

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

August Term, 2019

Argued: September 17, 2019 Decided: February 3, 2020

Docket No. 18-2481-cv

FRIENDS OF ANIMALS,

Plaintiff-Appellant,

— v. —

ALEX ROMERO, in his official capacity as Superintendent of Fire Island National
Seashore; UNITED STATES NATIONAL PARK SERVICE, an agency of the U.S.
Department of the Interior,¹

Defendants-Appellees.

B e f o r e:

NEWMAN, CABRANES, and LYNCH, *Circuit Judges.*

¹ Superintendent Alex Romero is automatically substituted as a party pursuant to Federal Rule of Appellate Procedure 43(c)(2) and hereby replaces former Acting Superintendent Kelly Fellner. The Clerk of Court is directed to amend the caption.

Plaintiff-Appellant Friends of Animals (“FOA”) brought this action against Defendants-Appellees, the Superintendent of the Fire Island National Seashore and the United States National Park Service (together, “NPS”), claiming that the agency violated the National Environmental Policy Act in approving the White-tailed Deer Management Plan for the Fire Island National Seashore. The United States District Court for the Eastern District of New York (Feuerstein, J.) denied FOA’s motion for summary judgment and granted NPS’s cross-motion for summary judgment. Because NPS’s decision was not “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” 5 U.S.C. § 706(2)(A), we AFFIRM the judgment of the district court.

Judge NEWMAN concurs in a separate opinion.

MICHAEL R. HARRIS, Friends of Animals, Centennial, CO, *for Plaintiff-Appellant.*

JAMES H. KNAPP, Assistant United States Attorney, Central Islip, NY (Varuni Nelson, Assistant United States Attorney, *on the brief*), *for* Richard P. Donoghue, United States Attorney for the Eastern District of New York, *for Defendants-Appellees.*

GERARD E. LYNCH, *Circuit Judge:*

Plaintiff-Appellant Friends of Animals (“FOA”) brought this action against Defendants-Appellees, the Superintendent of the Fire Island National Seashore and the United States National Park Service (together, “NPS”), challenging NPS’s adoption of the White-tailed Deer Management Plan (the “Plan”) for the Fire Island National Seashore (the “Seashore”). This case requires us to decide

whether NPS complied with the National Environmental Policy Act (“NEPA”) when it developed and approved the Plan to deal with the overpopulation of deer on the Seashore.

Over the past forty years, the deer population on the Seashore has grown substantially, negatively affecting the Seashore’s vegetative and cultural resources and increasing the number of undesirable human-deer interactions. In 2015, after years of study, NPS approved the Plan to reduce the deer population on the Seashore and manage the impact of the remaining deer. On appeal, FOA contends that NPS’s Environmental Impact Statement (“EIS”) and its decision to approve the Plan violated NEPA because the agency (1) lacked essential information, (2) failed to take a hard look at the environmental consequences of its action, (3) implemented a Seashore-wide target deer density despite a lack of evidence to support that decision, and (4) failed to consider all the reasonable alternatives.

The United States District Court for the Eastern District of New York (Sandra J. Feuerstein, *J.*) denied FOA’s motion for summary judgment and granted NPS’s cross-motion for summary judgment, holding that NPS complied with NEPA, and FOA appealed. For the reasons that follow, we AFFIRM the

judgment of the district court.

BACKGROUND

Fire Island is a narrow 32-mile long barrier island off the south shore of Long Island. It is home to the Seashore, which runs from the Robert Moses State Park in the west to the end of the island in the east. The Seashore was established in 1964 as part of the National Park System, for “the purpose of conserving and preserving for the use of future generations certain relatively unspoiled and undeveloped beaches, dunes, and other natural features within Suffolk County, New York, which possess high value[] to the Nation as examples of unspoiled areas of great natural beauty in close proximity to large concentrations of urban population.” 16 U.S.C. § 459e(a).

