. Louis to the Ohio River be at least nine feet deep and 300 feet wide. Letter from the Chief of Eng'rs to Hon. S. Wallace Dempsey, Chairman Comm. on Rivers and Harbors, H.R. Doc. No. 69-9, at 4 (1926). He also recommended that dredging be minimized because it produced only temporary results on the Middle Mississippi. Id.

Three years later, Congress authorized the Corps to maintain a nine-foot channel for the remainder of the Middle Mississippi, from St. Louis upstream to the mouth of the Missouri River. Rivers and Harbors Act of 1930, Pub. L. No. 71-520, 46 Stat. 918, 927 (1930). Consistent with this authorization, the Corps has for decades built and maintained structures—such as dikes, jetties, and chevrons—along the Middle Mississippi to ensure that the channel stays deep and wide enough for commercial navigation.

In 1976, after passage of the National Environmental Policy Act, the Corps prepared an environmental impact statement assessing the ecological impacts of the project. In 2013,

the Corps decided to supplement its 1976 environmental impact statement for the Middle Mississippi project. Although the project had not changed substantially since the Corps had issued its initial environmental impact statement, the Corps determined that a supplement was warranted due to new circumstances, such as newly designated threatened and endangered species, and new information on the effects of river training structures and dredging on fish and wildlife. In 2017, the Corps issued a 1,400-page final supplemental environmental impact statement and a record of decision that adopted recommendations made in the final supplemental statement.

In that statement, the Corps identified the purpose of the project as ensuring a navigation channel at least nine feet deep and 300 feet wide through the construction of regulating works and supplemental dredging. After considering several alternatives to pursue that goal, the Corps chose the "Continue Construction Alternative" as its preferred course. The Corps decided to continue building permanent river training structures until the cost of building such structures is no longer justified by the resulting reduction in dredging costs. Because the exact locations and types of river training structures that may be needed in the future are unknown, the supplemental statement studied the project's environmental impacts at a programmatic level, assessing the impacts that "can reasonably be anticipated to occur going forward." The statement noted that the Corps would perform site-specific environmental assessments before actually building additional river training structures.

In 2020, plaintiffs sued the Corps alleging that the 2017 final supplemental environmental impact statement violated

several federal laws, including the 2007 Water Resources Development Act and the National Environmental Policy Act. On cross-motions for summary judgment, the district court granted summary judgment for defendants on all claims. *National Wildlife Fed'n v. U.S. Army Corps of Eng'rs*, No. 20-cv-00443-DWD, 2022 WL 195332 (S.D. Ill. Jan. 22, 2022).

II. Analysis

We review the district court's grant of summary judgment de novo. *Sauk Prairie Conservation Alliance v. U.S. Dep't of the Interior*, 944 F.3d 664, 669 (7th Cir. 2019). Under the Administrative Procedure Act, which governs here, we may set aside agency action if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). When assessing whether agency action is arbitrary and capricious, our review is "deferential," and we may not "substitute [our] own policy judgment for that of the agency." *FCC v. Prometheus Radio Project*, 141 S. Ct. 1150, 1158 (2021). A reviewing court "simply ensures that the agency has acted within a zone of reasonableness and, in particular, has reasonably considered the relevant issues and reasonably explained the decision." *Id*.

A. Water Resources Development Act of 2007

Plaintiffs contend that the Corps violated a paragraph in the Water Resources Development Act of 2007 by failing to prepare a detailed mitigation plan when it selected the Continue Construction Alternative as described in its 2017 final supplemental environmental impact statement. Section 2283 of Title 33 of the United States Code is plaintiffs' focus. Section 2283 is found in the midst of a host of statutory provisions dealing with water resources all over the United States.

Section 2283 addresses mitigation measures for fish and wildlife affected by water projects.

Subsection (d) has long addressed mitigation plans in project proposals. Plaintiffs contend the Corps' final supplemental environmental impact statement and record of decision violated § 2283(d)(1), as amended in 2007. The 2007 Water Act amended § 2283(d)(1) by adding the following italicized language: "After November 17, 1986, the Secretary shall not submit any proposal for the authorization of any water resources project to Congress in any report, and shall not select a project alternative in any report, unless such report contains" either a specific plan to mitigate ecological damage or a finding by the Secretary that the project will have negligible adverse impact on fish and wildlife. Pub. L. No. 110-114, § 2036(a)(1), codified at 33 U.S.C. § 2283(d)(1).

