Wilderness Management in National Parks and Wildlife Refuges

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This Article provides a wilderness scorecard of sorts for the two "dominant use" land management agencies—the National Park Service (NPS) and the United States Fish and Wildlife Service (FWS). Given that both agencies operate under a similar conservation oriented mandate, one might assume that the imposition of a wilderness mandate would be closely aligned with their organic missions. However, NPS and FWS have both, at times, been surprisingly hostile toward wilderness within their systems. In NPS's case, this is likely because of a concern that wilderness might disrupt visitor use and rein in its management discretion over park activities and resources. It may also be due to the perception that NPS does not need wilderness because of its long history and reputation as the preeminent land steward among the federal agencies. For FWS, wilderness may be seen as interfering with its discretion and ability to manage wildlife populations and to restore habitat through deliberate intervention, both of which are favored by the state fish and game agencies that exert pressure on FWS.

While both agencies have issued policies supportive of wilderness preservation, only FWS has put its policies—at least some of them—in its regulations, while NPS continues to rely on nonbinding manuals and policies. Neither agency has been especially committed to wilderness planning, although FWS's planning processes may have a slight edge. Both agencies could improve their wilderness strategies and practices by engaging in rulemaking to solidify their commitment to preserving wilderness characteristics. For its part, the Department of Interior could take steps to coordinate its wilderness strategies and its oversight over all of the wilderness managing agencies.

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I. INTRODUCTION

The nation's preeminent preservation statute, the Wilderness Act of 1964, has achieved significant gains in ensuring that portions of federal lands remain "unimpaired for future use and enjoyment as wilderness."\(^1\) Great strides have been made to realize the congressional purpose of "secur[ing] for the American people of present and future generations the benefits of an enduring resource of wilderness .... administered ... in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, [and] the preservation of their wilderness character...."\(^2\) Despite the achievements, pressure to allow motorized access, road construction, and intensive recreational use within wilderness areas continues to mount.

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All four of the nation's federal land management agencies are subject to the Wilderness Act, and each has millions of acres of federally designated wilderness under its jurisdiction. But there is significant variation between agencies when it comes to their wilderness management approaches. As Robert Glicksman and George Cameron Coggins observed, the wilderness managing agencies have their own distinct traditions, missions, and governing standards, with "no pretense of uniformity or even of coordination."

Professor Glicksman's Article in this symposium issue explores the distinctions between the two multiple-use agencies—the Bureau of Land Management (BLM) and the Forest Service—and concludes that the Forest Service does a better job of achieving the objectives of the Wilderness Act. He measures the agencies' successes and failures by applying six factors that signify the agencies' approaches to wilderness: 1) the physical characteristics of the lands managed by each agency; 2) the agencies' history, culture, and structure; 3) the distinctions in statutory provisions governing the agencies' activities; 4) the differences in the agencies' planning and other policies; 5) congressional commitment to wilderness preservation on the lands under each agency's jurisdiction; and 6) judicial treatment of the agencies' wilderness related decisions.

This Article unabashedly borrows Glicksman's analytical framework to provide a scorecard of sorts for the two "dominant use" land management agencies—the National Park Service (NPS) and the United States Fish and Wildlife Service (FWS). It applies many of the same factors to determine whether NPS or FWS has had more success in handling wilderness issues. In a slight departure from Glicksman's analysis, this article hones in on wilderness management, but considers the agencies' approaches to wilderness designation to the extent that they shed light on the agencies' management modus operandi. Keying in on wilderness management leads to a greater emphasis on the language and implementation of the agencies' regulations and internal policies and guidelines. It also sharpens the focus on individual case studies on wilderness management and their resolution in court.

Like Glicksman's Article, this assessment provides an impressionistic view rather than an empirical one. For the purpose of the analysis, "success" in the agencies' approaches to wilderness management is measured by each agency's tendency to preserve the primitive, untrammeled character of wilderness areas under its jurisdiction, particularly when facing conflicts with other priorities and values. This benchmark for success tracks the Wilderness Act's requirement to keep wilderness areas wild by minimizing

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deliberate manipulation of natural biological and ecological processes and by prohibiting intrusive, "unnatural" human activities such as roads, motorized vehicles and equipment, structures, and installations.\(^6\)

Unlike the multiple-use agencies, the organic statutes of both NPS and FWS favor resource conservation and recreation over commodity production and extractive uses.\(^7\) Given that both agencies operate under a similar conservation oriented mandate, one might assume that the imposition of a wilderness mandate would be closely aligned with their organic missions. The agencies have not necessarily agreed.

NPS and FWS are alike in that they both have, at times, been surprisingly hostile toward wilderness within their systems. In NPS's case, this is likely because of a concern that wilderness might disrupt visitor use and enjoyment of the National Parks and rein in its management discretion over park activities and resources. It may also be due to the sentiment that NPS does not need wilderness because of its long history and reputation as the preeminent land steward among the federal agencies. For FWS, wilderness may be seen as interfering with its discretion and ability to manage wildlife populations and to restore habitat through deliberate intervention, both of which are favored by state fish and game agencies that exert pressure on FWS.

Part II of this Article tests these hypotheses by cataloguing the distinguishing features of wilderness management by the two dominant use agencies. It explores the physical characteristics of the land under each agency's jurisdiction, then turns to agency history, culture, and structure. Next, it assesses distinctions in the statutory provisions governing each agency, as well as the distinctions in their respective regulations and policies. Part III then attempts to identify management patterns and biases in NPS and FWS wilderness case studies. Part IV looks ahead, assessing how wilderness preservation on dominant use lands might be enhanced by reinforcing preservation oriented factors and by dampening preservation destroying factors. Possible options include legislative amendments, regulatory reforms, and presidential or secretarial orders. Part V provides

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\(^6\) Sandra Zellmer, *Wilderness, Water, and Climate Change*, 42 *Envtl. L.* 313, 315 (2012) ("[W]ilderness areas ought to be left largely 'untrammeled,' even if other important values [such as ecological restoration] are diminished over time...."); Zellmer, *supra* note 2, at 24–26 (similar); see also Sean Kammer, *Coming to Terms With Wilderness: The Wilderness Act and the Problem of Wildlife Restoration*, 43 *Envtl. L.* 83, 124 (2013) (arguing that the hallmark of wilderness management is the lack of manipulation or intervention). See generally BEYOND NATURALNESS: RETHINKING PARK AND WILDERNESS MANAGEMENT IN AN ERA OF RAPID CHANGE 86–87 (David N. Cole & Laurie Yung eds., 2010) (discussing views that interventions may be necessary to ensure resilient ecosystems in wilderness areas). For baseline conditions of wilderness areas, see FWS, REPORT ON THE 2011 WILDERNESS FELLOW INITIATIVE (2012), http://ecos.fws.gov/ServCatFiles/reference/holding/7678?accessType=DOWNLOAD; Ashley Adams et al., *Database Application for Wilderness Character Monitoring*, PARK SCIENCE, Jan. 15, 2014, http://www.nature.nps.gov/parkscience/index.cfm?ArticleID=543.

closing observations about the two agencies and their relative success as wilderness managers.

In contrast to Glicksman's assessment of the Forest Service and the BLM, where the Forest Service comes out the clear "winner," there is no obvious front runner between NPS and FWS. They each face pressure to allow intensive recreation: NPS must navigate demands for roads and tourism development, while FWS must navigate demands for wildlife propagation and hunting. They each have issued policies supportive of wilderness preservation. But only FWS has put its policies—at least some of them—in its regulations, while NPS continues to rely on nonbinding manuals and policies. Neither has been especially committed to wilderness planning, although FWS's planning processes may have a slight edge. Finally, each agency has prevailed in court when it has made preservation oriented decisions, and each has lost when it has attempted to favor intervention or development over preservation. All that can be said with confidence is that both agencies could improve their wilderness strategies and practices by engaging in rulemaking to solidify their commitment to preserving wilderness characteristics, and that the Department of Interior could take steps to coordinate its wilderness strategies and oversight over all of the wilderness managing agencies.

II. DISTINGUISHING FEATURES OF WILDERNESS MANAGEMENT BY THE DOMINANT USE AGENCIES

The Wilderness 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." Congress intended wilderness areas to be different than the vast majority of federal public land, "in contrast with those areas where man and his own works dominate the landscape." The Act further specifies that wilderness is "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions," having four essential characteristics:

(1) [It] generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;

(2) [It] has outstanding opportunities for solitude or a primitive and unconfined type of recreation;

(3) [It] has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and

9 Id.
Both the National Park System and the Wildlife Refuge System contain qualifying lands, but the physical characteristics of the two systems are distinct.

**A. Physical Characteristics**

1. **Wilderness Characteristics**

   In addition to being untrammeled and without permanent improvements or habitation, to qualify as wilderness, an area must be at least 5,000 acres or otherwise of “sufficient size as to make practicable its preservation and use in an unimpaired condition...” Wilderness designations include immense swaths of land, such as Death Valley National Park in California and Nevada, which contains more than three million acres, and the eight million acre Mollie Beattie/Arctic National Wildlife Refuge in Alaska. However, small areas amenable to preservation and use in unimpaired condition are also included in the system. For example, the Rocks and Islands Wilderness in California encompasses nineteen acres of coastal shoreline, reefs, and islands situated within the Pacific flyway, and the Pelican Island Wilderness—which was initially set aside as a bird haven by President Theodore Roosevelt in 1903—covers a mere six acres of lagoons within the Indian River in Florida.

   As for “primeval character and influence,” a wilderness area must “generally appear[] to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable...” It must also have “outstanding opportunities for solitude or a primitive and unconfined type of recreation...” In addition, wilderness areas may “contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” This provision is discretionary, and does not require that areas be selected for their ecological or other listed values. As a result,

   “many wilderness areas were chosen for reasons other than their ecological amenities. Unlike the National Wildlife Refuge System... the wilderness system was not designed to ensure that areas with the most biodiversity

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10 Id.
11 Id.
12 Zellmer, supra note 6, at 317.
14 Id.
15 Id.
16 See Peter A. Appel, Wilderness and the Courts, 29 STAN. ENVTL. L.J. 62, 77 (2010) (“[T]he suitability of an area for inclusion as wilderness is linked not to its ecological or environmental value but to its ability to fulfill a particular type of human use, namely, the provision of solitude and primitive recreation.”).
potential are included; rather, Congress and wilderness advocates... were more concerned with recreational and aesthetic virtues.”

As Glicksman notes, this may have caused "more portions of the national forests, which tend to feature more spectacular scenery and opportunities for hiking and camping in wooded areas, than of the [BLM] public lands [to be] chosen as wilderness." This is true of NPS lands as well. Other than battlefields and other historic sites, most of the units within the National Park System were chosen for their scenery, in contrast to wildlife refuges, which were generally chosen for their value as habitat.

Once designated, the Wilderness Act imposes some of the most restrictive, nondiscretionary management constraints found in federal law to ensure that wilderness areas retain their wild characteristics. Specifically, the Act flat-out prohibits permanent roads and commercial activities. It also limits motor vehicles, motorized equipment, mechanical transport, aircraft landings, structures, and installations. With respect to this latter set of activities, the Act makes a narrow exception for intrusions “as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter (including measures required in emergencies involving the health and safety of persons within the area).” Wilderness managers are also directed to manage wilderness areas “so as to preserve... natural conditions,” but “natural” is not defined in the Act, leaving managers with a great deal of discretion in the implementation of this provision.

In all, the National Wilderness Preservation System (“System”) includes 109.5 million acres spread across 757 wilderness areas. Of that amount, forty-four million acres of wilderness are located in forty-nine units of the National Park System (this comprises 40% of the wilderness system and roughly half of the National Park System), while twenty-one million acres of wilderness land are found in sixty-three units of the Wildlife Refuge System (18% of the wilderness system and roughly one-quarter of the Refuge System). According to Glicksman, the total acreage of wilderness areas

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17 Zellmer, supra note 6, at 320.
18 Wilderness Management, supra note 5, at 459.
19 16 U.S.C. § 1133(c) (2006); see e.g., Wilderness Soc’y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1069–70 (9th Cir. 2003) (en banc), rev’d in part on reh’g en banc, 360 F.3d 1374 (9th Cir. 2004) (enjoining salmon enhancement project within wilderness as an unlawful commercial enterprise); see also Alaska Wildlife Alliance v. Jensen, 108 F.3d 1065, 1074 (9th Cir. 1997) (prohibiting commercial fishing in a park’s designated wilderness areas).
administered by each agency is the "most obvious and objective manifestation of the differences in wilderness management experiences." Yet differences between the agencies in their implementation of the statutory prohibitions and exceptions and, more generally, their approaches to wilderness management go beyond the number of acres of wilderness under their jurisdiction.

2. National Park Characteristics

The National Park System includes 401 units spanning eighty-four million acres of land. In addition to national parks and monuments, there are dozens of battlefields, historical sites, recreation areas, parkways, and seashores. Every state hosts at least one unit, as does the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands.

The first national park, Yellowstone, is the core of one of the last intact natural ecosystems in the Earth's temperate zone, containing endemic predators, such as Grizzly bears and gray wolves, the oldest free-ranging native bison herd in the country, and a diverse array of other animal and plant species. Yellowstone and a number of other parks host unique geologic features, such as geysers, thermal pools, mudflats, lava tubes, hoodoos, canyons, and caves. The System is also known for its extensive historic and cultural resources, ranging from fossils of long-extinct species to centuries-old churches and other structures, and from petroglyphs to mountains and valleys that are sacred sites to Native American tribes.

In addition to natural and historic features, the System contains an extensive network of roads and infrastructure. There are about 900 visitor centers and contact stations within the System. Over 630 concessionaires operate in 128 different park units, providing visitors with food, shops,
transportation, and lodging options that range from four star hotels to modest campsites.\footnote{Nat'l Park Serv., Frequently Asked Questions, http://www.nps.gov/faqs.htm (last visited Apr. 18, 2014).}

Most of the largest national parks—especially those in the West—were created from existing public lands owned by the federal government.\footnote{Robert B. Keiter, The National Park System: Visions For Tomorrow, 50 NAT. RESOURCES J. 71, 82 (2010).} Despite their size, historian Patricia Limerick notes that, “[w]ith arbitrary borders determined by political and economic expedience more than by science, no national park makes ecological sense.”\footnote{PATRICIA NELSON LIMERICK, THE LEGACY OF CONQUEST 310 (1987).} This is especially true in the East, where many areas were heavily settled and fewer federal lands remained for the creation of new parks. In some cases, Congress conditioned the creation of new parks on state acquisition of certain designated private lands. In other instances, private lands have been acquired to create new park units, but not always in fee simple absolute. Some of the newer parks—like Padre Island National Seashore, established in 1963—have jurisdiction over only the surface estate, while mineral interests own the subsurface. Even more recently, conservation partnerships and the acquisition of conservation or scenic easements have been employed to expand the park system without obliterating existing ownership patterns.\footnote{Keiter, supra note 33, at 82.}

Mixed ownership patterns, wide variations in visitation and surrounding urban and rural populations, and the diverse array of park designations and resources make comprehensive, cohesive management of the National Park System a challenge, even without the overlay of a wilderness designation. Adding wilderness areas to the mix makes it all the more complex.

