

PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 13-2215

DEFENDERS OF WILDLIFE; NATIONAL WILDLIFE REFUGE ASSOCIATION,

Plaintiffs - Appellants,

v.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION; ANTHONY J. TATA, Secretary, North Carolina Department of Transportation; FEDERAL HIGHWAY ADMINISTRATION; JOHN F. SULLIVAN, III,

Defendants - Appellees,

and

CAPE HATTERAS ELECTRIC MEMBERSHIP CORPORATION,

Intervenor/Defendant - Appellee.

Appeal from the United States District Court for the Eastern District of North Carolina, at Elizabeth City. Louise W. Flanagan, District Judge. (2:11-cv-00035-FL; 2:12-mc-00001-FL)

Argued: May 13, 2014

Decided: August 6, 2014

Before DUNCAN and WYNN, Circuit Judges, and J. Michelle CHILDS, United States District Judge for the District of South Carolina, sitting by designation.

Affirmed in part, reversed in part, and remanded by published opinion. Judge Wynn wrote the opinion, in which Judge Duncan and Judge Childs joined.

ARGUED: Julia Furr Youngman, SOUTHERN ENVIRONMENTAL LAW CENTER, Chapel Hill, North Carolina, for Appellants. Robert Lundman, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C.; John Foster Maddrey, NORTH CAROLINA DEPARTMENT OF JUSTICE, Raleigh, North Carolina, for Appellees. **ON BRIEF:** Nicholas S. Torrey, SOUTHERN ENVIRONMENTAL LAW CENTER, Chapel Hill, North Carolina; Jason C. Rylander, DEFENDERS OF WILDLIFE, Washington, D.C., for Appellants. Ethan G. Shenkman, Acting Principal Deputy Assistant Attorney General, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C.; Thomas G. Walker, United States Attorney, Matthew L. Fesak, Assistant United States Attorney, Environment & Natural Resources Division, OFFICE OF THE UNITED STATES ATTORNEY, Raleigh, North Carolina; Roy Cooper, Attorney General, Scott T. Slusser, Special Deputy Attorney General, Thomas D. Henry, Assistant Attorney General, Colin A. Justice, Assistant Attorney General, NORTH CAROLINA DEPARTMENT OF JUSTICE, Raleigh, North Carolina, for Appellees.

WYNN, Circuit Judge:

At the heart of this case are the past and future of the Outer Banks, barrier islands along North Carolina's Atlantic coast. For decades, the Herbert C. Bonner Bridge ("Bonner Bridge") has provided highway access between mainland North Carolina and the Outer Banks's Hatteras Island. But the effects of time threaten the structural integrity of the Bonner Bridge, while large storms and changing coastal conditions threaten the viability of the non-elevated portions of North Carolina Highway 12 ("NC 12") south of the Bonner Bridge.

The North Carolina Department of Transportation ("NCDOT") and the Federal Highway Administration ("FHWA") (collectively, "Defendants") sought a long-term transportation solution to these problems and settled on a plan that essentially mirrors what currently exists: replacing the Bonner Bridge and maintaining NC 12 on Hatteras Island.

Defenders of Wildlife and the National Wildlife Refuge Association ("Plaintiffs") responded with this lawsuit. Plaintiffs claim that Defendants violated the National Environmental Policy Act ("NEPA") and Section 4(f) of the Department of Transportation Act of 1966 by, among other things, committing to the construction of only one segment of the transportation project—namely the replacement bridge—and denying the public the full review of the entire project and its

environmental impact, as NEPA requires. Plaintiffs also contend that Defendants violated Section 4(f) by, among other things, improperly rejecting alternatives that would not have used protected wildlife refuge land.

The district court brought Plaintiffs' suit to a halt by granting summary judgment in favor of Defendants. The district court held, in part, that Defendants complied with NEPA and Section 4(f) in researching, designing, and selecting their project.

On appeal, we do not decide whether we agree with Defendants' policy choices or project preferences. Rather, we must determine whether Defendants have complied with the law in reaching their decisions. This has been no easy task, given the tortured decisionmaking history of this project, the difficulty of determining exactly what Defendants intend to construct, and the extensive administrative record underlying the district court's decision. Nevertheless, for the reasons that follow, we affirm the district court's determination that Defendants complied with NEPA, reverse the district court's determination that a special exception frees Defendants from complying with Section 4(f), and remand for further proceedings.

I.

A.

Since the early 1990s, Defendants have been developing plans to replace portions of NC 12, a two-lane highway that traverses the Outer Banks. We refer to Defendants' chosen plan—the one currently under review by this Court—simply as “the Project.” The Project involves the fifteen-mile portion of NC 12 running from the southern tip of Bodie Island, across the Oregon Inlet, to the Village of Rodanthe, the northernmost population center on Hatteras Island. The Oregon Inlet is a relatively narrow and shallow channel of water formed in the mid-1800s by severe storms.

Before 1963, when the Bonner Bridge was constructed over the Oregon Inlet, motorists relied on ferries to travel between Hatteras Island and the mainland. The two-lane Bonner Bridge is approximately 2.4 miles long and carries over ten thousand vehicles per day during the area's busy summer tourist season.

After crossing the Oregon Inlet but before reaching Rodanthe, NC 12 passes through thirteen miles of the Pea Island National Wildlife Refuge (“Refuge”) and the Cape Hatteras National Seashore (“Seashore”). These two natural areas are owned and managed by the federal government, and they are major destinations for many of the tourists who visit Hatteras Island.

Although the boundaries of the Seashore and the Refuge generally overlap in the Project area, they are two distinct entities.

In 1938, President Roosevelt established the Refuge pursuant to Executive Order 7864, issued under the Migratory Bird Conservation Act. The Order stated that the land was to be reserved "as a refuge and breeding ground for migratory birds and other wildlife" and that "any private lands within the area described shall become a part of the refuge hereby established upon the acquisition of title thereto or lease thereof by the United States[.]" Exec. Order No. 7864, 3 Fed. Reg. 734-35 (Apr. 12, 1938). During 1937 and 1938, the United States government used condemnation proceedings to acquire the property for the Refuge directly from the previous land owners. The Refuge is managed by the United States Fish and Wildlife Service, a bureau of the Department of the Interior ("DOI").

In 1937, Congress created the Seashore as a protected environment separate and distinct from the Refuge. Act of Aug. 17, 1937, Pub. L. No. 311, 50 Stat. 669. The Seashore contains approximately 100 square miles of "primitive wilderness" on the coast, "set apart . . . for the benefit and enjoyment of the people[.]" Id. at 669. The United States government acquired the land for the Seashore through several deeds from the State of North Carolina. Today, the Seashore "is a publicly owned

park and recreation area that is owned by the federal government and administered by the [National Park Service]." J.A. 1413.

When the Seashore was created, Congress emphasized the need to protect it from development, stating that "no development of the project [Seashore] or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna" in the area. Act of Aug. 17, 1937, Pub. L. No. 311, § 4, 50 Stat. 669, 670. The Seashore remains "72 miles . . . of open, virtually unspoiled beach and scenic drive." J.A. 1413.

During the 1940s, paved roads were built between the villages on Hatteras Island, and in 1952, "a paved road was constructed through Hatteras Island to the village of Hatteras." J.A. 1910. Exactly when and how the public right-of-way south of the bridge was established is a matter of dispute discussed in detail below. But the record reflects that it was not until 1951 that Congress authorized DOI to grant "a permanent easement for the construction of a public road through . . . the Pea Island National Wildlife Refuge" to the State of North Carolina. Act of Oct. 29, 1951, Pub. L. No. 229, 65 Stat. 662. And it was not until 1954 that DOI formally deeded the easement to North Carolina.

Unfortunately, both the Bonner Bridge and the road have suffered from the effects of time, ocean overwash, and erosion.

NCDOT has deemed the condition of the Bonner Bridge "poor" and given it a "sufficiency rating of two out of 100." J.A. 1256. The condition of the surface road is no better. In its narrowest places in the Refuge, Hatteras Island is just one-quarter mile wide, and even under normal weather conditions, portions of NC 12 are "threatened by shoreline erosion and overwash." J.A. 1256.

Despite moving NC 12 as far west as possible,¹ and notwithstanding valiant efforts by its civil engineers and road crews, NCDOT has not been able to ensure the uninterrupted operation of the highway in recent years. In November 2009, for example, Tropical Storm Ida rendered NC 12 impassable just north of Rodanthe. Less than two years later, Hurricane Irene created two breaches that closed NC 12 from August 2011 until October 2011. And in 2012, Hurricane Sandy "tore up the roadbed, leveled the dunes, and damaged the sandbags" north of Rodanthe. DOT struggling with Highway 12 repairs at the S-curves; more ferries added for holiday, Island Free Press, Nov. 16, 2012, <http://islandfreepress.org/2012Archives/11.16.2012-DOTStrugglingWithHighway12RepairsAtTheScurvesMoreFerriesAddedForHoliday.html>. (saved as ECF opinion attachment).

