

PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

NATIONAL AUDUBON SOCIETY; NORTH
CAROLINA WILDLIFE FEDERATION;
DEFENDERS OF WILDLIFE;
WASHINGTON COUNTY, NORTH
CAROLINA; BEAUFORT COUNTY, NORTH
CAROLINA,

Plaintiffs-Appellees,

v.

DEPARTMENT OF THE NAVY; GORDON
R. ENGLAND, Secretary of the Navy;
HANSFORD T. JOHNSON, Assistant
Secretary of the Navy; R. M.
FLANAGAN, Major General, U.S.
Marine Corps, Commanding
General, Marine Corps Air Station,
Cherry Point,

Defendants-Appellants.

No. 05-1405

NATURAL RESOURCES DEFENSE
COUNCIL, INCORPORATED,
Amicus Supporting Appellees.

Appeal from the United States District Court
for the Eastern District of North Carolina, at Elizabeth City.
Terrence W. Boyle, District Judge.
(CA-04-2-BO-2; CA-04-3-BO-2)

Argued: July 20, 2005

Decided: September 7, 2005

Before WILKINSON, WILLIAMS, and TRAXLER, Circuit Judges.

Affirmed in part; vacated and remanded with instructions in part by published opinion. Judge Wilkinson wrote the opinion, in which Judge Williams and Judge Traxler joined.

COUNSEL

ARGUED: Aaron Peter Avila, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., for Appellants. Kiran H. Mehta, KENNEDY, COVINGTON, LOBDELL & HICKMAN, L.L.P., Charlotte, North Carolina; Derb Stancil Carter, Jr., SOUTHERN ENVIRONMENTAL LAW CENTER, Chapel Hill, North Carolina, for Appellees. **ON BRIEF:** Kelly A. Johnson, Acting Assistant Attorney General, Frank D. Whitney, United States Attorney, Jeffrey Bossert Clark, Deputy Assistant Attorney General, R. A. Renfer, Jr., Assistant United States Attorney, G. Norman Acker, III, Assistant United States Attorney, Stephen G. Bartell, UNITED STATES DEPARTMENT OF JUSTICE, Environment & Natural Resources Division, Washington, D.C.; Robert J. Smith, NAVY LITIGATION OFFICE, Washington, D.C., for Appellants. Raymond E. Owens, Jr., Christopher C. Lam, KENNEDY, COVINGTON, LOBDELL & HICKMAN, L.L.P., Charlotte, North Carolina, for Appellees Washington County, North Carolina, and Beaufort County, North Carolina; Michelle B. Nowlin, SOUTHERN ENVIRONMENTAL LAW CENTER, Chapel Hill, North Carolina, for Appellees National Audubon Society, North Carolina Wildlife Federation, and Defenders of Wildlife. Sharon Buccino, David Newman, NATURAL RESOURCES DEFENSE COUNCIL, Washington, D.C., for Amicus Curiae, Natural Resources Defense Council, Supporting Appellees.

OPINION

WILKINSON, Circuit Judge:

In this case we consider whether the Department of the Navy has complied with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq. (2000), in its decision to construct a landing field for its new Super Hornet aircraft in Washington and Beaufort

Counties, North Carolina. The landing field would lie within five miles of the Pocosin Lakes National Wildlife Refuge, the winter home for nearly 100,000 waterfowl. When a federal entity such as the Navy undertakes an action that will significantly affect the environment, NEPA requires it to prepare an Environmental Impact Statement (EIS) that takes a "hard look" at the action's impacts. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 356 (1989). The district court found that NEPA demanded a more thorough EIS than the one the Navy prepared during the process of selecting the location for its landing field. The court therefore issued a permanent injunction preventing the Navy from taking any steps toward planning, development, or construction of the landing field until it fulfilled its NEPA obligations.

We agree with the district court that the Navy's EIS was deficient and thus hold that the Navy must complete a Supplemental EIS (SEIS) to address its shortcomings. We conclude, however, that the injunction issued by the district court was overly broad. While the Navy completes the SEIS, it may proceed with certain specific steps prefatory to possible construction of the landing field. We therefore affirm the judgment below that the Navy has failed to comply with NEPA, vacate the injunction, and remand to the district court with instructions to narrow the injunction in accordance with the specific directions we set forth.

I.

This case arose from the Navy's efforts to modernize its fighter aircraft. It decided to station new F/A-18 E/F ("Super Hornet") aircraft on the East Coast to replace earlier model F/A-18 C/D ("Hornet") and F-14 ("Tomcat") airplanes in its Atlantic Fleet. This decision required that it determine both where to homebase, or station, the aircraft and where to operate an Outlying Landing Field (OLF) to conduct Field Carrier Landing Practice (FCLP).

FCLP is a training procedure in which pilots land on a simulated aircraft carrier deck marked out on the OLF. The pilots land on the simulated carrier and immediately take off to position the aircraft for another touchdown. This procedure, known as "touch and go," is repeated from eight to ten times during each training session. A Land-

ing Signals Officer judges each landing. FCLP is essential for pilot safety and proficiency. "Landing a high performance aircraft on a moving aircraft carrier at sea poses enormous challenges for even [the Navy's] most experienced pilots." Joint Appendix (JA) 877 (declaration of Rear Admiral James M. Zortman). On a dark, moonless night, these challenges are magnified.

The Navy plans to acquire approximately 30,000 acres for the OLF. It will use 2000 acres for the core area, which will include the landing field and support facilities. The remaining acreage will provide a buffer to ensure development compatible with the OLF and to limit noise impacts on nearby residents. The Navy projects that it will perform 31,650 FCLP operations annually at the OLF. The OLF will have twenty-four hour capability, and the Navy will conduct many of the operations at night.

According to the Navy, a new OLF is necessary because its existing East Coast OLF, Naval Auxiliary Landing Field (NALF) Fentress, is inadequate for several reasons. First, nearby residential developments restrict the Navy's ability to fully simulate carrier landings because lights from the residences create nighttime visual cues that are absent on a dark sea. These developments also impose altitude and flight pattern restrictions that would not exist in an actual carrier approach. Pilots utilizing Fentress for FCLP must fly in an irregular, kidney-bean shaped pattern rather than the oval shaped pattern used in actual carrier landings. Second, NALF Fentress lacks adequate capacity for "surge" operations, which require an aircraft carrier to deploy at unscheduled times. The military operations in Afghanistan (Enduring Freedom) and Iraq (Iraqi Freedom) are recent examples. Surge operations necessitate greater FCLP capacity because multiple carrier squadrons must train simultaneously at the OLF. Third, even under non-surge conditions, NALF Fentress is overscheduled, resulting in pilots and crews working late into the night. Beyond disrupting the lives of the naval personnel involved, mechanics also have less time to perform aircraft maintenance for flights leaving the next day. This puts aircraft out of service and consequently impacts squadron readiness.

The Navy attempted to follow NEPA's requirements in its decision to homebase the squadrons and construct an OLF. In August 2002, it

made available to the public a Draft Environmental Impact Statement (DEIS). In the DEIS, the Navy discussed the potential environmental impacts of selecting different homebasing and OLF sites. It suggested "Site C," located in Washington and Beaufort Counties, North Carolina, as one of two preferred sites for the OLF. After allowing time for public comment, in July 2003, the Navy issued a Final Environmental Impact Statement (FEIS). Department of the Navy, *Final Environmental Impact Statement (FEIS) for the Introduction of F/A-18 E/F (Super Hornet) Aircraft to the East Coast of the United States* (July 2003). In the FEIS, the Navy analyzed eight potential homebasing alternatives and six potential OLF siting alternatives.

The Navy issued a Record of Decision (ROD) in September 2003, setting forth its conclusions on the placement issues. Record of Decision for Introduction of F/A-18 E/F (Super Hornet) Aircraft to the East Coast of the United States, 68 Fed. Reg. 53,353 (Sept. 10, 2003). The Navy concluded that it should station eight Super Hornet fleet squadrons and a Fleet Replacement Squadron (FRS)¹ at Naval Air Station (NAS) Oceana in Virginia Beach, Virginia and two fleet squadrons at Marine Corps Air Station (MCAS) Cherry Point in Havelock, North Carolina. The Navy referred to this homebasing decision as "Alternative 6." Based on this decision, the Navy further concluded that the optimal location for the OLF was at Site C, which is fifty nautical miles from Cherry Point and seventy-two nautical miles from Oceana. The Navy chose Site C because it was roughly in between the two bases.

Site C is approximately five miles west of the Pocosin Lakes National Wildlife Refuge (NWR). *Washington County v. U.S. Dep't of the Navy*, 357 F. Supp. 2d 861, 865 (E.D.N.C. 2005). The Super Hornets' eastern approach and holding pattern are within two-tenths of a mile of the Pungo Unit of the NWR. FEIS 12-121. The NWR is a 115,000-acre wetlands area, and the Pungo Unit was initially granted federal protection in 1963. The Pungo Unit is an environment that is "highly populated by nature and thinly populated by man," and

¹A FRS is a transitory squadron. It provides the final training for newly-designated pilots in the specific aircraft that they will operate. It also provides training to experienced pilots who are switching aircraft models or who were previously in non-flying assignments.

is "home to some of the most unspoiled habitat along the East Coast." *Washington County*, 357 F. Supp. 2d at 865.

The FEIS noted that the Pungo Unit "was established specifically as an inviolate waterfowl sanctuary." FEIS 11-36. The NWR is located on the Atlantic Flyway, which is a major route for migratory waterfowl. The Pungo Unit provides the winter residence for nearly 100,000 of these waterfowl, including tundra swans and snow geese, which migrate there from arctic regions. These birds leave the NWR to forage in the agricultural fields surrounding Site C.

Plaintiffs, Washington and Beaufort Counties and several environmental groups, filed separate suits against the Navy, alleging that the Navy violated NEPA because it did not adequately assess the environmental impacts of its decision to place an OLF at Site C.² The district court consolidated the cases. Plaintiffs contend that the Navy's plan for an OLF at Site C threatens the waterfowl at the NWR and the ecotourism to the counties that the NWR provides. Specifically, they claim that the Super Hornet aircraft might strike the birds, flush them (disturb them and cause them to take flight), reduce their feeding and resting times, alter their behavior, hinder their migration, and decrease their populations.

