

TOO MUCH OF A GOOD THING: OVERCROWDING AT AMERICA’S NATIONAL PARKS

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INTRODUCTION

President Trump's proposed \$400 million budget cuts are not the most destructive thing happening to the national parks system this year.¹ Overcrowding at the national parks² is turning "America's Best Idea"³ into an administrative headache, and year to year the visitation numbers continue their meteoric rise.⁴ From 2015 to 2017, the parks have seen nearly an eleven percent increase in the number of visits made annually.⁵

While at first blush increasing visitation might sound like a good thing—particularly in light of the National Park Service's recent celebration of its centennial in 2016⁶—this is a paradigmatic case of too much of that good thing. When Congress created the National Park Service (NPS) in 1916, the parks were meant to accomplish two goals: (1) to preserve the scenery, natural and historic objects, and wildlife within, and (2) to provide for the enjoyment of those things by current and future generations.⁷

Congress recognized the generality in the statute, and amended the National Park Service Organic Act in 1978, urging the NPS to adopt carrying capacities and general management plans for each of the national parks.⁸ Unfortunately, William Whalen, the Director of the NPS at the time,⁹ appears not to have demanded immediate follow-through from the parks system. For the most part, parks did not adopt carrying capacities or general

1 Sammy Roth, *Joshua Tree Residents Fight Trump's 'Insane' National Parks Plan to Increase Fees*, DESERT SUN (Nov. 3, 2017), <https://www.desertsun.com/story/news/environment/2017/11/02/joshua-tree-residents-fight-trumps-insane-national-parks-plan/827786001/>.

2 While the national parks system is made up of many differently designated federal public lands (national monuments, military parks, national seashores, national parkways), this Note will focus on those specially designated "national parks."

3 *America's Best Idea Today*, NAT'L PARK SERV., <https://www.nps.gov/americasbestidea/> (last updated Sept. 17, 2009).

4 *Annual Visitation Summary Report (1979–Last Calendar Year)*, NAT'L PARK SERV., [https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Visitation%20Summary%20Report%20\(1979%20-%20Last%20Calendar%20Year\)](https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Visitation%20Summary%20Report%20(1979%20-%20Last%20Calendar%20Year)) (last visited Feb. 28, 2018).

5 See *id.* In 2015, the number of national park visits across the system totaled 76,988,877. In 2017, that number jumped to 85,451,798 visits across the system. *Id.*

6 Among other things, the Centennial involved many events and programs geared toward investing the public in the national parks system. *100 Years: Let's Celebrate!*, NAT'L PARK SERV., <https://www.nps.gov/subjects/centennial/index.htm> (last updated June 8, 2017).

7 National Park Service Organic Act, ch. 408, 39 Stat. 535 (1916) (codified as amended at 54 U.S.C. § 100101 (2012)).

8 16 U.S.C. § 1(a)–7(b) (repealed 2014) (certain sections of Title 16 were repealed and recodified at Title 54 in 2014. This Note refers to these sections by the former Title 16 citation). While Congress could set carrying capacities itself, it's likely that they chose to assign this task to the NPS because of the Agency's increased familiarity with each park.

9 See *Past Directors of the National Park Service*, NAT'L PARK SERV., <https://www.nps.gov/aboutus/nps-directors.htm> (last updated Jan. 3, 2017); see also *infra* note 31 and accompanying text.

management plans.¹⁰ Now overcrowding poses a challenge to both of the NPS's core aims.

Because the parks¹¹ have not set out restrictive carrying capacities, those trails and activities open to the general public are being used exhaustively and, in some cases, unsafely.¹² If carrying capacities are not determined in the near future, the unlimited visitation stands a good chance of negatively affecting the parks in the long run. In some parks, overcrowding on limited trail space leads to erosion or to the creation of visitor-made trails, which can be destructive to the existing ecosystem and wildlife within the park. In addition, the parks are feeling the effects of too many human visitors. For example, human waste pollutes the parks in some areas where washrooms are either unavailable or unable to keep up with the extreme demand. Although the most pressing concern is the negative physical impact on the parks, permitting negative visitor experiences also fails to meet the goals the 1916 Congress set out in establishing the NPS.

It is important to note that not all parks suffer from overcrowding, and that not all parks are suffering a *similar level* of overcrowding. The parks system consists in part of fifty-nine congressionally-designated national parks.¹³ Within the national parks system, certain parks' visitation statistics rise to the top year in and year out. In 2017, the top-ten list included, in this order: the Great Smoky Mountains, the Grand Canyon, Zion, the Rocky Mountains, Yosemite, Yellowstone, Acadia, Olympic, Grand Teton, and Glacier.¹⁴ Those ten parks combined accounted for almost fifty-seven percent of the recreational visits made to national parks for the year¹⁵—but made up only 16.9% of the specially designated national parks.¹⁶ The funneling effect of visitors toward the best-known parks makes establishment of these parks' carrying capacities even more of a priority.

10 While, for the most part, general management plans were not adopted either, this Note will focus nearly exclusively on the failure to implement carrying capacities, which are one small part of the general management plans.

11 Other types of federally reserved lands do exist to which the congressional mandate of determining carrying capacities and general management plans apply; however, this Note will focus primarily on the national parks themselves, as they are the greatest-suffering type of federal public lands with respect to overcrowding.

12 See *infra* Part III.

13 Rocío Lower, *How Many National Parks Are There?*, NAT'L PARK FOUND. (Oct. 17, 2016), <https://www.nationalparks.org/connect/blog/how-many-national-parks-are-there>.

14 *Annual Park Ranking Report for Recreation Visits in: 2017, Park Type: National Park*, NAT'L PARK SERV., [https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Park%20Ranking%20Report%20\(1979%20-%20Last%20Calendar%20Year\)](https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Park%20Ranking%20Report%20(1979%20-%20Last%20Calendar%20Year)) (last visited Sept. 22, 2018) [hereinafter *Annual Park Ranking*].

15 *Id.*

16 *Id.* With that said, some parks on the top ten list of National Parks in 2017 are large enough in size to handle their visitation numbers without showing signs of disruptive overcrowding—for example, the Great Smoky Mountains, at 522,247 acres, is large enough to handle the daily crowds without serious issue. *Park Statistics: Great Smoky Mountains*, NAT'L PARK SERV., <https://www.nps.gov/grsm/learn/management/statistics.htm> (last updated Jan. 12, 2017).

Inspiring the parks to begin compliance with their 1978 (and renewing yearly) statutory duties is no small task, particularly in light of the Trump administration's massive proposed budget cuts. The lack of direction given to the NPS by Congress likely exacerbates the issue, as the statute includes very little suggestion about how to determine visitor carrying capacity.¹⁷ The most useful statutory text hints at possible reliance on visitor circulation and transportation patterns as the parks develop.¹⁸ With that said, the NPS's abdication of its statutory duties is inappropriate and increasingly destructive to the parks system, and the time has come for the NPS to assess at least rough carrying capacities for immediate implementation. Even construed in the most positive light—which would be to suggest that the parks are taking their time to ensure they come to the best possible answer—forty years have passed without result. The carrying capacities initially identified do not need to be flawless; indeed, the statute contemplates revisions and yearly reports on the general management plans and carrying capacities of the parks. This ought to alleviate some of the park system's hesitancy in taking action.

Assuming the NPS remains reluctant toward identifying general management plans and carrying capacities, a handful of potential solutions exist. First, there is the possibility of legislative action. This could take many forms, some more extreme than others. This Note will discuss the possibility of legislating a pay cut for the top-earning employees within each national park until carrying capacities are established. It will also briefly consider the feasibility of paring down federal funding until the parks are in compliance with the law. Second, the executive branch could take action by removing and replacing the Director of the NPS. The Trump administration delayed for nineteen months before nominating Raymond David Vela as the director of the NPS,¹⁹ so this option is unlikely to make a significant difference in the NPS's overall operation in the near future. Finally, individuals could potentially bring lawsuits to compel the NPS to take action on the issue. Those lawsuits would face both standing issues and reviewability issues under the Administrative Procedure Act (APA), but this Note will argue that it is possible to thread the needle in a manner that makes individual lawsuits feasible.

In order to fix the overcrowding issues plaguing parks, carrying capacities will not only need to be identified, but will also need to be implemented. Possible implementation methods include the much-debated reservation system, adoption of public transportation systems within parks (and banning of private vehicular travel), special-use permits, or general advertising campaigns that direct people away from the most visited parks and toward the less well-known parks. These and other implementation strategies will be presented for consideration in Part IV.

17 16 U.S.C. §§ 1a–7(b)(2) (2012) (repealed 2014).

18 *Id.*

19 Charles S. Clark, *Trump Names 28-Year Career Employee to Run Park Service*, GOV'T EXECUTIVE (Sept. 4, 2018), <https://www.govexec.com/management/2018/09/trump-names-28-year-career-employee-run-park-service/150989/>.

This Note focuses on the NPS's failure to act in adopting a carrying capacity for each park specifically, and discusses some of the negative effects this failure has had on individual parks. Part I provides a general background of the national parks system and will more fully explore the dual aims of its Organic Act. Part II discusses the NPS's affirmative response to the 1978 amendment requiring carrying capacities, while Part III focuses on the ramifications of the widespread nonresponse by many of the parks. Part IV considers possible fixes, including not only inspiring the NPS to adopt carrying capacities, but also pragmatically responding to the current overcrowding dilemma.

I. BACKGROUND

The first national park created was Yellowstone National Park in 1872, predating the creation of the NPS. When the United States laid aside land for Yellowstone, it did so with the express purpose of providing "a public park or pleasuring ground for the benefit and enjoyment of the people,"²⁰ and dedicated the land to the control of the Secretary of the Interior.²¹ Congress created several other parks before commissioning the NPS, including Mount Rainier, Sequoia, Yosemite, and Glacier.²²

Congress created the NPS in 1916, and its Organic Act contemplated two different but closely related aims: "[T]o conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."²³ This enumeration of purpose burdens the NPS with no small task; the two goals can be conceived of as working at cross-purposes. The public's enjoyment might need to be limited in order to fully preserve the parks.

In the 2006 NPS Management Policies, the agency explicitly recognized the need to prioritize conservation at the expense of public engagement with the federal lands:

Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict

²⁰ 16 U.S.C. § 21.

²¹ *Id.* § 22.

²² *See, e.g.*, Act of May 11, 1910, ch. 226, 36 Stat. 354 (codified as amended at 16 U.S.C. §§ 161–162) (creating "The Glacier National Park"). The text of the Glacier bill expressly contemplates the exact same purpose as the statute creating Yellowstone National Park. *See also* Act of Mar. 2, 1899, ch. 377, 31 Stat. 993 (codified as amended at 16 U.S.C. §§ 91–93) (creating Mount Rainier National Park as a "public park"); Act of Oct. 1, 1890, ch. 1263, 26 Stat. 650 (codified as amended in scattered sections of 16 U.S.C.) (withdrawing "certain tracts of land in the State of California" that eventually became Yosemite National Park); Act of Sept. 25, 1890, ch. 926, 26 Stat. 478 (codified as amended at 16 U.S.C. §§ 41, 43) (setting aside land that eventually became Sequoia National Park, with an emphasis on preservation).