¹ NCDOT has had to seek DOI approval to reconstruct NC 12 west of its original right-of-way and outside the bounds of its easement.

In light of the impact of storm events such as these, merely replacing the Bonner Bridge would not achieve the central purpose of the Project, which is to "[p]rovide a new means of access from Bodie Island to Hatteras Island for its residents, businesses, services, and tourists prior to the end of the Bonner Bridge's service life." J.A. 2486. Indeed, as Defendants' own NEPA documents have put it: "Building Phase I [the bridge replacement] alone would not meet the purpose and need of the project[.]" J.A. 2493. Therefore, the Project now "also includes NC 12 between the community of Rodanthe and Oregon Inlet, a section of roadway that is at risk because of shoreline erosion." J.A. 2486.

B.

In 1991, NCDOT designated several "hot spots" along NC 12: areas with a high rate of erosion and a high likelihood of overwash creating a new inlet. That same year, transportation officials began to plan for the replacement of the Bonner Bridge. They completed a feasibility study and selected as their NEPA preferred alternative² the "1993 Parallel Bridge Corridor." J.A. 785. This alternative consisted only of a

² "Preferred alternative" is a NEPA term of art. An agency must identify its preferred alternative "if one or more exists, in the draft statement and . . . in the final statement unless another law prohibits the expression of such a preference." 40 C.F.R. § 1502.14(e).

replacement bridge. In 1993, Defendants completed a Draft Environmental Impact Study and a Section 4(f) analysis for this bridge-only preferred alternative.

However, nine years later, in 2002, officials decided "that the 1993 Parallel Bridge Corridor was no longer a viable Bonner Bridge replacement alternative," J.A. 787, due in large part to the ongoing beach erosion and "increased problems with ocean overwash along NC 12 south of Bonner Bridge" that often rendered the highway impassable. J.A. 786. Defendants perceived the need to "lengthen the project limits [T]he prevailing logic being that if those hot spots are impassible, [sic] what good is the bridge?" J.A. 1787.

Accordingly, Defendants began assessing different alternatives that addressed both the bridge and certain segments of NC 12, preparing a Supplemental Draft Environmental Impact Statement, and performing a new Section 4(f) Evaluation. These assessments were consolidated into one document that was signed and released to the public on September 12, 2005 (the "2005 Supplemental Draft Environmental Impact Statement/4(f) Evaluation").

The 2005 Supplemental Draft Environmental Impact Statement/4(f) Evaluation analyzed five alternatives that were located within two different geographic corridors. The first corridor was described as the "Pamlico Sound Bridge Corridor,"

and the two alternatives within this corridor involved an 18-mile-long bridge that extended from Bodie Island in the north to Rodanthe in the south. Both of these alternatives, titled "Pamlico Sound Bridge Corridor With Curved Rodanthe Terminus" and "Pamlico Sound Bridge Corridor With Intersection Rodanthe Terminus," J.A. 781, avoided almost all of the Refuge and the Seashore by making a large sweeping curve approximately five miles west of Hatteras Island into Pamlico Sound before rejoining existing NC 12 in Rodanthe.

The remaining three alternatives were located within the "Parallel Bridge Corridor." J.A. 781-82. These alternatives all consisted of a replacement bridge that would span the Oregon Inlet parallel to the existing Bonner Bridge, coupled with a strategy for keeping "NC 12 open from the community of Rodanthe to the Oregon Inlet bridge's southern terminus[.]" J.A. 783. These alternatives differed in their respective strategies for keeping NC 12 open on Hatteras Island.

The first alternative—titled "The Nourishment Alternative"—involved "beach nourishment plus dune enhancement . . . to maintain a minimally adequate beach and dune system." J.A. 783. The protection afforded by the beach and dunes—which would need to be replenished with dredged sand every few years—would ostensibly allow NC 12 to remain in place.

The second alternative—titled “Road North/Bridge South”—involved placing NC 12 “on a bridge west of Hatteras Island beginning at a new intersection in Rodanthe and continuing to a point approximately 2 miles . . . north of the Refuge’s southern boundary where the project would meet existing NC 12.” J.A.

783. After that point, NC 12 would

then remain unchanged for 2.6 miles [and] . . . would be relocated to a point 230 feet . . . west of the forecast worst-case 2060 shoreline. This relocation would continue 7.1 miles . . . north until the relocated NC 12 would meet the Oregon Inlet bridge. Three 10-foot-high dunes, totaling 2,100 feet . . . would be built when needed as the shoreline erodes towards the relocated road.

J.A. 783.

The final alternative within the Parallel Bridge Corridor was called the “All Bridge Alternative,” in which “NC 12 would be constructed on a bridge to the west of the existing road.”

J.A. 783. Notwithstanding its name, the All Bridge Alternative would also include two surface road segments—one near the Oregon Inlet and another “just north of the Refuge’s ponds where access from NC 12 to the Refuge would be provided.” J.A. 783. The 2005 Supplemental Draft Environmental Impact Statement/4(f) Evaluation explained that although all of the Parallel Bridge Corridor alternatives were described and addressed “as three separate alternatives, their components could be mixed and

matched geographically along the length of NC 12 to create other variations." J.A. 783.

The 2005 Supplemental Draft Environmental Impact Statement/4(f) Evaluation did not select a preferred alternative, and Defendants never issued a Final Environmental Impact Statement. Instead, Defendants issued another supplement in 2007. They titled this document the "Supplement to the 2005 Supplemental Draft Environmental Impact Statement and Draft Section 4(f) Evaluation" (the "2007 Supplement"). The 2007 Supplement explains that it was issued to address the "characteristics and potential direct, indirect, and cumulative impacts of two additional detailed study alternatives." J.A. 1091. These two new alternatives were titled: (1) "Parallel Bridge Corridor With Phased Approach/Rodanthe Bridge;" and (2) "Parallel Bridge Corridor With Phased Approach/Rodanthe Nourishment." J.A. 1096. The 2007 Supplement also explicitly stated that "[u]nless otherwise noted, information presented in the 2005 [Supplemental Draft Environmental Impact Statement] has not changed and is not reproduced in this Supplement." J.A. 1093.

The 2007 Supplement's two new alternatives were variations on a "Phased Approach" to the Project. Both alternatives included "an Oregon Inlet bridge and elevating portions of NC 12 through the Refuge and northern Rodanthe on new bridges within

the existing NC 12 easement." J.A. 1097. Both alternatives were proposed to be built in four phases, with the construction of the new Oregon Inlet bridge as the first phase. The remaining phases would be constructed "as necessitated by shoreline erosion." J.A. 1097.

The only difference between the two new "Phased Approach" alternatives was the manner in which NC 12 would be protected from erosion. Under the "Phased Approach/Rodanthe Bridge Alternative, the [new] bridge in the existing NC 12 easement would begin in Rodanthe . . . and extend north to Oregon Inlet except for the 2.1 mile . . . length of NC 12 in the southern half of the Refuge that would not be threatened by erosion prior to 2060." J.A. 1097. "The Phased Approach/Rodanthe Nourishment Alternative would be similar except the southern end of the NC 12 bridge would begin 0.3 mile . . . south of the Refuge/Rodanthe border. Beach nourishment would be used to protect NC 12 in Rodanthe." J.A. 1097. And like the 2005 Supplemental Draft Environmental Impact Statement, the 2007 Supplement explained that all of the Parallel Bridge Alternatives "could be mixed and matched geographically along the length of NC 12 to create other variations." J.A. 1097.

To review, then, the 2005 Supplemental Draft Environmental Impact Statement and its 2007 Supplement analyzed in detail seven alternatives: (1) Pamlico Sound Bridge Corridor With

Curved Rodanthe Terminus; (2) Pamlico Sound Bridge Corridor With Intersection Rodanthe Terminus; (3) Parallel Bridge Corridor With Nourishment; (4) Parallel Bridge Corridor With Road North/Bridge South; (5) Parallel Bridge Corridor With All Bridge; (6) Parallel Bridge Corridor With Phased Approach/Rodanthe Bridge; and (7) Parallel Bridge Corridor With Phased Approach/Rodanthe Nourishment.