3. Wildlife Refuge Characteristics

The National Wildlife Refuge System comprises over ninety-five million acres of federal lands divided into 540 units located across the fifty states. It is home to more than 700 species of birds, 220 species of mammals, 250 reptile and amphibian species, and 200 species of fish. Although other categories of federal land, including National Parks, provide habitat for a diverse array of species, the Refuge System is the only category dedicated only to wildlife.\footnote{U.S. FISH & WILDLIFE SERV. AND NAT'L WILDLIFE REFUGE SYS., AN INDEPENDENT EVALUATION OF THE EFFECTIVENESS OF THE U.S. FISH AND WILDLIFE SERVICE'S NATIONAL WILDLIFE REFUGE SYSTEM 2, 132 (2008), \textit{available at} https://www.fws.gov/refuges/pdfs/NWRS_Evaluation_FullReport.pdf (describing the layout, scope, and purpose of the National Refuge System); Nationalatlas.gov, \textit{The National Wildlife Refuge System—A Visitor's Guide}, http://nationalatlas.gov/articles/boundaries/a_nwrs.html (last visited Apr. 18, 2014).}

Today, the system includes wildlife refuges as well as game ranges, waterfowl production areas, migratory bird refuges, wildlife coordination areas, and several other land categories. Historically, federal wildlife
refuges, such as the Pelican Island Bird Refuge, were designated individually by either the president or Congress, and each refuge had its own unique purpose. Many refuges were carved out of other types of federal lands, but some were purchased from, or donated by, private owners, sometimes with the assistance of birding and hunters’ groups. Some refuges still allow farming and other types of activities that predated their designation.

Topography ranges from expansive first- and second-growth forests and arctic tundra in Alaska, to deserts and shrublands in the Southwest, to islands and estuaries along both coasts and the Gulf of Mexico, to grasslands and prairie potholes in the Great Plains. The top ten largest wildlife refuges are found in Alaska, including two that exceed nineteen million acres. Several refuges in Montana, Nevada, and Arizona approach or exceed one million acres each. Although it is not the largest, according to FWS, one of the most remote refuges in the contiguous United States is the 40,000 acre Ruby Lake in Nevada. Many wildlife refuges in the South, Northeast, and Midwest are quite small, however, and a handful are under five acres. By contrast, the smallest refuge in Alaska, Izembek National Wildlife Refuge, spans 315,000 acres. As a result, according to Robert Fischman, "[t]he National Wildlife Refuge System is a tangle of land units with widely varying sizes, purposes, origins, ecosystems, climates, levels of development and use, and degrees of federal ownership and Service control."

B. Agency History, Culture, and Organization

Wilderness management within the National Parks and Wildlife Refuges is shaped by the pre-Wilderness Act history of the two agencies, as well as their preexisting management policies and organizational structure. Although both agencies are located within the Department of Interior, there are nearly as many disparities between the two as there are commonalities. The Department of Interior’s organizational structure and jurisdictional sweep has been described by Patricia Limerick as “a crazy mosaic,” with the range of each agency or bureau within it enough “to make the head spin.”

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38 See, e.g., Ctr. for Food Safety v. Salazar, 900 F. Supp. 2d 1, 2 (D.D.C. 2012) (allowing the use of genetically modified crops on farms in some refuges in the Southeast).
41 ANNUAL REPORT, supra note 39, at 11. Tetlin National Wildlife Refuge, with 700,000 acres, is the only other refuge in Alaska with under one million acres. Id.
43 LIMERICK, supra note 34, at 307.
A common feature of both the NPS and the FWS is that each agency was created *after* a good number of parks and wildlife refuges had been created. This Part of the Article teases out other commonalities and distinctions in pre-Wilderness Act agency history, along with the impacts of Wilderness Act passage on each agency, and then turns to current agency culture and organization.

1. Pre-Wilderness Act Agency History

According to Charles Wilkinson and Mike Anderson, "[t]he Forest Service can rightfully claim credit for pioneering the concepts and methods of wilderness planning." Moreover, "[t]he Forest Service... has remained, at the frontiers of administrative creativity and efficiency." Of course, the Forest Service's commitment to wilderness preservation has waxed and waned over time, as has the wilderness commitment of other agencies, including NPS and FWS.

a. National Parks

Long before Congress created the National Park Service with the passage of the Park Service Organization Act in 1916, it had established an array of parks, ranging from national battlefields to Yellowstone, and several other scenic parks. In the 1890s, Congress established five Civil War battlefield parks, which, along with their associated cemeteries, were managed by the United States War Department. Yellowstone's establishment in 1872 was followed by three larger, scenic parks in the 1890s: Sequoia, Yosemite, and Mount Rainier. Several archeologically significant sites, including Casa Grande Ruins and Mesa Verde, were established in the late 1800s and early 1900s as well, along with spas

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44 See infra notes 47–53, 96–101 and accompanying text.
46 Id. at 371.
47 Wilderness Management, supra note 5, at 451.
surrounding thermal hot springs. \(^{52}\) Meanwhile, the president utilized his authority under the Antiquities Act of 1906 to create several dozen national monuments, ranging from relatively small, archeologically significant sites to one of the deepest and most dramatic river canyons in the world (aptly named the Grand Canyon). \(^{53}\) These too came under NPS jurisdiction in 1916. \(^{54}\)

Some of the earliest and best known champions of the National Park System, such as John Muir, were among the first to espouse the value of preserving wild areas across the federal land holdings. \(^{55}\) In 1888, Muir wrote, "Only by going alone in silence, without baggage, can one truly get into the heart of the wilderness. All other travel is mere dust and hotels and baggage and chatter." \(^{56}\) Muir's expositions helped motivate Congress to declare Yosemite a National Park in 1890. \(^{57}\) Nearly 100 years later, Congress, in apparent agreement with Muir, designated 94% of Yosemite as wilderness. \(^{58}\)

NPS officials, on the other hand, were not terribly excited about wilderness preservation. Although by 1920 Stephen Mather, NPS's first director, admitted that parts of both Yosemite and Yellowstone "should be maintained as a wilderness" and "wholly undeveloped," \(^{59}\) he enthusiastically supported increasing visitor access throughout the Park System. Mather, a former marketing director and owner of the detergent-mining company Borax, was determined to fulfill Interior Secretary Franklin Lane's vision of making the parks a "national playground." \(^{60}\) Capitalizing on the nation's newfound love for automobiles was, in Mather's mind, the key to ensuring continued political and financial support for the system. This required roads, lodges, and other visitor facilities—lots of them. According to Robert Keiter, "[i]n a few short years, the early parks were literally transformed in

\(^{52}\) SELLARS, supra note 51, at 17 (describing a pattern of intensive, resort development around thermal springs and scenic areas).

\(^{53}\) Id. at 13; see also Cameron v. United States, 252 U.S. 450, 456 (1920) (upholding the President's declaration of the Grand Canyon National Monument—now Park—describing it as "the greatest eroded canyon in the United States, if not the world.").


\(^{57}\) Id.


appearance," but the park superintendents called for even more roads and hotels, lest parks be left as "mere [] wilderness." On nearly all fronts, the Park Service sought not only to control but to subdue nature by fighting wildfires, eradicating wolves and other predators, corralling bison and baiting bears for the visitors' viewing pleasure, all in order to provide a more entertaining and less threatening recreational experience. As NPS historian Richard West Sellars notes, "more than anything else, park development simulated resort development."

Road building continued apace in the 1930s, aided by the employment of the Civilian Conservation Corps (CCC). By the end of the decade, the CCC had built more roads and other visitor facilities in the parks than had been completed in the previous fifty years. NPS director Horace Albright felt some concern, and when he left the directorship in 1933, he cautioned his successors to resist proposals to "penetrate... wilderness regions with motorways and other symbols of modern mechanization."

The pace of development in the parks "set[] off alarm bells with conservationists," including Bob Marshall, then chief forester of the Office of Indian Affairs. In 1934, Marshall proposed a national wilderness preservation policy to Interior Secretary Harold Ickes, prompting Arno Cammerer, the new director of NPS, to protest: "we have [already] been able to conserve the vast bulk of the parks free from roads and buildings, and other artificialities."

Nonetheless, Ickes worked to ensure that at least some portions of the Everglades, Kings Canyon, and other newly established parks would be treated as wilderness. But in general, NPS did not believe that wilderness protection would be consistent with its recreational mission, nor did it feel that it needed official wilderness designations because in certain areas where preservation might be appropriate, the Organic Act already provided authority for it to protect backcountry values. Discouraged with Interior's response, Marshall subsequently asked to be transferred to the Forest Service, explaining:

Eighty percent of the roadless areas of 100,000 acres or more are in the national forests. The Park Service has wrecked most of its roadless areas and the possibility of saving the wilderness just from a sheer statistical standpoint lies primarily in national forests...[T]he requirements of trail building

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61 Id. at 16.
62 Id. at 17.
63 SELLARS, supra note 51; see also John Copeland Nagle, How National Park Law Really Works 4-5 (Dec. 5, 2013) (unpublished manuscript) (on file with Environmental Law Review) (arguing that the preference for facilitating "enjoyment of" is consistent with the purpose of the Organic Act, and that NPS has discretion to balance recreation and conservation demands).
64 KEITER, supra note 60, at 18.
65 McCloskey, supra note 59, at 457.
66 KEITER, supra note 60, at 18.
67 SCOTT, supra note 55, at 5.
68 McCloskey, supra note 59, at 458.
69 KEITER, supra note 60, at 21; McCloskey, supra note 59, at 461.
machinery and large crowds are more important in their minds than the preservation of the primitive.\textsuperscript{70}

When legislation was introduced in 1939 to authorize the President to declare wilderness areas in national parks and monuments, Marshall threw his support behind the bill.\textsuperscript{71} The legislation died, while interest in development in the parks grew.

The post-World War II years brought new roads, lookouts, parking lots, visitor centers, hotels, ski resorts, tramways, and even dams.\textsuperscript{72} Wilderness proponents continued to worry about the loss of wild areas, and in 1955, the Director of the Wilderness Society, Howard Zahniser, circulated a draft bill that required the "designation of wilderness zones in units of the National Park System," as well as national forests, wildlife refuges, and Indian reservations.\textsuperscript{73} Senator Hubert Humphrey introduced the bill in 1956.\textsuperscript{74} As he explained:

Our national parks and many of our national monuments include within them our superbly beautiful pristine areas of wilderness. The chief threats to their preservation as such, under existing legislation, come from prospects for the extension of roads and the intrusion of recreation developments, perfectly good in themselves, that nevertheless are out of place in wilderness. Unless provision is made to protect the primeval within the parks, eventually the developments may take over.\textsuperscript{75}

Humphrey conceded, however, that authorizing roads and accommodations in certain portions of the "primeval back country" of the parks may be necessary to "make them accessible and hospitable."\textsuperscript{76} Thus, the wilderness bill allowed the designation of additional areas for development, "but only after a public notice that will give all concerned an opportunity to weigh the importance of diminishing the area of wilderness."\textsuperscript{77}

At the time, NPS agreed that untrammeled, roadless lands in the National Park System had certain virtues:

[I]t is the part of a National Park that is not intensively used that makes a park, and the undeveloped wilderness beyond the roads furnishes the setting and the background. Take away the background, and the park atmosphere of the whole disappears, and with it a very large part of the pleasure of those whose only

\textsuperscript{70} Scott, \textit{supra} note 55, at 5.
\textsuperscript{71} McCloskey, \textit{supra} note 59, at 459.
\textsuperscript{72} \textit{Id.} at 458–59.
\textsuperscript{73} \textit{Id.} at 461. Indian reservations were removed from subsequent versions of the bill.
\textsuperscript{75} Scott, \textit{supra} note 55, at 3 (quoting 103 CONG. REC. 1,895 (1957)).
\textsuperscript{76} \textit{Id.}
\textsuperscript{77} \textit{Id.}
contact with wilderness is experienced as they look outward over it from the roadside.\textsuperscript{78}

Even so, NPS was lukewarm, at best, about inclusion of its lands in the proposed Wilderness Act.\textsuperscript{79} People wanted access, and gateway communities near the parks relied on tourism dollars.\textsuperscript{80} NPS had just adopted a plan to give them what they wanted. "Mission 66," announced in 1956, was a massive program designed to accommodate 80 million visitors by 1966 by adding more construction, development, utilities, and staffing.\textsuperscript{81} Mission 66 was the brainchild of NPS director Conrad Wirth. Wirth, a landscape architect and recreation planner, feared that wilderness would interfere with his plans, but he also believed that there was simply no advantage to blanketing the parks with wilderness designations:

It is our belief that such primeval areas of national parks and monuments are, in fact, already wilderness areas with adequate protection against future nonconforming use. . . . [N]othing would be gained from placing such areas in the National Wilderness Preservation System. . . . [W]e view with some apprehension any proposed law which will deal with our fundamental objectives and policy. What we have now can hardly be improved upon.\textsuperscript{82}

Not everyone agreed. The conservation community was understandably skeptical. A 1962 report by the congressionally chartered Outdoor Resources Recreation Review Committee observed that NPS’s concept of wilderness was actually weakening the security of wildlands within parks and monuments.\textsuperscript{83} The report concluded that NPS’s approach was far more subjective and far more subject to change by the “stroke of a pen” than the Forest Service’s relatively consistent approach to wilderness protection through zoning and other, more objective measures.\textsuperscript{84}

NPS softened its position on wilderness legislation with the arrival of President Kennedy and his Interior Secretary Stuart Udall, who strongly

\textsuperscript{78} Id. at 1.
\textsuperscript{79} See \textsc{Sellars, supra} note 51, at 193 (noting how NPS was “very cold” about wilderness legislation, in part due to a territorial desire to maintain control of the backcountry and to avoid dealing with burdensome external regulations).
\textsuperscript{80} \textsc{Scott, supra} note 65, at 6 (quoting James Gilligan (1954)).
\textsuperscript{81} \textsc{Sellars, supra} note 51, at 183. Mission 66 was announced at a shindig sponsored in part by the American Automobile Association.
\textsuperscript{82} \textsc{Scott, supra} note 55, at 7 (quoting Conrad L. Wirth (1956)). \textit{See also} McCloskey, \textit{supra} note 59, at 461 ("[Director Wirth] argued that wilderness was already adequately protected and that ‘conflicts and dissension’ would arise over the use of the wilderness.").
\textsuperscript{83} \textsc{John C. Miles, Wilderness in National Parks: Playground or Preserve} 154 (2009). The Outdoor Recreation Resources Review Commission (ORRRC), established by Congress in 1958, was an advisory group whose members included both Congressmen and presidential appointees, charged to investigate and recommend policies and programs necessary to ensure that the outdoor recreational needs of Americans were met. \textit{See} \textsc{George H. Stehl, The Policy Path to the Great Outdoors: A History of the Outdoor Recreation Review Commissions}, 1, 2 (2008), available at \url{http://www.rff.org/Documents/RFF-DP-08-44.pdf}.
\textsuperscript{84} \textsc{Miles, supra} note 83, at 156.
supported the legislation. By 1964, when Congress finally passed the Wilderness Act, the National Park System was included, and NPS "reluctantly reconciled" itself to wilderness designations. It issued regulations governing wilderness reviews and recommendations in 1966 and chose Great Smoky Mountains National Park as its "pilot" wilderness proposal. The wilderness would include nearly 250,000 acres, but it was split by a proposed transmountain highway running from North Carolina to Tennessee. NPS carved out the main line and inner loop roads from its proposed wilderness. The conservation community's opposition was unified and vocal. Great Smoky and other early proposals prompted Sierra Club Director Michael McCloskey to accuse NPS of attempting to isolate "a series of [wilderness] islands within a sea of various levels of development." To date, wilderness has not been designated in Great Smoky.

