FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

WILDERNESS WATCH, INC.; ARIZONA WILDERNESS COALITION; SIERRA CLUB; WESTERN WATERSHEDS PROJECT; and GRAND CANYON WILDLANDS COUNCIL, non-profit corporations,

Plaintiffs-Appellants,

v.

U.S. FISH AND WILDLIFE SERVICE; H. DALE HALL, in his official capacity as Director of the U.S. Fish and Wildlife Service; Paul Cornes, in his official capacity as the Kofa Wildlife Refuge Manager; and Chris Pease, in his official capacity as Regional Refuge Manager,

Defendants-Appellees,

and

U.S. Sportsmen's Alliance
Foundation; Arizona Desert Big
Horn Sheep Society; Arizona
Deer Association; Arizona
Antelope Association;
Foundation for North American
Wild Sheep; Yuma Valley Rod &
Gun Club, Inc.; Safari Club
International; Safari Club
International Foundation;
National Rifle Association; and
State of Arizona,
Defendant-Intervenors-Appellees.

No. 08-17406 D.C. No. 2:07-cv-01185-MHM OPINION

Appeal from the United States District Court for the District of Arizona Mary H. Murguia, District Judge, Presiding

Argued and Submitted December 10, 2009—San Francisco, California

Filed December 21, 2010

Before: A. Wallace Tashima, Susan P. Graber, and Jay S. Bybee, Circuit Judges.

Opinion by Judge Graber; Dissent by Judge Bybee

COUNSEL

Peter M.K. Frost, Western Environmental Law Center, Eugene, Oregon, for the plaintiffs-appellants.

Justin R. Pidot, Environment & Natural Resources Division, United States Department of Justice, Washington, D.C., for the defendants-appellees.

James F. Odenkirk, Assistant Attorney General, Phoenix, Arizona, and William P. Horn, Birch, Horton, Bittner and Cherot, Washington, D.C., for the defendant-intervenors-appellees.

OPINION

GRABER, Circuit Judge:

The Kofa National Wildlife Refuge and Wilderness in southwest Arizona contains a desert ecosystem that is home to, among other species, bighorn sheep. After an unexpected decline in the population of the sheep, the United States Fish and Wildlife Service ("Service") built two water structures (the Yaqui and McPherson tanks) within the wilderness area. Plaintiffs Wilderness Watch, Inc., Arizona Wilderness Coalition, Grand Canyon Wildlands Council, Western Watersheds Project, and Grand Canyon Chapter of the Sierra Club brought suit against the Service. Plaintiffs allege that the Service's actions violated the express prohibition on the development of structures in the Wilderness Act, 16 U.S.C. §§ 1131-1133. The district court granted summary judgment to the Service, and Plaintiffs timely appeal. Reviewing de novo, *High Sierra Hikers Ass'n v. Blackwell*, 390 F.3d 630, 638 (9th Cir. 2004), we reverse and remand.

FACTUAL AND PROCEDURAL HISTORY

Situated between two mountain ranges, the Kofa Refuge and Wilderness consists of more than 600,000 acres of land in the Sonoran Desert in southwest Arizona. The area contains steep slopes, sparse vegetation, poor soil, and an extremely dry ecosystem. Summer temperatures can reach 120 degrees. The average rainfall measured at one weather station in the Kofa Mountains is about seven inches a year. Most of the rainfall occurs during one month, followed by many hot summer months with no measurable precipitation. The vegetation is dominated by saguaro, creosote, ironwood, paloverde, and mesquite. Kofa is home to 45 mammal species, including the desert bighorn sheep and muledeer, and 47 species of reptiles.

President Franklin D. Roosevelt established the Kofa Game Range by executive order in 1939. The President's order expressly designated the area for the "conservation and development of natural wildlife resources," Exec. Order No. 8039, 4 Fed. Reg. 438 (Jan. 25, 1939), and it was understood that preservation of bighorn sheep was one of the principal reasons for establishing the refuge. *See* David Brown, *Early History, in* The Desert Bighorn Sheep in Arizona 5-7 (Raymond M. Lee, ed., Ariz. Game & Fish Dep't 1993). Following the

executive order, the Fish and Wildlife Service and the Bureau of Land Management managed the land until 1976, when the Service assumed sole jurisdiction and the reserve was renamed the Kofa National Wildlife Refuge. *See* An Act to amend the National Wildlife Refuge System Administration Act of 1966, Pub. L. No. 94-223, 90 Stat. 199.

As a wildlife refuge, the area is subject to the provisions of the Refuge Act. Among other things, the Refuge Act requires the Secretary of the Interior to "provide for the conservation of . . . wildlife," "ensure that the biological integrity, diversity, and environmental health of the System are maintained," and "assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the System and the purposes of each refuge." 16 U.S.C. § 668dd(a)(4)(A), (B), (F). In 1990, Congress designated about 82% of the Kofa National Wildlife Refuge as wilderness, and it became the Kofa National Wildlife Refuge and Wilderness.¹ Arizona Desert Wilderness Act of 1990, Pub. L. No. 101-628, § 301(a)(3), 104 Stat. 4469. In doing so, Congress subjected the area to the provisions of the Wilderness Act.

Under the Wilderness Act, the Service is "responsible for preserving the wilderness character of the area," but it also must "administer such area for such other purposes for which it may have been established as also to preserve its wilderness character." 16 U.S.C. § 1133(b). Congress specifically provided that "wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, con-

¹The record often fails to distinguish between the area designated as refuge and the area designated as wilderness. We will refer to the area as the Kofa Refuge or Kofa Wilderness as necessary in this opinion. When we refer to the Kofa Wilderness, we are referring to the part of the Kofa Refuge designated as wilderness, which is subject to provisions of the Wilderness Act *and* the Refuge Act. We use Kofa Refuge to refer to the entire area. We note that about 18% of the Kofa Refuge is subject only to the provisions of the Refuge Act, an arguably less restrictive statute than the Wilderness Act.

servation, and historical use." *Id.* "[E]xcept as necessary to meet minimum requirements for the administration of the area," the Wilderness Act prohibits any "temporary road, . . . use of motor vehicles, motorized equipment or motorboats, . . . landing of aircraft, . . . mechanical transport, and . . . structure or installation" within a wilderness area. *Id.* § 1133(c). The Act declares that the purposes of the Wilderness Act are "within and supplemental to the purposes for which . . . [the] national wildlife refuge systems are established and administered." *Id.* § 1133(a). Thus, in managing the Kofa Wilderness, the Service must comply with both the Wilderness Act and the Refuge Act.

Since the 1950s, the State of Arizona, non-profit organizations, and the federal government developed water sources such as catchments, wells, and tanks to augment the availability of water for the bighorn sheep that inhabit the area. There are now more than 100 water sources in the area. During the summer months, the distribution of bighorn sheep is restricted by water availability, and most sheep can be found within a two-mile radius of water sources. With the cooperation of the Arizona Game and Fish Department and the Arizona Desert Bighorn Sheep Society, refuge personnel build, maintain, and monitor the water sources. During times of "extensive drought," refuge personnel transport water to the structures. Wildlife managers believe that these water sources have been instrumental in helping to restore the population of bighorn sheep.

A. The Management Plan for the Refuge

After Congress designated most of the Kofa Refuge as a wilderness area in 1990, and in an attempt to coordinate the dual purposes of the Kofa Wilderness and Refuge, the Service and the Bureau of Land Management ("BLM") issued a management plan. Kofa National Wildlife Refuge and Wilderness Interagency Management Plan (1997) ("Management Plan").²

²The plan also covered the New Water Mountains Wilderness.

The plan, which received public review and comment, was intended to ensure that future management decisions and techniques concerning the Kofa Wilderness were compatible with the Wilderness and Refuge Acts. The plan recognized the purpose of the Kofa Wilderness in preserving bighorn sheep:

Historically, Kofa . . . ha[s] played a central wild-life and wildlands conservation role in western Arizona. To counter dwindling populations of desert bighorn sheep in the earlier part of the century, a management theme relating to the recovery of the species had become necessary beyond the establishment of legal protection for the species under the Arizona State Game code. Thus, a clear and dominant strategy for the management of these historically "rocky, waterless sierras . . ." was designed specifically for the recovery of bighorn sheep populations.

Management Plan at 2 (second ellipsis in original) (footnote omitted). The plan stated that the Service and the BLM would "continue important efforts on behalf of the bighorn sheep." *Id.* at 3. The plan acknowledged that, although the wilderness designation of the land would "not chang[e] the purposes of these areas or the importance of current activities," the designation would "call for the consideration of these activities within the larger ecological contexts and within national wilderness goals inherent in the Wilderness Act of 1964." Id. The plan stated that "[t]he needs of the species and the requirements of the Act are not necessarily in conflict. In fact, the habitat management work done to benefit bighorn sheep, including water development, could have a positive influence on the natural cycles of predation and succession for a diversity of life in the desert without detraction of wilderness attributes and values." Id. at 39-40.

After espousing a broad goal to reconcile the Wilderness and Refuge Acts in the Kofa Wilderness, the plan discussed comprehensive planning objectives for the area. The plan addressed many issues, including "protection of wilderness values," "wildlife and habitat management," "law enforcement and emergency services," and "Native American religious access." *Id.* at 5-7 (some capitalization omitted). With respect to wildlife protection, the plan explained that "the Service is responsible to carry out a dual, but nonetheless interrelated, role of managing for bighorn sheep within the context of wilderness." *Id.* at 37. According to the plan, the Service would use "minimum tools" in order to "maintain[] an optimal desert bighorn sheep population." *Id.* at 53.

B. Decline in Population of Bighorn Sheep, and the Service's Response

As the Management Plan described, the Kofa Wilderness historically has been home to the desert bighorn sheep. In recent decades, the estimated population of the bighorn sheep in the Kofa Wilderness and Refuge remained relatively stable, with fluctuations between 600 and 800 sheep. Surveys done in 1991 and 1997 (the period shortly after the refuge was first designated as a wilderness area and while the Service was preparing the Management Plan) revealed that the population remained relatively stable at around 700 sheep, and the Service determined that the carrying capacity of the area was about 800 sheep. In 2000, the estimated population registered on the high end of the range, at 813 sheep.

