The Lost Art of the Master Plan: Managing Visitor Use in Yellowstone and Beyond

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I. Introduction

As the American population grows and diversifies, it places increasing demands on America’s national parks and other public lands. Yellowstone, Yosemite, the Grand Canyon—their beauty is part of the essence of America. So are the open spaces of the 245 million acres managed by the Bureau of Land Management, encompassing...
places like Utah’s Bears Ears National Monument and Wyoming’s Red Desert.\(^1\) As more people come to know these places, more people want to use them.

The challenge of managing visitor use is not new. Less than 10 years after the Wilderness Act passed in 1964, people already began to trample the lands that the law was designed to protect.\(^2\) During 1940 in New Hampshire’s White Mountains, for example, a backpacker could walk 4.5 miles without expecting to see another person.\(^3\) By the early 1970s, that figure had shrunk to 73 yards.\(^4\) Writing on Yellowstone’s centennial in 1972, National Park Service Director George Hartzog would proclaim the future of the park in jeopardy. “The problem, ironically, is an outgrowth of the park’s success—the threat of overuse.”\(^5\)

Although the problem of managing visitor use is not new, circumstances are. Growing voices for equity and justice demand consideration of the diverse ways that different cultures interact with nature. Given that America’s public lands belong to all Americans, all Americans have a right to enjoy these lands. Yet it is white, non-Hispanic Americans who have traditionally used them.\(^6\) To be more inclusive, stewards of America’s public lands must understand and accommodate the diverse ways that different people interact with nature. Inclusivity requires welcoming in new people. This includes racial and ethnic groups who now make up a large portion of the American population but remain a sliver of those visiting the nation’s public lands.\(^7\)

Yet, protecting the splendors and serenity that visitors come to see requires keeping people out at times. As millions of people traveled to America’s national parks this past summer, many experienced traffic jams and packed boardwalks. Last July, for the first time in the park’s history, Yellowstone received more than one million visitors in a single month. While pandemic conditions may have exaggerated visitation numbers, trends in park visitation have been increasing for several years.\(^8\) Too many visitors end up destroying what people come to the


\(^3\) Nash, supra note 2, at 320.

\(^4\) Id.


\(^6\) See infra Part II.

\(^7\) See infra Part II.B.

\(^8\) See, e.g., Christopher Monz, RECREATION ECOL. LAB AT UTAH STATE UNIV.,
parks to experience in the first place. Therefore, in some parks, limiting access has become necessary.\footnote{Glacier National Park, for example, will require a reservation to access the park via the famous Going-to-the-Sun road beginning this summer. \textit{Glacier National Park Vehicle Reservation System}, Nat’l Park Serv., https://www.nps.gov/glac/planyourvisit/gtstricketedentry.htm [https://perma.cc/3HVH-K689] (last visited May 22, 2022). Other parks requiring reservations for access to certain areas include Acadia, Arches, Muir Woods, Rocky Mountain, Shenandoah and Zion. Rachel Chang, \textit{These are the National Parks Requiring Reservations to Visit in 2022}, CONDÉ NAST TRAVELER (Jan. 26, 2022), https://www.cntraveler.com/story/these-are-the-national-parks-requiring-reservations-to-visit-in-2022 [https://perma.cc/8HKZ-YB2X].}

Bringing new people into America’s public lands while retaining their glory requires new and creative solutions. Some pieces of the past seem to hold land managers back. Other pieces can propel them forward. This article examines the power of planning to deliver an equitable, sustainable future for public lands. It focuses on planning at Yellowstone—examining the park’s past Master Plans to identify what they offer to solve today’s challenges.

Forgotten by many, the hand-colored cover of Yellowstone’s original 1932 Master Plan is as beautiful as Old Faithful itself. The plan’s creators meticulously drew maps and diagrams to illustrate the park’s future, the proposed location of the roads and facilities and areas to protect. Yellowstone completed 13 Master Plans from 1932 to 1973. These Master Plans convey a vision for Yellowstone and guideposts to direct the park toward this vision.\footnote{See infra Part III.}

In the beauty of yesterday’s Master Plans, today’s park managers can find lessons for preserving Yellowstone’s splendor.\footnote{See infra Part IV.} The article begins by examining the use of America’s federal public lands. Part II discusses the origins of public land protection and how different ethnic groups relate to these lands. It examines the idea of wilderness, the role it played in the creation of parks like Yellowstone, and new ways of thinking about it today. Part III then describes the relevance of planning to common-pool resources like public lands. It analyzes Yellowstone’s Master Plans and how they fit into the story of planning at the park. Finally, Part IV recommends actions that current park managers can take to diversify park users while preserving park resources. Such actions will help Yellowstone’s splendor shine even stronger over the next 150 years.

II. Use of America’s Federal Public Lands

A. Historical Context

Understanding the past uses of America’s public lands and how they have changed will help manage the current threats of overuse. Yellowstone became
the world’s first national park when Congress created it in 1872.\textsuperscript{12} Yellowstone’s creation, however, represents only the beginning of nature’s preservation in America. In 1891, Congress passed the General Revision Act, which withdrew forest reserves from the public domain.\textsuperscript{13} As a result, Presidents Harrison, Cleveland, McKinley, and Roosevelt set aside millions of acres of forest land for watershed protection and timber production.\textsuperscript{14} These withdrawals for public purposes reflected a shift from the previous push to dispose of federal lands under laws such as the Homestead Act designed to promote white settlement.\textsuperscript{15}

In the early 1900s, Congress set the stage for the preservation of federal lands for future generations to enjoy. Passed in 1906, the Antiquities Act gives the President the authority to preserve cultural and historic objects and the lands that hold them.\textsuperscript{16} While the Antiquities Act’s origin grew out of concerns to protect noted archaeological sites, such as Chaco Canyon and Mesa Verde, from private collecting and looting, it would come to protect some of America’s most iconic places, such as the Grand Canyon.\textsuperscript{17}

In 1916, Congress created the National Park Service (NPS).\textsuperscript{18} In addition to Yellowstone, 13 other national parks—including Yosemite, Mt. Rainier, and Mesa Verde—existed in 1916.\textsuperscript{19} The 1916 Organic Act created an agency responsible for

\begin{itemize}
  \item \textsuperscript{14} Gerald Williams, U.S. Dep’t of Agric., \textit{The USDA Forest Service—The First Century} 8, 25 (2005), https://www.fs.usda.gov/sites/default/files/media/2015/06/The_USDA_Forest_Service_TheFirstCentury.pdf [https://perma.cc/9T9H-CK6Y].
  \item \textsuperscript{16} 54 U.S.C. § 320301 (“The President may, in the President’s discretion, declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on land owned or controlled by the Federal Government to be national monuments.”).
  \item \textsuperscript{17} Mark Squillace, \textit{The Monumental Legacy of the Antiquities Act of 1906}, 37 Ga. L. Rev. 473, 473, 477 (2003).
\end{itemize}
managing them. The Organic Act directed the NPS to manage park units “by such means as will leave them unimpaired for the enjoyment of future generations.”20 Many lands first protected by the Antiquities Act became national parks. From its modest beginning, the national park system has grown to include “423 individual units covering more than 85 million acres in all 50 states, the District of Columbia, and U.S. territories.”21 Over 15 billion people have visited the national parks since their creation.22

The national parks, however, comprise just a small piece of the commonwealth that America’s public lands represent. The Bureau of Land Management (BLM) oversees the largest portion of America’s federal public lands. A part of the Department of the Interior, BLM manages 244.4 million acres in 20 states—over three times the amount of land within the national park system.23 These lands include the deserts of California, the red rock canyons of Utah, and the high plains of Wyoming. Legally, this large public estate flows from the Taylor Grazing Act of 1934, which effectively ended the homesteading era.24 Pursuant to the Taylor Grazing Act, the Secretary of the Interior created grazing districts encompassing tens of thousands of acres.25 Individuals could no longer establish private ownership of public land within grazing districts by simply using it. After the Taylor Grazing Act, homesteading land within a grazing district required the Secretary to explicitly open a parcel to homesteading.26 Such action required the Secretary to find the parcel “more valuable and suitable for the production of agricultural crops than . . . native grasses and forage plants . . . .”27 Limited land in the public domain met this criteria.