In 2008, Defendants issued a Final Environmental Impact Statement ("2008 Final Environmental Impact Statement") that analyzed the seven alternatives covered by the 2005 and 2007 documents. The Final Environmental Impact Statement stated that the preferred alternative was the Parallel Bridge Corridor With Phased Approach/Rodanthe Bridge. J.A. 1229. The Final Environmental Impact Statement clearly explained that the preferred alternative and the other Phased Approach alternative that was added in the 2007 Supplement—the Parallel Bridge Corridor With Phased Approach/Rodanthe Nourishment—would remain "within the existing NC 12 easement." J.A. 1230. The Final Environmental Impact Statement noted that Defendants chose the preferred alternative based on several factors, including: "the ability of the alternatives considered to meet the project's purpose and need; environmental consequences; opportunities available to mitigate impacts; cost; public and agency comment [on the 2005 Supplemental Draft Environmental Impact

Statement/4(f) Evaluation and the 2007 Supplement]; and other findings presented in this [Final Environmental Impact Statement].” J.A. 1231.

But at the end of the comment period, Defendants did not issue a Record of Decision.³ Instead, sometime between late 2008 and early 2009, Defendants decided “to revisit” their preferred alternative “because of consideration and evaluation given to comments received on the [Final Environmental Impact Statement] and the Section 4(f) Evaluation included in the [Final Environmental Impact Statement].” J.A. 1812. Defendants also claimed to have “obtained additional information, which also contributed to the re-evaluation” of the preferred alternative. J.A. 1812. This “additional information” consisted of what Defendants characterized as “substantial evidence that a public vehicular thoroughfare existed across the length of the project area before the Refuge and Seashore were established.” J.A.

³ An agency must “prepare a concise public record of decision.” 40 C.F.R. § 1505.2. The Record of Decision must “[s]tate what the decision was[,]” id. § 1505.2(a), “[i]dentify all alternatives considered . . . specifying the alternative or alternatives which were considered to be environmentally preferable[,]” id. § 1505.2(b), and “[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not[,]” id. § 1505.2(c). Until an agency issues its Record of Decision, “no action concerning the proposal shall be taken which would: (1) [h]ave an adverse environmental impact; or (2) [l]imit the choice of reasonable alternatives” for the project. Id. § 1506.1(a).

1814. Defendants explained that “[t]his new information changes [the] FHWA analysis required by Section 4(f).” J.A. 1814.

To support their assertions regarding the history of the NC 12 right-of-way, Defendants created a document titled “NC 12 Right-of-Way Timeline.” J.A. 1834-48. In the spring of 2009, Defendants distributed this document at a meeting with representatives of state and federal agencies involved in the Project. The meeting agenda for that day indicates that Defendants planned to designate the Road North/Bridge South Alternative as the new Preferred Alternative.⁴ J.A. 1811.

During that meeting, a representative from the Environmental Protection Agency (“EPA”) put forth the idea of first building the replacement for the Bonner Bridge and then examining the rest of the Project “in more detail when future

⁴ The Road North/Bridge South Alternative was first introduced in the 2005 Supplemental Draft Environmental Impact Statement/4(f) Evaluation. As discussed ante at 12, it involved a complicated mix of a new bridge west of Hatteras Island near Rodanthe, a road both in the existing easement and well into the Refuge, several dunes, and a new bridge parallel to the Bonner Bridge. Defendants’ stated reasons for favoring this alternative in 2009 were (1) improved public access to the Refuge; (2) consistency with the historic landscape; (3) ability to mitigate significant impacts on the “wildlife features of the Refuge;” (4) substantial cost difference; (5) less impact on waterfowl; and (6) shorter construction timeframe and fewer construction impacts. J.A. 1821-23.

conditions are more known." J.A. 1886. The EPA representative characterized this idea as "adaptive management[.]"⁵ J.A. 1886.

Not everyone at the meeting was completely on board with this idea, however. Specifically, Pete Benjamin, a representative with the U.S. Fish and Wildlife Service stated that "he was trying to decide if adaptive management was appropriate for this project" but had reservations regarding "whether or not [the agencies] could identify in the future a solution through the Refuge that is legal from the perspective of all of the agencies involved." J.A. 1887. He went on to say that the agencies "need[ed] more than just the 'hope' [of finding] an appropriate future solution." J.A. 1887. After the meeting, Mr. Benjamin sent NCDOT a letter explaining that the information that Defendants presented to the meeting participants "contained many incorrect statements and findings

⁵ Adaptive management is "a set of policy tools" directed at "ensuring the sustainability" of natural resources within distinct ecosystems. J.B. Ruhl et al., The Practice and Policy of Environmental Law 140 (2d ed. 2010). It allows agencies to "'continually research[], monitor[], and evaluat[e] the ecological conditions of ecosystems'" and to modify their efforts to restore those ecosystems based on that research. Id. (quoting U.S. Gen. Accounting Office, Ecosystem Management, Additional Actions Needed to Adequately Test a Promising Approach 49 (1994)). Agencies may use adaptive management to mitigate adverse environmental impacts. See, e.g., Theodore Roosevelt Conservation P'ship v. Salazar, 616 F.3d 497, 517 (D.C. Cir. 2010). But adaptive management is not a method through which agencies can defer decisionmaking about how a resource will be used. See id. at 505-06, 516.

that have the potential to improperly influence decision-making as the process moves forward." J.A. 1892. He took issue with Defendants' assessments regarding the environmental impact on the Refuge, and he expressed the belief that "NCDOT cannot demonstrate that it has a right to move its easement for NC-12 to any other location within the Refuge." J.A. 1896.

Notwithstanding such reservations, Defendants began to pursue yet another new multi-phase alternative—one that differed from the previously studied alternatives. In October 2009, FHWA released a "Revised Final Section 4(f) Evaluation" ("2009 Section 4(f) Evaluation"). This document provided the public with its first notice of "the new Preferred Alternative—the 'Parallel Bridge Corridor with NC 12 Transportation Management Plan.'" J.A. 1904. Defendants explained it as follows:

This alternative would replace the current [Bonner Bridge] with a new bridge located to the west of the existing bridge (Phase I). The replacement bridge location in the Refuge is limited to the area necessary to safely construct and tie-in the new bridge to NC 12. Under the Parallel Bridge Corridor with NC 12 Transportation Management Plan Alternative, later phases of actions to manage NC 12 through 2060 would be decided based on actual conditions existing on Hatteras Island at the point in time that additional action becomes necessary. These later phases could consist of, but would not be limited to, one or more components of any of the alternatives already studied as part of the environmental review process[.]"

J.A. 1904-05 (emphasis added).

FHWA also explained that "[b]ased on . . . newly obtained information," its determinations regarding the applicability of Section 4(f) had changed. J.A. 1907. Specifically, FHWA stated that Section 4(f) applied only to the Pea Island National Wildlife Refuge "as a historic property[,]" rather than "as a refuge."⁶ J.A. 1913-14. FHWA based this assertion on evidence that it claimed "demonstrate[d] that the Federal and State governments preserved the Hatteras Island area with an understanding that vehicular passage would be accommodated, and that the vehicular passage has not been fixed to one location." J.A. 1913.

FHWA went on to state that "the history indicates that the Refuge, transportation facility and existing Bonner Bridge were concurrently and jointly planned and developed by the Federal and State governments working together to preserve the land for

⁶ The distinction between a refuge and a historic property can be significant. For example, before making a finding of de minimis impact regarding refuge property, the Secretary must provide an opportunity for public review and comment. 49 U.S.C. § 303(d)(3). There is no similar requirement for historic sites. 49 U.S.C. § 303(d)(2). See also 23 C.F.R. § 774.5(b)(1)(iii) (imposing no public participation requirement beyond the minimal encouragement of public involvement included in the National Historic Preservation Act and 36 C.F.R. § 801.8). Also, refuges are presumed to be significant resources unless the official with jurisdiction over the property makes an express determination to the contrary. 23 C.F.R. § 774.11(c). Historic sites, on the other hand, are considered significant only if they are included in, or are eligible for, the National Register of Historic Places. 23 C.F.R. § 774.11(e).

wildlife while maintaining a means for safe and efficient vehicular transportation." J.A. 1913. The 2009 Section 4(f) Evaluation explained that "it is FHWA's revised determination that Section 4(f) is not applicable to the Refuge (as a refuge), as the impacts resulting from relocating NC 12 from its current alignment through the Refuge would not be considered a use as defined in 23 C.F.R. § 774.17." J.A. 1913. FHWA concluded that it "is not required to make a specific Section 4(f) approval for use prior to approving the project." J.A. 1913.