²³ 16 U.S.C. § 1 (repealed 2014).

between conserving resources and values and providing for enjoyment of them, conservation is to be predominant.²⁴

Commenters have also agreed that the plain meaning of the statutory text prioritizes the conservation goal above that of providing enjoyment to the public.²⁵ This line of thinking has long predated the 2006 guidelines. The Secretary of the Interior in 1918, Franklin Lane, wrote similarly in laying out his expected administrative policy to the first NPS Director, Stephen Mather:

This policy is based on three broad principles: First that the national parks must be maintained in absolutely unimpaired form for the use of Future generations as well as those of our own time; second, that they are set apart for the use, observation, health, and pleasure of the people; and third, that the national interest must dictate all decisions affecting public or private enterprise in the parks. Every activity of the Service is subordinate to the duties imposed upon it to faithfully preserve the parks for posterity in essentially heir [sic] natural state.²⁶

Lane's policy aimed high and took a clear position regarding which of Congress's twin aims he planned to put at the forefront of his policy decisions. Indeed, Lane proved prophetic in his plans. Perhaps recognizing a need to reiterate the Organic Act's dual goals, Congress passed an amendment to 16 U.S.C. § 1 in 1978, mandating the creation of general management plans for each of the national parks. According to the amendment, the general management plans were to "include, but not be limited to" four strategies for assessing the success of the national parks' management system.²⁷ One of these requirements was the carrying capacity designation, to be reported to Congress "[o]n January 1 of each year" by the Secretary of the Interior.²⁸

24 NAT'L PARK SERV., MANAGEMENT POLICIES 2006: THE GUIDE TO MANAGING THE NATIONAL PARK SYSTEM § 1.4.3 (2006).

25 See John Cathcart-Rake, Chapter, *The Friends of Yosemite Valley Saga: The Challenge of Addressing the Merced River's User Capacities*, 39 ENVTL. L. 833, 839–40 (2009) ("[T]he statute limits use and enjoyment to 1) the parks' particular scenery, objects, and wildlife, and 2) that which will leave the parks unimpaired for future generations."). But see *supra* notes 20–21 and accompanying text (showing that the statutory history in the creation of the national parks before the NPS cuts the other way—conservation purposes are not mentioned in those statutes; public use and enjoyment of the land are prioritized).

26 See Letter from Franklin K. Lane, Sec'y of the Interior, to Stephen T. Mather, Dir. of the Nat'l Parks Serv. (May 13, 1918), reprinted in AMERICA'S NATIONAL PARK SYSTEM: THE CRITICAL DOCUMENTS 48–52 (Lary M. Dilsaver ed., 1994).

27 See 16 U.S.C. § 1a–7(b) (repealed 2014).

28 *Id.* While the statute does not specify the duration of time over which the carrying capacity should apply, it seems to make the most pragmatic sense to assume a carrying capacity should be implemented on a daily basis, so that adjustments can be made as necessary. For example, use of yearly carrying capacities might lead to extremely limited visitation in December, because so many visitors came through in the summer months, and so on.

The legislative history of the statute reveals an emerging concern with the amount of technological developments occurring in national parks, charging the NPS with being “not very consistent” in its policy in the area.²⁹ While Congress recognized the need for certain modernizations—the implementing of plumbing systems and the like—they also acknowledged the possibility that these updates could spiral out of control. Keith Sebelius, a representative of Kansas who served on the Subcommittee on National Parks and Insular Affairs, argued:

The National Park Service must seriously begin to think about establishing a basic wilderness philosophy and policy which permits users to meet the wilderness on its own terms The provision of technological remedies, usually in the form of on-site facilities, can easily heighten the carrying capacity of the resource and permit more people to use it. But the problem is, this violates the concept of wilderness. Carrying capacities must be identified, adopted, and adhered to on the basis of the resource³⁰

Combined with the requirement to determine carrying capacities—which would necessarily lead to turning visitors away if too many came to the park on a given day—this seems to be a clear expression of congressional intent that the aim of preservation is to be considered paramount. The legislative history includes mention of Congress’s “disturb[ance]” at discovering general management plans for individual parks to be “many years behind . . . when due,” and calls upon the director of the NPS to inform the legislature of the plans to rectify this oversight.³¹

With this background firmly established, it is surprising that the NPS did not fully embrace the carrying capacity statute by identifying a cap on daytime visitors for each park with immediacy. This failure is even more startling when one recalls the requirement that the Secretary of the Interior report on the general management plan of each park yearly.³² Further, even those federally reserved public lands that did report ideal carrying capacities did not do so to the fullest extent. In Part II, this Note considers the affirmative responses the 1978 amendments did engender, and the effects those responses had on the respective parks.

29 124 CONG. REC. 18,873 (1978). The legislative history of the 1978 Act with regard to the NPS as a whole is very sparse. In only a few instances are the lacking carrying capacities of the majority of the system addressed; the meat of the legislative history deals more with naming of new federal lands to be protected and carrying capacities to be identified for the newer lands. *Id.*

30 *Id.*

31 *Id.*

32 Not only has the NPS not embraced the policy, some officials are openly avoidant. Yellowstone’s Superintendent Dan Wenk told a reporter who asked him about the policy, “[t]he words ‘carrying capacity’ will be attributed to you and not to me because they are words I don’t say.” *National Parks Punt on Overcrowding*, PEER (July 14, 2016), <https://www.peer.org/news/press-releases/national-parks-punt-on-overcrowding.html>.

II. RESPONSE TO THE 1978 AMENDMENTS

Of the fifty-nine national parks properly so called, only four have identified, currently enforced carrying capacities.³³ Of those four, none regulate the entire park; rather, they apply only to certain areas within the reserved land. Some other national parks have mentioned an intent to determine “preliminary carrying capacities” in general management plans,³⁴ but have not done more to delineate final carrying capacities or to put them into operation. The four national parks that have implemented carrying capacities at this time will be considered in more detail below.

A. Channel Islands National Park

Channel Islands published a general management plan (GMP) in 2015 that included carrying capacities for its park. The GMP explicitly pointed to Channel Islands’ “enabling legislation” as a reason for establishing a carrying capacity,³⁵ as 16 U.S.C. § 410ff-3(a) and (b) read, in part:

- (a) The park shall be administered on a low-intensity, limited-entry basis.
- (b) In recognition of the special fragility and sensitivity of the park’s resources, it is the intent of Congress that visitor use within the park be limited to assure negligible adverse impact on the park resources. The Secretary shall establish appropriate visitor carrying capacities for the park.³⁶

In establishing the carrying capacity, the NPS considered the types of visitor use the park would sustain, contemplating “not only . . . the number of visitors, but also . . . where they go, what they do, and the ‘footprints’ they leave behind.”³⁷ Channel Islands determined both day and overnight user capacity limits for popular use areas within the island, citing three past drafts of general management plans for the park as support.³⁸ The park further stated that no cap is needed for most of the day user capacities, with the exception of one particular valley whose visitation numbers can be controlled via passenger transportation.³⁹

Channel Islands asserted that some lesser used areas did not need established carrying capacities as of 2015.⁴⁰ The park indicated that it is possible that use levels could increase in those areas, and listed triggering events that

33 The four parks with currently enforced carrying capacities are Channel Islands National Park, Dry Tortugas National Park, Everglades National Park, and Saguaro National Park. See *National Park Units with Current Carrying Capacities*, PEER (July 14, 2016), https://www.peer.org/assets/docs/nps/7_14_16_Parks_with_Carrying_Capacities.pdf.

34 See *id.*

35 NAT’L PARK SERV., CHANNEL ISLANDS NATIONAL PARK FINAL GENERAL MANAGEMENT PLAN/WILDERNESS STUDY/ENVIRONMENTAL IMPACT STATEMENT 20 (2015), <https://parkplanning.nps.gov/document.cfm?parkID=292&projectID=11063&documentID=65517> [hereinafter CHANNEL ISLANDS NATIONAL PARK].

36 16 U.S.C. § 410ff-3(a)–3(b) (2012).

37 CHANNEL ISLANDS NATIONAL PARK, *supra* note 35, at 43.

38 *Id.*

39 *Id.* at 43–44.

40 *Id.* at 44.

might lead to a need to determine a carrying capacity.⁴¹ The GMP stated that “monitoring of visitor use levels”⁴² will occur in these sections of the park, with the implication that action will be taken if use significantly rises.

The GMP also demonstrated a willingness on behalf of Channel Islands to respond to public commentary on planned carrying capacities by answering concerns regarding island use limits impacts and explaining the rationales behind assigning differing carrying capacities to differing sections of the Park.⁴³

While Channel Islands' GMP is a good start toward determining carrying capacities, it falls short of producing a comprehensive report. Accepting partial regulation now will require parks to respond in a reactionary manner should overcrowding become an issue in the future. Instead, all parks should strive for a fully proactive plan.

B. *Dry Tortugas National Park*

In 2001, Dry Tortugas National Park published a GMP “amendment” that also assessed the need for carrying capacities.⁴⁴ The amendment explained the process of assigning a carrying capacity after divvying the park up into “zones” for management.⁴⁵ The park then specifies a range of visitors appropriate for each zone, identifies indicators that would alert park staff to any problems, and monitors the success of the carrying capacities.⁴⁶ The GMP Amendment also stated that the NPS has “the freedom to lower or raise capacities if standards indicate that no resource damage is occurring or standards warn that conditions require management action.”⁴⁷

Similar to Channel Islands, Dry Tortugas' carrying capacities only apply to specific areas of the park. Dry Tortugas also intends to enforce these limits through the commercial transportation of visitors into the park.⁴⁸ As an example, they cited bringing individuals into the park by boat. If a carrying capacity is determined to be 150, either three boats may bring in fifty visitors, or two may bring seventy-five.⁴⁹

The GMP amendment included a table that assigns a user capacity for two of the Keys within the park: Loggerhead Key, with a twenty-four to thirty-six daily visitor capacity, and Garden Key, with a 330 daily visitor capacity, *including* those visitors counted under Loggerhead Key's capacity.⁵⁰ The

41 *Id.*

42 *Id.*

43 *Id.* at 453–55.

44 See NAT'L PARK SERV., FINAL GENERAL MANAGEMENT PLAN AMENDMENT/ENVIRONMENTAL IMPACT STATEMENT: DRY TORTUGAS NATIONAL PARK 11 (2001), <https://www.nps.gov/drto/learn/management/upload/drtofgmpeis.pdf>.

45 *Id.* at ix.

46 *Id.* at 40–41 tbl.1, 41–42.

47 *Id.* at 20.

48 *Id.* at 57.

49 *Id.*

50 *Id.* at 40–41 tbl.1.

table specified the total number of visitors that may be brought in by differing methods—whether by seaplane, ferry, private boat, or other contractual arrangement—and contemplated staggering arrivals throughout the day as to minimize the impact on the Keys. The Garden Key section in particular discussed the possibility of enticing visitors to try alternate activities to eliminate crowding. The NPS justified the low visitor capacity total for Loggerhead Key by pointing out revegetation efforts on the Key.⁵¹

While Dry Tortugas' amendment only discussed the two Keys within the park with facilities, the detail put into their planning and the specified appropriate uses of the Keys ought to be used by other parks as a model. However, like Channel Islands, the GMP would benefit from a proactive plan for each Key, so that if facilities expand onto additional islands, a plan of action is already in place.