Through the early 1970s, NPS continued to move at a snail's pace on its wilderness proposals. Many of the recommendations that did get forwarded to Congress were far more modest than many wilderness advocates had hoped, and excluded far too many "enclaves" surrounding aircraft landing strips, snow gauges, fire towers, grazing lands, and ranger cabins. At the urging of a number of congressmen—including Senator Frank Church, who had been the floor manager of the Wilderness Act in 1964—NPS eventually grew more willing to expedite its proposals and to include areas with modest developments. Yet it seems fair to say that NPS's decades-long promotion of intensive recreational development and its historic bias against having an overlay of highly restricted, congressionally designated wilderness areas within the National Park System continue to color NPS's wilderness management approaches.

b. FWS

The FWS traces its origins back to 1871, when Congress created the United States Commission on Fish and Fisheries in the Department of Commerce to study population declines of fish species harvested for food. It also has roots in the Division of Economic Ornithology and Mammalogy, created in 1885 in the Department of Agriculture to study the effects of birds in controlling agricultural pests and to track the geographical distribution of

85 Id. at 152.
86 KEITER, supra note 60, at 22.
87 MILES, supra note 83, at 174.
88 Id. at 176.
89 Id. at 178.
90 See KEITER, supra note 60, at 116 (describing the effects of "rampant commercialism and unbridled development" on Great Smoky).
91 MILES, supra note 83, at 183-84.
92 Id. at 198-200. For details, see infra note 144-150 (describing NPS's recommendations and Park designations).
93 See infra Part III.A (NPS's wilderness case studies).
animal and plant species throughout the country. Over the years, these entities were folded into the Bureau of Fisheries and the Bureau of Biological Survey (BBS), and the responsibilities of the BBS were expanded to include management of national wildlife refuges. Both entities were eventually moved to the Department of the Interior and, in 1940, were combined to create the FWS.

In addition to legislation governing the management of the wildlife refuge system, FWS administers several other historic wildlife conservation statutes with land management implications. Earliest among them was the Migratory Bird Treaty Act (MBTA) of 1918, which protects bird species in accordance with international treaties with Mexico, Canada, Japan, and the former Soviet Union. The MBTA prohibits the killing of migratory birds “by any means in any manner,” unless specifically authorized by federal regulation. Although courts are split regarding the MBTA’s application to habitat degradation, FWS has occasionally used the statute to prosecute defendants whose pollution or habitat destruction results in actual bird mortality. A number of wildlife refuges were created to satisfy the objectives of the MBTA.

The Fish and Wildlife Coordination Act of 1934 directs the Department of the Interior to cooperate with federal and state agencies as well as public and private organizations in developing, protecting, and increasing wildlife resources. In particular, it requires consideration of wildlife conservation

97 U.S. Fish & Wildlife Serv., supra note 94.
98 16 U.S.C. § 703 (2006). Other bird protection statutes administered by FWS include the Bald and Golden Eagle Protection Act of 1940, which imposes liability on those who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner,” protected species. 16 U.S.C. §§ 668-668d (2006).
100 See United States v. FMC Corp., 572 F.2d 902, 908 (2d Cir. 1978) (holding that the release of toxins into a lagoon used by birds violated the MBTA); United States v. Jones, 347 F. Supp. 2d 626, 628 (E.D. Wis. 2004) (referring to news report stating that plaintiff pleaded guilty to charge of unlawfully killing a protected species of migratory bird, when birds died from drinking water contaminated by its copper mine). But see Robert Bryce, The Fish and Wildlife Service is Not for the Birds, WALL ST. J., Feb. 23, 2013, http://online.wsj.com/news/articles/SB100014241278873240396504578259824223563736 (last visited Apr. 18, 2014) (noting that authorities have never prosecuted the wind industry even though domestic turbines kill 440,000 birds per year). For other cases involving habitat-related claims, see, e.g., Newton Cnty Wildlife Ass’n v. U.S. Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997); Sausalito v. O’Neill, 386 F.3d 1186, 1225 (9th Cir. 2004); United States v. Brigham Oil & Gas, 840 F. Supp. 2d 1202, 1203 (D.N.D. 2012).
101 FISCHMAN, supra note 42, at 36.
in developing water resource development programs. Any federal agency that proposes to impound, divert, or otherwise modify a water body for any purpose must consult with FWS and the state agency with jurisdiction over wildlife resources in order to prevent damage to such resources.\textsuperscript{103}

The 1970s ushered in two landmark species conservation statutes—the Marine Mammal Protection Act (MMPA) of 1972, which protects seals, whales, porpoises, polar bears, and other mammals that inhabit the marine environment,\textsuperscript{104} and the Endangered Species Act (ESA) of 1973, which protects federally listed animal and plant species and their critical habitat.\textsuperscript{105} Both are administered primarily by FWS, and both strive to conserve species and their habitat. The objective of the MMPA is "to maintain the health and stability of the marine ecosystem,"\textsuperscript{106} and while it focuses on preventing the "take" of protected species, it also includes provisions for conservation, habitat acquisition, and improvement.\textsuperscript{107} The Refuge System includes 107 coastal and marine ecosystems within the National System of Marine Protected Areas.\textsuperscript{108}

The ESA prohibits "take" (including habitat destruction that injures a listed species), requires FWS to consult with other federal agencies to ensure that their actions avoid jeopardizing the species or degrading its critical habitat, and authorizes habitat acquisition and other land conservation measures.\textsuperscript{109} Due to these strict requirements, no other federal statute has had such a profound impact on land management in all categories of federally owned lands.\textsuperscript{110} The ESA has also triggered the acquisition of at least fifty-six wildlife refuges, including Oklahoma Bat Cave Refuge and Florida's Crystal River Refuge for manatees.\textsuperscript{111}

Although FWS is historically a wildlife agency, its mission goes beyond managing species' propagation. Its responsibilities for the National Wildlife Refuge System has propelled it to the spotlight as a major federal land management agency, with jurisdiction over 150 million acres of land.\textsuperscript{112}

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\hline
\textbf{Reference} & \textbf{Description} \\
\hline
104 & Id. §§ 1361–1407. \\
105 & Id. §§ 1531–1544. \\
106 & Id. § 1361(6). \\
107 & Id. § 1362(2). \\
110 & \textit{Fischman, supra} note 41, at 29. Another statute, the Land and Water Conservation Fund of 1964, has resulted in the addition of five million acres of federal and state habitat and recreation land. \textit{See} Wilderness Soc’y, \textit{Land and Water Conservation Fund}, http://wilderness.org/sites/default/files/LWCF-Fact-Sheet.pdf (last visited Apr. 18, 2014). This Fund is not unique to the FWS, but the money has been used to add about 1.5 million acres to the National Wildlife Refuge System. Nat’l Wildlife Refuge Ass’n, \textit{Land and Water Conservation Fund}, http://refugeassociation.org/advocacy/funding/land-conservation/lwcf/ (last visited Apr. 18, 2014). \\
111 & \textit{Fischman, supra} note 42, at 29. \\
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\end{table}
Managed growth of the national wildlife refuge system began with the appointment of Ding Darling as the head of FWS's predecessor, the BBS, by President Franklin D. Roosevelt in 1935.113 In 1940, Roosevelt issued a proclamation standardizing the names of refuge units as "wildlife refuges," and characterizing a utilitarian purpose for the system: "conservation and development of the natural wildlife resources [so they] may contribute to the economic welfare of the Nation and provide opportunities for wholesome recreation."114

Darling recruited J. Clark Salyer to manage the fledgling refuge system.116 The FWS describes Salyer as the "father of the refuge system," and "the primary driving force in selecting new refuge areas and campaigning for their acquisition, in defending their integrity, in protecting the wildlife which they harbored, and in seeing that refuges were administered and managed to best serve the wildlife resource."116 When Salyer retired in 1961, refuge acreage had grown from 1.5 million acres to nearly twenty-nine million acres.117

Congress provided explicit authority to FWS to acquire and develop refuge lands for the conservation of wildlife in the Fish and Wildlife Act of 1956.118 Like Roosevelt's 1940 proclamation, the Fish and Wildlife Act is couched in economic terms: "the fish, shellfish, and wildlife resources of the Nation make a material contribution to our national economy and food supply, as well as a material contribution to the health, recreation, and well-being of our citizens...[and] such resources are a living, renewable form of national wealth..."119 Under the 1956 Act, the FWS gained official recognition as a federal agency within the Department of Interior.120

The wildlife refuge system is critical for providing habitat for a wide variety of species, but it is also important for promoting outdoor recreation. To facilitate the increasing recreational demands on the wildlife refuges, Congress passed the Refuge Recreation Act of 1962 to authorize recreational uses as long as they were not "inconsistent" with the individual refuge's primary wildlife related purposes.121 The system's popularity for recreational pursuits continued to grow, as did the nation's concern about the extinction of wildlife species, and Congress passed the National Wildlife Refuge System Administration Act of 1966 to address the increased pressure of recreational

115 History of the National Wildlife Refuge System, supra note 113.
117 Id.
118 FISCHMAN, supra note 42, at 40 (citing 16 U.S.C. § 742a (2006)).
120 Id. § 742b.
121 See 16 U.S.C. §§ 460l; see also FISCHMAN, supra note 36, at 42 (noting that the number of visitor days doubled between 1954 and 1960).
use and to ensure wildlife conservation.\textsuperscript{122} The 1966 Act requires activities to be “compatible” with the individual refuge’s “major purposes.”\textsuperscript{123} It also consolidated the various land units managed by FWS into a Wildlife Refuge System, and applied an overarching conservation mandate to recreation and all other uses of the system.\textsuperscript{124} The 1966 Act turned away from the utilitarian language of the Roosevelt proclamation by dropping the reference to “development” and by explicitly including restoration in the mission of the system.\textsuperscript{125}

Much like the National Park System, many National Wildlife Refuges had been created long before Congress passed the Wilderness Act of 1964.\textsuperscript{126} However, the controversy surrounding wilderness application to national wildlife refuge lands appears to have been less heated, or at least less publicized, than it was for the National Parks. Issues regarding institutional reorganization, financing for refuge lands, and recreational use preoccupied the FWS and its predecessor agencies prior to 1960. Financing for the purchase of new lands and for the management of established refuges was an especially vexing problem.\textsuperscript{127}

In addition, the reorganization of federal agencies had a direct impact on the management of wildlife refuges.\textsuperscript{128} Prior to the creation of the FWS, wildlife refuge management rested primarily with the BBS, which was housed in the Department of Agriculture.\textsuperscript{129} Due to this early organizational structure, “refuges were closer institutional cousins to the national forests than to Interior Department lands such as national parks.”\textsuperscript{130} Even after the creation of FWS, refuges were managed idiosyncratically, without any comprehensive, overarching strategy for system-wide management. Congress addressed this problem, in part, by passing the Refuge Recreation Act in 1962, but it was concerned primarily with the vastly expanding

\textsuperscript{122} FISCHMAN, supra note 42, at 41; see Robert L. Fischman, The National Wildlife Refuge System and the Hallmarks of Modern Organic Legislation, 29 ECOLOGY L.Q. 457, 481–82 (2002) (“The partnering of the Refuge Administration Act with an endangered species conservation measure emphasizes that the refuge consolidation and operation features in the law were animated in large part by extinction concerns.”).


\textsuperscript{124} Id. § 668dd(a)(1).

\textsuperscript{125} Id. § 668dd(a)(2). See Fischman, Hallmarks, supra note 122, at 618–19 (“Though ‘development’ was an important aspect of New Deal conservation, the term fell out of favor with the rise of the wilderness ethic in the mid-1960s.”).

\textsuperscript{126} See FISCHMAN, supra note 42, at 34–36.

\textsuperscript{127} Id. at 37 (“[A]uthorization of government spending did not guarantee actual appropriations.”). Congress addressed this problem in part when it enacted the Migratory Bird Hunting Stamp of 1934, which created a dedicated fund for waterfowl refuge acquisition by requiring hunters to purchase federal duck stamps. Id.

\textsuperscript{128} See id. at 39 (describing how prior to the creation of the FWS in 1940, much of the duties assumed by the FWS were distributed between the U.S. Fish Commission, established in 1871, and the Biological Survey, established in the 1880s).

\textsuperscript{129} Id. at 40; see supra notes 95–96 and accompanying text (describing the origin and duties of the BBS).

