United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued September 11, 2014

Decided January 20, 2015

No. 13-5136

CAROL GRUNEWALD, ET AL., APPELLANTS

v.

JONATHAN B. JARVIS AND SALLY JEWELL, APPELLEES

Appeal from the United States District Court for the District of Columbia (No. 1:12-cv-01738)

Katherine Anne Meyer argued the cause for appellants. With her on the briefs was William S. Eubanks II.

Lane N. McFadden, Attorney, U.S. Department of Justice, argued the cause for appellees. With him on the brief was Robert G. Dreher, Acting Assistant Attorney General.

Before: GARLAND, *Chief Judge*, PILLARD, *Circuit Judge*, and SENTELLE, *Senior Circuit Judge*.

Opinion for the Court filed by Senior Circuit Judge SENTELLE.

SENTELLE, Senior Circuit Judge: The National Park Service of the Department of Interior adopted a plan for the management of deer in Rock Creek National Park in Washington, D.C. The plan involved the killing of white-tailed deer. The consideration and adoption of the plan included the issuance of an environmental impact statement. Appellants, five individuals and an organization called "In Defense of Animals," brought the present action for declaratory and injunctive relief, alleging that the Park Service's plan violated statutes governing the management of the Park and was not adopted in compliance with the Administrative Procedure Act. The complaint further alleged that the environmental impact statement did not meet the requirements of the National Environmental Policy Act. The district court granted summary judgment in favor of the defendants. Plaintiffs brought the present appeal. We affirm.

BACKGROUND

Rock Creek Park in Washington, D.C., was created by Act of Congress in 1890 as a "public park or pleasure ground for the benefit and enjoyment of the people of the United States." Rock Creek Park Enabling Act ("Enabling Act"), Ch. 1001, § 1, 26 Stat. 492. Originally, the Park was under the joint control of the Commissioners of the District of Columbia and the Chief Engineers of the United States Army. *Id.* § 7. In 1916, Congress established the National Park Service under the National Park Service Organic Act, 16 U.S.C. § 1, and the Rock Creek Park came under the authority of the Park Service. Both Acts authorize the management of natural phenomena such as wildlife within the park. The present controversy arises over the management of the deer population.

According to the Park Service, few if any white-tailed deer inhabited Rock Creek Park at the turn of the twentieth century. See National Park Service, Final White-Tailed Deer

Management Plan/EIS ("Final EIS") at ii (2011). Over the years, however, conditions changed. Areas surrounding Rock Creek Park became urbanized or suburbanized. Predators, such as cougars and wolves, no longer populated the mid-Atlantic region. Deer became increasingly common in Rock Creek Park. Occasional deer sightings emerged in the 1960s and continued sporadically throughout the 1970s. By the early 1990s, deer sightings were so common that the Park Service no longer recorded individual sightings. In 1989, the Park Service recorded the first incident of a deer struck and killed by a vehicle. *See id.* at 14. From 2003 to 2007, the Park Service recorded an average of 42 deer-vehicle collisions per year. *See id.* at 148.

Deer are herbivores and generally browse vegetation from ground level to approximately six feet in height. A large deer population can result in a visible "browse line," a line at approximately six feet above ground level, "below which most or all vegetation has been uniformly browsed." *Id.* at 535. Deer browsing can adversely impact native vegetation by overconsuming existing shrubs and herbaceous species. Excessive browsing of tree seedlings interferes with the forest's ability to naturally regenerate itself. *See id.* at 1.

By the mid-1990's, the Park Service began formally monitoring deer population levels. Based on intensive scientific evaluation, the Service estimated that, by 2009, Rock Creek Park would have a deer density of 67 per square mile, or approximately 315 total deer in the Park. *See id.* at 56. Given the increase in deer population and the increase in attendant problems, the Park Service convened a science team, comprised of experts from various state and federal agencies, to provide technical background information and research to support the preparation of a deer management plan. Science Team Final Report: Rock Creek Park Deer Management Plan/Environmental

Impact Statement ("Science Team Final Report") (2007). In September 2006, the Park Service published a notice in the Federal Register that it intended to prepare a white-tailed deer management plan and an accompanying environmental impact statement for Rock Creek Park, and invited comments from the public. 71 Fed. Reg. 55012, 55012–13 (Sept. 20, 2006). During the so-called "public scoping," the Park Service held two public meetings and received 140 written comments. *See* National Park Service, Record of Decision: Rock Creek Park White-Tailed Deer Management Plan and Final Environmental Impact Statement ("Record of Decision") at 11 (2012). In July 2007, the science team published its summary and recommendations, suggesting that an initial goal of 15 to 20 deer per square mile in 2009 "would be appropriate for Rock Creek Park." Science Team Final Report at 5.

