

# Effective Planning for Inclusive Recreation

By Erick Franz Hughes, Kimber Logan, and Trevor Thorvaldson

Fall 2021 EENR Law Practicum at the University of Wyoming

Advisor: Sharon Buccino

<b>PART I—THE ISSUE .....</b>	<b>2</b>
<i>Introduction.....</i>	<i>2</i>
<i>The Data .....</i>	<i>3</i>
<i>Demographics of Who Visits Public Lands .....</i>	<i>3</i>
<i>Increasing Use of Public Lands.....</i>	<i>4</i>
<i>African American Outdoor Recreation Experiences.....</i>	<i>12</i>
<i>Hispanic Outdoor Recreation Experiences .....</i>	<i>17</i>
<b>PART II—POTENTIAL SOLUTIONS .....</b>	<b>24</b>
<i>National Park Responses to Increased Visitation.....</i>	<i>25</i>
<i>Reservation Systems.....</i>	<i>25</i>
<i>Shuttle Systems / Private Vehicle Limits.....</i>	<i>28</i>
<i>Increased Fees .....</i>	<i>29</i>
<i>Less Traveled Alternative Destinations .....</i>	<i>29</i>
<i>Modernized Toilets .....</i>	<i>30</i>
<i>Tag Responsibly.....</i>	<i>30</i>
<i>Strategies for Effective Stakeholder Engagement .....</i>	<i>31</i>
<i>Interagency Visitor Use Management Council.....</i>	<i>31</i>
<i>Management Engagement.....</i>	<i>33</i>
<i>Including All Stakeholders.....</i>	<i>36</i>
<i>Other Management Tools .....</i>	<i>38</i>
<i>Other Data Resources.....</i>	<i>40</i>

# PART I—THE ISSUE

## *Introduction*

This document was created by a group of law students at the University of Wyoming participating in an Environment and Natural Resources Practicum. As recreation lovers and people who take frequent advantage of public lands, this project started out as a conversation about the future of recreation. We have all noticed the increase of use at national parks and even our local national forest and wilderness access points. In many places, the outdoors can no longer be considered a place of solace.

As visitation has increased, there has been a parallel increase in demand for access—information access and physical access. Included in this conversation is minority access to public lands. Though geography demographics play a hand, the ratio of white visitors to other visitors of public lands is disproportionate when compared to the racial demographics of America as a whole. In other words, it is mostly white people taking advantage of public lands. Most of the studies and data that we found suggest that minorities do not culturally associate with public lands. But there are people out to change that. As visitation and use of public lands increase, we are hopeful that there can also be an increase in minority users.

It is our hope that this document can be a quick resource for those looking for solutions to mitigate the impacts of increased visitation rates and to include all peoples in public land visitation. Our research focuses on the two largest minority groups in the States, African Americans and Hispanics.

## *The Data*

This section examines demographic data and resources that help shed light on the use of public lands by various minority groups.

### *Demographics of Who Visits Public Lands*

[Quickfacts, U.S. CENSUS BUREAU](https://www.census.gov/quickfacts/fact/table/US/RHI825219#RHI825219), <https://www.census.gov/quickfacts/fact/table/US/RHI825219#RHI825219> [<https://perma.cc/TM9Y-32EL>] (last visited Nov. 9, 2021).

- According to the census, about 60% of Americans identify their race as white only (not Hispanic or Latino). 13.4% Black of African, 1.3% Native American or Native Alaskan, 5.9% Asian alone, 0.2% Native Hawaiian or Pacific Islander, and 18.5% Hispanic or Latino.
- These numbers have not been traditionally reflected in the demographics of the people that use and visit public lands.

U.S. DEP'T OF THE INTERIOR, NAT'L PARK SERV., [YELLOWSTONE NATIONAL PARK VISITOR USE STUDY: SUMMER, 2016](https://www.nps.gov/yell/getinvolved/upload/R-YELL_VUS_FINAL-Report.pdf) (2017), [https://www.nps.gov/yell/getinvolved/upload/R-YELL\\_VUS\\_FINAL-Report.pdf](https://www.nps.gov/yell/getinvolved/upload/R-YELL_VUS_FINAL-Report.pdf) [<https://perma.cc/FV5Q-KQNN>].

- Yellowstone National Park commissioned a survey of summer visitors to better understand who's coming to Yellowstone, how they plan their trips, what they come to see, their perceptions of the park (including attitudes about access and transportation), and their level of satisfaction with park services and facilities.
- Groups indicated viewing natural scenery (96%), viewing wildlife (83%), viewing geysers and other thermal features (78%), experiencing a wild place (72%), and hearing the sounds of nature/quiet (52%) as their most important reasons for visiting Yellowstone.
- Equal amounts of male and female visitors visited the park (50% each respectively).
- **Seven percent of visitors were Hispanic or Latino(a) by ethnicity:**
  - The majority of visitors (82%) reported white as one or more of their races;
  - 15% reported Asian;
  - Very few visitors were American Indian or Alaska Native (2%);
  - **Black or African American (1%);**
  - native Hawaiian or other Pacific Islander (<1%).
- U.S. visitors came from 50 states and the District of Columbia and comprised 83% of total visitation to the park during the study period. The greatest percentages of domestic visitors came from California (8%) and Utah (6%).
- The majority of visitors (89%) preferred to use English while in the park. Six percent of visitors indicated that they preferred to use Mandarin while in the park.
- Methods: Mail-back survey packets were administered to visitor groups just after they had entered Yellowstone NP using onsite vehicle intercept methods. The survey was offered in English and Mandarin. Questionnaires were completed and returned by **1,257 visitor groups**.

[National Visitor Use Monitoring Program, U.S. FOREST SERV.](https://www.fs.usda.gov/about-agency/nvum), <https://www.fs.usda.gov/about-agency/nvum> [<https://perma.cc/6QEL-P6CB>].

- The Forest Service has a program in place for keeping track of visitor use statistics called National Visitor Use Monitoring Program. They publish a yearly report. Below is a summary of use demographics from 2016–2020

**Table 4.** Percent of national forest and wilderness visits by race and ethnicity, for FY2016 - FY2020.

Race/Ethnicity <sup>a</sup>	National Forest Visits (Percent)	Wilderness Visits (Percent)
American Indian/Alaska Native	2.0	1.8
Asian	3.0	4.3
Black/African American	1.2	0.9
Native Hawaiian or other Pacific Islander	0.6	0.6
White	95.2	94.4
Spanish, Hispanic, or Latino	6.9	6.0

<sup>a</sup>“Spanish, Hispanic or Latino” is presented in a separate question because it is an ethnicity, not a race. Respondents first stated whether they were of this ethnicity, then a separate question asked which of the racial categories applied to them. Respondents could choose more than one racial group.

Xiao Xiao et al., [Who Visits US National Parks \(and Who Doesn't\)? A National Study of Perceived Constraints and Vacation Preferences Across Diverse Populations](https://www.tandfonline.com/doi/pdf/10.1080/00222216.2021.1899776), J. LEISURE RSCH. (Aug. 18th, 2021), <https://www.tandfonline.com/doi/pdf/10.1080/00222216.2021.1899776>.

- This study examines the sociodemographic characteristics, constraints to visitation, and vacation preferences among “recent visitors, past visitors, and non-visitors” to US National Parks.
- The data was gathered from 2008–2009 by the University of Wyoming. Digital surveys were sent out to people in all 50 states and the District of Columbia, and about 1,000 telephone surveys were collected. In total, 4,103 answers were collected.
- The study found that “Black, Hispanic, and lower income respondents were least likely to visit NPS sites. Compared to White respondents, *they were also less aware of NPS units, more concerned about safety, and more likely to prefer alternative vacations such as sporting events, theme parks, and socially and culturally oriented destinations.*”

### *Increasing Use of Public Lands*

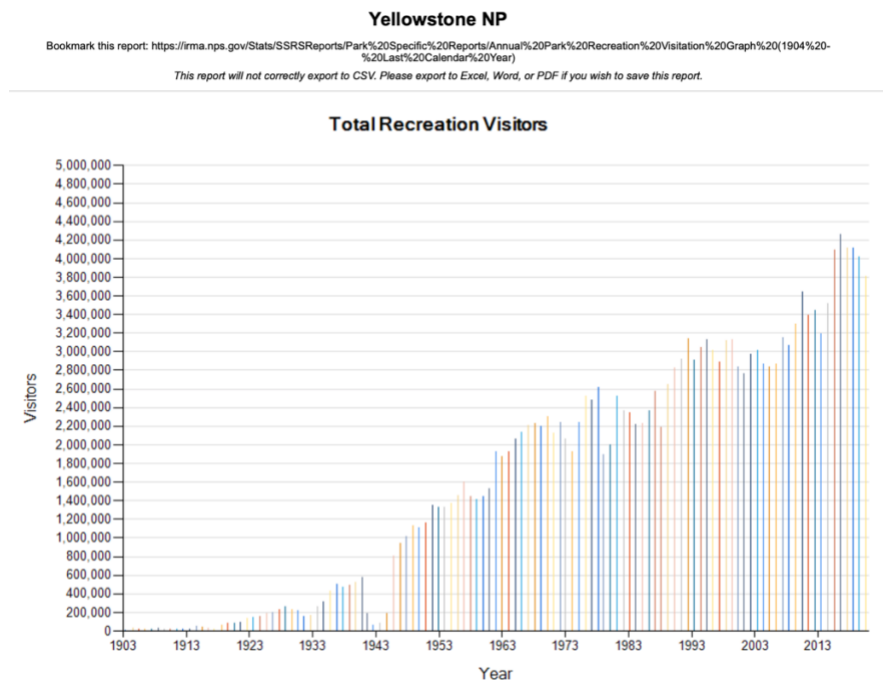
COLDWELL BANKER RICHARD ELLIS, INC., [CAMPGROUND INDUSTRY TRENDS REPORT 2019](https://www.nps.gov/subjects/policy/upload/CBRE_Campground_Trends_Report_3-16-20.pdf), [https://www.nps.gov/subjects/policy/upload/CBRE\\_Campground\\_Trends\\_Report\\_3-16-20.pdf](https://www.nps.gov/subjects/policy/upload/CBRE_Campground_Trends_Report_3-16-20.pdf) [<https://perma.cc/YZ9F-A5NW>].

- This report provides an overview of the camping industry, trends, issues, and suggested strategies for the National Park Service moving forward. It also reports on the state of NPS campgrounds.

- Issue of “Glamping” (at 30).
- In 2017 and 2018, approximately half of the newest campers originated from non-white ethnic groups. White and African American campers made up a similar proportion of new campers as they do in census data. In contrast, Asian and Hispanic campers are overrepresented in their numbers as new campers compared to the census data. Hispanic campers exceeded what would be expected in the overall population (22 percent versus 16 percent for census figures), and Asian campers are still represented at a rate three times of what would be expected (14 percent versus five percent for census figures). (at 17).
- “When segmented by ethnicity, the data show Hispanics camped with the largest average group size in 2018. Additionally, the average group size for both African American and Asian campers decreased from 2017 to 2018.” (at 12).
- African American campers (at 19).
- Hispanic Campers (at 19–20).

## YELLOWSTONE NATIONAL PARK VISITATION NUMBERS

1996	3,012,171
1997	2,889,513
1998	3,120,830
1999	3,131,381
2000	2,838,233
2001	2,758,526
2002	2,973,677
2003	3,019,375
2004	2,868,317
2005	2,835,651
2006	2,870,295
2007	3,151,343
2008	3,066,580
2009	3,295,187
2010	3,640,185
2011	3,394,326
2012	3,447,729
2013	3,188,030
2014	3,513,484
2015	4,097,710
2016	4,257,177
2017	4,116,524
2018	4,115,000
2019	4,020,288
2020	3,806,306
<b>Total</b>	<b>191,098,244</b>



[2020 Visitation Numbers, NAT'L PARK SERV.](https://www.nps.gov/aboutus/visitation-numbers.htm), <https://www.nps.gov/aboutus/visitation-numbers.htm> [<https://perma.cc/7VJB-L4KM>] (last visited Nov. 30, 2021).

- 237,064,332 recreation visits
- 1,054,952,540 recreation visitor hours
- 8,039,768 overnight stays (recreation + non-recreation)
- Three parks had more than 10 million recreation visits: Blue Ridge Parkway, Golden Gate National Recreation Area, and Great Smoky Mountains National Park
- Seven parks had more than five million recreation visits, which is down from 11 parks in 2019
- 60 parks had more than one million recreation visits (15% of reporting parks), which is down from 80 parks in 2019
- 19 national parks had more than one million recreation visits (30% of national parks)
- 25% of total recreation visits occurred in the top six most-visited parks (1.5% of all parks in the National Park System)
- 50% of total recreation visits occurred in the top 23 most-visited parks (6% of all parks in the National Park System)

[Yellowstone Visitor Use Management, NAT'L PARK SERV.](https://www.nps.gov/yell/learn/management/visitor-use-management.htm),

<https://www.nps.gov/yell/learn/management/visitor-use-management.htm> [<https://perma.cc/S9JL-4BH8>] (last visited Nov. 30, 2021).