Overall, BLM manages the lands it oversees under principles of “multiple use and sustained yield.”28 The statute governing BLM’s actions—the Federal Land Policy and Management Act (FLPMA)—requires the agency to balance various

20 § 1, 39 Stat. at 535 (codified as amended at 54 U.S.C. § 100101(a)).
25 John D. Leshy et al., supra note 15, at 798.
27 Id.; see also John D. Leshy et al., supra note 15, at 138–39.
possible uses. FLPMA requires BLM to manage the public’s lands, so they are “utilized in the combination that will best meet the present and future needs of the American people . . . .” In developing and revising land use plans, BLM shall “weigh long-term benefits to the public against short-term benefits . . . .” Moreover, Congress required the Secretary of the Interior to “by regulation or otherwise take any action required to prevent unnecessary and undue degradation of the [BLM] lands and their resources . . . .”

While mining and drilling occur on many BLM lands, these lands have become increasingly valuable for recreation. In fact, recreation has arguably become the dominant use of America’s public lands. In 1950, the national parks logged 33 million recreational visits; by 2018 this number increased almost tenfold to 318 million. While the national parks were created with recreation in mind, recreational visits to “multiple-use” lands managed by BLM and the U.S. Forest Service (USFS) have also dramatically increased. Visitors to national forests and grasslands swelled from 46 million in 1955 to over 148 million in 2016.

Although BLM lands traditionally received significantly fewer recreational visitors than national parks or forests, this trend is changing. Over the past 20 years that the BLM kept recreation statistics, total visitation increased from 51.5 million to 73.1 million—an increase of 42%. Increased use over the past two years has been particularly dramatic. It is difficult for the BLM to close

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29 Federal Land Policy & Management Act of 1976, Pub. L. No. 94-579, 90 Stat. 2743 (codified as amended at 43 U.S.C. §§ 1701–1787); see also Norton v. S. Utah Wilderness All., 542 U.S. 55, 58 (2004) (“‘Multiple use management’ is a deceptively simple term that describes the enormously complicated task of striking a balance among the many competing uses to which land can be put, ‘including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and [uses serving] natural scenic, scientific and historical values.’”).

30 43 U.S.C. § 1702(c); see also 43 C.F.R. § 1601.0-5(i) (2022).


32 Id. § 1782(c).


the lands it manages due to "the vast, undeveloped, and remote nature of the lands." Analysis by Interior's Office of the Inspector General found that the BLM experienced an unexpected surge in visitors at 8 of the 10 BLM recreation management areas they surveyed. The closure of other nearby public lands, such as state and national parks, caused overcrowding on BLM lands and exacerbated other problems such as "garbage dumping, driving and camping in unauthorized areas, and general vandalism."

While recreation on public lands has dramatically increased, the diversity of visitors has not. Historically, racial and ethnic minorities have been largely absent in most national parks. As the NPS recognized in its strategic plan almost 25 years ago:

\[\text{Parks have historically been used mainly by the white middle class segment of the population, and many parks do not attract and offer park experiences meaningful to visitors from varied ethnic backgrounds, or have not yet made their park values relevant to them.}\]

This reality remains the same today. White, non-Hispanic visitors dominate the use of public lands and the national parks.

Today, public land managers face a daunting task. Using the public's lands in a way that "will best meet the present and future needs of the American people" requires balancing two competing factors—welcoming racial and ethnic groups

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38 Id. at 3–4 (contacting field offices in Moab (UT), Montrose (CO) and Elko (NV) for the analysis).

39 Id. at 4.


43 See, e.g., Keiter, Emerging Law, supra note 33, at 109–10 ("By any measure, African-American, Latinx, Native American, Asian, and other minority populations are not well represented among those recreating on the public lands; they report feeling uncomfortable and unwelcome in spaces long the domain of predominantly white, Anglo users.").

44 43 U.S.C. § 1702(c).
while managing increased visitation so as not to destroy what people come to the lands to experience. Success requires understanding the public lands’ changing constituency and the diverse ways that different groups interact with nature.

B. New Park Constituents

As the demographics of the nation change, the nation’s parks belong to an increasingly diverse population. In 2011, more minority than white babies were born for the first time in American history. The United States has become more globalized and multicultural, transforming American culture.

Yet, as highlighted above, mostly whites have used America’s public lands. National parks are no exception. In 1872, when Yellowstone National Park was created, just over 33 million white people lived in the United States. The 1870 census recorded nearly five million “colored” inhabitants. While the Fourteenth Amendment granted citizenship in 1868 to African Americans born or naturalized in the United States, few, if any, of these new citizens considered themselves owners of the national parks. This remains true today. Few non-whites see the national parks as a large part of their lives or identities.

National park visitation has increased over the years; visitors, however, remain predominantly white. From 1895 when yearly visitor counts at Yellowstone began, visitors grew from 5,438 to nearly 4.5 million in 2021. While Yellowstone’s creation and the white men who promoted it have long been celebrated, African Americans’ role in the area’s exploration remains largely ignored due to their race, rank, and station in society. Although representing 13.4% of the American

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47 U.S. Census Bureau, 1 Compendium of the Tenth Census 378 tbl.IV (1880), https://www2.census.gov/library/publications/decennial/1880/vol-01-population/1880_v1-13.pdf [https://perma.cc/FW9S-ZQ8Y]. While not an acceptable term today, the term “colored” was used in census documents referenced herein to refer to African Americans.
48 Id.
50 Molly M. Ryan et al., Engaging Minority Communities in Local National Park Units Through Culturally Competent Focus Groups, 38 J. Park & Recreation Admin. 67, 68–69 (2020).
population, Black or African Americans account for 1% of visitors to Yellowstone. Likewise, those identifying as Hispanic or Latino represent 18.5% of the population while accounting for less than 7% of Yellowstone’s visitors.

Different racial and ethnic groups have varying associations with nature and seek to enjoy it in unique ways. African Americans have received repeated messages through the law, historical experience, and custom that the woods can be a place of terror and abuse. In fact, African Americans were banned from or segregated at many public recreation sites, including national and state parks, until the passage of the Civil Rights Act of 1964. In 1922, NPS park superintendents decided, “we cannot openly discriminate against [African Americans], [but] they should be told that the parks have no facilities for taking care of them.”

Negative and violent experiences in public outdoor spaces led many African Americans to recreate in the places created by and for them. Interviews with African Americans in the Denver area, for example, indicated that a limited number of people in their community visited Rocky Mountain National Park. Instead, African Americans in Denver frequented other places like Garden of the Gods, Manitou Springs, Cave of the Winds, Red Rocks, and Lookout Mountain. Between the 1920s and 1940s, many African Americans from Denver traveled less than 40 miles west to near-by Lincoln Hills to escape the summer heat. Developed by a local businessman as an African American resort, Lincoln Hills provided a place that African Americans could recreate outside with others like...


55 QuickFacts: United States, supra note 54; YNP Visitor Use Study, supra note 54, at 35.


61 Id. at 533.

62 Id. at 533–34.

The entire Lincoln Hills resort is now listed on the National Register of Historic Places. 65

Lack of awareness and information about public land recreational opportunities limits visitors’ racial and ethnic diversity. 66 Traditionally provided in English, information about recreational activity in Yellowstone and other national parks excluded Spanish or other non-English speakers. 67 Potential minority visitors are less likely than whites to have family members who actively use the national parks. They do not see people who look like them or share cultural experiences with park staff and management. All of these factors contribute to the lack of diversity in park visitors. 68

Culture and social customs also influence how Americans perceive and use the nation’s national parks. For some African Americans, going to a national park or recreating in natural areas is not a “Black thing” to do. 69 When they do go to national parks, minority visitors often prioritize different aspects of the park than white visitors. For instance, Hispanics rate the importance of facilities and services such as restrooms, exhibits, and staff availability higher than whites. 70 They often have not traveled as far to get to a park as white visitors. 71 While visible lines of segregation have disappeared, invisible lines of division remain.

C. Rethinking Wilderness

By design, Yellowstone and other national parks excluded many people from their nature. Parks were created as an escape from the increasing ills of the urban environment. 72 As Aldo Leopold wrote, “[c]ivilization has so cluttered this elemental man-earth relation with gadgets and middlemen that awareness of it is growing dim.” 73 As the nation settled, American writers and other thought leaders came to

64 Schnee, supra note 63.

65 Id. Today, Lincoln Hills hosts numerous activities to develop “the next generation of leaders through outdoor education and recreation, cultural history exploration and workforce advancement.” About Us, LINCOLN HILLS CARES, https://lincolnhillscares.org/about-us/ [https://perma.cc/CPG5-NKXS] (last visited May 22, 2022). The programs are designed to “empower youth who may not otherwise have the opportunity due to economic, social or family circumstances.” Id.

