COMMENTS

Preservation and Use: Road Building, Overcrowding, and the Future of Our National Parks

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I. INTRODUCTION AND HISTORICAL BACKGROUND

In June of 1916, a campaign to establish a national parks bureau peaked, culminating in the National Park Service Act of 1916 (Organic Act).¹ The Organic Act required the newly established National Park Service (NPS) to manage the national parks

by such means and measures as conform to the fundamental purpose of the \ldots parks, \ldots which purpose is to conserve the scenery and the natural and historic objects and the wildlife 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.²

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^{1. 16} U.S.C. § 1 (1994). Today, besides the Organic Act and regulations, park plans must also conform to most of the broad-sweeping environmental statutes, which are not specifically directed at the national parks, but are binding on all federal agency actions. These include the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370*d* (1994); the Wilderness Act, 16 U.S.C. §§ 1131-1136 (1994); the Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1994); the Clean Air and Water Acts, 42 U.S.C. §§ 7401-7671*q* (1994), and 33 U.S.C. §§ 1251-1387 (1994). *See* Lindsey Kate Shaw, *Land Use Planning at the National Parks: Canyonlands National Park and Off-Road Vehicles*, 68 U. COLO. L. REV. 795, 798-99 (1997).

^{2. 16} U.S.C. § 1.

This language has sparked an historical and long-lasting debate over whether the fundamental purpose of the parks is preservation or use, enjoyment now or benefit for later generations.³ This debate has pervaded every decision, small or large, that has affected the parks since the day the Organic Act was initially passed.⁴ Just how best to preserve the parks unimpaired while at the same time providing needed facilities for public use was never clear-cut and remains ambiguous to this day.⁵ When controversies arise and

[w]hen the battle lines are being formed, two camps can be identified. On the one side are the preservationists, for whom the word 'unimpaired' is the key and who counsel purity in all things. They hold that parks are established primarily to protect wilderness, that one best sees wilderness on foot with his gear on his back.⁶

On the other side are the people who "do not regard the parks as shrines but rather as places to have fun. They enjoy the scenery fully but tend to believe cabins and hotels are preferable to sleeping on the ground."⁷

The formal beginnings of the national parks started in 1864 when President Abraham Lincoln signed into law an Act that ceded the Yosemite Valley to the State of California to be used as a public park on the singular condition "that it would be 'inalienable for all time."⁸ Some eight years later, Congress established Yellowstone Park, the first national park, stipulating that the more than two million acres must be somehow preserved and managed by the federal government for the broad "enjoyment" and the "benefit" of the people.⁹ Congress's exact purpose for creating the national parks remains unclear to this day, but the notion of a park may have been "originally conceived as a tribute to monumentalism" and unique natural splendor.¹⁰ There were no formal

^{3.} See, e.g., Shaw, supra note 1, at 795-99; Robin Winks, Dispelling the Myth, NAT'L PARKS, July-Aug. 1996, at 52.

^{4.} See WILLIAM C. EVERHART, THE NATIONAL PARK SERVICE 80-81 (1972). Congress did not attempt to spell out precisely how much preservation is required and simply defined the spirit in which the parks are to be managed. See *id.*; see *also* 16 U.S.C. § 1.

^{5.} *See* EVERHART, *supra* note 4, at 80.

^{6.} *Id.* at 81.

^{7.} *Id*.

^{8.} ANN & MALCOLM MACEWEN, NATIONAL PARKS: CONSERVATION OR COSMETICS? 3 (1982).

^{9.} RICHARD WEST SELLARS, PRESERVING NATURE IN THE NATIONAL PARKS: A HISTORY 7 (1997). The Act came during an era labeled the Gilded Age "when the federal government was aggressively divesting itself of the public domain through huge railroad land grants, and, among others, homestead, mining and timber acts." *Id.* The idea of protecting federally managed parks from "extractive uses typical of the late-nineteenth-century American west" could be regarded as a "political phenomenon" of the time. *See id.*

^{10.} See Robert B. Keiter, Preserving Nature in the National Parks: Law, Policy, and Science in a Dynamic Environment, 74 DENV. U. L. REV. 649, 650 (1997).

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plans or agencies created for the parks' management and no clear definition of the parks and their purposes, but, what is certain is that there was little of what might later be called "ecological conscience" behind them.¹¹ The idea of a national park can be traced as far back as Thomas Jefferson in 1815, but it was Frederick Olmsted in the mid-nineteenth century who first formulated both a political philosophy and practical policy that a government should preserve regions of scenic beauty for the enjoyment of all its citizens.¹² His central idea was a democratic one, rejecting the pervasive old world, class philosophy that ordinary, working-class citizens were incapable of appreciating beauty, either in art or nature, and that only the very rich were so aesthetically endowed.¹³ In rejecting this philosophy, he argued that any apparent lack of aesthetic appreciation on the part of the common citizen was due to the lack of transportation and the lack of opportunity to travel the "choicest natural scenes in the country and the means of recreation in them."¹⁴

It was not until the early days of the twentieth century and use of "mass motoring" that common people began to exert a powerful influence in developing and touring national parks.¹⁵ Railroads and other profitoriented industries also quickly realized the economic potential of tourism in the fledgling national parks concept and exerted their own political pressure to create more national parks.¹⁶ In large part due to Yellowstone's ever increasing popularity and spectacularly beautiful landscape of mountains, canyons, and natural phenomena, the common American people began to include a notion of patriotism and pride of a national parks concept and budding environmental conservation

See Shaw, supra note 1, at 795; see also JOSEPH L. SAX, MOUNTAINS WITHOUT 11. HANDRAILS: REFLECTIONS ON THE NATIONAL PARKS 6-7 (1980). The forerunner to modern "environmentalism" was simply a response to the late nineteenth-century prevailing ethic that natural resources should be exploited as rapidly as possible. "Ecological conscience," in contrast, was a term developed later in the 1960s and was based on an appeal to a higher spiritual and moral imperative of ecology. At the time of the first national parks, the idea of complete preservation of large public lands in their natural state would have been unheard of, rather, conservation movements and the preservation ethic of the time simply challenged the rate of exploitation and argued that the resource development should be slowed to achieve a maximum, multiple-use return over time. See generally Krutilla & Haigh, An Integrated Approach to National Forest Management, 8 ENVTL. L. 373 (1978); ALDO LEOPOLD, A SAND COUNTY ALMANAC (1949); S. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY (1959).