- American national parks are also reporting increased use, which has led to increased impact on the ecology of the parks. New management for coordinating the desire of Americans to make use of their public spaces while still preserving those spaces to be enjoyed is a need seen by many, but there still lacks a definite answer to.
- “Since 2008, annual visitation to Yellowstone has increased close to 40%, causing overflowing parking lots, a rise in traffic jams, roadside soil erosion and vegetation trampling, and unsanitary conditions around busy bathrooms. Half of this increase in visitation occurred in just two years (2014 to 2016), coupled by an even greater rise in motor vehicle accidents (+90%), ambulance use (+60%), and search and rescue efforts (+130%) over the same time period. Meanwhile, staffing levels and funding have remained flat over the last ten years (see graph). The National Park Service mission requires the agency to provide people the opportunity to enjoy Yellowstone without allowing that enjoyment to damage or diminish the very things they came to see . . . The challenges posed by high levels of summer visitation and changing visitor use patterns are comprehensive, complex, and affect not only Yellowstone visitors and employees, but gateway communities, surrounding public lands, and other national and regional stakeholders. Difficult decisions lie ahead. [The park will need the public’s] help to find compromises that balance the protection of resources with a shared desire to experience the world’s first national park.”
- Yellowstone has not begun a formal planning process for visitor use management. The park has been working to understand the impacts of increasing visitation on: 1) park resources, 2) staffing, operations, and infrastructure, 3) the visitor experience, and 4) gateway communities and partners.

Meeting with Christina White, Chief of External Affairs & Partnerships at Yellowstone National Park (Nov. 12, 2020).

- Yellowstone does not currently have an official Visitor Management Plan. The implementation of an official plan will require a NEPA review. The staff at Yellowstone wants to accumulate the best tools they can and feel confident about their visitor use management strategy before they go through a NEPA review.
- In the meantime, Yellowstone is experimenting with small scale mitigation strategies throughout the park. Yellowstone is also following mitigation strategies being implemented by other National Parks and gauging their effectiveness.
  - One small traffic mitigation experiment in place from June to August of 2021 was TEDDY, The Electric Driverless Demonstration in Yellowstone. This low-speed, electric automated shuttle at Canyon Village was an experiment in how automated vehicle shuttle technology can be used in parks and how visitors perceive and engage these services. <https://www.nps.gov/yell/learn/management/automated-shuttle-pilot.htm>
- Christina outlined that Yellowstone’s current approach to its visitation strategy focuses on the impacts to: Park resources; staff, operations, and infrastructure; visitor experience; and park partnerships
- The impacts to Park resources have proved to be the most challenging so far. Management has not seen a direct correlation between increased visitation and park resources. Despite the massive amounts of people visiting Yellowstone, Christina told us that the data is showing that the Park ecosystem as a whole is in the best shape it’s ever been in. This is partially because the 4 million visitors to Yellowstone only visit 1% of the park.
- The Midway Geyser Basin only has 75 parking spots, but on average Park staff were counting about 300 cars parked in the area. Park management is considering establishing regulated time-entry at this site.
- The biggest challenge for staffing is housing. It’s difficult to hire more staff because there aren’t enough places for people to live. Creating more housing within the park is very expensive, and the Park doesn’t have the budget for it.
- Funding for Yellowstone comes from congressional appropriation. Parks do retain 80% of entrance fees, but that money can only be used on “visitor experience.”

JAKE JORGENSON ET AL., [YELLOWSTONE NATIONAL PARK VISITOR STUDY EXECUTIVE SUMMARY](#), INSTITUTE FOR TOURISM AND RECREATION RSCH. PUBLICATIONS 396 (2019), [https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1397&context=itrr\\_pubs](https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1397&context=itrr_pubs).

- Many surveys on visitor experiences to Yellowstone National Park are filled out and submitted after the visit to the Park has taken place. Mail-in surveys in the past fail to collect accurate information about how visitors are experiencing the Park in real time.
- The Institute for Tourism and Recreation Research Publications at the University of Montana designed this study to try and collect data on how visitors experience the Park in real time. Survey participants were given an iPad to carry with them throughout the day as they journeyed through the park. The GPS in the iPad kept track of where the visitors went and how long they spent at each location. Upon arrival at certain sights, the iPad would ask visitors to confirm their location and then answer a series of questions about the traffic in the area, difficulty in finding a place to park, how crowded they thought the

location was, how long it took them to find a parking space, were the bathrooms clean, did they enjoy the sight, etc. If the iPad noticed that the visitors were located along a road and not moving or moving very slowly, the iPad would bring up questions about traffic.

- This method of data collection allowed the Institute for Tourism and Recreation Research Publications to gather real time data on how the visitors experienced the park. It also allowed the Institute (among other things) to create a map of common areas of congestion and wildlife roadside spotting.
- Despite the increase in Park visitations over the last few years, the study showed that, even in the moment, the majority of visitors to the Park had a “good” or “excellent” experience.

Patricia A. Taylor & Burke D. Grandjean, [\*Visitor Satisfaction and Support for Park Fees: Examining the Effects of Frontcountry, Backcountry, and Information in Rocky Mountain National Park\*](#), The George Wright Forum, no. 2, 2009, at 12.

<http://www.georgewright.org/262.pdf> [<https://perma.cc/DP3Q-P239>].

- This article uses a year-long survey of on-site interviews with visitors at Rocky Mountain National Park to analyze dimensions of visitor satisfaction. It also uses a front-country/back-country dichotomy to make further summaries of the survey. The analysis found that quality and quantity of information about the park is a key aspect of the desired park experience and strongly influenced a willingness to pay higher park fees. This included ranger programs, availability of park personnel, the information on kiosks and the like.

NAT'L PARK SERV., NAT. RES. REPORT NPS/NRSS/EQD/NRR—2019/2042, [NATIONAL PARK SERVICE COMPREHENSIVE SURVEY OF THE AMERICAN PUBLIC: 2018—RACIAL AND ETHNIC DIVERSITY OF NATIONAL PARK SYSTEM VISITORS AND NON-VISITORS](#), <https://irma.nps.gov/DataStore/DownloadFile/636862>.

- This report provides a visitation survey and demographic statistics. It suggests that improving access, continuing to raise awareness of national parks, increasing interest and welcoming diverse audiences are important steps to take moving forward.
  - “Where access is a concern for some populations, many parks have *partnered* with environmental groups, school districts, community-based organizations, and local governments *to provide transportation assistance for those who cannot reach parks on their own*” (at 16).
  - “In general, public awareness campaigns should be assessed to ensure that they are reaching different ethnic and racial communities. *Suggested methods* for increasing awareness and exposure from the literature *include using varied, bilingual media and partnerships with organizations that serve diverse communities, including schools*” (at 17).
  - “Some relatively simple measures could contribute to a more welcoming atmosphere, such as having both recorded responses and written materials available in Spanish as well as in English when potential visitors contact a park for information. The NPS should also intensify its ongoing efforts to ensure the cultural sensitivity and service orientation of all those who provide services. This means more than language literacy, as reflected in multi-lingual interpretation and signage. It also means promoting cultural literacy by understanding the



preferences of different groups for various facilities and programs, as well as their preferred leisure activities and group structures when visiting (e.g., nuclear families vs. extended families)” (at 18).

Christopher Monz, Ph.D., *[Outdoor Recreation and Ecological Disturbance: A Review of Research and Implications for Management of the Colorado Plateau Province](https://suwa.org/wp-content/uploads/RecreationReport_Sept2021.pdf)* (Sept. 2021), [https://suwa.org/wp-content/uploads/RecreationReport\\_Sept2021.pdf](https://suwa.org/wp-content/uploads/RecreationReport_Sept2021.pdf) [<https://perma.cc/JVW6-CQCB>].

- This article provides a general overview of the current state of public lands, and how visitation/use has increased over the past decade especially. Further, it breaks down what types of disturbances occur when there is increased human use. Finally, this article suggests several policy strategies that could be employed to best minimize those disturbances, with a specific focus towards the Colorado Plateau.
- **See below** for table of policy strategies set forth in this article.

Table 1. Camping management strategies, options, and guidance at 18 (adapted from Marion et al., 2018).

Camping Strategy	Use Level Typically Applied	Description	Effectiveness for the Colorado Plateau
<b>UNCONFINED</b>  "At Large" Camping	All	Visitors have the freedom to select or create a campsite in the location of their choice, modified by management guidance to avoid certain locations	<u>Likely ineffective</u> in locations with soil crusts. Campsite proliferation is often an issue
<b>DISPERSAL STRATEGY</b>  Pristine Site Camping	Very Low	Visitors are asked to camp on durable <i>previously undisturbed</i> , surfaces at low-use levels, thus avoiding lasting impact.	<u>Very ineffective</u> in locations with soil crusts. Difficult to achieve in most situations and requires highly skilled visitors
<b>COFINEMENT STRATEGY</b>  Established Site Camping	All	Visitors are <i>encouraged to camp</i> in well-established campsites, often selected by managers	<u>Likely effective</u> with visitor compliance, but not all will comply. Allows for visitor choice.
<b>COFINEMENT STRATEGY</b>  Designated Site Camping	Mod - High	Visitors are <i>required to camp only</i> on a subset of sustainable, designated campsites selected by managers to promote resource protection.	<u>Likely effective</u> , but limits visitor choice. Often requires management through a reservation system.

Table 2. Backcountry travel corridor/trail management strategies at 20.

Backcountry travel management strategy	Use Level Typically Applied	Description	Effectiveness for minimizing impacts on the Colorado Plateau
<p><b><u>UNREGULATED</u></b></p> <p>Travel in locations without specific management and formal trails</p>	All	Visitors have the freedom to travel on routes and via modes of their choice.	Very ineffective in locations with soil crusts. Higher use locations will likely see the formation of networks of informal trails that are unsustainable.
<p><b><u>DISPERSAL STRATEGY</u></b></p> <p>Travel in areas of sparse vegetation; e.g., open summits, mesas</p>	Very Low to Low	Visitors are <i>asked to</i> travel on durable surfaces at low-use levels to avoid lasting impact. Durable surfaces include slickrock, sand, gravel, etc.	Likely ineffective in locations with soil crusts. Difficult to achieve in most situations and requires highly skilled visitors. Has been <u>effective</u> elsewhere, in some highly regulated settings, with low-use levels.
<p><b><u>COFINEMENT STRATEGY</u></b></p> <p>Travel on established but unmanaged routes: e.g., Canyoneering, climbing approach and descent</p>	Low-Moderate	Visitors are <i>encouraged to follow</i> well-established, sometimes informally marked routes	Likely effective with visitor compliance, but not all will comply. Allows for a more primitive experience and some visitor choice. More risk is assumed by the visitor, since routes are unmanaged.
<p><b><u>COFINEMENT STRATEGY</u></b></p> <p>Designated Trails</p>	Mod - High	Visitors are <i>required to travel only</i> on sustainably designed and maintained trails	Highly effective at limiting resource impacts. Limits visitor choice. In very high-use situations, often requires capacity

Table 3. Public land visitor management strategies for cultural resources at 22.

Cultural Resource Visitor Management strategy	Use Level Typically Applied	Description	Effectiveness for Minimizing Impacts to Cultural Resources
<p><b><u>UNREGULATED</u></b></p> <p>Travel in locations without specific management</p>	<p>Low-Moderate</p>	<p>Visitors can travel in an unconfined manner and “discover” artifacts and sites in their natural state.</p>	<p><u>Likely ineffective</u> over time as even small amounts of disturbance or theft results in significant loss or diminished condition. Particularly ineffective for motorized use.</p>
<p><b><u>COFINEMENT STRATEGY</u></b></p> <p>Travel on established routes and designated trails</p>	<p>Moderate-High</p>	<p>Visitors are <i>encouraged or required</i> to follow well-established, and/or marked routes and trails.</p>	<p><u>Likely effective</u> with visitor compliance, but some will not comply. Trails can be routed away from sensitive sites that cannot be effectively managed and near locations that can be managed sustainably.</p>
<p><b><u>COFINEMENT STRATEGY</u></b></p> <p>Guided Entry</p>	<p>High</p>	<p>Visitors are only permitted to enter sites in an organized way with a qualified guide or ranger.</p>	<p><u>Highly effective</u> at limiting resource impacts. Limits visitor choice but presents an enriching experience by incorporating interpretive components</p>
<p><b><u>COFINEMENT STRATEGY</u></b></p> <p>Site Closure</p>	<p>High</p>	<p>Visitors are not legally permitted to enter sites and often physically separated from resources. Can be applied continuously as in sensitive archeological sites or temporally, to honor spiritual practices of specific groups during certain times.</p>	<p><u>Highly effective</u> at limiting resource impacts. Limits visitor choice and experience, but accommodations can be made through interpretive programs and visitor center displays.</p>
<p><b><u>LAW ENFORCEMENT</u></b></p>	<p>All</p>	<p>Intentional damage, destruction or theft of cultural resources in public land settings is a serious offence. On federal lands this can result in either a misdemeanor or felony charges, depending on several factors</p>	<p><u>Effective</u> and necessary, but not all lands can be adequately patrolled and even small amounts of damage and theft can result in serious degradation over time.</p>
<p><b><u>INTERPRETATION AND EDUCATION</u></b></p>	<p>All</p>	<p>Programs designed to inform visitors as to the existence and value of cultural resources and best practices to experience them. Often includes information on laws and regulations.</p>	<p><u>Effective</u> and necessary, but will not eliminate all damage and theft, particularly intentional actions.</p>

## *African American Outdoor Recreation Experiences*

The African American outdoor experience is much different than a white and/or European experience. This is because the two groups have experienced a vastly different history in the United States, and that history has shifted how those communities perceive the wilderness. The historic and contemporary use of advertisement through magazines, park exhibits and brochures, and other forms of media typically do not show African American's recreating in the outdoors. When they are shown, it is frequently in an urban or suburban environment. By systematically confining the portrayal of African Americans to a sub-set of the outdoors, these media outlets are signifying who is and who is not allowed in the wilderness. It is clear through these sources that the white male still dominates the wilderness while "lesser wilderness," like urban parks, are for African Americans and other minorities.