The Seashore’s varied and distinctive environmental resources have established its national significance. The Sunken Forest, in the western portion of the Seashore, is a 250- to 300-year-old maritime forest which contains globally rare habitat. Farther east is the Otis Park Fire Island High Dune Wilderness (the “Wilderness”), the only federally designated wilderness in New York State. The William Floyd Estate, originally owned by a signer of the Declaration of Independence, is also part of the Seashore even though it is located on Long

Island rather than on Fire Island. It spans 613 acres, including a “historic core area” which contains a historic house and surrounding fields. Fire Island is also home to seventeen private residential communities (the “Communities”), which are interspersed within the Seashore on the western end, and three municipal beaches.¹

Although there were very few deer on Fire Island before the Seashore was established, the deer population quickly grew as the number of people on the island increased. By the 1970s and 1980s, the deer population was “established” in the Communities. Today, although deer densities vary throughout the Seashore, the deer remain most densely concentrated in the western portion of the Seashore, likely because of the easy availability of human-generated food in the Communities.

The explosion of the deer population in the 1970s brought concerns about Lyme disease and the deer’s destruction of the Seashore’s vegetation. As a result, in the 1980s, Seashore staff, along with academic and agency scientists, began to study the deer, including their movement, interaction with residents, and impact

¹ The Communities are within the Seashore’s “administrative boundary,” but the land within them is privately owned. J.A. 223, 228, 360.

on the Seashore's vegetation. Those groups "have been working to understand and address issues linked to the deer population on Fire Island" ever since. J.A. 248.

Because the information gleaned from those studies demonstrated "the need for a management plan to address impacts associated with changes in white-tailed deer abundance, distribution, and behavior," NPS initiated the NEPA planning process in October 2010. Its goal was to "develop a deer management strategy that supports protection, preservation, regeneration, and restoration of native vegetation and other natural and cultural resources at the Seashore and reduces undesirable human-deer interactions in the Fire Island communities." J.A. 216. Reducing the harm to the vegetation in the Sunken Forest and the William Floyd Estate was a particular priority.

To prepare to develop the EIS, NPS began the "scoping process" to determine the issues the Plan should address. Internal meetings were held to identify the "purpose, need, and objectives" of the Plan. The meetings involved members of an interdisciplinary team ("IDT"), which included NPS staff from various offices, NPS consultants, and staff from the US Geological Survey Patuxent Wildlife Research Center. As discussed further below, the IDT

continued to meet throughout the NEPA process; its role was to develop the alternatives that the EIS would evaluate in further detail.

In June 2011, NPS convened a Science Advisory Team (the “SAT”) of fourteen experts to answer technical questions from the IDT. It was tasked with considering how the deer population was affecting natural and cultural resources and creating social issues, particularly in the Communities, the Sunken Forest, and the William Floyd Estate. The SAT conducted eight conference calls, each scheduled to last approximately four hours, between June 2011 and February 2012. The SAT provided two reports to the IDT, a summary report in December 2011, and its final recommendations (the “SAT Final Report”) in February 2012.

Having received the SAT’s recommendations, the IDT took part in a series of workshops (the “Alternatives Development Workshops”) and calls (the “Alternatives Refinement Calls”) to develop and refine the range of alternatives that the EIS would consider for dealing with the deer problem at the Seashore. The first Alternatives Development Workshop was held over a three-day period in December 2011. The SAT provided a summary of its recommendations in advance of that workshop. After it received the SAT Final Report, the IDT held a second Alternatives Development Workshop over two days in June 2012. It

continued to meet, via telephone, for five Alternatives Refinement Calls between August and September 2012 to further discuss specific issues and distill the alternatives. Members of the SAT attended both the Alternatives Development Workshops and the Alternatives Refinement Calls.

This process culminated in the issuance of a Final EIS in December 2015 and a Record of Decision in April 2016. The EIS considered four alternative plans to manage the deer problem at the Seashore. Alternative A, the no action alternative, involved the continuation of “current management actions, policies, and monitoring efforts related to deer and their effects.” J.A. 225. It was rejected because it did not further the Plan’s objectives as “no-action would be taken to reduce deer numbers or effect a change in conditions that are the basis for the purpose of and need for action.” J.A. 156.

Alternatives B, C, and D, the action alternatives, all contained certain common elements to manage the adverse effects of the deer population: enhanced public education and outreach, fencing at the Sunken Forest and the William Floyd Estate, enhanced deer population and vegetation monitoring, and coordination with the New York State Department of Environmental Conservation.