^{12.} See MACEWEN, supra note 8, at 3; see also LAURA WOOD ROPER, FLO: A BIOGRAPHY OF FREDERICK LAW OLMSTED 283-85 (1973).

See ROPER, supra note 12, at 283-84; MACEWEN, supra note 8, at 4. 13.

^{14.} See MACEWEN, supra note 8, at 4.

^{15.} See id.; see also SELLARS, supra note 9, at 12.

^{16.} See SELLARS, supra note 9, at 12.

movements.¹⁷ In the early days of national parks' history, the parks conservation movement saw a great difference between the growing utilization of natural resources, such as tourism and public recreation, and the consumptive use of natural resources, such as logging, mining, and reservoir development.¹⁸ The best illustration of this conflict can be seen in the battle over Yosemite's Hetch Hetchy Valley and the proposed reservoir on the Tuolumne River.¹⁹ In 1913, Congress voted to dam the river and flood the valley in order to supply San Francisco with water.²⁰ Although Hetch Hetchy Valley was located in a national park, the distinct absence of significant recreational use in the valley exposed it to possible consumptive and exploitative use, and specifically reservoir development.²¹ John Muir, founder of the Sierra Club, saved the valley from the potentially devastating reservoir development because he hesitatingly realized the relevance of tourism.²² He distinctly understood that tourism development could serve as an initial ally in the war against the extensive, unregulated, and destructive consumptive use of the nation's environment.²³ The Sierra Club and John Muir were fighting to preserve the national parks' back country in its natural, wild condition.²⁴ However, they wisely recognized and thoughtfully conceded that limited tourist development was a necessary evil.²⁵ For them, tourism was far preferable to the alternative possibilities such as reservoir development or unregulated logging.²⁶

The modern debate, however, lies not in whether the national parks will be saved from profit-oriented corporations as John Muir first feared, but rather whether the Organic Act's continued dual mandate, preservation and use, itself becomes the national parks' greatest threat for the future. For example, in 1950, more than 37 million people visited the national parks and recently, in 1992, there were an estimated 252 million visitors and by 2010 that number is expected to climb to 500 million or more.²⁷

^{17.} See *id.* at 13. To date, the United States National Park system "has grown to 369 designated park sites located in each of the fifty states and several territories." See *id.* at 13-15; Keiter, *supra* note 10, at 650.

^{18.} SELLARS, *supra* note 9, at 15-16.

^{19.} See id. at 16.

^{20.} See id.

^{21.} See id.

^{22.} See id.

^{23.} See id.

^{24.} See id.

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^{25.} See id.

^{26.} See id.

^{27.} See Shaw, supra note 1, at 795; see also Dennis J. Herman, Loving Them to Death: Legal Controls on the Type and Scale of Development in the National Parks, 11 STAN. ENVTL.

Part I of this Comment explores the issue of overcrowding in our national parks. The Comment will discuss some of the recent park management decisions that the NPS has considered or might consider in the future in order to administer the dual mandate of the Organic Act's requirements. Part II examines the issue of roads and potential road building in the future with due regard to the above overcrowding issue and in contemplation of the Organic Act and the preservation and use dual mandate. The Comment concludes with observations and policy suggestions directed towards the future of our national parks in light of the fact that first, the popularity of the parks is substantially increasing and second, that the solution for preservation and future use cannot simply be to build more roads to accommodate more and more tourists as has been the status quo until recently.

II. OVERCROWDING, VERP, AND PRESERVATION

During the 1960s, the NPS was admonished by the landmark Leopold Report to reevaluate the parks.²⁸ The NPS responded by establishing controversial nonintervention and restoration policies in order to maintain indigenous plant and animal life in the parks.²⁹ As a result, Congress amended the original Organic Act, the National Parks and Recreation Act of 1978 (NPRA), to require that "the protection, management, and administration of [parks] . . . be conducted in light of the high public value and integrity of the National Park System."³⁰ The

L.J. 3, 9 (1992). Admittedly, the statistics might convey a false impression. The NPS divides their parks and areas into three broad categories: natural, recreational, and historical units. *See* DON HUMMEL, STEALING THE NATIONAL PARKS: THE DESTRUCTION OF CONCESSIONS AND PARK ACCESS 2-5, 11-13 (1987). While it is true that an estimated 350 million visitors will frequent a national park annually, only a much smaller percentage of that amount will visit the big natural areas like Yellowstone or Yosemite. *See id.* at 12. Most visitors frequent places that one wouldn't think of as a national park area, for example, Golden Gate National Recreation Area, the George Washington Memorial Parkway and many others including beaches and Washington, D.C. city parks. *Id.* (arguing against limiting citizen access to parks and claims that environmentalists who advocate the "lock-it-up-and-keep-'em-out" philosophy, and who want to return the parks to their natural state of pristine nature are the real cause of increasing conflict between the two land use camps).

^{28.} The Leopold Report stemmed from an adverse reaction to the shooting of elk in Yellowstone and concluded that "[a]s a primary goal, we would recommend that the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by the white man. A national park should represent a vignette of primitive America." See Keiter, supra note 10, at 650, 656; Leopold et al., Wildlife Management in the Natural Parks, in Transactions of the Twenty-Eighth North American Wildlife & Natural Resources Conference 29, 29-44 (1963), reprinted in AMERICA'S NATIONAL PARK SYSTEM: THE CRITICAL DOCUMENTS 237, 237-51 (Larry M. Dilsaver ed., 1994).