Perhaps most importantly, in order to shift the African American outdoor experience into a more positive one, individuals, groups, and organizations must recognize the traumatic past that African Americans experienced in this country. The racism that stems from that past and continues into our culture today must be reckoned with and addressed to overcome any oppression it has, and the effects that has had, on outdoor recreation.

Daniel Theriault & Rasul A. Mowatt, [Both Sides Now: Transgression and Oppression in African Americans' Historical Relationships with Nature](https://www.tandfonline.com/doi/pdf/10.1080/01490400.2018.1448024), 42 LEISURE SCIENCES 15 (2020), <https://www.tandfonline.com/doi/pdf/10.1080/01490400.2018.1448024>.

- This article provides an overview of African Americans' relationship with nature during enslavement, reconstruction and post reconstruction, and from 1936–1994.
- This article hopefully helps envision a new relationship between African Americans and wilderness for the future.

Beth Erickson et al., [Rocky Mountain National Park: History and Culture as Factors in African-American Park Visitation](https://www.tandfonline.com/doi/pdf/10.1080/00222216.2009.11950189?needAccess=true), 41 J. LEISURE RSCH. 529 (2009), <https://www.tandfonline.com/doi/pdf/10.1080/00222216.2009.11950189?needAccess=true>.

- This research explored the Denver area African American population's experience with Rocky Mountain National Park. Interviews consisted of 36 participants and archival techniques.
- This research also explores fairly in-depth about the history of the geographical area around and near Rocky Mountain National Park.

BRUCE BRAUN, ON THE RAGGEDY EDGE OF RISK: ARTICULATIONS OF RACE AND NATURE AFTER BIOLOGY (2003).

- When magazines targeting black or Hispanic readers portray activities in the outdoors, the focus is largely on recreational sports or relaxation, not adventure or risk-taking.
- This chapter also discusses the scientific separation of race as a point of differences between communities. Rather, racism is the focus and root of issues we see throughout culture and specifically nature.
- Look also to "Black Faces, White Spaces" by Carolyn Finn where the author did her own research into advertisements representing primarily white recreationists.

R. DANIELS, *RACISM: LOOKING FORWARD, LOOKING BACK* (2002).

- Largely white environmental institutions and organizations need to prioritize working within their own four walls against racism first.
- Organizations must develop a healthy sense of respect for the culture, identity, leadership, and agendas of African American communities.

DR. JOY DEGRUY LEARY, *POST TRAUMATIC SLAVE SYNDROME: AMERICA'S LEGACY OF ENDURING INJURY AND HEALING* (2005).

- Summarizing the question of fear
- “One-hundred and eighty years of the Middle Passage, 246 years of slavery, rape and abuse; one hundred years of illusory freedom. Black codes, convict leasing, Jim Crow, all codified by our national institutions. Lynching, medical experimentation, redlining, disenfranchisement, grossly unequal treatment in almost every aspect of our society, brutality at the hands of those charged with protecting and serving. Being undesirable strangers in the only land we know. During the 385 years since the first of our ancestors were brought here against their will, we have barely had time to catch our collective breath. That we are here at all can be seen as a testament to our will power, spiritual strength and resilience.” (at 111–12)

Kevin DeLuca & Anne Demo, *Imagining Nature and Erasing Class and Race: Carleton Watkins, John Muir, and the Construction of the Wilderness*, 6 ENV'T HIST. 541 (2001).

- A white wilderness is socially constructed and grounded in race, class, gender, and cultural ideologies.
- 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.

RON EYERMAN, *CULTURAL TRAUMA: SLAVERY AND THE FORMATION OF AFRICAN AMERICAN IDENTITY* (2001).

- Cultural trauma refers to traumatic fear that creates the need to narrate new foundations, including reinterpreting and re-righting the past in order to reconcile present and future needs

C. FINNEY & L. FRASER, *STATUS REPORT TO THE NATIONAL PARKS BOARD* (2011).

- By intentionally working on creating learning opportunities for communities and park service staff, the NPS believes it can play a significant role in addressing such varied societal challenges as declining historical and cultural literacy...and reconnecting Americans . . . to nature.
- A big piece to this is having the NPS staff take a look at themselves within their own four walls. What policies does the NPS have in place that limits diversity or diverse perspectives, and how can they address/change those policies?

M. GELOBTER ET AL., *THE SOUL OF ENVIRONMENTALISM: REDISCOVERING TRANSFORMATIONAL POLITICS IN THE 21ST CENTURY* (2005).

- During the 1980's the environmental justice movement emerged as a vehicle for addressing social justice concerns...however, the mainstream environmental movement is accused of falling short of addressing certain concerns, such as managing to racially integrate their senior staff.
- “Before we sanctify Muir, we need to understand how his racial attitudes affected his commitments to conservation”

WELTZ P. KAUFMAN, *NATIONAL PARKS AND THE WOMAN'S VOICE: A HISTORY* (1996).

- Discusses, broadly, the challenges facing minorities who work in the NP system, and more specifically women.
- Perhaps indirectly, this book also addresses the idea that researching leisure and recreation was still novel in 1996, however, by now this is a very researched topic.
- Also importantly, this book provides a history through the perspective of women's history in the US. Unlike the more typical history viewed through white male settler perspectives.

PATRICIA N. LIMERICK, *SOMETHING IN THE SOIL: LEGACIES AND RECKONINGS IN THE NEW WEST* (2000).

- While certain narratives offer us an arguably more palatable history, Limerick warns us that a linear and simplistic story can give the impression that all Americans have a shared understand and agree about how people should interact with nature
- Broadening the environmental movement to include the great diversity of the national population requires a full reckoning with this history (at 184)

L. F. LITWACK, *Hellhounds*, in *WITHOUT SANCTUARY*, at 8 (Twin Palms 2004),  
[https://www.sjsu.edu/people/ruma.chopra/courses/h170\\_MW\\_F12\\_9am/s0/Wk16\\_B.pdf](https://www.sjsu.edu/people/ruma.chopra/courses/h170_MW_F12_9am/s0/Wk16_B.pdf)  
[<https://perma.cc/64EG-ABE7>].

- Between 1882-1968, ~4,742 black people were illegally lynched by white mobs (at 12).
- Approximately the same number were lynched legally, fell victims to “private white violence,” or were murdered by a variety of means in isolated rural areas (at 12).
- Black Faces, White Spaces: “Arguably, lynching succeeded in limiting the environmental imagination of black people whose legitimate fear of the woods served as a painful and very specific reminder that there are many places a black person should not go” (at 60).

JAMES W. LOEWEN, *SUNDOWN TOWNS: A HIDDEN DIMENSION OF AMERICAN RACISM* (2005).

- The idea of “sundown towns” is that black people “better not find themselves in one of these towns after sundown.”
- Related to rural, western states and cities/towns in that the west was and still is not very welcoming to Black people and has a history of not welcoming Black people encompassing its entire history as a part of the US.

M. MARABLE, *LIVING BLACK HISTORY: HOW REIMAGINING THE AFRICAN-AMERICAN PAST CAN REMAKE AMERICA'S RACIAL FUTURE* (2006).

- There is a belief that personal agency is the sole explanation for whether black people use and explore outdoor spaces rather than recognizing the structural racism embedded in our way of life.
- Personal agency meaning that the only reason African Americans are not or do not explore outdoor spaces is because they don't want to or that they don't want to put in the time, money, energy, or effort to explore the outdoors. Rather, it is a personal choice of theirs and not a part of some larger systematic problem.
- However, this belief is disputed by layers upon layers of evidence showing quite the contrary.

D. C. Martin, *Apartheid in the Great Outdoors: American Advertising and the Reproduction of a Racialized Outdoor Leisure Identity*, 36 *J. LEISURE RSCH.* 513 (2004), <https://www.nrpa.org/globalassets/journals/jlr/2004/volume-36/jlr-volume-36-number-4-pp-513-535.pdf>.

- There may be a link between low levels of participation in outdoor recreation by African Americans and the racialized outdoor leisure identity perpetuated by the popular media
- In a content analysis of over 4,000 advertisements, black models are confined to urban and suburban environments while whites have exclusive domain over the Great Outdoors (at 513). (More research regarding more current advertisement can be found in “Black Faces, White Spaces” by Carolyn Finn (2014)).

PAUL OUTKA, *RACE AND NATURE: FROM TRANSCENDENTALISM TO THE HARLEM RENAISSANCE* (2008).

- “This legacy—in which whites viewed black people as part of the natural world, and then proceeded to treat them with the same mixture of contempt, false reverence, and real exploitation that also marks American environmental history—inevitably makes the possibility of an uncomplicated union with the natural world less readily available to African Americans that it has been to whites, who, by and large, have not suffered from such a history.”

PAUL A. SHACKEL, *MEMORY IN BLACK AND WHITE: RACE, COMMEMORATION, AND THE POST-BELLUM LANDSCAPE* (2003).

- In 1970, the NPS initiated a program to designate important sites related to African Americans as National Historic Landmarks (at 15).
- Additional project include the African American Experience Fund and Underground Railroad

TOMMIE SHELBY, *WE WHO ARE DARK: THE PHILOSOPHICAL FOUNDATIONS OF BLACK SOLIDARITY* (2005).

- Identifies the cultural concept of “blackness,” in which black identity is acknowledged as an identifiable ensemble of beliefs, values, conventions, traditions, and practices (at 211).
- Important to note this is considered the reality of being perceived as black by others regardless of one's own identification.

DAVID SIBLEY, *GEOGRAPHIES OF EXCLUSION: SOCIETY AND DIFFERENCE IN THE WEST* (1995).

- “Landscapes of Exclusion” theory
  - This theory is based on the idea that the development of public lands (whether they be state parks, national forests, national parks, or other types of public lands), is founded on racial prejudices and stereotypes which justified unequal access and participation.
  - By “Preserving the American Way of Life,” which is what many public lands are founded upon, the US also preserved a way of life that based on nineteenth century ideas.
- Key sites of nationalistic sentiment such as the countryside implicitly exclude black people (108)

M. Stewart, *Slavery and the Origins of African American Environmentalism*, in *TO LOVE THE WIND AND THE RAIN: AFRICAN AMERICANS AND ENVIRONMENTAL HISTORY* (University of Pittsburgh Press 2006).

- Through backbreaking labor and general day-to-day interactions, enslaved Africans became more knowledgeable about their surrounding environment than their white slave owners.

Ginger Thompson, [Reaping What Was Sown on the Old Plantation](https://www.nytimes.com/2000/06/22/us/reaping-what-was-sown-old-plantation-landowner-tells-her-family-s-truth-park.html), NY TIMES (June 22, 2000), <https://www.nytimes.com/2000/06/22/us/reaping-what-was-sown-old-plantation-landowner-tells-her-family-s-truth-park.html>.

- Illustrative story regarding the relationship between white and black perspectives of an old Plantation managed by NPS.

N. Trethewey, [Our Loss, Through the Eye of the Storm](https://www.nytimes.com/2010/08/29/opinion/29trethewey.html), NY TIMES (August 28, 2010), <https://www.nytimes.com/2010/08/29/opinion/29trethewey.html>.

- The removal of four hundred thousand acres of land from black hands, the inability to participate in government mandated processes such as the Homestead Act, being touted as the “missing link” and considered too “primitive” to be full citizens, and to die at the hands of those who believe they are morally justified in their actions, have left African Americans at times physically and psychologically exiled from their homeland while still in it.

C. WEST, *RACE MATTERS* (2001).

- What is most problematic is getting everyone to agree that there is a problem in the first place. Not everyone can agree that racism is a problem in America, and certainly not that racism would affect outdoor recreation.

Donald Worster, *Transformations of the Earth: Toward an Agroecological Perspective in History*, 76 J. AM. HIST. 1087 (1990).

- Offers a framework to get at the meanings people attribute to the environment that are based on ideologies, beliefs, myths, and experiences.



## *Hispanic Outdoor Recreation Experiences*

The literature on Hispanic Recreation suggests three dominant trends. First, that Hispanic recreation is largely associated with family. Second, that more communication in Spanish would be helpful for educating Hispanics about recreation opportunities as well as make them feel like they have a place on public lands. Third, safety is a concern. In particular, Hispanic women recreating without Hispanic men like to know that authority figures are nearby and available in case of trouble.