Each action alternative also proposed a Seashore-wide target deer density of 20-25 deer per square mile. As will be discussed further below, the EIS considered, but dismissed from further analysis, the use of site-specific target deer densities for different areas within the Seashore, rather than a Seashore-wide target deer density. The methods used to achieve that target varied among the alternative approaches considered. Alternative B recommended the use of a fertility control agent, while Alternatives C and D used direct reduction methods such as sharpshooting, capture and euthanasia, and public deer hunting.

Once the population had been reduced, Alternative B planned to use the fertility control agent to maintain the target deer density. Alternative C contemplated the continued use of the direct reduction methods to maintain the target deer density, and Alternative D suggested a combination of direct reduction and fertility control.

Each of the action alternatives included additional methods to manage the deer in the areas where they were particularly problematic: the Communities, the Sunken Forest, and the William Floyd Estate. Within the Communities, Alternative B proposed to relocate deer that were approaching humans to the Wilderness, while Alternatives C and D proposed to capture and euthanize such

deer. All three action alternatives proposed erecting a fence around the Sunken Forest and moving the deer out of that area. Finally, each action alternative proposed various fencing options for the William Floyd Estate. Alternative D contemplated a permanent fence around the historic core and moving the deer out of the fenced area. The goal of the fencing was to eliminate the deer entirely from the Sunken Forest and the William Floyd Estate's historic core.

Ultimately, NPS chose a modified version of Alternative D because it "reduces deer density quickly, providing immediate relief from the adverse impacts of deer browsing, and because it incorporates a wider range of management options than the other alternatives evaluated," providing "for both an efficient initial removal of deer and flexibility in management methods to address future control of deer density in different ways." J.A. 155.

FOA brought the instant action seeking to invalidate the EIS and vacate the Record of Decision approving the Plan because NPS did not comply with NEPA. The parties cross-moved for summary judgment, and the district court denied FOA's motion and granted NPS's motion, holding that NPS considered a reasonable range of alternatives and that the administrative record supported its decision to select Alternative D and implement a Seashore-wide target deer

density level because it furthered the EIS's stated objectives. FOA timely filed this appeal.

DISCUSSION

We review the district court's ruling on cross-motions for summary judgment *de novo*, in each case construing the evidence in the light most favorable to the non-moving party. *Fund for Animals v. Kempthorne*, 538 F.3d 124, 131 (2d Cir. 2008). "Because NEPA does not itself provide for judicial review, the [Administrative Procedure Act ("APA")] controls." *Brodsky v. U.S. Nuclear Regulatory Comm'n*, 704 F.3d 113, 119 (2d Cir. 2013). Under the APA, courts review agency action to determine if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

NEPA "establishes a 'national policy [to] encourage productive and enjoyable harmony between man and his environment,' and was intended to reduce or eliminate environmental damage and to promote 'the understanding of the ecological systems and natural resources important to' the United States." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (quoting 42 U.S.C. § 4321).

To further that policy, NEPA requires a federal agency to prepare an EIS before taking any major action that will "significantly affect[] the quality of the

human environment.” 42 U.S.C. § 4332(c). The EIS serves to “provide [a] full and fair discussion of significant environmental impacts and to inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” *Natural Res. Def. Council, Inc. v. Fed. Aviation Admin.*, 564 F.3d 549, 556 (2d Cir. 2009) (internal quotation marks omitted).

NEPA, however, is “a procedural statute that mandates a process rather than a particular result.” *Stewart Park & Reserve Coal., Inc. v. Slater*, 352 F.3d 545, 557 (2d Cir. 2003). As long as the agency adequately identifies and evaluates the adverse environmental effects of its action, it is “not constrained by NEPA from deciding that other values outweigh the environmental costs.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

The scope of judicial review is accordingly narrow. “The only role for a court is to insure that the agency has taken a ‘hard look’ at [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.” *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976) (internal quotation marks omitted). The question is not whether we “would have reached the decision under review had we been

decisionmakers within the agency,” but rather whether the agency has presented a rational basis for the decision reached. *Sierra Club v. U.S. Army Corps of Eng’rs*, 772 F.2d 1043, 1050 (2d Cir. 1985).