In 2009, the Park Service published its Draft White-Tailed Deer Management Plan/Environmental Impact Statement ("Draft EIS"). The Draft EIS stated a need to address the "potential of deer becoming the dominant force in the park's ecosystem, and adversely impacting native vegetation and other wildlife," a "decline in tree seedlings caused by excessive deer browsing and the ability of the forest to regenerate," and "[e]xcessive deer browsing impacts on the existing shrubs and herbaceous species" as well as on the "character of the [park's] cultural landscapes." Draft EIS at 1–2 (2009). The Plan's objectives included protecting "the natural abundance, distribution, and diversity of native plant species . . . by reducing excessive deer browsing, trampling, and nonnative seed dispersal," and protecting the habitat of birds and "rare plant and animal species from adverse effects of deer." Id. at 2. The Draft EIS identified four alternatives, including a "no-action" alternative (Alternative A). Under Alternative B, the Park Service would utilize non-lethal actions for deer control, including large-scale exclosures and reproductive controls.

Alternative C would include lethal actions, reducing the size of the deer herd through sharpshooting or capture and euthanasia. Alternative D would include both lethal and non-lethal actions, using lethal actions to quickly reduce the deer herd, with the possible use of reproductive controls to maintain herd size. *Id.* at 41–42. The Park Service identified Alternative D as its preferred alternative, and as the environmentally preferred alternative. *Id.* at 92.

After releasing the Draft EIS, the National Park Service announced an extended public comment period and held a public meeting on its Draft EIS. See Record of Decision at 11. Over 125 people attended the meeting, and the Park Service received 414 pieces of correspondence during the comment period. See id. at 11–12. The Park Service ultimately chose Alternative D in its Final EIS, finding that a combination of lethal and non-lethal controls would promote enhanced forest regeneration, improve the quality of Rock Creek's scenery and ecological diversity, and provide flexibility for the potential use of non-lethal means to control deer herd size. See id. at 8-10. The Park Service rejected the no-action alternative, Alternative A, as it would allow deer over-browsing and trampling to continue to adversely impact native vegetation. Alternative B, using only non-lethal reproductive controls, would not reduce the deer population quickly enough, given the long life cycle of white-tailed deer. Alternative C, using only lethal controls, would accomplish many of the Park Service's objectives, but would not allow future use of non-lethal methods, should the Park Service later find reproductive controls feasible and effective in maintaining acceptable deer densities. See id. at 9-10.

The Park Service published its Final Deer Management Plan and EIS for public review on January 13, 2012, and issued its Final Record of Decision on May 1, 2012. Plaintiff—appellants

filed their complaint in federal district court on October 25, 2012. The parties jointly agreed that the Park Service would stay implementation of the deer management plan until March 15, 2013, to give the district court time to rule on the merits. On March 14, 2013, the district court granted summary judgment for the defendants. *Grunewald v. Jarvis*, 930 F. Supp. 2d 73 (D.D.C. 2013). Plaintiffs appeal, assigning several grounds of alleged error. Upon review, we conclude that the National Park Service acted reasonably and within the scope of its authority, and therefore affirm.

ANALYSIS

We review the district court's grant of summary judgment to the National Park Service *de novo*, applying the Administrative Procedure Act standard that "requires us to set aside agency action that is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Jicarilla Apache Nation v. Dep't of Interior*, 613 F.3d 1112, 1118 (D.C. Cir. 2010) (quoting 5 U.S.C. § 706(2)(A)). Applying that standard, we consider each of appellants' allegations of error.

A. Whether the Deer Management Plan Violates the Rock Creek Park Enabling Act

Appellants argue that "the district court erred in deferring to the agency's *post hoc* construction of the Rock Creek Park enabling statute." Grunewald Br. 28. This is not precisely the question before us, as we review the agency's decision *de novo*. The question, then, is not whether the district court erred in its consideration of the agency's construction of the statute, but whether upon review of the administrative record we determine that the agency's construction of the Enabling Act is sustainable.