\textsuperscript{130} FISCHMAN, supra note 42, at 40 (“The Bureau of Biological Survey... had a strong economic orientation.”) (citing DONALD WORSTER, NATURE’S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS 262–63 (1994)).
recreational use of refuge lands.\textsuperscript{131} Although Congress consolidated the units managed by FWS into a National Wildlife Refuge System in the 1966 Refuge Administration Act,\textsuperscript{132} refuges were not managed as an integrated system with an overarching, comprehensive mandate until much later, when Congress passed the 1997 Refuge Administration Improvement Act.\textsuperscript{133}

Despite the statutory emphasis on conservation, as Professor Coggins explained, the FWS has remained "heavily influenced by state agency opinions, and state game agencies were in turn highly responsive to hunter desires."\textsuperscript{134} However, Coggins believes that, due to a "revolution in administrative law and procedure" and "better information, broader education of biologists, and the initiatives of wildlife partisans, . . . [the] [historic] emphasis upon hunting . . . is undergoing great change."\textsuperscript{135} Even so, when it comes to both refuge administration and ESA listings, state officials continue to exert pressure on FWS to promote state interests in recreation and economic development.\textsuperscript{136} This relationship has, at times, dampened FWS's enthusiasm for wilderness preservation.\textsuperscript{137}

\section*{2. Timing and Impact of Wilderness Application}

Upon enactment of the Wilderness Act of 1964, Congress designated nearly ten million acres of "instant" wilderness areas from lands that already had preservation status (wild, wilderness, and canoe areas) within the National Forests.\textsuperscript{138} Going forward, the Wilderness Act required the Departments of Agriculture and of Interior to review National Forest lands

\begin{itemize}
\item \textsuperscript{131} \textit{See} Fischman, supra note 42, at 41 ("By 1960, the Refuge System was hosting 11 million visitor days annually, more than double the number in 1954.").
\item \textsuperscript{132} \textit{16 U.S.C. \S 668dd(a)(1) (2006).}
\item \textsuperscript{133} \textit{Id.; see infra Part II.C.2 (detailing provisions of the 1997 Act).}
\item \textsuperscript{134} George Cameron Coggins & Sebastian T. Patti, \textit{The Resurrection and Expansion of the Migratory Bird Treaty Act}, 50 U. COLO. L. REV. 166, 197 (1979). In his examination of the MBTA, Coggins notes, "This historical orientation stems from both the close relationship between hunters and managers and the provision in federal law requiring the support of state game agencies by hunting and fishing license fees." \textit{Id.} at 197 n.239 (citing \textit{16 U.S.C. \S\S 669-669i} (1870)).
\item \textsuperscript{135} \textit{Id. at 197-98.}
\item \textsuperscript{137} \textit{See infra} Part III.B (FWS wilderness case studies).
\item \textsuperscript{138} \textit{16 U.S.C. \S 1132(a) (2006).}
\end{itemize}
as well as NPS and FWS lands for wilderness potential.\textsuperscript{139} The Department of Interior was directed to give wilderness recommendations to the President on all roadless areas of at least five thousand acres within national parks and wildlife refuges.\textsuperscript{140} Congress, however, retained the sole authority to designate wilderness areas.\textsuperscript{141}

Over the years, nearly thirty-seven million acres in the National Parks have been added to the National Wilderness Preservation System, most of which were established in 1980 with the passage of the Alaska National Interest Land Conservation Act (ANILCA).\textsuperscript{142} Today, NPS manages the most wilderness acreage of any agency, weighing in at nearly forty-four million acres in total, which comprises about 40% of the federal wilderness system.\textsuperscript{143} It also manages the largest wilderness area—the nine million acre Wrangell-Saint Elias Wilderness in Alaska—and several of the newest areas, including the Beaver Basin Wilderness in Michigan, which includes thirteen miles of Lake Superior's shoreline, and the Rocky Mountain National Park Wilderness, with around 250,000 acres.\textsuperscript{144}

Although wilderness designations are now found throughout the Park System, there are some notable exceptions. Three of the most iconic National Parks—Yellowstone, Glacier, and Grand Canyon—have no designated wilderness areas within them.\textsuperscript{145} More generally, according to Professor Keiter, NPS has been "seriously laggard in seeking wilderness protection for its lands and has yet to complete the wilderness review process required by the 1964 Wilderness Act."\textsuperscript{146} From the beginning, NPS responded "timidly" with its recommendations to the president. It made no formal recommendations until 1970, and even then it flagged only the most

\begin{footnotes}
\footnotetext[139]{Id. § 1132(b)-(c).}
\footnotetext[140]{Id. § 1132(c).}
\footnotetext[141]{See Wilderness Society v. Norton, 434 F.3d 584, 590-94 (D.C. Cir. 2006) (dismissing claim that the NPS failed to make wilderness recommendations, since no legal consequences would result from compliance. Congress did not have any obligation to consider the recommendations, let alone act upon them.).}
\footnotetext[142]{16 U.S.C. § 410hh (2006). In addition to wilderness areas created by ANILCA, ANILCA required the Secretary of Interior to review all NPS and FWS lands in Alaska that had not been designated as wilderness to determine their suitability for preservation as wilderness by 1985. 16 U.S.C. § 3205(a) (2006).}
\footnotetext[143]{Wilderness.net, Wilderness Statistics Reports, http://www.wilderness.net/NWPS/chartResults?chartType=acreagebyagency (last visited Apr. 18, 2014).}
\footnotetext[144]{Wilderness.net, http://www.wilderness.net/NWPS/wildView?WID=707 (last visited Apr. 18, 2014). Both the Beaver Basin Wilderness and the Rocky Mountain National Park Wilderness were included in the Omnibus Public Lands Act of 2009, Pub. L. 111-11, 123 Stat 991. Wilderness.net, supra note 143.}
\footnotetext[146]{KEITER, supra note 60, at 23.}
\end{footnotes}
remote portions of its parks for protection. Although it was required to submit a complete list of recommendations within ten years of enactment, as late as 2000, NPS had not yet conducted wilderness reviews for thirty-nine units of the Park System.147 Moreover, when it finally did submit its recommendations, it was reluctant to champion them in Congress, leaving many of the most hotly contested areas vulnerable to development.148

Within the National Wildlife Refuge System, there are over twenty million acres of designated wilderness. The first area to receive wilderness status was the Great Swamp National Wildlife Refuge in New Jersey in 1968.149 Banner years for wilderness additions include the 1980 passage of ANILCA, and the 1984 passage of statewide wilderness acts for federal lands in California, Oregon, Washington, and Arizona.150 The most recent additions were included in the 1994 California Desert Conservation Area Act, which designated the Havasu National Wildlife Refuge and the Imperial National Wildlife Refuge, both straddling Arizona and California.151

The Refuge System includes both the smallest wilderness area—the two-acre Wisconsin Islands Wilderness in Green Bay National Wildlife Refuge—and one of the largest wilderness areas—the eight million acre Arctic National Wildlife Refuge wilderness in Alaska.152 Approximately ninety percent of Refuge System wilderness is found in Alaska.153 Alaskan wilderness areas tend to be more remote, less developed, and less compromised than wilderness areas in the contiguous United States. ANILCA provides that in light of these “unique conditions,” and the need for both subsistence use and access by Native Alaskans and rural residents, ANILCA’s provisions should not be construed as diminishing or modifying the requirements of the Wilderness Act or the interpretation of the Wilderness Act on lands outside of Alaska.154

147 Id.; see Wilderness Soc’y v. Norton, 434 F.3d at 593 (rejecting challenge to NPS’s failure to complete its wilderness recommendations).
148 KETER, supra note 60, at 23. BUT SEE John Nagle, Wilderness Exceptions, 44 ENVL. L. 373 (2014) (describing how the superintendent of Apostle Islands Seashore successfully went to bat for the 2004 designation of most of the islands, except for one blanketed with vacation development and another one left out “in deference to the Bad River Band of Lake Superior Chippewa Indians”).
150 Number of Wilderness Public Laws Enacted by Year, http://www.wilderness.net/NWPS/chartResults (last visited Apr. 18, 2014).
152 Id. There appears to be some dispute about the smallest wilderness area. FWS claims that it is Wisconsin Islands, while Wilderness.net, a partnership between the Wilderness Institute at the University of Montana, the federal Arthur Carhart National Wilderness Training Center, and the Aldo Leopold Wilderness Research Institute, lists it as Pelican Island in Florida, which has 5.5 acres. Wilderness.net, Fast Facts About America’s Wilderness, http://www.wilderness.net/NWPS/fastfacts (last visited Apr. 18, 2014). Pelican Island is also managed by FWS.
153 U.S. Fish & Wildlife Serv., supra note 151.
154 16 U.S.C. § 3203(a) (2006). However, unlike wilderness areas in the lower 48 states, ANILCA allows for the construction of new public use cabins and shelters in Alaskan
In contrast to the National Park System, no new wilderness areas have been designated in the Refuge System since 1994. Recommendations for new refuge wilderness designations continue to lag. In 1989, the General Accounting Office found that as a result of restrictive criteria issued by FWS's Director, FWS recommended that only 3.4 million acres in Alaska's refuges be designated as wilderness, which was less than seven percent of the area that FWS's planning teams found qualified as wilderness.

3. Modern Agency Culture and Organization

NPS is governed by a Director, several deputy directors and associate directors, and seven regional directors. The Director establishes national policy, determines legislative strategies, and guides the implementation of NPS goals and objectives. The regional directors oversee all park superintendents within their regions, and are responsible for strategic planning, formulation of strategies for parks and programs within the region, and compliance with national policies and priorities.

Today, there are over 20,000 NPS full time employees, including archeologists, landscape architects, biologists, and law enforcement officers, and thousands of seasonal employees.

FWS currently employs around 7,500 people in its headquarters in Washington, D.C., seven regional offices, and nearly 700 field units. Wildlife refuge management is included within the FWS's Division of Natural Resources, and is headed by the Assistant Director of the National Wildlife Refuge System. Wilderness responsibilities are vested in the Director, the Assistant Director, and the National Wilderness Coordinator, who advises the Assistant Director on wilderness issues and coordinates wilderness stewardship policies with other wilderness management agencies.

The two agencies share an Assistant Secretary for Fish and Wildlife and Parks, and they both obtain legal advice from the Deputy Solicitor for Parks wilderness if "necessary for the protection of the public health and safety." Id. at § 3203(d). ANILCA also includes special provisions for access to inholdings, traditional uses, management plans, and navigation aids, communications sites, and research facilities. Alaska National Interest Lands Conservation, id. at §§ 3171, 3191, 3199.

155 U.S. Fish & Wildlife Serv., supra note 151.
159 U.S. Fish and Wildlife Serv., supra note 95.
These positions provide guidance and oversight for the two agencies, and can serve as a unifying force to ensure that the priorities and policies of the Secretary of Interior and the President are met in a systematic way. However, as Professor Glicksman explains, agency cultures still differ markedly from one another, and these differences affect how agencies implement their statutory responsibilities. The requirements and goals of the Organic Acts of the two agencies are also quite different, and these differences influence how the agencies manage wilderness.

C. Contours of the Agencies' Statutory Mandates

1. The Park Service Organic Act

Under the Organic Act of 1916, the NPS must “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” When the dual purposes of conservation and public use conflict, NPS must find an appropriate balance. Courts have insisted, “[t]he test for whether the NPS has performed its balancing properly is whether the resulting action leaves the resources ‘unimpaired for the enjoyment of future generations.’ But as Robert Fischman observed, “the Organic Act sets up an elegant tension between providing for enjoyment (often interpreted as recreation) and leaving units unimpaired (often interpreted as preservation).”

In addition to the Organic Act, units within the National Park System are also governed individually by park-specific legislation and planning documents. Each unit must uphold the mission of the park system as well as


163 Wilderness Management, supra note 5, at 465 (citing Eric Biber, The More the Merrier: Multiple Agencies and the Future of Administrative Law Scholarship, HARV. L. REV. 78, 80 (2012); see also Appel, supra note 16, at 123–24 (noting that the four federal land management agencies “quite possibly have different cultures about their amenability to wilderness protection”).


165 S. Utah Wilderness Alliance v. Dabney, 222 F.3d 819, 827 (10th Cir. 2000); see Bluewater Network v. Salazar, 721 F. Supp. 2d 7, 20–21 (D.D.C. 2010) (“Congress, recognizing that the enjoyment by future generations... can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict... conservation is to be predominant.”).

the purposes set forth in the specific legislation under which it was created.\textsuperscript{167}

At times, NPS has asserted that the conservation mandate of the Organic Act provides the same level of protection as the preservation mandate of the Wilderness Act, such that wilderness designation resulted in little change to an area’s management.\textsuperscript{168} However, as Michael McCloskey observed: “It is obvious that Congress could only have intended... that wilderness designation of National Park System lands should, if anything, result in a higher, rather than a lower, standard of unimpaired preservation.”\textsuperscript{169}

2. The Refuge Acts

Two years after the passage of the Wilderness Act, Congress organized the widely scattered national wildlife refuge lands into a unified system by passing the National Wildlife Refuge System Administration Act of 1966.\textsuperscript{170} The Act sets forth the primary purpose of the system: “the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”\textsuperscript{171} It limits secondary uses of the land to those uses “compatible with” the primary purpose.\textsuperscript{172} It allows recreational uses to the extent such uses are “not inconsistent with” and do “not interfere with” the primary purpose.\textsuperscript{173}

Despite the statutory directives, in 1989, the General Accounting Office concluded that FWS was allowing harmful secondary uses—such as boating, grazing, timber harvest, and public use—on 59% of the refuges.\textsuperscript{174} In 1996, President Clinton issued Executive Order 12,996 to reform refuge management and to establish an overriding conservation mission for the system.\textsuperscript{175} The Executive Order prompted Congress to enact the National Wildlife System Refuge Improvement Act of 1997.\textsuperscript{176}

The Improvement Act maintained all of the major provisions of the 1966 Act, but added new provisions intended to subordinate human uses to wildlife conservation and to promote “biological integrity, diversity, and

\textsuperscript{167} See id. at 779–80.
\textsuperscript{168} See McCloskey, supra note 59, at 464 (explaining that “[n]otwithstanding the clear wording of the [Wilderness] Act barring structures and installations, administrative practice and tradition have allowed” the building and maintenance of structures and installations in the National Parks).
\textsuperscript{169} Id. at 462 (quoting the Solicitor of the Department in an opinion issued in 1967).
\textsuperscript{170} 16 U.S.C. §§ 668dd–668ee (2006); see supra Part II.B.1 (describing the history of the System).
\textsuperscript{171} 16 U.S.C. § 668dd(a)(2).
\textsuperscript{172} Id. § 668dd(d)(1)(A).
environmental health."177 The Act also requires the FWS to prepare and implement comprehensive conservation plans for each refuge.178

The Improvement Act emphasizes that all activities within a refuge must be compatible with the system’s conservation purpose. A “compatible use” is one that “will not materially interfere with or detract from the fulfillment of the mission of the System or the purpose of the refuge.”179 Wildlife-dependent recreational uses—such as environmental education, interpretation, wildlife photography, hunting, and fishing—are considered a priority use, and are generally deemed compatible unless the refuge manager finds otherwise.180 All other uses—including grazing, oil development, timber harvesting, and nonwildlife related recreation—receive a lower priority ranking, and are prohibited when they conflict with the National Wildlife Refuge System mission, contradict the purposes for which the individual refuge was created, or materially interfere with wildlife-dependent uses.181 FWS’s guidelines for determining the compatibility of proposed uses explain that uses that may “conflict with th[e] directive to maintain the ecological integrity of the System are contrary to fulfilling the National Wildlife Refuge System mission and are therefore not compatible.”182

The 1997 Act is far more detailed, and provides far more specific substantive management criteria, than does the NPS Organic Act of 1916.183 As a result, FWS’s management discretion is bounded by relatively discrete congressional parameters, and the legally binding statutory requirements of the 1997 Act can be more easily enforced through judicial review. That said, FWS still has a great deal of discretion in determining whether public uses are compatible with the purposes of any individual refuge and the system as a whole, and whether and when management intervention might be warranted to protect or restore refuge conditions.184

179 Id. § 668ee(1).
180 Id. §§ 668dd(a)(3)(B), 668ee(1)-(2); see 50 C.F.R. § 25.12 (2013) (defining “compatible use” as “a proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose(s) of the national wildlife refuge”).
183 See Fischman, supra note 122, at 620 (“T[he] single most important aspect of the 1997 Improvement Act is the level of statutory detail for substantive management criteria.”).
D. Agency Rules, Policies, and Procedures

As described above, the organic statutes for both the Park Service and the FWS embrace conservation principles. In exercising the discretion afforded by the conservation mandate, however, both agencies have fluctuated between more and less protective regimes. Differences between the two agencies are a product of the factors discussed above in Parts A–C, including agency history, culture, organization, and statutory missions. In addition, the agencies' regulations, policies, and planning requirements influence how wilderness is managed and preserved in both systems.