### *A Not-So Clarifying Note on Semantics:*

According to the US Census Bureau, “[t]he concept of race is separate from the concept of Hispanic origin.” “Hispanic” refers more to a culture or ethnicity while “Latino” refers more to a race of people. Hispanic culture is a broader term than Latino, and Hispanic culture incorporates Latinos. However, the US Census Bureau still gives people the single option of identifying as “Hispanic or Latino.” Their definition is “Hispanics or Latino refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.”

Sandra Lynn Shaull, *Family-Related and Nature-Related Recreation Benefits Among Anglo Americans and Hispanic Americans: A Study of Acculturation and Primary Structural Assimilation* (1993) (Master’s thesis, Texas A&M University).

<http://oaktrust.library.tamu.edu/handle/1969.1/ETD-TAMU-1993-THESIS-S533>.

- This thesis examines the influence of Hispanic ethnicity on perceived family-related and nature related benefits of recreation.
- Based upon evidence of the core cultural value of familism among Hispanics, it was hypothesized that family-related recreation benefits would resist assimilation and display patterns of selective acculturation / Anglo-conformity. The dependent variables, family-related and nature-related recreation benefits, were tested to determine if there were significant differences between Anglos and Hispanic respondents with different levels of primary structural assimilation and language acculturation.
- A telephone survey conducted in central and southern California produced a final sample of 995 cases.
- The study found that nature-related recreation benefits produced patterns of Anglo-conformity for both language acculturation and primary structural assimilation. The statistical results were less clear for family-related recreation benefits, but no patterns of selective acculturation were found.

DEBORAH S. CARR & DANIEL R. WILLIAMS, USDA FOREST SERV. GEN. TECH. REP. PSW-132, [SOCIAL STRUCTURAL CHARACTERISTICS OF HISPANIC RECREATIONISTS ON THE ANGELES AND SAN BERNARDINO NATIONAL FORESTS](#) 30 (1992), [https://www.fs.fed.us/psw/publications/documents/psw\\_gtr132/psw\\_gtr132\\_02\\_carr.pdf](https://www.fs.fed.us/psw/publications/documents/psw_gtr132/psw_gtr132_02_carr.pdf) [<https://perma.cc/Y3GT-FDQ7>].

- This paper focuses on understanding the demographic characteristics of the Hispanic individuals (primarily of Mexican and Central American descent) recreating on the National Forests of Southern California utilizing on-site, self-administered surveys.

Deborah J. Chavez, [\*Adaptive Management in Outdoor Recreation: Serving Hispanics in Southern California\*](#), 17 WESTERN J. APPLIED FORESTRY 129–33 (2002), <https://academic.oup.com/wjaf/article/17/3/129/4741318?login=true>.

- This article describes the adaptive management process as it was used to serve Hispanic recreation visitors at the Applewhite Picnic Area on the San Bernardino National Forest in southern California.
- Three studies have been conducted at this site to gather information. Applewhite Picnic Area managers used the data to renovate the picnic area and to provide management direction, and managers are currently implementing ideas based on the results of this study; these ideas include adding an art log, adding a sports area, and preventing trespass at the site.

Lena Le, [\*Hispanic and White Visitors in U.S. National Parks: Meta-Analysis of Visitor Use Survey\*](#), 30 J. PARK & REC. ADMIN. 1–20 (2012), <https://web.p.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&sid=27914288-b3c8-416d-87ec-8a448cca25bb%40redis>.

- The purpose of this study was to examine differences in recreation behaviors between Hispanic and White (non-Hispanic) visitors to U.S. national parks.
- The findings showed significant differences between Hispanics and Whites in terms of the proximity of visitors' residences to the park and participation in backpacking, bird-watching, and learning. No differences were found in activities such as camping in developed campgrounds and picnicking nor in the proportion of family groups.
- Whites and Hispanics were similar in their ratings of the importance of park resources such as clean air and clean water. Hispanics, however, rated the importance of facilities and services such as restrooms, exhibits, and staff availability higher than did Whites.
- Whites were not more likely to visit national parks overnight, and among day users, Hispanics spent significantly longer time visiting the park.
- These findings strengthen the assumption that there are different recreation behaviors and preferences across ethnic backgrounds. Although differences exist, engaging in family-oriented activities and visiting in family groups were the core common behaviors that occurred across ethnic backgrounds.

Myron H. Floyd & James H. Gramann, [\*Perceptions of Discrimination in a Recreation Context\*](#), 27 J. LEISURE RSCH. 192–99 (1995), <https://www.tandfonline.com/doi/abs/10.1080/00222216.1995.11949742>.

- This study “examined how Spanish language maintenance (an indicator of cultural assimilation), primary structural assimilation (extent of contact with Anglo Americans), and educational attainment (an indicator of socioeconomic assimilation) among Mexican Americans affected perceptions of discrimination in a recreation context.”
- The study found that “respondents with greater levels of education and lower Spanish competency were less likely to report discrimination against their ethnic group.”
- “The study suggests that identifying the correlates of perceived discrimination in a recreation context can assist policymakers and managers in developing more targeted strategies when addressing discrimination issues.”

ROBERT A. DUNN ET AL., NAT. RES. TECH. NOTE REC-13, [HISPANIC RECREATION AT CORPS OF ENGINEERS LAKES IN THE GREATER TULSA AREA](#) (July 2002), <https://erdc-library.erd.c.dren.mil/jspui/bitstream/11681/3680/1/TN-REC-13.pdf> [<https://perma.cc/A7KB-GVH5>].

- In preparation for the upgrading and replacement of recreation facilities in Oklahoma, the US Army Engineer District of Tulsa wished to include the growing input of Hispanic stakeholders. This report documents the results of two focus group sessions with the Hispanic community in Tulsa, Oklahoma.
- The conversations in the focus groups naturally came to center around six different themes: communication, education, Hispanic recreational style, Corps facilities, job opportunities for Hispanics, and guidelines for better relations with the Hispanic community.
- There was general consensus that it would be beneficial if more written communication was available in Spanish.
- Hispanic recreation style included a focus on large family gatherings, day-use, and land/shore-based recreation. Also, while people enjoyed wading and splashing, few were confident swimmers.
- Also notable were concerns for personal safety and a desire to see an increased Hispanic presence in the Corps.

Deborah S. Carr and Daniel R. Williams, *Understanding the Role of Ethnicity in Outdoor Recreation Experiences*, 25 J. LEISURE RSCH. 22–38 (1993).

- This study looks at outdoor recreation on national forests near large urban centers and the influences of ancestral, generational, and “acculturational” differences on meanings and preferences related to outdoor recreation experiences and forest use
- Notes an increasing trend in people of ethnic and racial backgrounds to increasingly choose urban-proximate forests as recreation sites. These changes are particularly evident on the national forests of Southern California where relatively undeveloped riparian sites are popular among individuals of Hispanic descent for picnicking, barbecuing, and wading/swimming in small streams.
- The study performed an on-site survey of visitors to four recreation sites of varying ethnic composition. Results suggest that two of the study sites are used primarily by less acculturated Hispanic immigrants. The other two sites are used by larger numbers of Anglos and Hispanics with longer generational tenure and higher acculturation scores. Both Anglos and Hispanics with longer generational tenure and higher levels of acculturation are more likely to visit with friends and less with extended family, to indicate escaping the city as the primary reason for their visit, and to define “respecting the forest” in terms of specific behavioral norms compared to Hispanics of Central American ancestry and less acculturated Hispanics of Mexican ancestry.

UCLA ANDERSON SCH. OF MGMT. APPLIED MGMT. RSCH. PROGRAM, [THE HISPANIC COMMUNITY AND OUTDOOR RECREATION](#) (2006), <https://outdoorindustry.org/wp-content/uploads/2017/03/ResearchHispanic.pdf> [<https://perma.cc/6SQK-428V>].

- This study attempts to identify the general priorities of Southern California dwelling Hispanics in relation to outdoor recreation. It found that the three most valued and

influential aspects of Hispanic culture are family, community, and personalization. As such, a strong commitment to family and friends drives leisure activity decision making.

- Total leisure time available within the Hispanic segment is currently low, but is showing signs of increasing. This study also found that income level does not drastically impact participation and is not a factor in outdoor activity interest
- To increase Hispanic participation in outdoor activities, this paper recommends that increased awareness/education and personalization are needed. Gateway community activities may be helpful, as well as more sources printed in Spanish.

### **National Park Service Efforts at Inclusivity**

- [NPS Hispanic Heritage Month](https://www.nps.gov/subjects/npscelebrates/hispanic-heritage-month.htm) <https://www.nps.gov/subjects/npscelebrates/hispanic-heritage-month.htm>
  - September 15 to October 15 is celebrated nationwide as National Hispanic Heritage Month. It traditionally honors the cultures and contributions of both Hispanic and Latino Americans as we celebrate heritage rooted in all Latin American countries.
  - Along with Park events, NPS has created an extensive website dedicated to places throughout the U.S. that are important to Hispanic heritage
- [American Latino Heritage Featured Places](https://www.nps.gov/subjects/tellingallamericansstories/latinofeaturedplaces.htm) <https://www.nps.gov/subjects/tellingallamericansstories/latinofeaturedplaces.htm>
  - The NPS preserves a variety of places commemorating America's multi-faceted history. The NPS preserves cultural resources, such as buildings, landscapes, archeological sites, and museum collections. They serve as tangible evidence of our collective past.
  - Example of places preserved that relate to American Latino heritage include: Cabrillo National Monument, Castillo de San Marcos, César E. Chavez National Monument, El Camino Real de Tierra Adentro Trail, El Morro National Monument, and San Juan National Historical Park
- [American Latino/a Heritage Theme Study Series](https://www.nps.gov/subjects/tellingallamericansstories/latinothemestudy.htm) <https://www.nps.gov/subjects/tellingallamericansstories/latinothemestudy.htm>
  - Published by the National Park System Advisory Board for the NPS, *American Latinos and the Making of the United States: A Theme Study* is a collection of Latino history in the States.
  - Chapter titles include: *Immigration, Sports, Labor, Law, Intellectual Traditions, Arts, Food, Science and Medicine*, etc.

### **Hispanic Groups Dedicated to Inclusivity in the Outdoors**

- [Latino Outdoors](https://latinooutdoors.org) <https://latinooutdoors.org> “*This could be us. Seriously, though. Vamos.*”
  - Missions Statement: We inspire, connect, and engage Latino communities in the outdoors and embrace *cultura y familia* as part of the outdoor narrative, ensuring our history, heritage, and leadership are valued and represented
  - Vision Statement: A world where all Latino communities enjoy nature as a safe, inclusive, and welcoming place – a world where the outdoors is a place to share and celebrate stories, knowledge, and culture, while growing leadership and an active community of Latino outdoor users, mentors, and stewards.
  - One Current Project: Mapping Migraciones. Did you know? Birds have no borders

and migrate thousands of miles every year. In 2021, we are partnering with Audubon California and National Audubon Society to celebrate Latinidad, migration, and the stories that connect us across the Americas. “Mapping Migraciones” is a year-long project that is centered on stories from our community members. Latino Outdoors has created a map of migratory bird data and stories from people to give us a full picture of how birds and people are connected through geography and culture. Check in throughout the year and watch the map grow to include more birds, migration patterns, and stories.

- [Hispanic Federation](https://hispanicfederation.org/about/mission_and_history/) [https://hispanicfederation.org/about/mission\\_and\\_history/](https://hispanicfederation.org/about/mission_and_history/)
  - o Mission Statement: Hispanic Federation is the nation’s premier Latino nonprofit membership organization. Founded in 1990, Hispanic Federation seeks to empower and advance the Hispanic community, support Hispanic families, and strengthen Latino institutions through work in the areas of education, health, immigration, civic engagement, economic empowerment, & the environment.
  - o “Environmental equity is ultimately an issue of social justice, one that deeply affects Latino communities all across the United States. Particularly in low-income areas, access to parks and green space is becoming increasingly rare, with Latino adults lacking common areas to exercise and develop interpersonal connections, and Latino children unable to incorporate physical activity into their routines.”
  - o “Research shows that Latinos believe clean water, clean air, access to green spaces and other environmental issues are important to the wellbeing of Hispanic communities nationally. Because of this, Hispanic Federation supports legislation that protects our environment and natural resources such as public lands and monuments. To advance this goal, Hispanic Federation educates lawmakers in Washington on how environmental policies impact Latino communities, defends the Land and Water Conservation Fund, which funds parks in urban and rural areas, and upholds the Antiquities Act, which enables the designation of national monuments.”
  - o A member of the Latino Conservation Alliance Coalition
  - o Hispanic Federation created Healthy Parks: Healthy Latinos Environmental Policy Report. The report outlines the health disparities impacting Hispanics and the importance of green spaces to Latino communities.  
[https://hispanicfederation.org/advocacy/reports/healthy\\_parks\\_healthy\\_latinos/](https://hispanicfederation.org/advocacy/reports/healthy_parks_healthy_latinos/)
- HECHO - [Hispanics Enjoying Camping, Hunting, and the Outdoors](https://www.hechoonline.org) <https://www.hechoonline.org>
  - o Formed in 2013, HECHO was created to help fulfill our duty to conserve and protect our public lands for future generations. We provide a platform for Hispanics/Latinos to contribute knowledge and perspectives about public land conservation. From southwestern deserts to northern forestland, Hispanics/Latinx throughout America have a strong connection to our nation's diverse landscapes. We urge our elected and appointed leaders to safeguard our precious public lands, so that our children can enjoy fishing, hiking, hunting, camping, and other outdoor activities for generations to come
  - o *Querencia*, or a love for the land, is a deeply held value that connects southwestern Hispanics to a past, present, and future sense of belonging and purpose. It is a principle that elevates the importance of the stewardship and conservation of our