C. Everglades National Park

The Everglades management team adopted a zoning strategy much like that of Dry Tortugas to determine user capacity numbers.⁵² Their GMP included a flowchart explaining the process of creating and continually monitoring carrying capacity numbers, and went into additional detail about the standards and indicators that alert the park to the need to adjust carrying capacities.⁵³ The park paid homage to the dual aims of the NPS Organic Act by determining not only resource indicators and standards, but also visitor experience indicators and standards.⁵⁴

Seagrass scarring is one example of resource indicators the plan addressed.⁵⁵ The park considered the increase in scarring that occurred from 1997 to 2008, and, as a result, determined that management would address the issue by creating better channel markers and even rerouting boats to prevent future damage from accruing. The scarring is likely exacerbated by piloting of boats by inexperienced visitors and is particularly devastating because revegetation is estimated to take up to sixty years.⁵⁶

Relatedly, crowding and use conflicts are examples of visitor experience standards. The plan contemplated setting a minimum percentage of satisfied visitors necessary in response to surveys and addressing usages of the park where they fail to reach said minimum percentages. The NPS recognized the

⁵¹ *Id.*

⁵² See NAT'L PARK SERV., EVERGLADES NATIONAL PARK FINAL GENERAL MANAGEMENT PLAN/EAST EVERGLADES WILDERNESS STUDY/ENVIRONMENTAL IMPACT STATEMENT 116–19 tbl.3 (2015), <https://parkplanning.nps.gov/document.cfm?parkID=374&projectID=11170&documentID=67837> [hereinafter EVERGLADES NATIONAL PARK].

⁵³ *Id.* at 110–19.

⁵⁴ *Id.* at 112–15.

⁵⁵ Seagrass scarring occurs when boat propellers damage seagrass beds due to low water levels. *Propeller Scarring*, TEX. PARKS & WILDLIFE DEP'T, <https://tpwd.texas.gov/landwater/water/habitats/seagrass/propeller-scarring> (last visited Apr. 7, 2018). Where such scarring occurs, it can take years for the habitat to recover. *Id.*

⁵⁶ EVERGLADES NATIONAL PARK, *supra* note 52, at 112.

need to minimize for crowding, stating: “Many people visit Everglades National Park seeking wilderness and solitude.”⁵⁷ Despite this, the only numerical value the Everglades GMP stated was a user capacity of 400 to 500 on Shark Valley’s fifteen-mile loop road.⁵⁸ No other area was deemed sufficiently crowded for a hard cap on visitors, although the park indicated that monitoring of visitation increases would continue.⁵⁹

D. Saguaro National Park

The Saguaro National Park’s GMP discussed carrying capacities, though its treatment was almost entirely hypothetical.⁶⁰ The park mentioned that transportation systems within the park should not be used to exceed the park’s carrying capacities,⁶¹ and that the Superintendent should keep an eye on trail use density and take action to “mitigate potential impacts” if necessary.⁶² Appendix B laid out a few specifics, such as limitations on the number of visitors to the Madrona Pools area (no more than ninety per month for eleven out of twelve months in the year), and the number of people that should be encountered per hour on trails zoned “semi-primitive” or “natural.”⁶³

While the steps these national parks have taken to comply with the 1978 statute are a good start, they are insufficient as a whole. It is important to bear in mind that these parks—while moderately successful in their identification of some carrying capacities—are not among the most visited or the most overcrowded of America’s parks.⁶⁴ Their progress is a useful starting point, but should not be viewed as adequate for larger, more troubled parks. Promulgating carrying capacities for the most crowded areas alleviates immediate overcrowding issues, but a wait-and-see attitude regarding the remainder of the parks is neither compliant with statutory duties nor likely to end well. Those parks that have employed a wait-and-see approach have generally failed to determine even the most basic numerical figures for carrying capacities. We should no longer be satisfied with a complacent and reactionary approach to preserving our national parks.

57 *Id.* at 114.

58 *Id.* at 114–15.

59 *Id.*

60 See NAT’L PARK SERV., SAGUARO NATIONAL PARK: COMPREHENSIVE TRAILS MANAGEMENT PLAN/ENVIRONMENTAL ASSESSMENT (2009) [hereinafter SAGUARO NATIONAL PARK], <https://www.nps.gov/sagu/learn/management/upload/SAGU-Comprehensive-Trails-Mgmt-Plan-and-EA-February-2009-3.pdf>.

61 *Id.* at 12.

62 *Id.* at 11, 26.

63 *Id.* at B-1. However, the number of limitations placed on both of the hard number values makes them almost superfluous. No explanation is given for the extreme limits placed on the Madrona Pools area, and limitations regarding people-per-hour on certain trails are given a fifteen percent grace period—up to fifteen percent of the observations may exceed the given standard before any further management action will be taken. *Id.*

64 See *supra* note 14 and accompanying text.

III. RAMIFICATIONS OF NONRESPONSE

Overcrowding in the national parks has recently become a widely recognized phenomenon, in part due to a lack of established carrying capacities. The ramifications of the parks' nonresponse to the 1978 carrying capacity mandate are only just beginning to be felt, and will likely be even wider-ranging than currently recognized. This Part will consider the documented effects on one of the nation's most popular parks and will attempt to identify factors exacerbating the issue.

A. *Zion National Park*⁶⁵

Utah's Zion National Park consists of Zion Canyon and the Kolob Canyons and extends east toward Mount Carmel.⁶⁶ The activities it offers range from scenic driving to hiking and even canyoneering and rock climbing.⁶⁷ Because of the park's ability to sate a wide variety of outdoor appetites, and because it offers attractions for all ages, it has become an incredibly popular destination not just for outdoorsy types but for families as well.⁶⁸

The park itself is comparatively small.⁶⁹ While Zion ranks seventh overall in visitation numbers, the other parks topping the list (Grand Canyon, Yosemite, Yellowstone, etc.) are large enough that visitors can spread out; by contrast, a spokeswoman for Zion stated that "99.9 percent of visitors" go to Zion Canyon⁷⁰—only a six-mile-long stretch.⁷¹

Zion's difficulties in dealing with overcrowding are well-documented over the last several years and have even exceeded the park itself, spilling over into neighboring town of Springdale.⁷² Direct effects on the park include demonstrable erosion within the park, decreased safety for visitors, and increased waits for shuttle service.⁷³ Each of these effects impacts the

65 Zion National Park was chosen as the exemplar because its small size and recent surge in popularity have combined to create a pressing problem. The wealth of newspaper articles and blogs cited below is testimony to the seriousness of the issue.

66 *Zion at a Glance*, UTAH OFF. OF TOURISM, <https://www.visitutah.com/places-to-go/most-visited-parks/zion/zion-at-a-glance/> (last visited Feb. 12, 2018).

67 *Id.*

68 Allison Laypath, *Top Stops for Families in Zion National Park*, TIPS FOR FAM. TRIPS (Apr. 16, 2012), <https://tipsforfamilytrips.com/national-parks/zion-national-park/>.

69 Don Gilman, *Maxing Out Capacities; Growth Challenges for Zion National Park, Springdale*, ST. GEORGE NEWS (Feb. 14, 2016), <https://www.stgeorgeutah.com/news/archive/2016/02/14/djg-maxing-out-capacities-growth-challenges-for-zion-national-park-springdale/#.WoIGc5M-e9Y>.

70 *Id.*

71 Tanya Milligan, *Zion Canyon*, ZIONNATIONAL-PARK.COM, <http://www.zionnational-park.com/zion-canyon.htm> (last visited Feb. 12, 2018).

72 Betina Lindsey, Letter to the Editor, *Utah Is Not Taking Care of Its Own, Springdale and Zion Suffering*, INDEPENDENT (Apr. 15, 2015), <http://suindependent.com/zion-national-park-overcrowding-rockville-utah-springdale-utah/>.

73 This list is by no means exclusive. Other issues mentioned are overwhelming of visitor facilities like bathrooms and campgrounds. See Lilit Marcus, *Utah's Zion National Park Is Overcrowded, Even in Winter 'Off-Season'*, CONDÉ NAST TRAVELER (Jan. 4, 2017), <https://www.cntraveler.com/story/utahs-zion-national-park-is-overcrowded-even-in-winter-off-season>.

park's ability to achieve the dual goals set out by Congress in 16 U.S.C. § 1: ensuring park conservation and providing positive visitor experiences.⁷⁴ Zion's management team is under pressure to identify solutions to the problem before damage to the park itself as well as visitor experiences worsen.

The sheer amount of foot traffic occurring within the park causes erosion on an everyday basis,⁷⁵ with Zion Canyon suffering the most in the recent years.⁷⁶ Overuse of trails creates erosion concerns, but even more devastating are those visitors who choose to make their own trails, "either to get around crowds or just to get away from crowds."⁷⁷ Officials suggest that fortification of the soil at Zion is one measure that will be undertaken to help combat its recent explosion in popularity, although where visitor-created trails are made the vegetation may take "years and years to come back,"⁷⁸ given the harshness of the desert environment.

Another way in which visitors impact the environment of national parks is by constructing "cairns," small pilings of rock atop one another.⁷⁹ Zion National Park condemned the visitor building of these structures via their Facebook page in 2016, writing: "Visitors hike to be in Nature. Rock graffiti is *not* natural!"⁸⁰ The post further called the building of cairns "vandal-

/www.cntraveler.com/story/utahs-zion-national-park-is-overcrowded-even-in-winter-off-season.

74 16 U.S.C. § 1 (2012) (repealed 2014) ("[T]he fundamental purpose of the said parks, monuments, and reservations . . . is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.").

75 Marcus, *supra* note 73 ("The four million visitors and resulting eight million feet have caused erosion along the park's hiking paths . . .").

76 See Lale Arikoglu, *Zion National Park May Start Limiting Tourists*, CONDÉ NAST TRAVELER (Oct. 18, 2016), <https://www.cntraveler.com/story/zion-national-park-may-start-limiting-tourists>.

77 Gilman, *supra* note 69. This phenomenon is called "social trailing," and becomes more pervasive as park visitation numbers rise. A 2014 survey indicated that 842 "social trails" were found, totaling thirty-three miles' worth of erosion. NAT'L PARK SERV., STATE OF THE PARK REPORT: ZION NATIONAL PARK, UTAH 34 (2016) [hereinafter ZION STATE OF THE PARK REPORT].

78 Gilman, *supra* note 69; see also Melanie Haiken, *Is Zion National Park Being Loved to Death?*, TAKEPART (Dec. 12, 2016), <http://www.takepart.com/article/2016/12/12/zion-national-park-being-loved-death> ("It doesn't take many people to wear sandstone back down into sand.").