^{29.} See Keiter, supra note 10, at 651.

^{30.} Shaw, supra note 1, at 799 (quoting the Organic Act, 16 U.S.C. § 1a-1 (1994)).

language of the amendment and in particular the word choice, "protection," suggests Congress' intent to reaffirm the NPS's preservation ethic as before, yet the amendment also directs that regulation of the parks be for "the common benefit of all the people of the United States."³¹ Thus, Congress has not managed to resolve the dual mandate ambiguity. The preservation of natural beauty versus the practical use of national parks debate still polarizes the two seemingly irreconcilable land use camps and their divergent views.³²

A. Measuring Visitor Experience and Use

However, Congress did take an extra step in the NPRA that requires NPS management to identify and implement management guidelines and studies for visitor "carrying capacities" for all areas of the parks.³³ From this new authority, the NPS has developed a new process for determining a particular park's "carrying capacity" called "Visitor Experience and Resource Protection" (VERP), which forces park planners to gather data to support use restrictions based on that data.³⁴ VERP was first activated at Arches National Park in June of 1995.³⁵ From 1974 to 1984, the annual visitation rate to Arches grew from 238,000 to 345,000 and in the next ten vears it more than doubled to 777,000 and will probably double again by the end of this century.³⁶ Arches is not alone and most parks are bulging at the seams, yet the primary remedy previously proposed by park management was simply to expand parking lots and maintain an uneasy status quo between preservation and use.³⁷ VERP, however, is the first systematic process that allows park management to make quality decisions about visitor use and capacity based on "science rather than hunches" and is hailed by several commentators as a "revolution" in park management initiating a potential reconciliation between the preservation

^{31.} *Id.*

^{32.} See id.

^{33.} See The Organic Act, 16 U.S.C. § 1a-7(b) (1994).

^{34.} Carrying capacity is "the type and level of visitor use that can be accommodated while sustaining desired resource and social conditions that complement the purposes of a park." NATIONAL PARK SERVICE, VERP: A FRAMEWORK FOR ADDRESSING VISITOR CARRYING CAPACITY IN THE NATIONAL PARK SYSTEM (1993); see also Shaw, supra note 1, at 828-29.

^{35.} See Shaw, supra note 1, at 829. Specifically, the park visitors are shown photographs of the park's attractions with various numbers of visitors on the trail or road and are then asked what an acceptable level of congestion might be for each park feature. This allowed park planners to determine the level of tourist congestion that would be acceptable to most park guests and thereby, created nine different zones ranging from primitive, where no facilities are allowed, to developed, where full facilities and vehicles are allowed. *Id.; see also* Todd Wilkinson, *Crowd Control: With a Pilot Program at Arches National Park, the National Park Service is Charting a Promising New Course for Visitor Management*, NAT'L PARKS, July-Aug, 1995, at 36-37.

^{36.} Wilkinson, *supra* note 35.

^{37.} See id.

and use dual missions.³⁸ The four key elements of VERP are "(1) a parkwide management zoning scheme, (2) indicators and standards for each zone, (3) management actions that address visitor use and infrastructure in each zone, and (4) a monitoring program."³⁹ Jim Hammett, an original VERP team planner, has noted that "historically parks have always built their infrastructure and then tried to fill it to capacity with people, having little idea what the consequences would be on the resource or the visitor experience."⁴⁰ Hammett argues that VERP, by contrast, begins with three things:

[F]irst, it re-examines the legislation that created the park to gain a feel for the original intent of Congress; second, it involves the completion of a biological inventory and identifies certain plants or animals to serve as indicators of change; and third, it surveys visitors to gain an accurate reading of what they expect.⁴¹

This effort appears to be a good start. However, there is little historical and long term scientific data on the influence and response to human activities and perturbations on the parks upon which to build.⁴²

As a general matter, the data needed to make informed "ecological intervention judgments concerning park ecosystems is not available," and scientists do not know enough about the complex ecosystems of some national parks to make sound decisions, as evidenced by previous management techniques that have failed and "imperiled important biological resources."⁴³ For example, the Forest Service has not been able to operate a sustainable timber harvest program and the Bureau of Land Management's range management program has left federal rangelands in poor condition despite extensive scientific research and yield mandates.⁴⁴ The scientific assumptions that underlie the established thresholds of intervention, as often as not, "have [been] proven wrong, leaving natural resource managers unsure how to manipulate complex ecological systems."45 Simply put, we do not know enough about the influence of human activity on fragile ecosystems present in Arches and elsewhere to determine with any scientific accuracy the long term results of new roads, off-road vehicles, or even, simply, a single human footprint. What we do

^{38.} *Id.* (quoting Jayne Belnap, park soils biologist for the National Biological Service, Moab, Utah); Rodney Greeno, *Park Officials Look to Regulate Visitor Activity, Arches Too Crowded?*, SALT LAKE TRIB., Aug. 24, 1993, at A1. *See generally, Shaw, supra* note 1, at 829-30.

^{39.} Shaw, *supra* note 1, at 828-29.

^{40.} Wilkinson, *supra* note 35.

^{41.} *Id*.

^{42.} See Keiter, supra note 10, at 691.

^{43.} *Id.*

^{44.} Id. at 692.