On May 7, 2010, Defendants issued an Environmental Assessment⁷ that "identifie[d] and assesse[d] changes that have occurred since the approval of the Final Environmental Impact Statement/Final Section 4(f) Evaluation on September 17, 2008." J.A. 2151. The Environmental Assessment broadly described the Project as "the construction of a bridge to replace the Herbert

⁷ An Environmental Assessment is "a concise public document" intended to "provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." 40 C.F.R. § 1508.9(a)(1); see also Friends of Back Bay v. U.S. Army Corps of Eng'rs, 681 F.3d 581, 584 (4th Cir. 2012) (noting that an EA is used "[t]o determine whether a particular action meets the threshold of significantly affecting environmental quality" such that an agency is required to complete an Environmental Impact Statement pursuant to 40 C.F.R. § 1502.3) (internal quotation marks omitted). An Environmental Assessment is "more limited" than an Environmental Impact Statement in its analysis of the potential environmental impacts. Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 757 (2004).

C. Bonner Bridge in Dare County, the demolition and removal of Bonner Bridge, and improvements to NC 12 between the community of Rodanthe and Oregon Inlet." J.A. 2151. The Environmental Assessment was intended to provide the public with notice under NEPA of "the new Preferred Alternative, eventually titled the Parallel Bridge Corridor with NC 12 Transportation Management Plan[.]" J.A. 2178.

In approximately seven short pages of text and three maps, Defendants explained that the new preferred alternative would consist of multiple phases. The first phase would be the construction of a new Oregon Inlet bridge "as soon as possible," J.A. 2177, and in a slightly different location from that which had previously been evaluated. Defendants clarify in their appellate brief that "the replacement bridge would use the existing Highway 12 easement." Appellees' Br. at 37 (citing J.A. 2493). The amorphously titled "Later Phases"—also sometimes referred to as the "NC 12 Transportation Management Plan"—"would be finalized through commitments made in the Record of Decision." J.A. 2182-83.

The Environmental Assessment went on to explain that, with respect to the "Later Phases," the "Parallel Bridge Corridor with NC 12 Transportation Management Plan Alternative (Preferred) does not specify a particular action at this time on Hatteras Island beyond the limits of Phase I because of the

inherent uncertainty in predicting future conditions within the dynamic coastal barrier island environment." J.A. 2182. Rather, "the alternative addresses the study and selection of future actions on Hatteras Island . . . through a comprehensive NC 12 Transportation Management Plan." J.A. 2182.

The Environmental Assessment does not contain a "transportation management plan" as that term is typically understood.⁸ Rather, it contains approximately four pages that describe how the "plan" consists of "a comprehensive coastal monitoring program," J.A. 2183, "[e]nvironmental [r]eview for [f]uture [p]hases," J.A. 2185, and the "[s]election of [f]uture [p]hases for [i]mplementation," J.A. 2185. Defendants' "plan"

⁸ The term "transportation management plan" refers to a comprehensive document that "lays out a set of strategies for managing the work zone impacts of a project." Transportation Management Plan Examples—FHWA Work Zone, http://www.ops.fhwa.dot.gov/wz/resources/final_rule/tmp_examples.htm. (saved as ECF opinion attachment). A reasonable reader might expect to find such a document somewhere in the record, given statements made in the Record of Decision, such as: "The Transportation Management Plan will guide the implementation of future phases of the project through 2060." J.A. 2497. "The NC 12 Transportation Management Plan . . . provides a detailed plan to closely monitor the coastal conditions for environmental changes over the next 50 years along with changes in associated road maintenance activities." J.A. 2497-98. "The NC 12 Transportation Management Plan then describes the process for decision-making regarding the future phase actions." J.A. 2498. Some of these statements also appear in the EA. See J.A. 2182-83.

is simply to decide what to do with the remainder of NC 12 on Hatteras Island at some point in the future.⁹

Defendants claimed that “[b]y actively monitoring the conditions and delaying decisionmaking, the environmental impacts can be better quantified, minimized, and mitigated.” J.A. 2182. Defendants also stated that “[t]his process is somewhat analogous to a tiered NEPA study, in that the entire end-to-end impacts have been studied but the detailed selection of a portion of the action is being delayed.” J.A. 2182.

On December 20, 2010, FHWA issued a Record of Decision that authorized NCDOT to construct, and FHWA to substantially fund, the Project described in the revised Section 4(f) Evaluation and the Environmental Assessment. The Record of Decision explains that the Project “is a mix and match of the Parallel Bridge Corridor alternatives assessed in the 2008 [Final Environmental Impact Statement].” J.A. 2488. “It calls for Phase I (Oregon Inlet bridge) to be built as soon as possible, followed by construction of later phases whose details would be determined,

⁹ It seems that Defendants may already be proceeding with future phases. See J.A. 2682, N.C. Dep’t of Transp., Bonner Bridge Public Workshops Handout (2011) (“NCDOT has started work on long-term solutions for [breached locations along N.C. 12 in northern Rodanthe and the Pea Island National Wildlife Refuge], which combined are considered Phase II of the Bonner Bridge Replacement Project.”); see also J.A. 2693 (discussing NCDOT’s plan to issue contracts for the two breach sites in August and December 2012).

reevaluated, and documented through interagency collaboration as project area conditions warrant." J.A. 2488.

The Record of Decision also contains a section that responds to comments made by government agencies regarding the new preferred alternative. The Army Corps of Engineers submitted a comment noting that the Final Environmental Impact Statement (on which the Environmental Assessment was based) "would confine future NC 12 maintenance in the Refuge, including storm-related maintenance, to the existing NC 12 easement, after the issuance of the Record of Decision for the project." J.A. 2586-87. Defendants responded as follows:

The proposal in Section 4.6.8.6 of the Final Environmental Impact Statement to confine future NC 12 maintenance activities within the existing easement applied only to the Phased Approach Alternatives, which were developed with the requirement that all work within the Refuge must be confined within the existing easement. That requirement does not exist with the NC 12 Transportation Management Plan.

J.A. 2587 (emphasis added).

Given the foregoing, this Court understands the Project as follows: Construction of a new two-lane bridge that runs parallel to the existing Bonner Bridge and uses the existing NC 12 easement, followed by "the study and selection of future actions on Hatteras Island beyond the limits of Phase I through a comprehensive NC 12 Transportation Management Plan[,]" J.A. 2497, with the purpose of said Plan being to "guide the

implementation of future phases of the project through 2060," J.A. 2497, and with future phases not necessarily confined to the existing NC 12 easement, J.A. 2587.

C.

Plaintiffs sued on July 1, 2011, and the parties filed cross-motions for summary judgment in July and September of 2012. On September 16, 2013, the district court granted Defendants' motion and denied Plaintiffs' motion. Defenders of Wildlife v. N.C. Dep't of Transp., 971 F. Supp. 2d 510, 513 (E.D.N.C. 2013).

1.

Regarding Plaintiffs' NEPA claim, the district court explained that Defendants did not violate NEPA by issuing an "EIS [that] only covers the Bonner Bridge replacement, with future studies planned for later construction phases along the NC 12 corridor." Id. at 526. It also noted that the bridge project can stand alone "due to concerns as to changing conditions and weather events impacting the shoreline on Hatteras Island." Id. at 524.

To reach this determination, the district court analyzed whether the Project violated FHWA's NEPA regulations pertaining to segmentation, which require that a project have logical termini and independent utility and not restrict the selection of future phases. The district court explained that "the

factual circumstances surrounding this case are unique[,]” id. at 525, and that “the northern end of Hatteras Island constitutes a logical terminus for the Project” due to the constantly changing conditions on Hatteras Island, id. at 524. The district court also stated that the Project “is a reasonable expenditure independent of additional transportation improvements,” and that the fact “that NC 12 requires maintenance . . . does not ruin the substantial utility of replacing a bridge that is reaching the end of its service life.” Id. at 525-26. Finally, the district court determined that “no particular action is automatically triggered in later phases” by the construction of the bridge alone. Id. at 526 (internal quotation marks omitted).

2.

The district court also held that Defendants did not violate Section 4(f). First, the district court determined that “FHWA properly relied on the joint planning exception with respect to the Refuge.” Id. at 534. The district court concluded that the “[f]ederal and state governments preserved the Hatteras Island area with an understanding that vehicular passage would be accommodated, and that the vehicular passage has not been fixed to one location[.]” Id. In reaching this determination, the district court relied on the following evidence: (1) the depiction of an unimproved road through the

Refuge on a 1942 Coast Guard map; (2) a 1939 application for a ferry permit that describes ferry service beginning in 1926; (3) photos of ferries carrying cars; (4) North Carolina highway maps from 1944 and 1949; (5) 1938 reports from the manager of the Refuge that refer to a "public road;" (6) a 1951 U.S. Senate debate in which North Carolina Senator Willis Smith "asserted the State's ownership of the road;" (7) Public Law 229, which, in 1951, authorized DOI to grant an easement to North Carolina for a road; (8) a 1954 quitclaim deed granted by North Carolina to the federal government covering any interest in the land, with the exception of "a previously granted 100-foot easement;" and (9) a 100-foot easement granted by DOI to North Carolina in 1954 for construction and maintenance of NC 12. Id. 533-34.