79 John R. Platt, *The New Graffiti: National Parks Fight Stone Stackers*, TAKEPART (Aug. 25, 2016), <http://www.takepart.com/article/2016/08/25/new-graffiti-national-parks-fight-stone-stackers>. Depending on who you ask, the cairns have differing purposes—one commenter on Zion's Facebook page stated that building the structures was a type of meditation for her, while the NPS only ever uses the structures in order to mark its more ambiguous trails. See *id.*

80 Zion National Park, FACEBOOK (Aug. 18, 2016), <https://www.facebook.com/zionnps/photos/a.403609659670013.94901.143664062331242/1258125347551769/?type=3&theater>.

ism”—a term against which some commenters bristled.⁸¹ But beyond the aesthetic devaluation cairns create, they promote erosion by removing rocks from the ground.⁸² This causes soil to loosen, and in turn can affect plants struggling to survive in the fragile ecosystem.⁸³

Erosion is not the only issue overcrowding creates that directly affects the park’s trails; for example, one of the most popular hikes, called “The Narrows,” follows the Virgin River downstream.⁸⁴ There is no trail, only the river—and as a result, there are no available bathrooms. Aly Baltrus, a public information officer for Zion National Park, reported that environmental degradation is occurring within The Narrows, in part due to these human waste concerns.⁸⁵ This result is not limited to The Narrows; another popular hike, called “Angel’s Landing,” experienced similar issues, leading the park service to input evaporative toilets at the final rest stop along the trail.⁸⁶ Unfortunately, the park service underestimated the need for such facilities, and the restrooms have been effectively closed to visitors, who are asked to use rest areas further below on the trail.⁸⁷ Handling disposal of visitor waste is made difficult by unpredictability in crowd size. Setting a cap on visitor numbers would allow management to better estimate how many facilities will be needed and would also lower overall waste.

Aside from the impact overuse has on the natural resources of Zion, overcrowding also negatively impacts visitor experiences, particularly when it comes to the more strenuous hikes. One hiker wrote: “My biggest fear [while climbing Angel’s Landing] isn’t a misstep—though the highly eroded trail is coated with slippery dust—but being bumped by one of the thick crowd of hikers impatiently waiting their turn at each knife-edge passing.”⁸⁸ In a park featuring many trails with steep drop-offs to the canyon floor below, a jostling line of other visitors presents a real safety issue.

Even for the Zion visitor sticking to less dramatic scenery, the overcrowding of the park has an impact on the experience. Those who come to the park to get away from urban life and revel in the peaceful atmosphere may find that their goal is harder to attain than first imagined. “[T]he pictures of Zion [visitors] see online while planning their trip do not reflect the reality they experience when they get there.”⁸⁹ This is particularly true of the existing permit and shuttle bus systems. The permit system, for example, is a

81 *Id.*

82 *See* Platt, *supra* note 79.

83 *Id.*

84 *See* *The Narrows*, NAT’L PARK SERV. (last updated Sept. 28, 2018), <https://www.nps.gov/zion/planyourvisit/thenarrows.htm>.

85 Gilman, *supra* note 69.

86 Haiken, *supra* note 78.

87 *Id.*

88 *Id.*

89 Reuben Wadsworth, *Zion National Park Traffic Jam: A Closer Look at the Overcrowding Problem*, ST. GEORGE NEWS (Aug. 22, 2016), <https://www.stgeorgeutah.com/news/archive/2016/08/22/raw-zion-national-park-traffic-jam-a-closer-look-at-the-overcrowding-problem/#.WoIrUpM-e9Z>.

lottery of sixty permits available for visiting wilderness areas on a given day of the week. The park reports that “[i]t is common to have more than 600 people interested” in those sixty permits.⁹⁰ Visitors interested in canyoneering or camping are likely to have a similar experience; the overnight hike through The Narrows requires issuance of a permit, while reservations for The Watchman Campground fill six months in advance.⁹¹

The shuttle bus system creates its own set of problems. The system was originally put into place to prevent visitors from driving their own personal vehicles through the Canyon during peak visitation months.⁹² The bus line runs continuously through the six-mile loop in the Canyon, with busses spaced roughly seven to ten minutes apart, and each bus holding sixty-eight passengers.⁹³ Given the sheer volume of people entering the parks, this system is no longer adequate. On Memorial Day in 2017, the Zion staff reported seeing “the busiest Memorial [D]ay weekend on record.”⁹⁴ The lines to enter the park through the pedestrian walkway not only stretched beyond the park entrance itself but also wrapped around the parking lot of the nearby eatery and shopping center. Zion reports that the wait for the shuttle was two and a half hours⁹⁵—before any visitor could begin their vacation within the Canyon itself.

Further, the route the bus system takes adds to its troubles. The final stop on the route is the ever-popular The Narrows hike.⁹⁶ When the first morning visitors begin turning around, they board the shuttle busses. This works well until midday, when the amount of visitors leaving The Narrows soars to such a number that busses are filled to capacity before even reaching some of the other sites. This leads to visitors waiting hours for standing-room-only spots on busses packed to the gills.⁹⁷ Some visitors end up riding the entire loop over again—back to the trailhead for The Narrows, and back out of the park—simply to get a seat.⁹⁸

90 See ZION STATE OF THE PARK REPORT, *supra* note 77, at 35.

91 *Id.*

92 *Id.* at 46.

93 *Id.*; *Shuttle System—Zion National Park*, NAT'L PARK SERV., <https://www.nps.gov/zion/planyourvisit/shuttle-system.htm> (last visited Mar. 11, 2018) [hereinafter *Shuttle System*].

94 *Monthly Visitation Comments: Zion NP*, NAT'L PARK SERV., <https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Monthly%20Visitation%20Comments%20By%20Park?Park=ZION> (last visited Feb. 12, 2018).

95 The monthly visitation comments indicate that the number of visitors on Memorial Day 2017 was so high as to be shocking to an observer. *Cf. id.* (“This fact is here to help justify the counts for the weekend.”).

96 See *Zion National Park Shuttle System*, NAT'L PARK SERV., <https://www.nps.gov/zion/planyourvisit/images/ZION-FINAL-Media-Kit.jpg>.

97 See JOHN COPELAND NAGLE, *AMERICA THE BEAUTIFUL: SAVING THE SCENERY OF OUR NATIONAL PARKS* (manuscript at 147) (on file with author).

98 *But see Shuttle System*, *supra* note 93 (“You do not need to rush to catch [a bus].”). The National Parks Service is understandably reluctant to update these materials, but overcrowding in Zion has reached such levels that this statement is no longer accurate.

Despite all of these concerns—and despite regularly receiving commentary about overcrowding in recent years—the vast majority of visitors to Zion National Park still speak positively about their experience.⁹⁹

As of this writing, the NPS is undertaking an Environmental Assessment (EA) and Visitor Use Management Plan within Zion to address the overcrowding issues.¹⁰⁰ In the fall of 2016, the NPS accepted public comments and consolidated them into a Public Scoping Comment Summary Report in January 2017.¹⁰¹ The NPS expects to develop a final plan following internal and public reviews of the EA.¹⁰²

B. *Pinpointing Contributing Factors*

The increases in visitation at national parks have been stark, but whether American interest in the parks system will remain constant or subside again over time is unclear. (It is worth remembering that the NPS aggressively promoted its centennial celebration, which likely contributed to the sharp uptick in visitors to national parks in 2016.) In order to make a best guess, we should identify factors contributing to the intense spike in numbers so that national parks can design appropriate solutions to address the overcrowding issue.

A number of theories have been floated as to the driving force bringing people to national parks. One of the most constant theories is that the parks are seen as cheap, family-friendly vacation spots. Families with school-aged children are theoretically more likely to experience overcrowding at parks, as they likely make visits either during peak seasons or school holidays like all the other families with school-aged children.¹⁰³ Other writers have drawn a comparison in pricing between the national parks and Disneyland: “[A] week-long pass to both Yellowstone and Grand Teton is \$50 per vehicle. As a point of comparison, Disneyland starts at \$100 per person per day.”¹⁰⁴

Interestingly, the most-visited parks do tend to be those that charge entrance fees. Nine of the ten top-visited national parks in 2017 charged

99 See NAGLE, *supra* note 97 (manuscript at 146).

100 *Plan Process*, NAT'L PARK SERV., <https://parkplanning.nps.gov/PlanProcess.cfm?projectId=58542> (last visited Feb. 12, 2018).

101 See NAT'L PARK SERV., ZION NATIONAL PARK VISITOR USE MANAGEMENT PLAN: PUBLIC SCOPING COMMENT SUMMARY REPORT (Jan. 2017), <https://parkplanning.nps.gov/document.cfm?parkID=113&projectId=58542&documentID=77211>.

102 See *Plan Process*, *supra* note 100.

103 See Jennifer Toomer, *Sandy Boy Perishes in Fall From Zion Cliff*, DESERET NEWS (Mar. 30, 1997), <https://www.deseretnews.com/article/551531/Sandy-boy-perishes-in-fall-from-Zion-cliff.html> (“[During] spring break weekend . . . families and revelers flock to southern Utah parks and towns—in Zion alone, visitorship jumps from 80,000 in February to 220,000 in March.”).

104 Jonathan Wood, *Are Higher Entrance Fees the Fix for Overcrowded National Parks?*, PROP. & ENV'T RES. CTR. (Aug. 9, 2017), <https://www.perc.org/2017/08/09/are-higher-entrance-fees-the-fix-for-overcrowded-national-parks/>.

entrance fees.¹⁰⁵ This is in contrast to the 299 NPS sites that do not charge any fee at all.¹⁰⁶

Other people point to incredibly successful marketing campaigns by the states in which the parks are located. Utah's "Mighty 5" campaign, which is meant to draw visitors in to its five different national parks, is named as a central reason people choose to visit Zion, Arches, Canyonlands, Bryce Canyon, or Capitol Reef.¹⁰⁷ Utah's Director of the Office of Tourism even asserts that the Mighty 5 campaign has had far-reaching effects overseas.¹⁰⁸

The baby boomer population is also posited as a contributing factor, because baby boomers—generally speaking—are approaching retirement age and thus have more free time to travel.¹⁰⁹ It is also plausible to think that travel is simply a high priority to a great number of people and that travelling domestically is easier (and perceived as safer) than planning an international trip.¹¹⁰

105 The Great Smoky Mountains National Park is the only park of the 2017 top-ten list that does not charge an entrance fee. See, e.g., *Changes to Glacier National Park Fees*, NAT'L PARK SERV. (Sept. 15, 2015), <https://www.nps.gov/glac/learn/news/changes-to-glacier-national-park-fees.htm> (Glacier); *Fees & Passes—Acadia National Park*, NAT'L PARK SERV. (June 7, 2018), <https://www.nps.gov/acad/planyourvisit/fees.htm> (Acadia); *Fees & Passes—Grand Teton National Park*, NAT'L PARK SERV. (July 27, 2018), <https://www.nps.gov/grte/planyourvisit/fees.htm> (Grand Teton); *Fees & Passes—Olympic National Park*, NAT'L PARK SERV. (June 6, 2018), <https://www.nps.gov/olym/planyourvisit/fees.htm> (Olympic); *Fees & Passes—Rocky Mountain National Park*, NAT'L PARK SERV. (June 1, 2018), <https://www.nps.gov/romo/planyourvisit/fees.htm> (Rocky Mountain); *Fees & Passes—Zion National Park*, NAT'L PARK SERV. (June 21, 2018), <https://www.nps.gov/zion/planyourvisit/fees.htm> (Zion); *Grand Canyon National Park Announces Entrance and Backcountry Camping Fee Increases*, NAT'L PARK SERV. (May 13, 2015), <https://www.nps.gov/grca/learn/news/grand-canyon-announces-fee-increases.htm> (Grand Canyon); *Yellowstone National Park Announces New Entrance Fees Starting June 1*, NAT'L PARK SERV. (May 11, 2015), <https://www.nps.gov/yell/learn/news/15028.htm> (Yellowstone); *Yosemite National Park Announces Entrance and Campground Fee Increases*, NAT'L PARK SERV. (March 1, 2015), <https://www.nps.gov/yose/learn/news/yosemite-national-park-announces-entrance-and-campground-fee-increases.htm> (Yosemite).