66 See Xiao et al., supra note 42, at 908.

67 Ryan et al., supra note 50, at 69.


69 Erickson et al., supra note 60, at 540.


71 Id. at 4.

72 Nash, supra note 2, at 143.

look at the woods and wilderness differently. Associations with wilderness changed from something that needed to be conquered and tamed, to something that needed to be preserved. Its preservation demanded an absence of people.

The creation of some of the nation’s first parks actively displaced the people who already lived there. The Crow, Shoshone, Bannock, and Sheep Eater peoples frequented the land that would become Yellowstone for generations. Yet their hunting, gathering, and use of fire were inconsistent with the view of Yellowstone as an untouched Eden. Despite authorization of much of this use by off-reservation treaty rights, early park managers obsessively pursued ending Indian use within Yellowstone. As a result, the last of Yellowstone’s human inhabitants, a band of Sheep Eaters, were removed in 1879. The same story played out at other national parks.

As a result of increasing industrialization and expanding population, wilderness acquired a sense of scarcity. Nostalgia spread for “untamed wilderness, already in submission to the ax, the railroads, and the last campaigns against the Indians.” In successfully arguing against a railroad right-of-way across Yellowstone to assist mining ventures, Representative William McAdoo of New Jersey asserted, “[c]ivilization is so universal that man can only see nature in her majesty and primal glory, as it were, in these as yet virgin regions.” Wilderness came to be seen as “an increasingly rare and valuable place where people could experience life in ways far different from the increasingly frantic pace of life in modern industrial society.”

Wealthy, urban men turned to wilderness for recreation. Wilderness became a source of strength, resilience, and virulence for those softened by civilization.
As Theodore Roosevelt and co-author George Bird Grinnell wrote, “hunting big game in the wilderness is . . . a sport for a vigorous and masterful people.”

Living on nothing was better than living on too much. According to 19th century writer Henry David Thoreau, a culture or individual would become weak and dull to the extent it lost contact with the wilderness.

Comfort and wealth made such a view of wilderness possible. From the view of eastern cities, access to forests and Indian culture no longer required battle. Wilderness came to be approached from the viewpoint of “the vacationer rather than the conqueror.” Rather than an immutable truth, wilderness was an idea subject to change. As many have written, wilderness is a human creation. It is a “social construction of a particular human culture at a unique moment in time.”

As historically constructed, wilderness was a white space. Those with the means to vacation in the wilderness were a limited few. Traveling to Yellowstone in its early days required a lengthy and expensive journey. The same was true for early visitors to other national parks. Those individuals with such means were generally white. Having much of what money could buy already, they sought far-off pristine places that they could have to themselves.

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85 Nash, supra note 2, at 153.
86 Id. at 88.
87 Id. at 143.
88 Dorceta E. Taylor, Meeting Challenges of Wild Land Recreation Management: Demographic Shifts and Social Inequality, 32 J. Leisure Rsch. 171, 172 (2000); see also William Cronan, The Trouble with Wilderness; or, Getting Back to the Wrong Nature, in Uncommon Ground: Rethinking the Human Place in Nature 69, 69 (William Cronan ed., 1995) (“As we gaze into the mirror [wilderness] holds up for us, we too easily imagine that what we behold is Nature when in fact we see the reflection of our own unexamined longings and desires.”); Carolyn Finney, Black Faces; White Spaces 3 (2014) (“Whiteness, as a way of knowing, becomes the way of understanding our environment, and through representation and rhetoric, becomes part of our educational systems, our institutions, and our personal beliefs.”).
Even as parks became more accessible and cost less to visit, park visitors remained predominantly white. 91 Perhaps part of the reason is that the idea of the wilderness had been constructed to exclude non-whites. For some, the idea of the frontier and the wilderness that existed beyond it was a way to justify “‘free’ (appropriated) land and ‘free’ (slave) labor for European immigrants.” 92 Interpretative exhibits in wild land areas have traditionally celebrated European-American experiences, conquests, exploration, and heritage. The histories of people of color have been ignored, diminished, or distorted. 93

Enacted in 1964, the Wilderness Act enshrined the value of remote lands untouched by human hands. 94 The Act created a National Wilderness Preservation System. Through its action, Congress immediately placed 54 areas into a system covering 9.1 million acres in 13 states. 95 These first wilderness areas included Boundary Waters Canoe Area Wilderness in Minnesota, Bridger Wilderness in Wyoming, and Ansel Adams Wilderness in California. According to the Act, these areas “shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness.” 96

The thinkers behind the Wilderness Act, and The Wilderness Society, created to promote the wilderness ideal, were white men. 97 Author of the Wilderness Act’s first draft, Howard Zahniser, was a “bookish, polite” son of a Pennsylvanian minister. 98 He loved the outdoors from an early age. 99 Like other environmental icons, such as the Sierra Club’s first Executive Director David Brower, and Pulitzer Prize-winning author Wallace Stegner, Zahniser became weary of fighting battle after battle to protect wilderness lands from development. 100 These men envisioned

91 See Yellowstone’s Photo Collections: Visitor Activities, supra note 90; 1997 Strategic Plan, supra note 41, at 55.
92 Taylor, supra note 88, at 173.
93 Id. at 175.
97 If there were women involved in developing the wilderness ideal, their names have been largely forgotten. The only woman given any credit at all is Mardy Murie, the wife of Olaus Murie, an early President of The Wilderness Society. Our History, The Wilderness Soc’y, https://www.wilderness.org/about-us/our-team/our-history [https://perma.cc/29F6-PWTD] (last visited May 23, 2022). Although a scientist and activist in her own right, Mardy quietly operated in her husband’s shadow for much of her life. See id.
99 Id.
100 Id.
a system of wilderness preservation that could replace the “sequence of overlapping emergencies, threats and defense campaigns” that they found themselves fighting day after day.\footnote{Id.}{101}

Men like Zahniser accomplished a lot. Without these men, today’s Americans would not have treasured places like Yellowstone, Yosemite, and the national forests.\footnote{Id.}{102} But such men did not solve everything. Their ideas reflected the times in which they lived. Times have changed, and conceptions of the wilderness need to change with them.

\section*{III. Yellowstone’s Master Plans}

Engaging the public effectively in planning for the future can help reshape the wilderness ideal into something that works today. Parks like Yellowstone provide some of the nation’s last wilderness—a resource worth saving. Yet park managers cannot remain so focused on wilderness conservation that they ignore the ways different racial and ethnic groups interact with nature. Planning offers a way to balance various interests across a landscape. Without effective planning, common-pool resources like Yellowstone risk destruction.

\subsection*{A. Planning’s Power}

“Freedom in a commons brings ruin to all,” as Garrett Hardin recognized in his often-quoted essay “Tragedy of the Commons.”\footnote{Hardin, \textit{supra} note 103, at 1245.}{103} America’s national parks are classic examples of the common-pool resources that Hardin was concerned about.\footnote{Id.}{104} Unlimited access results in overuse and the destruction of the ecosystem, beauty, and experiences that Congress created the parks to protect.

For Hardin, the solution is “mutual coercion, mutually agreed upon . . . .”\footnote{Id. at 1247.}{105} A community is willing to accept limits on individual freedom where the consequences of unrestricted behavior are worse than those of the limits.\footnote{See id.}{106} Visitors to Yellowstone might chafe at needing a timed ticket to visit Midway Geyser Basin, but might accept that limit if it means that when they do get to go, they will enjoy the peace

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\begin{itemize}
  \item \footnote{Id.}{101}
  \item \footnote{Id.}{102}
  \item \footnote{Sharon Buccino, \textit{What Did the Archdruid Miss?}, NRDC (Apr. 22, 2020), https://www.nrdc.org/experts/sharon-buccino/what-did-archdruid-miss [https://perma.cc/WC2K-22FY].}{103}
  \item \footnote{Garrett Hardin, \textit{The Tragedy of the Commons}, 162 Sci. 1243, 1244 (1968). While Hardin’s “tragedy of the commons” concept has been widely used and built upon, not all his ideas are so widely accepted. In fact, some are morally repulsive. Hardin was a known racial eugenicist and nativist. See Eve Z. Bratman & William P. DeLince, \textit{Dismantling White Supremacy in Environmental Studies and Sciences: An Argument for Anti-Racist and Decolonizing Pedagogies}, J. \textsc{Env’t Stud. Sci.} 4 (2022).}{104}
  \item \footnote{Hardin, \textit{supra} note 103, at 1245.}{105}
  \item \footnote{Id. at 1247.}{106}
\end{itemize}
and beauty that they came to the park to experience. Waiting for one’s turn is preferable to never getting the experience at all.