Plaintiffs argue that the supplemental environmental impact statement counts as a "report" under § 2283(d)(1) and, because the document selected a project alternative (the Continue Construction Alternative), the Corps was required to prepare a detailed mitigation plan as part of the report. The Corps, on the other hand, insists that "report" in § 2283(d)(1) refers more narrowly to reports submitted to Congress. Because neither the record of decision nor the supplemental environmental impact statement was submitted to Congress, the Corps argues, it was not required to develop a detailed mitigation plan.

Both sides have offered good arguments about the proper scope of "report" in § 2283(d)(1). As we explain below, several factors persuade us that the better understanding of "report" in § 2283(d)(1) is that the term refers only to a report submitted to Congress. Under that paragraph, the Corps is therefore

required to develop a specific fish and wildlife mitigation plan for projects with non-negligible environmental impact only when it submits a project proposal or selects a project alternative in a report submitted to Congress. The Corps did not submit the supplemental statement in this case to Congress. Plaintiffs, on the other hand, focus more narrowly on the word "report." That focus tends to support plaintiffs' view that the term is broader than "reports to Congress" and can include environmental impact statements like the one at issue here on the Middle Mississippi River, as well as a host of other types of reports. We agree with the Corps.

Statutory language "cannot be construed in a vacuum." Sturgeon v. Frost, 577 U.S. 424, 438 (2016), quoting Roberts v. Sea-Land Servs., Inc., 566 U.S. 93, 101 (2012); see also 1 William Blackstone, Commentaries on the Laws of England § 2, p. 43 (Wayne Morrison ed., 2001) ("The fairest and most rational method to interpret the will of the legislator, is by exploring his intentions at the time when the law was made, by signs the most natural and probable. And these signs are either the words, the context, the subject-matter, the effects and consequences, or the spirit and reason of the law."). Statutory interpretation is a "holistic endeavor," and a provision that "may seem ambiguous in isolation is often clarified by the remainder of the statutory scheme—because the same terminology is used elsewhere in a context that makes its meaning clear." *United Savings Ass'n of Texas v. Timbers of Inwood Forest Assocs.,* Ltd., 484 U.S. 365, 371 (1988). We can also trace the evolution of statutory language to get a better understanding of the final language enacted into law, e.g., Russello v. United States, 464 U.S. 16, 23–24 (1983), and actual implementation of statutory language can offer further guidance in interpreting the text. Congress's response to agency or judicial interpretations of

statutes—of which Congress is presumed to be aware—can offer further guidance in interpreting the text. E.g., *Forest Grove School Dist. v. T.A.*, 557 U.S. 230, 239–40 (2009).

All of these interpretive tools are useful here. Before diving into the details, we pause to note the lawmaking and policymaking context. From the early days of the Republic, internal improvements to promote commerce, including river management and flood control, have been a major focus of federal spending and personnel, with Congress legislating and appropriating many details of the improvements. The dialogue between the Corps of Engineers and Congress has now gone on for more than two centuries. Courts have not been the most important participants in the dialogue, but they are occasionally called upon to referee disputes among the major players or to enforce laws at the behest of other parties, such as the environmental groups who brought this case.

In construing the term "report" in § 2283(d), we look first to textual clues provided by other, nearby provisions of the Water Act. Congress has frequently used the word "report" to refer only to reports submitted to Congress, including in the same 2007 Water Act. See, e.g., 33 U.S.C. § 2282a(f)(2) (requiring that "a report of the Chief of Engineers for a water resources project" be submitted to specified congressional committees) (added by § 2033 of 2007 Water Act); § 2282d(a) (requiring the Secretary of the Army to develop and submit to Senate and House committees a "Report to Congress on Future Water Resources Development"); § 2282e(a) (requiring the Corps to prepare and submit to Congress a "post-authorization change report" for water resources development projects); § 2283a(1) (requiring the Secretary to submit to specified congressional committees "a report on the status of

construction of projects that require mitigation") (added by § 2036 of 2007 Water Act). By comparison, another nearby provision uses "report" to instruct the Corps to prepare certain reports that are submitted not to Congress but to "the non-Federal interest" sponsoring a water resources project, but it makes that broader meaning plain. § 2282(b)(5). And that language was added in 2020, long after the 2007 legislation we focus on in this case. See Pub. L. No. 116-260, Div. AA, § 117.