The district court also briefly addressed the substantive requirements of Section 4(f) and concluded that FHWA had complied with them. Specifically, the district court determined that no prudent alternative existed, that the "[selected] alternative will cause the least overall harm," and that "FHWA . . . conducted all possible planning to minimize harm." Id. at 535.

This appeal followed. Plaintiffs argue that the district court erred in its determinations regarding: (1) whether Defendants engaged in improper segmentation in violation of NEPA; (2) the applicability of the joint planning exception to

Section 4(f); and (3) whether Defendants complied with the substantive requirements of Section 4(f). We turn now to a description of the law governing these issues.

II.

A.

At the outset, we must correct a major error on which the district court's analysis was based: The district erroneously defined the scope of the Project when it noted that "the current [Environmental Impact Statement] only covers the Bonner Bridge replacement," Id. at 526. This statement contradicts the entire record, and in making it, the district court invented a project that Defendants' NEPA documents under review expressly disown.¹⁰

¹⁰ Although it acknowledged the existence of future phases, the district court analyzed the Project as if it consisted of only the replacement bridge over the Oregon Inlet, and it concluded that such a Project did not violate NEPA's anti-segmentation principles. As discussed below, we reject the district court's approach because it was based on a project other than the one described in the record. We note that the district court's analysis may have been appropriate if Plaintiffs had, for example, demonstrated that none of Defendants' studied alternatives for NC 12 south of the bridge could be constructed as a matter of fact. If that were the case, then the replacement bridge would be required to connect "logical termini," 23 C.F.R. § 771.111(f)(1), have "independent utility," 23 C.F.R. § 771.111(f)(2), and "[n]ot restrict consideration of alternatives for other reasonably foreseeable transportation improvements," 23 C.F.R. § 771.111(f)(3). We do not pass upon the correctness of the district court's illegal (Continued)

Since at least 2002, Defendants have made plain that the purpose of the Project is to “[p]rovide a new means of access from Bodie Island to Hatteras Island for its residents, businesses, services, and tourists prior to the end of the Bonner Bridge’s service life.” J.A. 2486. This purpose cannot be fulfilled by the bridge alone because the entire northern part of Hatteras Island is occupied by the Seashore and the Refuge. The bridge is essentially worthless without a means of conveying motorists from its southern terminus to the Village of Rodanthe, which is the northernmost point where the residents, businesses, and services on Hatteras Island are located. See, e.g., J.A. 2493 (stating in the Record of Decision that “[b]uilding Phase I alone would not meet the purpose and need of the project”).

As Defendants stated in their Record of Decision, the Project “is a mix and match of the Parallel Bridge Corridor Alternatives assessed in the 2008 [Final Environmental Impact Statement].”¹¹ J.A. 2488. According to the Record of Decision,

segmentation analysis because nothing in the record on appeal indicates that Defendants cannot construct at least one of their previously studied alternatives.

¹¹ To recap, these five alternatives were titled: (1) Parallel Bridge Corridor With Nourishment; (2) Parallel Bridge Corridor With Road North/Bridge South; (3) Parallel Bridge Corridor With All Bridge; (4) Parallel Bridge Corridor With (Continued)

the Project "calls for Phase I (Oregon Inlet bridge) to be built as soon as possible, followed by construction of later phases whose details would be determined, reevaluated, and documented through interagency collaboration as project area conditions warrant." J.A. 2488.

It is true that the Project's only definite component at this time is the construction of a "Parallel Bridge" across Oregon Inlet within the existing easement. Beyond that, the "plan" is to "delay[] decision-making," ostensibly "because of the inherent uncertainty in predicting future conditions within the dynamic coastal barrier island environment." J.A. 2497. Nonetheless, Defendants have clearly committed themselves to doing something between the southern terminus of the bridge and Rodanthe—they simply have not (at least publicly) chosen what.

One way to resolve this case would be to remand all of it to the district court with instructions to fully evaluate the actual Project that Defendants proposed. However, "[a]n appellee may defend, and this Court may affirm, the district

Phased Approach/Rodanthe Bridge (Preferred); and (5) Parallel Bridge Corridor With Phased Approach/Rodanthe Nourishment. The 2008 Final Environmental Impact Statement also included the two alternatives that consisted of a long bridge in Pamlico Sound: (1) Pamlico Sound Bridge Corridor With Curved Rodanthe Terminus; and (2) Pamlico Sound Bridge Corridor With Intersection Rodanthe Terminus.

court's judgment on any basis supported by the record." Sloas v. CSX Transp., Inc., 616 F.3d 380, 388 n.5 (4th Cir. 2010). Because both parties have adequately briefed and argued the issues using the properly defined Project, we proceed to our analyses of the NEPA and Section 4(f) arguments in this case.

B.

Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). We review a grant of summary judgment de novo, Nat'l Audubon Soc'y v. Dep't of the Navy, 422 F.3d 174, 185 (4th Cir. 2005), taking the facts in the light most favorable to the non-moving party. Anderson v. Liberty Lobby, Inc. 477 U.S. 242, 255 (1986).

Because the district court's grant of summary judgment disposed of cross-motions for summary judgment, "we consider each motion separately on its own merits to determine whether either of the parties deserves judgment as a matter of law." Bacon v. City of Richmond, Va., 475 F.3d 633, 638 (4th Cir. 2007) (internal quotation marks omitted). In considering each motion, we "resolve all factual disputes and any competing, rational inferences in the light most favorable to the party opposing that motion." Rossignol v. Voorhaar, 316 F.3d 516, 523 (4th Cir. 2003) (internal quotation marks omitted).

The Administrative Procedure Act ("APA") governs our review of agency actions under NEPA and Section 4(f). See N.C. Wildlife Fed'n v. N.C. Dep't of Transp., 677 F.3d 596, 601 (4th Cir. 2012); Hickory Neighborhood Def. League v. Skinner, 893 F.2d 58, 61 (4th Cir. 1990). A reviewing court may set aside an agency action that was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.]" 5 U.S.C. § 706(2)(A); see Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 763 (2004); Marsh v. Or. Natural Res. Council, 490 U.S. 360, 375-76 (1989). "This inquiry must 'be searching and careful,' but 'the ultimate standard of review is a narrow one.'" Marsh, 490 U.S. at 378 (quoting Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971)). Our review is de novo, "without deference to the district court's resolution of the issue." Friends of Back Bay v. Army Corps of Eng'rs, 681 F.3d 581, 587 (4th Cir. 2012).

III.

A.

The National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370f, "establishes a 'national policy [to] encourage productive and enjoyable harmony between man and his environment,' and was intended to reduce or eliminate environmental damage and to promote 'the understanding of the

ecological systems and natural resources important to' the United States." Pub. Citizen, 541 U.S. at 756 (2004) (quoting 42 U.S.C. § 4321). All actions undertaken by a federal agency "with effects that may be major and which are potentially subject to Federal control and responsibility[,]" and all "projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies" must comply with both NEPA and the regulations promulgated by the Council on Environmental Quality.¹² 40 C.F.R. § 1508.18.

NEPA mandates "a set of 'action-forcing' procedures that require that agencies take a 'hard look' at environmental consequences, . . . and that provide for broad dissemination of relevant environmental information." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (internal quotation marks and citation omitted). Because NEPA "does not mandate particular results, but simply prescribes the necessary process[,]" it "prohibits uninformed—rather than unwise—agency

¹² The Council on Environmental Quality is the executive agency responsible for promulgating regulations that implement NEPA. See 42 U.S.C. § 4342; Exec. Order No. 11,991, 42 Fed. Reg. 26,967 (May 25, 1997). Courts give "substantial deference" to the Council on Environmental Quality's regulations. Nat'l Audubon Soc'y v. Dep't of the Navy, 422 F.3d 174, 184 (4th Cir. 2005) (quoting Andrus v. Sierra Club, 442 U.S. 347, 358 (1979)). Additionally, each federal agency must ensure that it complies with NEPA, and FHWA has established its own regulations for this purpose. See 23 C.F.R. § 771.101.

action." Id. at 350-51. "[T]he broad dissemination of information mandated by NEPA permits the public and other government agencies to react to the effects of a proposed action at a meaningful time." Marsh, 490 U.S. at 371.