The district court subsequently entered a preliminary injunction prohibiting the Navy from undertaking further work toward an OLF at Site C, and the Navy appealed. We dismissed the appeal as moot because the district court decided the case on the merits during the pendency of the appeal. Both parties had moved for summary judgment, and the court granted plaintiffs' motion.³ *Washington County*, 357 F. Supp. 2d at 878.

²The environmental plaintiffs also raised NEPA challenges to certain proposed Military Operating Areas, which are a type of special-use airspace designated by the Federal Aviation Administration. However, the district court severed this claim and it is now a separate case. *Washington County*, 357 F. Supp. 2d at 873 n.12.

³Plaintiffs also alleged that the Navy violated the Coastal Zone Management Act (CZMA). 16 U.S.C. § 1451 et seq. (2000). The district court granted the Navy's motion for summary judgment on this claim. *Washington County*, 357 F. Supp. 2d at 878. It found that the Navy had complied with the CZMA when it informed the North Carolina Division of Coastal Management (NCDQM) that its proposal was consistent with North Carolina's Coastal Management Plan and the NCDQM agreed. *Id.* at 876. Plaintiffs have not appealed that decision.

The district court held that the Navy's EIS did not adequately address the impacts of an OLF at Site C on migratory waterfowl. *Id.* at 868. It also stated that the inadequacy of the EIS was "more understandable" in light of various documents suggesting that the selection of Site C was a preordained decision and that the Navy "reverse engineered" the EIS to justify this outcome. *Id.* at 874. The district court enjoined the Navy from doing work related to the OLF at Site C until it complied with its NEPA obligations. *Id.* at 878. Specifically, it enjoined the Navy "from taking any further activity associated with the planning, development, or construction of an OLF in Washington and Beaufort Counties." *Id.* The Navy appealed the trial court's grant of summary judgment and issuance of a permanent injunction.

The issues before this Court are both whether the Navy complied with NEPA and, if not, whether the district court's permanent injunction was the appropriate remedy.

II.

NEPA sets forth a regulatory scheme for major federal actions that may significantly affect the natural environment. *Mt. Lookout-Mt. Nebo Prop. Prot. Ass'n v. Fed. Energy Regulatory Comm'n*, 143 F.3d 165, 171 (4th Cir. 1998). It is designed "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 42 U.S.C. § 4321. Specifically, the purpose of NEPA is to sensitize all federal agencies to the environment in order to foster precious resource preservation. *Andrus v. Sierra Club*, 442 U.S. 347, 350-51 (1979); *Hodges v. Abraham*, 300 F.3d 432, 438 (4th Cir. 2002).

NEPA promotes its purpose in two ways. First, NEPA ensures that a federal agency will carefully consider the effects of its actions on the environment by specifying formal procedures the agency must follow before taking action. *Robertson*, 490 U.S. at 349. Second, NEPA requires an agency to disseminate widely its findings on the environmental impacts of its actions. Thus, it ensures that the public and government agencies will be able to analyze and comment on the action's environmental implications. *Id.*; *see also Hodges*, 300 F.3d at 438 (same).

NEPA is a procedural statute; it does not force an agency to reach substantive, environment-friendly outcomes. Rather, NEPA simply requires that the agency take a "hard look" at environmental impacts before taking major actions. *See, e.g., Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (noting that "NEPA itself does not mandate particular results") (quotation marks omitted); *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227-28 (1980) (per curiam) (noting that the agency considered the environmental effects of its decision and that "NEPA requires no more"). In fact, an agency decision is acceptable even if there will be negative environmental impacts resulting from it, so long as the agency considered these costs and still decided that other benefits outweighed them. *See Robertson*, 490 U.S. at 350. "NEPA merely prohibits uninformed — rather than unwise — agency action." *Id.* at 351.

The core provision of NEPA requires that an agency of the federal government:

include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on — (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332(2)(C). The statement that this section requires is the EIS. *See Pub. Citizen*, 541 U.S. at 757; 40 C.F.R. § 1508.11 (2004). To supplement the statute, the Council on Environmental Quality (CEQ) has set forth regulations that agencies are required to follow, *Pub. Citizen*, 541 U.S. at 757; 40 C.F.R. § 1500.3, and courts give these regulations "substantial deference," *Andrus*, 442 U.S. at 358. The statute and the regulations specify that the EIS should contain the environmental effects and impacts of the proposed action, 40 C.F.R. §§ 1502.15-.16, reasonable alternatives to it, *id.* § 1502.14, possible

mitigation measures for any negative environmental impacts that will result from it, *id.* §§ 1502.14(f), 1508.20, and the cumulative impacts of it combined with other past, present, or foreseeable future actions, *id.* §§ 1502.16, 1508.7-8.

In drafting the EIS, the agency has to follow certain procedures that the CEQ has set forth. Most relevant here, the CEQ stipulates that the agency will draft the EIS in stages. The initial draft is the DEIS. *Id.* § 1502.9(a). Once the DEIS is complete, the agency must circulate it in order to obtain feedback from other agencies and the public. *Id.* § 1503.1. The agency must then respond to these comments and publish a FEIS. *Id.* §§ 1502.9(b), 1503.4. After the FEIS is complete, the agency may be required to draft a SEIS if there are changed circumstances or new information becomes available. *Id.* § 1502.9(c). Finally, once the agency has made a decision, it must publish a ROD. *Id.* § 1505.2. Only then may an agency finalize its action. *See id.* § 1506.1(a).

III.

The Navy contends that the district court erred in concluding that the EIS failed to comply with NEPA. We review the district court's grant of summary judgment *de novo*. *Hodges*, 300 F.3d at 445. There is no dispute that the Navy is a federal agency for the purposes of NEPA. *Concerned About Trident v. Rumsfeld*, 555 F.2d 817, 823 (D.C. Cir. 1977); *see also* 32 C.F.R. § 775 (2004) (Navy regulations for implementing NEPA).

A.

A court examining the sufficiency of an agency's environmental analysis under NEPA must determine whether the agency has taken a "hard look" at an action's environmental impacts. *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 443 (4th Cir. 1996) (*Hughes River I*). What constitutes a "hard look" cannot be outlined with rule-like precision. At the least, however, it encompasses a thorough investigation into the environmental impacts of an agency's action and a candid acknowledgment of the risks that those impacts entail. *See Robertson*, 490 U.S. at 350 (agencies must assure that "the adverse environmental effects of the proposed action are

adequately identified and evaluated"); *Hughes River Watershed Conservancy v. Johnson*, 165 F.3d 283, 288 (4th Cir. 1999) (*Hughes River II*) (same); 40 C.F.R. § 1502.14(a) (agencies shall "[r]igorously explore and objectively evaluate all reasonable alternatives") (emphasis added).

We may not, of course, use review of an agency's environmental analysis as a guise for second-guessing substantive decisions committed to the discretion of the agency. *Robertson*, 490 U.S. at 350. However, this does not turn judicial review into a rubber stamp. "[I]n conducting our NEPA inquiry, we must 'make a searching and careful inquiry into the facts and review whether the decision . . . was based on consideration of the relevant factors and whether there has been a clear error of judgment.'" *Hodges*, 300 F.3d at 445 (quoting *City of Alexandria v. Fed. Highway Admin.*, 756 F.2d 1014, 1017 (4th Cir. 1985)); see also *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989) (same).

Two further considerations guide us in assessing whether an agency has conducted a "hard look." First, given all the possible factual variations in NEPA cases, an agency's obligations under NEPA are case-specific. A "hard look" is necessarily contextual. See *Hodges*, 300 F.3d at 445 (describing the court's role as "a searching and careful inquiry into the facts" and the agency's consideration of "relevant factors") (quotation marks omitted); *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982) ("The detail that NEPA requires in an EIS depends upon the nature and scope of the proposed action.").

Second, as the Navy correctly contends, a court reviewing an EIS for NEPA compliance must take a holistic view of what the agency has done to assess environmental impact. Courts may not "flyspeck" an agency's environmental analysis, looking for any deficiency, no matter how minor. See, e.g., *Fuel Safe Washington v. FERC*, 389 F.3d 1313, 1323 (10th Cir. 2004) (describing the inquiry as "deciding whether claimed deficiencies in a FEIS are merely flyspecks, or are significant enough to defeat the goals of informed decision making and informed public comment") (quotation marks omitted); *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 508 (9th Cir. 1988) ("The reviewing court may not 'flyspeck' an EIS."). Allowing courts to seize upon any trivial inadequacy in an EIS as rea-

son to reject an agency decision would permit undue intrusion into an agency's decisionmaking authority. Thus, when an agency has utilized multiple forms of analysis in compiling an EIS, a deficiency in a single area is less likely to indicate NEPA non-compliance.

By the same token, however, a totality of the circumstances approach means that a court must view deficiencies in one portion of an EIS in light of how they affect the entire analysis. *See* 40 C.F.R. § 1502.1 (requiring that an EIS "shall be supported by evidence that the agency has made the necessary environmental analyses"). The Navy does not dispute that defects in different forms of analysis that would not by themselves indicate NEPA non-compliance may nevertheless do so in combination. An agency may not, for example, paper over one inadequate mode of analysis by referencing another with shortcomings of its own. A reviewing court must therefore examine all of the various components of an agency's environmental analysis in order to determine, on the whole, whether the agency has conducted the required "hard look."

B.

The Navy contends that it took a "hard look" at the potential impact of an OLF on waterfowl by utilizing a wide range of analyses, including site investigation, Bird Aircraft Strike Hazard (BASH) evaluation, scientific literature review, consultation with natural resource agencies, comparative analysis, and cumulative impact analysis. On the basis of these analyses, the FEIS states that migratory waterfowl "would not be affected" by an OLF at Site C, FEIS 2-105, and the ROD concludes that "[w]hile there would be some impacts to migratory waterfowl, these impacts are mitigable and would be minor," 68 Fed. Reg. at 53,354.