The relevant portion of the Enabling Act reads as follows:

[T]he public park authorized and established by this act shall be under the joint control of the Commissioners of the District of Columbia and the Chief of Engineers of the United States Army, whose duty it shall be, as soon as practicable, to lay out and prepare roadways and bridle paths, to be used for driving and for horseback riding, respectively, and footways for pedestrians; and whose duty it shall also be to make and publish such regulations as they deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition, as nearly as possible.

Enabling Act, § 7. Although the National Park Service, rather than the Commissioners and Engineers named in the Enabling Act, is now responsible for its administration, no one contends that the Enabling Act no longer applies. As we note further below, the Organic Act of the National Park Service, 16 U.S.C. §§ 1, 3, is also relevant, but we nonetheless agree that the provisions of the Enabling Act are still effective.

In beginning our review of appellants' objection to the agency's adherence to the Enabling Act, we note that we afford the Park Service the deference mandated in *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984). Appellants urge that the agency is not due such deference, as the Park Service's position that the statutes permit the killing of deer is "post hoc," and first appeared as the litigation position of the agency in the district court. Appellants are mistaken. The agency has consistently treated the Enabling Act as setting forth "the most fundamental criteria against which the appropriateness of all plan recommendations" are to be tested. National Park Service, Rock

Creek Park Final General Management Plan/EIS at 11–12 (2005). The agency has recognized among those criteria the mandate to "preserve and perpetuate" the park, its "ecological ... resources," and its "scenic beauty," in "as natural a condition as possible." *Id.*; Final EIS at 11. The first sentence of the executive summary of the deer management final environmental impact statement applies that interpretation of the Enabling Act. Specifically, the EIS states:

PURPOSE OF AND NEED FOR ACTION

The purpose of this action is to develop a white-tailed deer (*Odocoileus virginarius*) management strategy that supports long-term protection, preservation, and restoration of native vegetation and other natural and cultural resources in Rock Creek Park. White-tailed deer herds have increased substantially within and around Rock Creek Park. In 2007, sampling indicated 82 deer per square mile in the park, and deer densities continued at high levels in 2008 (66 deer per square mile) and 2009 (67 deer per square mile). Results of vegetation monitoring in recent years have documented the adverse effects of the large herd size on forest regeneration.

Final EIS at i. The Record of Decision is to the same effect. *See* Record of Decision at 1. In short, the agency has consistently interpreted the Act permitting it to conduct the proposed killing of deer, and there is nothing *post hoc* about that position. Before this court, however, the Park Service raises a harder line position that the Enabling Act does not apply to the present deer management plan at all.

The agency's hard-line position begins with a meticulous review of the precise language of the Act. The agency points to the Act's last sentence, requiring that "[s]uch regulations shall provide for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition, as nearly as possible." Enabling Act, § 7. The term "such regulations," it argues, must relate back to the last preceding reference to what might be described as "such regulations." As the agency argues, that last reference comes in the next preceding sentence, where the predecessor agencies of the Park Service are given the duty "to make and publish *such regulations* as they deem necessary or proper for the care and management of the same." *Id.* (emphasis added). The argument of the agency proceeds that this next raises the question of what referent is intended by the term "the same." This time, the Park Service looks back to the earlier parts of that same sentence which refer to the "duty" of the agency to "lay out and prepare roadways and bridle paths, to be used for driving and for horseback riding, respectively, and footways for pedestrians." Id. Thus, the Park Service argues, § 7 of the Enabling Act refers only to regulations governing roadways, bridle paths, and footways, and has no applicability to regulations governing other parts of the park, such as the one before the court.

While the agency's hard-line interpretation has some logic, we do not find it necessary to uphold that construction of the statute, as the statute, taken as applying to the regulation of the whole park, nonetheless is consistent with the Park Service's decision in this case. The agency's fallback position, actually more consistent with its position in the Record of Decision and the Environmental Impact Statement, is that even under the Enabling Act, properly construed, the Park Service has the authority to implement the plan as presented.