^{45.} *Id.*

know, however, is that ecosystems, like certain forests and rangelands, could be more fragile and susceptible to human influence than previously thought, with potential irreversible consequences to local and global ecosystems.⁴⁶ In Arches, for example, there is a thin cryptobiotic, "fungal microflora," growth on the top of the sand everywhere in the park that contains microscopic fungi life that can take unknown years to develop, yet can be wiped out by one, intentional or unintentional, footprint.⁴⁷

B. Public Trust Doctrine as a Backstop

Most ecological intervention decisions are not only difficult to buttress scientifically, but a further difficulty lies with the fact that the NPS's direct decisions can only be challenged legally on the ground that the final agency decision is arbitrary or capricious.⁴⁸ Arguably, the broad, dual mandate in the Organic Act and its successor the NPRA makes decisions regarding park access or rationing access largely immune from review because Congress has not specifically addressed the issue.⁴⁹ Previous to VERP's introduction, Arches Superintendent Noel Poe noted the following:

If ever we [NPS management] were called to court, the first thing they attack is the process by which you arrived at your conclusions. If you're on the witness stand and testify that your actions were based on a gut feeling that allowing 30 people at Delicate Arch is appropriate, you'd get crucified.⁵⁰

Consequently, because of the lack of scientific evidence and Congress' continued dual mandate, the issue of withdrawing part of a park from use or rationing access to the parks has been rarely litigated and the courts

^{46.} See generally id. at 649-75; see also SELLARS, supra note 9, at 80-123.

^{47.} See V.A. Kovda et al., Soil Processes in Arid Lands, in 1 ARID-LAND ECOSYSTEMS: STRUCTURE, FUNCTIONING AND MANAGEMENT 439, 449-50 (D.W. Goodall et al. eds., 1979). The crust forms when the soil is moistened from occasional precipitation and is then quickly heated and dried creating numerous pores where algae and lichen can grow. Insects and other animals can then feed off of the algae and consequently spread the biomass to new pores and thereby perpetuate a cycle that is strikingly similar to the honeybee and flower relationship. The mere existence of this crust formation process, possibly involving little understood chemical processes, is very recent and the exact mechanisms still remain unclear. See id.

^{48.} Generally, a plaintiff can seek judicial review of any final agency action found to be "arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law." Administrative Procedures Act, 5 U.S.C. § 706(2)(A) (1994).

^{49.} See A. Dan Tarlock, For Whom the National Parks?, 34 STAN. L. REV. 255, 266 (1981) (reviewing JOSEPH L. SAX, MOUNTAINS WITHOUT HANDRAILS: REFLECTIONS ON THE NATIONAL PARKS (1980)).

^{50.} Wilkinson, *supra* note 35 (quoting Arches Superintendent, Noel Poe). Certain conservationists have credited Noel Poe with being able to step back from the situation, admit something had to change, and "with being the first to take a hard line on carrying capacity by embracing the rather innovative ideas that VERP represents." *Id.*

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have found it difficult "to find sufficient standards in the statute against which to test the arbitrariness of a park allocation choice."51 An initial case, Wilderness Public Rights Fund v. Kleppe, involved a challenge to a NPS decision that limited the use of the Colorado River in the Grand Canyon to a certain amount of users per year.⁵² The Ninth Circuit found in favor of the NPS and stated that "[i]f the over-all use of the river must, for the river's protection, be limited, and if the rights of all are to be recognized, then the 'free access' of any user must be limited to the extent necessary to accommodate the access rights of others."53 This decision is an important precedent and suggests that some restrictive level of access must be initiated and maintained to accommodate the access rights of others. The language in the Kleppe opinion suggests an intent to protect the rights of all citizens including those not yet born and arguably embraces the public trust concept developed initially in the Roman and English concepts of res communes or "the notion that certain property was held by the Crown for the benefit of all the people."54

The public trust doctrine began in its applications to waterways, but an analogy between waterways and national parks as public resources seemed appropriate to some.⁵⁵ Professor Joseph Sax and other commentators, for example, appropriated the common law public trust doctrine "that all public resources were held in trust and that courts should recognize public rights in public property when resolving conflicts among different proposed uses" and applied it to the national parks.⁵⁶ Despite some early success by the Sierra Club in the 1970's to convince courts and Congress to incorporate the trust notion into the parks' statutes, Congress ultimately "balked at using the term" or its message in the NPRA ostensibly due to the lack of certainty in the public trust's

^{51.} Tarlock, *supra* note 49, at 266; *see also* Bicycle Trails Council of Marin v. Babbitt, 82 F.3d 1445, 1459 (9th Cir. 1996) (recent NPS decision to allow biking on certain trails in Golden Gate National Recreation Area upheld).

^{52. 608} F.2d 1250 (9th Cir. 1979); see also Tarlock, supra note 49, at 266.

^{53.} *Kleppe*, 608 F.2d at 1253.

^{54.} Mark Squillace, *Common Law Protection for Our National Parks, in* OUR COMMON LANDS: DEFENDING THE NATIONAL PARKS 87, 96 (David J. Simon ed., 1988).

^{55.} See id. at 97. The most celebrated public trust concept case in American jurisprudence, *Illinois Central Railroad v. Illinois*, 146 U.S. 387, 460 (1982), found that the state could not divest itself of the responsibility to govern submerged lands for the benefit of the public. *Id.* at 96-97. The extension between waterways to public lands evolved from *Gould v. Greylock Reservation Commission*, 350 Mass. 410, 215 N.E.2d 114 (1966). See Squillace, *supra* note 54, at 97. In this case, a private developer blocked by a judicial rule that favors protection rather than encroachment by private interests. See id.