106 See Lauren Katz, *Here's How Much You'll Pay with the Proposed National Park Service Entrance Fee Hikes*, VOX (Nov. 22, 2017), <https://www.vox.com/energy-and-environment/2017/10/26/16543124/national-park-service-entrance-fee-increases>.

107 Jim Robbins, *How A Surge in Visitors Is Overwhelming America's National Parks*, YALE ENV'T 360 (July 31, 2017), <https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks>.

108 Eric Trenbeath, *National Parks Scramble to Keep Up with the Crowds*, HIGH COUNTRY NEWS (July 13, 2015), <https://www.hcn.org/articles/arches-crowds-tourism-national-parks-utah> ("In Europe, the Mighty 5 is now on everyone's bucket list.").

109 See Robbins, *supra* note 107.

110 *Id.* ("The threat of terrorism in Europe has also kept many people in the United States, experts say.").

Finally, the proliferation of “Instagram fame” bears consideration. Instagramming can now be a highly lucrative business¹¹¹ and people attempting to build a brand as a travel blogger might be drawn to the gorgeous scenery of the national parks as a jumping-off point. For those who maintain a YouTube channel or own a GoPro, hiking at a national park may be a way to appeal to a wide audience. Beyond use of social media for moneymaking purposes, simply posting pictures of oneself at a national park online may be motivation for someone attempting to curate a particular image.

These reasons are unlikely to capture the full story, but they suggest that the overcrowding problem is not temporary. Although the NPS has toyed with the idea of implementing surge pricing at the most popular national parks,¹¹² the expenses incurred in visiting parks will remain significantly lower than those associated with alternatives (like Disneyland). While the baby boomer generation will eventually satisfy its desire to see the national parks, generations will continue to retire, and travel will remain a great bucket-list aspiration for much of the population. Additionally, the baby boomer generation may have inadvertently promoted park attendance in cases where parents have introduced hiking to children who intend to continue the family tradition. And though the success of Utah’s “Mighty 5” marketing campaign was unprecedented, states will likely remain dedicated to bringing tourism in through similar methods in the future.¹¹³ In order to find a status quo that preserves the parks for the future (while allowing them to be enjoyed now), the NPS will need to determine some long-term solutions.

IV. POSSIBLE FIXES NOW

While overcrowding has become a significant issue at national parks, the problem is not yet beyond repair. Inspiring the NPS to identify carrying capacities in short order should be of paramount concern for the executive branch in handling federal land management. The executive branch is not the only entity with power to influence the NPS, however; Congress or even individual lawsuits could also incentivize the NPS to finally take action. Relatedly, the issue of determining carrying capacities is no longer the only problem the NPS must juggle; it must also repair the harm created from decades of noncompliance with the 1978 amendments. This Part will consider different strategies for spurring the NPS to determine carrying capacities for each

111 See Tam Pham, *Meet the People Making a Full-Time Living from Instagram, Kickstarter, and Teespring*, THE HUSTLE (Jan. 18, 2016), <https://thehustle.co/meet-the-people-making-a-full-time-living-from-instagram-kickstarter-and-teespring>.

112 As of this writing, the NPS has reconsidered the initial proposal to surge price national parks (increasing entrance fees from their original \$30 to \$70 during “peak seasons”). Daniel Victor, *National Park Service Reconsiders Steep Fee Increase After Backlash*, N.Y. TIMES (Apr. 5, 2018), <https://www.nytimes.com/2018/04/05/us/national-parks-fee-increase.html>.

113 This conclusion is supported by the financial success of the Mighty 5 campaign, which “saw a return of \$126 for every dollar invested.” Trenbeath, *supra* note 108.

park, and then will posit suggestions for how to fix the overcrowding prior to implementation.

A. *Effecting Compliance with the Federal Statute*

Several different strategies could properly motivate the NPS into fixing individual carrying capacities for its federal lands with immediacy. Each branch of the government could potentially play a role. Congress could pass legislation that inconveniences the NPS such that it is spurred on to taking quicker action. The executive branch could remove officials responsible for overseeing the yearly reports to Congress for failure to do so. The judiciary could even become involved in the event that individuals bring lawsuits against either the NPS or the Secretary of the Interior. For a number of reasons, this Note identifies individual lawsuits as the approach most likely to have the desired effect.

1. Revocation of Federal Funding

Congress could take a few different tacks in approaching the issue of carrying capacity, some punitive in nature and others incentive laden.

First, Congress could vote to limit or even eliminate funding for the NPS until carrying capacities are determined by each individual park.¹¹⁴ To convince members that this dramatic move is necessary, a representative could argue that the parks as they are do not satisfy the goal of the Organic Act, because preservation is not treated as the top priority.

Total revocation of federal funding would be devastating for the Agency, because it is already experiencing a massive budget deficit¹¹⁵—and stands to face an even greater one if President Trump follows through on his threat to further slash the budget by \$400 million.¹¹⁶

The problem with this strategy is that it would cripple the NPS. Without money to pay park employees, there would be no employees at the parks to actually identify carrying capacities. Further, without the ability to pay employees to oversee the parks, the federal land would be left open to any individuals wishing to experience an unmonitored park. Without any threat of enforcement, the parks could be vandalized, physically harmed, or somehow used for personal gain, none of which would be congruent with the expressed congressional purpose of preservation above all.¹¹⁷

114 This subsection assumes that Congress could actually eliminate funding for a particular agency via the Appropriations Clause. See U.S. CONST. art. I, § 9, cl. 7. It is unclear whether Congress could actually go so far in financially controlling an agency. Such a drastic limitation might implicate separations of powers concerns, though such an analysis is beyond the scope of this Note.

115 See Nathan Rott, *National Parks Have a Long To-Do List but Can't Cover the Repair Costs*, NPR (Mar. 8, 2016), <https://www.npr.org/2016/03/08/466461595/national-parks-have-a-long-to-do-list-but-cant-cover-the-repair-costs>.

116 See *supra* note 1 and accompanying text.

117 See, e.g., Peter Andrew Hart, *Ruinous Graffiti Etched into National Park's Ancient Rock Arches*, HUFFINGTON POST (Apr. 28, 2016; 7:16 PM), <https://www.huffingtonpost.com/>

The second, marginally more realistic avenue Congress could pursue is limitations on salaries of top executives within the Agency.¹¹⁸ With a cap placed on salaries until determination of carrying capacities, an incentive would exist for those at the top to ensure that the congressional mandate is finally met, but without causing long-term ripple-effect damage to the NPS in the way total revocation of funding would.¹¹⁹ Additionally, the NPS's top paid officials are compensated highly enough that this would not have significant negative effects on individual persons; as of 2016, the top 100 highest-paid employees of the NPS made at least \$150,000 per year.¹²⁰

Congress offering the NPS a figurative carrot would potentially be more successful than these retributive approaches. For example, Congress could appropriate more funding to those national parks that have satisfactorily complied with the carrying capacity mandate. This approach could lead to initial ambiguity, and even hasty assignment of carrying capacities (who is to decide whether a proposed carrying capacity is adequate such that more funds should be appropriated?), but as this Note has argued, a starting point is better than no assignment at all. Fitting this additional expense into the yearly budget, however, could prove problematic.

The most effective way for Congress to make these changes would be to affix a rider to an appropriations bill. Congress has a history of using riders on appropriations bills to make changes in the natural resources context,¹²¹ and given the need to pass appropriation bills yearly,¹²² this tactic could make an immediate difference in the NPS's funding and motivate a parallel immediate move toward identifying park-specific carrying capacities.

2. Removal of Executive Branch Officials

The threat of removal of high-ranking officials by the President is another possible way to convince the NPS to comply with its statutory duties. The President generally has the authority to remove at-will high-ranking offi-

entry/graffiti-arches-national-park_us_57228af5e4b0b49df6aadaae. "Defacing structures in national parks can land vandals in jail for up to six months and fine them \$5,000." *Id.* Without any Park employees present in the parks to discourage this type of behavior, it is likely copycat vandals wanting to make their mark on the parks would spring up.

118 Determining whose salaries should be affected would be a congressional decision. This Note suggests Congress approach the issue from the top down to affect the quickest compliance and injure individuals the least.

119 Because this limitation is less extreme than total defunding, manipulation of top executives' salaries is more likely to be within Congress's power under the Appropriations Clause without raising separation of powers concerns. See U.S. CONST. art. I, § 9, cl. 7.

120 *Highest-Paid Employees of the National Park Service*, FEDERALPAY.ORG, <https://www.federalpay.org/employees/national-park-service/top-100> (last visited Mar. 6, 2018).

121 Cf. GEORGE C. COGGINS ET AL., *FEDERAL PUBLIC LAND AND RESOURCES LAW 267* (7th ed. 2014) (explaining how appropriations riders are "attractive vehicles" to make changes in the law because Congress must enact appropriations acts each year).

122 *A Brief Guide to the Federal Budget and Appropriations Process*, AM. COUNCIL ON EDUC., <http://www.acenet.edu/news-room/Pages/A-Brief-Guide-to-the-Federal-Budget-and-Appropriations-Process.aspx> (last visited Mar. 6, 2018).

cial in his or her administration. In appointing another Director or Secretary of the Interior to replace the former official, the President could impress upon his or her candidate the importance of identifying carrying capacities straightaway.

However, in order for this to be an effective remedy, the President would need to prioritize federal land management and the NPS's compliance with the 1978 amendments. Given the sheer amount of other duties demanding the President's attention, convincing him or her that overcrowding issues at national parks are significant enough to consider removing a member of the cabinet (the Secretary of the Interior) or the Director of the NPS might be difficult.

Additionally, the President would need to *want* to preserve federal lands, and to be willing to push for preservation through agency action. President Trump does not appear to have in this agenda; notably, he has announced his intention to shrink certain national monuments¹²³ and to make budgetary cuts to the already financially struggling NPS.¹²⁴ This might be a viable solution in the future, but until at least 2020, it is unlikely any executive action will be taken to coerce the NPS to come into statutory compliance.¹²⁵

3. Individual Lawsuits

A final possibility to urge the NPS into action comes in the form of individual lawsuits, which could be filed either against the NPS or against the Secretary of the Interior.

Suing the Secretary of the Interior would be less procedurally complex, but would likely need to take place on a park-by-park basis.¹²⁶ To file suit

123 Julie Turkewitz, *Trump Slashes Size of Bears Ears and Grand Staircase Monuments*, N.Y. TIMES (Dec. 4, 2017), <https://www.nytimes.com/2017/12/04/us/trump-bears-ears.html>.