1. National Parks

The NPS does not have formal, binding regulations governing wilderness preservation in the National Park System. Instead, its wilderness management guidelines are found in the NPS Management Policies, manual provisions, and general management plans.

The NPS Management Policies contain the agency's interpretation of the Organic Act and other statutory requirements, including the Wilderness Act. The Policies allow some effects to park resources when necessary to fulfill the purposes of a park, so long as the effects stay below the threshold of "impairment" to affected resources and values. When there is a conflict between conserving resources and providing for their enjoyment, the Policies insist that conservation predominates. Because the threshold at which "impairment" occurs is not always apparent, NPS strives to avoid "unacceptable impacts," including those that individually or cumulatively "diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values" or impede the attainment of desired park conditions.

The Policies include several provisions directly relevant to wilderness management. First, they require park superintendents to "develop and maintain a wilderness management plan or equivalent planning document to
guide the preservation, management, and use of these resources. This plan should specify desired future conditions for wilderness areas and "establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts to wilderness resources." Wilderness management plans should also contain "specific, measurable management objectives that address the preservation and management of natural and cultural resources within wilderness as appropriate to achieve the purposes of the Wilderness Act and other legislative requirements."

Wilderness plans have been slow in coming. NPS's own national wilderness coordinator criticized the agency for failing to issue wilderness management plans in a timely fashion. As of 2004, nearly three-fourths of the NPS's wilderness areas did not have wilderness management plans in place. When The Wilderness Society attempted to force NPS to follow the Policies and issue management plans for designated wilderness areas, its claims were dismissed. The court held that the Policies are not judicially enforceable, because they had not been promulgated as official rules and because they contained general statements of policy rather than specific directives. According to the court, the Policies are "no more than a set of internal guidelines for NPS managers and staff." Unenforceable though they are, the Management Policies are not unimportant. NPS treats the Policies as the "Level 1" top-tier directive in its hierarchy of internal instructions and guidance, and NPS officers and staff look to it for direction. In addition to the wilderness planning guidelines, the Policies provide substantive guidelines regarding activities and processes in wilderness areas. Chapter six, on Wilderness Preservation and Management, directs NPS managers to allow "natural processes... insofar as possible, to shape and control wilderness ecosystems." However, management intervention is allowed "to the extent necessary to correct past

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192 Id. at 6.3.4.2.
193 Id.
194 Id.
195 KEITER, supra note 60, at 23. Keiter notes that NPS began to complete additional wilderness assessments and plans, beginning in 2004. Id.
196 Id. at 23–24. Since 2004, NPS has picked up the pace on its wilderness assessments and plans. Id. at 23.
198 Wilderness Soc'y v. Norton, 434 F.3d at 596; see Greater Yellowstone Coalition v. Kempthome, 577 F. Supp. 2d 183, 206 (D.D.C. 2008) (noting that the policies are not enforceable but may be relevant so far as NPS puts them forward as a basis for a decision).
200 NPS POLICIES, supra note 187, at 6.3.7.
mistakes, the impacts of human use, and influences originating outside of wilderness boundaries.\footnote{201}

Intrusion into wilderness is also allowed for scientific activities “when the benefits of what can be learned outweigh the impacts on wilderness resources or values.”\footnote{202} Chapter six cautions that scientific activities must be evaluated to ensure that they are the “minimum requirement” for managing wilderness.\footnote{203} The minimum requirement concept is applied as a two-step process that determines whether the proposed action is 1) appropriate or necessary for administration, and 2) does not cause a significant impact to wilderness resources and character. At step two, the NPS manager must analyze the techniques and types of equipment needed to ensure that impacts are minimized.\footnote{204} Chapter six provides that, “[w]hen determining minimum requirements, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience.”\footnote{205} It also notes that the use of motorized equipment or mechanical transport may be authorized in “emergency situations (for example, search and rescue, homeland security, law enforcement) involving the health or safety of persons actually within the area,” but only if they are the minimum tool that will address the emergency situation.\footnote{206}

The NPS Management Policies are supplemented by Director’s Order #41 on Wilderness Stewardship, issued in 2013.\footnote{207} Director’s Orders provide the next level of guidance to park managers. They “capture the Director’s expectations” by prescribing operating policies, instructions, and standards for specific functions, programs, and activities.\footnote{208} Order #41 addresses wilderness training requirements, wilderness reviews and boundaries, and wilderness stewardship strategies. In particular, the Order identifies the goal of wilderness stewardship: “to keep these areas as natural and wild as possible in the face of competing purposes and impacts brought on by activities that take place elsewhere in the park and beyond park

\footnote{201} Id. ("Management actions, including the restoration of extirpated native species, the alteration of natural fire regimes, the control of invasive alien species, the management of endangered species, and the protection of air and water quality, should be attempted only when the knowledge and tools exist to accomplish clearly articulated goals.").

\footnote{202} Id at 6.3.6.1.

\footnote{203} Id at 6.3.1; see also 16 U.S.C. § 1133(c) (2012) (allowing exceptions for certain activities only if they are necessary for the minimum requirements of wilderness management).

\footnote{204} NPS POLICIES, supra note 187, at 6.3.5.

\footnote{205} Id. (“If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable. Although park managers have flexibility in identifying the method used to determine minimum requirement, the method used must clearly weigh the benefits and impacts of the proposal, document the decision-making process, and be supported by an appropriate environmental compliance document.”).

\footnote{206} Id.


\footnote{208} DIRECTOR’S ORDER #1, supra note 187, at 5.3.5.
boundaries." It directs managers of wilderness areas within parks to "integrate the concept of wilderness into park planning, management, and monitoring in order to preserve the enduring benefits and values of wilderness for future generations." The values of wilderness are described in terms of "biophysical, experiential, and symbolic ideals" of areas that are "(1) untrammeled, (2) undeveloped, (3) natural, (4) offer[] outstanding opportunities for solitude or primitive and unconfined recreation, and (5) other features of scientific, educational, scenic, or historical value." The Order provides additional details on the timing and application of the "minimum requirement" concept, generally and as it relates to fire management, invasive species management, and other activities.

The Order specifically addresses two types of increasingly popular activities occurring in the National Parks—commercial filming and rock climbing. It states that filming should not occur in wilderness unless it necessarily must take place in wilderness (presumably, if the plot involves wilderness characteristics that cannot be found elsewhere, such as Into the Wild and 127 Hours). If filming does occur in wilderness, it must be the minimum amount of activity for the shortest period of time possible. Even so, park managers are directed to help the applicant find suitable locations outside of wilderness. For climbing, the Order provides that clean climbing techniques that rely on temporary, removable equipment "should be the norm," and that "[f]ixed anchors or fixed equipment should be rare in wilderness.

In addition to the Management Policies and Director's Order, NPS's Wilderness Stewardship Reference Manual #41 provides yet another layer of guidance to NPS employees in managing and protecting wilderness character and resources. Reference Manuals provide the third level of NPS

209 DIRECTOR'S ORDER #41, supra note 207, at 6.
210 Id. at 6.2.
211 Id. at 6.4-7.2.
212 Id. at 7.2, 7.3.
214 DIRECTOR'S ORDER #41, supra note 207, at 7.3; see also Richard J. Ansson, Jr., Funding Our National Parks In The 21st Century: Will We Be Able To Preserve And Protect Our Embattled National Parks?, 11 FORDIAM ENVT'L. L. REV. 1, 44 (1999) ("National parks have served as the background for many popular movies, including such well-known movies as Star Wars, Star Trek, Thelma and Louise, and Forrest Gump.").
215 DIRECTOR'S ORDER #41, supra note 207, at 7.3. For a description of increased climbing activity and one controversy over the Devils Tower National Monument climbing management plan, see Bear Lodge Multiple Use Ass'n v. Babbitt, 175 F.3d 814, 819-20 (10th Cir. 1999).
directives, and typically include relevant regulations, policies, and other instructions or requirements, along with examples and recommended practices. 217

Reference Manual #41 expressly provides, "[w]ilderness is to be given supplemental and permanent protection beyond that normally afforded other back country resources." 218 To dispel any misconceptions, it continues:

[The Wilderness Act of 1964 ... provides a degree of protection to the resources of the National Park Service Organic Act does not. ...]

While the National Park Service Organic Act and the Wilderness Act speak in comparable terms about preserving integrity resources, the Wilderness Act prohibits activities in national park wilderness that the Organic Act permits or leaves open to interpretation by park managers. The effect of the Wilderness Act is to unambiguously place an additional layer of protection on wilderness within the National Park System. 219

Apparently, NPS managers have sometimes failed to distinguish between wilderness areas and backcountry lands, which are "primitive, undeveloped portions of parks" that have not been congressionally designated as wilderness and that are not subject to the statutory requirements and prohibitions of the Wilderness Act. 220 In addition to Reference Manual #41, a 2005 Guidance Paper issued by the National Wilderness Steering Committee pointedly reminds NPS managers to recognize the distinction between wilderness and backcountry lands: "there should be no question that [wilderness] decisions must be analyzed and framed differently than similar decisions for backcountry given the language and intent of the law." 221 In either case, NPS managers must avoid impairment to park resources, but they have much greater discretion over activities and structures in the backcountry than in wilderness areas. 222

Finally, within each individual park unit, the General Management Plan (GMP) for that unit further defines the direction for resource preservation and visitor use. 223 In particular, GMPs must include measures for preserving

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217 Nat'l Park Serv., supra note 199, at 7.
218 REFERENCE MANUAL 41, supra note 216, § 2.
219 Id.
220 See NPS POLICIES, supra note 187, at 8.2.2.4. Backcountry areas that are under study for wilderness designation are managed pursuant to the wilderness policies described above, supra notes 201-217.
222 NPS POLICIES, supra note 187, at 8.2.2.4; see id. at 9.3.2.3 (stating that hostels, huts, and other shelters may be an appropriate means of encouraging use of backcountry areas).
the area's resources, for managing the types and intensity of development, and for establishing visitor carrying capacity and other "implementation commitments." GMPs also provide a mechanism through which NPS evaluates wilderness characteristics and suitability within the National Park System. The planning guidance provides:

"[I]f lands and waters in a park have not been analyzed for possible designation as wilderness..., an assessment should be conducted within the general management planning process [and]... potentially eligible resources... should be zoned accordingly in the GMP to protect the wilderness or wild and scenic river values until such time as a formal study is completed and Congress acts on the agency's proposal.

Although wilderness reviews are not required in conjunction with each GMP, coordination of the two is seen as "an economical way to achieve multiple responsibilities." GMP's are to be reviewed and revised every 10 to 15 years, or sooner if conditions change significantly. Not all parks have up-to-date GMP's; in fact, it appears that most parks do not have a GMP, thereby limiting their usefulness to National Park System management.

2. Wildlife Refuges

In contrast to NPS, the FWS promulgated binding wilderness regulations in 1971, with amendments in 1972. The regulations generally track the prohibitions and exceptions of the Wilderness Act. More specifically, they give the FWS Director broad power to "prescribe conditions under which motorized equipment, mechanical transport, aircraft, motorboats, installations, or structures may be used to meet the minimum requirements for authorized activities to protect and administer the wilderness." They also empower the Director to "prescribe the

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224 *Id.* § 1a-7(b).
225 NPS POLICIES, *supra* note 187, at 2.3.1.10 ("The Park Service will develop wilderness studies and plans as part of the comprehensive planning framework for each park. Managers are encouraged to incorporate these studies and plans within general management plans when possible."); NAT'L PARK SERV., GENERAL MANAGEMENT PLAN SOURCEBOOK 1.6.1 (2009), available at http://planning.nps.gov/GMPSourcebook/pdfs/GMPSourcebook_2009rev.pdf.
226 GENERAL MANAGEMENT PLAN SOURCEBOOK, *supra* note 225, at 1.6.1.
227 *Id.*
228 NPS POLICIES, *supra* note 187, at 2.3.1.12. Wilderness management plans or "equivalent planning document[s]" are also required to guide the preservation, management, and use of wilderness resources. The wilderness management plan "will identify desired future conditions, as well as establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts on wilderness resources." *Id.* at 6.3.4.2. Wilderness plans may be developed independently or as a component of other planning documents. *Id.*
229 See NPS Planning, http://planning.nps.gov/plans.cfm (Apr. 4, 2014) (listing only 84 active GMPs and other park management plans).
232 50 C.F.R. § 35.5(a) (2011).
conditions under which such equipment, transport, aircraft, installations, or structures may be used in emergencies involving the health and safety of persons, damage to property, violations of civil and criminal law, or other purposes.233

By statute and by regulation, public uses within the National Wildlife Refuge System are treated quite differently than public uses of National Parks. Unlike the Park System, wildlife refuges are generally closed to public access unless a decision is made to open them, following a compatibility determination.234 The FWS's wilderness regulations specify that refuge managers may regulate public access and use by "limiting the numbers of persons allowed in the wilderness at a given time, imposing restrictions on time, seasons, kinds and location of public uses, requiring a permit or reservation to visit the area, and similar actions."