The textual signs in favor of the Corps' position include the fact that Congress used "report" to refer to submissions to Congress in the verb clause that immediately precedes the disputed phrase in § 2283(d)(1) itself: the specific fish and wildlife mitigation requirement applies to water resources project proposals submitted "to Congress in any report...." § 2283(d)(1). It is not unreasonable to think that congressional drafters saw no need to repeat "to Congress" in the very next verb phrase. We generally assume, "[a]bsent evidence of Congress's intent to the contrary," that "Congress intended the same words used close together in a statute to have the same meaning." *United States v. LaFaive*, 618 F.3d 613, 617 (7th Cir. 2010). That principle supports the view that "report" in § 2283(d)(1) means a report submitted to Congress.

In deciding whether "report" in 33 U.S.C. § 2283(d)(1) includes environmental impact statements that are not submitted to Congress, we note that elsewhere in the 2007 Water Resources Development Act, Congress distinguished between "reports" and associated environmental impact statements. In § 2043 of the 2007 Act, Congress defined "feasibility report" as "each feasibility report, and any associated environmental impact statement and mitigation plan" prepared by the Corps

for a water resources project. Pub. L. No. 110-114, § 2043, codified at 33 U.S.C. § 2282(a)(4). Section 2041 similarly distinguishes between environmental impact statements and "reports." That section requires the Secretary to provide the Library of Congress with, among other things, a copy of each "final environmental impact statement" and each "report to Congress prepared by the Corps of Engineers." Pub. L. No. 110-114, § 2041, codified at 33 U.S.C. § 2346(b)(1). If the term "report" already encompassed environmental impact statements that are not sent to Congress routinely, there would have been no need for Congress to mention environmental impact statements expressly in these provisions.

The weight of these textual clues favors the Corps' view here. Still, as plaintiffs point out, the key phrase in § 2283(d)(1) does not expressly limit "report" to reports submitted to Congress. If that is indeed what Congress meant, it would have been easy to make that meaning unmistakably clear. We therefore continue consideration of other indications of statutory meaning. We find important corroboration of the Corps' view in the history of the 2007 amendment. The Senate first adopted a version of what became the 2007 Water Resources Development Act with language that would have amended § 2283(d)(1) to require the precise result plaintiffs seek here. The Senate version would have provided that the Secretary shall not submit any proposal for authorization and "shall not select a project alternative in any final record of decision, environmental impact statement, or environmental assessment, unless the proposal, record of decision, environmental impact statement, or environmental assessment" contains a specific mitigation plan or a finding by the Secretary that the project would have negligible adverse impact on fish and wildlife. S. Rep. No. 110-58, at 103 (2007).

The House version, by contrast, proposed no change to § 2283(d)(1). H.R. Rep. No. 110-80, at 20 (2007). In a conference committee, the Senate proposal favoring these plaintiffs' view was rejected. In the language of congressional conference committees, the conference substitute that was enacted into law reflects a compromise reached in the conference committee: Congress limited § 2283(d)(1) to "reports," but it expanded its reach to cover any report to Congress that selects a project alternative, not just those proposing new projects. H.R. Rep. No. 110-280, at 54 (2007) (Conf. Rep.); 33 U.S.C. § 2283(d)(1).1

Comparing the Senate version to the final statute as enacted shows that if we were to adopt plaintiffs' interpretation of "report," we would read into the statute language that Congress expressly rejected. We decline to do so. *Chickasaw Nation v. United States*, 534 U.S. 84, 93 (2001), quoting *INS v. Cardoza-Fonseca*, 480 U.S. 421, 443 (1987) (Courts "ordinarily will not assume that Congress intended 'to enact statutory language that it has earlier discarded in favor of other language.""); Victoria Nourse, Misreading Law, Misreading Democracy 80 (2016) (explaining that when interpreting legislative history, "[l]ater textual decisions

¹ The 2007 conference committee report illustrates the level of detailed congressional attention to water resources. The 369-page report includes hundreds of provisions specific to particular rivers, harbors, and stretches of rivers, including authorizing more than 100 new projects and adding "project-related provisions" for 178 different projects, studies for 99 projects, and other provisions for more than 150 other projects. Similarly numerous and detailed legislative provisions on water projects are common in other omnibus water bills.

trump earlier ones[,]" such that conference committee reports changing relevant language can be especially helpful).

