

## Determining the appropriateness of automobile-based tourism in the national park system

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**THE NATIONAL PARK SERVICE PROTECTS SOME OF AMERICA'S** most treasured landscapes, but its dual mission of preservation and recreation sometimes creates controversy when human activities seem to degrade natural and cultural resources.<sup>1</sup> Consequently, the agency must carefully consider potential impacts to resources when planning new recreation programs in parks. This issue is especially relevant today: the National Park Service is currently preparing a proposal to increase automobile-based tourism in one of its parks. The agency seeks to have the portion of U.S. Route 209 that lies within Delaware Water Gap National Recreation Area designated as a scenic byway by the commonwealth of Pennsylvania and, ultimately, the federal government. The designation would provide the National Park Service with funds to improve roads, add pull-outs, and add interpretive facilities to promote car-based tourism in the park. This type of tourism could have both beneficial and damaging effects on the park.

In March 2010, I was one of eight graduate students invited to Delaware Water Gap National Recreation Area on behalf of the George Wright Society, the National Park Service, and the U.S. Geological Survey in order to participate in Park Break, a week-long educational program with classroom- and field-based activities. We prepared an inventory of the natural and cultural resources along U.S. Route 209 to support the proposal for the scenic byway designation. During the project, I became familiar with the resources in the park, and I reflected on the potential effects of the scenic byway program.

In this essay, I will first demonstrate that Congress intended for the National Park Service to prioritize resource conservation ahead of tourism, but that some parks (including Delaware Water Gap National Recreation Area) are exceptions to this general rule. This fact allows the NPS to develop tourism programs that may harm park resources. However, despite this capability, I question the appropriateness of automobile-based tourism programs such as the national scenic byways in the national park system. I will use Delaware Water Gap as a case study and present rationales for and against the designation of U.S. Route 209 as a scenic byway. Ultimately, the National Park Service will decide whether to advance the proposal; these are some of the factors the agency should consider.

### **The National Scenic Byways Program**

The National Scenic Byways Program (NSBP) was established by Congress in 1991 to protect and promote a collection of distinctive American roads.<sup>2</sup> Most scenic byways are specifically recognized for their remarkable scenic vistas, but the program also protects other qualities such as cultural and historic resources. By preserving such a diverse assortment of roadways, the program provides travelers—both commuters and tourists alike—with opportunities to learn about and appreciate the resources of the United States.

Unlike other federal conservation programs that are mandatory (e.g., that of the national wilderness preservation system, which requires federal agencies to survey and protect lands with pristine natural character), the national scenic byways program is voluntary. The foundation of the program comes from individual grassroots organizations that seek to protect their local roadways. Proposals for new scenic byways come from citizen groups, nonprofit organizations, tribes, state governments, federal agencies, and any combination of interagency collaborative efforts (Kelley 2004). Officials from the Federal Highway Administration review the proposals and make recommendations to the secretary of transportation, who has the authority to decide which roads are designated as national scenic byways.

Once a scenic byway is designated, the nominating organization typically receives funding for tourism-related projects from the Federal Highway Administration. This funding may be used for road improvements, installation of kiosks or interpretive exhibits, and production of educational materials such as brochures

and audiotapes. It is this federal financial assistance that provides the incentives necessary to drive the voluntary nomination process. In the first twelve years of the program, designated scenic byways received more than \$170 million to improve automobile-based tourism (Kelley 2004). This potentially lucrative business helps explain some of the motivation of the nominating organizations.

The National Park Service already manages a substantial portion of the national scenic byways. Administration can be complex due to the fact that a single road may pass through both public and private lands; that said, the National Park Service plays at least a partial administrative role in approximately 39% of the byways (Kelley 2004). These include renowned roadways such as Skyline Drive (in Shenandoah National Park, Virginia) and Death Valley Scenic Byway (in Death Valley National Park, California) as well as lesser-known multi-agency efforts such as Utah's Patchwork Parkway (which passes through Cedar Breaks National Monument). Of the federal resource management agencies, only the Forest Service is as heavily involved in the Scenic Byways Program. The Bureau of Land Management, Fish and Wildlife Service, and Bureau of Indian Affairs operate substantially fewer roadways.<sup>3</sup> To gauge the appropriateness of automobile-based tourism as a management goal of a federal land management agency such as the National Park Service, it is useful to examine the agency's mission.

### **Evolution of the National Park Service mission**

National parks are a distinctly American idea, though the meaning of "national park" has transformed several times. The world's first was Yellowstone National Park, established in 1872. Congress continued to create new parks in the following decades—Yosemite in 1890, Mount Rainier in 1899, Crater Lake in 1902, and others. By 1916, the Department of Interior was responsible for managing 14 national parks, but it had neither an administrative agency nor management directives from Congress to accomplish the task.

With the National Park Service Act of 1916 (commonly called the "Organic Act"), Congress created a new Interior agency, the National Park Service, and provided it with administrative direction. This document remains today the primary source of information regarding management goals for NPS units. Congress declared that the purpose of the National Park Service 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 a manner and by such means as will leave them unimpaired for the enjoyment of future generations (P.L. 64-235).