- air, land, water, and interconnected communities
- [Green Latinos](https://www.greenlatinos.org) <https://www.greenlatinos.org>
    - o Green Latinos is a national non-profit organization that convenes a broad coalition of Latino leaders committed to addressing national, regional and local environmental, natural resources and conservation issues that significantly affect the health and welfare of the Latino community in the United States.
    - o Green Latinos provides an inclusive table at which its members establish collaborative partnerships and networks to improve the environment; protect and promote conservation of land and other natural resources; amplify the voices of low-income and tribal communities; and train, mentor, and promote the current and future generations of Latino environmental leaders for the benefit of the Latino community and beyond.
    - o Green Latinos develops and advocates for policies and programs to advance this mission.
  - [Voces](https://www.vocesverdes.org) - Latino Leadership in Action <https://www.vocesverdes.org>
    - o Founded in 2009, Voces is a community of organizational and individual leaders who support sustainable environmental progress. Voces seeks businesses, organizations and individuals who are willing to testify at congressional hearings, meet with legislators and serve as spokespeople to bring their unique perspectives as to the importance of strong, effective environmental policies.
    - o “Poll after poll show that Latinos in the U.S. care deeply about fighting climate change and moving towards a clean energy economy. By raising our Voces, we know a cleaner, more prosperous future is possible, and we are eager to support leaders and policies that will help us achieve that through clean energy jobs, strong carbon limits, and healthier air. Voces exists to ensure that Latinos everywhere remain actively engaged as leaders in the ongoing fight to protect our planet, the air we breathe, the water we drink, and the future we dream of for our children.”
  - [Hispanic Access Foundation](https://hispanicaccess.org) <https://hispanicaccess.org>
    - o Hispanic Access Foundation’s conservation program seeks to elevate diverse Latino voices and leaders to support Latino communities to advocate for the environmental issues that directly affect their daily lives. The program seeks to build bridges of access for Latinos to stewardship, conservation advocacy, and recreation opportunities to promote the health of their communities and the natural environment.
  - [Por La Creación](https://hispanicaccess.org/what-we-do/por-la-creacion-faith-based-alliance)—Faith Based Alliance <https://hispanicaccess.org/what-we-do/por-la-creacion-faith-based-alliance>
    - o A branch of the Hispanic Access Foundation, Por la Creación Faith-based Alliance develops stewards of God’s creation by educating and engaging this generation to leave a legacy for the future. This group educates Latinos and encourages active engagement in supporting the nation’s public lands and protecting our natural resources.
    - o Pastors bring common-sense and spiritual guidance to the national discussion about the value of our parks and public lands, and other environmental issues affecting Latinos. This leadership is instrumental in spurring change that preserves our natural treasures for future generations — bringing balance and fairness to how our nation views conservation in relation to energy development.

- The Alliance seeks to encourage more religious leaders to speak up for conservation, especially in communities that are on the front lines of energy development. We need energy development, but we also need to protect wildlife and other aspects of God's creation in our public lands. We can do both
- Department of the Interior's National Association of Hispanic Employees
- National Park Service's Hispanic Organization on Relevancy, Advising, Leadership, and Excellence

## PART II—POTENTIAL SOLUTIONS

Making decisions for the entire country is no easy task. Administrators of public lands are tasked with representing the voices of all Americans. Doing this requires balancing a large variety of interests, all of which are pitted against the task of preserving the natural resources we all want to enjoy. In this section are some of the tools currently being tried by different national parks, a synopsis of the Interagency Visitor Use Management Council, a list of potential systems and tools created by scholars, and lastly a list of some other data resource centers.

Molly M. Ryan et al., *[Engaging Minority Communities in Local National Park Units Through Culturally Competent Focus Groups](#)*, 38 J. PARK & RECREATION ADMIN. 67 (2020), <https://web.s.ebscohost.com/ehost/detail/detail?vid=0&sid=82999242-58b1-499b-93cb-3e6fd47d1011%40redis&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#AN=142338495&db=hjh>.

- This article provides a more general guide to engaging minority communities in addition to addressing Hispanic communities experience with the outdoors and specifically their relationship to Castillo del San Marcos National Monument (CASA).
- Their research suggests that National Parks should rely on focus groups to gather feedback from local communities in relation to nearby parks and public lands.

David E. Booher, *[Collaborative Governance Practices and Democracy](#)*, NAT'L CIVIC REVIEW 32–46 (2004), <https://www.csus.edu/indiv/s/shulockn/Executive%20Fellows%20PDF%20readings/Booher%20Collaborative%20governance%20practices.pdf>.

- This article provides background on some of the challenges faced by policy makers in modern day society. Specifically, with natural resource management due to the complexity and uncertainty that decision making carries.
- It also addresses the need for collaborative decision making to ensure that a wide range of voices are heard and taken into consideration.

J.E. Innes & David E. Booher, *[Consensus Building as Role Playing and Bricolage](#)*, J. OF AM. PLANNING ASS'N 9 (1999), <https://www.tandfonline.com/doi/pdf/10.1080/01944369908976031?needAccess=true>.

- This article provides a unique perspective specifically regarding collaborative decision making where stakeholders role play with other participants.
- This approach allows participants seeking consensus to consider alternatives that are not normally acceptable and to cooperate in a unique way that encourages genuine engagement.

Kirk Emerson et al., *[Environmental Collaboration and Conflict Resolution](#)*, in ROBERT F. DURANT ET AL., ENVIRONMENTAL GOVERNANCE RECONSIDERED: CHALLENGES, CHOICES AND OPPORTUNITIES (2017).

- These are some of the most prominent authors regarding collaboration focused negotiations and decision making.
- This book provides a great overview of what collaborative decision making looks like in environmental contexts, the challenges that come with those decisions, and how collaboration can make for better decision making.



## *National Park Responses to Increased Visitation*

National Parks across the nation are tackling increased visitation rates from a variety of angles. Based on Elisabeth Kwak-Hefferan's *8 Ways To Ease Overcrowding at Our National Parks* (September 2020), here are six different ways the Parks are attempting to mitigate increased visitation: (1) Reservation Systems; (2) Shuttle Systems / Private Vehicle Limits; (3) Increased Fees; (4) Less Traveled Alternative Destinations; (5) Modernized Toilets, and (6) Tag Responsibly.

### *Reservation Systems*

#### **Rocky Mountain**

[Rocky Mountain National Park Timed Entry](https://www.recreation.gov/timed-entry/10086910), RECREATION.GOV, <https://www.recreation.gov/timed-entry/10086910> [<https://perma.cc/U4ZZ-EWXC>] (last visited Nov. 10, 2021).

- “Rocky Mountain National Park will be implementing a ***new pilot temporary timed entry permit reservation system*** beginning on May 28, 2021.”
- “There will be two types of reservations available. One permit will be for the Bear Lake Road Corridor (from the junction of Trail Ridge Road to the Bear Lake Trailhead), which will include the entire corridor and access to the rest of the park. This reservation period will be from 5 am to 6 pm. The second permit will be for the rest of Rocky Mountain National Park, excluding the Bear Lake Road corridor. This reservation period will be from 9 am to 3 pm. Permits issued using the reservation system will allow park visitors to enter the park within two-hour windows of availability. ***The reservation system will apply to all areas of the park.***”
- “This year’s pilot reservation system allows for a greater number of reservations per day. Reservations will be based on approximately 75 percent to 85 percent of the park’s total parking capacity. ***Last year’s system was based on approximately 60 percent of the park’s total parking capacity.*** This system spreads use throughout the park to better utilize all parking/trailhead areas. This system will be adaptable to changes in visitation trends and public health concerns.”

#### **Yosemite**

[Yosemite: Entrance Reservations](https://www.nps.gov/yose/planyourvisit/reservations.htm), NAT’L PARK SERV., <https://www.nps.gov/yose/planyourvisit/reservations.htm> [<https://perma.cc/P5AM-RMV5>] (last visited Nov. 9, 2021).

- “***Based on local, state, and federal public health guidelines***, the number of vehicles entering Yosemite was reduced from normal visitation levels for public safety from June 11, 2020 through October 31, 2020 and February 8, 2021 through February 28, 2021, and May 21, 2021 through September 30, 2021. ***This helped reduce overcrowding at the park’s most popular destinations.*** The park aimed to increase public access while providing visitors with a reasonable opportunity to comply with health guidelines. The day-use reservation system was a ***temporary system*** that was created to address public health concerns resulting from the COVID-19 pandemic.”
- “***The day-use reservations only limited the number of vehicles; it did not limit the number of people.***”

## **Glacier**

Tristan Scott, [Glacier Park Partners Examine Reservation System's Ripple Effects](https://flatheadbeacon.com/2021/10/21/glacier-park-partners-examine-reservation-systems-ripple-effects/) (Oct. 21, 2021), <https://flatheadbeacon.com/2021/10/21/glacier-park-partners-examine-reservation-systems-ripple-effects/> [<https://perma.cc/HLE8-S6A8>].

- “Glacier National Park announced the launch of a *pilot program requiring reservations for motorists accessing the Going-to-the-Sun Road.*”
- “The reservation system crafted to cut down on congestion inside the park *delivered unintended consequences outside the park*, mainly by diverting ticket-less visitors to areas that didn't require a reservation. Those included more remote corners of Glacier, as well as neighboring sites managed by other land agencies, such as FWP and the Flathead National Forest, both of which are less equipped to deal with surges in visitation, traffic and crowds, and which encountered a variety of problems.”
- “*Accessibility was a concern* not only for our *elderly and non-tech savvy visitors*, but for all users because there was such a huge demand and volume of users.”
- “Options for next year include extending some version of the ticketed entry system as a pilot program, although permanent implementation would require a more extensive period of public involvement and analysis.”
- “Diane Medler, executive director of Explore Kalispell, said the challenges created by Glacier's ticketed entry system were significant, but that *coordinated messaging and outreach helped alleviate the strain.*”
- “The park's *late notice of its decision* to implement the reservation system *was especially problematic.*”
- “There was also significant confusion from visitors about *what park services exempted them from needing a ticketed entry to the Sun Road.*”

## **Zion**

[Zion National Park Accepting Comments on Proposed Lava Point Campground and Day-use Permit Lottery Amenity Fees](https://www.nps.gov/zion/learn/news/zion-national-park-accepting-comments-on-proposed-lava-point-campground-and-day-use-permit-lottery-amenity-fees), Nat'l Park Serv. (Aug. 13, 2021)

<https://www.nps.gov/zion/learn/news/zion-national-park-accepting-comments-on-proposed-lava-point-campground-and-day-use-permit-lottery-amenity-fees.htm> [<https://perma.cc/CT9R-4LJA>].

- “In 2017, ZION initiated a *trail use study to understand hiking patterns and visitor experience on Angels Landing and in The Narrows*. In 2019 and 2021, results from the research were used to pilot an informal means of managing hiker flow along the chain section of Angels Landing on holiday weekends. This allowed the park to understand levels and rates of visitor use that alleviate congestion and safety concerns along the trail.”
- “Building from these previous efforts and public input, ZION is proposing to implement a day-use permit lottery system in 2022.”
- “*A more formalized system* on Angels Landing *would provide an equitable process that prioritizes visitor safety* along the chain section of Angel Landing *while ensuring park resources are protected and desired visitor experiences are available.*”

## Arches

Rachel Fixsen, [Arches Reservation System on the Table Again: Park Service Hosts Public Meetings to Discuss Congestion](https://www.moabsunnews.com/news/article_6ecd116e-0c27-11ec-bba2-8b9842e6d5d8.html), MOAB SUN NEWS (Sep. 2, 2021), [https://www.moabsunnews.com/news/article\\_6ecd116e-0c27-11ec-bba2-8b9842e6d5d8.html](https://www.moabsunnews.com/news/article_6ecd116e-0c27-11ec-bba2-8b9842e6d5d8.html) [<https://perma.cc/P34E-7QUA>].

- “[In July 2021] Congress’s national parks subcommittee, held a hearing to discuss different approaches to managing the traffic and crowding in the nation’s most popular parks . . . ***focused on two strategies: [1] implementing more timed-entry reservation systems for vehicles at America’s most popular parks, and [2] trying to channel more visitors to some of the nation’s lesser-known, less popular parks, monuments, and outdoor destinations.***”
- “Arches National Park is considering a timed-entry pilot in spring of 2022,” said Thomas, emphasizing that the park plans to collaborate with the community in deciding what approaches to use and how to implement them.”
- “A 2018 study commissioned by the National Park Service found that implementing a reservation system could reduce local revenues in the Moab area by \$11–22 million in the first year, though it also predicted that once people were used to the system, visitation and spending would rebound to what it would have been without the reservation system.”