I. Lack of Information

FOA argues that NPS violated NEPA because it lacked information about deer movement on the Seashore that was essential to the decision-making process and it did not comply with NEPA’s disclosure requirements. Under NEPA’s implementing regulations, the EIS must include any information “relevant to reasonably foreseeable significant adverse impacts” that “is essential to a reasoned choice among alternatives.” 40 C.F.R. § 1502.22(a). The agency is excused from obtaining the information if the cost of doing so is exorbitant or if the means to obtain it are unknown, but, in that case, the EIS must state “that such information is incomplete or unavailable,” and it must provide other information to help analyze the reasonably foreseeable significant adverse impacts on the human environment. *Id.* § 1502.22(b).

FOA asserts that information about the deer movement across the Seashore was essential because the SAT warned that without “information regarding whether deer populations on the island move east to west in any significant way,

it would be impossible to effectively evaluate how to deal with the alleged deer issues on the Seashore.” Appellant’s Br. 18, 30. FOA overstates the SAT’s position. Nowhere in the SAT Final Report is there any suggestion that the SAT lacked sufficient information about deer movement to make a recommendation or that NPS needed that information to develop the alternatives. The notes from SAT’s second conference call indicate that at the conclusion of the call, the SAT thought that it needed “a more detailed understanding of deer movements” if it was going to make “management recommendations for individual deer or clusters of units.” J.A. 1983. Over the course of its numerous conference calls, the SAT reviewed a large quantity of scientific literature. *See, e.g.*, J.A. 2056 (discussing materials SAT members reviewed in advance of one call). It ultimately issued the SAT Final Report, which included site-specific target deer densities for the William Floyd Estate and the Sunken Forest, while expressly acknowledging that “[l]ittle is known about individual deer movements at [the Seashore].” J.A. 2317.

In other words, despite its statement early on in the process, as it further

explored the issue and reviewed other information,² the SAT determined that the information was not necessary for its recommendation. NPS was not required to obtain the information about deer movement because it was not “essential to a reasoned choice among alternatives.” *See Nat’l Mining Ass’n v. Zinke*, 877 F.3d 845, 875-76 (9th Cir. 2017) (upholding EIS despite missing data because it was not essential). Moreover, as FOA itself seems to acknowledge, if the stray comments it cites from the SAT’s conference calls establish anything, it is merely that more data on deer movement could be helpful. *See Appellant’s Br. 30* (“[T]he Plan/EIS fails to address the SAT’s determination that this missing data could *better* inform management decisions in each of the diverse areas of the Seashore.”) (emphasis added). “Helpful” and “essential” are not synonymous terms; the fact that the data might have been helpful does not establish that it was “essential” to reasoned decision making.³

² For example, before the fifth conference call, Brian Underwood, a member of the SAT, provided the other members with a report that compiled and analyzed all of the deer monitoring and vegetative data NPS had accumulated since the 1980s, along with more recent data he himself had gathered. J.A. 2056.

³ As a result, NPS’s express acknowledgment that it lacked detailed information about deer movements, *see* J.A. 224 (“Little is known about individual deer movements at the Seashore.”), was sufficient to comply with NEPA’s disclosure requirements.

II. Failure to Take a Hard Look

FOA argues that NPS failed to take a “hard look” at the differences between the deer population on the eastern and western portions of the island when making its decision. According to FOA, the “record is replete with evidence demonstrating that the NPS’s experts recommended and developed different management strategies for areas on the eastern portion of the Seashore and areas on the western portion of the Seashore.” Appellant’s Br. 24.

There is evidence that the deer populations on the eastern and western portions of the island differ and that, at some points in their many conference calls, members of the SAT indicated that it might be beneficial to distinguish between the two populations.⁴ The SAT Final Report does not state that the eastern and western portions of the Seashore need to be managed differently, but it does provide specific recommendations for the Communities, the Sunken

⁴ The thoughts expressed in the notes from the SAT’s calls do not necessarily reflect a group consensus, as opposed to one team member’s thoughts. *See* J.A. 1920 (“Dan Niosi elaborated on the role of the Science Team, which is to provide information to the park and planners. He encouraged open dialogue, and explained that the goal of the [SAT] is to not necessarily reach a consensus. Everything addressed during the calls will be clearly documented in notes and recommendations. The park will benefit most from the [SAT] if they hear all sides of each issue.”).

Forest, and the William Floyd Estate, which lie from west to east on the Seashore. For example, in the Communities, the SAT Final Report recommended removing the deer that were approaching humans using euthanasia or capture and relocation, while in the Sunken Forest and William Floyd Estate it recommended site-specific target deer density levels and fencing. This is unsurprising given that it was tasked with focusing on these areas.