^{56.} Tarlock, *supra* note 49, at 268; *see generally* Joseph L. Sax, *Liberating the Public Trust Doctrine from its Historical Shackles*, 14 U.C. DAVIS L. REV. 185 (1980).

meaning.⁵⁷ In spite of ultimately rejecting and eliminating the public trust doctrine, the court in Sierra Club v. Andrus stated that the "Secretary has an *absolute duty*, which is not to be compromised ... to take whatever actions and seek whatever relief as will safeguard the units of the National Park System."58 To date, the public trust doctrine as a limitation on agency decision making has been curtailed by the courts, however, several leading scholars have argued that the NPRA might hold "a sufficient basis for judicial implication of trust duties because it 'expressly create[s] high duties that set standards not dissimilar to those imposed on private trustees.""59 It remains to be seen whether courts in the future will apply this doctrine to afford greater protection for the parks, but at a very minimum, the doctrine may effectively serve as "a backstop against the most egregious actions by the government" when the statutory directives are ambiguous and without a clear public benefit.⁶⁰ VERP's data, for example, shows that there is generally strong public support for such measures as restricting parking to preexisting designated spaces and certain visitor restrictions, even if it means that immediate access to national parks is not available.⁶¹ VERP may revolutionize park management decisions through public opinion by defining how many visitors a particular park can handle and therefore, perhaps almost unintentionally, protect the parks' resources in a pseudo-private trust for generations to come and yet also protect the present visitor experience as well. In this way, VERP is helping the NPS to make the notion of rationing visitors to certain parks defensible against being arbitrary in court and perhaps reintroducing the public trust doctrine to national parks issues. Similarly, VERP may serve NPS management decisions against future political pressure from both preservation and use advocates.

III. ROAD BUILDING, ISTEA, AND PRESERVATION

While overcrowding remains one of the top concerns for the national parks, transportation issues coupled with overcrowding lingers as

See Tarlock, supra note 49, at 268-69. The Sierra Club convinced a District Court to 57 partially rely on the public trust doctrine in Sierra Club v. Dept. of Interior, 398 F. Supp. 284, 287 (N.D. Cal. 1975), but later in Sierra Club v. Andrus, 487 F. Supp. 443 (D.D.C. 1980) (Sierra Club alleged NPS must implement public trust duties in reserved water rights in southern Utah), the court formally "eliminated 'trust' notions in National Park System Management." Id. at 268-69; see also Squillace, supra note 54, at 98-99.

⁴⁸⁷ F. Supp. at 448. 58.

⁵⁹ See Tarlock, supra note 49, at 274; see also Squillace, supra note 54, at 87-99; Charles Wilkinson, The Public Trust Doctrine in Public Land Law, 14 U.C. DAVIS L. REV. 269, 293-94 (1980) [hereinafter Public Trust].

^{60.} Squillace, *supra* note 54, at 99.61. A study conducted by Colorado State University and by the NPS confirms VERP's results. Public Trust, supra note 59.

the top concern and the most complex question for the parks' futures.⁶² Not only are more people inundating the parks, most of them arrive in cars and rarely stray far from them.⁶³ The tourists usually ask three basic questions at entrance stations and visitor centers, namely, "(1) Where's the john? (2) How long's it take to see this place (3) Where's the Coke machine?"⁶⁴ As Edward Abbey cynically wrote thirty years ago, the tourists would line up to get into parks' campgrounds in elaborate house trailers and through

their windows you will see the blue glow of television and hear the studio laughter of Los Angeles; [while] knobby-kneed oldsters in plaid Bermudas buzz up and down the quaintly curving asphalt road on motorbikes; [and] quarrels break out between campsite neighbors while others gather around their burning charcoal briquettes (ground campfires no longer permitted—not enough wood) to compare electric toothbrushes.⁶⁵

Abbey, as a park ranger in Arches in the 1960's, relayed a story in Desert Solitaire: A Season in the Wilderness about a confrontation he had with a survey crew laying out a new road in which he dared ask the simple question of why the road was needed at all.⁶⁶ The crew quickly responded that it was Abbey himself who needed the road there because there were too few tourists in this particular park and a road was needed to get "ten, twenty, thirty times as many tourists in here as you get now."⁶⁷ Arches, Grand Canyon, and Zion National Parks have since that time become perfect examples of what Abbey most feared. Within a few years, the two parks went from small, almost hidden, remote areas to modern, paved, conventional high-speed highways "interrupted at numerous places by large asphalt parking lots."68 Since there are limited parking spaces available for certain attractions-during peak tourist season in even the biggest parking lots, visitors spend their time vying for a parking spot instead of enjoying the scenery-"the experience for a lot of visitors is simply trying to avoid hitting other vehicles."⁶⁹ In the past, management's only option would have been to build bigger and bigger parking lots within the park in an attempt to accommodate all the extra

^{62.} See EVERHART, supra note 4, at 94-98.

^{63.} See Todd Wilkinson, Road Block Ahead?, NAT'L PARKS, Sept.-Oct. 1997, at 22 [hereinafter Road Block Ahead].

^{64.} EDWARD ABBEY, DESERT SOLITAIRE: A SEASON IN THE WILDERNESS 45 (1968).

^{65.} Id. at 44-45.

^{66.} Id. at 42-44.

^{67.} *Id.* at 44. Ultimately, Abbey followed the survey crew's tracks while systematically removing the carefully placed wooden stakes and cutting all the bright ribbons in a futile effort to stop the road through Arches. *See id.* at 58-59.

^{68.} *Id.* at 45-46.

^{69.} Road Block Ahead, supra note 63 (quoting Zion Superintendent Don Falvey).

visitors and their cars.⁷⁰ Furthermore, road and parking lot building arguably causes more damage to park resources than any other kind of development because construction through the rugged back country requires blasting rock and utilizing heavy machinery through fragile ecosystems.⁷¹ Thus, Abbey asks the pertinent question: "[W]hy is the Park Service generally so anxious to accommodate ... the indolent millions born on wheels and suckled on gasoline, who expect and demand paved highways to lead them in comfort, ease and safety into every nook and corner of the national parks?"⁷²

Historically, roads were considered an acceptable and appropriate development from the days of the Organic Act and before.⁷³ For example, during Stephen T. Mather's administration as the first director of the newly established NPS in 1916, he advocated the construction of new roads to prepare the parks for the inundation of automobiles to come, noting that the "road problem (the need for more and better roads) ... [was] one of the most important issues before the Service."⁷⁴ In contrast, similarly destructive development of reservoirs or mines was considered inappropriate for the national parks due largely to the efforts of John Muir and the Sierra Club who had, recall, considered tourism and road building to be acceptable and even desirable to provide a bulwark against more exploitative and consumptive uses of the land.⁷⁵