Taken at its simplest, appellants' position is that because the Enabling Act requires that regulations "provide for the preservation from injury or spoliation . . . animals . . . within said park . . . as nearly as possible," a plan which involves

killing some animals is not consistent with the authority and duty granted to the governing agency. However, despite the simplicity of that interpretation, we agree with the agency that the meaning of "possible" can no more be taken to the metaphysical limit of "possibility" than the term "necessary" in the Necessary and Proper Clause of the Constitution. U.S. Const. art. I, § 8. Just as there is no question that Congress need not discover the direst and most absolute necessity in order to execute its enumerated powers, neither can it be that the Park Service must refrain from wildlife management unless it can determine that it is utterly impossible to avoid that form of management. Under the Chevron analysis, we defer to an agency's interpretation, not only where it is the best interpretation, but where it is merely "reasonable." Chevron, 467 U.S. at 844. We do not suggest that the agency's interpretation of its authority here is not the best, but only assure that it is at the very least reasonable.

The National Park Service interpreted the mandate to preserve animals from harm "as nearly as possible" to permit killing some animals to prevent serious harms to other natural resources, even before those harms have fully materialized. That interpretation was reasonable. We note that the Tenth Circuit considered a similar issue in interpreting the Secretary of Interior's authority under Section 3 of the Organic Act to "provide in his discretion for the destruction of such animals . . . as may be detrimental to the use of any of said parks," 16 U.S.C. § 3. In rejecting the argument that something is only "detrimental to the use" of a park if it causes a present harm, the court observed:

The obvious purpose of this language is to require the Secretary to determine when it is necessary to destroy animals which, for any reason, may be detrimental to the use of the park. He need not wait until the damage through

overbrowsing has taken its toll on the park plant life and deer herd before taking preventive action no less than he would be required to delay the destruction of a vicious animal until after an attack upon a person.

New Mexico State Game Comm'n v. Udall, 410 F.2d 1197, 1201 (10th Cir. 1969).

In our focus on the interpretation of the Enabling Act responsive to the appellants' assignment of error, we do not lose sight of the ultimate purpose of our review: We are to uphold the agency's action unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Jicarilla, 613 F.3d at 1118 (quoting 5 U.S.C. § 706(2)(A)). Indeed, in first setting forth the two-step process of *Chevron* analysis, the Supreme Court noted that the review of an agency's enabling acts occurred in the context of reviewing regulations that "are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute." Chevron, 467 U.S. at 844. It was in that context that the Chevron Court observed that "a court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency." *Id.* There is nothing unreasonable about an agency charged with the preservation of "all timber, animals, or curiosities within said park," Enabling Act, § 7 (emphasis added), determining that preventing an imbalance that allows one species of its protectees to destroy others is within the power granted by its enabling act.

The reasonableness of the Park Service's interpretation of the Enabling Act, and indeed, the propriety of its decision under the arbitrary and capricious standard, is buttressed by the fact that the Park Service is required to comply not only with the Enabling Act, but also with the National Park Service Organic Act, 16 U.S.C. § 1, et seq. The Organic Act, which creates the

Park Service as an agency of the Department of Interior, provides the Service power to

promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified . . . to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

16 U.S.C. § 1.

Further, the Organic Act expressly provides that the Secretary of the Interior (of whom the Service is the delegee) "may also provide in his discretion for the destruction of such animals and of such plant life as may be detrimental to the use of any said parks, monuments, or reservations." *Id.* § 3. Given the express empowerment under the Organic Act, the agency's interpretation is, at the very least, reasonable.

Appellants discount the effect of the Organic Act by claiming that the Organic Act is overridden by the Enabling Act. In support of this proposition, they point to 16 U.S.C. § 1c(b), which provides, "[e]ach area within the national park system shall be administered in accordance with the provisions of any statute made specifically applicable to that area." Thus, the normal canon that the later-enacted Organic Act would supersede the earlier-enacted Enabling Act is inapplicable. That may be. Nonetheless, our earlier observations, that the agency's interpretation of the two Acts as giving it the power it exercises in the decision under review are consistent and reasonable, remain undisturbed. In short, we reject appellants' first assignment of error.

B. Whether the Deer Management Plan is Otherwise Arbitrary and Capricious

Aside from their argument that the Deer Management Plan violates the Park's Enabling Act, appellants raise other issues that we analyze under the Administrative Procedure Act. Appellants contend that "[e]ven accepting the agency's position as articulated in its brief to the district court – that 'NPS must reduce the deer population if necessary to prevent "injury or spoliation" of the "timber" and other resources of the Park, "and their retention in their natural condition as nearly as possible," - the Park Service simply cannot demonstrate that such circumstances are present here." Grunewald Br. 31–32 (quoting NPS Mot. Summ. J. 30, Grunewald v. Jarvis, No. 1:12-cv-1738 (D.D.C. Jan. 25, 2013), ECF No. 18) (emphasis added by appellants). Appellants claim that the Park Service has not demonstrated that deer are causing a problem for forest regeneration, and has not demonstrated that deer, rather than some other factor (such as invasive, nonnative plant species), are to blame for any detrimental impacts on native plant species. Thus, appellants argue, the Park Service has not shown that killing deer is necessary for the protection of the natural ecology. See Grunewald Br. 31–39.