Finally, the Corps' actual implementation of the 2007 Water Act and congressional responses to that implementation give further support to the narrower reading of "report" in § 2283(d)(1) that we adopt here. In 2009, the Corps issued implementation guidance explaining that the 2007 Water Act amended § 2283(d)(1) to require that "any report, submitted to Congress for authorization, shall not select a project alternative unless such report contains" a specific mitigation plan or a determination that the project will have negligible adverse impacts. U.S. Army Corps of Engineers, Memorandum for Commanders: Implementation Guidance for Section 2036(a) of the Water Resources Development Act of 2007 (WRDA 07)—Mitigation for Fish and Wildlife and Wetlands Losses (Aug. 31, 2009), at 1(a) (emphasis added). If the Corps was wrong in that interpretation, we have no evidence that Congress has taken any action expressing disagreement. In fact, in the fourteen years since the Corps issued that guidance, Congress has passed several more Water Resources Development Acts. It has not acted to amend the relevant language in § 2283(d)(1). See Water Resources Reform and Development Act of 2014, Pub. L. No. 113-121, 128 Stat. 1193 (2014); Water Resources Development Act of 2016, Pub. L. No. 114-322, 130 Stat. 1632 (2016); Water Resources Development Act of 2018, Pub. L. No. 115-270, 132 Stat. 3768 (2018); Water Resources Development Act of 2020, Pub. L. No. 116-260, 134 Stat. 2615 (2020); Water Resources Development Act of 2022, Pub. L. No. 117-263, 136 Stat. 3691 (2022). This history provides strong evidence that Congress approves the Corps' interpretation. See Forest Grove School Dist., 557 U.S. at 239–40, quoting Lorillard v. Pons, 434 U.S. 575, 580 (1978) ("Congress is presumed to be

aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change."). This reasoning from evidence of agency implementation takes on special force in the context of federal water projects and the close working relationship between Congress and the Corps.

Plaintiffs insist, however, that construing "report" to mean "reports submitted to Congress" would give no effect to the 2007 amendment. In their view, before 2007 the Corps was required to develop a specific mitigation plan for projects expected to cause more than negligible adverse environmental impact whenever it selected a project alternative in a report submitted to Congress. We agree with the general principle in interpreting statutory amendments, but we disagree with the proposed application to the 2007 amendment to § 2283(d)(1).

Before the 2007 amendment, § 2283(d)(1) applied only to project *proposals* in reports submitted to Congress. See 33 U.S.C. § 2283(d)(1) (1986) (providing that "the Secretary shall not *submit any proposal for the authorization of any water resources project* to the Congress unless such report contains" a specific mitigation plan or a determination of negligible adverse impact on fish and wildlife) (emphasis added). The 2007 amendment thus broadened the provision's reach to include other reports submitted to Congress that select a project alternative, such as reevaluation reports submitted to Congress to change an authorized project.

We recognize that the term "report" in the 2007 amendment to § 2283(d)(1) does not contain the explicit limitation the Corps advocates here. Taken in isolation, the English word "report" is broad enough to cover the supplemental final environmental impact statement. It was a report to the

public assessing the environmental impact of the regulating works project and different ways of moving forward with the project. These other cues from associated statutory provisions, the history of the statutory language at issue, and the history of its implementation persuade us, however, to agree with the Corps that the better reading is that Congress used "report" in § 2283(d)(1) to refer to reports submitted to Congress. Because neither the 2017 record of decision nor the final supplemental environmental impact statement for the Middle Mississippi River was such a report, the Corps was not required to develop a specific mitigation plan within the scope of § 2283.²

B. National Environmental Policy Act

We turn next to plaintiffs' arguments that the final supplemental environmental impact statement violated requirements of the National Environmental Policy Act. For all "major Federal actions significantly affecting the quality of the human environment," the Act requires agencies to develop a "detailed" environmental impact statement. 42 U.S.C. § 4332(2)(C). This statement should describe the environmental impact of the proposed action and analyze potential alternatives. *Id.* Here, plaintiffs allege that the supplemental statement's purpose-and-need statement was inadequate, that the Corps failed to explore reasonable alternatives, and that the Corps did not meaningfully consider the studied alternatives. We find no violation of the Act.

² The final supplemental environmental impact statement does, however, include an appendix detailing the Corps' plans to mitigate habitat losses caused by the project. We do not decide here whether the appendix would be sufficient to comply with the mitigation requirements of § 2283.

1. Purpose-and-Need Statement

An environmental impact statement must "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 C.F.R. § 1502.13 (1978).3 We review an agency's purpose-and-need statement for reasonableness and grant agencies "considerable discretion to define a project's purpose and need." Alaska Survival v. Surface Transp. Bd., 705 F.3d 1073, 1084 (9th Cir. 2013). An agency may not, however, "contrive a purpose so slender as to define competing 'reasonable alternatives' out of consideration." Simmons v. U.S. Army Corps of Eng'rs, 120 F.3d 664, 666 (7th Cir. 1997). When an agency acts "pursuant to a specific statute, the statutory objectives of the project serve as a guide by which to determine the reasonableness of objectives outlined" in the environmental impact statement. Westlands Water Dist. v. U.S. Dep't of the Interior, 376 F.3d 853, 866 (9th Cir. 2004).