NPS, however, was not bound by the SAT's recommendations. The SAT was convened to "[p]rovide scientific based input (both natural and social) for *consideration* by the [IDT]." J.A. 1914 (emphasis added). The SAT Final Report was simply information for the IDT to consider as it developed the alternatives. See J.A. 264 ("[The Final SAT Report] was used to inform the development of the alternatives."). In fact, rather than stating that its approach was the only permissible way to proceed, the SAT Final Report recognized that each of its recommendations presented difficulties and NPS would have to balance various factors "in developing a plan for action." J.A. 2331.⁵

Moreover, although NPS's chosen plan implements a Seashore-wide target

⁵ In some instances it even provided more than one option. For example, it recommended two potential methods to manage the deer in the Sunken Forest.

deer density, rather than site-specific targets for different regions, it also includes distinctive management actions in the Communities, the Sunken Forest, and the William Floyd Estate. For example, to reduce the deers' harmful impact in the Communities, NPS will increase its public education efforts, conduct additional surveys and monitoring, and it will take direct reduction actions only when landowners request such actions. It will conduct a public hunt only in the Wilderness, which is the most eastern part of the Seashore on Fire Island other than the Smith Point County Park. Fencing will be erected only around the Sunken Forest and the historic core of the William Floyd Estate, to entirely exclude deer from those areas. Accordingly, despite FOA's contention, to the extent that the SAT Final Report can be read as a recommendation to distinguish between the eastern and western portions of the Seashore, the NPS followed that recommendation.

Finally, a review of the copious administrative record reveals that, far from failing to take a hard look, the agency made a reasoned decision after years of discussion and study by numerous experts. First, NPS had information from the studies conducted over the thirty years prior to the start of the NEPA process. Those studies provided data on many facets of the unique issues at the Seashore,

including information on deer movement, impacts on vegetation, and previous deer management efforts. Second, it held internal meetings to identify the Plan's objectives. Third, it enlisted the help of numerous experts to provide technical expertise, including the SAT and staff from the New York State Department of Environmental Conservation ("NYS DEC") and the United States Department of Agriculture's Animal and Plant Health Inspection Service ("USDA"). Fourth, upon receiving the SAT's recommendations, it held a series of multi-day workshops and numerous calls where it discussed those recommendations. Notes from those calls and workshops indicate that NPS considered that the populations on the east and west sides of the island differed. *See, e.g.,* J.A. 2345 (discussing study which indicated that there is a "natural break . . . in the deer population, resulting in an eastern island population and a western island population"). In short, it is abundantly clear that NPS took a hard look at the environmental consequences of the Plan.

III. Use of a Seashore-wide Target Deer Density

FOA argues that the decision to set a Seashore-wide target deer density was arbitrary and capricious because the choice is contrary to the evidence in the record and the expert's recommendations. In particular, according to FOA, there

is no evidence that the deer population in the Wilderness needs to be reduced.

To the extent that FOA argues that a different course of action would *better* further the Plan's objectives, that contention is irrelevant because our "judicial role is relegated to affirming the agency's decision as long as a rational basis is presented for the decision reached." *Sierra Club*, 772 F.2d at 1050. "NEPA merely prohibits uninformed – rather than unwise – agency action." *Robertson*, 490 U.S. at 351.

Restricting our review to the appropriate question, we conclude that NPS has presented a rational basis for its decision to employ a Seashore-wide target deer density. First, contrary to FOA's assertion, the decision does not conflict with the recommendations of the SAT and the IDT. Although the SAT Final Report did not propose a Seashore-wide target deer density, nowhere in the SAT Final Report is there any indication that the SAT thought that the use of a Seashore-wide target deer density was an inappropriate way to deal with the problem.⁶ Even if one could infer that from the SAT Final Report's

⁶ In fact, some members of the SAT remained active in the NEPA process after the SAT Final Report was issued. It appears that the SAT's thinking continued to evolve as the notes from the first Alternatives Refinement Call, at which several members of the SAT were present, indicate that "[t]he Science Team had proposed the use of a deer density target of 20 deer per square mile based on

recommendation of site-specific deer densities for certain areas,⁷ as previously discussed, NPS was not obligated to follow that suggestion.