We first observe that appellants have misconstrued the Park Service's interpretation of the Enabling Act. Appellants contend that, under the Park Service's own interpretation of the Enabling Act, reduction of the deer population must be *necessary* to prevent injury to plant life. However, appellants make this argument by selectively quoting the Park Service's district court summary judgment brief out of context. In the relevant section of the brief, when the Park Service described the conditions under which the Enabling Act's text "arguably compelled" the killing of deer, it was adverting to a potentially non-discretionary core of its duty to act. *See* NPS Mot. Summ. J. 30.

The Park Service was not thereby delineating its own reasonable interpretation of the outer limit of its prophylactic management authority, consistent with the Park's Enabling Act and agency Organic Act, to select to kill deer as a prudent strategy to manage competing natural resources in the Park. Contrary to appellants' contentions, and consistent with our analysis of the governing statutes above, the Enabling Act does not require the Park Service to wait until killing deer is absolutely necessary to protect other native species. The agency's Organic Act gives the Park Service broad discretion to take preventive measures to control species overpopulation. *See, e.g., New Mexico State Game Comm'n*, 410 F.2d at 1201. In this case, the Park Service did not need to wait until deer overbrowsing took an even greater toll on native plant species, that is, until the problem met the appellants' definition of "necessary," before taking action.

Appellants further claim that the Park Service lacks the "data it said were needed before it could take any action to kill deer in this Park." Grunewald Br. 32 (emphasis in original). They contend that the Park Service's science team established a "threshold for taking action" based on Park staff's monitoring of tree seedling counts and deer browsing impacts, and that the Park Service failed to show that conditions in Rock Creek Park met this threshold. Id. at 32-37. We disagree. The record shows that the Park Service met its "threshold for taking action." The record documents a dramatic reduction in tree seeding stocking rates from 1991 to 2007. See Final EIS at 176. Under high deer densities, such as those present in Rock Creek Park, normal forest regeneration may be expected to occur when 67% of observed plots have at least 153 seedlings. See id. at 46. None of the plots observed in 2007 had 153 or more seedlings present. Id. at 176.

Appellants argue that the Park Service's seedling count analysis is flawed because it looked at unfenced plots only, and thus could not isolate deer as a causal factor. *See* Grunewald Br. at 33–35. We are not persuaded by this argument. First, the failure to undertake paired plot studies does not mean that the Park Service failed to meet its self-defined "threshold for taking action." Monitoring unfenced plots sufficed to meet that threshold. *See* Final EIS at 45–46. Second, the Park Service has conducted a paired plot study to isolate the effects of deer, and found that detrimental ecological "impacts can be directly attributed to deer browsing." *Id.* at 17. Thus, the Park Service had the data necessary to meet its "threshold for taking action," and did not need to undertake any further studies before deciding to take lethal action against deer.

Appellants' contention that the Park Service had not shown that deer, rather than some other factor such as invasive plants, are responsible for harming native plants also fails. The district court addressed this issue at length, see Grunewald, 930 F. Supp. 2d at 83–84, 88–90, and we agree with the district court's conclusion that the record shows that "the deer are having negative impacts on Rock Creek Park," id. at 83. The Park Service is not required, under the Park's Enabling Act or otherwise, to show that deer and only deer are threatening the native ecology. The Final EIS repeatedly acknowledges the concurrent threat that invasive plant species pose to the native ecology. "Anyone reviewing the [Final EIS] does not have to read far before the subjects of deer management and exotics are discussed together: there are five mentions of the two subjects in the first two pages." *Id.* at 89. The Park Service has also shown that deer independently threaten native plants. The Park Service has compared vegetation cover between fenced and unfenced plots to help isolate the impacts of deer browsing on native plants. Final EIS at 17–18. The Park Service has directly monitored the effects of deer, including observing the effects of deer browsing. See id. at 14. The Park Service has reasonably, and on the basis of sufficient evidence, concluded that "deer herbivory is having significant negative impacts on forest vegetation in the park." National Park Service, Impacts of Deer Herbivory on Vegetation in Rock Creek Park, 2001-2009 at 10 (2011). Therefore, we hold that the National Park Service's Deer Management Plan for Rock Creek Park is not arbitrary, capricious, or otherwise in contravention of the Administrative Procedure Act.