The key is creating a process for identifying “mutually agreed upon” limits. Planning fills the gap. It allows communities or, in this case, park managers to accomplish specific goals and to avoid negative outcomes. Planning delivers social and economic benefits as well as environmental ones.107

Through planning, park managers can identify the resources needing protection, visitors’ impact on those resources, and steps to limit such impacts. By participating in planning, citizens (i.e., park owners) can help determine how to use the park without spoiling what they find most valuable in it. When citizens work with park managers to identify the park’s carrying capacity, they will be more likely to accept the actions needed to protect the park’s resources.

The NPS defines visitor carrying capacity as “the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in the park.”108 Although a subjective term, “desired” conditions are determined by the NPS’s mandate as articulated in its Organic Act. This 1916 Act required the NPS to ensure that park resources remain “unimpaired for the enjoyment of future generations.”109

The NPS’s obligation to address visitor carrying capacity is not optional. In 1978, Congress explicitly required that park management plans include “identification of and implementation commitments for visitor carrying capacities for all areas of the System unit . . . .”110 Recognizing the need to address visitor capacity in the parks as well as elsewhere in the public land system, an Interagency Visitor Use Management Council established in 2011 developed guides and other resources to help land managers identify appropriate visitor use levels.111 The Council’s approach emphasizes monitoring visitor use impacts and changing visitor use levels as necessary.

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Determining carrying capacity is a complex exercise involving several different inter-disciplinary factors. Monitoring data and scientific studies of impacts on park resources such as wildlife populations and habitat are only some of the necessary inputs. Carrying capacity is not shaped by ecology alone:

With increasing use of parks and related areas, some change in the recreation environment—park resources, the visitor experience, the management context—is inevitable. But sooner or later the type or amount of change may become unacceptable. What determines the limits of acceptable change?\(^{112}\)

Research documenting the impacts of visitor use of parks and other public lands is not new.\(^{113}\) Assessing the impacts of visitor use includes a descriptive component focusing on factual, objective data such as visitor numbers. But it also includes a prescriptive component—the more subjective issue: how many visitors results in unacceptable crowding?\(^ {114}\)

Human values, as much as wildlife population surveys and other monitoring data, shape acceptable levels of impacts. Social norms can help define resource and social conditions desired by society.\(^{115}\) While differences of opinions exist among various park users, all share an interest in sustaining the common resource. Overuse destroys use for everyone. Park users are comparable to fishermen who limit the fish they take to ensure that there are fish to take in the future. Only by assessing and incorporating social norms can park managers implement sustainability measures that will stick. Relying only on ecological measures skips the “mutually agreed upon” piece of Hardin’s solution.\(^ {116}\)

Once acceptable levels are “mutually agreed upon,” park managers can devise rules that specify how much and when the use of the common property resource, the park, will be allowed.\(^ {117}\) They can “create and finance formal monitoring arrangements, and establish sanctions for non-conformance.”\(^ {118}\) Moreover, park managers can use indicators to measure resource and social conditions—like water quality or experiences of solitude—and standards to protect the park.\(^ {119}\)

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\(^{112}\) Robert E. Manning, Parks and Carrying Capacity: Commons Without Tragedy 22 (2007).

\(^{113}\) See, e.g., id. at 21–22; Monz, supra note 8 (providing a review of research related to outdoor recreation and ecological disturbance).

\(^{114}\) Manning, supra note 112, at 23.

\(^{115}\) Id. at 44.

\(^{116}\) For a discussion of the role of social norms in determining limits of acceptable change, see id. at 42–55.


\(^{118}\) Id.

\(^{119}\) See id. at 279–81.
A park plan memorializes the choices made by park managers with input from visitors. Developing a plan provides a process for identifying applicable social norms. National park planning began with the creation of the NPS in 1916. The 1916 Organic Act requires the NPS to manage the national parks “by such means and measures . . . to conserve the scenery, natural and historic objects, and wild life” of the various park units while also “provid[ing] for the enjoyment of [the same].” The Act directs park managers to ensure that park resources remain “unimpaired” for future generations.

The NPS Branch of Plans and Designs began creating master plans to facilitate the development of the parks as early as the 1930s. These early master plans typically consisted of a decorative cover, an index, and drawings of existing and proposed roads and other facilities within a park. The initial plans paid little, if any, attention to the parks’ natural resources. In reviewing the history of NPS resource management, Chief Scientist George Smathers writes, in the parks’ early years, “there was practically no resources management operations consistent with preserving the ecological integrity of parks.”

The growing environmental concern and interest in ecology in the 1960s brought new focus to planning at the NPS, as well as other federal land management agencies. In the National Parks and Recreation Act of 1978 (NPRA), Congress explicitly required that each park unit develop a General Management Plan. The Act required that each plan include information regarding development for public enjoyment and use as well as measures for the “preservation of the area’s resources.” The Secretary of the Interior must report the status of completion or revision of general management plans for each park unit to Congress each year.

Several laws enacted in the 1970s established a foundation for land use planning at the federal level and guaranteed the public the right to participate in such planning. In 1976, Congress required Resource Management Plans from

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121 Id.
122 Id.
123 Id.
124 Id.
127 Id.
128 Id.
the Bureau of Land Management\textsuperscript{129} and National Forest Plans from the USFS.\textsuperscript{130} Because these agencies managed lands that belonged to all Americans, Congress required robust public participation in plan development.\textsuperscript{131} Public participation would provide citizens with a say in how public lands were used, help agencies make informed decisions, and it was hoped, provide public support for the decisions that agencies made.\textsuperscript{132}

Such planning requirements echoed the emphasis on integrated and holistic management required of all federal agencies under the National Environmental Policy Act of 1969 (NEPA).\textsuperscript{133} NEPA recognizes the interrelatedness of air, water, land, wildlife, and humans.\textsuperscript{134} The Act requires federal agencies to “utilize a systematic, interdisciplinary approach which will insure the integrated use of natural and social sciences and the environmental design arts in planning and in decision making . . . .”\textsuperscript{135} Moreover, NEPA rests on the fundamental principle that those affected by proposed government decisions should have a say in them.\textsuperscript{136} NEPA requires federal agencies to cooperate “with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance . . . .”\textsuperscript{137} Such public participation helps ensure that agency decisions are informed and supported.

In addition to these statutes, regulations and guidelines govern planning at each federal land management agency. At the NPS, the Planning Process Guideline (NPS-2) specifies the framework and process for planning at park units.\textsuperscript{138} Until its

\begin{footnotes}
\item[129] Federal Land Policy & Management Act of 1976, Pub. L. No. 94-579, § 202(a), 90 Stat. 2743, 2747 (codified at 43 U.S.C. § 1712(a)) (“The Secretary shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.”).
\item[130] National Forest Management Act of 1976, Pub. L. No. 94-588, sec. 6, § 5, 90 Stat. 2949, 2952 (codified as amended at 16 U.S.C. § 1604(a)) (“[The Secretary] shall develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System, coordinated with the land and resource management planning processes of State and local governments and other Federal agencies.”).
\item[131] 43 U.S.C. § 1712(c)(9) (stating that the Secretary of the Interior “shall provide for meaningful public involvement of State and local government officials, both elected and appointed, in the development of land use programs, land use regulations, and land use decisions for public lands”); 16 U.S.C. § 1604(d) (stating that the Secretary of Agriculture “shall provide for public participation in the development, review, and revision of land management plans”).
\item[134] See 42 U.S.C. §§ 4331–4335.
\item[135] Id. § 4332(A).
\item[136] See id. §§ 4331–4332.
\item[137] Id. § 4331(a).
revision in January 2021, NPS-2 provided that “[t]he major planning document for all parks is the combination general management plan/environmental document.” The guideline required an interdisciplinary team to identify issues to be addressed by the plan and acquire information necessary to develop meaningful and reasonable alternatives for dealing with those issues.

B. Yellowstone Planning

Yellowstone’s first park plan dates from 1932. By traveling to Gardiner, Montana, one can turn the oversized pages and maps themselves. Like the park itself, the plan is an object of beauty.

Source: 1932 Master Plan, infra note 141.

nphistory.com/publications/management/planning-process-guideline.pdf [https://perma.cc/P7L3-M5CH].

139 Id.
140 Id.
142 The author traveled to the Heritage Center in November 2021 to examine the park’s original master plans. The discussion of the plans is based on this in-person research. The Heritage
This first Master Plan (1932 plan) includes a map of the road system as it existed at the time. Another map records the trail system. But perhaps most significant is the Developed Area Plan. In addition to meticulous drawings of existing and proposed development, that plan identifies specific, limited areas in the park to be developed. Such areas include Mammoth Hot Springs, Old Faithful, West Thumb, Madison Junction, Norris Junction, and Canyon Junction. As described by the plan, “the developed areas are centered about some major area of interest from the tourist viewpoint.” Within each developed area, the plan identifies “sacred” areas “defined as those special areas which are of such vital importance as to warrant protection from encroachment in any way detrimental to its preservation.”