124 See Jesse Prentice-Dunn, *In Their Own Words: National Park Service Explains Impacts of Crippling Cuts in President Trump's Proposed Budget*, MEDIUM (June 8, 2017), <https://medium.com/westwise/in-their-own-words-national-park-service-explains-impacts-of-crippling-cuts-in-trumps-budget-ea6d19f420fd> ("Reductions to both the seasonal and permanent workforce would have an immediate impact on day-to-day park operations. Since FY 2011, the NPS workforce has decreased by more than 2,300 [employees] (11 percent). Over the same period, visitation has climbed to record-high levels [The] NPS' ability to cover basic resource protection and visitor service needs has become increasingly challenging.").

125 However, when a new President is installed, it is possible that he or she will prioritize federal public lands to a higher degree than President Trump. For example, President Obama did a great deal to preserve federal lands during his eight-year tenure, including the establishment of twenty-nine national monuments and the expansion of four others. See Russell McLendon, *Obama's National Monuments Are a Big Deal*, MOTHER NATURE NETWORK (Oct. 8, 2018), <https://www.mnn.com/earth-matters/wilderness-resources/photos/national-monuments-obama/monumental-legacy>.

126 This subsection assumes that any suit filed against the Secretary of the Interior would seek injunctive relief requiring him to formulate carrying capacities for the park in question. Because injunctive relief is still available even where qualified immunity is asserted, this should be a possible course of action. Any claims for damages would of

against the Secretary, the potential plaintiff would need to identify a cause of action. One possibility would be to bring suit under 43 U.S.C. § 1732(b), which demands, “[i]n managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands.”¹²⁷ In a multiple-use litigation context, this statute has not historically been successful. For example, in *Theodore Roosevelt Conservation Partnership v. Salazar*,¹²⁸ the plaintiffs could not receive relief under section 1732(b) when they disagreed with the Secretary’s regulations of natural gas removal, because the federal land in question was under the control of the Bureau of Land Management (“BLM”). The BLM’s land is all necessarily multiple-use land under the Federal Land Management and Policy Act.¹²⁹ The multiple uses contemplated involve not only enjoyment of land (like for the *Theodore Roosevelt* plaintiffs, who were avid hunters¹³⁰) but also use of BLM land for extraction of minerals. By contrast, the land controlled by the NPS is all single-use land, with the sole purpose of preservation.¹³¹ Establishing carrying capacities is likely to help control the overcrowding issue threatening such undue or unnecessary degradation to the national parks, making the provision particularly appropriate for relief.

The theoretical plaintiff would also necessarily have to establish his or her standing before the suit could go forward. In this context, the plaintiff would be required to fix the type of standing issues seen in *Lujan v. Defenders of Wildlife*,¹³² where the plaintiffs’ suit was unable to go forward due to a failure to establish standing.¹³³ In *Lujan*, the plaintiffs failed to show an imminent injury, with the Court stating that it “is simply not enough” that the plaintiffs had visited the affected areas before or that they had an intent to return.¹³⁴ Instead, the Court said that establishing standing would require

course be dismissed. Presumably, absolute immunity will not apply, even despite the Secretary’s cabinet position, based on precedent in *Butz v. Economou*, 438 U.S. 478 (1978).

127 43 U.S.C. § 1732(b) (2012).

128 661 F.3d 66 (D.C. Cir. 2011).

129 See 16 U.S.C. § 528 (2012); see also *Theodore Roosevelt*, 661 F.3d at 76.

130 *Theodore Roosevelt*, 661 F.3d at 68.

131 *H.R. 5441: A Bill to Provide for the Management, Protection, Development and Enhancement of the Public Lands, and for Other Purposes Before the Subcomm. on Pub. Lands of the Comm. on Interior & Insular Affairs*, 93rd Cong. 735, 751 (1974) (“[L]ands within the parks are not multiple use lands.”).

132 504 U.S. 555 (1992).

133 Notably, the composition of the Court has changed since *Lujan* was decided. Because the majority opinion in *Lujan* was a five-Justice majority on certain sections of the opinion, it is possible the changes to the bench could similarly change the outcome in a way that prevents a plaintiff from establishing standing. For the remainder of this subsection, this Note treats the issue as though the makeup of the Court has not significantly altered, such that *Lujan* would remain good law.

134 *Lujan*, 504 U.S. at 564. The Court contemplated other complications in standing in *Lujan* that are unlikely to be relevant here. For example, redressability was at issue in *Lujan* because it was unclear that foreign countries would comply with any action the United States took to preserve the animals in question. In an action requiring identification of carrying capacities, it seems clear enough that the harm could be redressed by (1)

“concrete plans, or . . . specification of *when* the some day will be,”¹³⁵ a holding that drew criticism from Justice Blackmun in his dissent.¹³⁶ Indeed, Justice Blackmun suggested that simply purchasing plane tickets for a particular day might make the plaintiffs’ injury rise to a level the Court recognized as sufficiently imminent.¹³⁷ The requirement to make some *concrete* plan to visit a place before standing can be established leads to the assertion that action against the Secretary of the Interior would need to take place on a park-by-park basis. While unlikely to be the swiftest form of recourse available to preservationists, the likelihood of an individual lawsuit succeeding (or at least drawing significant attention such that Congress might consider stepping in) is higher than that of persuading the President or Congress to act first themselves.

Finally, an individual lawsuit could be filed against the NPS itself, seeking injunctive relief that would compel the Agency to comply with the 1978 congressional directive. This course of action is likely to be opposed by reference to the Administrative Procedure Act, which handles questions of reviewability of agency action. In order for a failure to act to be judicially reviewable, the failure must be a discrete action, legally required, and nondiscretionary in nature.¹³⁸ A helpful case comparison is *Norton v. Southern Utah Wilderness Alliance*, wherein an interest group sued the BLM for refusal to take action with respect to ATV use on federal land.¹³⁹ The Court asserted that “[f]ailures to act are sometimes remediable under the APA, but not always.”¹⁴⁰

In *Norton*, the BLM’s ability to manage wilderness study areas was found to be a matter of discretion; while the Agency’s requirement to manage the wilderness study areas was mandatory and discrete, it was nonspecific and thus nonreviewable.¹⁴¹ By contrast, the NPS’s duty to determine carrying capacities is mandatory, discrete, *and* specific. The numbers are meant to be reported yearly to the Secretary of the Interior. Reporting a number is demonstrably more specific than managing land; while land management can occur through nonaction, a report cannot.

establishing those capacities and (2) taking steps to fix overcrowding (as will be addressed in Section IV.B).

135 *Id.*

136 *Id.* at 592 (Blackmun, J., dissenting) (“[T]he Court, in my view, demands what is likely an empty formality. No substantial barriers prevent [plaintiffs] from simply purchasing plane tickets to return.”).

137 *Id.*

138 *Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 62–65 (2004).

139 *See id.*

140 *Id.* at 61; *see* Colleen E. O’Connor, Note, *Executive Authority and the Take Care Clause*, 94 NOTRE DAME L. REV. 460–63 (2018) (discussing a line of Supreme Court cases declining to interfere with administrative agencies’ nonenforcement decisions).

141 *Norton*, 542 U.S. at 71; O’Connor, *supra* note 140, at 462 (“[O]nce an action is classified as an exercise of enforcement discretion, the agency essentially gets a ‘pass’ to do as it pleases.”).

The *Norton* Court also provided an example, appreciably more similar to the NPS duty to determine carrying capacities:

For example, [a statute] which required the Federal Communications Commission “to establish regulations to implement” interconnection requirements “[w]ithin 6 months” of the date of enactment of the Telecommunications Act of 1996, would have supported a judicial decree under the APA requiring the prompt issuance of regulations, but not a judicial decree setting forth the content of those regulations.¹⁴²

The 1978 duty for the Director of the NPS to report to the Secretary of the Interior a status update on all of the general management plans, including the carrying capacities, repeats itself yearly. The Secretary is meant to provide an update on all plans “[o]n January 1 of each year.”¹⁴³ The above example from the *Norton* Court is likely to apply: courts judicially reviewing NPS agency inaction on the general management plans and included carrying capacities would be able to require “prompt issuance of regulation[],” but would not be able to determine carrying capacities for the parks.¹⁴⁴

B. Possible Fixes for Overcrowding

While figuring out operative (and later, ideal) carrying capacities for the national parks should help alleviate the crush of visitors, implementation of the requirements will likely be an ongoing process. In order to pragmatically handle the overcrowding problem—and to prevent further erosion of some of these delicate ecosystems—the NPS should also consider measures it can take now that will relieve the stress on individual parks.¹⁴⁵

The difficulty in proposing such features is that they are inevitably met with public backlash and outcry. This Section aims to identify the most favorable options, while recognizing some of the drawbacks as well. Ultimately, much like the balancing of the NPS’s dual-aim Organic Act, choosing which solutions to implement will constitute a balancing act.

1. Mandatory Use of Shuttle Systems in Other Parks

Shuttle systems are controversial, and their success is likely to differ on a park-by-park basis, with one of the main considerations being the size of the park.¹⁴⁶ Zion was the first park to completely restrict vehicular travel within

142 *Norton*, 542 U.S. at 65 (quoting 47 U.S.C. § 251(d)(1) (2012)).

143 National Park Service and Related Programs, Pub. L. No. 113-287, 128 Stat. 3094 (2014).

144 *Norton*, 542 U.S. at 65.

145 To their credit, NPS officials at Zion are already deep in the planning stages of such a process. Public commentary has been collected, and an EA/EIS will be conducted in the upcoming year. Many of the suggestions below either model themselves after Zion’s efforts so far, or after possible solutions Zion officials have floated. See generally *Plan Process*, *supra* note 100.

146 For example, national parks with denser attraction-to-acreage ratios are more likely to benefit from a shuttle system implementation. A recent study considering addition of a shuttle system to Arches National Park ultimately decided that a shuttle system was unlikely

park boundaries. In 2000, the park implemented a shuttle bus system that continuously loops throughout Zion Canyon to bring hikers and sightseers to different locations within the park.¹⁴⁷ No private vehicular travel occurs within Zion Canyon, thanks to the shuttle system.¹⁴⁸ The shuttles have allowed for significantly more visitors to use the park on a daily basis, given that people no longer have to compete for a coveted parking spot at the most well-known hikes.¹⁴⁹

By contrast, other parks have noted continuing issues with personal vehicular travel within their boundaries—notably, Acadia National Park, which experiences complete gridlock on Cadillac Mountain,¹⁵⁰ and Yosemite National Park, of which one would-be visitor said: “‘I think they need to manage the people better in a way that cars don’t go in there’ when no parking is available.”¹⁵¹ Others complained that half-an-hour traffic jams could occur when wild animals, such as a singular elk, were spotted.¹⁵²

Grand Canyon National Park has taken the step of hiring extra employees to try to deal with the crushing crowds.¹⁵³ These new hires help visitors find parking spots and set up signs when particular lots have filled.¹⁵⁴ Grand Canyon National Park has also started encouraging visitors to use a neighboring city’s bus system; as a result, the bus service is so busy that its times of operation have been extended by almost two months.¹⁵⁵

Expansion of existing parking lots is not a strong option for NPS officials, who consider the idea to trespass upon land they are called to preserve.¹⁵⁶ Acadia National Park has responded to its gridlock issues by scheduling “car-free morning[s]” twice as of September 2015,¹⁵⁷ during

to work favorably within their park, in part due to the proposed length of the shuttle loop (fifty-two miles) and the related high travel times visitors would need to endure in order to reach attractions. See *Arches: Transportation*, NAT’L PARK SERV. (Dec. 8, 2017), <https://www.nps.gov/arch/getinvolved/transportation.htm>.