## Press Reactions:

Emily Pennington, [The National Parks Reservation System Is Off to a Bumpy Start](https://www.outsideonline.com/adventure-travel/national-parks/national-parks-reservation-systems/), OUTSIDEONLINE.COM (Aug. 11, 2021), <https://www.outsideonline.com/adventure-travel/national-parks/national-parks-reservation-systems/>.

- Reservations—Desired dates are sold out in 3 minutes.
- ***“I wish there were some sort of allowance for local folks that wasn’t Hunger Games-style,” said Kelsey Connor, who lives just 30 minutes outside of Rocky Mountain.*** “This year, with reservations being opened a month in advance and 25 percent the day before, it’s a huge pain in the ass.”
- ***“At Yosemite, reviews have been more positive.*** When Ray Wrabley had to cancel his family’s planned trip to Canada last summer, he likened the new reservation system to the familiar slog of snagging coveted concert tickets. “It was relatively easy—and something we were used to—but had we not known we needed to get reservations that early, we would have had a much harder time getting into Yosemite,” he said. Once inside the park in July, he noted that the permitted entry system made the park experience more pleasant. “We were able to get around without the kinds of crowds we had encountered in other national parks.”
- “Though Senator Angus King, chair of the Parks Subcommittee, admitted at the onset of the July hearing that “there is no one single solution that will fit all the situations in our parks,” he did give a hint at the end of the meeting to the possibility that the addition of more parks might ultimately be the answer.
- “I want to refer to a line in Mr. Gartland’s testimony, which jumped out at me,” said King of a statement by Kevin Gartland, executive director of the Whitefish (Montana) Chamber of Commerce. ***“The law of supply and demand doesn’t apply here. The demand is here, but we can’t just go out and build more Glacier parks.*** Perhaps we need to bear that in mind as this committee and subcommittee considers new proposals for

parks across the country . . . one additional solution is to provide additional opportunities for people to enjoy these extraordinary places in our country.”

### *Shuttle Systems / Private Vehicle Limits*

#### **Mount Rainier**

*Mount Rainier: [Avoid Summer Congestion](#)*, Nat'l Park Serv., <https://www.nps.gov/mora/planyourvisit/congestion.htm> [<https://perma.cc/T68X-6MV>] (last visited Nov. 10, 2021).

- “When the Sunrise parking area is filled to capacity, vehicles are held at the White River Entrance and then slowly metered in as other vehicles depart.”

#### **Grand Canyon**

*Grand Canyon: [History of the Shuttle Bus System](#)*, NAT'L PARK SERV., <https://www.nps.gov/grca/planyourvisit/shuttle-buses.htm> [<https://perma.cc/JMV4-LYDS>].

- “The National Park Service has provided free shuttle bus service on the South Rim of Grand Canyon National Park for more than 40 years.”
- “All of the park’s buses are fully accessible and run on compressed natural gas, which means fewer harmful emissions for people and the environment. And the roadways are far less crowded!”
- “Grand Canyon’s shuttle system provides a hassle free way to access South Rim trails, viewpoints, and other points of interest—some areas are only accessible by bus.”

NPS, TOWN OF TUSAYAN, GRAND CANYON SOUTH RIM CHAMBER OF COMMERCE, & USFS, [SOUTH RIM - TUSAYAN MULTIMODAL TRANSPORTATION ACTION PLAN](#) (2019),

[https://www.nps.gov/grca/learn/management/upload/south\\_rim\\_tusayan\\_transportation\\_action\\_plan\\_may2019\\_508.pdf](https://www.nps.gov/grca/learn/management/upload/south_rim_tusayan_transportation_action_plan_may2019_508.pdf).

- “The purpose of this action plan is to enhance the quality, extent, and use of multimodal transportation options between Tusayan and the South Rim of Grand Canyon National Park in a manner that benefits visitors, residents, service providers, community members, and park resources.”
- The strategy described in this document includes 45 recommended actions presented under four primary themes. Some of these actions represent current efforts that have proven effective and are recommended for continuation. Some have already been launched during the preparation of the plan, while a substantial number of others require concerted action by one or more parties. Nearly all of the recommendations sit on the foundation of existing, approved plans.

#### **Zion**

*Zion: [Zion Canyon Shuttle System](#)*, NAT'L PARK SERV., <https://www.nps.gov/zion/planyourvisit/zion-canyon-shuttle-system.htm> [<https://perma.cc/A8J8-5N8L>].

- “There are two shuttle routes and both are free.”
- “In 1997, visitation was 2.4 million and increasing. The shuttle system was established in 2000 to eliminate traffic and parking problems, protect vegetation, and restore tranquility to Zion Canyon. In 2017, park shuttles estimated more than 6.3 million riders.”

- “The Zion Canyon Scenic Drive is closed to private vehicles during the shuttle season.”

## **Yosemite**

[YARTS](https://yarts.com), <https://yarts.com> (last visited Nov. 16, 2021).

- Long distance bus service
- *Wikipedia*: “First proposed in 1992, YARTS was designed as a way to reduce traffic and increase accessibility to Yosemite National Park. In May 2000, after 8 years of planning, the bus line officially commenced service in Yosemite's neighboring communities. To date, the Yosemite Area Regional Transportation System has provided over 1,000,000 rides.”
- “On May 23, 2015, YARTS began operating on Highway 41 **between Fresno and Yosemite.**”
- *YARTS: Do yourself a favor and take it*, review on Tripadvisor (posted August 5, 2017).

[NPS ACTIVE TRANSPORTATION GUIDEBOOK: A RESOURCE ON SUPPORTING WALKING AND BICYCLING FOR NATIONAL PARKS AND THEIR PARTNERS \(2018\)](https://www.nps.gov/subjects/transportation/upload/UPDATED_NPS_Guidebook_July2018_Final_UpdateSept2018-High-Res_WEB-2.pdf), [https://www.nps.gov/subjects/transportation/upload/UPDATED\\_NPS\\_Guidebook\\_July2018\\_Final\\_UpdateSept2018-High-Res\\_WEB-2.pdf](https://www.nps.gov/subjects/transportation/upload/UPDATED_NPS_Guidebook_July2018_Final_UpdateSept2018-High-Res_WEB-2.pdf)

- To help alleviate increased visitation and vehicle congestion, this resources gives ideas for what parks can do to facilitate walking and biking visitors to parks.
- Coordinate with local communities to create connected multi-use trails and other biking and pedestrian infrastructure.
- Carr-free events
- Biking and hiking safety education.
- Cheaper to enter the park by food or bicycle.

## *Increased Fees*

### *Not a popular solution.*

Timothy Cama, [Zinke Backs Off Plan for Big National Park Fee Increases](https://thehill.com/policy/energy-environment/382906-zinke-backs-off-plan-for-big-national-park-fee-increases), THE HILL (Apr. 12, 2018), <https://thehill.com/policy/energy-environment/382906-zinke-backs-off-plan-for-big-national-park-fee-increases> [<https://perma.cc/JP3L-W8MX>].

- “Zinke’s original proposal elicited strong backlash from Democrats and environmentalists, who accused Zinke of prioritizing oil, coal and other companies that use federal land over parkgoers.”

## *Less Traveled Alternative Destinations*

### **Glacier National Park**

*Recreation Access Display*, <https://www.nps.gov/applications/glac/dashboard/>

- Downside: Can create other issues at *previously* off-the-beaten-path spots.

## **Mount Rainier**

- Tips to have an enjoyable visit and avoid the worst of the congestion, <https://www.nps.gov/mora/planyourvisit/congestion.htm>
- Have an alternate plan and destination in mind if long lines and waits are encountered entering the park. Experience the sights and activities of gateway communities during peak hours and weekends. U.S. Forest Service lands and the Crystal Mountain Resort provide nearby destination alternatives. Download the NPS App and download Mount Rainier National Park's section so that you can use the app offline to find alternate locations within the park
- As wait times increase to enter the park each summer weekend, break up your trip by visiting the **public restroom in Elbe** on SR706 at the WSDOT-managed Safety Rest Area. In addition, visitors with children may enjoy letting them stretch their legs at the **Ashford County Park** located at 29801 SR706 in Ashford. The 80-acre park has walking trails, a playground with a large play structure, balancing elements, infant swings, and regular swings. There is plenty of parking, and public restrooms are located next to the playground

## *Modernized Toilets*

Elisabeth Kwak-Hefferan, [8 Ways to Ease Overcrowding at Our National Parks](https://www.5280.com/2020/09/8-ways-to-ease-overcrowding-at-our-national-parks/#one) (September 2020), <https://www.5280.com/2020/09/8-ways-to-ease-overcrowding-at-our-national-parks/#one> [<https://perma.cc/88SW-GGBW>].

- “[P]arks could implement new-school, urine-diverting toilets that drastically reduce waste volume, maintenance costs, and overall stink. These models redirect pee to on-site septic fields, tanks, or the ground’s surface, thereby preventing the gag-inducing ammonia buildup that comes from mixing solid and liquid waste. That diversion also makes it easier for soil microbes to break down the remaining TP and poop, greatly shrinking the overall load parks have to deal with in the backcountry.”
- “Several parks have already installed these modernized toilets in crowded, fragile backcountry environments, such as Zion’s Angels Landing and the Boulderfield just below Rocky’s Longs Peak. Not only have Rocky’s new-in-2018 latrines reduced waste buildup by 40 percent—a big deal when llamas are your chief means of packing out crap—but their natural stone meets sleek modern design is also stylish enough to have earned an American Institute of Architects Award in 2019.”

## *Tag Responsibly*

[Sustainability](https://www.visitjacksonhole.com/sustainability), VISIT JACKSON HOLE, <https://www.visitjacksonhole.com/sustainability> [<https://perma.cc/8F3M-T3ZT>] (last visited Nov. 16, 2021).

- **“Geotagging photos in social media creates a surge in human traffic, increasing strain on delicate habitats. Post the photo. Trash the tag.”**

Abby L. Timmons, Note, *Too Much of a Good Thing: Overcrowding at America's National Parks*, 94 NOTRE DAME L. REV. 985 (2018),

[https://heinonline.org/HOL/LandingPage?handle=hein.journals/tnd194&div=28&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/tnd194&div=28&id=&page=)

- This article provides a general overview of issues that various National Parks are facing. It suggests suggests policies moving forward.
- “With the emergence of career YouTubers and professional Instagram travel bloggers, some of those who come to visit the national parks may be less interested in experiencing the lands of their beauty and solitude, and may instead be more interested in monetizing or showing off the experience.”
- “This Note takes the stance that *improving the presence of technology in national parks is a poor idea, and that choosing to do so would undermine the core appeal of the lands to many parkgoers*. “[O]utdoor enthusiasts worry that bastions of quiet reflection could be transformed into noisy hubs where visitors yak on cell phones and fidget with electronic tablets, detracting from the ambience of such natural wonders as Yellowstone's celebrated geyser Old Faithful.”

## *Strategies for Effective Stakeholder Engagement*

This section lays out different mechanisms and strategies to inform and effect stronger stakeholder engagement. Stakeholders include federal agencies, state agencies, and all visitors and users of public lands. Finally, this section concludes with other data resources to help approach issues facing stakeholders of public lands.

### *Interagency Visitor Use Management Council*

Established in 2011, the Interagency Visitor Use Management Council (IVUMC) provides guidance on visitor use management policies and develops legally defensible and effective interagency implementation tools for visitor use management. IVUMC serves six federal agencies that manage public lands: the National Park System, US Fish and Wildlife Service, Bureau of Land Management, National Oceanic and Atmospheric Administration, US Army Corp. of Engineers, and the US Forest Service. Technical advisors from the six agencies - as well as from the U.S. Geologic Survey, U.S. Department of the Interior - contribute to the activities of the council. IVUMC has published several guidebooks and papers to aid the agencies, hosts classes and seminars, and is contracted with by the agencies to aid in special projects.