We note at the outset that the proximity of the proposed OLF to the Pocosin Lakes National Wildlife Refuge bears heavily on our inquiry in this case. We cannot divorce this fact from the sufficiency of the agency's environmental analysis. NEPA's "national policy . . . to promote efforts which will prevent or eliminate damage to the environment," 42 U.S.C. § 4321, is surely implicated when the environment that may be damaged is one that Congress has specially designated for federal protection. The point of a wildlife refuge is not just to pro-

tect an area that is beautiful and valuable in its own right, but to remind us that an environment that is welcoming to wildlife will ultimately be one that is more hospitable to humankind. The implementing statute of the National Wildlife Refuge System states that "[t]he mission of the System is to administer a national network of lands and waters for the conservation, management and where appropriate, restoration of fish, wildlife and plant resources and their habitats." 16 U.S.C. § 668dd(a)(2) (2000). Congress has expressly found that "[t]he Pocosin Lakes National Wildlife Refuge . . . provides unique opportunities for observing and interpreting the biological richness of the region's estuaries and wetlands." Pub. L. No. 103-232, § 301(1), 108 Stat. 336, 339 (1994). The Navy's "hard look" in this case must therefore take particular care to evaluate how its actions will affect the unique biological features of this congressionally protected area.

The Navy did not meet this burden. The deficiencies in each area of the Navy's analysis would not, on their own, be sufficient to invalidate the EIS. But a review of the various components of the EIS taken together indicates that the Navy did not conduct the "hard look" that NEPA requires. The Navy's conclusion that impacts on snow geese and tundra swans would be "minor" is simply difficult to reconcile with its failure to conduct more detailed analysis on both the relevant species and the unique properties of the habitat surrounding Site C. Its determination is further belied by the implications from the data that it did gather. The hallmarks of a "hard look" are thorough investigation into environmental impacts and forthright acknowledgment of potential environmental harms. *Robertson*, 490 U.S. at 350. The Navy's effort fell short in both regards.

C.

We shall address the major components of the Navy's environmental analysis and why they collectively fail to meet the "hard look" standard. Subsection (1) discusses the Navy's visits to Site C and month-long radar study. Subsection (2) addresses BASH, a particular environmental harm, and the Navy's efforts to assess BASH risk through Bird Avoidance Modeling (BAM), site visits, and the radar study. Subsection (3) evaluates the Navy's reliance on scientific literature, and Subsection (4) examines the Navy's comparative analysis of the environmental effects at three existing military facilities.

Lastly, Subsection (5) canvasses the cumulative impacts of military airspace in eastern North Carolina, including proposed Military Operating Areas.

1.

We first address the Navy's site investigation. Solid investigation into the location and concentration of waterfowl in the vicinity of the OLF was a potentially key component for the Navy's evaluation of environmental impacts. These included the likelihood of flushing, disruption of foraging and roosting, and bird-aircraft strike risk. The parties do not dispute that the proximity of the OLF to a National Wildlife Refuge required the gathering of on-site data to determine where waterfowl loafed and foraged. Indeed, the Fish and Wildlife Service specifically commented that long-term data was necessary because bird populations vary annually and even within a single migratory season. JA 292.

The FEIS relies on various site visits and a radar study to conclude that the birds primarily stay within the confines of the NWR, which is approximately five miles from the proposed OLF. *See* FEIS 12-139. This conclusion formed part of the support for the Navy's determination that the placement of an OLF at Site C would minimally impact waterfowl. 68 Fed. Reg. at 53,354.

We find that the site investigation was inadequate. The Navy first visited the site in the summer of 2001, when the waterfowl had long since departed for their arctic summer home. This visit was part of the initial screening of the various proposed OLF sites (the "OLF Siting Study"), and similar trips were made to other locations. According to Greg Netti, the Navy contractor assigned primary responsibility for the EIS sections on biological resources, the Navy team spent only half a day at Site C.⁴ This visit, which consisted of driving around the

⁴The Navy has objected to the district court's admission of evidence beyond the administrative record. While review of an agency decision is usually confined to that record, "there may be circumstances to justify expanding the record or permitting discovery." *Fort Sumter Tours, Inc. v. Babbitt*, 66 F.3d 1324, 1336 (4th Cir. 1995) (quotation marks omitted). We review a district court's admission of extra-record evidence for abuse of discretion. *See id.* On the facts of this case, we are unable to conclude that the district court abused its discretion.

site, was focused mostly on agricultural patterns and residential developments, including the effects of aircraft noise on nearby churches and schools. An assessment of bird movement was not possible at this time because the migratory population was not even present. This preliminary visit was the only visit to the site before the DEIS was published in August 2002, classifying Site C as one of two recommended OLF locations.

Following publication of the DEIS and the selection of Site C as a preferred alternative, the Navy made three additional visits in the winter of 2002-2003. The FEIS describes these three site visits in a single paragraph, offering no details on the nature of the analysis conducted beyond the fact that birds were observed loafing or foraging in certain locations. *See* FEIS 12-139. The Navy attempts to draw on other evidence in the record to showcase its site visits, but this too provides only the briefest of summaries.

The first winter visit was made on December 2, 2002. The only document the Navy cites in its brief recounting this trip indicates that Navy representatives and Fish and Wildlife Services personnel were led around the NWR by Joe Albea, a local expert and host of a North Carolina wildlife television program, and others who were opposed to a new OLF. Brief of Appellants at 28. The document provides no details on bird concentrations beyond the report that the group observed wildlife and discussed birds.

The Navy's second winter visit was made on January 14-15, 2003. According to the district court, this was the only site visit devoted to studying the environmental impacts on waterfowl. *Washington County*, 357 F. Supp. 2d at 868. The Navy spent the first evening in a meeting with a group convened by Mr. Albea that included members of various environmental groups and resource agencies critical of the proposed OLF. The next morning, Mr. Albea led a tour of the NWR and the Navy observed bird foraging. This tour lasted four to five hours. At one point during the morning, the group saw a military jet flying at low level over Pungo Lake and noticed that it did not result in bird disturbance. Nonetheless, the group did no further study into the frequency, altitude, or effects of jet flights during this site visit. Following the tour of the NWR, Mr. Netti and other Navy repre-

sentatives spent additional time driving around the site. This was Mr. Netti's last visit to Site C before the FEIS was published.

The third winter visit was made on February 12, 2003 and included the Navy's BASH Program Manager, Matt Klope. The Navy does not describe this visit in its brief, nor does it point to any portions of the record beyond an email indicating that this third visit occurred. Mr. Klope's visit did, however, result in a brief summary of bird-aircraft strike issues that was used to complement Mr. Netti's analysis.

In addition to these three winter site visits, the Navy also points to a month-long radar study conducted in February-March 2003. *See* FEIS 12-139 to 12-145. This study was designed in part to measure bird movement patterns in the airspace that would be used by Super Hornets training at the proposed OLF. While this study provided a more continuous analysis of bird patterns than the hasty one-day site visits, the Navy acknowledges that the radar study, by itself, does not provide an adequate assessment of potential environmental harm.

First, by February and March, the migratory population had begun to depart the Pocosin Lakes area, making the radar data less representative of the winter migratory season. This fact was noted in the FEIS. It stated that movement patterns identified by the radar study "may not reflect the overall foraging strategy of the birds throughout the wintering period but rather their preference during the latter months given the weather and distribution of crops during this particular season." FEIS 12-140 to 12-145. Even at this time, the radar study still detected 452,210 birds of which 70,241 were "large bird targets." FEIS 12-139.

Second, the district court found that the Navy knew a month-long study was insufficient in duration. *Washington County*, 357 F. Supp. 2d at 869. Dan Cecchini, the EIS Project Manager, testified that "the four-week time frame was too short for a meaningful study" and that the Navy "never believed that a one-month radar study . . . was enough to assess impacts." JA 2647b. The Fish and Wildlife Service also advised that one month did not allow for the accumulation of long-term data. JA 292.

Our "searching and careful inquiry," *Hodges*, 300 F.3d at 445 (quotation marks omitted), compels the conclusion that the site visits and

radar study do not pass muster under a "hard look" standard. As described above, the initial summer visit afforded no occasion to observe the waterfowl, and the subsequent three winter visits offered, at best, abbreviated tours of the NWR. These one-day visits did not provide a meaningful opportunity to conduct systematic observations or perform species-specific studies. *Compare Hughes River II*, 165 F.3d at 288 ("hard look" satisfied where, among other things, agencies sponsored two species-specific studies on zebra mussels). Nor could long-term data be collected. In short, the site visits never developed into the careful investigation that a "hard look" contemplates. *See id.* (agency must "sufficiently identif[y]" environmental impacts). The subsequent month-long radar study represents a beginning in this regard, but its limitations have been conceded.

2.

We turn next to the Navy's evaluation of a specific yet important environmental impact, Bird Aircraft Strike Hazard (BASH). BASH poses a formidable concern for flight operations. As the FEIS recounts, thousands of bird-aircraft encounters are reported in the United States every year. FEIS 12-128. The record contains evidence that bird strikes have been responsible for aircraft damage and occasionally pilot death and serious injury.

In addition to posing obvious risks to the safety of military aviators, the parties do not dispute that BASH is an environmental issue. BASH issues were, for example, raised by the Fish and Wildlife Service in meetings with Navy representatives. BASH was also addressed in comments on the DEIS and FEIS by the North Carolina Wildlife Resources Commission and the Department of the Interior.

The Navy initially considered BASH as part of its OLF Siting Study, which reviewed six potential sites for the proposed OLF. To measure BASH, the Navy utilized Bird Avoidance Modeling (BAM), a historical model of bird movement patterns that predicts relative bird-aircraft strike potential for low-level aircraft flights. *See* FEIS 12-128 to 12-132. The model is based on combined historical data from sixty species of birds that have been known to cause bird strikes or are likely to pose BASH concerns due to flocking tendency, mass, migration, and behavior. BAM sets risk levels (Low, Moderate, and

Severe, with internal sub-levels in ascending risk 1-3; e.g., "Moderate 1") based on bird mass per square kilometer. Thus, while tundra swans and snow geese are among the sixty species included in BAM, BAM risk levels represent an aggregated biomass measurement utilizing historical data.