Rather than being contrary to the IDT's recommendations, the record reveals that the decision to use a Seashore-wide target deer density, rather than site-specific targets, was developed at an IDT meeting. In particular, after receiving the SAT Final Report, members of the IDT met for a two-day Alternatives Development Workshop in June 2012 to develop the alternatives that the EIS would consider.⁸ The workshop began with an SAT member summarizing the SAT's recommendations. When discussing potential deer density targets, the group first considered a target of 7 deer per square mile based on studies about ticks. They also discussed the difficulties associated with site-specific and Seashore-wide target deer densities and considered "whether it

forest regeneration literature." J.A. 2460-61.

⁷ It recommended a deer density target of 14 deer per square mile in the areas surrounding the Sunken Forest and 17 to 20 deer per square mile in the William Floyd Estate. In the "[o]ther maritime forests," it recommended vegetative monitoring and a reduction in the population in the surrounding areas to 14 deer per square mile. J.A. 2327-2329.

⁸ A majority of the IDT members were present for this meeting, along with representatives from the NYS DEC, the USDA, the SAT, NPS, and the contractor team which assisted with the preparation of the EIS.

is practical to have different densities for different areas in the seashore and whether it is possible to achieve the densities in such small areas.” J.A. 2351.

A few months later, during the first Alternatives Refinement Call, the attendees, who included members of the IDT and SAT, again discussed the possibility of a Seashore-wide target deer density. During that discussion, the group recognized that a Seashore-wide target deer density provided NPS with the flexibility to manage the deer population through adaptive management and to adjust the density level depending on whether NPS was achieving its goals. Such flexibility was crucial because of the complexity of the issues present at the Seashore. *See, e.g.*, J.A. 1927 (noting that developing a management plan will be “a challenge since [the Seashore] is an extremely unique park . . . which will require complex policy and management decisions”); J.A. 2441 (“[NPS] needs to be a[s] broad as possible [when developing its management tools], but within reason, in order to achieve [its] goals.”).⁹

Ultimately, NPS ruled out a site-specific deer density target approach in favor of a Seashore-wide target deer density in part because it lacked “site-specific information [about] how the lowered deer density would affect Seashore

⁹ In the SAT Final Report, the SAT emphasized that it “consistently discussed the need for the park to implement an adaptive management approach.” J.A. 2332.

resources.” J.A. 308.¹⁰ Instead, “[t]he Seashore-wide target density was intended to balance anticipated benefits associated with a reduced deer population with consideration for available resources and the cost of implementation.” *Id.* This process complied with NEPA’s requirement to “briefly discuss the reasons for” eliminating alternatives from detailed study, 40 C.F.R. § 1502.14(a), and, its rationale was permissible because, so long as the agency considers the environmental implications, NEPA does not require it to “accord environmental concerns any more weight in the decisionmaking process than other appropriate concerns . . . [such as] economic or social benefits.” *Sierra Club*, 772 F.2d at 1050. Notably, in this case the agency is not weighing environmental concerns against economic or social concerns, but rather weighing competing environmental issues. NEPA is not an animal protection statute, and the deer – as sympathetic as such sentient creatures are – are only one of the many *environmental* factors the agency was required to, and did, consider.

¹⁰ Because NPS explicitly stated that it lacked this information and, for the reasons discussed above, reasonably concluded that this information was not “essential” to its final decision, the agency did not violate NEPA’s disclosure requirements.

Second, there is evidence that the Seashore-wide target deer density level furthers the Plan's objectives to protect native vegetation and promote its natural regeneration. NPS conducted preliminary vegetation sampling at numerous areas on the Seashore, including the Sunken Forest, Talisman, and Blue Point, the results of which "clearly point[ed] to a decline in tree seedlings, shrubs, herbaceous annuals, and perennials due to browsing from a high density of deer." J.A. 373. Additionally, NPS reviewed a study from another park which concluded that deer densities exceeding 20 deer per square mile "caused noticeable impacts on forest regeneration." J.A. 277. Deer densities vary widely throughout the Seashore, but they exceed 20 deer per square mile even in areas of less critical concern than the William Floyd Estate and the Sunken Forest. For example, even in the Wilderness, where FOA asserts that there is no evidence that the deer are causing any harm, the density is estimated to be 36 deer per square mile.