Under NEPA, for every "major Federal action[] significantly affecting the quality of the human environment," the agency involved must prepare "a detailed statement" that discloses and evaluates, among other things, "the environmental impact of the proposed action," unavoidable adverse effects of the proposed action, and "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C). Every Environmental Impact Statement must "provide full and fair discussion of significant environmental impacts" arising from the reasonable alternatives. 40 C.F.R. § 1502.1.

An agency's comparative evaluation of alternatives to the proposed action "is the heart of the environmental impact statement" because it "sharply defin[es] the issues and provid[es] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. Therefore, agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives[.]" Id. § 1502.14(a). The assessment of the environmental impacts is the "scientific and analytic basis for the comparison[]" of alternatives. 40 C.F.R. § 1502.16. "[A]gencies must measure the indirect and cumulative environmental effects of proposed actions. . . . Conclusory

statements that the indirect and cumulative effects will be minimal or that such effects are inevitable are insufficient under NEPA." N.C. Wildlife Fed'n, 677 F.3d at 602 (citation omitted).

"NEPA does not require agencies to adopt any particular internal decisionmaking structure." Balt. Gas & Elec. Co. v. Natural Res. Def. Council, 462 U.S. 87, 100 (1983). But NEPA does require agencies to follow a particular decisionmaking process. For example, Environmental Assessments and Environmental Impact Statements must be completed "before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b); see also id. § 1500.1(c) (stating that "the NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences").

Also, NEPA imposes a continuing obligation on agencies to consider the environmental impacts of a proposed action, even after a Final Environmental Impact Statement has been issued. An agency must issue a supplemental Environmental Impact Statement if the agency "makes substantial changes in the proposed action that are relevant to environmental concerns" or if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(i), (ii).

This case implicates the regulations pertaining to illegal segmentation of the analysis of environmental impacts as well as those pertaining to the permissible "tiering" of the analysis of impacts. We discuss each in turn below.

B.

Agencies may not engage "in segmentation, which involves 'an attempt to circumvent NEPA by breaking up one project into smaller projects and not studying the overall impacts of the single overall project.'" Webster v. U.S. Dep't of Agric., 685 F.3d 411, 426 (4th Cir. 2012) (quoting Coal. on W. Valley Nuclear Wastes v. Chu, 592 F.3d 306, 311 (2d Cir. 2009)).

Specifically, "[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." 40 C.F.R. § 1502.4(a). Proposed projects are considered "connected if they: (i) Automatically trigger other actions which may require environmental impact statements[;] (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously[; or] (iii) Are interdependent parts of a larger action and depend on the larger action for their justification." Id. § 1508.25(a)(1). Agencies must also assess "[c]umulative actions," and "[s]imilar actions" with "common timing or geography" in the same impact statement. Id. § 1508.25(a)(2)-(3).

FHWA's anti-segmentation regulations are designed to "ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated[.]" 23 C.F.R. § 771.111(f). Each action evaluated must:

- (1) Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- (2) Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
- (3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Id. § 771.111(f)(1)-(3).

To evaluate whether a project connects logical termini, courts look to the purpose and need of the project as stated in the Environmental Impact Statement. See Indian Lookout Alliance v. Volpe, 484 F.2d 11, 18 (8th Cir. 1973) ("If the major objective of a proposal is to connect two cities by expressway, then these two termini should determine the proper scope of the [Environmental Impact Statement]."). Additionally, logical termini are often obvious because of their connection to "crossroads, population centers, major traffic generators, or similar highway control elements." Conservation Law Found. v. Fed. Highway Admin., 24 F.3d 1465, 1472 (1st Cir. 1994).

The independent utility test also determines whether related actions or projects must be evaluated in a single Environmental Impact Statement. Webster, 685 F.3d at 426. Courts inquire into "whether each project would have taken place in the other's absence. . . . If so, [the projects] have independent utility and are not considered connected actions." Id. When determining whether an action has independent utility, courts consider the benefits and uses that will occur as a result of that action, even if no other construction is done in the area. For example, in James River v. Richmond Metropolitan Authority, this Court upheld a determination that Richmond's Downtown Expressway and I-195 had independent utility because each segment independently allowed traffic to access parts of the downtown area and other major highways more easily. 359 F. Supp. 611, 636 (E.D. Va. 1973), aff'd per curiam, 481 F.2d 1280 (4th Cir. 1973). See also Save Barton Creek Ass'n v. Fed. Highway Admin., 950 F.2d 1129, 1141-42 (5th Cir. 1992) (holding that one portion of a highway loop had independent utility because, standing alone, the project alleviated traffic, improved access to residential, commercial, and recreational areas, and connected to major roadways).

C.

By contrast, a tiered or multiphase NEPA analysis may be appropriate for agencies that are "contemplating large or

complex projects." Shenandoah Valley Network v. Capka, 669 F.3d 194, 196 (4th Cir. 2012). In fact, "[a]gencies 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" 40 C.F.R. § 1502.20.

A properly tiered analysis consists of "a broad environmental impact statement" followed by "a subsequent statement or environmental assessment . . . on an action included within" the program or policy contemplated in the broad statement. 40 C.F.R. § 1502.20 (emphasis added). The subsequent statement "shall concentrate on the issues specific to the subsequent action[,]" and it "need only summarize the issues discussed in the broader statement[.]" Id.

Tiering may never be used to "avoid consideration of reasonable alternatives by making a binding site-specific decision at the programmatic stage without analysis, deferring consideration of site-specific issues to a [subsequent Supplemental Environmental Impact Statement]." 'Ilio'ulaokalani Coal. v. Rumsfeld, 464 F.3d 1083, 1101 (9th Cir. 2006). And the dividing line between illegal segmentation and permissible tiering is an agency's proposal "to make an irreversible and irretrievable commitment of the availability of resources to a project at a particular site." California v. Block, 690 F.2d

753, 761 (9th Cir. 1982) (internal quotation marks omitted); see also 42 U.S.C. § 4332(2)(C)(v).

D.

When reviewing a NEPA decision, a court "must not reduce itself to a 'rubber-stamp' of agency action." N.C. Wildlife Fed'n, 677 F.3d at 601 (quoting Fed. Mar. Comm'n v. Seatrain Lines, Inc., 411 U.S. 726, 746 (1973)). Rather, we must ensure that the agency has "'examine[d] the relevant data and articulate[d] a satisfactory explanation for its action.'" FCC v. Fox Television Stations, Inc., 556 U.S. 502, 513 (2009) (quoting Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). An agency's decision is arbitrary and capricious if the agency

relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

State Farm, 463 U.S. at 43.

We may not substitute our "judgment for that of the agency." Fox Television Stations, 556 U.S. at 513 (internal quotation marks omitted). "[O]ur task is to ensure that [the agency] took a hard look at the environmental consequences of the proposed action." Webster, 685 F.3d at 421 (internal quotation marks omitted). Consequently, "we 'may not flyspeck

[the] agency's environmental analysis, looking for any deficiency, no matter how minor.'" Id. (quoting Nat'l Audubon Soc'y, 422 F.3d at 186 (alteration in original) (internal quotation marks omitted)). Nor may we seize on any "trivial inadequacy in an [Environmental Impact Statement] as a reason to reject an agency decision[.]" Nat'l Audubon Soc'y, 422 F.3d at 186. Our "totality of the circumstances approach means that [we] must view deficiencies in one portion of an [Environmental Impact Statement] in light of how they affect the entire analysis." Id.

E.

Plaintiffs argue that "Defendants violated the basic principles of NEPA and engaged in illegal 'segmentation' by issuing a [Record of Decision] that disclosed only one initial segment of the Selected Alternative—a segment that will commit them to significant future construction of a road and bridges through a National Wildlife Refuge—while failing to disclose any specific plans for that construction." Appellants' Br. at 20.

Defendants counter that "[n]othing in NEPA requires an agency to authorize all phases of a proposed action evaluated in an [Environmental Impact Statement] at the time it issues a [Record of Decision]." Appellees' Br. at 29. They maintain that "the agencies have fully analyzed the entire project in an [Environmental Impact Statement] and [Environmental

Assessment,]" by conducting "a full end-to-end study of alternatives and associated impacts for the entire length of the project, from the northern limit on Bodie Island to the southern limit in the [V]illage of Rodanthe" and have thus not engaged in segmentation. Appellees' Br. at 29-30.