A few points are particularly germane to the issue of national scenic byways in national parks. "Scenery" is the first resource mentioned in the mission statement, suggesting that the Scenic Byways Program is an appropriate use of NPS lands. Furthermore, the act directs the agency to "provide for the enjoyment" of people; that is, recreation is a major purpose of the agency. On the other hand, the mission statement also stipulates that management should ensure the preservation of resources for future generations.

It would seem that this dual mission of conservation and tourism would have stirred controversy for the young agency. This was generally not the case, however. In its early years, the National Park Service was able to increase tourism to parks without much uproar from conservationists (Sax 1980, 6–7). The high number of visitors helped increase public support for parks, and so it was in the interest of preservationists to allow tourism. Furthermore, the West was only sparsely populated and many Americans did not yet have the means (i.e., personal vehicles and vacation time) to visit the remote national parks, so adverse effects of tourism were minimal.

As the century progressed, however, the American population and new demands for recreation boomed. Eventually the dual mission of the NPS created uncertainty, and Congress responded by passing amendments to clarify the agency's goals.

In 1970 and 1978, Congress passed acts that reaffirmed the importance of natural and cultural resources in the national parks. The first, the Act to Improve the Administration of the National Park System of 1970 (known as the "General Authorities Act"), united all protected areas administered by NPS into a single national park system (P.L. 91-383). This clarification was necessary because NPS had been charged with the administration of many areas other than those designated as "National Parks" such as national recreation areas, national lakeshores, national seashores, and wild and scenic rivers. This law removed any doubt that areas with these additional designations were to be managed under the authority of the original Organic Act. It is this fact that relates specifically to Delaware Water Gap National Recreation Area. Despite the fact that the area is not designated as a "National Park," it is a unit of the national park system and must be managed for both conservation and tourism. In 1978, Congress finally provided direction to the National Park Service for balancing conservation and tourism, and it favored conservation as the primary goal for the agency. The Redwoods Act of 1978 (which, despite the name, included statements regarding the entire NPS) stated the following management directives for national park system units:

The *authorization of activities* shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and *shall not be exercised in derogation of the values* and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress (P.L. 95-250, emphasis added).

In this passage, known as the "anti-derogation clause," the original non-impairment standard of the Organic Act is reaffirmed; only management activities that do not degrade park resources shall be permitted. Thus, tourism is a secondary objective of the National Park Service, and only tourism that fits within the confines of conservation is appropriate for a unit of the national park system (Keiter 1997). Therefore, a proposed national scenic byway within a National Park Service unit would have to be managed carefully, so as not to degrade park resources. The clause does allow room for exception, however, if the park's establishing act provided for certain activities. Consequently, it is necessary to examine the specific legislation regarding Delaware Water Gap National Recreation Area to determine whether it would be an exception to these congressional acts.

#### **Specific mission of Delaware Water Gap National Recreation Area**

The central feature of Delaware Water Gap National Recreation Area is the Delaware River, which serves as the border between Pennsylvania and New Jersey. The river is the longest unmodified river in the eastern United States, and the entire 35-mile stretch of river located within the park is designated as a "National Scenic River" under the Wild and Scenic Rivers Act. The park also includes the forested hills on either side of the river, to bring the total protected area to 69,260 acres (NPS 2005).

The park is significant for natural, cultural, and historic reasons. In addition to the river, the park has numerous other interesting aquatic features. There are spectacular waterfalls on both the Pennsylvania and New Jersey sides of the park; there are about 150 lakes and ponds; and the park includes about 600 acres of wetlands (NPS 2005). Although no federally listed endangered species reside in the park year-round, the park does support some rare and significant wildlife. For example, pere-

grine falcons and bald eagles have been sighted in the park (NPS 1987). Threatened species living in the park include some 49 plant, 9 fish, 10 amphibian, 7 reptile, and 13 mammal species (NPS 2005). Furthermore, the Delaware River Valley shows evidence of human habitation for thousands of years, and some pre-historic and historic sites are located within the national recreation area. The park includes 487 documented archaeological sites (NPS 2005). And at least 70 culturally significant sites have been recognized by the National Register of Historic Places (NPS 1987). These resources were important for the original designation of the park, and the National Park Service should take them into consideration when planning management actions.

The enabling legislation for Delaware Water Gap National Recreation Area provides the National Park Service with guidance for how to balance conservation and tourism. And interestingly, it describes the goals differently from the acts applicable to the national park system overall. Congress established this park

*for public outdoor recreation use and enjoyment of the proposed Tocks Island Reservoir and lands adjacent thereto by the people of the United States and for preservation of the scenic, scientific and historic features contributing to public enjoyment of such lands and waters (P.L. 89-158, emphasis added).*

In this legislation, tourism is described first and conservation second. The National Park Service has since interpreted this congressional instruction to mean that tourism should be prioritized above other uses. The agency wrote a general management plan for the park that states management objectives “in order of priority: (1) public outdoor recreation benefits; (2) preservation of scenic, scientific, and historic features contributing to public enjoyment; (3) such utilization of natural resources” as deemed appropriate by the secretary of the interior (NPS 1987). Thus, a congressional statement that could reasonably be interpreted as an unprioritized list of potential uses of the park seems to have evolved into a prioritization scheme by the agency.