Mather, for one, understood the problems associated with building too many roads, but was nevertheless convinced that every major park needed a major road to penetrate "into the heart of the scenic backcountry" and thought that most American citizens would want the agency to utilize "every nook and corner" of the parks.⁷⁶ In 1915, for example, Mather, bought the already hastily constructed Tioga Road with the financial help of the Sierra Club in order to encourage more travel to Yosemite.⁷⁷ Encourage he did: the Tioga Road eventually became swamped with travelers inching along the fifty-six mile road and yet was simply impassable in inclement weather.⁷⁸ During the 1950s, the NPS decided to rebuild and enlarge the Tioga Road to meet modern standards; bulldozers blasted through glacially polished granite creating horrific

^{70.} See id.; see also Shaw, supra note 1, at 829.

^{71.} See EVERHART, supra note 4, at 94.

^{72.} ABBEY, *supra* note 64, at 49.

^{73.} See SELLARS, supra note 9, at 59-60.

^{74.} Id. at 59-60.

^{75.} See supra text accompanying notes 18-26.

^{76.} *Id.* at 60 (quoting Steven T. Mather, former NPS director).

^{77.} See EVERHART, supra note 4, at 95.

^{78.} See id.

destruction through one of the most fragile sections of Yosemite.⁷⁹ The new Tioga Road has given the public the "unparalleled opportunity" to drive through one of the most beautiful and inspiring sections of the park, but only another ice age would return the park to its original state.⁸⁰ Ironically, the Sierra Club, which initially helped fund the purchase of the road, was the biggest opponent of the new, expanded road project.⁸¹ It should be clear now that national parks simply cannot indefinitely continue accommodating every person who wants to drive his or her automobile through the parks. If the parks "are to retain their distinctive character, the numbers of people and their means of access will have to be controlled; in seeking solutions to park access, new roads should be considered the last resort."82 Ostensibly, new policies and regulations have curtailed, to some extent, the road construction horrors of early park history, and there are now more controls and standards that allow road decisions to be made with more care for the environment and the ecosystems involved.83

An example of legislation that attempted more control and care for the environment of public parks generally is the Department of Transportation Act of 1966 (DOTA) which imposed two major requirements with respect to any historic site, recreation area, or public park.⁸⁴ First, the DOTA dictated that a road project could not use a park or recreation area unless there was no "prudent and feasible alternative" or, if an alternative could not be found, unless it included "all possible planning to minimize harm ... resulting from the use."85 The Supreme Court, in Citizens to Preserve Overton Park, Inc. v. Volpe, has interpreted this statute broadly, using tough language to support the statute and to fortify the seemingly formidable barrier to road building through parks by forcing an agency to select an alternative that would impose the least amount of harm and not destroy or "substantially impair" the value to the public.⁸⁶ However, this outwardly tough standard contemplated in Overton Park, the so-called "no build" alternative involving truly unique problems or factors, has been generally disregarded in recent years since

^{79.} See id. at 95-96.

^{80.} See id. at 96.

^{81.} See id. at 95-96.

^{82.} Id. at 98.

^{83.} For example, the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370*d*, the Wilderness Act, 16 U.S.C. §§ 1131-1136, the Endangered Species Act, 16 U.S.C. §§ 1531-1544, and the Clean Air and Water Acts, 42 U.S.C. §§ 7401-7671 and 33 U.S.C §§ 1251-1387.

^{84. 49} U.S.C. § 303 (1994). Repealed in 1983 but codified without substantive change as 49 U.S.C. § 303. See also Stephen H. Burrington, *Restoring the Rule of Law and Respect for Communities in Transportation*, 5 N.Y.U. ENVTL. L.J. 691, 711 (1996).

^{85. 49} U.S.C. § 303(c)(1), (2) (1994); see also Burrington, supra note 78.

^{86. 401} U.S. 402 (1971); Burrington, *supra* note 78, at 711-12.

1985.⁸⁷ Courts have rarely reversed an agency decision to build, and, with the rapid growth in traffic volumes generally throughout the country, "the existing or predicted congestion that courts have found to justify using parks and historic properties for road projects is, in today's context, neither 'truly unusual' nor 'unique,' but instead commonplace."⁸⁸

A. ISTEA, an Alternative Transportation Directive

However, much like VERP discussed above, the Intermodel Surface Transportation Efficiency Act (ISTEA) of 1991, may play a revolutionary and vital role in how people will get around in the national parks, and, subsequently, what kind of experience they ultimately will have in the parks.⁸⁹ National Parks and Conservation Association's deputy director, Al Eisenberg, has noted that "ISTEA provided an incentive to look into the future and anticipate tomorrow's problems today. The intent was to encourage citizens and policy makers to view transportation in a broader context than their own cars."⁹⁰ In addition to funneling a proposed \$161 million per year to the NPS for road repair and similar projects, ISTEA also requires studies on the feasibility of alternative transportation modes in the parks.⁹¹ ISTEA is due this year for re-authorization and it will be either re-enacted as presently codified or passed as the National Economic Crossroads Transportation Efficiency Act of 1997 (NEXTEA)

^{87.} See Burrington, supra note 78, at 712-13; see also Louisiana Envtl. Soc'y, Inc. v. Coleman, 537 F.2d 79 (5th Cir. 1976); D.C. Fed'n of Civic Ass'ns v. Volpe, 459 F.2d 1231 (D.C. Cir. 1972).