Source: 1932 Master Plan, supra note 141, sheet no. 3.

Center is in the process of making the park’s planning documents available online. Yellowstone: Heritage and Research Center, Nat’l Park Serv., https://www.nps.gov/yell/learn/historyculture/
The 1932 plan tells its story through maps rather than words. Compared to park documents filled with many pages of words, it is the maps' blank spaces that reveal an intention to protect Yellowstone's natural resources. The 1932 plan recognizes the need for Research Reserves: “those special areas which are to be drawn from public use.” Yet this first plan sets no research reserves aside. “The small size of the park's developed area compared to the vast expanse of the park may explain the absence of designated “research reserves” in Yellowstone’s first Master Plan.

Yellowstone developed similar Master Plans in 1933, 1939, 1940, 1941, 1942, 1952, and 1954. Like the 1932 plan, these subsequent plans


\[143\text{ 1932 Master Plan, supra note 141.}\]

\[144\text{ Id. sheet no. 2.}\]

\[145\text{ Id. sheet no. 3.}\]

\[146\text{ See Id.}\]

\[147\text{ Id.}\]

\[148\text{ Id.}\]

\[149\text{ Id.}\]

\[150\text{ Id.}\]

\[151\text{ Id. (“No research areas are set aside at the present time in Yellowstone Park.”).}\]


focus on developed areas surrounding the park’s tourist attractions. Notably, in 1939, the description of Developed and Special Areas adds a Wilderness Areas category. That 1939 plan provides that “the Park as a whole, aside from the Developed Areas, is considered a Wilderness Area. No special area is set aside as such as it is believed that the Park is a wilderness area to begin with and any other areas necessarily encroach upon it.”

Source: 1939 Master Plan, supra note 153, at 2.

See, e.g., 1933 Master Plan, supra note 152; 1939 Master Plan, supra note 153.

1939 Master Plan, supra note 153, at 2.

Id.
The 1940 Master Plan reflects significantly greater development.162 It documents buildings and other facilities at various outlying areas beyond the core tourist attractions.163 These outlying areas include residences, ranch buildings, and new ranger stations at Lower and Upper Slough Creek, Belcher River, Heart Lake, Soda Butte, and Upper Lamar Area.164 The plan also reflects the development of new tourist sites such as Obsidian Cliff.165 Notably, new policy language focused on preservation supplements the plan’s maps.166 The 1940 plan defines the purpose of “National Park Research Reserves” to “preserve permanently representative . . . biotic communities in as nearly as possible unmodified condition and free from external influences . . . .”167 These research reserves are equated with wilderness—the need to preserve normal conditions of fauna and flora in their primitive state as well as abnormal ones for scientific study.168 The 1940 plan identifies criteria for selecting Research Reserves and specifies five research areas within Yellowstone, including Electric Peak, Petrified Tree, Fossil Forest, Mirror Plateau, and Belcher River.169

In 1963, Yellowstone’s Master Plan began to look dramatically different.170 For the first time, the Master Plan includes a form of zoning that identifies Hydrothermal, Land Wilderness, and Water Wilderness Zones where development is excluded except for limited, narrow exceptions.171

The 1963 plan’s maps include a Land Classification Overlay and an analysis of existing climate and soil conditions in the park.172 In addition, the plan includes analysis of relevant legal factors like existing leases and water rights.173 Most significantly, the 1963 plan identifies Objectives and Guidelines for the land, visitors, and staff. The guidelines explicitly “encourage the elimination of existing intrusive facilities.”174

162 See 1940 Master Plan, supra note 154.
163 Id.
164 Id.
165 Id.
166 Id.
167 Id.
168 See id.
169 Id.
171 Id. at GP-7.
172 Id. at GP-3 to -4.
173 Id. at GP-5.
174 Id. at GP-2.
The 1963 Master Plan, its features repeated again in 1965, represents a high-water mark in park planning.\textsuperscript{175} As reflected in the 1963 and 1965 plans, Yellowstone National Park combined a holistic, comprehensive vision with detailed site-specific information to effectively manage the area’s resources and visitors.\textsuperscript{176} As it has often done, Yellowstone led the nation with ideas that Congress would incorporate later into landmark environmental statutes—the NEPA and the NPRA. Integrating powerful visual images with succinct objectives, the 1963 Master Plan represents planning at its best.\textsuperscript{177} It provides a concise, easily digested, strategic roadmap to guide present and future management decisions.


\textsuperscript{176} See 1961 Master Plan, \textit{supra} note 170; 1965 Master Plan, \textit{supra} note 175.

\textsuperscript{177} See 1963 Master Plan, \textit{supra} note 170.
Yellowstone completed its last Master Plan in 1973.\(^{178}\) An Environmental Impact Statement accompanies that plan.\(^{179}\) Both are relatively succinct. The reader can easily identify the issues and values most important to guiding the park’s management and development. Developed as Yellowstone celebrated its centennial, the 1973 Master Plan sought to balance visitor use with the preservation of the park’s unique features for future and present generations.\(^{180}\) In describing the plan’s focus, NPS Director George Hartzog explained, “we face the grim realization that without prudent planning the future of Yellowstone is in jeopardy. The problem, ironically, is an outgrowth of the park’s success—the threat of overuse.”\(^{181}\) The park exists to serve the public, but the public could not be allowed to damage or destroy it.

Despite recognizing planning’s imperative, the 1973 Master Plan would be Yellowstone’s final plan. To address the impact of increasing visitation, the 1973 plan proposed a rather radical idea at the time—remove cars from the park by concentrating development at the park entrances, but then using mass transportation to move visitors through the park.\(^{182}\) “The idea of alternative transportation systems in national parks started gaining disciples in the late 1960s.\(^{183}\) For some park leaders, replacing individual cars with a mass transportation system would help manage the flow of visitors in the parks and eliminate the harm that growing numbers of cars and their exhaust imposed on park resources.\(^{184}\) In addition to protecting park resources, relying on mass transportation within parks would promote economic development in gateway communities where visitors would eat and sleep. Writing about Yellowstone’s plan to eliminate cars, Hartzog asserted that “one of the most serious threats to Yellowstone—and to most other parks as well—is the automobile.”\(^{185}\) While private automobiles continue to drive Yellowstone’s roads, several other parks experimented with mass transportation systems to move visitors within park boundaries.\(^{186}\)


\(^{180}\) 1973 Master Plan, supra note 178, at 13, 14.

\(^{181}\) Hartzog, supra note 5, at 632–33.

\(^{182}\) Id. at 635; see also 1973 Master Plan, supra note 178, at 19–20.


\(^{184}\) See id. at 169.

\(^{185}\) Hartzog, supra note 5, at 635.

Rather than completing additional master plans, Yellowstone managers completed a Statement of Management in 1991.\textsuperscript{187} This document provided “an inventory of the park’s condition and an analysis of its problems.”\textsuperscript{188} It also provided a framework to evaluate the condition of the park and identify major issues and gaps in information.\textsuperscript{189} Next, the park completed a Resource Management Plan in 1995 and a Strategic Plan in 1997.\textsuperscript{190} Yellowstone completed a second Strategic Plan in 2000.\textsuperscript{191} The park completed its most recent comprehensive planning document in 2014—Yellowstone’s Foundation Document.\textsuperscript{192}

Yellowstone’s Foundation Document includes a brief description of the park, the park’s purpose, significance statements, interpretive themes, interpretive goals, and fundamental resources and values.\textsuperscript{193} These core components provide the foundation for future planning and management efforts.\textsuperscript{194} Information about the park’s natural, cultural, and other resources is collected and publicly available in a web-based atlas.\textsuperscript{195} The Foundation Document identifies the laws, policies, and guidance that govern park management.\textsuperscript{196} In addition, the document provides an inventory of the park’s planning documents.\textsuperscript{197}

IV. Lessons for Current Park Managers

Yellowstone’s Master Plans provide powerful lessons for addressing the challenges the park and America’s other public lands face today. Even the most cursory examination allows one to grasp what is important to protect and how such protection will occur. The maps and drawings allow readers to picture themselves


\textsuperscript{188} Id.

\textsuperscript{189} Id.

\textsuperscript{190} See id. app. C, at 59.

\textsuperscript{191} See id. app. C, at 58.