Here, the supplemental statement identified the project's purpose as "obtaining and maintaining a navigation channel" on the Middle Mississippi that is at least nine feet deep and 300 feet wide. The statement noted further that the "long-term goal of the Project, as authorized by Congress, is to obtain and maintain a navigable channel and reduce federal expenditures by alleviating the amount of annual maintenance dredging through the construction of regulating works." The purpose of the supplemental environmental impact statement

³ The Council on Environmental Quality amended NEPA regulations in 2020 and 2022. 85 Fed. Reg. 43,304 (July 16, 2020); 87 Fed. Reg. 23,453 (Apr. 20, 2022). Throughout this opinion, we cite the NEPA regulations in effect in 2017 at the time of the challenged action.

itself was to assess the project's effects on the environment and to update the 1976 environmental impact statement in light of new information.

The Corps reasonably defined the purpose and need for the project. Congress authorized the project in the Rivers and Harbors Act of 1910. Pub. L. No. 61-264, 36 Stat. at 659. It later modified the project in the Rivers and Harbors Act of 1927 "in accordance with the recommendations submitted by the Chief of Engineers" in his letter to Congress. Pub. L. No. 69-560, 44 Stat. at 1012. In that letter, the Chief recommended a channel at least nine feet deep and 300 feet wide, and he advised that this channel be maintained through the construction of permanent river training structures. Letter from the Chief of Eng'rs, H.R. Doc. No. 69-9, at 4. Though he acknowledged that some amount of dredging "will probably always be necessary," he recommended that it be "reduced to a minimum" because it offered only temporary results. Id. The 2017 final supplemental statement's purpose-and-need statement tracks this Congressional authorization. It identifies the purpose of the project as maintaining a navigable channel in the Middle Mississippi River at least nine feet deep and 300 feet wide through the construction of permanent river training structures and minimal dredging. The Corps tailored the purpose and need of its project to Congress's specific instructions.

Plaintiffs argue, however, that the Corps ignored limits in the project's authorizing legislation. In their view, the Corps was authorized to build structures only to narrow the river to a certain width. Once the authorized width was obtained, they insist, the Corps was required to maintain the channel through dredging. Plaintiffs are mistaken. Though they cite the Chief of Engineers' letter in support of their position, they

do not cite his recommendations. The Chief included proposals from the Board of Engineers for Rivers and Harbors and the District Engineer, Major John C. Gotwals, in his letter to Congress. *Letter from the Chief of Eng'rs*, H.R. Doc. No. 69-9, at 4–31. In their brief, plaintiffs cite the letter of the District Engineer, who recommended that the channel be maintained through dredging once the river is contracted to a certain width. Congress, however, specifically adopted the recommendations "submitted by the Chief of Engineers," not those of the District Engineer. Rivers and Harbors Act of 1927, Pub. L. No. 69-560, 44 Stat. at 1012.

The plaintiffs' remaining arguments are unpersuasive. They argue that the purpose-and-need statement ignores Congress's other directives—found in the National Environmental Policy Act, various Water Resources Development Acts, and the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 et seq.—to protect the environment and mitigate ecological damage. None of these acts, however, modified the project's authorization or purpose. And, while agencies should "always consider the views of Congress, expressed ... in the agency's statutory authorization to act, as well as in other congressional directives," *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991), the Corps was not arbitrary or capricious when it defined the project's goals according to the project aims authorized by Congress.

Finally, plaintiffs contend that the purpose-and-need statement is unduly narrow, because it assumes that only river training structures can achieve the project's purposes. They argue that defining the project's purpose and need in this manner restricted the range of reasonable alternatives that could be considered. While an agency may not

"constrict[] the definition of the project's purpose and thereby exclude[] what truly are reasonable alternatives," *Simmons*, 120 F.3d at 666, that did not occur here. Congress instructed the Corps to maintain the channel by using permanent structures and by using supplemental dredging, but no more than necessary and economical. The Corps, in turn, developed a statement of purpose and need that reflected these instructions from Congress. It was not arbitrary and capricious to do so.