^{88.} Burrington, *supra* note 78, at 716. The growth in traffic congestion in urban America has "outstripped the ability of any plausible program of highway expansion to return the nation's roads to the relatively free-flowing conditions that were once considered the norm." *Id.* at 715; *see also* 1 Texas Transportation Institute, *Trends in Urban Roadway Congestion—1982-1992* (1995); U.S. SECRETARY OF TRANSPORTATION, 102d CONG., THE STATUS OF THE NATION'S HIGHWAYS AND BRIDGES: CONDITIONS AND PERFORMANCE 27 (Comm. Print 1991).

^{89.} ISTEA, 23 U.S.C. §§ 101-402 and scattered sections of 49 U.S.C. §§ 101-5907 (1994). Generally, ISTEA "affects all surface transportation, except for railroads and shipping." *Road Block Ahead, supra* note 63. It directs that "State[s] must set aside at least 10% of the federal highway monies" they received and use those funds for several types of aesthetic and environmental "enhancements" like "establishing new biking paths on abandoned rail lines." *Id.* Most importantly for the present discussion, however, is the fact that the NPS has discretion with a small portion of the ISTEA funds for alternate transportation systems studies and implementation in the parks. "Since it was first enacted in 1991 and hailed as a breakthrough law, ISTEA has helped to curb traffic congestion at Yosemite ... [and] has the potential to help halt the defoliation of roadside forests at Great Smokey Mountains and eliminate ozone at Acadia." *Id.*

^{90.} See Road Block Ahead, supra note 63.

^{91.} See id.; see also Kevin Collins, Environmental Law Face Review in New Congress: 105th Congress will consider Landmark Laws Affecting Parks, NAT'L PARKS, Jan.-Feb. 1997, at 15.

or one of the other proposals now before Congress.⁹² Overall, the size of ISTEA funding and the opportunity to use federal monies for different modes of transportation has given States and federal agencies the opportunity to look at alternative transportation schemes and projects that would not normally be within their financial parameters.⁹³ The policy and purpose of a federal subsidy like ISTEA appears to be to more rapidly increase "the economic and social benefits of improvements in transport service and of lowered transport costs when entirely new transport technology became available."⁹⁴ The federal government is attempting to steer States and agencies like the NPS into exploring alternate transportation technologies and planning strategies in an effort to hasten environmental protection.⁹⁵ Further, the federal government is securing a flexibility to change the old approaches to the same environmental issues through fund apportionment schemes like ISTEA.⁹⁶

B. An Intelligent Transportation Initiative

Meanwhile, Secretary of the Interior, Bruce Babbitt, and Secretary of Transportation, Rodney Slater, joined recently together to "underscore the commitment of both federal agencies to work together to conserve the magnificent natural resources of America's National Parks."⁹⁷ Both Secretaries signed a "Memorandum of Understanding" purporting to be the "next step in the implementation of President Clinton's vision for the future in his 'Parks for Tomorrow' initiative outlined on Earth Day, 1996."⁹⁸ The two stated that they were optimistic for the future and that efforts would be made to assure that future generations will be able to see the parks "with as good or better a quality of experience than we have today."⁹⁹ The memorandum specifically establishes: (1) an interagency, multi-disciplinary team to develop parks transportation policy; (2) a personnel exchange program to encourage expertise across agency lines;

^{92.} See Arnold W. Reitze, Jr., Improving Transportation-Related Air Quality under the Clean Air Act's Conformity Requirements and the Intermodal Surface Transportation Efficiency Act of 1991, 3 ENVTL. L. 631, 636 (1997). The full text of NEXTEA, Hearing on Senate Bill 468, 105th Cong. 1 (1997), can be found on the Internet at <hr/><htps://ftp.loc.gov/pub/thomas/c105/s468.rcs.txt>. One coalition, the Surface Transportation Policy Project, has created a Website on ISTEA and NEXTEA issues at <http://www.istea.org>.

^{93.} See Reitze, supra note 92, at 665.

^{94.} Joseph P. Thompson, *ISTEA Reauthorization and the National Transportation Policy*, 25 TRANSP. L.J. 87, 94 (1997).

^{95.} See Reitze, supra note 92, at 636.

^{96.} See id.

^{97.} Dep't of the Interior, *Transportation Interior to Announce New Partnership to Handle Transportation Needs in Parks for the 21st Century*, 1997 WL 737238, at *1.

^{98.} *Id.*

^{99.} Id.

and, perhaps most importantly; (3) an "Intelligent Transportation Systems" (ITS) technology to develop and implement transportation improvement initiatives.¹⁰⁰ There are already several demonstration ITS projects currently in use. In Zion, for example, an open air shuttle bus service carries tourists from nearby hotels and campgrounds to various attractions throughout the park. Zion has only one paved road through the park's main attractions and, not only has the shuttle service decreased traffic congestion, it also provides a better way to see the canyon. Much of the experience at Zion involves looking up at the surrounding, majestic cliffs, and the open air shuttle bus allows for an unobstructed view. Yosemite's management is also proposing a similar in-valley shuttle system combined with a plan to remove unnecessary roadways and buildings in an effort to restore the entire east end of the Yosemite Valley to its natural condition.¹⁰¹ Perhaps the most radical implementation of the newly attempted demonstration projects is at Grand Canyon National Park. NPS management hopes not only to have alternative fuel busses similar to those in Zion and Yosemite in the most congested areas, but also plans to implement a light-rail train from Mather Point to Tusayan and to various other popular viewing areas and facilities.¹⁰² Babbitt describes these plans as pointing

toward the twenty-first century, and the direction we must follow if visitors continue to love and spend time in their national heritage, our premier system of National Parks.... [and a] new generation of Americans will reap the benefits... and will be able to view and appreciate these majestic landscapes with more serenity and clearer air.¹⁰³

ISTEA's funds, or alternatively ISTEA's successor NEXTEA's funds, coupled with the President's and the NPS's present policy plans outlined by the Secretaries above, arguably begins a new era. This new era recognizes our duty to future generations to keep the parks unimpaired and seeks to repair the damage done by the preservation and use dual mandate present in the Organic Act of 1916 and its prodigy.