Due to the population's stability, the Service and other government agencies have permitted certain activities that generally are viewed as inconsistent with population conservation. For example, since 1979, the area has served as a primary source of sheep for translocation programs to re-establish populations of bighorn sheep in Arizona, Colorado, New Mexico, and Texas. For decades, the Service translocated sheep from the refuge on a nearly annual basis.³ The area also

³The first translocation occurred in 1957, and a total of 569 sheep have been moved from the refuge.

has been a hunting ground for bighorn sheep, and the Service has issued a limited number of hunting licenses (between 9 and 17) each year. The Service also permits hiking in known lambing areas, despite the sheep's strong aversion to human disturbance. One factor historically benefitting the bighorn sheep within the Kofa Refuge was the absence of predators such as mountain lions. Studies conducted in the 1990s found no evidence of mountain-lion presence within the Kofa Refuge.

In 2003, the estimated population of bighorn sheep in the refuge was 623. Although this marked a decline since 2000, the estimated population nevertheless remained comfortably within the acceptable range of 600 to 800 sheep. Unconcerned, the Service continued issuing hunting permits, allowed hiking, and, encouraged by abundant rainfall in 2005, translocated 31 sheep that year.

In 2006, however, surveys indicated that the population of bighorn sheep had suffered an unexpected decline—to 390 sheep, or approximately 30% to 50% fewer sheep than in recent decades. In response, the Service and the Arizona Game and Fish Department prepared a document in 2007 titled "Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd" ("Investigative Report"). The report came to no concrete conclusions concerning the recent decline in population. Instead, the comprehensive document examined the wide range of mortality factors of bighorn sheep and, for each factor, it presented prescriptive strategies intended to aid successful recovery of their population. The most prominent factors identified by the report are availability of water, predation, translocation, hunting, and human disturbance.

1. Availability of Water

The report identified availability of water as a "critical habitat variable." Investigative Report at 8. The report concluded

that, "[i]n addition to a need for better monitoring and maintenance of existing waterholes, a better distribution of permanent water supplies is needed to provide water in all areas of suitable sheep habitat." *Id.* at 9. The report identified strategies such as identifying existing permanent water sources that could be improved by hauling water during low-water seasons, identifying existing water sources that could be redeveloped to improve capacity and efficiency, and identifying locations for new water sources. *Id.* at 10.

With respect to new water sources, the report stated that "[n]ew water developments can likely be constructed outside of wilderness, although construction in wilderness should remain an option if a wilderness location best meets wildlife management needs." *Id.* at 9. "Plans for . . . new water developments will require an environmental assessment and minimum requirement analysis/minimum tool analysis." *Id.* at 10.

2. Predation

The report examined predation, primarily by mountain lions. *Id.* at 11-15. The report noted that, until 2003, no mountain lions were known to exist within the Refuge. *Id.* at 11-12. Beginning in 2003, however, there have been mountain-lion sightings and confirmed mountain-lion kills of bighorn sheep. Id. at 12. "The overall impact of mountain lion predation on the sheep population is unknown. It is unlikely that lion predation alone accounts for the decline observed, but it may be additive to other sources of mortality or sufficient to prevent sheep population recovery. Predation by bobcats or coyotes may also be a contributing factor" Id. at 13. "Limited removal of individual lions identified as regularly preying on sheep may help the bighorn population recover to historical levels." Id. "Determining the cause of bighorn sheep mortality is another vital part of assessing the effect of predation on the Kofa population." *Id.* The report recommended the strategies of determining the extent of predation and reducing predation by the removal of "offending" lions until the sheep population fully recovers. *Id.* at 14-15.

3. Translocations

The report discussed the high demand by other natural areas for translocated bighorn sheep and the history of translocations from the Refuge to distant natural areas. *Id.* at 18-19. The report discussed the translocation of 31 sheep in 2005 despite the relatively low population estimate in 2003. *Id.* at 18. The report found that, "[w]hile not the ultimate cause of the population decline, the 2005 transplant may have contributed to the low numbers seen in [one region of the Refuge] on the 2006 survey." *Id.* The report concluded that no additional translocations will occur until the population of sheep returns to historical levels. *Id.* at 18-19.

4. Hunting

"Hunting for desert bighorn sheep in Arizona is a once-in-a-lifetime opportunity and the demand for bighorn sheep hunting exceeds the allowable harvest." *Id.* at 19. The report described the very restrictive limits on permitted hunting and the financial benefit to certain conservation groups, which are granted a small number of annual permits for auction at fundraisers. *Id.* The government agencies have "issued anywhere from 5 to 17 bighorn sheep permits for the Kofa [Refuge] . . . since 1960." *Id.* The report recommended, without explanation, that the agencies "[c]ontinue to offer bighorn sheep hunting opportunities consistent with sheep conservation." *Id.* at 20.

5. Human Disturbance

"Bighorn sheep tend to use the highest, most rugged areas within their home ranges for lambing." *Id.* at 16. "Signal Peak and Castle Dome Peak are two of the most distinctive features of the refuge and as such are popular destinations for hikers."

Id. "Most use of these areas occurs in the cool winter months (November-March), which strongly overlaps the peak lambing season of January-March." Id. The report cited documentation of "strong reactions (immediate running, left area and did not return) from Kofa sheep in response to 1 or 2 people." Id. at 17. "Frequent human disturbance of ewes may cause them to abandon these areas for less optimal habitat, which could in turn affect lamb survival." Id. The report recommended "[r]educ[ing] the negative impacts of human recreational activities on bighorn sheep" by monitoring sheep usage during lambing season and, if necessary, closing popular hiking trails during lambing season. Id.

6. Conclusions and Additional Documents

The report contained no overall summary and came to no conclusions about the causes of the decline in the population of bighorn sheep, nor did it make a reasoned comparison among the different potential causes and recovery strategies. The report's discussion of water does not mention the development of the two water structures at issue in this case—the Yaqui and McPherson tanks. Those structures are listed only in a cost comparison chart near the end of the report. *Id.* at 23. The report lists projects "in priority order"—though the reasons for the priorities are unstated. *Id.* at 23 (capitalization omitted). In that list, the development of the Yaqui and McPherson tanks is listed sixth out of 14, below four strategies aimed at monitoring mountain lions and reducing mountain-lion predation and one overall strategy for recovery of bighorn sheep. *Id.*

The Service prepared two other documents before initiating work on the new water structures within the Kofa Wilderness. The first document, titled "Kofa National Wildlife Refuge Minimum Requirements Analysis," is a two-page document that contains a series of yes/no questions and requires the preparer to circle, with a pen or pencil, either YES or NO. The questions on the second page provide a very small space for

an explanation of a yes/no answer, but the first page contains no such area. The preparer—whose identity is unknown—dutifully circled answers to the questions and, on the second page, provided very short explanations for the selected yes/no answers to those questions. The final question asks if there are potential adverse effects on wilderness. The preparer circled "YES—PROCEED TO MINIMUM TOOL ANALYSIS."

The second document, titled "Kofa National Wildlife Refuge Minimum Tool Analysis," is a detailed explanation of the proposed action, an explanation for why it is necessary, alternative action plans (including the "no action" alternative), an analysis of the effects of the alternative action plans, and a summary description of the chosen alternative. In a section titled "Why Project Is Necessary," the Minimum Tool Analysis states, in full:

Kofa NWR was established, in part, for the conservation of desert bighorn sheep and other wildlife, and the maintenance of this population of desert bighorn sheep is very important regionally for the conservation of sheep and as a source for transplants to other locations in order to establish and re-establish other sheep herds. Wildlife is an important component of Wilderness.

The three alternatives are (1) no action, (2) constructing the two structures with mechanized means, and (3) constructing the two structures without mechanized means. The Service selected alternative number 2: constructing the two structures with mechanized means. The Service rejected the no-action alternative because it would not help the sheep. The Service rejected the alternative that used non-mechanized means because it would increase the time needed to complete the project, resulting in increased disturbance to wildlife and human visitors alike.

Over a three-day period in 2007, the Service built the new Yaqui and McPherson water structures, consisting mostly of

aerated PVC pipe buried underground. Designed to catch rainwater and run that water into small concrete weirs or troughs, each system is capable of holding approximately 13,000 gallons of water. The Service decided to enter the two areas with motorized vehicles and equipment because it concluded, in its Minimum Tool Analysis, that using motorized equipment was safer for the workers and would reduce the amount of time the workers would be in the wilderness. The workers used existing roads and removed tracks left by the vehicles. The workers also covered the troughs with local sand and rocks to blend the structures into the natural environment, so that only the troughs and small vent pipes are visible above ground. The Yaqui tank is located in the refuge, just outside the wilderness, but two or three water diversion weirs fall within the wilderness. The McPherson tank is located well inside the wilderness, but within 0.1 mile of a designated road in the area.

C. The Current Suit

Plaintiffs filed suit against the Service shortly after the completion of the Yaqui tank,⁴ arguing that the structure violated the Wilderness Act because the Act prohibits any "structure or installation" within a wilderness area "except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." 16 U.S.C. § 1133(c). The district court granted summary judgment to the Service, holding that the Service had not violated the Wilderness Act.⁵ Plaintiffs timely appeal.

⁴Plaintiffs also sought a temporary restraining order against construction of the McPherson tank. The parties settled that issue out of court, and the Service built the structure.

⁵At the district court and on appeal, Plaintiffs also argued that the Service violated the National Environmental Policy Act of 1969 by failing to prepare a public analysis of the environmental effects of the water structures. Because we hold that Plaintiffs prevail on their claim under the Wilderness Act, we need not and do not reach their claim under the National Environmental Policy Act.

DISCUSSION

[1] The Wilderness Act prohibits the development of "structure[s] or installation[s]" on the land "except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." 16 U.S.C. § 1133(c). Both parties (and we) agree that the two water tanks qualify as structures or installations in the Kofa Wilderness. At issue here is whether the water structures fall within the quoted exception in the Act. The Service argues that these structures fit within the exception in the Wilderness Act because (1) the conservation of bighorn sheep is a valid "purpose" of the Wilderness Act and (2) the Service adequately determined that the structures are necessary to meet the minimum requirements for conserving bighorn sheep. Plaintiffs disagree on both points.

Under the Administrative Procedure Act, we may "set aside agency action" only if we determine that the action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(a). We have held that this standard requires us to

carefully review the record to ensure that agency decisions are founded on a reasoned evaluation of the relevant factors, and may not rubber-stamp administrative decisions that [we] deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute. Nevertheless, we may not substitute our judgment for that of the agency

Friends of Yosemite Valley v. Norton, 348 F.3d 789, 793 (9th Cir. 2003) (citation, internal quotation marks, and alterations omitted).