2. Consideration of Reasonable Alternatives

Next, plaintiffs argue that the Corps failed to consider reasonable alternatives in its supplemental impact statement. An environmental impact statement must "[r]igorously explore and objectively evaluate all reasonable alternatives" to the proposed project, including "reasonable alternatives not within the jurisdiction of the lead agency" and the alternative of taking no action. 40 C.F.R. § 1502.14. A project's purpose determines the range of reasonable alternatives, and the "broader the purpose, the wider the range of alternatives; and vice versa." Simmons, 120 F.3d at 666. "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Westlands Water Dist., 376 F.3d at 868, quoting Morongo Band of Mission Indians v. Fed. Aviation Admin., 161 F.3d 569, 575 (9th Cir. 1998). Agencies, however, need to evaluate only reasonable alternatives: they need not consider alternatives that would be "impossible for the agency to implement" or that would "frustrate the project's goals." Protect Our Parks, Inc. v. Buttigieg, 39 F.4th 389, 400 (7th Cir. 2022). We "owe and accord deference to the Corps" in determining which alternatives are reasonable, considering the project's purposes. Simmons, 120 F.3d at 668–69.

As discussed above, the supplemental impact statement identified the Middle Mississippi project's purpose as maintaining a navigation channel that is nine feet deep and 300 feet wide through the use of river training structures and minimal supplemental dredging. The Corps evaluated several alternatives before determining that only two warranted detailed study.

In response to public comments, the Corps considered conducting environmental restoration and enhancement measures for fish and wildlife habitat as part of the project. The Corps ultimately determined that this was not a reasonable or feasible alternative because Congress had not authorized the Corps to undertake such measures without specific funding and a cost-share partner. The Corps also considered, in response to public comments, other ways to maintain the Middle Mississippi channel, such as altering water releases from the Upper Mississippi through locks and dams. That too was determined to be an unreasonable alternative because the locks and dams on the Upper Mississippi are maintained through a different authorized project. That rationale has more than a whiff of bureaucratic rigidity to it, but more substantively, the Corps also concluded that, while it was possible to alter some water control procedures to improve navigation on the Middle Mississippi, prior experience, especially during the serious drought of 2012, indicated that these alterations would not be substantial enough to accomplish the purpose of the project and would not constitute a reasonable alternative.

The Corps also revisited four alternatives studied in the 1976 environmental impact statement. The first, stopping all construction and dredging activities on the Middle

Mississippi, was determined to be unreasonable because it would not satisfy the project's purpose of maintaining a navigable nine-foot channel. If the river were left to its own devices, the navigable channel would soon be lost. The second alternative, constructing locks and dams along the Middle Mississippi, was also rejected because it went beyond the purpose of the final supplemental statement, which was to update the 1976 environmental impact statement, and because it would require Congressional authorization and funding. The third, seeking from Congress a change in authorization for the project to include fish and wildlife habitat restoration as a project purpose, was also determined to be unreasonable because, in the years since 1976, the Corps has incorporated environmental mitigation into the project and Congress has authorized environmental restoration in other acts. Congress has passed legislation permitting, but not requiring, ecological restoration on the Middle Mississippi. Congress, however, has not permitted the Corps to use construction funds for that purpose, and any restoration project would require a costshare partner. This left the fourth alternative, which was adopted in 1976: to continue construction of regulating works and to supplement with as little dredging as possible.

The Corps then considered four additional alternatives, each requiring different levels of construction and dredging. Under the first, the "No New Construction Alternative," the Corps would maintain existing structures and dredge but would build no new structures. The second alternative, reducing dredging as much as possible by building new structures, was ultimately determined to yield the same outcome as the third alternative, the most cost-effective mixture of new construction and dredging. The Corps then considered a fourth alternative, requested by natural resource agencies: to

select a level of construction between the no new construction option and the minimal dredging option that would avoid environmental impacts. The Corps thought it unreasonable to select a "random dredge reduction amount" with a commensurate level of construction between these two options without a scientific reason, but the Corps did incorporate the costs of compensatory mitigation into the alternatives already identified. When compensatory mitigation costs were considered, the final cost-effective level of dredging increased and the level of construction decreased, which was precisely what the natural resource agencies had proposed.

The Corps thus ultimately identified two alternatives that warranted detailed study. Under the first, the "No New Construction Alternative," the Corps would not construct any additional structures but would maintain the channel through dredging and maintenance of existing structures. Under the second, the "Continue Construction Alternative," the Corps would continue constructing river training structures until the cost of building additional structures could not be justified by the reduction in dredging costs. In determining what level of construction is cost-effective, this alternative considers costs of compensatory mitigation.