C. Challenges Under the National Environmental Policy Act

In addition to their arguments relying on the Enabling Act and the Administrative Procedure Act, appellants contend that the Park Service did not comply with the National Environmental Policy Act ("NEPA"). In reviewing appellants' arguments on this subject, we recall at the outset that NEPA's mandate "is essentially procedural." Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 558 (1978). NEPA requires agencies to take a "hard look' at environmental consequences," Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976), and to "provide for broad dissemination" of relevant environmental information," Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989). It is "well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process." *Robertson*, 490 U.S. at 350. NEPA is "not a suitable vehicle" for airing grievances about the substantive polices adopted by an agency, as "NEPA was not intended to resolve fundamental policy disputes." Found. on Econ. Trends v. Lyng, 817 F.2d 882, 886 (D.C. Cir. 1987).

1. Whether the Park Service Violated NEPA in its Failure to Consider Exotic Vegetation Abatement as a Fifth Alternative

Appellants argue that "by failing to consider the reduction of exotic plant species as an alternative way to protect the native vegetation in the Park," Grunewald Br. 39, the National Park Service violated its NEPA obligation to consider "all 'reasonable alternatives' to the proposed action," *Nevada v. Dep't of Energy*, 457 F.3d 78, 87 (D.C. Cir. 2006) (quoting 40 C.F.R. § 1502.14). Appellants argue that the Park Service has recognized that the proliferation of exotic plants seriously threatens native vegetation. They further contend that removing exotic plants could accomplish the stated objective of the Deer Management Plan to protect native plants, and that the Park Service violated NEPA when it refused to consider exotic plant removal as an alternative to killing deer.

Again, appellants' argument is not persuasive. In reviewing an agency's selection of alternatives, we owe "considerable deference to the agency's expertise and policy-making role." *City of Alexandria v. Slater*, 198 F.3d 862, 867 (D.C. Cir. 1999). "[W]e review both an agency's definition of its objectives and its selection of alternatives under the 'rule of reason." *Theodore Roosevelt Conservation P'ship v. Salazar*, 661 F.3d 66, 73 (D.C. Cir. 2011). "[A]s long as the agency 'look[s] hard at the factors relevant to the definition of purpose,' we generally defer to the agency's reasonable definition of objectives." *Id.* (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991)). "If the agency's objectives are reasonable, we will uphold the agency's selection of alternatives that are reasonable in light of those objectives." *Id.*

Under this deferential standard, we conclude that the Park Service did not err when it failed to include removing exotic plants as a stand-alone alternative. In arguing that the Park Service could have achieved its stated objectives without killing deer, appellants quote selectively from the record. emphasize the Management Plan's objectives to "[p]rotect the natural abundance, distribution, and diversity of native plant species," and "[m]aintain, restore, and promote a mix of native plant species and reduce the spread of nonnative plant species." Final EIS at i (quoted in Grunewald Br. 40). However, appellants omit other, more specific objectives that the Park Service cannot accomplish through plant management alone. These objectives include "[p]rotect[ing] habitat of rare plant and animal species from adverse effects of deer, such as excessive deer browsing, trampling, and nonnative seed dispersal"; and "[p]rotect[ing] the integrity, variety, and character of the cultural landscapes by reducing excessive deer browsing, trampling, and nonnative seed dispersal." Final EIS at ii.

The Park Service reasonably determined that the overpopulation of white-tailed deer in Rock Creek Park detrimentally affects the Park's ecology. Given this concern, it was not unreasonable for the Park Service to define its objectives in terms of abating the effects of deer browsing and trampling. A stand-alone exotic plants management plan would not address the deer problem. The agency did not adopt "an 'unreasonably narrow' definition of objectives that compels the selection of a particular alternative." *Theodore Roosevelt*, 661 F.3d at 73. Instead, it reasonably defined its objectives and alternatives in light of its legitimate concern with deer populations. Accordingly, the Park Service did not violate NEPA when it did not consider a "plants-only" option as an alternative.