A. Conservation of Bighorn Sheep as a Purpose of the Wilderness Act

As stated above, the Wilderness Act prohibits "structure[s] or installation[s]" unless they are necessary to meet the minimum requirements of a "purpose" of the Wilderness Act. 16 U.S.C. § 1133(c). We first must decide if the Service's determination that a purpose of the Act includes conservation of the bighorn sheep is unambiguously contrary to the language of the Wilderness Act. If so, the structures violate the Act, and we will "give effect to the unambiguously expressed intent of Congress." *Chevron U.S.A. Inc. v. Natural Resources Def. Council, Inc.*, 467 U.S. 837, 846 (1984). If not, we must then determine what level of deference to grant to the Service's interpretation, a determination that depends upon whether the Service's interpretation has the force of law. *Christensen v. Harris County*, 529 U.S. 576, 587 (2000).

[2] The Act begins with a broad statement of purpose:

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States . . . , leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.

16 U.S.C. § 1131(a). The Act defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain," and as "an area of undeveloped Federal land retaining its primeval character and influence, . . . which is protected and managed so as to preserve its natural conditions." *Id.* § 1131(c). The Act also states that the "agency administering any area designated as wilderness" must "administer such

area for such other purposes for which it may have been established as also to preserve its wilderness character." *Id.* § 1133(b). Had Congress stopped there, these strongly worded phrases would have suggested that wilderness areas were to remain untouched—not merely untouched by development but, literally, untouched by humans. But Congress did not mandate that the Service preserve the wilderness in a museum diorama, one that we might observe only from a safe distance, behind a brass railing and a thick glass window. Instead, Congress stated that the wilderness was to be preserved as wilderness and made accessible to people, "devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use." Id. Congress was specific about what it understood might be necessary to preserve the wilderness for such public purposes. Congress expressly authorized structures, motorized vehicles, and temporary roads if such things are necessary to meet the minimum requirements for administering the area, id. § 1133(c); indeed, the Act permits, under certain circumstances, aircraft and motorboat use and even mining, id. § 1133(d). Those uses are incompatible with a museum notion of wilderness.

[3] Read as a whole, the Act gives conflicting policy directives to the Service in administering the area. The Service is "charged with maintaining the wilderness character of the land, providing opportunities for wilderness recreation, managing fire and insect risk, and even facilitating mineral extraction activities." High Sierra, 390 F.3d at 647. It is charged with simultaneously devoting the land to "conservation" and protecting and preserving the wilderness in its natural condition. 16 U.S.C. §§ 1131(c), 1133(b). We cannot discern an unambiguous instruction to the Service. Rather, those competing instructions call for the application of judgment and discretion. We may be able to identify violations at the margins but, in this case, the Act is not so clear that we can identify precisely what the Service must do and must not do. We conclude that the purpose of the Wilderness Act with regard to conservation is ambiguous. See High Sierra, 390 F.3d at 647-48 ("Although we believe that Congress intended to enshrine the long-term preservation of wilderness areas as the ultimate goal of the Act, the diverse, and sometimes conflicting list of responsibilities imposed on administering agencies renders Congress's intent arguably ambiguous.").

Our decision in Wilderness Society v. United States Fish & Wildlife Service, 353 F.3d 1051 (9th Cir. 2003) (en banc), is not to the contrary. In Wilderness Society, the Service initiated a sockeye salmon enhancement project in a freshwater lake, located in the Kenai Wildlife Refuge and Wilderness, that flowed into the Gulf of Alaska. The Service planned to allow a private corporation to capture 10,000 sockeye salmon each year and transport about 10 million eggs to a hatchery outside the Kenai Wilderness. During the spring, the organization planned to return about 6 million salmon to the wilderness and to sell the rest. Id. at 1058. The plaintiffs argued that the corporation's activities fell within the Wilderness Act's ban on all "commercial enterprise[s]" within a wilderness area (subject to certain exceptions inapplicable in that case). *Id.* at 1061 (citing 16 U.S.C. § 1133(c)). Looking to the common meaning of the term and to the purpose and structure of the Act, we held that the corporation's activities unambiguously fell within the Act's prohibition on commercial enterprises.⁶ Id. at 1062.

Wilderness Society is easily distinguishable from the present case. There, we gave effect to the unambiguously expressed intent that, subject to certain inapplicable exceptions, commercial enterprises were prohibited. The Service argued that its interpretation of the undefined term "commercial enterprise" was entitled to some deference but we held that, because the primary purpose and effect of the action was

⁶In the alternative, we held that the corporation's activities constituted a commercial enterprise, "even if we were to assume that the Wilderness Act's prohibition on commercial enterprise within the wilderness is ambiguous." *Wilderness Soc'y*, 353 F.3d at 1067-69.

purely commercial, no deference was due. Here, by contrast, we must analyze conflicting instructions in the Wilderness Act: The Service must preserve the wilderness character of the area while at the same time providing for "recreational, scenic, scientific, educational, conservation, and historical use." 16 U.S.C. § 1133(b). Both the specific statutory mandate that "conservation" is a valid purpose of the Act and the historical focus of the area on the preservation of bighorn sheep render this case vastly different from the situation we analyzed in *Wilderness Society*.

Because we conclude that the term "conservation" is ambiguous, we turn to the question of what level of deference to grant the Service's interpretation of "conservation" as including wildlife conservation and, more specifically, conservation of bighorn sheep. United States v. Mead Corp., 533 U.S. 218, 229-30 (2001); Christensen, 529 U.S. at 587. We apply *Chevron* deference "when it appears that Congress delegated authority to the agency generally to make rules carrying the force of law, and that the agency interpretation claiming deference was promulgated in the exercise of that authority.' Mead, 533 U.S. at 226-27. "It is fair to assume generally that Congress contemplates administrative action with the effect of law when it provides for a relatively formal administrative procedure tending to foster the fairness and deliberation that should underlie a pronouncement of such force." Id. at 230. By contrast, "[i]nterpretations such as those in opinion letters —like interpretations contained in policy statements, agency manuals, and enforcement guidelines, all of which lack the force of law—do not warrant *Chevron*-style deference." Christensen, 529 U.S. at 587. "Such views, . . . even if not authoritative for purposes of *Chevron*, are entitled to so-called Skidmore deference insofar as they 'constitute a body of experience and informed judgment to which courts and litigants may properly resort for guidance.' "Vigil v. Leavitt, 381 F.3d 826, 835 (9th Cir. 2004) (quoting Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944)).

- [4] Here, the 1997 Management Plan was subject to public review and comment and was intended to "provide long-term" management guidance." But, other than stating that the plan was subject to public review and comment, the record is bereft of any other information describing the formality of the administrative procedure that fostered the plan. We are not convinced that the "management guidance" included in the plan carries the force of law. On this record, we are unable to distinguish with certainty the plan from "interpretations contained in policy statements, agency manuals, and enforcement guidelines, all of which lack the force of law." Christensen, 529 U.S. at 587. We therefore apply Skidmore deference. Under that standard, "the deference to be accorded . . . depends upon 'the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control." Wilderness Soc'y, 353 F.3d at 1060 (quoting Mead, 533 U.S. at 228).
- [5] The plan demonstrated consistency in recounting the history of Kofa and its "conservation role in western Arizona." Management Plan at 2. Preservation of the bighorn sheep in the area was one of the principal motivations for President Roosevelt's establishing the Kofa Game Range in 1939. From the beginning, federal agencies cooperated with the Arizona Game and Fish Department to protect the bighorn sheep. The plan reiterated that preserving desert bighorn sheep was an important component of the management of the area and noted that the "management theme" of the area is devoted "[t]o counter dwindling populations of desert bighorn sheep" and to "continue important efforts on behalf of the bighorn sheep." *Id.* at 2-3.
- [6] The plan also demonstrated thoroughness in addressing the new requirements that the wilderness designation would impose on the goal of conserving bighorn sheep. It concluded:

⁷Arizona granted legal protection to bighorn sheep in 1913.

There is no question that management of this species remains as one of the princip[al] missions of the Kofa [National Wildlife Refuge] However, the new considerations relative to the Wilderness designations require the Service and the BLM to review management techniques and their compatibility with wilderness principles.

Id. at 36. The plan acknowledged that "the Service is responsible to carry out a dual, but nonetheless interrelated, role of managing for bighorn sheep within the context of wilderness." Id. at 37. The plan further recognized that the Service had "to maintain the natural character of the landscape" consistent with the Wilderness Act, a duty that required use of "the minimum tool necessary to accomplish the work" and "technologies . . . as unobtrusive as possible." Id. at 37, 39. The plan continued:

The needs of the species and the requirements of the Act are not necessarily in conflict. In fact, the habitat management work done to benefit bighorn sheep, including water development, could have a positive influence on the natural cycles of predation and succession for a diversity of life in the desert without detraction of wilderness attributes and values.

Id. at 39-40.

[7] In light of the historical purpose of the area to preserve bighorn sheep and the explicit purpose of "conservation" in the Act, we find that the Service's reasoning was thorough, valid, consistent, and persuasive. We defer to the Service's interpretation in the Management Plan that conservation of the bighorn sheep is consistent with the purposes of the Wilderness Act.

- B. The Wilderness Act's Exception for Structures that are "Necessary" to Meet the "Minimum Requirements" for Conserving Bighorn Sheep
- [8] The Wilderness Act prohibits the development of any structure within a wilderness area, subject to only one exception: "except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." 16 U.S.C. § 1133(c). Because the conservation of bighorn sheep is a valid purpose of the Wilderness Act, the relevant question is whether the Service made an adequately reasoned determination of necessity. See High Sierra, 390 F.3d at 646-47 (holding that, in order to invoke an exception to prohibited conduct in a wilderness area, the Wilderness Act requires the relevant agency to make a reasoned finding of necessity).

In *High Sierra*, we interpreted the similar provision 16 U.S.C. § 1133(d)(5), which permits commercial services "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." We held that "[i]t is clear that the statutory scheme requires . . . that the Forest Service make a finding of 'necessity' before authorizing commercial services in wilderness areas." *High Sierra*, 390 F.3d at 646. We held that the Wilderness Act "does not specify any particular form or content for such an assessment" and that we must defer to the form selected by the agency. *Id.* at 646-47. Accordingly, we found that a "Needs Assessment" document prepared by the Forest Service sufficed as the required "necessity" finding. *Id.* at 647.