BAM was conducted on the six potential OLF sites as well as several current military facilities, including NALF Fentress, NAS Oceana, MCAS Cherry Point, and the Dare County Bombing Range. This analysis classified Site C as a "Severe 1" average annual bird strike risk and predicted a severe hazard advisory for approximately 50% of the year. By way of comparison, BAM indicated that NAS Oceana, NALF Fentress, and the Dare County Range all have "Severe 1" average ratings, as did two other proposed OLF sites.

The Navy contends that an OLF at Site C would not pose an unusual BASH risk because low-level flight training currently takes place at Oceana, Fentress and the Dare County Range, which have similar BAM ratings. But this comparative assessment provided only a useful starting point for an analysis of waterfowl impact. BAM indicated that Site C had among the highest BASH ratings of sites surveyed. *See* FEIS 12-131. In order to reach the conclusion that impact on waterfowl would be "minor," further BASH investigation was necessary. BAM could not satisfy this obligation on its own.

The FEIS and ROD indicate that the Navy did not consider BAM conclusive, for two primary reasons. First, the record indicates that the Navy viewed BAM as a preliminary form of BASH analysis. The ROD describes BAM as a screening mechanism for various proposed sites, and BAM was conducted at an early stage in the OLF siting process. 68 Fed. Reg. at 53,357. The FEIS similarly characterizes BAM as "a first step in evaluating the relative BASH of the proposed OLF sites," FEIS 12-128, and cautions that "BAM is just one tool used to determine risk potential and does not necessarily reflect the Navy's overall assessment of risk at any particular site." FEIS 12-129. Mr. Cecchini testified that "BAM is . . . an accepted first kind of main step that you would do if you were looking at BASH." JA 2463a.

Second, the Navy acknowledged that BAM had key limitations. The FEIS specifically references BAM's "inability to adjust for real-

time bird movements or population fluctuations because it is derived from fixed, historical data." FEIS 12-129. Comparing BAM ratings from other facilities therefore does not offer a complete assessment of BASH risk, because flocking patterns and bird concentrations will vary across sites. This qualification has additional significance in this case due to the close proximity of the proposed OLF to a wildlife refuge that is the winter home to tens of thousands of migratory waterfowl. The district court found, and the Navy does not dispute, that "nowhere else on the eastern seaboard is there a higher concentration" of tundra swans and snow geese. *Washington County*, 357 F. Supp. 2d at 869.

Additional evidence in the record, including a 1999 article relied upon by the Navy in the FEIS, FEIS 12-128 to 12-129, suggests further limitations inherent in BAM. BAM is not species-specific, and instead relies on a composite of sixty different birds of varying size and weight. While BAM does utilize historical data from tundra swans and snow geese, they are but two of the sixty species incorporated into the model. BAM does not, therefore, assess the BASH risks posed by the specific species at the NWR. BAM also does not control for variation in aircraft features, such as aircraft model, that have the potential to increase or decrease BASH risk.

In addition to BAM's acknowledged limitations and preliminary nature, state and federal environmental agencies raised concerns about bird strike hazards at Site C. In its critique of the FEIS, for example, the Fish and Wildlife Service advised that the Navy's conclusions drawn from BAM were "based on extremely limited data." JA 292. Commenting on the DEIS, the North Carolina Wildlife Resources Commission similarly emphasized the limited utility of BAM and suggested that collisions with larger birds prevalent at Site C, such as swans and geese, could have particularly catastrophic consequences. JA 264.

In light of BAM's acknowledged limitations, and with the understanding that Site C was a preferred site and presented a unique BASH situation because of its proximity to the NWR, the Navy endeavored to conduct what the FEIS describes as "[a] more in-depth analysis" of BASH issues. FEIS 12-139. But the Navy claims this "in-depth analysis" was satisfied by its winter 2002-2003 site visits and

four-week radar study. As described above, these efforts fell short of a thorough investigation. Nor was the Navy's focus solely on BASH during the site visits. Absent a more comprehensive investigation of bird concentration and foraging patterns, the Navy could not make supportable conclusions about bird-aircraft collisions.⁵

On the basis of BAM and the subsequent site visits and radar study, the district court determined that the Navy's BASH analysis "demonstrate[d] patently flawed methodology." *Washington County*, 357 F. Supp. 2d at 869. There is, however, no evidence to suggest that the Navy failed to utilize standard tools in its BASH analysis. *Hughes River II*, 165 F.3d at 289 ("Agencies are entitled to select their own methodology as long as that methodology is reasonable."). The Navy should also not be faulted for updating its BASH assessment during the course of the EIS process.⁶

The Navy did falter, however, by not doing enough. BAM indicated a severe hazard advisory at Site C for 50% of the year, and various natural resource agencies had expressed concern about BASH risks in the vicinity of the NWR. The Navy also acknowledged that BAM was merely "a first step" in a BASH analysis and that BAM provided limited predictability for actual bird patterns because it is derived from fixed historical data. All of these facts warranted a more searching investigation into BASH risk. This the Navy did not do. Instead, it supplemented BAM with site visits and a radar study that were themselves merely preliminary. In light of the serious environ-

⁵Nor are we persuaded by the Navy's claim that its BASH Program Manager determined that a BASH prevention program could be implemented at Site C. Agencies are certainly entitled to rely on the opinions of their own experts, but "[h]ere, however, the record provides no basis for determining whether the opinions of the [BASH Program Manager] were reasonable." *Hughes River I*, 81 F.3d at 445. While a BASH prevention program may successfully reduce the threat of bird strikes, it is dependent upon a conscientious assessment of BASH risk.

⁶Indeed, the district court found that the Navy's post-FEIS decision to adjust certain holding patterns to mitigate waterfowl impact "undermine[d] the sufficiency of the FEIS." *Washington County*, 357 F. Supp. 2d at 870. However, the Navy should not be discouraged from making minor changes designed to reduce environmental impact.

mental consequences of BASH and the proximity of the proposed OLF to a bird sanctuary, a more extensive investigation into BASH issues was required.

3.

We now turn to the Navy's review of the scientific literature on the effects of aircraft activity on waterfowl. As described above, the Navy's site investigation did not comprehensively consider the impacts of aircraft activity on the tundra swans and snow geese in the NWR. But the Navy suggests that preexisting scientific studies support its conclusion that aircraft activity will not significantly flush the waterfowl around Site C. Scientific literature can be useful to an agency in determining environmental impacts. *See, e.g., Lee v. U.S. Air Force*, 354 F.3d 1229, 1244 (10th Cir. 2004) (relying, in part, on the agency's use of existing scientific studies to conclude that the agency took a hard look); *Hughes River II*, 165 F.3d at 288 (relying, in part, on the agency's own scientific studies to determine that the agency took a hard look).

The Navy's cursory review of relevant scientific studies, however, further illustrates its failure to take a hard look at the environmental impacts of an OLF at Site C. Most of these studies do not support the Navy's conclusions that waterfowl "would not be affected" by the OLF, FEIS 2-105, or that its impacts on waterfowl in the area would be "minor," 68 Fed. Reg. at 53,354. Rather, the relevant studies suggest, at the least, that Super Hornet activities in the area around Site C might lead to substantial disturbance of snow geese. The Navy neither distinguishes this evidence adequately nor provides sufficient counter-evidence.

As a preliminary matter, the Navy has consistently maintained that wildlife reaction to aircraft noise is species-specific. *See* FEIS 12-116, B-42. For example, it noted in the FEIS that "[a] common finding is that behavioral responses to aircraft noise appear to be species-specific. It is therefore difficult to draw conclusions from the effects or responses of aircraft noise on one species and predict those responses for other species." FEIS 6-91; *see also* FEIS 4-103 (same); FEIS 8-64 (same); FEIS 10-28 (same). The Navy relied on several

studies, such as the Edwards study and the Conomy study, to support this conclusion. *See* FEIS B-42 to B-43.

The only species-specific studies that are available illustrate that snow geese may be especially sensitive to aircraft activity.⁷ For example, the Navy cited to a Davis and Salter study finding that aircraft tended to flush snow geese. FEIS 12-120 to 12-121. The authors determined that an airplane on the North Slope of Alaska disturbed all visible snow geese when it was at 10,000 feet and below. At an altitude of 5,000 feet, all snow geese within five miles were flushed. The authors concluded that, while more studies were needed, recurring flushing of snow geese might affect the birds' ability to store energy, which could impact their migratory success and ultimately have long-term effects on future populations.

Other studies that the Navy cited confirm the conclusion that aircraft disturb snow geese. *See* FEIS 12-121 (citing to studies by Belanger and Bedard (1989) and Davis and Wiseley (1974) finding that aircraft bothered snow geese); *see also* FEIS B-43 (citing to study by Edwards (1979) noting the same). The North Carolina Wildlife Resources Commission and the Fish and Wildlife Service have also told the Navy that, based on scientific studies, snow geese are susceptible to aircraft disturbance. JA 94, 261-262, 271. Thus, species-specific information suggests that since the Super Hornets will land on the OLF and fly as low as 3000 feet above the NWR, FEIS 12-121, the aircraft may have the potential to flush snow geese up to five miles away.

The Navy makes only a limited attempt in the FEIS to distinguish these snow geese studies, which constitute some of the most striking evidence against its "minor" impact conclusion.⁸ The Navy has con-

⁷The Navy provided no scientific studies regarding the reaction of tundra swans to aircraft activity, noting that only a limited amount of information exists. FEIS 12-121.