2. Whether NEPA Requires the National Park Service to Analyze the 2004 Draft Exotic Plant Management Plan as a "Connected" or "Similar" Action

Appellants argue the Park Service violated NEPA when the Park Service did not analyze its 2004 Draft Exotic Plant Management Plan in the same NEPA document as its Deer Management Plan. Appellants contend that an agency should consider "connected" or "similar" actions within a single NEPA document. Connected actions are "closely related and therefore should be discussed in the same impact statement." 40 C.F.R. § 1508.25(a)(1). Similar actions are those "which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together." Id. at § 1508.25(a)(3). Therefore, appellants contend, the National Park Service's 2004 Draft Exotic Plant Management Plan, which aims to combat the proliferation of invasive plants in Rock Creek Park, is a "connected" or "similar" action and the Park Service should have considered it alongside the Deer Management Plan within a single programmatic EIS. We disagree. The Park Service did not violate the requirements of NEPA by analyzing the 2004 Draft Exotic Plant Management Plan and the Deer Management Plan in different documents. "Even when [an EIS addresses] one of a series of closely related proposals, the decision whether to prepare a programmatic impact statement is committed to the agency's discretion." Izaak Walton League of Am. v. Marsh, 655 F.2d 346, 374 n.73 (D.C. Cir. 1981). "Only if the decision is arbitrary and capricious will we overturn it." Nevada, 457 F.3d at 92 (citations omitted). In determining whether a programmatic EIS is necessary, we consider "the extent of the interrelationship among proposed actions and practical considerations of feasibility." Kleppe, 427 U.S. at 412.

We reject appellants' contention that the Park Service was required to consider the Draft Exotic Plant and Deer Management Plans together in a single EIS as similar actions. The regulation cited by appellants does not support appellants' contentions. Defining "similar actions," the regulation provides that an agency "may wish to analyze [similar] actions in the same impact statement," and "should do so when [it is] the best way to assess adequately the combined impacts of similar actions or reasonable alternatives." 40 C.F.R. § 1508.25(a)(3) (emphasis added).

The Park Service did not act arbitrarily, but rather exercised its lawful discretion, when it declined to analyze the Exotic Plant and Deer Management Plans together. While the Park Service acknowledges that the subjects of deer management and invasive species management are "in some ways related," the Park Service maintains that they are distinct actions "addressed in two different planning efforts." Final EIS at 380. Appellants point out that the Rock Creek Park General Management Plan lists future "invasive species control" and "deer management" implementation plans as "[c]onnected, [c]umulative, and [s]imilar [a]ctions." See Grunewald Br. 42–43. However, the fact that each plan may be related to the Park's General Management Plan (which is the "basic document for managing Rock Creek Park," Rock Creek Park Final General Management Plan at 1) does not mean that the plans are so closely related to each other that NEPA requires concurrent analysis of deer management and exotic plant control. As the Supreme Court has held, "[a]n agency enjoys broad discretion in determining how best to handle related, yet discrete, issues in terms of procedures and priorities." *Mobil Oil Exploration & Producing* Se. Inc. v. United Distribution Cos., 498 U.S. 211, 230 (1991) (citations omitted). The Park Service has not abused that broad discretion here.

Similarly, appellants' contention that the Park Service arbitrarily failed to consider the Deer Management and Draft Exotic Plant Plans together as "connected" actions is unavailing. Under the regulation, actions are "connected" if they "[a]utomatically trigger other actions which may require environmental impact statements"; "[c]annot or will not proceed unless other actions are taken previously or simultaneously"; or "[a]re interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1).

Again, the Park Service acted within its discretion when it declined to analyze the Exotic Plant and Deer Management Plans together as "connected" actions. Nothing in the record indicates that any of the regulatory definitions of "connected" apply. Neither Plan automatically triggers other reportable actions. Actions pursuant to the Deer Management Plan have already proceeded, and have not depended on the concurrent or previous undertaking of the Draft Exotic Plant Plan or some other action. The Plans are not interdependent parts of a larger action. The fact that the Plans have similar goals, protecting the native ecology, does not make the plans sufficiently intertwined to require concurrent NEPA analysis. "[A]n agency need not solve every problem before it in the same proceeding." Mobil Oil, 498 U.S. at 231. A court "cannot force an agency to aggregate diverse actions to the point where problems must be tackled from every angle at once. To do so risks further paralysis of agency decisionmaking." Nw. Res. Info. Ctr., Inc. v. Nat'l Marine Fisheries Serv., 56 F.3d 1060, 1069 (9th Cir. 1995) (citation omitted). We hold that the Park Service did not err in concluding that the Deer Management and Exotic Plant Plans are not "similar" or "connected" for the purposes of NEPA.