Although NPS did not study the impact of the deer on the vegetation in each distinct area of the Seashore, it was not required to do so because other evidence provided a rational basis for its decision.¹¹ See *Fund for Animals*, 538 F.3d

¹¹ The EIS expressly stated that it relied upon this evidence when setting the Seashore-wide target deer density level at 20 deer per square mile.

at 135-36 (holding that agency complied with APA despite lack of information about the widespread impact because there was site-specific evidence available for many areas).

Of course it is “always possible to explore a subject more deeply and to discuss it more thoroughly[, but t]he line-drawing decisions necessitated by this fact of life are vested in the agencies, not the courts.” *Coalition on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 66 (D.C. Cir. 1987). It was reasonable for NPS to rely on the information obtained from the other areas of the Seashore, along with a study demonstrating that deer densities exceeding 20 deer per square mile negatively affect vegetation, to conclude that reducing the deer density to 20 deer per square mile throughout the Seashore would further the objective to protect the Seashore’s natural vegetation.

In sum, because NPS has articulated a rational basis for its choice, we hold that its decision was neither arbitrary nor capricious.

IV. Failure to Consider All Reasonable Alternatives

FOA argues that NPS violated NEPA because it did not adequately consider all of the reasonable alternatives. As previously discussed, in addition to a no-action alternative, NPS considered three action alternatives. Each of the

action alternatives included measures to reduce the deer population that ranged in severity from fertility control to sharpshooting. The action alternatives shared common elements, like public education and fencing, that were aimed at managing the impacts of the remaining deer population. FOA argues that NPS was obligated to consider an alternative that contained those elements but did not include any strategy to reduce the deer population.

To comply with NEPA, an agency must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 40 C.F.R. § 1502.14(a). However, “[i]t is well-settled that under NEPA the range of alternatives that must be discussed is a matter within an agency’s discretion.” *Natural Res. Def. Council, Inc.*, 564 F.3d at 558 (internal quotation marks omitted). An agency is “not obligated to consider in detail each and every conceivable variation of the alternatives stated.” *Monroe Cty. Conservation Council, Inc. v. Adams*, 566 F.2d 419, 425 (2d Cir. 1977) (internal quotation marks omitted). Instead, it must only “consider such alternatives to the proposed action as may partially or completely meet the proposal’s goal.” *City of New York v. U.S. Dep’t of Transp.*, 715 F.2d 732, 742 (2d Cir. 1983) (internal quotation marks omitted).

The NEPA process was initiated because, after years of study, NPS

determined that the increase in the deer population was negatively affecting the Seashore. One of the Plan's objectives is to "[m]anage a *viable* white-tailed deer population in the Seashore that is supportive of the other objectives for this plan/EIS." J.A. 221 (emphasis added). Those other objectives include, among other things, promoting natural regeneration of native vegetation and protecting vegetation communities from a high level of deer browsing. In order to achieve those vegetation objectives, NPS reasonably determined that a reduction in the deer population was necessary. *See, e.g.* J.A. 377 ("The target population density is expected to allow the recovery of vegetation impacted by heavy browsing.").

Without a mechanism to reduce the deer population, FOA's proposed alternative fails to further the Plan's vegetation objectives. At the Alternatives Development Workshop in June 2012, the group, which included SAT members, expressly noted that the deer population had to be reduced. *See* J.A. 2358 ("The [S]eashore needs more than a non-lethal alternative, which will not work, and a lethal alternative where all the deer die.").

A review of NPS's rationale for rejecting Alternative B, which *did* contain a mechanism to reduce the deer population, demonstrates the insufficiency of FOA's proposal. Alternative B contained the six elements FOA proposes, along

with the use of a fertility control agent to reduce the deer population. It was rejected because it would take too long to reduce the deer population and, even with the fencing at the Sunken Forest and the William Floyd Estate, “the continued loss of vegetation to deer browsing outside [the] fenced areas would severely degrade vegetation communities throughout the Seashore.” J.A. 156. That in turn would increase the “potential for invasion by non-native plants.” *Id.* If use of the fertility control agent did not achieve the deer density goal, the adverse impacts to vegetation could reach a “tipping point” from which recovery might not be possible. *Id.*

Given that the agency thoroughly examined that alternative, which contained a method to reduce the deer population, and reasonably concluded that it would not further the Plan’s objectives, there is no question that FOA’s proposed alternative, which contains no mechanism to reduce the deer population, would not “partially or completely” meet the Plan’s goals. *See City of New York*, 715 F.2d at 742. As a result, NPS was not obligated to consider it.