\textsuperscript{193} 2014 Foundation Document, supra note 187, at 1–12.

\textsuperscript{194} Id. at 3.

\textsuperscript{195} Id. at 2; see also INTERACTIVE PARK ATLAS, NAT’L PARK SERV., https://www.nps.gov/gis/maps/help/atlas.html [https://perma.cc/L2EN-QKHU] (last visited May 26, 2022).

\textsuperscript{196} 2014 Foundation Document, supra note 187, app. B.

\textsuperscript{197} Id. app. C.
in the park. The plans inspire and energize—they convey a vision for Yellowstone along with a road map to get there.

Yet few have looked at the plans in the last 50 years. The Master Plans went to the archives—their simplicity and power forgotten. Park planning became bogged down in paper, process, and litigation.\textsuperscript{198} Notably, Yellowstone’s last Master Plan coincides with the emergence of a new, democratic approach to public land management.\textsuperscript{199} Despite Congress’s intention, these new laws that brought the public into the public land management process made public land management more difficult in some ways. Yellowstone became embroiled in intense controversy over a winter use plan to address snowmobile use in the park.\textsuperscript{200} The conflict would last over 15 years and leave park managers exhausted.\textsuperscript{201}

A different path is possible. For parks to remain relevant in the future, they need the support of an increasingly diverse public. Involving the public in park planning provides a way to generate such support. Effective public engagement can help Yellowstone’s managers connect with racial and ethnic groups who have not previously seen themselves as park constituents. Effective public engagement can help managers identify the “mutual constraints, mutually agreed upon” that will sustain the park into the future.

\textbf{A. Public Participation’s Promise}

As previously discussed, three laws enacted in the 1970s fundamentally changed public land management. NEPA, FLPMA, and the National Forest Management Act embraced the importance of public participation in public land management.\textsuperscript{202} NEPA required the NPS to include the public when developing park plans or taking other major federal actions.\textsuperscript{203} NEPA mandates that federal agencies “make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment . . . .”\textsuperscript{204}

In addition to involving the public in public land management, these new laws incorporated a growing understanding of the complexity of the ecosystems that parks aimed to protect. Increasing awareness of the interlocking pieces of the natural

\begin{footnotes}
\item[198] See infra Parts IV.A–C.
\item[199] See infra Part IV.A.
\item[200] See infra Part IV.B.
\item[201] See infra Part IV.B.
\item[202] See supra notes 129–140 and accompanying text.
\item[203] 42 U.S.C. § 4331(a) (requiring federal agencies to cooperate “with State and local governments, and other concerned public and private organizations”); see also NAT’L PARK SERV., NATIONAL PARK SERVICE: NEPA HANDBOOK 10 (2015), nps.gov/subjects/nepa/upload/NPS_NEPAHandbook_Final_508.pdf [https://perma.cc/FD3U-PHET] [hereinafter NEPA HANDBOOK].
\item[204] 42 U.S.C. § 4332(G).
\end{footnotes}
systems upon which all life depends compelled park managers to look beyond park boundaries.\textsuperscript{205} Conserving the biodiversity of life became seen as essential to preserving life.\textsuperscript{206} What happened to the climate and habitat outside the park affected the resources within it.\textsuperscript{207} Parks became seen as vital sanctuaries in regional, ecosystem-based management initiatives, and minimizing human intervention into natural systems became important.\textsuperscript{208} Addressing the interactions among genes, species, and ecosystems requires more information—a lot of it. NEPA requires environmental analysis to include an assessment of indirect and cumulative effects as well as direct effects.\textsuperscript{209} Looking beyond immediate, short-term effects is necessary to ensure wise government decision-making such as park planning.\textsuperscript{210} Park managers need this information across time. For example, managers need information about the impacts of new proposed oil and gas wells when combined with existing wells. They also need information across space. Protecting park resources requires information about habitat, air quality, and water resources outside the park as well as within it.\textsuperscript{211} Plans, like Yellowstone’s old Master Plans, provide the mechanism for collecting such information from the public and incorporating it into wise management decisions.\textsuperscript{212}


\textsuperscript{206} E.O. Wilson, \textit{The Diversity of Life} xxiv (W.W. Norton & Co. 1999) (“To keep the Creation, we need all the science, technology, and moral commitment that can be mustered in the service of ecology.”).


\textsuperscript{210} NEPA Handbook, supra note 203, at 13 (“Agencies are required to consider direct, indirect, and cumulative impacts and connected and similar actions during a NEPA review.”).

\textsuperscript{211} See Keiter, \textit{The Greater Yellowstone Ecosystem Revisited}, supra note 205, at 7–8. Yellowstone National Park sits within the Greater Yellowstone Ecosystem, described as “ecologically integrated,” yet “culturally diverse, and legally fragmented.” \textit{id.} at 7. The national park’s 2.5 million acres is surrounded by five national forests. \textit{id.} at 8. The regional ecosystem also includes state and private land. \textit{See id.} at 13–14.

\textsuperscript{212} See, e.g., \textit{Council on Env’t Quality, Exec. Off. of the President, A Citizens Guide
B. Winter Use Controversy

At the same time, the public placed greater—and at times conflicting—demands on park resources. The acrimonious, lengthy controversy over snowmobiles in Yellowstone provides a telling example. While Yellowstone resisted early pressure to keep park roads open year-round, entrepreneurs in West Yellowstone began experimenting with various means of transport across snow-covered roads.\(^{213}\) In 1949, they drove the first motorized winter visitors into Yellowstone in snowplanes, or “passenger cabs set on skis and blown about (without becoming airborne) with a rear-mounted airplane propeller and engine.”\(^{214}\) Later, the first visitors on modern snowmobiles entered Yellowstone in 1963.\(^{215}\) By the 1990s, more than 60,000 snowmobiles entered the park during the winter months, causing air and noise pollution and harassment of wildlife.\(^{216}\)

In 1990, park managers completed the Winter Use Plan Environmental Assessment for Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway to address known and developing problems with snowmobile use.\(^{217}\) The plan formalized the existing winter use program for the park and if visitors exceeded 140,000, the park would further examine the snowmobile issue.\(^{218}\) In the winter of 1992–93, eight years earlier than anticipated, that threshold was exceeded.\(^{219}\) Controversy increased, pitting two groups against each other:

[A]n environmental community intent on ridding the Park of these loud, polluting machines during the quiet winter months against snowmobile enthusiasts and the town of West Yellowstone, which had proclaimed itself the ‘snowmobile capitol of the world.’\(^{220}\)

Fund for Animals, an animal welfare organization, sued the NPS, claiming that Yellowstone’s bison were being enticed to leave the park on hard-packed, snow-
mobile-traveled winter roads only to be killed by the State of Montana, concerned about the spread of brucellosis to their local cattle.\textsuperscript{221} Fund for Animals argued that the NPS did not adequately consider the environmental impacts of snowmobile use.\textsuperscript{222} The parties reached a settlement providing that the NPS would prepare an environmental impact statement “addressing a full range of all alternatives for all types of visitor winter use, including snowmobiling and trail grooming . . . and considering the effects of those alternatives on the Parks’ environments.”\textsuperscript{223}

Following the environmental analysis and accompanying public participation, the agency’s conclusion was unequivocal: continued snowmobile use “hinders the enjoyment of the resources and values for which the parks were created.”\textsuperscript{224} These resources included “natural soundscapes, clean and clear air, and undisturbed wildlife in a natural setting.”\textsuperscript{225} Citing its governing legal authorities, the NPS announced in late 2000 that it would phase out snowmobiles over a three-year period, while encouraging less intrusive snow coach access to enable visitors to continue enjoying the park in winter.\textsuperscript{226}

Unfortunately, this decision served as just the beginning of vacillating policies based on election results. Following the inauguration of the Bush Administration in January 2001, the NPS reversed course and increased the number of snowmobiles allowed in Yellowstone.\textsuperscript{227} In response to litigation by environmental groups, a federal judge in Washington, DC, blocked the NPS’s action. The judge found that the NPS did not explain its policy reversal in light of its conservation mandate and that the change “was politically driven and result oriented” with no regard for the overwhelming public opinion opposing snowmobiles in the park.\textsuperscript{228}