The regulations also provide that refuge managers may provide "[l]imited public use facilities and improvements... as necessary for the protection of the refuge and wilderness and for public safety."235 They caution that facilities and improvements are not allowed simply for the comfort and convenience of wilderness visitors.236 Yet the regulations authorize public services by packers, outfitters, and guides, along with certain temporary installations and structures, as "necessary" for realizing recreational or other wilderness purposes.237

Although the regulations specify that management activities in forests within refuge wilderness areas should be aimed at letting natural ecological processes operate freely, they state, "[t]o the extent necessary, the Director shall prescribe measures to control wildfires, insects, pest plants, and disease to prevent unacceptable loss of wilderness resources and values, loss of life, and damage to property."238 They also commit to controlled burning "when such burning will contribute to the maintenance of the wilderness resource and values in the unit."239

As for rangelands within the refuges, FWS's wilderness regulations specify that "[t]he Director may permit, subject to such conditions as he deems necessary, the maintenance, reconstruction or relocation of only [pre-existing] livestock management improvements and structures."240 They also provide that "[n]umbers of permitted livestock... may be more restrictive" than had been the case prior to wilderness designation.241 The Wilderness Act expressly authorizes continued livestock grazing on National Forest lands

233 Id.
234 Id. § 25.21(a).
235 Id. § 35.6(a).
236 Id. § 35.6(d).
237 Id.
238 Id. § 35.6(e).
239 Id. §§ 35.7–35.8.
240 Id. § 35.10.
241 Id. § 35.9; see also Wilderness Stewardship Policy 2.18, 2.32 (2008), http://www.fws.gov/policy/610fw1.html (allowing grazing in wilderness areas for ecological restoration and for packstock) (last visited Apr. 18, 2014).
242 50 C.F.R. § 35.9 (2011).
where established prior to September 3, 1964.\textsuperscript{243} Established grazing continues in some Department of Interior wilderness areas as well.\textsuperscript{244} Grazing has been a particularly controversial economic use of the refuges within wilderness and wilderness study areas.\textsuperscript{245}

In addition to the regulations, the FWS adopted a Wilderness Stewardship Policy in 2008 to govern wilderness planning, management, and recommendations for inclusion in the wilderness system.\textsuperscript{246} As with NPS policies, the FWS Wilderness Stewardship Policy provides guidance, but it is probably not legally enforceable.\textsuperscript{247}

The FWS Policy outlines the planning processes that refuge managers must follow in crafting wilderness stewardship plans (WSPs) for wilderness areas and in incorporating wilderness concerns into the comprehensive conservation plans (CCPs) for refuges.\textsuperscript{248} It provides that WSPs, which are used to guide the preservation and use of wilderness areas, should include descriptions of baseline wilderness conditions and existing public uses.


\textsuperscript{244} See Barnes v. Babbitt, 329 F. Supp. 2d 1141, 1156 (D. Ariz. 2004) (citing H.R. REP. 101-405, at 41 (1990)) (finding that the BLM's range improvement plan, which permitted motor vehicle access and mechanized reconstruction of range improvements in the Arrasta Mountain Wilderness Area, lacked sufficient support and failed to satisfy congressional grazing guidelines that limited preexisting grazing management to "necessary" activities or facilities).


\textsuperscript{247} See McGrail & Rowley v. Babbitt, 986 F. Supp. 1386, 1393-94 (S.D. Fla. 1997) (stating that FWS's Manual is "generally advisory and policy-oriented," that FWS "does not appear to have conformed with APA procedural requirements for rulemaking in producing the manual," and finding that neither the Manual nor any of its particular provisions regarding recreational uses of island refuges "carry the independent force and effect of law"); see also Wilderness Soc'y v. Norton, 434 F.3d 584, 596–97 (D.C. Cir. 2006) (holding that NPS's Management Policies were not binding rules because they did not impose rights or responsibilities and they did not demonstrate an intent to create enforceable rights.).

\textsuperscript{248} \textit{Wilderness Stewardship Policy}, supra note 159, at 3.5–3.6. CCPs are required for all refuges. They describe desired conditions and provide long-range management direction to achieve refuge purposes, help fulfill the mission of the system, and maintain and restore the ecological integrity of each refuge and the Refuge System. \textit{Fish & WILDLIFE SERV., NATIONAL WILDLIFE REFUGE SYSTEM PLANNING} 3.1–3.2 (2000), http://www.fws.gov/policy/602fw3.html (last visited Apr. 18, 2014). In addition, CCPs are to help achieve the goals of the National Wilderness Preservation System by ensuring preservation of wilderness character, but at the same time they are to ensure that wildlife comes first and also to provide a basis for adaptive management. \textit{Id.} at 3.1; 65 Fed. Reg. 33,892, 33,906 (May 25, 2000) (codified at 50 C.F.R. § 25.12). Both of the latter goals could be seen as encouraging interventions in wilderness. See Zellmer, \textit{supra} note 6, at 323, 374 (discussing the conflict between adaptive management experimentation and wilderness).
objectives for the wilderness area, minimum requirements analyses for activities within the area, stewardship strategies for natural resources and recreation, and implementation schedules.249 Like CCPs, WSPs should be revised when significant changes occur, and at least every fifteen years.250

As for wilderness management, the FWS Policy states that refuge managers generally will not modify ecosystems with prescribed fires, new structures, water impoundments, or interventions into species population levels or natural processes in wilderness areas.251 However, the Policy provides an exception when such actions are necessary to accomplish wilderness or refuge purposes, to maintain or restore biological integrity, diversity, or environmental health, or as necessary to protect or recover threatened or endangered species.252

The FWS Policy also guides the determination of whether a proposed refuge management activity, such as restoring habitat for a threatened or endangered species, constitutes the minimum requirement for wilderness management. It calls for the use of the "minimum tool," defined as "[t]he least intrusive tool, equipment, device, force, regulation, or practice determined to be necessary to achieve a refuge management activity objective in wilderness."253

Interestingly, according to the FWS Policy, both the Refuge Act and ANILCA “prevail” over the Wilderness Act in the event of conflict.254 The few courts that have been called upon to resolve conflicts between the Wilderness Act and the Refuge Act have consistently disagreed with this interpretation—the specific prohibitions of the Wilderness Act take precedence over the wildlife conservation and use provisions of the Refuge Act.255 ANILCA, by contrast, does allow some activities that would otherwise be prohibited in wilderness areas, such as motorized access for traditional activities and to reach inholdings, but it explicitly states, “[e]xcept as otherwise expressly provided for in this Act, wilderness designated by this Act shall be administered in accordance with applicable provisions of the

249 Wilderness Stewardship Policy, supra note 161, at 3.8.
250 Id. at 3.13.
251 Wilderness Stewardship Policy, supra note 161, at 2.5, 2.16, 2.23; see supra notes 241-42 (describing wilderness fire regulations).
252 Wilderness Stewardship Policy, supra note 161, at 2.16(B), 2.23(A); see id. at 2.8(D) (stating that aircraft may be used as necessary for wilderness or refuge management or for emergencies).
253 Id. at 1.5(N).
254 Wilderness Stewardship Policy, supra note 161, at 1.2(C); see also id. at 1.4 (listing the Wilderness Act behind the Refuge Act and the ESA in order of priority). Although the 1997 Refuge Act amendments include many specific directives related to refuge management, 16 U.S.C. §§ 668dd–668ee, it did not purport to alter or even address Refuge System wilderness area management.
255 See Wilderness Soc'y, 353 F.3d at 1055, (finding that FWS's sockeye enhancement project in a refuge was a commercial enterprise prohibited by the Wilderness Act); Wilderness Watch, Inc. v. U.S. Fish & Wildlife Serv., 629 F.3d 1024, 1040 (9th Cir. 2010) (agreeing that bighorn sheep conservation could be a legitimate purpose of the Kofa wildlife refuge wilderness, but that water tanks for sheep were unlawful "installations" that had not been shown to be "necessary" for Wilderness Act purposes).
The courts have not yet had to resolve conflicts between the Wilderness Act and ANILCA, but it is simplistic to state that ANILCA would necessarily “prevail” regardless of the nature of the conflict.257

III. CASE STUDIES

This Part reviews a handful of wilderness case studies for each agency. It focuses on cases that have resulted in judicial resolution, with an aim toward identifying patterns that demonstrate how each agency has implemented the provisions of the Wilderness Act and its own organic legislation and management policies. There are fewer FWS cases involving wilderness, making trends more difficult to discern, but some contours emerge with respect to each agency’s approach to preserving wilderness.

A. NPS

When recreationists and other litigants challenge agency actions that protect wilderness areas, NPS tends to prevail. For different reasons, NPS has also prevailed against programmatic challenges where plaintiffs sought sweeping changes to NPS’s wilderness designation reviews or wilderness management plans. On the other hand, when litigants challenge NPS for taking action that allows intrusions into designated wilderness areas, NPS tends to lose.258 The following assessment of key NPS cases explores these discrepancies and attempts to identify evidence of either a pro- or anti-wilderness management bias in the agency.

The lead programmatic challenge to NPS’s wilderness approach is Wilderness Society v. Norton,259 which attempted to force NPS to complete


257 See Wilderness Soc’y, 353 F.3d at 1056, 1058, 1060 n.17 (explaining that ANILCA designated 1.35 million acres of the Kenai Wildlife Refuge as wilderness and that ANILCA permits fishery enhancement “[i]n accordance with the goal of restoring and maintaining fish production in the State of Alaska,” but prohibiting fish stocking as an unlawful commercial use under the Wilderness Act).

258 For an empirical assessment of the wilderness litigation record of all four land management agencies, see Appel, supra note 16, at 111-13. Appel demonstrates how pro wilderness decisions tend to be upheld, while anti wilderness decisions tend to be struck down. By contrast, when litigants challenge NPS decisions for allegedly violating the Organic Act (rather than the Wilderness Act), litigants almost always lose, regardless of whether they seek more access or a higher degree of resource protection. See Nagle, supra note 63, at 3. The few exceptions include an off-road vehicle controversy. See, e.g., Southern Utah Wilderness Alliance v. Dabney, 222 F.3d 819, 830 (10th Cir. 2000) (finding that NPS’s decision was not clearly contrary to the Organic Act, but remanding for a determination of the level of impairment that would result), and disputes over snowmobiling in Yellowstone, see, e.g., Fund for Animals v. Norton, 294 F. Supp. 2d 92, 114-15 (D.D.C. 2003) (invalidating NPS’s decision to allow snowmobiling as a violation of the Organic Act); International Snowmobile Manufacturers Ass’n v. Norton, 340 F. Supp. 2d 1249, 1265 (D. Wyo. 2004) (invalidating NPS’s decision to ban snowmobiles as arbitrary and capricious).

259 434 F.3d 584 (D.C. Cir. 2006).
its wilderness inventories and recommendations and to issue management plans for designated wilderness areas. Plaintiffs alleged a chronic, system-wide failure to satisfy NPS's legal obligations with respect to identification and management of wilderness in the National Park System. The court dismissed the case, holding that NPS's Management Policies were not enforceable because they were not published in Federal Register, did not purport to prescribe substantive rules, and were merely a guidance document that NPS could waive or modify.260

Similarly, in River Runners for Wilderness v. Martin,261 plaintiffs challenged NPS's 2006 Colorado River Management Plan, which allowed motorized rafts, generators, and helicopters in the river corridor within the Grand Canyon despite the area's potential for wilderness designation. In previous years, NPS had stated that motors would be eliminated because "[n]on-motorized travel is more compatible with wilderness experience."262 In addition, NPS's 2001 management policies required NPS to treat this stretch of the Colorado River as wilderness or potential wilderness.263 In the 2006 Plan, however, NPS concluded that the use of motors in the river corridor "is only a temporary or transient disturbance of wilderness values" and "does not permanently impact wilderness resources or permanently denigrate wilderness values."264 Citing Wilderness Society v. Norton, the court held that the plaintiffs could not enforce the 2001 Management Policies because they did not prescribe substantive rules nor establish public or individual rights.265 Once it had concluded that NPS's policy of treating portions of the river as wilderness was unenforceable, the court went on to uphold NPS's determination that motorized uses did not impair the natural soundscape of Grand Canyon National Park within the meaning of the Organic Act.266

260 Wilderness Soc'y, 434 F.3d at 596-97; see supra notes 190-200 (placing this case within the policy and planning context).
261 593 F.3d 1064 (9th Cir. 2010); see also Voyageurs Region Nat'l Park Ass'n v. Lujan, 966 F.2d 424, 428 (8th Cir. 1992) (refusing to compel NPS to adhere to management policies that called for managing potential wilderness areas as wilderness, and upholding NPS's decision to allow snowmobiling in a wilderness study area).
262 593 F.3d at 1068. In 1980, NPS proposed that the Colorado River Corridor be designated as potential wilderness and, once motorboat use was phased out, as wilderness. However, in the 1981 appropriations bill for the Department of the Interior, Congress prohibited the use of funds "for the implementation of any management plan for the Colorado River within the [Park] which reduces the number of user days or passenger-launches for commercial motorized watercraft excursions . . . ." Id. at 1069.
263 Id. at 1075 (stating that the Park Service "will seek to remove from potential wilderness the temporary, nonconforming conditions that preclude wilderness designation").
264 Id. at 1071-73 (citing Wilderness Soc'y, 434 F.3d 584, 596 (D.D.C. 2006)). The court did not decide whether the Grand Canyon Management Plan was enforceable because plaintiffs failed to raise that issue on appeal. Id. at 1071.
265 Id. at 1083-84. NPS had found that any added noise from motorboats would not result in significant impairment given existing noise levels from aircraft flying overhead. Id. In 2009, NPS proposed a rule to implement new permit requirements for commercial river trips and to update visitor use restrictions, but it has not yet issued a final rule. See Nat'l Park Serv. Proposed Rule, 74 Fed. Reg. 33,384 (July 13, 2009); DOI Unified Agenda, 75 Fed. Reg. 79,582 (Dec. 20, 2010).
NPS has also fared well in court in site-specific cases where recreationists have challenged NPS actions that protect wilderness areas from intrusions. In *Isle Royale Boaters Ass'n v. Norton*, boaters challenged NPS's decision to restrict motorboat access to wilderness areas. The court rejected the challenge, finding that NPS's decision that motorboat access must be limited by moving or removing docks was not arbitrary or capricious. It concluded that the statutory framework gives NPS "broad discretion to preserve the land and its character," and explained, "[a]lthough the Wilderness Act does not specifically mention docks, it does explicitly ban motorboats, structures, and installations... We cannot believe that Congress would ban motorboats but require docks without giving some indication that it was doing so."

NPS has also been upheld when it decides to phase out inconsistent commercial uses. In *Drakes Bay Oyster Co. v. Salazar*, the court found that the Secretary of Interior had discretion not to renew a special use permit for a commercial oyster farm in a potential wilderness area. Although the oyster farm dated back to the 1950s, the Secretary directed NPS to allow the permit to expire, without renewal, because of the "public policy inherent in the 1976 act of Congress that identified Drakes Estero as potential wilderness," and because "removal of commercial operations in the estero would result in long-term beneficial impacts to the estero's natural environment."

Conversely, NPS tends to lose when it authorizes intrusions into wilderness. There are several reported cases that demonstrate this phenomenon. Perhaps most famously, in *Wilderness Watch v. Mainella*, the court enjoined NPS's practice of transporting tourists in a passenger van across the Cumberland Island Wilderness in order to provide public access to historical structures. It rejected NPS's argument that such services were "necessary" just because they made visitor access more convenient and had "no net increase" in effects to the land.