Plaintiffs challenge the Corps' selection of reasonable alternatives on several grounds. First, they criticize the Corps for offering a "binary choice," and they insist that more alternatives should have been studied. As illustrated above, however, the Corps considered many alternatives but offered substantial reasons for eliminating several from further consideration because they would not satisfy the project's purpose or were otherwise unreasonable. As regulations require, the

Corps "briefly discuss[ed] the reasons" for not studying these alternatives in detail. 40 C.F.R. § 1502.14(a).

In any event, the "reasonableness of the analysis of project alternatives ... is resolved not by any particular number of alternatives considered, but by the nature of the underlying agency action." Friends of Capital Crescent Trail v. Fed. Transit Admin., 877 F.3d 1051, 1063 (D.C. Cir. 2017) (finding no violation of NEPA where the agency's final environmental impact statement studied only two alternatives); see also Citizens for Smart Growth v. Sec'y of the Dep't of Transp., 669 F.3d 1203, 1212 (11th Cir. 2012) ("NEPA does not impose any minimum number of alternatives that must be evaluated."). Here, the purpose of the project, as defined by Congress for generations, was relatively narrow. Congress authorized the Corps to maintain a navigation channel through construction of river training structures with minimal supplemental dredging. That narrow purpose appropriately limited the range of reasonable alternatives that the Corps selected for detailed study. Citizens Against Burlington, 938 F.2d at 195 ("The goals of an action delimit the universe of the action's reasonable alternatives.").

Plaintiffs next contend that the Corps ignored reasonable alternatives, including those that would require the Corps to seek Congressional authorization. Specifically, plaintiffs argue that the Corps should also have considered (1) an alternative that would remove or modify existing structures; (2) an alternative that would maintain the navigation channel through other means, including upstream water level management regimes, alternative dredging, and the development of new, innovative techniques; and (3) an alternative that

would propose ecological restoration and fish and wildlife conservation as authorized project purposes.

As an initial matter, the Corps did consider some of these alternatives, either individually or as part of studied alternatives. The Corps has already removed or modified a number of river training structures, such as those that are no longer effective. It plans to continue to do so as a compensatory mitigation measure under the chosen Continue Construction Alternative. The Corps will also continue to develop and implement innovative river training structures that are more environmentally friendly than traditional structures. And, as part of both studied alternatives, the Corps considered alternative dredging techniques and beneficial uses of dredged material that would minimize environmental harm.

Other alternatives suggested by plaintiffs were rejected, in part, because they would require Congressional authorization. As discussed above, the Corps considered and rejected an alternative proposing ecological restoration as an authorized project purpose and an alternative that would use upstream water management techniques to maintain the navigation channel.

Courts have repeatedly said that an otherwise reasonable alternative should not be eliminated solely because it would require legislative action. *Natural Resources Def. Council, Inc. v. Morton,* 458 F.2d 827, 837 (D.C. Cir. 1972) ("The mere fact that an alternative requires legislative implementation does not automatically establish it as beyond the domain of what is required for discussion," but court did not "suppose Congress intended an agency to devote itself to extended discussion of the environmental impact of alternatives so remote from reality as to depend on, say, the repeal of the antitrust laws.");

Environmental Def. Fund, Inc. v. Froehlke, 473 F.2d 346, 351 (8th Cir. 1972) (disagreeing with Corps' conclusion that it need not study further an alternative that would require separate Congressional authorization). An alternative requiring Congressional authorization, however, will "qualify for inclusion in an [environmental impact statement] only in very rare circumstances." City of Sausalito v. O'Neill, 386 F.3d 1186, 1208 (9th Cir. 2004), quoting City of Angoon v. Hodel, 803 F.2d 1016, 1021 n.2 (9th Cir. 1986). The touchstone is reasonableness, which can include assessment of political realities. *Natural Re*sources Def. Council, 458 F.2d at 837. Compare City of Sausalito, 386 F.3d at 1209-10 (reasonable for Park Service not to consider alternative requiring Congressional funding for refurbishment project in light of previous indications from Congress that funding would not be provided), with *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 814 (9th Cir. 1999) (unreasonable for Forest Service not to consider alternative because it would require additional funding when the alternative ultimately selected relied on "admittedly speculative funds").

Here, it was not unreasonable for the Corps to eliminate from consideration certain alternatives that would require Congressional action. The Corps' rejection of an alternative that would use upstream water level management techniques to ensure a navigable channel was based not only on that fact that Congress had authorized water control plans for the Upper Mississippi in a separate project but also the Corps' assessment that such an alternative could not guarantee a navigable channel.

