

**SUBSTITUTE THE FOLLOWING CASE FOR THE WILDERNESS SOCIETY V.  
U.S. FISH & WILDLIFE SERVICE ON PAGE 1031, through Note 7 on p. 1038.**

WILDERNESS WATCH, INC. et al., v. U.S. FISH AND WILDLIFE SERVICE

United States Court of Appeals for the Ninth Circuit, 2010  
\_\_\_ F.3d \_\_\_, 2010 WL 5157167.

Before [A. WALLACE TASHIMA](#), [SUSAN P. GRABER](#), and [JAY S. BYBEE](#), Circuit Judges.

[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. [Plaintiff conservation organizations sued, alleging] \*\*\* 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. 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.<sup>1</sup> Arizona Desert Wilderness Act of 1990, 104 Stat. 4469. In doing so, Congress subjected the

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<sup>1</sup> The 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.

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, conservation, 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\(c\)](#). [emphasis added by editors]. 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*

\*\*\* [The Service, in cooperation with the BLM, issued a management plan for the Refuge in 1997, after public review and comment. It] 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 detracting of wilderness attributes and values.” *Id.* .

\*\*\* 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*

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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.

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. \* \* \* 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 [about 570 sheep have been moved from the Refuge in the last half-century]. \* \* \*. The area also 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 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." 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.

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." "Plans for ... new water developments will require an environmental assessment and minimum requirement analysis/minimum tool analysis."

### *2. Predation*

The report examined predation, primarily by mountain lions. The report noted that, until 2003, no mountain lions were known to exist within the Refuge. Beginning in 2003, however, there have been mountain-lion sightings and confirmed mountain-lion kills of bighorn sheep. "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. \* \* \*

### *3. Translocations*

The report [concluded that translocations may be a factor in lower populations, and] \* \* \* concluded that no additional translocations will occur until the population of sheep returns to historical levels.

#### 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.” 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. The government agencies have “issued anywhere from 5 to 17 bighorn sheep permits for the Kofa[Refuge] ... since 1960.” The report recommended, without explanation, that the agencies “[c]ontinue to offer bighorn sheep hunting opportunities consistent with sheep conservation.”

#### 5. *Human Disturbance*

[The report noted that the most popular areas and seasons for hiking strongly overlap with the peak lambing locations and seasons, and] \* \* \* 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.

#### 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. \* \* \*

[The Service also prepared a “minimum requirements analysis,” a two page document that contained circled “yes” or “no” answers to questions, and concluded on the second page that the construction of the water structures had potential adverse effects on wilderness, and recommended proceeding to a “minimum tool analysis.” The latter document was also prepared prior to initiating work on the new water structures within the Kofa Wilderness, and it noted:] \* \* \*

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 minimum tool analysis had three alternatives:] (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 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 \* \* \*. The district court granted summary judgment to the Service, holding that the Service had not violated the Wilderness Act.<sup>2</sup> Plaintiffs timely appeal.

## DISCUSSION

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.

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

\*\*\* 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).

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 untrammelled 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

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<sup>2</sup> At 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.

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.

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.

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. *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 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)).

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).

The plan demonstrated consistency in recounting the history of Kofa and its “conservation role in western Arizona.” Management Plan at 2. \* \* \* 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.

The plan also demonstrated thoroughness in addressing the new requirements that the wilderness designation would impose on the goal of conserving bighorn sheep. It \* \* \* 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 detracting of wilderness attributes and values.

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*

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.

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.”

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.” “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.” “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.”

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).<sup>3</sup>

The Service failed to make that required finding. The Service undoubtedly found that, *assuming that*

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<sup>3</sup> It 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.

*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.

\*\*\* 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 action-item 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 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.

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.

## CONCLUSION

The Wilderness Act requires a delicate balancing between Congress' desire to maintain lands untouched by humans and Congress' recognition that such an idealistic view 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.<sup>FN10</sup>

**REVERSED and REMANDED with instructions.**

[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,” and although the documents prepared by the Service “amply describe the reasons for the Service’s decision to construct these two particular water structures,” the majority nevertheless holds that the agency acted arbitrarily and capriciously because it never explained whether there was a “need for additional water structures,” or even “whether water structures were necessary at all.” 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, 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.” [High Sierra Hikers Ass’n. v. Blackwell](#), 390 F.3d 630, 647 (9th Cir.2004). In so holding, \* \* \* the majority ignores our deferential standard of review under the APA and engrafts new procedural requirements onto the Wilderness Act.