In response, the International Snowmobile Industry Association filed suit in federal court in Wyoming, blocking the implementation of the previous Clinton-era’s no snowmobiles in the park rule.\textsuperscript{229} The Wyoming judge found that the NPS had not properly evaluated the environmental and safety aspects of snowmobiles, short-circuiting public comment opportunities and ignoring the economic harm to local businesses.\textsuperscript{230}

\begin{itemize}
  \item \textsuperscript{221} For discussion of the litigation beginning with complaint filed in 1997, see Fund for Animals v. Norton, 294 F. Supp. 2d 92, 99 (D.D.C. 2003).
  \item \textsuperscript{222} Id.
  \item \textsuperscript{223} Id.
  \item \textsuperscript{224} Id.
  \item \textsuperscript{225} Id. at 80917–18.
  \item \textsuperscript{226} Id. at 80917–18.
  \item \textsuperscript{227} Winter Use Plans Final Rule for the Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway, 68 Fed. Reg. 69268 (Dec. 11, 2003).
  \item \textsuperscript{228} Fund for Animals, 294 F. Supp. 2d at 108, 108 n.11.
  \item \textsuperscript{229} Int’l Snowmobile Mfrs. Ass’n v. Norton, 304 F. Supp. 2d 1278 (D. Wyo. 2004).
  \item \textsuperscript{230} Id. at 1292–94.
\end{itemize}
In 2007, the NPS issued another plan, which allowed more than 500 snowmobiles into Yellowstone each day. The federal court in Washington, DC, again blocked the plan. The court stated that “the fundamental purpose of the national park system is to conserve park resources and values” and that “conservation is to be predominant.” The Wyoming court responded by reinstating an earlier temporary rule allowing increased snowmobile use.

Following the election of President Obama in 2008, the NPS sought a middle ground—avoiding additional litigation as well as Congressional action. The final plan adopted a flexible “daily transportation event” quota system that regulated access split between guided snowmobile parties and snow coaches, imposed a best-available technology requirement to control emissions and noise, and required guides. In addition, the NPS agreed to keep Sylvan Pass open at the park’s eastern entrance to support a local snowmobile rental business.

While this compromise has held, the snowmobile conflict scarred those involved. For over 15 years, park planning was tied in knots. The conflict between preservation and use paralyzed the park. Scarc money and time went into litigation rather than protection. Staff worked to implement one decision, only to be told to reverse course and then reverse course again and again. Money and time went into one winter use plan and then another and another. Planning became a torturous experience for park managers.

C. Creative Solutions

An increasingly divided nation—more so than NEPA—is the reason for the tortuous planning process that Yellowstone has experienced since its last Master Plan in 1973. Extreme positions on the park’s issues dominated national politics. Rather than a steady course, park policy would flip flop with each presidential election. Park plans accompanied by an extensive environmental review and public

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233 Id. at 192.
236 Special Regulations; Area of the National Park System; Yellowstone National Park; Winter Use, 78 Fed. Reg. at 63069–93.
237 Keiter, The Greater Yellowstone Ecosystem Revisited, supra note 205, at 41.
participation became bogged down by process and paper. As a result, Yellowstone and other national parks began experimenting with different approaches.

As revised at the beginning of 2021, the NPS’s policy governing planning (NPS-2) has become more adaptive:

The National Park Service (NPS) park planning program has transitioned from preparing traditional stand-alone general management plans to a more responsive and flexible planning framework to meet park planning needs and fulfill legal and policy requirements. 239

NPS policy requires every park to develop a foundation document—a formal statement of its core mission that provides basic guidance for planning and management decisions. 240 Yellowstone completed such a document in 2014. 241

According to NPS-2, the foundation document and other planning documents constitute a “planning portfolio.” 242 This planning portfolio should identify: (1) measures to preserve the area’s resources; (2) types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes); (3) visitor carrying capacities for all areas of the park; and (4) potential modifications to the external boundaries of the park, and the reasons for the modifications. 243 If the planning portfolio contains all these elements, NPS-2 provides that such a collection of planning documents can substitute for a General Management Plan. 244

Yet public participation is missing from Yellowstone’s foundation document. Without including the public in the foundation document’s creation or the development of other park plans, Yellowstone managers cannot comply with the NPS’s statutory mandates. 245 NPS management policies provide as follows:

Public participation in planning and decision-making will ensure that the Service fully understands and considers the public’s interests in the parks, which are part of the public’s national heritage, cultural traditions,

240 Id. § 3, at 2.
242 Order # 2, supra note 239, at 2.
243 Id. § 3.2.1, at 3.
244 Id.; 54 U.S.C. § 100502.
and community surroundings. The Service will actively seek out and consult with existing and potential visitors, neighbors, American Indians, other people with traditional cultural ties to park lands, scientists and scholars, concessioners, cooperating associations, gateway communities, other partners, and government agencies.\textsuperscript{246}

NPS-2 explicitly states that it supplements NPS management policies.\textsuperscript{247} Moreover, the Park Planning Order explicitly requires compliance with the section of the management policies quoted above.\textsuperscript{248}

Public participation builds public support and in an increasingly diverse world, such support must come from diverse groups. By understanding the ways that different racial and ethnic groups experience nature, Yellowstone’s managers can cultivate new park constituents within these groups. Public participation also creates public buy-in. By bringing stakeholders together, Yellowstone’s managers can identify acceptable limits on use and how to ensure continued use in the future. Park users, both old and new, are more likely to accept constraints on use if they contributed to developing such constraints.\textsuperscript{249}

Engaging a diverse public is not easy. Doing so in an effective and efficient way requires hard work. Focusing on future generations provides an essential guide. Arguably, the most important part of Yellowstone’s purpose is its commitment to preserving public land for future generations. At times, such protection of public resources requires limitations on the use of those resources.\textsuperscript{250} Best practices and examples of strategies that have worked elsewhere can help identify necessary

\textsuperscript{246} Management Policies, supra note 108, § 2.1.3, at 22.

\textsuperscript{247} Order # 2, supra note 239, at 1.


Planning, environmental evaluation, and public involvement in management actions that may affect national park system resources are essential in carrying out the trust responsibilities of the National Park Service. Particularly in this era of heightened environmental concern, it is essential that NPS management decisions (1) be scientifically informed, and (2) insist on resource preservation as the highest of many worthy priorities.

\textsuperscript{249} See infra notes 250–272 and accompanying text.

\textsuperscript{250} 2014 Foundation Document, supra note 187, at 5. While set aside as a “pleasuring ground,” Yellowstone’s use is limited by the obligation to “preserve and protect the scenery, cultural heritage, wildlife, and geologic and ecological systems and processes in their natural condition, for the benefit and enjoyment of present and future generations.” Id.

\textsuperscript{251} See, e.g., Director’s Order #12, supra note 248, § 1, at 2 (“[I]t is essential that NPS management decisions . . . insist on resource preservation as the highest of many worthy priorities.”).
exclusions while also including diverse, new users to Yellowstone. Through effective public engagement, park managers can enjoy the planning necessary to preserve the park for tomorrow as well as today.

1. Best Practices

There is significant research regarding what makes public outreach and engagement effective. That research concludes: relationships form the foundation of effective engagement. Park managers need “to listen rather than inform and tell, to be fellow participants.” They need to frequent informal gathering places such as churches and coffee houses to discover the topics of concern that are being discussed every day. By understanding community concerns, park managers can begin to see how park management may affect these concerns.

Agency staff can enhance engagement by meeting stakeholders “on their turf, at their convenience.” This means collecting input in different ways and at different times. Many people can only participate outside regular work hours. Making meetings enticing will also encourage participation. This could include providing light snacks, reimbursing transportation costs, and supplying quality childcare. Agency staff should also use quality visuals. Colorful maps, photos, and charts draw people into a discussion. By relying on images rather than words, effective visuals can promote effective communication between individuals or groups with different cultures or literacy levels. The investment is worth it.

252 The rising number of visitors at national parks across the country has made planning increasingly important for many years. See, e.g., Lindsey Kate Shaw, Land Use Planning at the National Parks: Canyonlands National Park and Off-Road Vehicles, 68 U. Colo. L. Rev. 795 (1997). Yellowstone’s Foundation Document is not a plan. It may provide the basis for planning, but it cannot substitute for it or the public participation that is critical to the success of any planning effort.


255 Id. at 26.


257 See, e.g., Ana Roque de Oliveira & Maria Partidário, You see what I mean?—a review of visual tools for inclusive public participation in EIA decision-making processes, 83 Envt’l Impact Assessment Rev. 106413, 106413 (2020).