⁸The Navy does try to distinguish the Davis and Salter study in its brief. Reply Brief of Appellants at 15-16. It claims that the snow geese in Alaska would be more sensitive to aircraft than the snow geese in North Carolina because Alaska is more isolated. This argument, however, is not in the FEIS and is supported by little more than speculation.

sistently maintained that effects from aircraft activity are species-specific, but seemingly places little weight on the snow geese studies before it. Nor did the site investigation or comparative analysis provide sufficient species-specific data to counter these most relevant studies.

The Navy contends, however, that it engaged in a hard look because its overall analysis still supports its conclusion. It makes two arguments. First, the Navy maintains that it was sufficient to simply describe all the snow geese studies in the FEIS and acknowledge their conclusions. This initial survey was a good start. A hard look in this context, however, entails more than citing the articles or abstracts that contradict the conclusions reached. *See* 40 C.F.R. § 1502.1 (EIS "shall provide full and fair discussion of significant environmental impacts"). If anything, the obligation to carefully parse contrary findings is magnified when a congressionally protected National Wildlife Refuge is only miles away.

Second, the Navy contends that it was sufficient for the FEIS to rely on other studies illustrating that other species did not have a significant response to aircraft noise. The FEIS cited to a volume of studies by Fleming that suggested the black duck habituated relatively quickly to aircraft noise. FEIS B-41. As the district court noted, however, these studies would appear to be of limited value since none of them illustrated whether aircraft noise would disturb tundra swans or snow geese, *Washington County*, 357 F. Supp. 2d at 871, and the Navy made its position quite clear that the effects of aircraft activity are species-specific, *see, e.g.*, FEIS 6-91, 12-116, B-42. Further, the studies also indicated that even within the duck family, some ducks were able to habituate to aircraft noise while others were not. One of the studies in the volume concluded "that the dissimilar responses between black ducks and wood ducks suggest that the capability to habituate to disturbance varies by species, a possibility also reported by [other studies]." JA 1614; *see also* JA 1497 (same); JA 1756 (same). Moreover, the North Carolina Wildlife Resources Commission repeatedly called into question the Navy's reliance on the Fleming volume because the birds discussed in those studies were of a different species. *See* JA 261-262, 271.

An agency's hard look should include neither researching in a cursory manner nor sweeping negative evidence under the rug. As we

have noted, NEPA requires that the agency both investigate and acknowledge the impacts on waterfowl around Site C. *See Robertson*, 490 U.S. at 350. The Navy fails on both fronts.

On the one hand, to the extent the Navy wishes to adhere to its conclusion that impacts on waterfowl would be "minor," its investigation falls short of providing adequate support. The Navy did not distinguish in the FEIS the species-specific studies as to snow geese that tend to directly contradict its conclusions. Nor did it explain its reliance on black duck studies in light of its general position that effects of aircraft noise are species-specific. On the other hand, to the extent the Navy maintains its investigation was thorough, it has failed to make a forthright acknowledgment of the likely environmental harm. The most relevant literature indicates that the impacts may be much greater.⁹

4.

We next address the Navy's comparative analysis. The Navy relied on the environmental effects of aircraft overflights at several existing military facilities to reach its conclusion that an OLF at Site C would have minimal impact on tundra swans and snow geese. The Navy focused on three sites — the Dare County Bombing Range, the Piney Island Bombing Range, and R-5314, which is restricted airspace above the Pocosin NWR that is already used for high-speed, low-level military jet flights. According to the Navy, its experience with these three facilities lends support to the view that waterfowl will habituate to any noise disturbance caused by FCLP at the proposed OLF.

⁹The Navy states that the impacts will be minor, notwithstanding the studies illustrating the opposite, because it has "anecdotal evidence" that disturbances will not occur. FEIS 12-121; Brief of Appellants at 37. However, the Navy provides little indication of what this evidence is. NEPA demands more than "anecdotal evidence." *See* 40 C.F.R. § 1502.24 (noting that agencies should "make explicit reference . . . to the scientific and other sources relied upon for conclusions in the statement"). To the extent that the anecdotal evidence was based on military training exercises in restricted airspace above the NWR, referred to as "R-5314," FEIS 12-121, that evidence lacks a sufficient factual foundation at this point to support the Navy's conclusion, as will be discussed in the next subsection.

The Navy does not dispute that implicit in its duty to "adequately identif[y] and evaluate[]" negative environmental effects, *Robertson*, 490 U.S. at 350, is the unremarkable requirement that a comparative analysis be founded upon a proper factual basis for the comparison. As the Navy correctly argues, this does not require the existing facilities to be "identical" to the proposed OLF. It does, however, require the Navy to verify that there is a "rational basis" for any comparison. *Hodges*, 300 F.3d at 445. This may include, for example, parallels in species and habitat, or a showing that operations at the various facilities are similar in nature or scope. *See, e.g., Hughes River II*, 165 F.3d at 288 (hard look satisfied where, among other things, agency "compiled a report regarding the impact of zebra mussel infestation at another lake with similar conditions to those anticipated at the Project"). Here, we are unable to conclude that the Navy has established this necessary factual predicate.

The Navy first claims that a Site C OLF will have minimal impact on waterfowl at the Pungo Unit because aircraft training activities at the Dare County Range have resulted in negligible waterfowl flushing at the nearby Lake Mattamuskeet. The district court found that this conclusion was made without any investigation into noise levels at Lake Mattamuskeet or flight altitudes at the Dare County Range. *Washington County*, 357 F. Supp. 2d at 872. The only ground of comparison proffered by the Navy is the allegedly commensurate distance between the proposed Site C OLF and the NWR, and the Dare County Range and Lake Mattamuskeet. But even this factual basis is lacking: Site C is approximately five miles from the NWR, whereas the district court found that Lake Mattamuskeet is fifteen miles from the Dare County Range. *Id.* And scientific literature that the Navy cited indicates that aircraft may flush snow geese up to five miles away. The Navy provides no response for why the comparison to the Dare County Range remains sound.

The Navy next points to the Piney Island Bombing Range and the Fleming study suggesting that black ducks acclimated quickly to aircraft noise and experienced no significant behavioral effects. On this basis, the Navy contends that waterfowl at Site C are likely to habituate as well. The comparison lacks an adequate foundation. As discussed above in the context of the Navy's review of scientific literature, the Navy has consistently maintained that the impact of air-

craft activity is species-specific. The Navy offers no explanation for why Piney Island remains an appropriate comparison when it is largely inhabited by ducks and not tundra swans and snow geese.

The Navy lastly offers a comparison to R-5314, restricted airspace above the NWR. According to the Navy, R-5314 is currently used for high-speed military flights as low as 1000 feet above ground level, and snow geese still continue to populate the NWR during the migratory season. The FEIS notes that "high concentrations of snow geese and other migratory waterfowl at [the] NWR suggest that some habituation may occur." FEIS 12-121. The comparison once again lacks the requisite factual basis. The district court found that the Navy never undertook any systematic investigation into operations at R-5314, such as the number, frequency, altitude, or speed of flights. *Washington County*, 357 F. Supp. 2d at 872. Nor did the Navy's determination that snow geese and other waterfowl continue to return to the NWR establish that the bird population was not still decreasing or experiencing adverse behavioral effects.

The Navy protests that finding its comparisons insufficient requires it to produce too much detailed information before employing comparative analysis. To the contrary, the Navy must only supply enough background information to establish a rational basis for its conclusions. *Hodges*, 300 F.3d at 445. In this case, the Navy has provided only the most cursory factual basis for its comparisons, to the extent it has offered any at all. The Dare County and Piney Island Ranges and R-5314 may well exhibit environmental effects analogous to those at Site C, but this comparison is not self-evident. Demonstration of sufficient similarity to make the comparison relevant requires additional investigation by the Navy.

5.

We finally consider the Navy's analysis of the cumulative environmental impacts of an OLF at Site C in conjunction with existing and proposed military airspace over North Carolina. NEPA requires an agency to consider not only the direct effects of an action, but also the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other

actions." 40 C.F.R. § 1508.7; *see also id.* § 1508.27(b)(7) (requiring an agency to consider "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts").

At issue here are one set of "present" actions and one "reasonably foreseeable future" action. 40 C.F.R. § 1508.7. First, the present actions concern Federal Aviation Administration (FAA) designation of substantial airspace in eastern North Carolina for military use. As the FEIS details, North Carolina is home to a number of special use areas for military training and operations, FEIS 9-2, training routes for low-altitude flight practice, FEIS 9-10, and target ranges for weaponry training, FEIS 9-14.

The Navy contends that "FEIS Chapters 9 and 10 address airspace usage, describing the existing environment and the effects to that environment." Brief of Appellants at 43. However, neither chapter addresses the possible incremental impacts of the proposed OLF. Chapter 9 simply "provides a description of" the existing military airspace, without offering any analysis of the possible cumulative effects of the proposed action. FEIS 9-1. Chapter 10 does discuss environmental impacts, but only those associated with different *homebasing* alternatives, not those associated with different *OLF siting* alternatives. FEIS 10-1.

This omission is crucial. By the Navy's own calculations, there will be 31,650 annual FCLP operations at the OLF. The Navy must consider whether these operations, and the flights necessary for the Super Hornets to travel between the OLF and their homebases, will add any significant noise-related or other environmental impacts to those that the existing military airspace currently imposes. For example, as the Navy itself has noted, the NWR is already affected by low-level high-speed flights in R-5314.

Second, the reasonably foreseeable action at issue involves the Navy's recent proposal that the FAA designate two additional Military Operating Areas (MOAs) over North Carolina.¹⁰ One of these,

¹⁰As we noted above, the environmental plaintiffs have challenged the sufficiency of the Navy's compliance with NEPA in its requested designation of the two MOAs. *See supra* note 2. Our consideration of the issues before us here does not prejudge the merits of a potential appeal in that case.

the "Mattamuskeet MOA," would be an area of twenty-five by thirty-five nautical miles, part of which would lie over sections of Washington and Beaufort Counties and the Pocosin Lakes NWR. The Navy plans to use the Mattamuskeet MOA for "aerial training operations," some involving the Super Hornets, that include "dog fighting, formation flying, acrobatic flying and evasive flying." *Washington County*, 357 F. Supp. 2d at 874.