147 *Shuttle System*, *supra* note 93.

148 *See id.*

149 *See id.* (“The shuttle system was established in 2000 to eliminate traffic and parking problems, protect vegetation, and restore tranquility to Zion Canyon.”).

150 See Bill Trotter, *Acadia National Park Grapples with Traffic Congestion*, BANGOR DAILY NEWS (Sept. 16, 2015), <http://bangordailynews.com/2015/09/16/news/hancock/acadia-national-park-grapples-with-traffic-congestion/>.

151 Hugo Martin, *Too Many Tourists: Crowding Is a Big Headache at National Parks and Theme Parks*, L.A. TIMES (Oct. 28, 2017), <http://www.latimes.com/business/la-fi-ovtourism-20171028-story.html>. The tourist in question had spent over two hours “driving in circles looking for a parking spot.” *Id.*

152 *See id.*; see also Robson Fletcher, *‘It Scares Me’: Banff Tourists Seek Up-Close Bear Photos Despite Warnings*, CBC NEWS (June 27, 2017), <https://www.cbc.ca/news/canada/calgary/banff-bears-tourists-photos-danger-free-park-entry-1.4180027> (discussing handling of “bear jams” at Banff National Park in Canada).

153 *See* Martin, *supra* note 151.

154 *Id.*

155 *Id.*

156 *See* Trotter, *supra* note 150.

157 *Id.*

which local bus tour companies were allowed vehicular entry to the park, but all other vehicles were prohibited. The car-free mornings were meant to stimulate suggestions to Acadia officials as to how to solve the congestion issues, with the two primary solutions offered being (1) expanding parking, which is unlikely, and (2) increasing carrying capacity of the local bus system.¹⁵⁸

While the shuttle systems certainly have their own problems, they could do much to improve the current situations of other parks, and could somewhat decrease pollution concerns, since they reduce the number of personal vehicles driving through parks. The Executive Director of Public Employees for Environmental Responsibility, Jeff Ruch, cleverly ripped on the NPS Centennial slogan “Find Your Park,” suggesting that “this summer [2016] the challenge should be called ‘Find a Place to Park.’”¹⁵⁹ Implementing a mandatory public transportation system would not only alleviate vehicular parking and gridlock struggles, but also could improve parks’ sustainability efforts by decreasing pollution.¹⁶⁰ While complaints are probable to occur from those who fear their loss of autonomy in planning their trip, it seems evident that required public transportation would be generally beneficial to preserving parks and to minimizing visitor frustration.¹⁶¹

2. Reservation Systems

Perhaps the most controversial idea is to implement some kind of reservation or permit requirement for the use of the parks. These strategies have been pitched both as a total need for a reservation—which is to say, a reservation would be necessary to enter the park at all—or as a limited-use reservation, applicable only to certain attractions.¹⁶²

To some extent, these systems are already in place. Campsites at national parks across the system require reservations. Overnight backpacking trips through The Narrows at Zion entail special permits.¹⁶³ Haleakala National Park in Hawaii recently implemented a special use permit for those wanting to experience the sunrise view from atop the park’s highest peak.¹⁶⁴

158 *Id.*

159 *National Parks Punt on Overcrowding*, *supra* note 32.

160 *See ZION STATE OF THE PARK REPORT*, *supra* note 77, at ix.

161 As above, this would need to be assessed on a park-by-park basis. *See supra* note 146 and accompanying text.

162 *See Lindsay Whitehurst, Utah’s Crowded Zion National Park May Soon Require Reservations*, CHI. TRIB. (July 21, 2017), <http://www.chicagotribune.com/lifestyles/travel/ct-zion-national-park-reservations-20170721-story.html>.

163 *Zion: Backpacking*, NAT’L PARK SERV., <https://www.nps.gov/zion/planyourvisit/backpacking.htm> (last updated Sept. 4, 2018).

164 *Sunrise Visitors Overload Maui Peak, Leading to Restrictions*, L.A. TIMES (Feb. 4, 2017), <http://www.latimes.com/nation/nationnow/la-na-hawaii-volcano-20170204-story.html> [hereinafter *Sunrise Visitors*]. The permit system was implemented for multiple reasons—preservation of habitat, overflowing parking lot, and increased rate of emergency calls—and it is possible that implementation of a mandatory shuttle system could allow the park to remove the reservation system in the future. *See id.*

As of 2017, Yosemite also allowed visitors to make parking reservations for prime locations in August, the park's busiest month.¹⁶⁵

However, the public at large bristles at the idea of needing a reservation to visit a national park. Some of this backlash appears to come from locals, who feel they should not need to reserve a particular day to visit a park twenty minutes away. Indeed, the reservation system solution is much better suited to the long-distance traveler, who will need to book hotels and rental cars months in advance during peak park seasons anyways.¹⁶⁶ With that said, in order to improve the service for everyone, it may make sense to require reservations even of those who live nearby.¹⁶⁷

Reservation systems that have been proposed would be "based on capacity" and would "vary by season,"¹⁶⁸ but rough estimates as to how many reservations should be available range anywhere from 10,000 to 30,000 visitors per day. Zion accepted public comments on the implementation of such a reservation system in 2017, with one article reporting that it could be up to two years before a reservation system was in place, even if the public responded favorably.¹⁶⁹

Opinions seem to be split as to whether requiring reservations would increase or decrease demand. Roxie Sherwin, the Director of Tourism for Utah's Washington County, suggested that the system could "discourage visits but would ultimately keep traffic manageable."¹⁷⁰ By contrast, Ashley Korenblat of Moab, Utah—the town closest to Arches National Park—suggested that "reservations do[] not decrease demand, in fact it is just the opposite. Improving the experience makes it more sought after."¹⁷¹ In fact, the effects permits have had on special uses have also shown divergent results: the Haleakala permits massively decreased use of the area in question, while Zion's backpacking lottery often entertains more than ten times the number of entrants to which it can allocate permits.¹⁷² It will be worth keeping an eye on the success of the Muir Woods National Monument in California, which

165 *Yosemite National Park Announces Pilot Day Use Parking Reservation Program for 2017*, NAT'L PARK SERV. (June 21, 2017), <https://www.nps.gov/yose/learn/news/parkingreservations17.htm>.

166 *See* Martin, *supra* note 151.

167 Another possibility is a separate number of quasi reservations for locals. Instead of requiring locals to make reservations, they could demonstrate proof of Utah residency via a driver's license or something similar and gain access to the park. Setting aside a few hundred spots daily for residents might help to balance the system so that those who live close by are not disadvantaged.

168 Whitehurst, *supra* note 162.

169 *Id.*

170 *Id.*

171 Ashley Korenblat, *Commentary: Reservations Are the Answer for Arches National Park*, SALT LAKE TRIB. (Jan. 27, 2018), <https://www.sltrib.com/opinion/commentary/2018/01/27/commentary-reservations-are-the-answer-for-arches-national-park/>.

172 *See supra* note 90 and accompanying text.

will implement a reservation-only visitation system beginning in January 2018.¹⁷³

3. Changing the Focus of Advertising Campaigns

A look through the national parks' visitation statistics shows patterns of use suggesting that certain national parks are more frequently visited than others.¹⁷⁴ These findings track with the household recognition of names: most people have heard of Yellowstone and Yosemite, while the Gates of the Arctic National Park in Alaska—the least-visited national park with just over 11,000 visitors in 2017¹⁷⁵—is a significantly less popular park, both contemporarily and in terms of visitor statistics.

In order to spread out the use of the parks, changes in advertising and marketing campaigns should occur. A consideration of the success of Utah's Mighty 5 campaign¹⁷⁶ is appropriate: placing other, lesser-known parks on foreign and domestic visitors' bucket lists would help decrease the load on the more well-traveled parks suffering from overcrowding. More than mere advertising for these parks would be helpful as well—providing information about what the parks offer and what amenities are located nearby would be a huge help for potential visitors. For instance, in perusing the website for the Gates of the Arctic National Park, the NPS stated that there are no defined trails within the park.¹⁷⁷ To appeal to more visitors, it might be beneficial to suggest ways to enjoy the park other than hiking on ranger-created trails.

Additionally, the NPS could attempt to shift focus from national parks to national monuments, national historical parks, or other uses of federal lands. While the national parks are beautiful, the country (and the Agency) have worked to preserve other lands equally as deserving of significant visitation statistics.

Finally, on days where parks exceed carrying capacities, the NPS would do well to suggest alternate attractions until current attendees have trickled out such that new people can enter to enjoy the parks.¹⁷⁸

173 See Jennifer Errick, *The First National Park Site to Require Reservations Year-Round*, NAT'L PARKS CONSERVATION ASS'N (Dec. 5, 2017), <https://www.npca.org/articles/1687-the-first-national-park-site-to-require-reservations-year-round>.

174 See *Annual Park Ranking*, *supra* note 14.

175 *Gates of the Arctic NP & PRES*, NAT'L PARK SERV., [https://irma.nps.gov/Stats/SSRS/Reports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=GAAR](https://irma.nps.gov/Stats/SSRS/Reports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=GAAR) (last visited Sept. 22, 2018).

176 See *supra* notes 107–08 and accompanying text.

177 *Backpacking & Hiking*, NAT'L PARK SERV., <https://www.nps.gov/gaar/planyourvisit/backpackingandhiking.htm> (last updated Apr. 7, 2017).

178 Cf. Whitehurst, *supra* note 162 (nothing that the office of tourism for Utah's Washington County "has suggested that tourists visit attractions beyond Zion's main canyon as the park started getting crowded"). Of course, it would be necessary to ensure all measures taken were consistent with one another. If a reservation system were implemented, visitors should not be encouraged to visit other attractions until they have had a chance to visit the park for which they had made a reservation, and so on.

4. Charging Children Entrance Fees

Part III briefly discussed the possibility of families choosing to vacation at parks because their fees are significantly cheaper than those of Disneyland. While the national parks should be discouraged from charging prices comparable to Disneyland, it makes financial and pragmatic sense to charge children to enter the parks. The fiscal situation of the parks system is such that any additional funding would assist the NPS, while also working to mitigate some of the overcrowding issues.

As an example, consider a young couple with three children. The cost of a one-day Disneyland trip for two adults and three children under age ten is at least \$467¹⁷⁹—before parking, food, and any merchandise purchased within the amusement park. By contrast, that same family's cost to visit a national park by car (take Yellowstone for example) is \$35.¹⁸⁰ Where national parks are located such that travel would be feasible, the base entrance price for a family is meaningfully less.