However, under the terms of the Wilderness Act, a finding of necessity is a necessary, but not sufficient, ground for permitting commercial activity in a wilderness area. The finding of necessity required by the Act is a specialized one. The Forest Service may authorize commercial services only "to the *extent* necessary."

Id. (quoting 16 U.S.C. § 1133(d)(5)). Keying off the emphasized text, we held that "the Forest Service must show that the number of [commercial activity] permits granted was no more than was necessary to achieve the goals of the Act." *Id.*

We held that the Needs Assessment document did not meet that requirement because "[n]owhere in the [document] does the Forest Service articulate why the extent of such [commercial] services authorized by the permits is 'necessary.' " Id. The Needs Assessment document "examined independently three topics related to the need for commercial services: the types of activities for which commercial services are needed, the extent to which current permits are being used, and the amount of use the land can tolerate." Id. "All of these are relevant factors to consider . . . [but], at some point in the analysis, the factors must be considered in relation to one another." Id. "If complying with the Wilderness Act on one factor will impede progress toward goals on another factor, the administering agency must determine the most important value and make its decision to protect that value. That is what the Forest Service failed to do in this case." Id.

[9] Here, similarly, the relevant statutory provision prohibits the creation of structures within a wilderness area "except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." 16 U.S.C. § 1133(c). Like the similar provision in *High Sierra*, this provision requires the agency to make a finding of necessity. But a *generic* finding of necessity does not suffice, *High Sierra*, 390 F.3d at 647; the Service must make a finding that the structures are "necessary" to meet the "*minimum* requirements for the administration of the area for the purpose of [conserving bighorn sheep]," 16 U.S.C. § 1133(c) (emphasis added).8

⁸It is that specific necessity finding, mandated by the statute, that the Service must make. We in no way hold that the Service must make a finding of "absolute necessity." Dissent at 20376.

[10] The Service failed to make that required finding. The Service undoubtedly found that, assuming that improvements to water facilities were necessary, the development of the two water structures was necessary. The record contains the requisite necessity finding as to that narrow question and a reasoned analysis justifying the finding. But the key question—whether water structures were necessary at all—remains entirely unanswered and unexplained by the record, even though the Service's own documentation strongly suggests that many other strategies could have met the goal of conserving bighorn sheep without having to construct additional structures within the wilderness area (for example, eliminating hunting, stopping translocations of sheep, and ending predation by mountain lions).

The Service points us to the three documents discussed in some detail in the factual background section, above: the 2007 Investigative Report, the Minimum Requirements Analysis, and the Minimum Tool Analysis. But they do not contain the required analysis.

The Service's 2007 Investigative Report provided a thorough, neutral, and scientific assessment of the many factors that contribute to sheep mortality, and the report made recommendations pertaining to each mortality factor. But the Investigative Report did not—and did not purport to—assess the factors *relative to each other*. Nor did the Investigative Report reach legal conclusions or even cite the relevant legal standard that the Service must apply before developing structures in a wilderness area. What the report did conclude, however, is that many factors other than access to water, either alone or in combination, might suffice to restore the population of bighorn sheep.

Perhaps most importantly, the report concludes that mountain lions recently began inhabiting the Kofa Refuge and killing bighorn sheep; in fact, the arrival of mountain lions corresponds precisely to the time frame in which the popula-

tion of sheep declined from its previously stable, optimal level. After decades of mountain-lion absence, the Service first received reports of mountain lions (and mountain-lion kills of bighorn sheep) in the Kofa Refuge during the crucial time period of 2003 to 2006. The report even concludes that mountain-lion predation may be "sufficient to prevent sheep population recovery." In its summary chart, the report lists four different actions related to mountain-lion predation as higher priorities than the development of water structures.

Similarly, the report acknowledges that, despite the relatively low population of sheep in 2003, the Service carried out a translocation of 31 sheep from the Refuge in 2005 which, the report concluded, "may have contributed to the low numbers seen in [one region of the Refuge] on the 2006 survey." The report recommends that the temporary cessation of translocations be continued.

Next, the report notes the obvious fact that hunting results in a population decline. Yet the report recommends, without explanation, that hunting be *continued* in the Refuge.

Finally, the report explains that human disturbance may lead to a reduction in the survival rate of bighorn lambs, and the report notes that peak hiking season in prime lambing territory corresponds directly to peak lambing season. The report concludes that temporary trail closures may be advisable.

[11] In short, the report identified many different actions that were likely to lead to an increase in the population of bighorn sheep: reduction in mountain-lion predation, cessation of translocations, moratorium on hunting, and temporary trail closures. Importantly, in contrast to the creation of new structures within the wilderness, the Wilderness Act does not prohibit any of those actions. The Service could have taken any or all of those actions without the need for a finding of necessity. Yet nowhere in the record does the Service explain why

those actions, alone or in combination, are insufficient to restore the population of bighorn sheep.

The Investigative Report did, of course, identify the creation of the new structures as one possible strategy toward the recovery of the bighorn sheep population. But the report never stated that the two water structures are *necessary*, either in the abstract or with respect to the statutory standard (which the report nowhere cited). The report simply listed that actionitem alongside the many other action-items, including those described above, all of which might contribute to the recovery of the bighorn sheep. Indeed, the report concluded that "[n]ew water developments can likely be constructed outside of wilderness," which would not require a finding of necessity. To the extent that the report contemplated the construction of water structures within the wilderness, it stated that those structures "will require . . . [a] minimum requirement analysis/minimum tool analysis."

Before building the two water structures, the Service did complete a Minimum Requirements Analysis and a Minimum Tool Analysis. Those documents amply describe the reasons for the Service's decision to construct these two particular water structures, assuming that water structures are necessary at all. But, again, nowhere does the Service address that underlying assumption. The documents leap from the worthy goal of conserving bighorn sheep to the need for additional water structures. The basis for that analytical leap is nowhere described.

In fact, with only one possible exception, the two documents provide no basis for the conclusion that the Service even *considered* the possibility of actions other than the construction of water structures. The documents as a whole demonstrate that the Service began with the assumption that water structures are necessary and reasoned from that starting point.

In only one place is it even arguable that the Service considered the possibility of other actions. On the first page of the

yes/no checklist, the Service circled "NO" in response to the question: "Are there other less intrusive actions that can be taken or that should be tried first inside or outside wilderness that will resolve this issue? (i.e. signing, visitor education, information, regulations, use limits, law enforcement, are [sic] or trail closures, etc). Circle *Yes* or *No*." Viewing the documents as a whole, the Service's response to this question likely carried forward its primary underlying assumption: that water structures are necessary. In context, the Service likely interpreted this question as asking whether "other less intrusive [water-based] actions" such as hauling of water or development of structures outside of wilderness "should be tried first."

Even if one assumes that the Service understood this question as querying whether other non-water-based actions should be tried first, this lone, generic question cannot meet the requirement under the Wilderness Act that the Service explain its conclusion. As we wrote in *High Sierra*, 390 F.3d at 647, the Service must, "at some point in the analysis," weigh the relevant factors "in relation to one another." (Emphasis added.) As in High Sierra, "[n]owhere in the [record] does the . . . Service articulate why" the action taken is "necessary" to meet the "minimum requirements" of the Act. *Id.* (emphasis added). And, as in *High Sierra*, that failure is fatal. Where, as here, the record demonstrates that many alternative actions *not* prohibited by the Wilderness Act very well could have attained the Service's goal, a single yes/no question cannot suffice to invoke the very limited exception for structures that are necessary to meet the minimum requirements for the administration of the purposes of the Wilderness Act. The Service's decision "entirely fail[s] to consider an important aspect of the problem," namely, the failure to consider whether new water structures are necessary at all. Lands Council v. McNair, 537 F.3d 981, 987 (9th Cir. 2008) (en banc) (internal quotation marks omitted), overruled in other part as recognized by Am. Trucking Ass'ns v. City of Los Angeles, 559 F.3d 1046, 1052 (9th Cir. 2009).

[12] The Wilderness Act imposes a strong prohibition on the creation of structures, subject only to an exception for structures that are *necessary* to meet the Act's *minimum* requirements. Just because a particular variable affects the sheep's viability, the Service is not free to create structures addressing that variable without regard to any other variables at play. The Act certainly provides for some flexibility to address a given situation, even with imperfect information and time and budget constraints. But, unless the Act's "minimum requirements" provision is empty, the Service must, at the very least, *explain* why addressing one variable is more important than addressing the other variables and must *explain* why addressing that one variable is even necessary at all, given that addressing the others could fix the problem just as well or better.

[13] There is little question that improvements to the water supply likely will help the sheep recover. But, when the issue is a new *structure*, that conclusion is not good enough under this statute. The statute requires that a structure be "necessary to meet minimum requirements" of the wilderness. 16 U.S.C. § 1133(c). It is beyond dispute that, if addressing other variables will lead to satisfactory sheep recovery, then a new structure is not "necessary." The Service's complete failure to address that key question is fatal to its conclusion.⁹

CONCLUSION

[14] The Wilderness Act requires a delicate balancing between Congress' desire to maintain lands untouched by humans and Congress' recognition that such an idealistic view

⁹As we have explained, and notwithstanding the dissent's assertions to the contrary, the documents in the record simply do not contain an explanation for that key question. The dissent cobbles together *its own explanation* from disparate parts of the various documents at issue and from its own analysis of sheep recovery, but it is *the Service's explanation*, or lack thereof, that we must review, and we cannot supply missing elements for the agency.

is subject to some practical limitations. The prohibition on the creation of permanent structures within a wilderness area is one of the strictest prohibitions, subject only to an exception for structures that are necessary to meet the minimum requirements for the administration of the purposes of the Act. It may be that the two water structures at issue here are, in fact, necessary to meet the minimum requirements for conserving bighorn sheep, which is a permissible purpose. But, in light of the many other potential avenues of achieving bighorn sheep conservation identified by the Service itself, the Service must provide enough evidence and explanation in the record to assure this court that it fully considered those avenues and nevertheless rationally concluded that new water structures are, in fact, necessary. Because the record is wholly inadequate to meet that requirement, we reverse the district court's determination to the contrary and remand with instructions to determine the appropriate remedy. On remand, the court may accept briefing from the parties on whether to require the Service to dismantle the structures, to remand the matter to the Service for reconsideration regarding "necessity" under the Wilderness Act, or to fashion such other relief as may be appropriate.10

REVERSED and REMANDED with instructions.