Commercial services were also at the heart of *High Sierra Hikers Ass'n v. U.S. Department of Interior*, which challenged provisions of NPS's management plan for Sequoia and Kings Canyon National Parks that

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267 330 F.3d 777 (6th Cir. 2003).
268 Id. at 779.
269 Id. at 783.
270 Id. (citing 16 U.S.C. § 1133(d)(1) (2006)).
271 921 F. Supp. 2d 972, 990 (N.D. Cal. 2013), aff'd, 729 F.3d 967 (9th Cir. 2013).
272 Id. at 982.
273 Id. The Secretary's Memorandum to NPS also notes "Congress's direction to 'steadily continue to remove all obstacles to the eventual conversion of these lands and waters to wilderness status.'" Id.
274 Professor Appel calls this "a one-way judicial ratchet in favor of wilderness protection."
276 375 F.3d 1085 (11th Cir. 2004).
277 See id. at 1089-90.
278 Id. at 1089, 1095-96. Congress subsequently redrew the wilderness boundary lines to exclude the road in question. H. REP. No. 108-738, 108th Cong., 2d Sess. 3 (2004).
permitted outfitters' use of packstock in wilderness areas at pre-existing levels without making the required finding of necessity. The court agreed that NPS had violated the Wilderness Act:

"[T]he agency's primary responsibility is to protect the wilderness, not cede to commercial needs. An agency can only override this responsibility and promote competing interests such as those related to commercial activity, if it first engages in a "comparative and qualitative analysis where the variables are considered in relation to one another and the interests at stake are weighed." Once this analysis is complete, "the administering agency must determine the most important value and [justify] its decision to protect that value.""

It chastised NPS for failing to make a thorough assessment of the necessity for, and effects of, commercial services: "[W]hen there is a conflict between maintaining the primitive character of the area and between any other use . . . the general policy of maintaining the primitive character of the area must be supreme." The court remanded the case and imposed a deadline for NPS to complete a comprehensive wilderness plan.

Courts have also construed the Wilderness Act exception for "measures required in emergencies" rather narrowly, and have pushed back when agencies like NPS attempt to take undue advantage of it. In Olympic Park Assocs. v. Mainella, the court enjoined NPS from using helicopters to replace collapsed hiker shelters in wilderness areas and rejected the argument that the new shelters were necessary to prevent emergencies. It admonished NPS that imminent threats to human health and safety—"matters of urgent necessity"—must be demonstrated before structures, installations, or vehicles can be deployed in wilderness.

Although the Wilderness Act is ambivalent toward water rights for wilderness areas, NPS decisions that undermine water rights for wilderness areas have likewise experienced remarkably vigorous judicial review. A federal district court in Colorado concluded that NPS could not abdicate its responsibilities for protecting wilderness water rights for the

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280 Id. at 1044.
281 Id. at 1047 (citing Californians for Alternatives to Toxics v. U.S. Fish & Wildlife Serv., 814 F. Supp. 2d 992, 1018, 1021 (E.D. Cal. 2011)).
285 Id.
286 See 16 U.S.C. § 1133(d)(6) (2006) ("Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.").
Black Canyon of the Gunnison National Park. There, the agency entered into a settlement with the State of Colorado whereby it agreed to permanently relinquish its reserved water right for peak and shoulder flows in the Black Canyon to state agencies. Instead of a 1933 priority date for the federal reserved water right, the negotiated state right would have a priority date of 2003, which would provide little or no water for the Canyon under state prior appropriation law. NPS also ceded its ability to enforce the state water right to the state water conservation board. The court set aside the settlement as a violation of NPS's duty to protect the Black Canyon's resources. It explained that protecting reserved water rights was not a discretionary option but rather a legal obligation under the National Park Service Organic Act and the Wilderness Act, concluding that the "canyon was entitled to a quantity of water necessary... for the preservation of the wilderness uses, wildlife and fish." Cases like Wilderness Society v. Norton and River Runners for Wilderness v. Martin indicate that NPS has been loath to embrace its wilderness management policies as concrete, enforceable, on-the-ground commitments, and that it has failed to take wilderness planning terribly seriously. Water rights for wilderness areas seem to fall into the same category, with the Black Canyon of the Gunnison case hinting at NPS's reluctance to champion federal reserved water rights in the face of state resistance. By the same token, recreational interests have been given preference over the preservation of untrammeled wilderness characteristics in cases like Mainella, Olympic Park, and High Sierra Hikers. It may not be fair to call the two cases where NPS took action to preserve wilderness characteristics—Drakes Bay Oyster Co. and Isle Royale Boaters—anomalies, but they do seem to be outliers among the reported cases. Based on this admittedly small selection of cases, it seems fairly clear that NPS faces immense pressure to allow commercial and other nonconforming uses in wilderness, and it has not always been able to resist.

288 Id. at 1241–42, 1252.
289 Id. at 1242.
290 Id. at 1248–53. The court also found that the settlement agreement constituted an unlawful disposition of federal property, which can only be accomplished by Congress. Id. at 1248.
291 Id. at 1247. The court also held that entering into a settlement that abdicated responsibility for protecting reserved water rights for the Canyon was a "discrete agency action" and subject to judicial review. Id. at 1249 (distinguishing Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 63 (2004)).
292 See supra notes 262–269 and accompanying text.
293 See supra notes 290–294 and accompanying text.
294 See supra notes 279–288 and accompanying text.
295 See supra notes 270–276 and accompanying text.
As is the case with NPS, when FWS undertakes or allows intrusions into designated wilderness areas, FWS tends to lose when litigation ensues. The most telling case took place in the Kofa Wilderness in the Sonoran Desert of southwest Arizona. The Kofa Wilderness was designated in 1990. It makes up approximately 80% of the Kofa Wildlife Refuge, which was created by an executive order in 1939. The executive order declared that the Refuge was being set aside for “conservation and development of natural wildlife resources,” in particular, desert bighorn sheep. The area is extremely arid, averaging around seven inches of rain a year. During a drought, the FWS constructed water tanks and pipes in the wilderness to augment the sheep’s water supplies. The tanks are comprised of aerated PVC pipe designed to catch rainwater and channel it into concrete weirs or troughs. Absent sufficient rain, water is transported by truck to the structures. FWS personnel, in partnership with the Arizona Game and Fish Department, maintain the system.

In *Wilderness Watch v. U.S. Fish and Wildlife Service*, Wilderness Watch successfully sued, claiming that, while the facilities might be useful to the conservation of sheep threatened by drought and high temperatures, they were “installations” that unlawfully trammeled the wilderness, contrary to the explicit terms of the Act. The Ninth Circuit enjoined the construction and maintenance of the water tanks. It found that, while sheep conservation was a legitimate purpose within Kofa, the tanks were indeed “installations,” and that, while such installations might be useful to sheep threatened by drought and high temperatures, FWS had failed to establish that they were a necessary minimum requirement for wilderness administration.

The desire to enhance fish and game populations at the behest of a state agency is also evident in *Wilderness Society v. FWS*, where the court set aside FWS’s decision to allow a commercial fishing association to stock

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296 Wilderness Watch, Inc. v. U.S. Fish & Wildlife Serv., 629 F.3d 1024, 1027 (9th Cir. 2010).
297 Id.; see also Exec. Order No. 8,039, 4 Fed. Reg. 438 (Jan. 27, 1939).
298 Exec. Order No. 8,039, supra note 297; *Wilderness Watch*, 629 F.3d at 1026.
299 *Wilderness Watch*, 629 F.3d at 1026.
300 Id. at 1027.
301 See id. at 1027, 1031.
302 Id. at 1027.
303 Id. at 1032, 1040.
304 Id. at 1040.
305 Id. at 1032, 1036–37, 1040. Kammer provides a thoughtful critique of the Ninth Circuit for misconstruing the minimum requirements exception, which “allows for motorized vehicles and human installations not when necessary to achieve a purpose of the Wilderness Act, but when necessary to achieve the purpose—namely, preserving the wilderness character of the area.” Kammer, supra note 6, at 117 (emphasis added). Kammer argues that, “once Congress designated most of the refuge as a wilderness area in 1990, the purpose of bighorn sheep conservation became one of many secondary purposes—along with recreation, aesthetics, science, education, and historical use—which were made subject to the Act’s primary purpose of preserving the area’s wilderness character.” Id.
hatchery-raised salmon in a lake within the Kenai Wildlife Refuge wilderness. The State of Alaska had recommended the project in order to enhance commercial operations for the benefit of the fishing industry, and the project had its origin in an Alaska Department of Fish and Game research project "designed to test the ability of the ecosystem to produce fish." The court held that the project had a primary commercial purpose and effect and was therefore invalid under the Wilderness Act.

The enhancement of fish stocks also drove the decision to authorize an aggressive restoration project that would eradicate non native trout with the pesticide rotenone and restock the treated area with "pure" cutthroat trout from donor streams. In Californians Against Toxics, FWS was the consulting agency, as required by the ESA, while the Forest Service was the land manager. The agencies selected an auger, powered by a gasoline powered generator, to distribute potassium to neutralize the toxicity of the rotenone downstream. The court disagreed that their plan represented the necessary "minimum" for wilderness management and enjoined the project. This case indicates that FWS is eager to restore wildlife populations and manipulate existing habitat in wilderness areas, but it is somewhat dangerous to draw much from it since the Forest Service was the action agency, and the project occurred on a forest rather than a refuge.

FWS also lost a notable hunter-dominated case that occurred outside of designated wilderness, but within one of the most remote refuges in the contiguous United States—Ruby Lake, Nevada. Although FWS tends to get a great deal of deference by courts reviewing challenges to its compatibility determinations, in Defenders of Wildlife v. Andrus (Ruby Lake), FWS's

306 353 F.3d 1061, 1055, 1070 (9th Cir. 2003).
307 Id. at 1066-1057.
308 Id. at 1064-1065.
310 See id. at 1019 ("[W]hile the Agencies justified the necessity of using motorized equipment as opposed to other methods, they nonetheless violated the Wilderness Act by failing to consider the potential extinction of native invertebrate species as a factor relevant to the decision of whether the extent of the project was necessary.").
311 Id. It may be relevant to note that the division of FWS that oversees ESA implementation is separate from the refuge management division. At the risk of venturing too far down this path, another illustrative case where FWS, in its consulting role, approved intrusive tracking measures in Forest Service wilderness is Wolf Recovery Foundation v. U.S. Forest Service, 692 F. Supp. 2d 1264 (D. Idaho. 2010) (upholding decision to allow Idaho to track wolves by helicopter).
313 See Humane Soc'y v. Lujan, 768 F. Supp. 360, 365 (D.D.C. 1991) (upholding decision to allow hunting in Mason Neck Wilderness Refuge, despite possible disturbance to bald eagles, when FWS had reached a plausible conclusion on compatibility, monitored deer populations, considered risks and alternatives, and imposed mitigation measures); see also McGrail & Rowley v. Babbit, 986 F. Supp. 1336, 1386 (S.D. Fla. 1997) (upholding FWS's authority to deny permits to commercial services in order to protect refuge resources).
authorization of motor-boating in the refuge was “contrary to all reason,” because boats with unlimited horsepower were inconsistent with the primary purpose of the refuge as a breeding ground for migratory birds. As the court explained in an earlier opinion, FWS cannot balance economic or political factors in its compatibility decision, and it cannot justify noncompliance with the statutory standard by pointing to a need to remedy past damage to wildlife resources or habitat. FWS’s reliance on speed limits to ensure against disruption of nesting behaviors and habitat fared no better, as speed limits would be virtually unenforceable. As with Californians Against Toxics, it may be risky to draw too much from Ruby Lake, which did not involve the Wilderness Act, but it adds anecdotal evidence for FWS’s proclivity to bend to state wildlife agencies’ will.

Like NPS, it appears that FWS fares better in cases where it decides to protect wilderness characteristics. There are very few cases to assess, however, and none involving hunting and fishing interests or state fish and game agencies. In McGrael & Rowley v. Babbitt, FWS’s denial of a special use permit to a commercial catamaran outfitter who wished to bring tourists to frolic on an island beach within the Florida Keys Refuge wilderness area was easily upheld. In reaching his decision to deny the permit, the refuge manager cited a biologist’s concerns that the excessive public use (nearly 10,000 passengers annually) could cause damage to the shoreline and sea turtle nests, and that tourists flinging kites, paddleballs, and Frisbees would be incompatible with the wilderness character of the island. The court also agreed (albeit somewhat reluctantly) with the refuge manager’s decision that allowing a different catamaran outfitter to take tourists to a nearby island

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316 Ruby Lake II, 455 F.Supp. at 449. The State of Nevada subsequently challenged both the new waterfowl regulations and even the federal government’s ownership of the refuge. Nevada v. United States, 731 F.2d 633, 633 (9th Cir. 1984). Its arguments were unavailing: “for Nevada to succeed in its challenge to federal authority to regulate Ruby Lake under the Property Clause, Nevada would have to prove that the United States did not own sufficient property within the refuge to give the federal government authority to regulate under the Property Clause,” but the statute of limitations for such claims had passed. Id. at 636 (citing U.S. CONST., art. IV, § 3, cl. 2). Cf. Nat’l Audubon Soc’y v. Hodel, 606 F. Supp. 825 (1984) (allowing land exchange).

317 Ruby Lake II, 455 F. Supp. at 449. But see Wyoming v. United States, 279 F.3d 1214, 1218 (10th Cir. 2002) (remanding FWS’s refusal to permit the state to vaccinate elk on National Elk Range to protect livestock from brucellosis).

318 See supra notes 261, 270–76, and accompanying text. See also GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, PUBLIC NATURAL RESOURCES LAW 31:7 (2d ed. 2013) (“Environmentalists usually will have better legal grounds to challenge the opening of a refuge to motor vehicles than the grounds available to recreationists opposing closures.”).


320 Id. at 1390.
posed fewer problems for refuge resources, and therefore did not serve as a precedent for permit issuance.321

In sum, the Wilderness Watch and Wilderness Society cases indicate that FWS may be too willing to utilize aggressive intervention tactics in wilderness areas where such tactics may restore or enhance wildlife populations.322 These and other cases also indicate that FWS is still subject to heavy pressure from state wildlife agencies whose primary motivation has nothing to do with wilderness preservation and everything to do with hunter expectations and revenues.323

IV. THE FUTURE OF WILDERNESS PRESERVATION ON THE MULTIPLE USE LANDS

According to Bob Keiter, "[c]ontroversy still haunts the image and reality of wilderness in the national parks."24 The same can be said of wilderness in the National Wildlife Refuges, although they seem to provoke somewhat less publicity and less litigation. This Part considers how the agencies' wilderness preservation strategies and activities might be improved to effectuate the Wilderness Act's requirement that wilderness areas remain untrammeled. Possibilities include congressional amendments to the agencies' organic acts, presidential or secretarial orders, and agency revisions to regulations and internal policies.