Illegal segmentation is distinct from approving only a portion of a project that has been fully and adequately studied. We agree with the Eleventh Circuit that NEPA does not require an agency to "authorize all stages of a project in one [Record of Decision]." Defenders of Wildlife v. U.S. Dep't of the Navy, 733 F.3d 1106, 1116 (11th Cir. 2013). Nothing in NEPA prohibits Defendants from authorizing only one part of the Project so long as doing so does not commit them to a course of action that has not been fully analyzed. To be sure, Defendants' Record of Decision does commit resources to the Project, and we perceive no reason why Defendants cannot analyze the entire Project "in a single impact statement." 40 C.F.R. § 1502.4(a). But they are not required to approve the entire Project in a single Record of Decision so long as their NEPA documents adequately analyze and disclose the impacts of the entire Project—including those portions that have yet to be approved.

The parties agree that the studied alternatives are feasible, i.e., that, as a matter of sound engineering judgment, they can be built. And the record shows that Defendants have

adequately analyzed the impacts associated with the five Parallel Bridge Corridor alternatives that could be implemented to complete the Project: (1) Parallel Bridge Corridor With Nourishment; (2) Parallel Bridge Corridor With Road North/Bridge South; (3) Parallel Bridge Corridor With All Bridge; (4) Parallel Bridge Corridor With Phased Approach/Rodanthe Bridge (Preferred); and (5) Parallel Bridge Corridor With Phased Approach/Rodanthe Nourishment. Indeed, at oral arguments, even Plaintiffs acknowledged that if Defendants had issued a Record of Decision that committed to any one—or any combination—of those alternatives, that action likely would have complied with NEPA's procedural requirements.

Accordingly, at least with respect to the previously studied alternatives, Defendants have neither attempted to "circumvent[] NEPA" nor refused to study "the overall impacts of the single overall project." Webster, 685 F.3d at 426 (internal quotation marks omitted). Rather, they have conducted a full, site-specific analysis. Thus, their decision to implement the Project one phase at a time does not violate NEPA.

Plaintiffs press that the Record of Decision seems to authorize the construction of future phases that have not yet been analyzed and disclosed to the public. And certain aspects of the record lend support to that position.

For example, the Record of Decision seems to anticipate the possibility of "a separate NEPA process" that will take place when Defendants finally decide what to do with the rest of NC 12. J.A. 2500. And the Revised Section 4(f) evaluation seems to indicate that Defendants are contemplating the construction of something that has not previously been studied or disclosed:

Under the Parallel Bridge Corridor with NC 12 Transportation Management Plan Alternative, later phases of actions to manage NC 12 through 2060 would be decided based on actual conditions existing on Hatteras Island at the point in time that additional action becomes necessary. These later phases could consist of, but would not be limited to, one or more components of any of the alternatives already studied as part of the environmental review process

J.A. 1905 (emphasis added).

Although it is possible to read such statements as Defendants' attempts to commit to or authorize something outside the scope of what their NEPA documents have analyzed and disclosed, that is not how we view these isolated statements made in the context of hundreds of pages of analysis. And notwithstanding that the NC 12 Transportation Management Plan is really nothing more than a plan to make a plan for the remainder of NC 12, the public is clearly on notice that Defendants intend to pursue the five studied alternatives that pass through Hatteras Island and the Refuge—not the two alternatives that avoid Hatteras Island altogether via construction of a bridge in Pamlico Sound. And because Defendants have fully analyzed and

disclosed the environmental impacts associated with these five legitimate alternatives, Defendants have complied with NEPA with regard to all five.

Moreover, NEPA obligates agencies to continue to review the environmental consequences of their actions, and we think it is best to read Defendants' statements that allude to a separate NEPA process simply as an acknowledgement of this requirement. If, for example, Defendants wait too long to implement the future phases of the Project, conditions on Hatteras Island could change so much that the current Environmental Impact Statement no longer covers the alternatives that they studied. If conditions change to such an extent, Defendants must issue a supplemental Environmental Impact Statement prior to taking any other action. 40 C.F.R. § 1502.9(c)(1)(i), (ii). Defendants' statements in their Environmental Assessment and Record of Decision that seem to anticipate changing conditions cannot and do not shield them from NEPA's procedural requirements.

In sum, Defendants have not violated NEPA by engaging in unlawful segmentation with respect to the five studied parallel bridge alternatives. We thus affirm the district court's grant of summary judgment on the NEPA issue. Our opinion may not, however, be construed as an authorization to proceed outside the scope of the previously studied alternatives, and Defendants' doing so would almost surely violate NEPA.

IV.

A.

Unlike NEPA, which “prohibits uninformed—rather than unwise—agency action[,]” Robertson, 490 U.S. at 351, Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. § 303, imposes substantive restraints on an agency’s action.¹³ Under Section 4(f), the Secretary of Transportation (“Secretary”) is permitted to approve a transportation project that requires the

use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge . . . or land of an historic site . . . only if . . . there is no prudent and feasible alternative to using that land; and . . . the program or project includes all possible planning to minimize harm to the [publicly owned land] resulting from the use[.]

49 U.S.C. § 303(c).

In other words, Section 4(f) property “may not be put to non-park uses unless there is no feasible and prudent alternative to the non-park use of the land.” Coal. for Responsible Reg’l Dev. v. Brinegar, 518 F.2d 522, 525 (4th Cir.

¹³ The term “Section 4(f)” refers to this provision’s original location in the Department of Transportation Act of 1966. Pub. L. No. 89-670, 80 Stat. 931 (1966). The text of Section 4(f) has now been codified at both 23 U.S.C. § 138 and 49 U.S.C. § 303. The name “Section 4(f)” is no longer indicative of the provision’s location, but the term is so widely recognized that it continues to be used to avoid “needless confusion.” 23 C.F.R. 771.107(e) n.2 (2013).

1975).¹⁴ Further, the Secretary may approve a transportation project that uses Section 4(f) property only if "the program or project includes all possible planning to minimize harm to the . . . wildlife and waterfowl refuge[.]" 49 U.S.C. § 303(c)(2).

The Secretary must perform a Section 4(f) evaluation and comply with that provision's other substantive requirements before approving any use of Section 4(f) property. The same is not required, however, if the "joint planning exception" applies. Under the joint planning exception,

[w]hen a property is formally reserved for a future transportation facility before or at the same time a [Section 4(f) property] is established and concurrent or joint planning or development of the transportation facility and the Section 4(f) resource occurs, then any resulting impacts of the transportation facility will not be considered a use as defined in § 774.17.

23 C.F.R. § 774.11(i). In other words, for a transportation facility that uses Section 4(f) property to escape the substantive requirements of Section 4(f), two conditions must be met. First, the property for the transportation facility must

¹⁴ The term "Section 4(f) property" refers to "publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance[.]" 23 C.F.R. § 774.17. A "'use' of Section 4(f) property occurs[.]" among other things, "[w]hen land is permanently incorporated into a transportation facility[.]" 23 C.F.R. § 774.17.

be "formally reserved . . . before or at the same time" as the establishment of the Section 4(f) property. Id. Second, the transportation facility and the Section 4(f) property must be concurrently or jointly planned or developed. Id.

If Section 4(f) property will be used and no exception applies, the Secretary must show that the project includes "all possible planning to minimize harm" to the Section 4(f) property and that "no prudent and feasible" alternatives are available. 49 U.S.C. § 303(c)(1)-(2).

The "all possible planning" prong of the analysis cannot be met until a project's design is complete. See D.C. Fed'n of Civic Ass'ns v. Volpe, 459 F.2d 1231, 1239 (D.C. Cir. 1971). If all possible planning to minimize harm to the Section 4(f) property has not been completed before the Secretary's approval of the project, the Section 4(f) evaluation is invalid because, "[a]bsent a finalized plan . . . , it is hard to see how the Department could make a meaningful evaluation of 'harm.'" Id.

The Secretary must also find that there is "no prudent and feasible alternative" to using the Section 4(f) property. 49 U.S.C. § 303(c)(1). An alternative is infeasible only when it "cannot be built as a matter of sound engineering judgment." 23 C.F.R. § 774.17(2); see also Overton Park, 401 U.S. at 411.