¹⁰On appeal, Plaintiffs requested a specific remedy: removal of the structures via non-motorized means. The Service did not object and, indeed, did not address the issue of remedy at all. We express no opinion on whether the Service may be precluded, by waiver or otherwise, from objecting to that form of relief.

Because the Service did not brief the issue of remedy, we believe that it is prudent to remand the issue to the district court to address with the benefit of full advocacy. The dissent's view of the appropriate remedy is, as we state in text, one possible option. But we are perplexed by the dissent's insistence that we must reach an issue that one party failed to brief—particularly because our decision to remand prejudices neither party.

BYBEE, Circuit Judge, dissenting:

This should not have been a hard case. For more than seventy years, "[t]he dominant wildlife and habitat management theme for the Kofa...has been the preservation of the desert bighorn sheep species." For much of that period, the Fish and Wildlife Service ("Service"), together with the BLM and the Arizona Game and Fish Department ("AGFD"), has supplied water to bighorn herds in the Kofa. So it is no surprise that after observing a dramatic decline in the bighorn population in this region, the Service proposed a variety of non-mutually exclusive solutions, including redevelopment of the Yaqui and McPherson tanks—two existing but unreliable water sources considered to be critical to the survival of the bighorn in the Eastern Kofa.

Although "[t]here is little question that improvements to the water supply likely will help the sheep recover," Maj. Op. at 20356, and although "[t]he Service undoubtedly found that . . . the development of the two water structures was necessary," id. at 20352, and although the documents prepared by the Service "amply describe the reasons for the Service's decision to construct these two particular water structures," id. at 20354, the majority nevertheless holds that the agency acted arbitrarily and capriciously because it never explained whether there was a "need for additional water structures," id., or even "whether water structures were necessary at all." Id. at 20352. In the process, the majority holds that the Service should have engaged in a formalized, side-by-side comparative analysis of the various factors affecting the bighorn's decline, id. at 20354, even though we previously told the Service that the Wilderness Act "does not specify any particular form or content" for a finding that an action is "necessary."

¹U.S. Fish & Wildlife Service, Kofa National Wildlife Refuge and Wilderness and New Water Mountains Wilderness Interagency Plan, Environmental Assessment, and Decision Record 35 (1996) [hereinafter Kofa Management Plan].

High Sierra Hikers Ass'n. v. Blackwell, 390 F.3d 630, 647 (9th Cir. 2004). In so holding, as I explain in Part I, the majority ignores our deferential standard of review under the APA and engrafts new procedural requirements onto the Wilderness Act.

Additionally, as I explain in Part II, the majority fundamentally misconstrues the appropriate remedy for cases where an agency provides insufficient reasons for its action. Rather than remanding this case to the agency for a fuller explanation of its reasoning—as both Supreme Court and circuit precedent require—the majority remands to the district court for an exercise in futility: determination of the appropriate remedy. Then, under the guise of "express[ing] no opinion on whether the Service may be precluded, by waiver or otherwise, from objecting to th[e] form of relief" requested by the Plaintiffs, the majority even suggests that dismantling the structures may be the only appropriate remedy in this case. Maj. Op. at 20357 n.10.

I respectfully dissent.

Ι

There is nothing unusually difficult about this case. Like any other routine administrative law appeal, it presents a finding made by an agency—here, the Service's finding that building additional water sources was necessary to meet minimum administrative requirements for the conservation of the bighorn in the Kofa—and a subsequent decision based upon this finding—here, the Service's decision to redevelop the Yaqui and McPherson tanks. Our task is, simply, to determine whether the agency's finding, and thus its subsequent decision, was "arbitrary" or "capricious," 5 U.S.C. § 706(2)(A), in light of the administrative record as a whole.

We know the standard of review: We may not overturn the Service's decision simply because we disagree with it, nor may we substitute our own judgment for that of the Service because we feel the Service's decision was imprudent or unwise. See River Runners for Wilderness v. Martin, 593 F.3d 1064, 1070 (9th Cir. 2010). Rather, we must simply determine whether "the [Service's] decision is founded on a rational connection between the facts found and the choices made . . . and whether [the Service] has committed a clear error of judgment." Id. (citation and quotation marks omitted). "To do so, we look to the evidence the . . . Service has provided to support its conclusions, along with other materials in the record, to ensure that the Service has not, for instance, relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or an explanation that is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." The Lands Council v. McNair, 537 F.3d 981, 993 (9th Cir. 2008) (en banc) (quotation marks and alterations omitted). "Even when [the Service] explains its decision with less than ideal clarity, [we] will not upset the decision on that account if the [Service's] path may reasonably be discerned." Alaska Dept. of Envtl. Conservation v. EPA, 540 U.S. 461, 497 (2004) (quotation marks and citation omitted).

Here, the Service has produced three primary documents to explain why redeveloping the Yaqui and McPherson water structures was necessary to meet minimum requirements for the conservation of the bighorn: (1) the *Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd* ("Kofa Bighorn Investigative Report"), a 39-page report that found a need to supply bighorn sheep with water; (2) the Kofa National Wildlife Refuge Minimum Tool Analysis ("Kofa Minimum Tool Analysis"), a six-page document that concluded that without action, the bighorn population would continue to decline; and (3) the Kofa National Wildlife Refuge Minimum Requirements Analysis ("Kofa Minimum Requirements Analysis"), a two-page decision document that found

there were no other less intrusive actions that could be taken to reverse the decline of the bighorn.² Together, these documents demonstrate that the Service considered all the important aspects of the problem and offered a reasonable explanation for the necessity of building additional water sources for the sheep. Accordingly, with a few citations to important sections of these various reports, the majority should uphold the Service's decision in a rather unremarkable opinion. Instead, the majority holds the Service's decision arbitrary and capricious not because of what the Service said in its reports, but because of what, allegedly, it did not say. Specifically, the majority claims the Service never stated that water structures were necessary and never explained why addressing factors other than water would be insufficient to reverse the bighorn's decline. As I discuss below, the record reveals the Service thoroughly addressed the majority's concerns.

A

First, the majority holds the Service acted arbitrarily and capriciously because the Service "never stated that the two water structures are *necessary*, either in the abstract or with respect to the statutory standard." Maj. Op. at 20354. However, the Service did explicitly state "there [are no] other less intrusive actions," other than redeveloping the two water tanks, that would help the sheep recover. *See Kofa Minimum*

²The Service has also discussed the bighorn in more comprehensive studies, such as the 1996 *Kofa Management Plan*, a more than 100-page management plan that considered, among other things, how the Service could "carry out a dual, but nonetheless interrelated, role of managing for bighorn sheep within the context of wilderness." *Kofa Management Plan* at 37. *See* 16 U.S.C. § 1133(a) (The Wilderness Act is "within and supplemental to the purposes for which . . . units of the . . . natural wildlife refuge systems are established and administered.") (emphasis added). Additionally, the Service described its proposed redevelopment of the two tanks in a five-page document, *Categorical Exclusion, Yaqui and McPherson Tanks Redevelopment Projects* ("Kofa Categorical Exclusion").

Requirements Analysis at 1. I give this statement its plain and ordinary meaning: "the two water structures are necessary, either in the abstract or with respect to the statutory standard." Maj. Op. at 20354. To explain the Service's statement, the majority conjures up a handy expedient: the Service's statement is meaningless because, you see, the Service had already "assum[ed] that water structures are necessary and reasoned from that starting point." Id. at 20354. Thus, according to the majority, the Service's statement "likely carried forward [this] primary underlying assumption." Id. As I explain below, a close reading of the Service's reports reveals the Service never assumed water structures were necessary; rather, the Service arrived at this conclusion after carefully studying the bighorn's decline.

The Kofa Bighorn Investigative Report, conducted jointly by the Service and the AGFD, reveals both that bighorn sheep need reliable water sources to survive and that reliable water sources must be supplied to the bighorn. Specifically, the report found that "water distribution is a critical habitat variable for desert bighorn" and that the sheep are "dependen[t] on reliable water sources." Kofa Bighorn Investigative Report at 8. The report found that in areas where the AGFD had maintained water for the sheep, the populations "remained fairly stable in comparison to the Kofa population." *Id.* at 9. Yet despite the critical importance of reliable water sources, "[f]ew of the [existing] bighorn waters could be considered permanent, which means that they may go dry during the height of summer when water is needed most, or during drought years." Id. Indeed, a water survey conducted during a drought year revealed that "very few of the known waterholes were not dry." Id. This observation is significant first, because it shows sheep must be supplied with water, and second, because when "a water source dries up, bighorn may not move to new areas to find water." Id. Thus, it does not matter much that the Kofa Wilderness "has a large number of water sources" because "their utility for sheep and their reliability varies greatly." *Id.* In light of these observations, the report determined that

[i]n addition to a need for better monitoring and maintenance of existing waterholes, a better distribution of permanent water supplies is needed to provide water in all areas of suitable sheep habitat. . . . Some existing ephemeral waters can be improved or redeveloped to hold water longer, but in some areas new waters might need to be built. . . . New water developments can likely be constructed outside of wilderness, although construction in wilderness should remain an option if a wilderness location best meets wildlife management needs.

Id. Accordingly, the report recommended that the agency "[i]dentify existing waters that need to be redeveloped to improve water holding capacity and efficiency" to "[e]nsure year-round water availability for all bighorn sheep on the Kofa [National Wildlife Refuge]." *Id.* at 10.

The Kofa Bighorn Investigative Report was consistent with the Service's comprehensive management plan, which likewise stressed that bighorn sheep must be supplied with water to survive. Specifically, the management plan explained that

[i]n the extremely dry Sonoran Desert ecosystem, water is the primary habitat component and variable. Over the years, wildlife managers have learned to manipulate the conservation of water in the desert for wildlife management purposes. . . . Kofa NWR has a long history of water hole development projects aimed at improving wildlife numbers and distribution throughout the refuge.