Glicksman observed that with respect to the Forest Service and BLM, "organic statute fixes are capable of ratcheting up the level of wilderness protection on the public lands."325 In contrast to the Forest Service and BLM, NPS and FWS already have a conservation mandate embedded in their organic acts.326 Each organic act includes a purpose that sometimes conflicts with wildness. For NPS, public enjoyment often means high-intensity, motorized recreation. For FWS, placing wildlife first sometimes means active intervention to restore wildlife populations and/or habitat. Congress could amend each of the two organic acts to better protect the wild by explicitly prioritizing wilderness characteristics in the event of a conflict with other statutory purposes, and by authorizing only "primitive" low-impact recreation and "hands off" management strategies.

321 Id. at 1393. The court stated that it "might well have come to different conclusions, if writing on a clean slate," but that it could not set aside FWS's decision that the disputed tours were distinct from the competitor's proposed "passive and education oriented" tours. Id.
322 See supra notes 308–316 and accompanying text.
323 See supra notes 136–139, 308–316 and accompanying text; Daniel T. Spencer, Recreating [in] Eden: Ethical Issues in Restoration in Wilderness, in PLACING NATURE ON THE BORDERS OF RELIGION, PHILOSOPHY AND ETHICS, 57 (Forrest Clingerman & Mark H. Dixon eds., 2011) (finding the Kofa plan motivated by hunting because bighorn sheep are "[h]ighly valued as both a trophy hunting animal that brings in a significant amount of revenue to state agencies through the sale of hunting licenses, as well as an iconic species that symbolizes wildness in the desert southwest").
324 KEITER, supra note 60, at 25.
325 WILDERNESS MANAGEMENT, supra note 5, at 493.
Although the current organic act authorizations for recreation and wildlife restoration activities can conflict with wilderness preservation, a major statutory overhaul for NPS and FWS is not warranted, nor is a sea change in the overarching missions for either agency. NPS should strive to balance the demand for public enjoyment and the need to conserve park resources while ensuring against resource impairment within the National Park System, and FWS should strive to fulfill its wildlife conservation and enhancement requirements within the National Refuge System. That said, a modest revision to each organic statute to prioritize wilderness preservation—keeping designated wilderness areas within each system wild and untrammeled—would be useful in terms of elevating wilderness status within the agencies and providing additional constraints on agency discretion in the event of conflicts. In addition, Congress could rescind its authorization for preexisting grazing, which invites human intervention and thus erodes wilderness characteristics.\(^{327}\) The likelihood of wilderness-friendly statutory amendments, or for that matter any substantive statutory amendments, is slim, however, as Congress seems uninterested and perhaps even incapable of accomplishing environmental reforms.\(^{328}\)

Rather than seeking statutory amendments, a presidential or secretarial order may be appropriate. I explained in a previous article how “executive orders have a profound influence on how the government executes its policy initiatives.”\(^{329}\) By directing federal agencies to work on specified priorities, a presidential executive order can compel executive branch officers “to take an action, stop a certain type of activity, alter policy, change management practices, or accept a delegation of authority under which they will henceforth be responsible for the implementation of law.”\(^{330}\) Elevating wilderness preservation on all federal lands through an executive order may be a viable alternative to legislation or other possible measures. Executive orders are equivalent to federal laws and are entitled to a strong presumption of validity. They are less durable than legislation, however, and perhaps even less durable than notice-and-comment regulation, because a new president can sweep them away with the stroke of a pen without public involvement or recourse.

An order issued by the Secretary of Interior suffers from the same problem, but it too may be a reasonably effective means of prioritizing preservation over other concerns for wilderness lands within the National Park and National Wildlife Refuge Systems. In particular, secretarial orders have been used to reorganize entire bureaucracies where necessary. In the wake of the BP Deepwater Horizon blowout, Secretary of Interior Salazar issued an order reassigning responsibility for the offshore oil and gas-leasing


\(^{329}\) Zellmer, *supra* note 328, at 2390.

\(^{330}\) *Id.*
program historically managed by Minerals Management Service to three new agencies to separate the regulators from the revenue collectors. In doing so, the Secretary took steps to transform “a dysfunctional organization... riddled with conflicts of interest."\(^{330}\) The Secretary of Interior could issue an order creating a new entity within the Department to oversee wilderness management on Department of Interior lands.\(^{332}\) Although NPS and FWS already share both an assistant secretary and a deputy solicitor,\(^{333}\) having an unbiased office housed outside of the agencies, with the backing of a secretarial order that establishes a clear preservation priority for all wilderness lands within the Interior, may move the agencies away from some of the entrenched biases and interests that favor recreation, wildlife propagation, grazing, and other high-intensity uses and toward a more integrated, systematic wilderness strategy.\(^{334}\)

Other options for enhancing wilderness preservation turn on administrative action by the agencies themselves. Professor Glicksman agreed that administrative action may be capable of raising the profile of wilderness preservation on federal lands.\(^{335}\) In particular, for BLM, he flagged the adoption of “more specific planning regulations, modeled after the 2012 Forest Service planning rules, which strengthen the requirements for both identifying public lands of potential value as wilderness and managing lands that Congress has designated as official wilderness."\(^{336}\) Although it is not clear that regulations promulgated by the Forest Service, as a multiple-use agency, would heighten rather than dilute the protections already provided by NPS and FWS, it would be desirable for both NPS and FWS to adopt regulations that explicitly prioritize wilderness preservation. Such regulations could provide cover for the agency when it implements a preservation-oriented strategy unpopular with states, hunters, or high-impact recreationists. Moreover, unlike manual provisions and general policies, detailed regulations promulgated through notice-and-comment rulemaking are enforceable in court when the agency decides to depart from them.\(^{337}\)

In particular, NPS should issue a set of regulations for wilderness management, rather than continuing to rely on complex layers of Management Policies, manual provisions, director’s orders, and general

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\(^{333}\) See supra note 164 (describing agency organization).

\(^{334}\) See WILDERNESS MANAGEMENT, supra note 5, at 37 (considering, but rejecting, the merger of federal agencies and the formation of a new National Park and Wildlife Service charged with wilderness protection as unlikely and not necessarily in the best interest of enhanced wilderness preservation).

\(^{335}\) Id. at 39.

\(^{336}\) Id.

management plans, none of which is legally binding or enforceable.\textsuperscript{338} The FWS could strengthen its wilderness regulations by incorporating the preservation guidelines found in its Wilderness Stewardship Policy.\textsuperscript{339} In particular, FWS should adopt regulations that protect natural ecological processes in wilderness areas, and should omit any provisions that suggest that interventions (such as fire suppression and pest eradication) may be allowed to enhance fish and game populations or prevent damage to private property.\textsuperscript{340} In addition, revised regulations should explicitly prohibit any public facilities, improvements, or services in wilderness areas, as well as interventions for population enhancement or environmental restoration, unless such things are the necessary minimum requirement for achieving not just refuge purposes but wilderness purposes.\textsuperscript{341} Finally, both agencies could benefit by issuing a regulatory definition of “necessary,” and of “minimum requirement.”\textsuperscript{342}

Absent binding regulations with detailed prescriptions for preventing interventions in the wilderness, wilderness preservation will continue to be subject to political pressure. A recent decision illustrates the impact of changes in political currents as applied to a wildlife refuge in Alaska. In 2011, FWS denied the State of Alaska’s proposal to kill wolves on Unimak Island Wilderness within the Alaska Maritime National Wildlife Refuge.\textsuperscript{343} Unimak Island is “a functional and intact natural ecosystem, free from invasive and non-indigenous species,” and it receives high marks for its “untrammeled quality.”\textsuperscript{344} Although FWS’s initial inclination was to approve the hunt at Alaska’s behest,\textsuperscript{345} FWS ultimately concluded that it would

\textsuperscript{338} See supra Part II.D.1.
\textsuperscript{339} See supra notes 248-255. However, the provision purporting to elevate the Refuge Act and general provisions of ANILCA over the Wilderness Act should be excised.
\textsuperscript{340} See supra notes 241-242 (describing fire, pest, and disease management policies).
\textsuperscript{341} See supra notes 238-240 (describing policies for public facilities, improvements, and services, which appear to depart from the Wilderness Act by allowing such activities when necessary for realizing recreational purposes); supra note 254 (noting that FWS’s Stewardship Policy purports to allow interventions into population levels and natural processes not only to achieve wilderness purposes but also to maintain or restore biological integrity or recover listed species).
\textsuperscript{342} See supra note 161 (describing FWS definition of “minimum tool” as “[t]he least intrusive tool, equipment, device, force, regulation, or practice determined to be necessary to achieve a refuge management activity objective in wilderness”) (emphasis added). This definition should be revised to comport with the Wilderness Act by allowing only minimum tools necessary to achieve wilderness objectives.
\textsuperscript{345} Craig Medred, Feds OK Aerial Wolf Hunt, ALASKA DISPATCH, Jan. 10, 2011, http://www.alaskadispatch.com/article/feds-ok-aerial-wolf-hunt-alaskas-unimak-island. The history of aerial wolf hunting in Alaska is a complex one and the FWS’s position has shifted over time for
negatively impact natural diversity and wilderness character, two purposes of the Refuge, and outweigh the potential benefit of enhanced subsistence hunting of caribou, a third purpose of the Refuge. FWS also recognized that the use of helicopters would degrade wilderness character. This decision may have been less difficult for FWS than some of the reported cases described above, because the wildlife-protective requirements of the Refuge Act and the Wilderness Act both pointed in the same direction. In the end, FWS cited public opposition and a "reevaluation" of applicable Refuge laws and policies in its final decision to deny the proposal.

Rulemaking has the added advantages of harnessing agency expertise and fostering transparency. Both agencies could bring their experiences and lessons learned from several decades of wilderness implementation to bear at the rulemaking table, share those experiences and lessons with other agencies and the public in an open and transparent fashion, and collect and consider public feedback and suggestions from their sister agencies in the process. For NPS and FWS, the fiftieth anniversary of the Wilderness Act is an ideal time to formalize their wilderness policies through rulemaking processes.

V. CONCLUSION

As Robert Glicksman noted in his comparison of wilderness management on Forest Service and BLM lands, one might have expected those two agencies “to implement their wilderness designation and management responsibilities in similar fashion. Such has not been the case.” The same can be said about NPS and FWS.

NPS struggles to achieve both recreational enjoyment and resource non-impairment, as required by the Organic Act, but the pressure to allow

\begin{footnotesize}
\begin{enumerate}
\item See supra Part III.B.
\item U.S. FISH & WILDLIFE SERV., NOTICE OF DECISION (2011), http://www.adfg.alaska.gov/static/home/news/ongoingissues/pdfs/unimak_03_07_2011_fonsi.pdf. A Wilderness Fellows report describes the wolf hunting proposal as "the only serious impending issue that could drastically reduce wilderness character" of Unimak. FWS Wilderness Fellows Report on Wilderness Character Monitoring, supra note 344, at 29 ("If wolves are physically destroyed/removed from the wilderness by the preferred method (aerial gunning) there would be major implications and severe negative impacts to every quality of wilderness character. Overhead flights would cause noise... bullet casings and debris would be scattered across wilderness, a natural population of predators would be destroyed and would create another imbalance in the ecosystem."). Id.
\item See supra Part III.B.
\item NOTICE OF DECISION, supra note 347, at 5. FWS was not willing to avoid intervention completely; however, it issued a special-use permit to the state to translocate twenty bull caribou from the Southern Alaska Peninsula Herd to Unimak Island. Id; Pemberton, supra note 8.
\item See, e.g., NOTICE OF DECISION, supra note 347.
\item Wilderness Management, supra note 5, at 494.
\end{enumerate}
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intensive recreational use, particularly motorized use, tourist facilities, and commercial outfitters, weighs heavily on the agency. FWS faces similar pressures, but the Refuge Act puts a thumb on the scale in favor of wildlife conservation first and recreation second. If recreation is incompatible with conservation, conservation prevails.

FWS has another advantage in terms of achieving wilderness success in that it has adopted binding regulations governing wilderness management, while NPS relies on non-binding (and unenforceable) policies. The FWS regulations are somewhat cursory, however, but to the extent that a decision comes within the regulatory provisions, citizens concerned about wilderness management will have an easier time getting involved, challenging, and helping to improve FWS decisions than they would NPS decisions.

NPS, by contrast, has a completely different kind of advantage. With some exceptions, NPS's lands have been impacted less by commodity development than FWS lands. Outside of Alaska, FWS's lands run the full gamut from areas carved out of other categories of federal lands, some of which had been utilized for grazing, oil and gas development, and logging, to bankrupt farm and ranchlands acquired during the Depression, to modest wetlands beloved (and sometimes overrun) by hunting and conservation groups. The degraded state of some of its lands, and the overwhelming diversity of the system as a whole, likely makes it more challenging for FWS to commit to a nonintervention policy for the wilderness lands within its system.

NPS may have an additional advantage in terms of achieving wilderness success. Perhaps its history as a land management agency and its pride in wearing the stewardship mantle cultivates a greater commitment among its directors and superintendents to ensuring that undisturbed areas within the Park System maintain wilderness characteristics. FWS, by contrast, began as a wildlife agency, and its oversight over individual wildlife refuges was relatively haphazard until the latter part of the twentieth century when Congress strengthened the refuge system and passed more stringent conservation requirements for system-wide management. It appears that biologists concerned first and foremost with maintaining and restoring wildlife populations lead the way, while ecologists and stewards of wilderness characteristics trail behind. Where population enhancement or habitat restoration requires active intervention and manipulation of the wilderness area, FWS may have an innate inclination to prioritize intervention. The FWS's Wilderness Stewardship Policy, which asserts that the Refuge Act and ANILCA "prevail" over the Wilderness Act in the event of conflict, is telling (and at least in part erroneous) in this regard.352 In addition, FWS, because of its character as a wildlife management agency, probably experiences more pressure from state fish and game managers to allow incursions into wilderness lands to enhance fish and game populations and to control predators that depredate livestock and game species.

352 See supra notes 256–259 (critiquing Wilderness Stewardship Policy 1.2(C)).
It is impossible to say, based on this broad-brush, impressionistic analysis, whether either agency is relatively more committed to protecting federally designated wilderness areas within the lands under their jurisdiction, and whether either has been more successful in avoiding intervention and trammeling. It is safe to say, however, that both agencies could improve their preservation strategies, planning processes, and management practices by engaging in rulemaking to enhance their commitment to wilderness stewardship and to foster greater public involvement and recourse when wilderness characteristics may be trammled by conflicting uses. Moreover, the creation of a high-level wilderness stewardship office within the Department of Interior, created by presidential or secretarial order, would help achieve Wilderness Act objectives by synthesizing policies, overseeing the resolution of system-wide conflicts, and solidifying the preservation commitment of all Interior agencies.
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