It was also reasonable for the Corps to reject an alternative that would propose ecological restoration as an authorized

project purpose. An alternative that would require Congress to alter a project's purpose is substantially different from one that would require Congress to provide additional funding, see Muckleshoot, 117 F.3d at 814, or to acquire land, see Froehlke, 473 F.2d at 351. Moreover, given the history of the Middle Mississippi project, it was not unreasonable for the Corps to conclude that Congress was unlikely to approve a change in project purpose. Since 1910, Congress has directed the Corps to maintain a navigation channel on the Middle Mississippi. While Congress has, in other acts, authorized the Corps to engage in environmental protection and restoration, it has never altered the Middle Mississippi project's purpose to include ecological restoration, even after the Corps sought authorization to that effect as part of its 1976 environmental impact statement. The Corps was not arbitrary and capricious in rejecting this alternative, especially given the purpose of the supplemental statement itself, which was to update the 1976 environmental impact statement in light of new circumstances and information.

3. Informed Consideration of Alternatives

Finally, plaintiffs argue that the Corps failed to provide informed consideration of the alternatives it did study. They argue that the final supplemental statement does not explain what criteria will trigger future dredging, revetment, or construction of river training structures. Plaintiffs further complain that the supplemental statement does not specify where future dredging and construction will take place, nor does it assess the economic cost and environmental impact of the studied alternatives. Last, plaintiffs fault the supplemental statement for not identifying which river training structures will be built under the Continue Construction Alternative.

We disagree with these criticisms. First, the supplemental statement does explain how the Corps decides where and when to dredge, as well as how it determines whether and where to build river training structures. Plaintiffs' other objections are, at core, objections to the fact that the supplemental statement is a programmatic analysis rather than an analysis of specific proposed structures.

Due to the Middle Mississippi's changing flows and sediment levels, the Corps cannot know in advance just where future construction, revetment, and dredging will be needed. In light of these unknowns, the supplemental statement assesses the programmatic impacts that "can reasonably be anticipated to occur," while providing that the Corps will conduct site-specific environmental assessments before it builds specific additional river training structures.

"Tiering" environmental studies in this manner is permitted and in fact encouraged by NEPA regulations. 40 C.F.R. § 1502.20 ("Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review."); see also Environmental Law & Policy Center v. U.S. Nuclear Reg. Comm'n, 470 F.3d 676, 684 (7th Cir. 2006), quoting County of Suffolk v. Sec'y of the Interior, 562 F.2d 1368, 1378 (2d Cir. 1977) ("Courts have permitted agencies to defer certain issues in an [environmental impact statement] for a multistage project when detailed useful information on a given topic is not 'meaningfully possible' to obtain, and the unavailable information is not essential to determination at the earlier stage."). Corps regulations explain that when using tiered environmental analyses, the "inprogrammatic [environmental broad or

statement] must present sufficient information regarding overall impacts of the proposed action so that the decision-makers can make a reasoned judgment on the merits of the action at the present stage of planning." 33 C.F.R. § 230.13(c).

Given the necessary and permissible limits of a programmatic study, we are satisfied that the Corps took the "hard look" required by the National Environmental Policy Act. *Highway J Citizens Grp. v. Mineta*, 349 F.3d 938, 953 (7th Cir. 2003), quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). The supplemental statement discusses the types of river training structures the Corps would likely build under the Continue Construction Alternative, including their various effects on channel flow, sediment levels, and river habitats. The supplemental statement also assesses the environmental impact of each studied alternative, including anticipated effects on side channel habitats, water quality, air quality, fishery resources, threatened and endangered species, and human resources.

As for economic cost, the supplemental statement employs an admittedly simplified economic analysis to estimate the amount of construction under the Continue Construction Alternative that would be cost effective considering the costs of construction, dredging, and compensatory mitigation. The statement explains, however, that due to constraints on annual funding and the Corps' inability to predict where future construction and dredging will be required, it was not practicable to produce detailed economic analyses in the programmatic statement, but that such analyses would be provided in future site-specific environmental assessments. Considering both the purpose of the supplemental statement, which was to update the Corps' analysis of the project's environmental

impacts, and its programmatic nature, the Corps did not act unreasonably in declining to provide more detailed economic analyses.

We conclude that the Corps' final supplemental environmental impact statement satisfied the National Environmental Policy Act. The Corps reasonably articulated the purpose and need for the project, identified reasonable alternatives that warranted detailed study, and provided meaningful consideration of those alternatives, given the programmatic nature of the supplemental statement.

The judgment of the district court is AFFIRMED.