Kofa Management Plan at 31.3 The Kofa Management Plan

³Water developments in the Refuge have been a longstanding conservation tool of the bighorn sheep in the Kofa area. As early as 1937, refuge

further explained that "[e]ven with . . . improvements some [water] tanks occasionally go dry." *Id.* "To prevent large scale wildlife movement away from these areas, or even worse, wildlife die offs, water is hauled to these drought susceptible tanks when needed." Id. Moreover, the Service addressed the need for "artificial water catchments" to help preserve bighorn sheep in the Kofa. Id. at 36; see also id. at 38 ("The development of water sources for the bighorn sheep has been an important factor in species recovery since the 1950s."); id. at 39 ("Strategic water development programs" for bighorn are a "key management tool[] in the restoration of moribund [bighorn] populations to historic carrying capacities.") (internal quotation marks omitted). Thus, as obvious as the need for water is in the desert Southwest, the Service never "assum[ed] that water structures [were] necessary," as the majority asserts. Maj. Op. at 20354. Rather, the Service arrived at this conclusion after carefully documenting the impact of water availability on the survival of the bighorn.

After explaining why—as a general proposition—water structures are necessary for the survival of the bighorn, the Service explained why the two particular water structures at issue here—the Yaqui and McPherson tanks—were necessary. Specifically, the Service noted that the Yaqui and McPherson tanks were "considered to be critical to bighorn sheep, based on their locations in sheep habitat and documentation of sheep use." *Kofa Bighorn Investigative Report* at 9. The Service further explained that "permanent water sources"

managers were discussing water developments and predator control as methods to conserve the population. David Brown, *Early History*, *in* The Desert Bighorn Sheep in Arizona 7 (Raymond M. Lee, ed., 1993). Since the 1950s, the AGFD helped develop over 100 water sources for bighorn sheep, and in 1968 non-profit organizations began coordinating volunteers who offered to improve and maintain sheep water sources in cooperation with Arizona and the federal government. *Kofa Management Plan* at 38; *see also* William Werner, *Water Development*, *in* The Desert Bighorn Sheep in Arizona at 163.

for desert bighorn sheep are relatively clustered, leaving large areas of desert bighorn sheep habitat without permanent water" and that the planned Yaqui and McPherson tanks were "relatively distant" from other existing, permanent water sources. 4 Kofa Minimum Tool Analysis at 1. Thus, the Yaqui and McPherson tanks "would fill gaps in the eastern portion of the Kofa Mountains and in the McPherson Pass area." Id. Aside from highlighting the remote locations of the Yaqui and McPherson tanks, the Service also explained that redeveloping these two tanks "would provide reliable, year-round water for desert bighorn sheep at two locations . . . where the existing Yaqui and McPherson Tanks have not always been reliable and have been very difficult, logistically, to maintain." *Id.* The Service further stressed the unreliability of the existing water tanks when explaining why the project was a redevelopment: the project involved the installation of "a modern design requiring little water augmentation . . . in the vicinity of an existing, non-functional or unreliable source." Id. (emphasis added).

The Service then considered alternatives: (1) not to redevelop the Yaqui or McPherson tanks, (2) to redevelop the tanks using mechanized means, or (3) to redevelop the tanks through non-mechanized means. See Kofa Minimum Tool Analysis at 2-5. It rejected the first alternative—doing nothing—because "[w]ithout improvements to the current distribution of permanent water, the desert bighorn sheep population could be expected to continue to decline," while providing water would "assist[] lactating ewes in milk production" thereby "improv[ing] lamb survival, which is critical to population recovery." Id. at 3. The Service characterized the option of doing nothing as "failing to meet its responsibilities for

⁴The location of these tanks was critical because the "optimum water distribution" for the bighorn is two miles. William Werner, *Water Development*, in The Desert Bighorn Sheep in Arizona at 164. "[G]ood distribution of water" helps disperse the sheep, reducing stress and disease transmission. *Id*.

wildlife and habitat management . . . [and] its legal or policy requirements." *Id.* at 4. Of the two remaining alternatives, the Service recommended the second—mechanized redevelopment of the Yaqui and McPherson tanks—because using vehicles and mechanized tools would minimize the time its employees spent in the wilderness (three days versus two to three weeks for non-mechanized redevelopment).

Based on the documents discussed above, the Service ultimately determined that there were no other "less intrusive actions that can be taken or that should be tried first inside or outside wilderness" to reverse the decline of the bighorn and that the "activity [could not] be accomplished outside of [the] wilderness." Kofa Minimum Requirements Analysis at 1. The Service then evaluated the potential adverse effects on the wilderness character and concluded that the project should proceed because "[w]ildlife is a wilderness resource" and "[t]he proposed action is intended to restore and maintain wildlife and wildlife habitat." *Id.* at 2. Significantly, the Service even explained how redeveloping the Yaqui and McPherson tanks would actually increase the wilderness character of the land: "Overall, the impact of maintenance activities in the Kofa Wilderness would decrease since very little water hauling after construction is expected to take place." Kofa Categorical Exclusion at 5.5

⁵Once the Service concluded that additional water structures were necessary for the recovery of the bighorn, the Service took great care to preserve the wilderness character of the land. The Service's respect for wilderness can be seen both from the locations chosen for the two water structures and from the manner in which the Service redeveloped the Yaqui and McPherson tanks. First, most of the redeveloped Yaqui tank is located just outside wilderness-indeed, only two or three "substantially unnoticeable" water diversion weirs are located on wilderness land-while the redeveloped McPherson tank is located inside wilderness, but within 0.1 miles of a designated road. Kofa Categorical Exclusion at 5. These strategic locations show that the Service sought to minimize intrusions on wilderness land. Second, the Service completed the work in three days, removed tracks left by workers and vehicles, covered visible portions of the water structures to blend them into the natural habitat, and replanted nearby plants. These efforts show the Service restored, as much as possible, the wilderness character of the land.

The majority nevertheless argues that "nowhere in the record does the . . . Service articulate why the action taken is necessary to meet the minimum requirements of the Act," Maj. Op. at 20354-55 (alterations omitted), and that the Service did not address "the key question—whether water structures were necessary at all," leaving that question "entirely unanswered and unexplained." Id. at 20352. The record belies the majority's claim. Looking at these documents as a whole, the Service articulates repeatedly that the bighorn sheep need water to survive and that the existing water sources are not adequate for sheep in the Kofa Mountains and the McPherson pass area. See, e.g., Kofa Bighorn Investigative Report at 8-9 (stating that "water distribution is a critical habitat variable for desert bighorn, . . . [sheep are] dependen[t] on reliable water sources, . . . a better distribution of permanent water supplies is needed to provide water in all areas of suitable sheep habitat, ... new waters might need to be built, [and] ... construction in wilderness should remain an option if a wilderness location best meets wildlife management needs"); Kofa Minimum Tools Analysis at 3 (stating that "[w]ithout improvements to the current distribution of permanent water, the desert bighorn sheep population could be expected to continue to decline"); Kofa Minimum Requirements Analysis at 1 (stating that "there [are no] other less intrusive actions," other than redeveloping the two water tanks, that would help the sheep recover); Kofa Categorical Exclusion at 4 (stating that "[w]ithout improving the distribution and reliability of available water, it is likely that the desert bighorn sheep will continue to decline").

Admittedly, the Service could have been more didactic in its explanation, locating it in one document rather than several. But because the Wilderness Act "does not specify any particular form or content" for the Service's finding of necessity, *High Sierra Hikers*, 390 F.3d at 647, the Service does not fail to make a finding of necessity simply because it does not explain its reasoning in a single document. The majority, however, accuses me of "cobbl[ing] up [my] own explanation

[of why water structures were necessary] from disparate parts of the various reports . . . [when] it is the Service's explanation, or lack thereof, that we must review." Maj. Op. at 20351 n.8. With respect, the majority misses the point. The majority wants the Service to hold us by the hand and to slowly and exhaustively explain to us its actions at every junction along the way. But the Service's reasoning and conclusions are readily discernable from the record, and so we are required to uphold the Service's decision to redevelop the two water tanks. See Alaska Dept. of Envtl. Conservation v. EPA, 540 U.S. 461, 497 (2004) ("Even when an agency explains its decision with less than ideal clarity, a reviewing court will not upset the decision on that account if the agency's path may reasonably be discerned.") (internal quotation marks omitted); see also River Runners, 593 F.3d at 1078 (holding that absence of a specific discussion of the amount of motorized traffic found necessary and appropriate does not require overturning the agency's action if the agency's consideration of the motorized traffic necessary "can reasonably be discerned" from the documents provided by the agency). We have no right to impose additional burdens on the agency because we think we can improve its handling of the matter. See Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 546 (1978) ("[I]f courts continually review agency proceedings to determine whether the agency employed procedures which were, in the court's opinion, perfectly tailored to reach what the court perceives to be the 'best' or 'correct' result, judicial review would be totally unpredictable.").

В

In addition to holding that the Service acted arbitrarily and capriciously because it never stated that water structures were necessary, the majority also holds the Service acted arbitrarily and capriciously because "nowhere in the record does the Service explain why [addressing other possible causes for the bighorn's decline], alone or in combination, are insufficient to

restore the population of the bighorn sheep." Maj. Op. at 20353-54. But the Service did not consider the need for the Yaqui and McPherson tanks in isolation, as the majority suggests. Rather, these tanks—which service a remote area of the Kofa—are part of a comprehensive plan for promoting the survival of the bighorn. The Service also analyzed other possible causes of the bighorn's decline and incorporated recommendations regarding these causes into its overall proposal. This comprehensive analysis discharges the Service's obligation to consider other possible causes.

1

Nevertheless, the majority argues that redeveloping the water tanks was not "necessary" because "many factors other than access to water, either alone or in combination, might suffice to restore the population of bighorn sheep." Maj. Op. at 20352. The majority points to four factors: translocation, human disturbance, mountain lion predation, and hunting. *Id.* at 31-32. But the majority is wrong. The Service did consider these factors in the 2007 *Kofa Bighorn Investigative Report*. Specifically, the Service found that each factor contributed in some way to the decline in the bighorn sheep population from 813 to 390 between 2000 and 2006, but concluded that drought was the principal explanation for the decline.