\* \* \*

\*\*\* [T]he 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.

\*\*\* The majority \*\*\* 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. \* \* \*

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. \* \* \* 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.”) \* \* \*.

[T]he 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.

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.” The majority points to four factors: translocation, human disturbance, mountain lion predation, and hunting. 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 \* \* \* human disturbance, \* \* \* 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.” \* \* \* 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. 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. 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. 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.” 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.” 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 maintained 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. \* \* \*

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*.” 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. 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. [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 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.’” 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. \*\*\*.<sup>4</sup>

I see no reason to require the Service to show that improving 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;”<sup>5</sup> \* \* \* *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

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<sup>4</sup> The 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.”

<sup>5</sup> Most obviously, the Supreme Court in [McCulloch v. Maryland](#), [4 Wheat. 316](#), [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.

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.

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](#). 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.

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. Where Congress has placed such decision-making power in the Service, the majority 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).

## Notes and Questions

1. Where do the majority and the dissent differ? Do both agree that preservation of bighorn sheep is consistent with the purpose of the Wilderness Act?
2. How do the majority and the dissent here differ in their interpretation of the language of the Wilderness Act, which prohibits any "structure or installation" in wilderness areas "except as necessary to meet the minimum requirements for administration of the area for the purpose of this chapter"? Is this an appropriate case for deference to the agency' interpretation of the statute under [Chevron](#) step one (see casebook pp. 241-44)?
3. What would the Service need to have done in its administrative record, and analysis, to satisfy the majority that it could put these water tanks in the Kofa Wilderness? Or does the majority make it impossible to reach that result?
4. Compare the majority's and the dissent's discussion of the earlier Ninth Circuit decision in [High Sierra Hikers Ass'n v. Blackwell](#) (2004), where the court upheld the U.S. Forest Service's finding under the Wilderness Act that allowing commercial outfitters to take large pack groups into the wilderness was a "necessary" commercial service under §1133(d)(5), which allowed such permits "to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas." The [High Sierra Hikers](#) court went on to fault the agency for failing to show that the number of permits granted was no more than necessary to achieve the goals of the Act, and therefore its renewal of permits "in the face of documented damage resulting from overuse does not have rational validity." It concluded that the ultimate purpose of the Act was "long-term preservation of wilderness areas." The court found that, despite the "diverse, and sometimes conflicting list of responsibilities imposed [by the Act] on administering agencies," and despite its emphasis on the importance of wilderness areas as places for the public to enjoy," public use should be restricted if it "would impair their future use as wilderness." 390 F.3d at 638 (emphasis in original). Was the [High Sierra Hikers](#) case easier or harder than the bighorn sheep water tank case, or just different

because it involved a different section of the act and a somewhat different test? The dissent here seems to think it was a very different case because of the wording of the different sections of the Act.

5. Look at the majority's discussion of an earlier Ninth Circuit decision in Wilderness Society v. U.S. Fish & Wildlife Service (2003), which struck down a "sockeye salmon enhancement project" in Wilderness Area as violating the Wilderness Act's prohibition against any "commercial enterprise \* \* \* within" any wilderness area. Was that an easier or harder case than this one, according to the majority here?

6. Why should commercial enterprises be per se incompatible with wilderness? What exactly is so objectionable about using the prime ecosystem of the wilderness to increase fish stocks? Should whether a project is a "commercial enterprise" be gauged by its physical impact in the wilderness, or by its degree of "psychological intrusion"? Would the Wilderness Act be improved if it prohibited only activities that physically degraded the ecosystem, or is the cultural component of wilderness significant here? Would that case have come out differently if the fish enhancement project were to promote sport rather than commercial fishing? Several years before the *Wilderness Society* case, the Ninth Circuit found that the same Wilderness Act provision banned commercial fishing from the wilderness areas in Glacier Bay National Park, notwithstanding long-established practices. *Alaska Wilderness Alliance v. Jensen*, 108 F.3d 1065 (9th Cir. 1997).

7. One of the issues in *Wilderness Society* was whether the commercial project took place "within" the wilderness. Would a project that removed genetic material from a rare plant found only within a wilderness, and generated a commercially valuable product in a laboratory outside the wilderness, violate the Wilderness Act? Compare the Sierra Club v. Lyng cases [Casebook, pp. 1016-22], where the court allowed the Forest Service to take actions within wilderness areas in order to protect commercial timber outside of the wilderness.