- [Welcome](https://visitorusemanagement.nps.gov), INTERAGENCY VISITOR USE MGMT. COUNCIL, <https://visitorusemanagement.nps.gov> (last visited Nov. 30, 2021).
- Leaders of these federal agencies chartered the Interagency Visitor Use Management Council (the council) to enhance best practices, interagency consistency, cost-effectiveness, and the defensibility of decisions related to visitor use management. It is important to reduce redundancy of effort and increase consistency in the interpretation and application of laws and policies pertaining to visitor use management on federal

- lands and waters.
- These agencies are directed to provide opportunities for recreational uses to the extent that recreation is compatible with each agency’s mission and can be sustained without unacceptable impact to other resources and values/purposes.
  - **Visitor use management goals are combined with visitor capacity to create a management framework**
    - Strive to maximize benefits for visitors while achieving and maintaining desired resource conditions and visitor experiences.
    - Recent public initiatives, such as *America’s Great Outdoors* and *Healthy Parks Healthy People US*, demonstrate a commitment to enhance the public’s connection with the outdoors for purposes of recreation, spiritual renewal, improved health, and high-quality time spent with families and friends. Providing and managing for these opportunities is fundamental to the stewardship missions of these federal agencies. At the same time, these agencies are challenged to strike an appropriate balance between these societal benefits and resource protection and conservation.
    - It requires that managers analyze not only the number of visitors but also where they go, what they do, their impacts on resources and visitor experiences, and the underlying causes of those impacts.
    - Specific recommendations for interpreting the concept of capacity and associated legal requirements for wild and scenic rivers, national historic and scenic trails, and in units of the National Park Service.
  - The Framework Elements:
    - Build the Foundation–Understand why the project is needed, and develop the project approach.
    - Define Visitor Use Management Direction–Describe the conditions to be achieved or maintained and how conditions will be tracked over time.
    - Identify Management Strategies–Identify strategies to manage visitor use to achieve or maintain desired conditions.
    - Implement, Monitor, Evaluate, and Adjust–Implement management strategies and actions, and adjust based on monitoring and evaluation
  - Contributed Papers:
    - [The Relationship between Amount of Visitor Use and Environmental Impacts](#) by David N. Cole
    - [The Relationship between Amount of Visitor Use and Social Impacts](#) by Stewart Allen
    - [Impacts to Wildlife: Managing Visitors and Resources to Protect Wildlife](#) by Jeffrey L. Marion
    - Social science is a particularly important contribution to informed and legally defensible decision making for managing visitor use. Proactively managing visitor use supports the ability of the National Park Service to encourage access, improve visitor experiences, and protect resources. To guide its work in visitor use management, the National Park Service is actively using the framework.
  - [Laws applicable to visitor use management:](https://visitorusemanagement.nps.gov/VUM/WhatGuidesIt)  
<https://visitorusemanagement.nps.gov/VUM/WhatGuidesIt>



- [Council Contacts](#) from each organization:  
<https://visitorusemanagement.nps.gov/Home/Contact>

### *Management Engagement*

Diane Vosick, [Democratizing Federal Forest Management Through Public Participation and Collaboration](#), 48 ARIZ. ST. L.J. 93 (2016),

[https://heinonline.org/HOL/LandingPage?handle=hein.journals/arzjl48&div=8&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/arzjl48&div=8&id=&page=)

- As a resource for some of the laws and regulations that influence federal land management agencies to “actively and meaningfully collaborate with the public during project development and implementation” (93). Including the Collaborative Forest Restoration Act 16 USCS §7303.

Maggi Kelly & Debra Whitall, [Which ‘Public’? Sampling Effects in Public Participation GIS \(PPGIS\) and Volunteered Geographic Information \(VGI\) Systems for Public Lands Management](#), 57 J. ENV’T PLAN. & MGMT. 190 (2013),

[https://www.tandfonline.com/doi/full/10.1080/09640568.2012.741045?casa\\_token=FQ8FWw\\_OtBYAAAAA%3AtIAJksq2JSaMRnje5ls2QW0kNDLueQjXYBrTeYosMP6B2jjDI-kunZAxuEXXjhJ3W4i3el26s9L2iCM](https://www.tandfonline.com/doi/full/10.1080/09640568.2012.741045?casa_token=FQ8FWw_OtBYAAAAA%3AtIAJksq2JSaMRnje5ls2QW0kNDLueQjXYBrTeYosMP6B2jjDI-kunZAxuEXXjhJ3W4i3el26s9L2iCM).

- This article provides a different kind of sampling to gain info about how people value public lands
- A random sample (RS) of households and a volunteer public (VP) were invited to participate in an internet-based PPGIS to identify national forest values and use preferences. Spatial and non-spatial group responses were analysed. The VP group expressed stronger utilitarian values and consumptive use preferences while the RS group preferred forest amenities. These results would lead to different planning decisions.
- Public Participation Geographic Information Systems (PPGIS) should include scientific sampling to ground-truth voluntary participation.

Holland et al., [A Systematic Review of the Psychological, Social, and Educational Outcomes Associated with Participation in Wildland Recreational Activities](#), 10 J. OUTDOOR RECREATION, EDUC., & LEADERSHIP 197 (2018), <https://js.sagamorepub.com/jorel/article/view/8382>.

- This article surveys outdoor recreation studies and provides a systematic examination and summary of the empirical evidence. Moreover, this article provides a table of defined terms to help guide discourse about recreational issues. These include such terms as mental restoration, place attachment, pro-social behaviors, and personal development. In effect, the article found that academic studies have focused primarily on “11 broad categories, the most common related to personal development (59%), pro-social behaviors (52%), mental restoration (42%), and environmental stewardship (36%).” Of particular relevance is that “the lack of diversity in participants in wildland recreation influences not only how results are reported in studies of wildland recreation, but also their relevance for addressing the needs of an increasingly diverse U.S. public.”

Elinor Ostrom, *A General Framework for Analyzing Sustainability of Social-Ecological Systems*, 325 SCI. MAG. 419 (July 24, 2009),

<https://science.sciencemag.org/content/325/5939/419.abstract>.

- Creating social-ecological systems. Embrace complexity and create a language which people can communicate with across borders and topics.
- There has been so much interdisciplinary work done on environmental issues, but it is exceedingly difficult to transfer what is learned in one field or study to another. The Ostrom method lays out a complex, but adaptable system for groups to use in implementing how they examine social-ecological systems.

CHAPIN, KOFINAS, & FOLKE, *PRINCIPLES OF ECOSYSTEM STEWARDSHIP: RESILIENCE-BASED NATURAL RESOURCE MANAGEMENT IN A CHANGING WORLD* (2009).

- This book extensively explores natural resource management by establishing a framework for “stewardship of ecosystems for human well-being” (v). The authors opine that, “[i]t is no longer possible to manage systems so they will remain the same as in the recent past, which has traditionally been the reference point for resource managers and conservationists” (5).
- While not written directly for the managers of our public lands, the ideas presented in this book are applicable none-the-less because they outline an argument for where management focus should be. The NPS and BLM have to balance changing cultural desires and use with the protection of ecosystems. As resource managers attempt to cope with the changes of the climate on ecosystems, they must also incorporate the growing desire to access public lands. This includes being sure to incorporate all Americans and previously underrepresented groups. This will require change in the system of management and new focus.
- “We must adopt a more flexible approach to managing resources - management to sustain the functional properties of systems that are important to society under conditions where the system itself is constantly changing. Managing resources to foster resilience - to respond to and shape change in ways that both sustain and develop the same fundamental function, structure, identity, and feedbacks - seems crucial to the future of humanity and the Earth System. Resilience-based ecosystem stewardship is a fundamental shift from steady-state resource management, which attempted to reduce variability and prevent change, rather than to respond to and shape change in ways that benefit society” (6).

TABLE 1.1. Contrasts between steady-state resource management, ecosystem management, and resilience-based ecosystem stewardship.

Steady-state resource management	Ecosystem management	Resilience-based ecosystem stewardship
Reference state: historic condition	Historic condition	Trajectory of change
Manage for a single resource or species	Manage for multiple ecosystem services	Manage for fundamental social–ecological properties
Single equilibrium state whose properties can be sustained	Multiple potential states	Multiple potential states
Reduce variability	Accept historical range of variability	Foster variability and diversity
Prevent natural disturbances	Accept natural disturbances	Foster disturbances that sustain social–ecological properties
People use ecosystems	People are part of the social–ecological system	People have responsibility to sustain future options
Managers define the primary use of the managed system	Multiple stakeholders work with managers to define goals	Multiple stakeholders work with managers to define goals
Maximize sustained yield and economic efficiency	Manage for multiple uses despite reduced efficiency	Maximize flexibility of future options
Management structure protects current management goals	Management goals respond to changing human values	Management responds to and shapes human values

In traditional steady-state resource management, decisions are made by those in management positions. In the other two systems though, decisions are made by the stakeholders. This table shows which voices the resource management system incorporates (Table found on page 5). Under either of the ecosystem management systems, there is more opportunity for traditional minority voices to be heard.

- “We focus on stewardship, which recognizes managers as an integral component of the system that they manage. Stewardship also implies a sense of responsibility for the state of the system of which we are a part (Leopold 1949). The challenge is to anticipate change and shape it for sustainability in a manner that does not lead to loss of future options (Folke et al. 2003). Ecosystem stewardship recognizes that society’s use of resources must be compatible with the capacity of ecosystems to provide services, which, in turn, is constrained by the life-support system of the planet” (6).
- An Integrated Social-Ecological Framework: Linking Physical, Ecological, and Social Processes
  - None of them can be studied by themselves. Change on this planet is very interconnected, so interdisciplinary is required
  - “They are, therefore, best viewed, not as ecological or social systems, but as social—ecological systems that reflect the interactions of physical, ecological, and social processes.”
  - “Resource stewardship policies must therefore be ecologically, economically, and culturally viable, if they are to provide sustainable solutions.”
  - “Resource management considers the actions that agencies or individuals take to sustain natural resources, but typically pays less attention to the interactions among interest groups that influence how management policies develop or how the public will respond to management. Similarly, environmental policy analysis addresses the potential interactions of environmental policies developed by different organizations, but typically pays less attention to potential social or

ecological thresholds (critical levels of drivers or state variables that, when crossed, trigger abrupt changes or regime shifts) that determine the long-term effectiveness of these policies” (8).

Rebecca Sokol, Comment, [\*Toward Sustainable Recreation on Colorado’s Fourteeners\*](#), 91 U. COLO. L. REV. 345 (2020), [https://heinonline.org/HOL/LandingPage?handle=hein.journals/ucollr91&div=10&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/ucollr91&div=10&id=&page=)

- This Comment “explains why the Forest Service often resorts to use limits to manage recreation. In doing so, it provides an analysis of the agency's historical role as a land regulator. This Comment also suggests an alternative strategy to mitigate recreational overuse on fourteeners that focuses on fostering sustainability through changing hiker behavior.”

### *Including All Stakeholders*

[\*Office of Relevancy, Diversity, and Inclusion\*](#), NAT’L PARK SERV., <https://www.nps.gov/orgs/1244/index.htm> (last visited Nov. 29, 2021).

- The mission of the Office of Relevancy, Diversity, and Inclusion (RDI) is to champion for an organizational culture that is increasingly inclusive and participatory, which values the diverse ideas, experience and background of every individual, and empowers an innovative, flexible and resilient NPS to engage the opportunities and challenges of the future.
- The Office of RDI works collaboratively with NPS stakeholders to embed these best practices into the organization and provide the support needed to ensure their implementation.
- The National Park Service defines relevancy, diversity, and inclusion as:
  - Relevancy is achieved when all Americans are able to establish a personal connection to the National Park Service parks and programs and find meaning and value in the mission of the National Park Service.
  - Diversity represents the practice of actively incorporating people of different backgrounds, perspectives, thoughts and beliefs throughout the organization to ensure that NPS is advantaged by the best thinking possible. Diversity represents the wide range of visible and invisible differences and similarities that make each of us unique.
  - Inclusion is the practice of intentionally building a culture that is flexible, values diverse ideas, and embraces the meaningful participation of all.
- Employee Resources Groups include: Council for Indigenous, Relevance, Communication, Leadership and Excellence; Employee Empowerment Collective; Hispanic Organization on Relevancy, Advising, Leadership, and Excellence; Lesbian,

Gay, Bisexual, Transgender, and Queer Employee Resource Group; Women's Employee Resource Group; and Employees for the Advancement of People with Disabilities

Aby Sène-Harper, et al., [Black Philanthropy and National Parks: Giving Green to Give Black](https://web.p.ebscohost.com/ehost/detail/detail?vid=0&sid=f4d8eb33-6697-43ee-86923d2bbd460558%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=153391009&db=hjh), J. PARK & RECREATION ADMIN. 95 (2021), <https://web.p.ebscohost.com/ehost/detail/detail?vid=0&sid=f4d8eb33-6697-43ee-86923d2bbd460558%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#AN=153391009&db=hjh>.

- The abstract states: “The study found that Black philanthropy is embedded in the community life; measured not only in money, but also in time and talent; and, driven by race and humanity. Participants also noted that a **general lack of awareness** as an important reason why they had not considered giving in support of national parks in the past. **They suggested that making more visible the Black history of national parks would likely increase African American donors’ interests and stewardship. We suggest the NPS broaden its lens in forming strategies for connecting to Black donors (and audiences in general).** Findings in this report present unique opportunities for the NPS to cultivate enduring and meaningful relationships with African American communities in support of national parks. Specifically, the NPS should leverage Black philanthropy to build partnerships, recognize the importance of social empowerment, expand cultural memory as part of the NPS visitor experience, and **build on the concept of giving circles.**” (emphasis added).

Courtney L. Schultz, [Whose National Park Service? An Examination of Relevancy, Diversity, and Inclusion Programs from 2005–2016](https://www.researchgate.net/profile/Kangjae-Lee2/publication/334316028_Whose_National_Park_Service_An_examination_of_relevancy_diversity_and_inclusion_programs_from_2005-2016/links/5d372d1a4585153e591bbba5/Whose-National-Park-Service-An-examination-of-relevancy-diversity-and-inclusion-programs-from.pdf), J. PARK & RECREATION ADMIN. 1 (2019), [https://www.researchgate.net/profile/Kangjae-Lee2/publication/334316028\\_Whose\\_National\\_Park\\_Service\\_An\\_examination\\_of\\_relevancy\\_diversity\\_and\\_inclusion\\_programs\\_from/links/5d372d1a4585153e591bbba5/Whose-National-Park-Service-An-examination-of-relevancy-diversity-and-inclusion-programs-from.pdf](https://www.researchgate.net/profile/Kangjae-Lee2/publication/334316028_Whose_National_Park_Service_An_examination_of_relevancy_diversity_and_inclusion_programs_from/links/5d372d1a4585153e591bbba5/Whose-National-Park-Service-An-examination-of-relevancy-diversity-and-inclusion-programs-from.pdf).