The FEIS does contain a brief (approximately one-page) discussion of the cumulative impact of OLF siting and the proposed Mattamuskeet MOA. FEIS 13-14 to 13-15. This discussion, however, considers only the cumulative impact of an OLF at Site D, because it asserts that only that site, which is "immediately adjacent to [the MOA's] eastern boundary," would be "in proximity" to the MOA. FEIS 13-14 to 13-15. The FEIS claims that since the MOA and an OLF at Site D would be "functionally independent," cumulative impacts on eastern North Carolina would be "minimal." FEIS 13-15. The only two impacts that the FEIS specifically considers are interference with non-military aircraft traffic and additional noise. The FEIS states that non-military aircraft traffic would be minimally impacted by placing an OLF right next to the MOA and that the potential impacts of additional noise would be mitigated by the Navy's plan to relocate all residents in the affected area. FEIS 13-15.

The critical omission here is the failure to discuss the potential cumulative impacts of building an OLF at *Site C*. The Navy asserts that this omission is "reasonable," since "the potential cumulative impacts at Site D were determined not to be significant, and [] the location of Site C is further away from the Mattamuskeet MOA than Site D." Brief of Appellants at 42-43.

We find this argument to be problematic. Site D may be closer to the Mattamuskeet MOA than Site C, but this does not mean that consideration of Site D's cumulative impacts automatically substitutes for consideration of Site C's. Site C — which, we note, is only 4.5 miles away from the MOA, *see Washington County*, 357 F. Supp. 2d at 874 — will interact with the MOA in at least one significant way that the FEIS neglected to consider. The district court found, and the Navy has not disputed, that "the holding patterns and arrival and departure flight paths for the Mattamuskeet MOA and [an] OLF [at Site C]

overlap at the edge of the Pungo Unit," *id.*, the precise part of the NWR that serves as the winter home to nearly 100,000 waterfowl, *id.* at 864-65. Thus, there is a potential overlap of 31,650 annual FCLP operations at Site C with an estimated 2400 flights per year through the MOA. Needless to say, the FEIS's analysis of Site D did not address the issue of thousands of co-located flights near Site C, the OLF location that the Navy actually chose.

NEPA's hard look requires analysis of the combined impact that may result from tens of thousands of flights potentially passing over or near the same geographic area. *See* 40 C.F.R. § 1508.7; *see also Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976) (considering a situation where an agency simultaneously considered "several proposals for . . . actions that will have cumulative or synergistic environmental impact upon a region" and concluding that "their environmental consequences must be considered together"). That the region in question is part of a National Wildlife Refuge heightens the Navy's statutory duty. The Fish and Wildlife Service has expressed concern about harm that the proposed MOA by itself would cause to resident waterfowl, JA 105-06, creating cause for concern regarding what would happen when the effects of the MOA and OLF are combined. "Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action." *Kleppe*, 427 U.S. at 410.

The Navy's consideration here of cumulative impacts both with existing military airspace and with the proposed Mattamuskeet MOA was insufficiently comprehensive.¹¹ A holistic view of the FEIS

¹¹The district court also appears to have decided, without meaningful discussion, that the Navy failed to adequately consider cumulative impacts of the OLF in combination with the second proposed MOA, the "Core MOA." *See Washington County*, 357 F. Supp. 2d at 873. The Core MOA is a narrow flight path intended "for high speed travel between the Atlantic Ocean and existing military space over the Pamlico Sound." *Id.* The FEIS concluded that there would be no cumulative impacts because the Core MOA is more than thirty nautical miles south of the nearest OLF siting alternative (Site D). FEIS 13-14. As neither the district court nor plaintiffs have pointed us to any evidence suggesting that this conclusion was erroneous, we do not believe that any further analysis of cumulative impacts with the Core MOA is required.

makes this particularly apparent. The problems we have identified with the Navy's site investigation, BASH analysis, scientific literature review, and comparative analysis bleed into the arena of cumulative impacts as well. These shortcomings cast doubt upon whether the Navy has fully comprehended the impacts of its actions in isolation, let alone in combination with others. Only when the Navy fully investigates and acknowledges both will it satisfy NEPA. *See Robertson*, 490 U.S. at 350.

D.

Although we agree with the district court's conclusion that the Navy failed to undertake a hard environmental look, two words of caution are in order. First, the district court exceeded the proper scope of its inquiry when it placed probative weight upon evidence of the Navy's subjective intent. *Washington County*, 357 F. Supp. 2d at 874-75. Plaintiffs have relied heavily on several internal Navy emails and documents to advance the theory that the Navy had irreversibly decided to locate an OLF at Site C before it began its environmental impact analysis. Plaintiffs attempted to prove that twists and turns in the agency's official mind indicated that a hard look was not taken. The district court inappropriately indulged this theory.

A court should generally restrict its inquiry to the objective adequacy of the EIS, namely, thorough investigation of environmental effects and candid acknowledgment of potential environmental harms, *Hughes River II*, 165 F.3d at 288. Courts should not conduct far-flung investigations into the subjective intent of an agency. For example, in *Fayetteville Area Chamber of Commerce v. Volpe*, 515 F.2d 1021, 1026 (4th Cir. 1975), plaintiffs challenged an EIS on the ground that a state official assisting in its preparation had made a prior administrative decision on the location of the same project. We declined to probe into the subjective predispositions of agency decisionmakers and held that the test for NEPA compliance "is one of good faith objectivity rather than subjective impartiality." *Id.* (quotation marks omitted). Since the EIS was "prepared in accordance with the applicable statutes and regulations, there ha[d] been no violation of [NEPA]." *Id.*; *see also Coal. for Canyon Preservation v. Bowers*, 632 F.2d 774, 782 (9th Cir. 1980) ("[S]ubjective good faith is not the test

for determining the adequacy of an EIS. The test is an objective one.").

This rule is supported by common sense. Inquiries into subjective intent in the NEPA context open a Pandora's box that courts should in most cases attempt to avoid. Psychoanalyzing an agency's intent could restrict the open exchange of information within an agency, inhibit frank deliberations, and reduce the incentive to memorialize ideas in written form. It could also frustrate an agency's ability to change its mind or refocus its actions, the very effect that NEPA was designed to encourage. *See* 40 C.F.R. § 1502.1 ("primary purpose" of an EIS "is to serve as an action-forcing device to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government"). Finally, most federal agencies consist of numerous actors with varying levels of responsibility and different objectives; discerning one subjective intent is a speculative exercise at best.

NEPA of course prohibits agencies from preparing an EIS simply to "justify[] decisions already made." 40 C.F.R. § 1502.2(g). But the evidence we look to in determining whether this has taken place consists of the environmental analysis itself. It does not include, as plaintiffs suggest, the alleged subjective intent of agency personnel divined through selective quotations from email trails. *Fayetteville*, 515 F.2d at 1026 (in assessing agency's good faith, courts may not delve into whether agency decisionmaking process lacked "subjective impartiality"). Where an agency has merely engaged in post hoc rationalization, there will be evidence of this in its failure to comprehensively investigate the environmental impact of its actions and acknowledge their consequences. *See Robertson*, 490 U.S. at 350. This objective analysis is the full extent of our inquiry, and we therefore express no opinion as to the Navy's motivations here.

Our second word of caution is that to the extent the district court's judgment on the adequacy of the EIS was influenced by its opinion on the necessity or wisdom of the proposed action, this influence was inappropriate. The parties in this case vigorously debate whether a new OLF is in fact needed. This discussion should remain within the Navy. We reemphasize that "NEPA merely prohibits uninformed — rather than unwise — agency action." *Robertson*, 490 U.S. at 351.

Whether the Navy needs a new OLF is irrelevant to NEPA compliance because NEPA does not demand particular results. *Id.* at 350. Courts should not second-guess agency decisions, so long as the agency has given a hard look at the environmental impacts of its proposed action. "[T]he only role for a court is to ensure that the agency has considered the environmental consequences; it cannot 'interject itself within the area of discretion of the executive as to the choice of the action to be taken.'" *Strycker's Bay*, 444 U.S. at 227-28 (quoting *Kleppe*, 427 U.S. at 410 n.21). This is especially the case where the government's decision concerns military preparedness.

E.

It is important to place the foregoing analysis in some perspective. The final decision on where to construct an OLF is committed by law to the sound discretion of the Navy, once it has complied with the requirements of NEPA. *Strycker's Bay*, 444 U.S. at 227-28. Our intention is in no way to wrest control of this ultimate decision from the Navy's hands, or to make NEPA an insurmountable bar to agency action. However, the requirements that Congress has set forth in NEPA are not ones that we are free to disregard, especially when the proposed action would place extensive flight operations in close proximity to a National Wildlife Refuge. The fact of this proximity does not operate to defeat the Navy's intentions, but it of necessity lends importance to NEPA's requirements that environmental impacts be thoroughly investigated and forthrightly acknowledged. We reemphasize that potential negative environmental impacts do not work to prohibit the selection of Site C for an OLF, but those impacts simply must be carefully analyzed and fairly evaluated. *Robertson*, 490 U.S. at 350.

We caution district courts that they are not to flyspeck each and every detail of an EIS, but to view it in its entirety, as we have attempted to do. In this case, a shortcoming in a particular area of analysis may not have been fatal to the legal sufficiency of the FEIS. But taken in combination, the inadequacies of the Navy's investigation are too serious to ignore. Considered together, the site investigation, BASH analysis, review of scientific literature, comparative analysis, and cumulative impact analysis reveal neither a complete investigation into environmental impacts nor a frank admission of

environmental harms. The end result of this study was the far from self-evident conclusion that repetitive take-offs and landings of advanced fighter aircraft near mass gatherings of waterfowl will have only the most minor of impacts upon them. Maybe so, but this needs to be explained.

The sufficiency of the mitigation measures proffered in the FEIS are necessarily dependent on an adequate assessment of environmental impact. For this reason, the FEIS also fails to sufficiently address mitigation.