Indeed, Edward Abbey suggests that there was never really a dichotomy between preservation or use, but rather only a simple question of "accessibility."¹⁰⁴ Do we want the parks to be fully accessible not only to people, but also to their cars, machines, boats, campers, and so forth?¹⁰⁵ Abbey suggests that a large Smokey the Bear stand next to a 100 foot

^{100.} See id. at *2.

^{101.} See id.

^{102.} See id.

^{103.} Id.

^{104.} See ABBEY, supra note 64, at 48.

^{105.} See id.

high billboard at national parks' entrances that would recite in "a voice ursine, loud and clear," the billboard's message:

HOWDY FOLKS. WELCOME. THIS IS YOUR NATIONAL PARK, ESTABLISHED FOR THE PLEASURE OF YOU AND ALL PEOPLE EVERYWHERE. PARK YOUR CAR, JEEP, TRUCK, TANK, MOTORBIKE, MOTORBOAT, JETBOAT, AIRBOAT, SUBMARINE, AIRPLANE, JETPLANE, HELICOPTER, HOVERCRAFT, WINGED MOTORCYCLE, ROCKETSHIP, OR ANY OTHER CONCEIVABLE TYPE OF MOTORIZED VEHICLE IN THE WORLD'S BIGGEST PARKING LOT BEHIND THE COMFORT STATION IMMEDIATELY TO YOUR REAR. GET OUT OF YOUR MOTORIZED VEHICLE, GET ON YOUR HORSE, MULE, BICYCLE OR FEET, AND COME ON IN. ENJOY YOURSELVES. THIS HERE PARK IS FOR *PEOPLE*.¹⁰⁶

Although Abbey obviously advocates a complete ban on any motorized traffic into national parks; ultimately, it is the ordinary citizen, voting for their various elected officials who in turn initiate and pass programs like VERP and ISTEA, who must decide best how to provide for the enjoyment of the people, yet leave the parks unimpaired.

C. Vail Symposium Recommendations

In 1991, at the 75th Anniversary Symposium held in Vail, Colorado, the NPS initiated an intensive and major review of their responsibilities and policies for the next century and beyond.¹⁰⁷ The symposium found that the NPS's role has evolved over the last seventy-five years and is now "called upon to play a broad role of preserving, protecting, and conveying to the public the meaning of those natural and cultural resources that contribute to the nation's values, character, and experience."¹⁰⁸ The symposium's "Steering Committee" developed six hierarchical, strategic objectives that envelop the NPS's contemporary role and vision for the future: (1) protect park resources as the main, primary responsibility of the NPS, (2) provide access to the nation's values, character, and experience, (4) assist in international park affairs and provide leadership for others in managing their park resources, (5) engage

^{106.} Id. at 57.

^{107.} See NATIONAL PARK SERVICE, NATIONAL PARKS FOR THE 21ST CENTURY: THE VAIL AGENDA 2 (1992) (forward by Bruce Babbitt and preface by Roger Kennedy, Director of NPS). The symposium brought together nearly 700 experts and interested parties and was charged with writing a "comprehensive report and set of recommendations for improved park system stewardship and NPS management." *Id.*

^{108.} Id. at 2-3.

in science and research aimed at protecting park resources, and finally (6) maintain a professional work force and organization.¹⁰⁹ Not only has the Committee made park resource protection its primary goal, but it has further made it a fundamental breach of the public trust to irreparably alter and degrade the national parks with improper stewardship and protection.¹¹⁰ The Committee acknowledges that different parks have different capabilities and that visitor activities wholly appropriate in one park may completely and irreparably damage another.¹¹¹ Therefore, there is no simple, universal rule for the dual mandate of preservation and use and every park must be evaluated and managed with that park's unique quality fully realized and ultimately protected.¹¹²

IV. CONCLUSION

On the whole, we have realized that our national parks are marked by contrast, some being more ecologically sensitive and requiring more attention to perhaps very subtle ecological differences than others. This realization and incorporation into future policy should be of paramount importance to the NPS. The NPS is, after all, the chosen guardian of our national treasures held in public trust. The NPS must ensure future generations unimpaired national parks, not national parks plagued by overuse and careless road construction as it has repeatedly tolerated and even fostered in the past. Therefore, a heightened and careful scrutinization must be made on any particular park's acceptable visitor level and specifically, on any proposed road or construction project. Initiatives like VERP will, for the first time, allow the NPS to make informed decisions about the appropriate amount of use in any individual park. Similarly, ISTEA, or its prodigy, will allow the NPS the flexibility needed to alter park travel to less harmful modes of transportation in the These two programs begin to simultaneously elevate visitor future. experience and preserve the park as much as currently possible for the benefit of our children and beyond. Couple these programs with future initiatives, as contemplated by the Vail Symposium experts and hopefully others in the future, and our chances of saving the parks unimpaired increases dramatically.

Although the automobile has created a fantastic opportunity for ordinary citizens to view the majesty of Yosemite or the grandeur of Zion, ultimately the trade-off is too costly when it involves substantially

^{109.} See id. at 3-4.

^{110.} See id. at 15-16.

^{111.} See id. at 17-18.

^{112.} See id. at 18.

harming the parks, as road construction surely and invariably does. So, what will our generation's legacy be? We could simply maintain existing roads, but develop less harmful transportation alternatives for the future. Similarly, we could maintain the current preservation and use dual mandate by limiting visitor accessibility to a reasonable level. Or, perhaps it is time to depart from the nearly century-old dual mandate and completely ban cars altogether as Abbey advocated. Or, we could simply leave the parks from this day forward as we have found them. In sum, much like Beethoven's Ninth Symphony, the Sistine Chapel, and the works of Shakespeare, our national parks are treasures of Western civilization that must be passed on as intact as possible from one generation to another.