For example, with regard to translocation, the Service observed that "[t]ransplants of sheep from the Kofa were conducted nearly every year from 1979 through 1998 with no apparent decline in population." *Kofa Bighorn Investigative Report* at 18. No sheep were transplanted from the Kofa in 2000, 2003, or 2004 "because of drought conditions." *Id.* In 2005, thirty-one sheep were translocated, and the report acknowledged that "[w]hile not the ultimate cause of the population decline, the 2005 transplant may have contributed to the low numbers" in 2006. *Id.* In 2006, because the levels of sheep were "historically low," the Service discontinued the

transplant program until the bighorn sheep population increased to an average of 800. *Id.* at 18-19.

With respect to human disturbance, the investigative report acknowledged that a "study conducted from 1977 to 1984 documented strong reactions . . . from Kofa sheep in response to 1 or 2 people" and that "[f]requent human disturbance of ewes may cause them to abandon the[ir] areas for less optimal habitat." *Id.* at 17. To address these concerns, the report recommended conducting surveys to identify critical lambing areas and instituting seasonal closures if substantial recreational use is observed in these areas. *Id.* These measures would certainly have some positive effect on the bighorn's recovery. But given that hikers have been present in the Kofa for decades and that their presence has not historically correlated with a decline in the bighorn's population, the Service could reasonably conclude that addressing human disturbance alone would not solve the bighorn's decline.

With respect to predators, particularly mountain lions, the investigative report found that "[i]t is unlikely that lion predation alone accounts for the decline observed." Id. at 13. The report noted that "[t]here are no verified records of mountain lions on the refuge between 1944 and 2001" but "a female lion and 2 kittens were spotted" in 2003 and "at least 5 lions [were documented] on the refuge in 2006." Id. at 12. The report acknowledged that researchers did not know much about the threat mountain lions posed to the bighorn sheep population because "[l]ittle is known about the . . . specific diet of mountain lions on Kofa NWR." Id. The report found "evidence that some mountain lions in bighorn sheep habitat may kill multiple sheep within a year, some may kill only one sheep within a year, and some may kill no sheep at all. The key factor is that lion-sheep interactions must be studied" Id. at 13. The report also stated that "predation is generally believed to rarely threaten population survival." Id. at 11. The report proposed further study and recommended collaring

lions and sheep to "[d]etermine [the] cause and extent of predation." *Id.* at 14.

Notwithstanding the Service's explanation of the need for further study, the majority speculates that addressing predation alone could be sufficient to restore the bighorn sheep population. See Maj. Op. at 20352-53. The majority places far too much stock in the explanatory power of the mountain lions. The report makes clear that the relatively recent appearance of mountain lions in the Kofa may contribute to, but cannot explain, the bighorn's decline. The bighorn herds in the Kofa declined by more than 400 sheep—a more than fifty percent decline—between 2000 and 2006. No mountain lions were even spotted until 2003, and only five were observed in 2006 in the 600,000 acre refuge. *Id.* at 20338-39. Most importantly—and this is one of the reasons the report recommended further study and made radio collars for lions and sheep a priority—the report stated that mountain lions were believed to have killed only *one* bighorn sheep in 2005 and 2006. Id. The presence of mountain lions in the Kofa cannot account for a 400-sheep decline that began three years before any lions were even observed. I thus respectfully disagree with the majority's claim that "[ending predation by mountain lions | could have met the goal of conserving bighorn sheep without having to construct additional structures within the wilderness area." Maj. Op. at 20352. There is no support for such conclusion in the record.

Lastly, the investigative report addressed hunting. It observed that Arizona issues hunting permits in an auction to support bighorn sheep management and conservation and that anywhere from five to seventeen bighorn sheep permits are issued each year. *Kofa Bighorn Investigative Report* at 19. The majority comments that "the report recommends, without explanation, that hunting be *continued* in the Refuge." Maj. Op. at 20353. The Service did explain this. The permits authorize hunting of mature rams only. The Service cited studies showing that "a healthy vigorous herd can be main-

tained by conservative harvest of mature rams " Kofa Bighorn Investigative Report at 19 (emphasis added). The hunting of mature rams has little effect on the survival of the sheep.

After reviewing the Service's various reports, it becomes apparent that the Service took a comprehensive look at the problem of declining bighorn populations and the various factors that may have contributed to that decline. Then, based on its scientific and technical expertise and drawing on decades of its own and Arizona's experience in conserving the bighorn in the Kofa, the Service reasonably concluded that supplying water to the bighorn was necessary to ensure the survival of a critical herd. That other factors—predation, translocation, hunting, and human disturbance—might come into play does not discredit the Service's determination that drought was the critical factor leading to the bighorn's decline. The majority errs by failing to afford the Service's scientific determination the special deference it is due. See, e.g., Arizona Cattle Growers' Ass'n v. Salazar, 606 F.3d 1160, 1167 (9th Cir. 2010) ("[W]hen an agency is acting within its expertise to make a scientific determination a reviewing court must generally be at its most deferential.") (internal quotation marks omitted); Ctr. For Biological Diversity v. Kempthorne, 588 F.3d 701, 707 (9th Cir. 2009) ("[High] deference is especially warranted

⁶For example, the Service found that "[s]evere drought conditions in 1996 and 2002 were likely causes for the bighorn population dips observed on the 1997 and 2003 aerial population surveys." *Kofa Bighorn Investigative Report* at 7. This finding was unsurprising because "extreme ambient temperatures, reduced moisture content of forage, and mating activities necessitate additional water intake, and thus [create] a dependence on reliable water sources." *Id.* at 8. The Service explained that, in addition to being "a critical habitat variable for desert bighorn, especially during summer months when temperatures can reach 120 [degrees]," water distribution affects other mortality factors for the bighorn sheep: "[d]isease in bighorn sheep is most prevalent when animals are stressed and during severe drought." *Id.* at 8, 15. The report concluded that, because of water's critical role in preventing mortality, "a better distribution of permanent water supplies [was] needed." *Id.* at 9.

when reviewing the agency's technical analysis and judgments, based on an evaluation of complex scientific data within the agency's technical expertise.") (internal quotation marks and citation omitted).

2

The majority recognizes that the 2007 report was "a thorough, neutral, and scientific assessment of the many factors that contribute to sheep mortality," but faults it for not "assess[ing] the factors *relative to each other.*" Maj. Op. at 20352. Specifically, the majority argues that *High Sierra Hikers* requires the Service to conduct a side-by-side, comparative analysis of the factors contributing to the bighorn's decline. Maj. Op. at 20354-55. But nothing in *High Sierra Hikers*, 16 U.S.C. § 1133(c), or the APA requires a comparison of this kind.

In *High Sierra Hikers*, we interpreted 16 U.S.C. § 1133(d)(5) in the context of the Forest Service's decision to authorize commercial packers to take groups through a wilderness area.⁷ 390 F.3d at 646. We held that the Forest Service's determination that "packstock was needed to provide access to those people who would otherwise not be able to gain access for themselves or their gear" supported a finding of necessity, but that the Forest Service failed to meet the Act's requirement of a "specialized" finding of necessity because the Service could authorize commercial services only "to the *extent* necessary." *Id.* at 647 (emphasis in original). Because the Act required that commercial services could be authorized "to the *extent* necessary" to realize the recreational purposes of the area, the court found that the "Forest Service

⁷The Wilderness Act generally prohibits commercial enterprises in the wilderness area, but authorizes commercial services within wilderness areas "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." 16 U.S.C. § 1133(c), (d)(5).

must show that the number of permits granted was no more than was necessary to achieve the goals of the Act" and that the Service must "articulate why the *extent* of such packstock services authorized by the permits is 'necessary." *Id.* (emphasis in original). The court emphasized that the language "to the *extent* necessary" required a more specialized determination, one that balanced the purposes of the Wilderness Area with the antithetical purposes of commercial activity. Because it failed to conduct a specialized finding of necessity—that the licenses were issued "to the *extent* necessary"—the Service "[a]t best . . . failed to balance the impact that the level of commercial activity was having on the wilderness character of the land [and a]t worst . . . elevated recreational activity over the long-term preservation of the wilderness character of the land." *Id.*

Unlike § 1133(d)(5), § 1133(c) does not require a specialized determination of necessity. Section 1133(c) prohibits structures "except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." Without a qualifier on the word "necessary," I would not interpret the statute as requiring a specialized finding of absolute necessity, as the majority does. See Maj. Op. at 20356 ("Just because [the need for water] affects the sheep's viability, the Service is not free to create structures addressing [the need for water] without regard to any other variables at play. . . . [T]he Service must, at the very least, explain why addressing [the need for water] is more important than addressing the other variables and must explain why addressing [the need for water] is even necessary at all. . . .").8

I see no reason to require the Service to show that improv-

⁸The practical effect of the majority's decision—requiring the Service to show that nothing but these additional water structures will help the sheep recover—subverts the majority's disclaimer that it "in no way hold[s] that the Service must make a finding of absolute necessity." Maj. Op. at 20351 n.8.

ing the bighorn's access to water at the Yaqui and McPherson tanks is the only way to stop the decline of the bighorn sheep population. Indeed, courts have long rejected interpreting "necessary" to mean "absolutely necessary" or "indispensable;" as the D.C. Circuit has explained: "[C]ourts have fre-

⁹Most obviously, the Supreme Court in *McCulloch v. Maryland*, 17 U.S. 316 (1819), rejected interpreting the word "necessary" in the Necessary and Proper Clause to mean "always import[ing] an absolute physical necessity, so strong, that one thing to which another may be termed necessary, cannot exist without that other" and instead found that the word "import[ed] no more than that one thing is convenient, or useful, or essential to another. To employ the means necessary to an end, is generally understood as employing any means calculated to produce the end, and not as being confined to those single means, without which the end would be entirely unattainable." *Id.* at 413-14; *see also Stenberg v. Carhart*, 530 U.S. 914, 937 (2000) (explaining that the word "necessary" in *Planned Parenthood of Southeastern Pennsylvania v. Casey*'s "phrase 'necessary, in appropriate medical judgment, for the preservation of the life or health of the mother . . . cannot refer to an absolute necessity or to absolute proof").