We would be remiss in our own obligations under NEPA if we were to countenance an environmental review that was in its various aspects lacking in the hard look that NEPA mandates and requires. The Navy is accordingly ordered to prepare a SEIS that respects the congressional directive that agency decisionmaking weigh seriously environmental harms.

IV.

We now turn to consider what further steps, if any, the Navy may take toward placing an OLF at Site C prior to its completion of the SEIS. The district court entered an injunction prohibiting any such activity. The Navy argues that the injunction is overly broad and requests that we narrow it.

We review the scope of an injunction for abuse of discretion. *Va. Soc'y for Human Life, Inc. v. Fed. Election Comm'n*, 263 F.3d 379, 392 (4th Cir. 2001). In doing so, we review the district court's factual findings for clear error and its legal conclusions de novo. *Id.*

A.

The Supreme Court has cautioned that "[t]he grant of jurisdiction to ensure compliance with a statute hardly suggests an absolute duty to do so under any and all circumstances, and a federal judge sitting as chancellor is not mechanically obligated to grant an injunction for every violation of law." *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 313 (1982). Instead, courts must look to traditional principles of

equity to determine what form of injunctive relief, if any, is appropriate to remedy a statutory violation. *See id.* at 311-13. These equitable principles have always required "irreparable injury and the inadequacy of legal remedies" before an injunction is warranted. *Id.* at 312.

Even where these conditions are met, however, the crafting of an injunction is not a one-way street. Just as the plaintiff is harmed by the legal violation that gave rise to its claim, so may the defendant be harmed by the injunction itself. "[T]he traditional function of equity has been to arrive at a 'nice adjustment and reconciliation' between the competing claims." *Id.* (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329 (1944)). In granting injunctive relief, a court must also "pay particular regard for the public consequences of employing the extraordinary remedy of injunction." *Id.* Where the harms of a particular injunctive remedy outweigh the benefits, a court may decline to adopt it. *Id.* at 312-13.

NEPA creates no exception to the traditional principles that govern injunctive remedies. The CEQ regulations require that "[u]ntil an agency issues a 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." 40 C.F.R. § 1506.1(a); *see also id.* § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision.").

In a given case, an injunction may be necessary to prevent actions that would produce either or both of these results. We have recognized that "[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable." *S.C. Dep't of Wildlife & Marine Res. v. Marsh*, 866 F.2d 97, 100 (4th Cir. 1989) (quoting *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987)). And we have ordered an injunction against further pre-EIS work on a highway where we found that "[i]f investment in the proposed route were to continue prior to and during the Secretary's consideration of the environmental report, the options open to the Secretary would diminish, and at some point his consideration would become a meaningless formality." *Arlington Coal. on Transp. v. Volpe*, 458 F.2d 1323, 1333 (4th Cir. 1972); *see also Md. Conservation Council, Inc. v. Gilchrist*,

808 F.2d 1039, 1042-43 (4th Cir. 1986) (permitting an injunction under similar circumstances contingent on the district court finding, inter alia, that the proposed highway construction program would actually violate 40 C.F.R. § 1506(a)(2)).

We have cautioned, however, that a NEPA injunction "should be tailored to restrain no more than what is reasonably required to accomplish its ends." *S.C. Dep't of Wildlife*, 866 F.2d at 100 (quotation marks omitted). Violation of NEPA is not always cause to enjoin all agency activity while the agency completes the required environmental analysis. If this were the case, 40 C.F.R. § 1506.1(a) would be rendered superfluous. The subsection's specific prohibition only on activities that cause environmental harm or "[l]imit the choice of reasonable alternatives" compels the conclusion that activities exist which do not have such effects and may proceed while an EIS is pending. Indeed, a later subsection expressly lists one such activity, stating that § 1506.1(a) "does not preclude development by applicants of plans or designs or performance of other work necessary to support an application for Federal, State or local permits or assistance" while NEPA work is in progress. 40 C.F.R. § 1506.1(d).

It is therefore unsurprising that our caselaw has been careful to tailor the scope of injunctive relief in NEPA cases. First, we have noted that a NEPA injunction predicated on preventing environmental harm can be overbroad if it restricts nonharmful actions — even ones that are precursors to other actions that are potentially harmful. *South Carolina Department of Wildlife* concerned a proposed action by the Army Corps of Engineers to install and operate pumped storage generators at a dam. 866 F.2d at 98. The district court found that the agency's EIS likely failed to sufficiently consider the environmental impact of operating the generators, and it thus issued a preliminary injunction preventing the Corps from installing or operating the generators until it produced a sufficient EIS. *Id.* at 100.

We held that this injunction went too far. *Id.* We reasoned that "installation alone," absent activation of the generators, would "cause no environmental damage," and we consequently narrowed the injunction to allow installation simultaneous with the environmental study. *Id.* While the results of the study had the potential to persuade the agency not to run the generators, the decision as to whether it would

thus be a waste of resources to proceed with installation was "one Congress ha[d] charged the Corps with making." *Id.* at 101.

Second, we have indicated that allowing an agency to continue work on a project while its environmental study is pending does not necessarily create the type of option-limiting harm that NEPA seeks to prevent. Like the inquiry into whether an agency has taken a "hard look," the question of whether particular activities will in fact "[l]imit the choice of reasonable alternatives," 40 C.F.R. § 1506.1(a)(2), is context-specific. As noted above, in two cases involving highways, we found that permitting construction to continue before the environmental analysis was complete would virtually require the agency to finish the project regardless of what that analysis revealed. *See Gilchrist*, 808 F.2d at 1042-43; *Arlington Coal.*, 458 F.2d at 1328, 1333-34. But we have expressly declined to read these results too broadly:

If the rule were such that any construction that could, in even the smallest degree, bring public and political pressure on agencies is prohibited until final agency approval of all aspects of the project, the prohibition would logically extend to any de minimis construction. . . . [F]or example, it might extend even to surveying and unrelated construction That is not the intended reach of *Gilchrist*.

North Carolina v. City of Virginia Beach, 951 F.2d 596, 603 (4th Cir. 1991). Indeed, *Gilchrist* itself expressly held it to be a factual question whether an activity "in fact violates NEPA and its regulations by limiting 'the choice of reasonable alternatives' available to federal decision-makers." 808 F.2d at 1043 (citing 40 C.F.R. § 1506.1(a)(2)).

In sum, a court should not automatically enjoin agency action whenever it finds a NEPA violation. As in all injunction cases, a court must balance the harms particular to each case in assessing whether an injunction is justified and how far it should reach. And it should take care not to craft a remedy that extends beyond what NEPA itself and its implementing regulations require.

B.

The district court in this case issued a sweeping injunction, prohibiting the Navy "from taking *any* further activity associated with the

planning, development, or construction of an OLF in Washington and Beaufort Counties without first complying with its obligations under NEPA." *Washington County*, 357 F. Supp. 2d at 878 (emphasis added). We hold that it erred in doing so.

The district court treated the injunction as an all-or-nothing proposition, reasoning that any further action by the Navy would violate NEPA. *See id.* at 877-78. The district court noted that "during the periods when an injunction has not been in place, the Navy has proceeded with the development of the OLF" and asserted that such actions "have been taken within a context that does not conform to the requirements of the law." *Id.* at 878.

As our above discussion demonstrates, such a broad-brush view of NEPA is an error of law. The CEQ regulations and our own caselaw make clear that agency action prior to completing a sufficient environmental study violates NEPA only when it actually damages the environment or "limit[s] the choice of reasonable alternatives." 40 C.F.R. § 1506.1(a). Rather than treat "development of the OLF" as a single indivisible activity, the district court should have subdivided it to determine which of its component steps (either in isolation or in combination) would cause these harms and which would not. *See S.C. Dep't of Wildlife*, 866 F.2d at 100.

It was likewise error to discount the harm to the Navy that would result from the injunctive remedy. *See Washington County*, 357 F. Supp. 2d at 878 (concluding that the harm "will not be appreciable"). According to the district court, "[t]he record shows that while an OLF may increase operational flexibility, current military facilities, including NALF Fentress, are sufficient to accommodate training for the Super Hornets until a NEPA analysis can be completed." *Id.* at 877. To reach this conclusion, the district court relied upon selective evidence from "the Navy's working documents" to second-guess the Navy's need for an OLF and opined that naval decisionmakers had "intentionally discredited" the use of NALF Fentress. *Id.* As we have previously stated, inquiries into an agency's subjective intent and the necessity of its substantive decision exceed the permissible scope of judicial review in a NEPA case.

The Navy asserts that "[e]very day that the Navy is prevented from moving forward with an [OLF] in Washington County has an impact

on Naval aviation readiness." JA 2014 (declaration of Admiral William J. Fallon). The readiness of carrier groups so essential to the protection of this nation's vital interests and the safety of pilots who risk their lives in the common defense are matters of the gravest import. It is uncontested that training at a new OLF will be superior to training at the Navy's current facilities — it is for precisely this reason that the Navy has decided to build one. District courts should not substitute their own judgments for those of the Executive Branch in such national security matters as pilot training, squadron readiness, and safety. *See* U.S. Const. art. II, § 2, cl. 1.

Plaintiffs urge us to affirm the district court's conclusion. They argue that the Navy's declaration on its website that "We have the most ready force in our history!" undermines the rationale for building a new OLF. Brief of Appellees at 44. "These are not empty words," plaintiffs claim, because "the Navy has within the past four years successfully fought two wars" using the training facilities it now seeks to replace. *Id.*

Even if we had the constitutional power to strip the Executive of its decisionmaking authority in military matters, plaintiffs' argument would not induce us to exercise it. General statements from a public website cannot substitute for the considered judgment of the Executive on the more technical and particularized matter of the need for a new OLF. And it goes without saying that the Navy need not lose an armed conflict before it may upgrade its training methods. Both common sense and the Constitution require us to reject plaintiff's suggestion that we hold otherwise.

C.

For the foregoing reasons, we must reexamine the scope of the injunction. Our inquiry focuses on specific types of activities that the Navy has requested permission to pursue while it completes its SEIS. As we find that these activities will neither harm the environment nor limit the options available to the Navy — nor cause any other form of irreparable harm — we conclude that the injunction must be narrowed to permit them.