In addition, younger children are some of the most destructive and most dangerous visitors to national parks. Where children too young to understand cliff drop-offs and river currents are admitted, the possibility of an accident increases—particularly because their parents will understandably want to enjoy the park in addition to caring for their children.¹⁸¹

Similarly, because parents might not be aware of all the park rules, their children can be unintentionally destructive to the fragile ecosystems of many parks. Take the cairns example within Zion National Park.¹⁸² Unattended children are likely to copy (or independently build) such formations, without understanding how they are causing damage to the environment.¹⁸³ Relatedly, a parent who might not personally build a cairn might tolerate their child doing so.¹⁸⁴

179 *Theme Park Tickets*, DISNEYLAND, <https://disneyland.disney.go.com/tickets/> (last visited Sept. 17, 2018) (values calculated for a day using “value” pricing, the cheapest possible).

180 *Yellowstone National Park Announces New Entrance Fees Starting June 1*, *supra* note 105 (either for admission of one vehicle, or for two adults; children under age fifteen are admitted for free).

181 See David Ferry, *A Brief History of Deaths in Yellowstone's Hot Springs*, OUTSIDE (June 16, 2016), <https://www.outsideonline.com/2090251/brief-history-deaths-yellowstones-hot-springs> (“Children . . . are frequently involved in hot spring accidents.”); see also Toomer, *supra* note 103 (“Especially with children, people need to respect the signs and warnings set up for them . . . to use this area carefully and not allow a moment's inattention to become a nightmare for a vacationing family.”).

182 See *supra* notes 79–83 and accompanying text.

183 NAT'L PARK SERV., *Caring for Cairns at Acadia National Park*, AMERICANTRAILS.ORG (Nov. 1, 2003), <https://www.americantrails.org/resources/caring-for-cairns-at-acadia-national-park> (“Young children (pre-adolescents) are the predominant group responsible for building and destroying cairns.”).

184 As another example of children possibly exhibiting behavior that breaks park rules occurs when a child approaches wildlife. These behaviors can be dangerous for the children in addition to the animals, who might be put down if they become separated from

Finally, the noise and excitement attending young visitors might be such that it is disruptive to other park attendees.¹⁸⁵ For many reasons, children—especially young children—are not ideal park visitors. Charging admission would encourage parents and family members to wait on taking their little ones to the parks until they are old enough to fully and safely appreciate the experience.

5. Consider Technology Limitations

As above,¹⁸⁶ the explosion of social media has likely contributed in some part to the rising popularity of the national parks. The commonly held desire to show off one's vacation to friends and family would place a national park visit at a premium, particularly because of how well the spectacular scenery photographs. With the emergence of career YouTubers¹⁸⁷ and professional Instagram travel bloggers,¹⁸⁸ some of those who come to visit the national parks may be less interested in experiencing the lands for their beauty and solitude,¹⁸⁹ and may instead be more interested in monetizing or showing off the experience. The Haleakala National Park Superintendent Natalie Gates commented similarly on the Maui sunrise attraction: "If you ever went up there, you would see that fully half to three-quarters of our visitors who are watching the sunrise are either taking photos that they immediately broadcast to their friends, or filming it."¹⁹⁰ While visitors should not be begrudged the opportunity to take photographs of the vistas, the NPS should consider finding a way to limit those attendees whose primary intention is to exploit the park for social media popularity.¹⁹¹

their herds. See *As National Parks Mark Milestone, Visitor Misbehavior Abounds*, CBS NEWS (Aug. 28, 2016), <https://www.cbsnews.com/news/as-national-parks-mark-milestone-visitor-misbehavior-abounds/>.

185 Cf. SAGUARO NATIONAL PARK, *supra* note 60, at 11 ("Unless mandated by statute, the NPS will not allow visitors to conduct activities that . . . unreasonably interfere with . . . the atmosphere of peace and tranquility or the natural soundscape maintained in wilderness.").

186 See Pham, *supra* note 111 and accompanying text.

187 See, e.g., MyOwnFrontier, *Backpacking Yellowstone National Park: The Lamar River, Hoodoo Basin, Eastern Boundary Loop*, YOUTUBE (Feb. 2, 2015), <https://www.youtube.com/watch?v=V5Xpu8bas7s> (documenting a five-day backpacking trip through Yellowstone).

188 See, e.g., *15 National Park Instagram Accounts to Follow*, PARK CHASERS (May 2, 2016), <http://www.parkchasers.com/2016/05/15-national-park-instagram-accounts-follow/>.

189 Cf. Julie Turkewitz, *National Parks Struggle with a Mounting Crisis: Too Many Visitors*, N.Y. TIMES (Sept. 27, 2017), <https://www.nytimes.com/2017/09/27/us/national-parks-overcrowding.html> ("[A Zion employee in the 1980s] could hike for hours, even days, without seeing a soul, and he remembered a constant sensitivity to the changing light on the canyons, the brilliant green of the trees, the emerald water of the Virgin River. Today, he said, when he finds solitude, it is usually accompanied by the distant rumble of the shuttle bus.").

190 *Sunrise Visitors*, *supra* note 164.

191 The NPS has made the move to ban drones entirely, which seems to tip in favor of banning other ambitious forms of recording the national parks. See Mark Berman, *National Park Service Bans Drone Use in All National Parks*, WASH. POST. (June 20, 2014),

In 2013, Yellowstone and Glacier National Parks considered requests to improve the quality of cell phone coverage within the park.¹⁹² 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.”¹⁹³

Concerns about the lack of technology on safety split both ways. While the obvious point of view is to reference the need for constant communication—whether to assure those at home that all are safe, or to make emergency phone calls when accidents occur—others have posited concerns that the availability of cell phone service might lead adventurers to feel a “false sense of safety in the wilderness” that might lead to “reckless behaviors.”¹⁹⁴ The National Parks Conservation Association’s Northern Rockies Director, Tim Stevens, suggests that provision of cell phone services in conjunction with personal vehicular travel could lead to decreased safety as well: “People brake in the middle of the road to watch animals. The added distraction of a wireless signal—allowing a driver to text Aunt Madge to say how great the trip is—could have disastrous consequences.”¹⁹⁵

Lack of cell phone service understandably raises potential safety concerns. However, injured visitors are generally able to seek help when necessary, even without phone service. For example, Zion National Park offers no cell service within its namesake Canyon, but injured visitors are able to find help and separated families are able to reconnect all the same. While there are certainly practical benefits attending cell phone coverage, it should not be provided at the expense of the essential character of the national parks—about which John Muir, sometimes called “[t]he Father of our National Parks,”¹⁹⁶ said, “only by going alone in silence, without baggage, can one truly get into the heart of the wilderness.”¹⁹⁷

https://www.washingtonpost.com/news/post-nation/wp/2014/06/20/national-park-service-bans-drone-use-in-all-national-parks/?utm_term=.Ecf8d7222371.

192 Laura Zuckerman, *Feature—America’s National Parks Weigh Solitude Against Cellular Access*, REUTERS (Jan. 19, 2013), <https://www.reuters.com/article/usa-parks-cellphones/feature-americas-national-parks-weigh-solitude-against-cellular-access-idUSL2N0AK10V20130119>.

193 *Id.*

194 Rachel Nuwer, *Should National Parks Offer Wifi and Cellular Coverage?*, SMITHSONIAN.COM (Feb. 13, 2013), <https://www.smithsonianmag.com/smart-news/should-national-parks-offer-wifi-and-cellular-coverage-16478541/>.

195 Zuckerman, *supra* note 192.

196 *Who Was John Muir?*, SIERRA CLUB, https://vault.sierraclub.org/john_muir_exhibit/about/ (last visited Sept. 17, 2018).

197 Jeva Lange, *Don’t Let Cell Phones Ruin America’s National Parks*, THE WEEK (June 9, 2017), <http://theweek.com/articles/704090/dont-let-cell-phones-ruin-americas-national-parks>.

While none of the above solutions are perfect, applying a combination of the given suggestions is likely to have some positive effect on the implementation of a carrying capacity.¹⁹⁸ The identification of ideal carrying capacities need not and *should* not take place before the NPS begins its implementation. The degradation parks stand to suffer while delays continue is of momentous importance, and should motivate immediate development of operating carrying capacities, to be adjusted as needed. The process of fixing overcrowding at the national parks must be a dynamic one, with changes made where visitor enjoyment suffers or preservation needs demand.

CONCLUSION

An article in High Country News by Alan Spears pushes back on the idea that national parks are America's "best idea," as he writes: "Rather, I think that our national parks are like most of the other laudable, lofty ideals created by Americans: an ever-evolving concept filled with great promise and in need of constant stewardship."¹⁹⁹ Spears hits on something critically important in his piece: the national parks are not an idea, completed, full-stop. In order to become "America's Best" anything, the NPS will need to ensure the best implementation possible of said idea. Realizing such a bold concept requires dynamic and ongoing contributions to the system, and innovation where old ways are no longer the most efficient. Since 1978, the NPS's execution has been lacking.

Increasing visitation at the national parks can be a good thing where well-managed. Indeed, the popularity of the parks reinforces the majesty of the program. And the parks' popularity is not only a good thing for the future of the system; it also helps boost the economy in the nearby towns and the tourism industry within the states. All that is required is a more delicate balancing of the goals of preservation and visitor enjoyment—with a careful premium placed on preservation.

198 This is not a comprehensive examination of all possible solutions; rather, this Note has tried to limit suggestions to those likely to preserve the NPS the way it currently stands, and those that will not implement some kind of cost barrier that favors wealthy Americans. Other possible solutions that have been discussed include creation of new national parks and the implementation of surge pricing at parks. In order to preserve the high quality of the "national park" designation as it exists within the NPS today, elevating less spectacular areas to national park status is undesirable. See John Copeland Nagle, *Commentary: Upgrading the Indiana Dunes to a National Park Is a Horrible Idea*, CHI. TRIB. (Dec. 5, 2017), <http://www.chicagotribune.com/news/opinion/commentary/ct-perspec-dunes-indiana-national-parks-bad-idea-1206-20171205-story.html>. For its part, surge pricing has been publicly condemned as a strategy that would effectively bar lower-income families from visiting the parks. Raising entrance fees is inconsistent with the goal of preserving the parks for the enjoyment of all Americans. See *Don't Push the Poor Out of Our Most Popular National Parks by Doubling Entry Fees*, L.A. TIMES (Oct. 27, 2017), <http://www.latimes.com/opinion/editorials/la-ed-parks-fees-yosemite-grand-canyon-trump-20171027-story.html>.

199 Alan Spears, *No, National Parks Are Not America's 'Best Idea'*, HIGH COUNTRY NEWS (Apr. 16, 2016), <https://www.hcn.org/no-national-parks-are-not-americas-best-idea>.

In order to turn overcrowding into a positive engagement with Americans, the NPS should take affirmative action to ensure that parks are enjoyed in the manner the 1916 Congress intended in penning the Service's Organic Act. If the NPS continues to fail to comply with the 1978 amendments, even the individual citizen or interest group may have a chance of meaningful action that leads to adoption of a carrying capacity policy. In order to build the brightest future for the NPS, all parks staff should work together to figure out an operating strategy for each park, as overseen by the Secretary of the Interior. The parks are too valuable to allow mismanagement to overtake the most beautiful lands America has to offer.