Other courts have followed suit. In Cellular Telecomm. & Internet Ass'n v. F.C.C. 330 F.3d 502, 510 (D.C. Cir. 2003), the court deferred to the FCC Commissioner's interpretation of "necessary" in 47 U.S.C. § 160(a), a statute allowing the FCC to forbear enforcing a regulation or a statutory provision if certain conditions are met. The court defined necessary as "that which is required to achieve a desired goal" and found that the term "does not foreclose a particular means to an end merely because other means are hypothetically available to achieve the desired end." Id. Similarly, in Inbesa America, Inc. v. M/V Anglia, 134 F.3d 1035, 1036 (11th Cir. 1998), the court stated that in order for a federal court to have admiralty jurisdiction over a contract, the elements of the contract must "pertain directly to and be necessary for commerce or navigation upon navigable waters. . . . The test we apply in deciding whether the subject matter of a contract is necessary to the operation, navigation, or management of a ship is a test of reasonableness, not of absolute necessity." Id. (omission in original). In In re Mile Hi Metal Sys., Inc., 899 F.2d 887, 892-93 (10th Cir. 1990), the court held that the term "necessary modifications" in the context of a collective bargaining agreement under 11 U.S.C. § 1113(b)(1)(A), "does not mean absolutely necessary" to the debtor's reorganization but must be "more than potentially helpful." And in Southland Royalty Co. v. United States, 582 F.2d 604, 605 (Cl. Ct. 1978), the court interpreted "necessary" under 26 U.S.C. § 162(a), which allows a quently interpreted the word 'necessary' to mean less than absolutely essential, and have explicitly found that a measure may be 'necessary' even though acceptable alternatives have not been exhausted." *Natural Res. Def. Council, Inc. v.* Thomas, 838 F.2d 1224, 1226 (D.C. Cir. 1988) (citations omitted); *see also Sierra Club v. Lyng*, 663 F. Supp. 556, 560 (D.D.C. 1987) (interpreting § 1133(d)(1)—which permits the agency to take such measures in the wilderness "as may be necessary in the control of . . . insects"—to allow the agency "to use measures that fall short of full effectiveness so long as they are reasonably designed to restrain or limit the threatened [insect] infestation"). A determination of absolute necessity would be nearly impossible for scientists and researchers to make and would render meaningless § 1133(c)'s exception to the structure prohibition.

Here, the Service took a tried-and-true approach: it looked at the potential impacts on the bighorn population and proposed a comprehensive solution. Rather than trying to isolate a one-size-fits-all solution, the Service moved forward on all fronts. It addressed predators, hunting, translocation, human disturbance, *and* water structures. The Service recognized that some of its proposals called for immediate action, while others required further study. Thus, for example, the Service did not recommend killing mountain lions, but studying them; it recommended seeking funding for GPS collars, but noted that such collars only "last 1-2 years, which would require frequent recollaring for long term monitoring efforts." *Kofa Bighorn Investigative Report* at 14. By contrast, as any denizen of the Southwest knows, obtaining water requires short-term planning, because finding adequate water in the desert is both

deduction for "all the ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business." The court held, "[a]n expense satisfies the requirement of being 'necessary' within the statute if it is 'appropriate and helpful' 'to the development of the tax-payer's business." *Id.*

an immediate and a constant concern. It is thus far from clear that the Service would have had a good basis for comparing the efficacy of mountain lion control with rebuilding the Yaqui and McPherson tanks, and nothing in the Wilderness Act suggests the Service must ignore immediate needs to compare them with long-term proposals. See Lyng, 663 F. Supp. at 560 ("The degree of efficacy of various . . . methods [of controlling insect infestation] is not to be debated between various scientists and resolved before this Court. The [agency's] judgment that the control measures authorized are reasonably efficacious is entitled to respect under [the APA].").

Although the Service did not do a side-by-side comparative analysis of the various causes of the bighorn's decline, nothing in the Wilderness Act, the Service's interpretation of the Act, the APA, or our decisions obligates the Service to conduct its review in that way. In fact, we have eschewed imposing such form on the Service. See High Sierra Hikers, 390 F.3d at 646-47 ("The Wilderness Act is framed in general terms and does not specify any particular form or content for [the Service's finding of necessity.]"). I would thus decline to hold the Service to a particular form or content to determine necessity. As long as the explanations the Service offered to support its finding of necessity are not implausible, do not omit an important aspect of the problem, and do not run counter to the evidence presented, I would uphold the Service's finding under the APA. See The Lands Council, 537 F.3d at 993.

The majority may not think that the Yaqui and McPherson tanks are necessary, but whether these two water structures are necessary or not is at best debatable. The Plaintiffs may consider bighorn management contrary to the natural order and an affront to the idea of wilderness, but the Service has declared—and the majority today affirms—that preserving bighorn in the Kofa is consistent with the Service's charge from Congress. *See* Maj. Op. at 20349. Where Congress has placed such decision-making power in the Service, the major-

ity errs by failing to "defer to the informed discretion of the responsible federal agenc[y]." *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989) (quotation marks omitted).

П

Ultimately, the majority concludes "the Service must provide enough evidence and explanation in the record to assure this court that it fully considered [alternative factors for the bighorn's decline and nevertheless rationally concluded that new water structures are, in fact, necessary." Maj. Op. at 20357. I think the Service did just that. But even if I were to agree that the record in this case is "wholly inadequate," I would not remand this case to the district court "with instructions to determine the appropriate remedy." Id. When both Supreme Court and circuit precedent mandate a remand to the agency for a more adequate explanation of the agency's reasoning, an open-ended remand to the district court is but an exercise in futility. The only remedy the district court should consider is remand to the Service for further explanation. See Florida Power & Light Co. v. Lorion, 470 U.S. 729, 744 (1985) ("[I]f the reviewing court simply cannot evaluate the challenged agency action on the basis of the record before it, the proper course, except in rare circumstances, is to remand to the agency for additional investigation or explanation."); Humane Soc'y of the U.S. v. Locke, ___ F.3d ___, 2010 WL 4723195, at *5 (9th Cir. Nov. 23, 2010) (holding that when the agency's "explanation is incomplete and inadequate to permit meaningful judicial review," the proper remedy is a remand "to afford the agency the opportunity to . . . articulate a reasoned explanation for its action"); see also Seavey v. Barnhart, 276 F.3d 1, 12 (1st Cir. 2001) ("When an agency has not considered all relevant factors in taking action, or has provided insufficient explanation for its action, the reviewing court ordinarily should remand the case to the agency."); Public Power Council v. Johnson, 674 F.2d 791, 794 (9th Cir. 1982) ("When there is a need to supplement the record to explain agency action, the preferred procedure is to remand to the agency for its amplification.") (citation omitted); 3 Charles H. Koch, Jr., Administrative Law and Practice § 8:32 (3d ed. 2010) ("Remand is particularly appropriate where the agency justification is inadequate . . . [because] the agency should be given every opportunity to justify its decision.").

For the reasons discussed above, the majority engrafts a new procedural requirement onto the Wilderness Act and the APA. Before building a permanent structure within wilderness, the Service must now make a thoroughly documented, formalized finding of necessity accompanied by the comparative, multi-factor, side-by-side analysis the majority dictates. But even more consequential is the majority's holding that the Service's failure to offer an explanation that satisfies the majority's new criteria is fatal to its case: without creating this judicially-mandated record, the agency's action is *per se* arbitrary and capricious. But

[t]here is a fine line between agency reasoning that is "so crippled as to be unlawful" and action that is potentially lawful but insufficiently or inappropriately explained. In the former circumstance, the court's practice is to vacate the agency's order, while in the later the court frequently remands for further explanation (including discussion of relevant factors and precedents) while withholding judgment on the lawfulness of the agency's proposed action.

Radio-Television News Directors Ass'n v. F.C.C., 184 F.3d 872, 888 (D.C. Cir. 1999); see also Checkosky v. SEC, 23 F.3d 452, 463 (D.C. Cir. 1994) (Silberman, J., concurring) (citing some of the "many instances where [the court has] remanded to an agency for a better explanation before finally deciding that the agency's action was arbitrary and capricious") (emphasis added).

Nevertheless, the majority concludes the Service's action was arbitrary and capricious because the Service failed to consider an important aspect of the problem—"namely, the failure to consider whether new water structures are necessary at all." Maj. Op. at 20355. The majority's holding rests on the following syllogism: (1) arbitrary and capricious agency actions must be set aside; (2) all inadequately explained agency actions are arbitrary and capricious; (3) therefore, inadequately explained agency actions must be set aside. I disagree with the second proposition of this syllogism; not all inadequately explained agency actions are arbitrary and capricious. The majority's approach sets aside agency actions

even when the reviewing court is unsure of the agency's reasoning. This assertion, if accepted, would fundamentally alter the role of the judiciary vis-a-vis administrative agencies by forcing courts to decide that the agency's action is either unlawful or lawful on the first pass, even when the judges are unsure as to the answer because they are not confident that they have discerned the agency's full rationale. This assertion finds support in neither logic nor precedent.

Checkosky, 23 F.3d at 463 (Silberman J., concurring).

The majority deflects analysis of the appropriate remedy in this case by giving the district court a choice: on remand, the district court may either require the Service to dismantle the water structures or may remand the matter to the Service for a fuller explanation of the Service's decision. The problem, of course, is that the majority errs by giving the district court this very choice. See 1 Richard J. Pierce Jr., Administrative Law Treatise § 8.5 (5th ed. 2010) ("If a court concludes that the explanation provided by the agency . . . is too terse to allow the court to apply the arbitrary and capricious test, the only remedy authorized by [the Supreme Court] is a remand to the agency for further explanation.") (emphasis added). Additionally, the majority even hints the Service may have waived its right to object to any remedy other than the dismantling of the structures. See Maj. Op. at 20357 n.10. I offer just one com-

ment in reply: I find it mind-boggling to think the Service can waive what courts must do.

* * * * *

An inescapable theme runs through the Service's various reports: water is, and historically has been, critical to conserving bighorn populations in the Kofa, and any proposal that does not take account of the herds' need for additional water sources is unlikely to succeed. In my view, the record in this case clearly indicates the agency conducted a comprehensive analysis of the possible causes for the bighorn's decline and reasonably decided to address the most pressing cause. Scattered over three reports, the Service's finding of necessity is not as graceful or as elegant as it could have been. But, unlike judges at a pageant competition, our proper role is not to grade the Service on poise and style. Rather, as the Supreme Court has consistently held, even if the Service does not explain its decision with "ideal clarity," we must uphold the decision "if the agency's path may reasonably be discerned." Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc., 419 U.S. 281, 286 (1974). Here, the Service's reasoning for redeveloping two critical but previously unreliable water sources can readily be discerned. Because the majority requires the Service to do more than it must do, I dissent.