- “Organizations focused on increasing diversity in outdoor recreation have become nearly ubiquitous. For example, Outdoor Afro, an organization that would become the nation’s leading network to celebrate and encourage African American connections and leadership in nature, was launched in 2009 using Facebook and a blog (Meraji, 2015). Social media has been central in amplifying the voices of the younger generation in their advocacy of diversity in the outdoors. Digital platform advocacy has given rise to collective partnerships such as Diversify Outdoors, a coalition of social media influencers: “leaders in social media advocacy of promoting diversity and equity in the outdoors” (Diversify Outdoors, n.d.). These social groups are helping to redefine who nature is for and what those outdoor spaces mean to different communities.”
- “In an evaluation of 44 issues over a 10-year period of *Outside* magazine, Finney (2014) found that out of 4,602 images of people, only 103 were of African-Americans, and those images were mostly of well-known male sports figures in urban settings.”
- Director’s Order 16B (NPS, 2012) articulated policies to guide the NPS toward achieving increased diversity and inclusion within its workforce and in the services and programs provided to an increasingly diverse society.
- ***There remain questions of the pervasiveness of RDI programs across the agency and the extent to which those relevancy, diversity, and inclusion (RDI) efforts adequately reflect the faces of a new American society.***

- *Evaluates inclusive histories and interpretation, community involvement, program sustainability, supportive culture/addressing issues of workforce diversity, limitations and future research.*

Dialogue, [Diversifying the Outdoors and Public Lands](https://heinonline.org/HOL/LandingPage?handle=hein.journals/elrna51&div=51&id=&page=), 51 ENVTL. L. REP. 10369 (2021), <https://heinonline.org/HOL/LandingPage?handle=hein.journals/elrna51&div=51&id=&page=>.

- Transcript: “On February 11, 2021, the Environmental Law Institute hosted a panel of experts that explored opportunities for improving diversity and inclusion in the outdoors and access to national parks, public lands, and outdoor recreation.”
- Discusses various NGOs, Legislation, corporate help to encourage inclusivity.

OR. PARKS & RECREATION DEP’T, [Outdoor Recreation in Oregon: Responding to Demographic and Societal Change, 2019–2023: Oregon Statewide Comprehensive Outdoor Recreation Plan](https://www.oregon.gov/oprd/PRP/Documents/SCORP-2019-2023-Final.pdf), <https://www.oregon.gov/oprd/PRP/Documents/SCORP-2019-2023-Final.pdf>.

- This document lays out Oregon’s statewide comprehensive outdoor recreation plan (SCORP). It pays particular attention to “the effects of an aging population, an increasingly diverse population, lack of youth engagement in outdoor recreation, an underserved low-income population, and increasing levels of physical inactivity within the population.” The report addresses the dramatic increase in the hispanic population. A survey found that “the most common activities respondents would like to do more often, or start doing were walking for Asians, and walking and camping for Hispanics. The factor that would most help make this happen is availability of partners, followed by more time.” Finally, it found that recreation providers can better respond to these changes by: (1) Develop facilities (such as picnic areas) large enough for extended families; (2) Recruit a more diverse staff; (3) Target marketing information at ethnic groups in appropriate media and languages; (4) Develop a multi-language recreation web site; (5) Create trust with key informants within the communities; (6) Focus information delivery on Hispanic youth; and (7) Focus youth programs on academic enhancement.

### *Other Management Tools*

[The East Zion Initiative—One Chance to Get it Right](https://zionpark.org/projects/the-east-zion-initiative-one-chance-to-get-it-right/), ZION NAT’L PARK FOREVER PROJECT, <https://zionpark.org/projects/the-east-zion-initiative-one-chance-to-get-it-right/> (last visited Nov. 9, 2021).

- “Zion Mountain Ranch, at the east entrance to Zion National Park, is the last unprotected gateway to a national park in the continental US.”
- “The mission of landowners, Kevin and Stacy McLaws, is to ***create a conservation-based, sustainable gateway rooted in providing visitor experiences and services, nurturing our next generation of public land stewards.***”
- “The East Zion Initiative and protection of the landscape through conservation easements is a critical priority for Zion National Park. The project aligns with the park’s long term General Management Plan and helps alleviate the impacts of overcrowding in Zion’s main canyon by extending the visitor experience beyond the boundaries of the park.”

Elisabeth Kwak-Hefferan, [8 Ways To Ease Overcrowding at Our National Parks](https://www.5280.com/2020/09/8-ways-to-ease-overcrowding-at-our-national-parks/#one) (September 2020), <https://www.5280.com/2020/09/8-ways-to-ease-overcrowding-at-our-national-parks/#one> [<https://perma.cc/88SW-GGBW>].

- “Introduce *geofencing*—location-based services that use GPS, Wi-Fi, or other tech to trigger messages when someone accesses a specific area—to the parks. “*When people enter a part of a park, you could have a pop-up message on your phone or in your car,*” the NPS’ MacIntyre says. “It might say, ‘Welcome!’ or it might say that parking lots in the area are already full, or that this other lot is still open.”

Jan G. Laitos & Rachael B. Gamble, [The Problem with Wilderness](https://heinonline.org/HOL/LandingPage?handle=hein.journals/helr32&div=16&id=&page=), 32 HARV. ENVTL. L. REV. 503 (2008),

[https://heinonline.org/HOL/LandingPage?handle=hein.journals/helr32&div=16&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/helr32&div=16&id=&page=)

- This article examines the “problems” with wilderness, that is: large-group externalities, true tragedy of the commons, and resource popularity conflicts.
- Suggests traditional command-and-control top-down government regulation of users and would-be users of wilderness resource.
  - “This approach relies on rules that (1) limit the demand of the users, (2) increase the supply of the demanded resource, and (3) minimize the degree of the resource popularity conflict that follows when those who desire a resource have been divided into two groups-- those who are permitted access, and those who are excluded.” (at 507).
- Proposes a *property rights* based solution:
  - “If a property rights approach is preferred to a command-and-control regime, then the issue is how to create a system of property rights in wilderness use. This Article suggests an individual transferable quota program. Such a program has two enormous advantages: (1) it creates individual legal interests in wilderness access and use, which ensures that a property rights system replaces one without property; and (2) it permits exchanges among interest holders, which, in theory at least, allows property rights to wilderness to end up with those parties most willing and likely to engage in a preferred use of the wilderness asset. The presence of transferable property interests is exactly what an efficiently working market (in this case, the market for wilderness use) needs to operate efficiently. Although there are obvious downsides to an individual transferable quota program (e.g., potentially astronomically high enforcement costs), such a scheme squarely addresses and corrects many fundamental flaws in the current law of wilderness.” (at 508).

Sean Krammer, [No-Analogue Future: Challenges for the Laws of Nature in a World Without Precedent](https://heinonline.org/HOL/LandingPage?handle=hein.journals/vlr42&div=12&id=&page=), 42 VT. L. REV. 227 (2017),

[https://heinonline.org/HOL/LandingPage?handle=hein.journals/vlr42&div=12&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/vlr42&div=12&id=&page=)

- “[W]e must focus on what type of relationship we want to facilitate with one another and with our physical surroundings. Rather than pretending to rely upon science to answer the difficult decisions we will increasingly face, we must recognize the proper role of scientific knowledge: namely that it is capable of describing physical phenomena but incapable of telling us what our responses to that information should be. Rather than attempting to manage parcels of land based on an idyllic, pristine past—before Moderns

began degrading their Nature—we must recognize that fundamental changes are occurring and will continue to take place for the foreseeable future. Rather than attempting to save all species we find to be in danger of extinction from their fate, and doing so on a piecemeal approach, we must recognize that extinctions are likely to far exceed the background rate for the next century or more. More generally, rather than attempting to *save* the Earth from *unnatural* changes, we must recognize that we are part of an intricately complex and dynamic web of living organisms, relationships, and processes. We may indeed be unique among organisms in our ability to deliberate among a range of options and to consciously manipulate our physical environment to serve our desired ends. It is time we embrace that, while also recognizing our limitations and appreciating the opportunity costs of each action we might take. After all, in a *no-analogue future*, we can no longer pretend to be bound by precedent from the distant past. As Jean Bruller noted over a half-century ago, we may still not know “*what we are*” or *why we are*, but we best decide—however tentatively—“*what we want to be.*” This will not solve “*man's troubles,*” but it is a start.” (p. 294–95).

Martin Nie et. al., [\*Fish and Wildlife Management on Federal Lands: Debunking State Supremacy\*](#), 47 ENVTL. L. 797 (2017),

[https://heinonline.org/HOL/LandingPage?handle=hein.journals/envlnw47&div=31&id=&page=.](https://heinonline.org/HOL/LandingPage?handle=hein.journals/envlnw47&div=31&id=&page=)

- “This Article reviews the authority of federal and state governments to manage wildlife on federal lands. It first describes the most common assertions made by state governments regarding state powers over wildlife and then analyzes the relevant powers and limitations of the United States Constitution and federal land laws, regulations, and policies. Wildlife-specific provisions applicable within the National Park System, National Wildlife Refuge System, National Forest System, Bureau of Land Management, the special case of Alaska, and the National Wilderness Preservation System are covered, as is the Endangered Species Act. We reviewed an extensive collection of cases of conflict between federal and state agencies in wildlife management on federal lands. ***These cases show how federal land laws, regulations, and policies are frequently applied by federal agencies in an inconsistent and sometimes even unlawful fashion. They also demonstrate how commonalities found in state wildlife governance, such as sources of funding and adherence to the North American Model of Wildlife Conservation, often exacerbate conflict over wildlife management on federal lands.***”

### *Other Data Resources*

[\*Economic Profile System: About\*](#), HEADWATERS ECONOMICS,

<https://headwaterseconomics.org/tools/economic-profile-system/about-eps/> (last visited Nov. 5, 2021).

- This website provides a tool to “customize and download socioeconomic reports for U.S. communities, counties, and states.” Importantly, it catalogues the status for surrounding lands of counties. This can provide great clarity regarding the existence of federal, state, and private lands around a given community.



## National Park System Monitoring & Inventory System

- To aid management decisions, the National Parks System currently supports robust monitoring and inventory programs across its 280 managed ecosystems. These ecosystems have been grouped into 36 “networks” based on regional geography and the shared characteristics of the areas. Monitoring and inventories are identified by park name and/or the network within which they lie.
- NPS uses the data collected to help make park management decisions. In 2012 NPS defined 31 “vital signs” that they identified as being key categories in determining ecosystem health. The ongoing monitoring in these areas have provided NPS with baseline norms for ecosystems, as well as data about what happens when certain stressors are introduced to ecosystems. In some areas the data is so robust that NPS can make hypotheses about climate change effects.
  - [NPS Inventories](https://www.nps.gov/im/inventories.htm) <https://www.nps.gov/im/inventories.htm>
  - [NPS Monitoring](https://www.nps.gov/im/monitoring.htm) <https://www.nps.gov/im/monitoring.htm>
  - [NPS GIS Data](https://www.nps.gov/im/imd-gis.htm) <https://www.nps.gov/im/imd-gis.htm>
  - [NPS Natural Resource Reports](https://www.nps.gov/im/reports-nrr.htm#3EB676E11DD8B71B0B6C971E3B6844E6) <https://www.nps.gov/im/reports-nrr.htm#3EB676E11DD8B71B0B6C971E3B6844E6>
    - home to peer review articles reporting on ecosystem conditions within NPS lands. There is rigorous monitoring taking place throughout NPS lands of everything from soil health, to wadeable stream habitat, to moose populations, to acoustic levels in the Grand Canyon.
  - [NPS Data Series](https://www.nps.gov/im/reports-nrds.htm) <https://www.nps.gov/im/reports-nrds.htm> whereas the Natural Resource Reports are peer reviewed articles, the data series is simply data without much commentary or analysis.

[Institute of Outdoor Recreation and Tourism](https://extension.usu.edu/iort/), UTAH STATE UNIV., <https://extension.usu.edu/iort/> [<https://perma.cc/3QBP-YAYT>] (last visited Nov. 30, 2021).

- Provides accurate, research-based information about tourism and outdoor recreation issues to the Utah State Legislature and state agencies. Includes data and expertise to help communities balance the economic, social, and environmental tradeoffs of tourism development. Uses an interdisciplinary approach, with research and analysis on outdoor recreation and tourism, a complex sector of the state's economy

[Institute for Tourism and Recreation Research at the University of Montana](http://itrr.umt.edu), UNIV. OF MONT., <http://itrr.umt.edu> [<https://perma.cc/QZ8J-43WZ>] (last visited Nov. 30, 2021).

- Research priorities: Economic Impact of Nonresident Travel, Visitor Characteristics and Expenditures, Social and Environmental Impacts of Tourism, Regional and Community Tourism Planning and Development, Niche Market Studies, Geotourism, Outdoor Recreation, Travel and Recreation Yearly Outlook