3. Whether the National Park Service Violated NEPA by Failing to Consider the Deer Management Plan's Effects on the "Human Environment"

Appellants argue that the National Park Service "violated NEPA by failing to consider the adverse impact its decision to kill wildlife will have on the public's ability to enjoy this extremely special national park which for over 120 years has been . . . completely free of any violence against wildlife." Grunewald Br. 52. Appellants reason that NEPA requires an agency to consider "the environmental impact of the proposed action," 42 U.S.C. § 4332(C), including the "aesthetic" aspects of a decision, 40 C.F.R. § 1508.8, and how the action will affect "the relationship of people with [the natural and physical] environment," id. § 1508.14. Appellants stress the views of park goers, expressed in several public comments, that allowing the killing of deer will "significantly mar their ability to enjoy using this Park" and "fundamentally transform the overall character of the Park from a tranquil place . . . to a place where wildlife is shot, maimed, and killed" regularly. Grunewald Br. 53. They maintain that the district court wrongly dismissed these concerns as mere "psychological harms," and that the Park Service did not adequately consider and address them. We disagree.

The National Park Service complied with NEPA by adequately considering the Deer Management Plan's effects on the human environment. The Final EIS discusses at length the potential impacts of each alternative on visitor use, experience, and safety. Final EIS at 240–55. The EIS discusses the costs and benefits of archery and sharpshooting; the possibility of adverse impacts on those who might see or hear the killing; ways to prevent visitor encounters with dead or dying deer; and mitigating the impact of gunshots on the "soundscape" of the park. *Id.* The Plan mitigates its effects on visitor experience by limiting culling activities to night or times when the park is

closed; concentrating activities during winter months, when there are fewer visitors; and separating visitors from culling activities or uncollected deer carcasses. *See* Record of Decision at 5. In short, the Park Service adequately considered the impacts that killing deer could have on the human environment. It squarely addressed the potential effects on visitors of seeing or hearing the killing of deer, and other tangible and physical impacts of the Plan.

The National Park Service was not required to consider the psychological harm that some visitors may suffer from simply knowing that the intentional killing of deer happens at Rock Creek Park. The appellants fail in their attempt to recast their psychic injuries as concerns relating to visitor experience and the human environment. They claim that the killing of deer fundamentally changes the character of the Park and destroys its value to some visitors. However, once we set aside what the Park Service has addressed (witnessing killings, encountering carcasses, hearing gunshots, etc.), appellants' claim supports at most a psychological harm—appellants' knowledge that deer are killed, even if they perceive no such killings. NEPA requires agencies to consider "the effect of their proposed actions on the physical environment." Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983) (emphasis added). NEPA does not require an agency to consider the potential that its action may remotely cause "psychological health damage" for some members of the public. *Id.* at 775–76. The Park Service adequately and comprehensively considered the impacts of its proposed alternatives on the "human environment." It was not obligated to address the potential for some members of the public to be psychologically harmed by simply knowing that deer are killed in Rock Creek Park; this kind of remote impact is outside the scope of NEPA.

CONCLUSION

While there might not have been any white-tailed deer present in Rock Creek Park at its founding in 1890, deer populations have risen dramatically since the first deer sightings in the 1960s. With no natural predators, deer populations grew unabated. While the native deer are a valued park resource, the National Park Service became concerned with the deer's ecological impacts. The National Park Service, exercising its expertise, studied the deer and their effects on Rock Creek Park. The Park Service concluded that the deer pose a threat to the Park's native ecology, and proposed taking action to reduce the deer population to sustainable levels. The Park Service eventually decided to take lethal action against the Park's deer, quickly reducing the herd to an ecologically sustainable level. The Park Service held open the potential future use of contraceptives to maintain population levels. In reaching this decision, the Park Service fully complied with the Rock Creek Park Enabling Act, the Administrative Procedure Act, and the National Environmental Policy Act. Therefore we affirm the judgment of the district court.

So ordered.