To find an alternative to using Section 4(f) property imprudent, the Secretary must determine that the impacts or

adverse effects associated with that alternative are extraordinary or unique. See id. at 413. The Secretary's regulations explain that an alternative is imprudent if:

- (i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- (ii) It results in unacceptable safety or operational problems;
- (iii) After reasonable mitigation, it still causes:
 - (A) Severe social, economic, or environmental impacts;
 - (B) Severe disruption to established communities;
 - (C) Severe disproportionate impacts to minority or low income populations; or
 - (D) Severe impacts to environmental resources protected under other Federal statutes;
- (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- (v) It causes other unique problems or unusual factors; or
- (vi) It involves multiple factors . . . that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

23 C.F.R. § 774.17(3)(i)-(vi).

Imprudence may not provide cover for using Section 4(f) land "unless 'there [are] truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reach[] extraordinary magnitudes.'" Hickory Neighborhood Def. League, 893 F.2d at 61 (quoting Overton Park, 401 U.S. at 413). See also, Monroe Cnty. Conservation Council, 472 F.2d at 700 ("[A] road must not take parkland, unless a prudent person, concerned with the quality of the human environment, is convinced that there is no way to

avoid doing so." (footnote omitted)). And a state may not use "self-imposed restrictions" on financing mechanisms to render an alternative imprudent. Coal. for Responsible Reg'l Dev., 518 F.2d at 526.

The Secretary's Section 4(f) evaluation of the entire project must be completed before the Record of Decision is issued and before work on the project begins. Corridor H Alternatives, Inc. v. Slater, 166 F.3d 368, 373 (D.C. Cir. 1999); see also 23 C.F.R. § 774.9(a) ("The potential use of land from a Section 4(f) property shall be evaluated as early as practicable . . . when alternatives to the proposed action are under study.").

Further, the Secretary may not reduce the number of prudent and feasible alternatives that are available by fragmenting the evaluation and approval of a single project into separate parts. Instead, the Secretary must evaluate each project as a whole, not "phase-by-phase." N. Idaho Cmty. Action Network v. U.S. Dep't of Transp., 545 F.3d 1147, 1159 (9th Cir. 2008). The Secretary's determination that there are no feasible and prudent alternatives must "include sufficient supporting documentation to demonstrate why there is no feasible and prudent avoidance alternative and shall summarize the results of all possible planning[.]" 23 C.F.R. § 774.7(a).

If there are no feasible and prudent alternatives to using Section 4(f) property, the Secretary may select only the alternative that "[c]auses the least overall harm in light of [Section 4(f)'s] preservation purpose." 23 C.F.R. § 774.3(c)(1). This determination involves balancing several factors, including: (1) the "ability to mitigate adverse impacts"; (2) the relative severity of the harm after mitigation; (3) the relative significance of the Section 4(f) property; (4) the "views of the official(s) with jurisdiction over each Section 4(f) property;" (5) the "degree to which each alternative meets the purpose and need for the project;" (6) "[a]fter reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f);" and (7) "[s]ubstantial differences in costs among the alternatives." 23 C.F.R. § 774.3(c)(1)(i)-(vii).

B.

In reviewing an agency's Section 4(f) determination, we must conduct a "thorough, probing, indepth review" to ensure that the Secretary's determination complies with Section 4(f)'s requirements. Monroe Cnty. Conservation Council, 472 F.2d at 700 (internal quotation marks omitted). First, we consider whether the Secretary acted within the scope of his or her authority when conducting the Section 4(f) evaluation. Overton Park, 401 U.S. at 415. This requires examining whether the

Secretary could have reasonably believed that no feasible and prudent alternatives to using Section 4(f) property existed. Id. at 416. Second, the reviewing court must consider whether the Secretary's choice to use Section 4(f) property was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Id. (quoting Administrative Procedure Act, 5 U.S.C. § 706(2)(A) (1964)). This determination requires us to review whether the Secretary's "decision was based on a consideration of the relevant factors" and whether the factors actually support the Secretary's determination. Hickory Neighborhood Def. League, 893 F.2d at 61-62 (internal quotation marks omitted). Finally, we must also determine whether the Secretary followed all procedural requirements. Overton Park, 401 U.S. at 417.

C.

1.

Plaintiffs contend that the district court erroneously applied the joint planning exception to the Project. They argue that when the Refuge was created, NC 12 had not yet been formally reserved and that it was not jointly or concurrently planned.

Because the joint planning exception applies only when a transportation facility is "formally reserved . . . before or at the same time," as a Section 4(f) property, 23 C.F.R. §

774.11(i), the only relevant evidence is that which sheds light on the status of NC 12 on or before April 12, 1938, the date of the executive order establishing the Refuge. Yet some of the evidence on which the district court relied in deeming the joint planning exception applicable—the 1942 Coast Guard map, the North Carolina highway maps from 1944 and 1949, the 1951 Senate debate, the public law from 1951 authorizing DOI to grant an easement to North Carolina, the 1954 quitclaim deed, and the 1954 easement—prove nothing about the status of NC 12 when the Refuge was established. In other words, this evidence is wholly insufficient to support the application of the joint planning exception here.

All we are left with, then, is a 1939 application for a ferry permit that describes ferry service beginning in 1926, photos of ferries carrying cars, and some 1938 reports from the Refuge's manager that refer to a "public road." None of this evidence demonstrates that NC 12 had been formally reserved as of April 12, 1938. At best, it shows that cars were crossing Oregon Inlet and perhaps driving on a "public road" sometime in 1938.

Moreover, formal reservation "before or at the same time," alone, even if it had been shown—and it was not—cannot support the application of the joint planning exception. Instead, the evidence must also show that "concurrent or joint planning or

development" of NC 12 and the Refuge occurred. Id. But the evidence in the record here shows no such thing. Indeed, the only evidence that pertains to the planning of NC 12 is the 1951 public law authorizing DOI to grant an easement to North Carolina, North Carolina's 1954 quitclaim deed, and DOI's 1954 easement. Because these substantially postdate the establishment of the Refuge, they cannot possibly show "concurrent or joint planning or development" of NC 12 and the Refuge.

Having sifted through the remainder of the record, we find nothing on which we could affirm the district court's application of the joint planning exception. In other words, Defendants have fallen far short of demonstrating that there is "no genuine dispute as to any material fact" that would entitle them to summary judgment on this issue. Fed. R. Civ. P. 56(a).

That being said, it is possible that a careful reading of the condemnation proceedings used by the United States to acquire the Refuge contain something indicating that NC 12 was formally reserved and concurrently or jointly planned at the same time that the Refuge was established. But that will require an odyssey into the facts of the condemnation proceedings and pertinent North Carolina property law that we refuse to undertake in the first instance.

Accordingly, we reverse the district court's application of the joint planning exception and remand the issue for further proceedings consistent with the detailed instructions in this opinion's conclusion.

2.

Despite the fact that the district court determined that the joint planning exception applied and that the Project was therefore not subject to Section 4(f)'s substantive requirements, the district court nevertheless analyzed whether Section 4(f)'s substantive requirements had been met. Because a Section 4(f) analysis is irrelevant if the joint planning exception applies, we will not engage in such an inquiry here. Of course, should the district court determine that the joint planning exception is inapplicable, it must examine the record to determine whether FHWA complied with the substance of Section 4(f).

V.

For the foregoing reasons, we affirm the district court's grant of summary judgment regarding Plaintiffs' NEPA challenge, and we reverse the district court's grant of summary judgment regarding Plaintiffs' Section 4(f) challenge.

We remand this case for further proceedings in accordance with this opinion. Specifically, the district court must

examine the record to determine whether Section 4(f)'s joint planning exception applies. The only evidence relevant to this inquiry is that which pertains to the status of NC 12 when the Refuge was established. The district court may not apply the joint planning exception unless it determines that NC 12 was both formally reserved before or at the same time that the Refuge was established and jointly planned or developed with the Refuge.

Should the district court conclude that the joint planning exception does not apply, it must then determine whether FHWA has complied with the substantive requirements of Section 4(f). The district court must determine whether FHWA conducted "all possible planning to minimize harm" to the Refuge, and it must determine whether FHWA acted in an arbitrary and capricious manner when it determined that no prudent and feasible alternative to the use of Refuge property for the Project existed.¹⁵ Finally, if the district court determines that FHWA's determination regarding the lack of prudent and feasible alternatives was not arbitrary and capricious, it must determine

¹⁵ We note that the district court may need to consider whether Defendants' compliance with Section 4(f) can be fully determined before Defendants have committed to and disclosed the particulars of the future phases.

whether FHWA has selected the alternative that causes the least overall harm to the Refuge.

To the extent the district court previously analyzed the substantive requirements of Section 4(f), we expressly vacate that analysis and instruct the district court to follow the legal framework set forth in this opinion, make the determinations enumerated above, and engage in the requisite "thorough, probing, indepth review" to ensure that the Secretary's determination complies with Section 4(f)'s requirements. Monroe Cnty. Conservation Council, 472 F.2d at 700.

AFFIRMED IN PART,
REVERSED IN PART,
AND REMANDED