258 Id.

259 Id.
Empowering participants also increases engagement. Asking park stakeholders to help run a meeting or solicit follow-up will help create public buy-in while building trust in the public participation process. Having a clear ask of the audience by assigning homework can also help.260 Park managers should ensure that the participants know that the input they provide will in fact matter to the decision making.261 Agency staff should ask clarifying questions and confirm what has been said. Agency staff build essential trust by demonstrating, through behavior, that participant input matters.262

Maintaining regular and concise communication is essential for effective public engagement. Such communication provides notice of meetings and other engagement opportunities. It also enables reporting back, such as What We Heard Reports and sharing the next steps.263 Park staff can create their own communication mechanisms including on social media, as well as utilize existing networks within communities. Leveraging community partnerships can help stretch limited park resources. Such partners include non-profits, schools, churches, and community recreation centers.264

Moreover, for the park to effectively engage the public, managers must embrace representative participation. This means the park must involve individuals and groups who have not traditionally participated in park management and focus public engagement resources on those who face the greatest barriers to participation. This kind of effective engagement requires identifying leaders within racial and ethnic groups in nearby communities.265 It requires building reciprocal relationships, dedicating time, and being willing to share power to co-create mutually beneficial and accessible engagement processes.266 Further, it requires tracking participation and targeting the segments of the population that are often missing from public

260 Biggs et al., supra note 256, at 9.
261 See Leong et al., supra note 254, at 33.
263 Nicole Armos, Beyond Inclusion: Equity in Public Engagement, A Guide for Practitioners 18 (2020), https://www.sfu.ca/content/dam/sfu/dialogue/ImagesAndFiles/ProgramsPage/EDI/BeyondInclusion/Beyond%20Inclusion%20-%20Equity%20in%20Public%20Engagement.pdf [https://perma.cc/9P85-DVBR] (describing the content of What We Heard Reports: (1) “Outline the outreach and engagement process”; (2) “Summarize community recommendations and next steps”; and (3) “Close the loop with participants by explaining how their input contributed to decisions”).
264 Biggs et al., supra note 256, at 16.
265 National organizations can help identify local leaders. Such groups include Outdoor Afro, Green Latinos, LatinoOutdoors, GirlTrek, Brown Girl Surfing, and Brothers of Climbing. These affinity groups serve as “role models,” showing diverse audiences that people “like them” do indeed enjoy the outdoors and are active in the park community. Amy Markle et al., In-groups, Out-groups and the Challenge of Increasing Diversity through Intentional Inclusion and Equity Practices: Exploring the Roles of Urban Land Managers, Affinity Groups, and Alaska Residents 44 (August 2019) (Ph.D. dissertation, University of Missouri–St. Louis).
266 See Armos, supra note 263, at 13–16.
dialogue.\textsuperscript{267} It also requires understanding the obstacles that have hindered past participation.\textsuperscript{268} Those responsible for public engagement too often become focused on gathering input; they lose sight of whether such input is as representative as it needs to be.

Moreover, how input is solicited affects whether such input is representative of the whole public. Agency staff should avoid grandstanding opportunities and limit the use of open microphones.\textsuperscript{269} Instead, park managers and agency staff should organize the audience into smaller discussion groups designed to foster dialogue.\textsuperscript{270} Such an approach takes work, but it allows park managers to hear a variety of voices. Polling on wireless devices or other anonymous voting techniques at meetings can also help ensure representative participation.\textsuperscript{271} Various examples of creative approaches to engage diverse audiences are available to park managers interested in exploring them.\textsuperscript{272}

2. Examples

The NPS has experimented with various ways to connect with racial and ethnic minorities. As the NPS celebrated its centennial in 2016, the NPS increased its focus on diversity, equity, and inclusion to enhance the national parks’ relevance in the next century. Specifically, the NPS paid greater attention to urban parks as a way to engage diverse groups.\textsuperscript{273} Other programs have emerged that look beyond one-time experiences to instead build “ladders of engagement.”\textsuperscript{274} Santa Monica Mountains and Boston Harbor Islands national recreation areas, for example, “have developed programs to engage youth of diverse backgrounds that go beyond short-term outreach activities to provide a continuing pathway for deepening park-community relationships.”\textsuperscript{275} This includes internships, summer work opportunities

\textsuperscript{267} See Biggs et al., supra note 256, at 6, 23.

\textsuperscript{268} Floyd, supra note 40, at 3–6 (discussing four theoretical perspectives on limited minority use of national parks: marginality, subcultural, assimilation and discrimination hypotheses); see also supra notes 53–71 and accompanying text.

\textsuperscript{269} Biggs et al., supra note 256, at 18.

\textsuperscript{270} Id.

\textsuperscript{271} Id.


\textsuperscript{274} Id. at 11.

\textsuperscript{275} Id.
for young adults, and service learning experiences. Further, the North Coast and Cascades Network, a network that includes the eight national parks surrounding Seattle, worked with urban youth organizations such as the YMCA to help connect youth with the area’s national parks.

Some park managers have used focus groups to understand communities underrepresented in park planning and visitation. For example, the Castillo des San Marcos National Monument (CASA) in St. Augustine, Florida, commissioned focus groups to gather qualitative data about the local Latinx/Hispanic community’s experiences and impressions of the monument. The park identified six community leaders who worked with a facilitator to design and conduct the focus groups. The leaders and the facilitator were all Latinx/Hispanic and lived in the local area. The community leaders were also integral to recruiting focus group participants.

Cultural competence guided the focus group conduct. Start times were flexible to accommodate participant arrivals and facilitate friendly small talk (plática) to increase comfort and rapport among the group. A locally owned Latin restaurant provided food and beverages at each meeting. Each participant received CASA brochures in Spanish and English and a $20 Amazon gift card to thank them for their participation. Participants offered suggestions to increase CASA’s involvement in the local Latinx/Hispanic community, such as participating in the Mayor’s Hispanic American Advisory Board.

Work completed by the USFS may also help park managers effectively engage racial and ethnic minority groups. The USFS placed increased importance on outreach, including new audiences in its 2012 revision to the agency’s planning requirements that govern the national forests. The final rule provides that the official responsible for a forest plan “should be proactive and use contemporary tools, such as the Internet, to engage the public, and should share information in an open way with interested parties.” The rule explicitly acknowledges the value of different types of knowledge, including Native knowledge, indigenous ecological knowledge, and land ethics. Moreover, the rule mandates outreach to those who

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276 Id.
278 Ryan et al., supra note 50, at 72.
279 Id.
280 Id.
281 Id. at 74.
282 Id. at 77–79.
284 Id. § 219.4(a)(3).
have not traditionally engaged in decision-making about the nation’s public lands, including “[y]outh, low-income and minority populations.”

Following the final rule’s issuance, the USFS developed further guidance and resources to encourage effective public engagement. In 2015, the agency issued a public participation directive. This directive, along with other specific instruction for implementing the 2012 planning rule, is collected in Forest Service Handbook 1909.12. Chapter 40 addresses public participation. The agency directs its staff to “[r]each out to youth, minority, and low-income populations for ideas on how to best engage them in different phases of planning.” The directive encourages attendance by agency staff at non-traditional meetings and the use of radio and television in multiple languages to engage diverse park constituents.

Various non-governmental organizations built upon the actions taken by the USFS to support engagement in forest planning by groups that have not previously been involved, including youth, African Americans, and Hispanics. Working with USFS employees, the Natural Resources Defense Council developed a tool kit to assist new voices in making themselves heard. The tool kit describes the five stages for public participation, from pre-assessment to monitoring and implementation. It explains key terms and provides examples of public comments.

By leveraging what land managers have tried elsewhere and partnerships with non-governmental organizations, Yellowstone staff can engage a diverse public in efficient and effective ways. Park staff and visitors can enjoy getting to know each other and their park better. Through education programs, real-time surveys and collaborative gatherings, visitors can help park staff balance competing demands on park resources. Rather than turning away from planning, Yellowstone can use it to build the diverse constituency needed to support the park into the future.

V. Conclusion

Few know of Yellowstone’s Master Plans. Even fewer have seen and studied them. These Master Plans sit in the Yellowstone Heritage and Research Center just

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285 Id. § 219.4(a)(1)(ii).
287 Id. § 43.3, at 20.
288 Id. § 43.3, at 20–21.
290 Id. at 6–7.
291 Id. at 15–17.
outside the park’s north entrance. When done well, planning offers a way to identify the “mutual constraints, mutually agreed upon” needed to preserve common pool resources like Yellowstone National Park.

Over the years, complexity and controversy plagued planning at Yellowstone. Rather than give up on planning, the solution lies in bringing back the fun and the beauty in it. Best practices exist to guide the way. Park managers need the time and resources to pursue them. As Americans become more diverse, Americans seek to use public lands like Yellowstone in different ways. Understanding these differences and planning to accommodate them will allow park managers to bring new people into America’s parks without destroying the priceless resources that visitors come to experience.