1.

In its brief and in the declaration of Rear Admiral Richard E. Celson (Commander, Naval Facilities Engineering Command, Atlantic), the Navy specifies five categories of activity that are prerequisites to construction and will take a significant amount of time to complete. The Navy contends that narrowing the injunction to permit these activities to proceed in parallel with the SEIS will substantially reduce the potential for the injunction to cause irreparable harm to naval preparedness.

First, the Navy seeks to conduct a site-specific Wildlife Hazard Assessment and a site-specific BASH Plan. While some of this work would of course be required for the SEIS, the Navy asserts that it wishes to go beyond the requirements of NEPA and pursue more intensive studies at Site C in particular. These studies will take over a year to complete.

Second, the Navy wishes to undertake activities preliminary to land acquisition, including property surveys and appraisals, title searches, relocation surveys, and hazardous material surveys. In total, these efforts may take over a year to complete. Some of the surveying will require the Navy to obtain temporary easements or rights of entry onto land owned by private individuals.

Third, the Navy desires to purchase land from willing sellers. This includes both completing existing purchase agreements that have been held in abeyance by the district court's order as well as reaching additional agreements with other landowners.

Fourth, the Navy seeks to proceed with architectural and engineering work necessary for the planning and design of an OLF at Site C. These efforts will take over a year, and the inception of this work is a prerequisite for the lengthy permit application process that must also precede any actual construction.

Fifth, once the design is far enough along to make this possible, the Navy requests permission to apply for the permits it will require before breaking ground on the OLF. At the least, the Navy will

require a permit under the Clean Water Act before it may proceed with construction. *See* 33 U.S.C. §§ 1311(a), 1344(a) (2000). The process of obtaining this and possibly other permits will take six to nine months, and may begin only after three to six months of the design work.

2.

Any environmental harm that the above activities might cause would be negligible. With respect to land acquisition only, the district court did suggest that "the fragile habitat around Site C will be disrupted" if it were allowed to continue. *Washington County*, 357 F. Supp. 2d at 877. But the record fails to support the idea that simple title transfers will injure the environment. The Navy has publicly stated its plan to out-lease the majority of the land it acquires for agricultural activities, and it plans no restrictions on the types of crops that can be grown there. 68 Fed. Reg. at 53,356.¹² It is therefore apparent that the environmental impact of the Navy's undertaking will arise from the construction and operation of the OLF, not from the fact that the area's farmers are lessees rather than holders in fee. *See, e.g., Ohio ex rel. Brown v. Callaway*, 497 F.2d 1235, 1239-41 (6th Cir. 1974) (upholding, where EIS for agency project was inadequate, district court's injunction prohibiting "activity which would alter the natural environment of the project area" but permitting "continue[d] land acquisition") (quotation marks omitted).

The district court also reasoned that land transfers would harm the county plaintiffs' tax revenues. *Washington County*, 357 F. Supp. 2d at 877. But a county does not suffer irreparable harm — or possess a cognizable third-party interest — when a private landowner willingly sells his property to a non-taxable entity such as the federal government. And it would be ironic if a local government's constitutional inability to tax the federal government were to bestow additional

¹²The Navy has suggested that crop restrictions might be a way to mitigate BASH issues, because growing a non-edible crop near the OLF would discourage birds from venturing there. *See* FEIS 12-113, 12-147. However, even if implemented, these restrictions would apply only to a small percentage of the land, and, in any event, we are not aware of any plans to implement them prior to the actual construction of the OLF.

power to enjoin the federal government from acting, at least where the federal action is motivated by national security concerns.

3.

Even if these steps by themselves will cause no environmental harm, plaintiffs contend they will create irreparable harm in the form of a "bureaucratic steamroller." According to plaintiffs, if the Navy "continue[s] its commitment of public resources to a site chosen as a result of a fundamentally flawed process . . . [t]his would only propel the Navy even further towards biasing the decisionmaking process in favor of Site C." Brief of Appellees at 45-46. In other words, plaintiffs argue that allowing these activities will function to "[l]imit the choice of reasonable alternatives" available to the Navy, 40 C.F.R. § 1506.1(a)(2), by committing the Navy's attention and resources to Site C.

We have noted above our rejection of the claim that even the most minor of steps toward a course of action that an agency initially prefers must necessarily wait until completion of its NEPA analysis. *Supra* at 35-36. Indeed, such a rule would be impractical with respect to the sorts of preliminary activities that the Navy proposes here. One cannot expect an agency in all cases to neatly proceed from environmental analysis to planning. Each endeavor inevitably impacts the other, and the CEQ regulations specifically anticipate that "[a]gencies shall integrate the NEPA process *with other planning*." 40 C.F.R. § 1501.2 (emphasis added); *see also id.* § 1506.1(d) (permitting design and other work for permit applications during the NEPA process).

The facts of this case provide a good example of why this is so. It goes without saying that additional site-specific wildlife studies and BASH analysis will enhance the environmental consideration that NEPA already requires. Beginning design and engineering work on the OLF will allow the EIS to provide greater specificity on the OLF's environmental impacts and on how to mitigate them. Land surveys and Clean Water Act permit applications also have the potential to provide useful environmental information. And even if they did not, it would not be economical to require that the Navy wait until

after it completes a lengthy environmental analysis to find out that the land is unsuitable or the permits unattainable.

To be sure, an agency's planning may focus most intently on a limited subset of all the possible alternatives available to it. But to hold such focus to be a per se violation of NEPA would severely undermine the statute's efficacy. Mandating equally detailed planning for all possible alternatives would force on the agency three unappealing alternatives. First, it could limit its planning and thereby risk unwelcome surprises at a later point — hardly a good way to effectuate NEPA's goal of promoting "better decisions," 40 C.F.R. § 1500.1(c). Second, it could commit an extraordinary amount of resources to each project, potentially including design, planning, and permit application for alternatives it will ultimately eschew, *see id.* § 1506.1(d). Finally, it could unduly narrow the range of possible alternatives in order to make possible a complete investigation of each, meaning that the very burdens of NEPA compliance would function to limit the range of "reasonable alternatives" that the statute requires agencies to consider, *see id.* § 1502.14. We decline to hold that NEPA hinders federal agencies in such a fashion.

The proper inquiry in a NEPA case is therefore not whether an agency has focused on its preferred alternative, but instead whether it has gone too far in doing so, reaching the point where it actually has "[l]imit[ed] the choice of reasonable alternatives." *Id.* § 1506.1(a)(2); *see also Gilchrist*, 808 F.2d at 1043. The list of activities the Navy seeks to perform here does not cross that line. Further environmental studies and land surveys do not pre-commit the Navy to building an OLF at Site C. The CEQ regulations expressly allow design and other work necessary for permit applications. *See* 40 C.F.R. § 1506.1(d). And plaintiffs do not dispute the Navy's assertion that even design work going beyond what would be necessary for permit applications will be roughly fifty-percent reusable should the Navy ultimately select a different site.

Nor will the Navy's purchase of land from willing sellers turn its ultimate decision about where to place the OLF into a foregone conclusion. As a preliminary matter, it is questionable how much of Site C the Navy will actually be able to acquire without exercising its eminent domain powers. Plaintiffs suggest that most of the current land-

owners are opposed to the Navy's plan, and the record contains declarations from landowners who wish to retain title to their property. Furthermore, as we have noted, the Navy plans to lease most of the land it acquires at Site C, and it can undertake this venture regardless of whether it eventually builds the OLF there. Finally, plaintiffs suggest no reason why the Navy could not attempt to resell the land if it decides to build an OLF elsewhere.

Two additional considerations bolster our conclusion that these five activities will not unduly influence the Navy's decisionmaking process. First, we believe that the Navy will complete its supplemental NEPA analysis — which it began prior even to our hearing argument in this case — in good faith. Its current EIS, while deficient, is not contemptuous of NEPA's important mandate. Accordingly, we trust that the SEIS will proceed with a hard look and honest assessment of the environmental impacts and, more importantly, with an understanding that those impacts may bear on the actual decision and not serve simply to ratify foregone conclusions. Second, these five steps are far from the only ones that the Navy must complete before its OLF becomes operational. Most significantly, it must still acquire the remaining land by condemnation, and it must still construct the OLF and supporting facilities. Indeed, the five activities we have considered do not include cutting even a single blade of grass in preparation for construction.

D.

We therefore order that on remand, the district court should modify the injunction to allow the Navy to pursue the following activities while completing the SEIS:

(1) a site-specific Wildlife Hazard Assessment and BASH plan at Site C;

(2) efforts preliminary to land acquisition at Site C — property surveys and appraisals, title searches, relocation surveys, and hazardous material surveys — and, where necessary as part of these efforts, the obtaining of temporary easements and rights of entry onto land owned by private individuals;

(3) land purchases at Site C from willing sellers, with the power of condemnation usable only with the seller's consent where necessary to clear title or fix a price;

(4) architectural and engineering work necessary for planning and design of an OLF at Site C;

(5) application for permits necessary to construct and operate an OLF at Site C.

V.

Our holding in this case rests upon two important separation of powers principles. First, Executive decisionmaking must fully comply with the environmental policy mandate that Congress has expressed through NEPA, particularly where the Executive's proposed action may affect an area that Congress has specially protected as a National Wildlife Refuge. Second, the judiciary must take care not to usurp decisionmaking authority that properly belongs to the Executive or unduly hamper the Executive's ability to act within its constitutionally assigned sphere of control.

The Navy's failure to take a hard look at the environmental effects of its proposed OLF violated the first of these principles. The second-guessing of the Navy in matters of military readiness and the overly broad grant of injunctive relief violated the second. We thus agree with the trial court that the Navy must undertake further environmental study, but we require that court on remand to narrow the injunction to permit the five specific activities that we have detailed. The judgment of the district court is therefore

*AFFIRMED IN PART; VACATED AND
REMANDED WITH INSTRUCTIONS IN PART.*