CONCLUSION

For the reasons stated above, we AFFIRM the judgment of the district court.

Jon O. Newman, Circuit Judge, concurring:

I concur in virtually all of Judge Lynch's opinion for the Court ("Ct. Op.") but disagree on one point: interpretation of 40 C.F.R. § 1502.22 ("Regulation"). Because the Regulation might be at issue in subsequent cases concerning the validity of an environmental impact statement ("EIS"), I write separately to explain what I believe is the correct interpretation. The Regulation is set out in full in the margin.¹

¹ "When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

"(a) If the incomplete information relevant to reasonably foreseeable adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

"(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

"(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, 'reasonably foreseeable' includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

"(c) The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

Judge Lynch's opinion states that the EIS complies with the disclosure requirements of the Regulation. *See* Ct. Op. at 23 n.10. The opinion reaches that conclusion by combining the disclosure requirements of subparagraphs (a) and (b).

His reasoning has three parts. First, he invokes the language of subparagraph (a) that states, "'If the incomplete information relevant to reasonably foreseeable adverse impacts is essential to a reasoned choice among alternatives,'" the information must be included in the EIS. *See* Ct. Op. at 13 (quoting 40 C.F.R. § 1502.22(a)). Second, he accepts the agency's finding that the incomplete information was not essential to a reasoned choice among alternatives. *See id.* at 15. Third, and critically, he combines the disclosure requirements of subparagraphs (a) and (b) by stating that if relevant information is essential, as stated in subparagraph (a), but the cost of obtaining omitted information is exorbitant or if the means to obtain it are unknown, as stated in subparagraph (b), the EIS must provide other information, as also stated in subparagraph (b). *See id.* at 13-14.

It is this third aspect of the reasoning that I believe is incorrect. The disclosure requirements of the subparagraphs cannot be combined. Subparagraph

(a) states the disclosure requirements for incomplete information; subparagraph (b) states the disclosure requirements for unavailable information. The fact that the EIS, after finding that the incomplete information was not essential, complied with the disclosure requirement of subparagraph (a) provides no basis for excusing the failure to comply with the disclosure requirements of subparagraph (b). This becomes clear upon careful analysis of the wording and structure of the Regulation.

That analysis begins with the introductory paragraph of the Regulation. That paragraph states the general requirement that when an agency is evaluating significant environmental impacts and there is “incomplete or unavailable information,” the agency must say that the information is lacking. 40 C.F.R. § 1502.22, first paragraph. Note that the introductory paragraph applies when there is either “incomplete” or “unavailable” information. Then, subparagraph (a) states a requirement where information is incomplete, and subparagraph (b) states different requirements where information is unavailable.

The distinction between the coverage of subparagraphs (a) and (b) is made clear by the different requirements of the two subparagraphs. With respect to incomplete information, subparagraph (a) requires such information to be

included in the EIS. Obviously, such a requirement could not apply to unavailable information. Instead of such an impossible requirement, subparagraph (b), applicable to unavailable information, requires inclusion in the EIS of four items. The EIS acknowledged that the idea of using site-specific deer density targets, as Appellant urged the National Park Service to do, was rejected ““because of the lack of site-specific information,”” J. App’x 308 (quoting EIS 59), and three of the four items required by subparagraph (b) are not included in the EIS.

The point is this: the fact that the incomplete information is not essential to a reasoned decision is irrelevant to this case because the clause concerning essential information is located in, and applies only to, subparagraph (a) and does not apply to subparagraph (b). And, to repeat, it is undisputed that the EIS does not comply with the requirements of subparagraph (b), applicable to unavailable information.

Despite the lack of compliance with the requirements of subparagraph (b), I join the Court’s opinion affirming the judgment of the District Court. I rely on the language of the Administrative Procedure Act stating that “due account shall be taken of the rule of prejudicial error.” 5 U.S.C. § 706(2)(A). I do not think the

lack of compliance with subparagraph (b) was prejudicial in view of the overall thoroughness of the EIS.