Given this entire collection of documents, it is clear that a national scenic byway is an allowable activity within Delaware Water Gap National Recreation Area. The stipulation that tourism not degrade park resources, which applies generally to the national park system, appears to be more ambiguous with respect to Delaware Water Gap because of the specific wording in the enabling legislation and subsequent park management plan. However, even though tourism is allowed to impact park resources to some degree, Congress has not negated the NPS mission of conservation entirely. Indeed, “preservation” of resources is the second objective for the park in its management plan. Thus, given the fact that a national scenic byway could be permitted, the question becomes whether it would be a responsible use of the park.

### **The case for a national scenic byway**

Delaware Water Gap National Recreation Area is an ideal place for many urbanites to experience nature relatively close to home, and the “National Scenic Byway” designation may be a good way to promote that opportunity. The park is located in the highly populated northeastern region of the country, and the large metropolitan centers of New York and Philadelphia are within a 90-minute drive. City dwellers considering a vacation may be especially pleased with the sort of “reversal” offered by the rural landscapes of Delaware Water Gap. This potential audience and their motivations cannot be underestimated; in fact, the search for “otherness” is one of the primary reasons that people travel (Urry 2002, 2–3). A national scenic byway that promises views of working farms, natural waterfalls, and brilliantly colored forests in autumn could be very easily marketed as a retreat from urban life.

Bringing urbanites to the Delaware River Valley has the additional benefit of offering a nature-based vacation to demographic groups that currently have ambivalent or even fearful feelings toward nature. For example, a survey of over 500 American youth found that black and Hispanic students were more likely to describe forest environments as threatening, while white students were more likely to describe them as safe and pleasing (Viriden and Walker 1999). If racial or ethnic minorities feel uneasy about experiencing nature, then a program like the national scenic byways could be a good introduction. Visitors unfamiliar or uncomfortable with remote, natural areas may appreciate the ability to view the varied landscapes of Delaware Water Gap from the safety and comfort of their personal vehicles.

The ramifications of such a program would spread beyond just the participants, too. The environmental awareness gained from a road trip along a scenic byway could affect a person's opinions in the long term. This is potentially important to the environmental movement. Over the last several decades, environmental efforts in this country have been dominated by white, middle-class citizens. This trend has begun to endanger our national parks and other public protected areas because their support is reliant on an ever-dwindling proportion of Americans. In just a few decades, this constituency may not have enough voting power to carry environmental efforts (Rothman 2006). The proximity of Delaware Water Gap to the diversity of New York and Philadelphia would make this park an ideal site for automobile-based tourism, especially if it could be marketed toward traditionally under-represented tourist groups. And beyond the environmental argument, there is an ethical argument for involving a more diverse base. Our public lands represent a common national identity in America, and they should be readily available to all. The fact that national parks are owned by no one, and at the same time by everyone, represents the sort of democratic ideals and equality that define our country.

Delaware Water Gap National Recreation Area is well-placed to serve a diverse group of Americans, including urbanites and suburbanites, at-risk youth, immigrants, and people from a wide array of ethnic backgrounds. And while a wilderness area or thick forest may shock some of these potential visitor groups, the more developed parklands of Delaware Water Gap provide a comfortable avenue into nature. With the right sort of tourism program, the park could bring new groups of Americans into the heart of environmental appreciation and advocacy.

### **The case against a national scenic byway**

With nearly 100 threatened species living in the park, potential impacts to flora and fauna must be considered. A national scenic byway could do direct and indirect harm to wildlife. First, drivers may accidentally collide with animals. Second, the noise and speed of cars could scare off or otherwise disturb wildlife. And third, the increase in paved surface (for roads, pull-outs, parking lots, etc.) would alter the local hydrology, which would impact near-road communities of plants and amphibians. Although conservation may only be a secondary objective for this park, the National Scenic Byways Program has the potential to hamper that objective. Furthermore, the program could harm the park's primary objective of recreation even more.

A national scenic byway has the potential to interfere with existing park uses, and this is one of the strongest reasons not to institute such a program in the park. The park is already a popular site for several forms of recreation, including hiking, birdwatching, hunting, fishing, swimming, boating, and camping. Some of these recreationists value solitude and silence, which would be impacted by traffic along U.S. Route 209. For example, birdwatchers may rest at one site to wait for particular species to come near. But activity by automobiles may disturb the wildlife enough to essentially prohibit birdwatching and other wildlife-viewing. And the installation of more pull-outs (an action likely to follow the byway designation) will bring cars off the road and closer to the natural areas currently used by recreation-

ists. With a designated scenic byway in the park, conflicts between different user groups will likely increase.

It is difficult to predict how incompatible tourist groups will respond to each other, but surveys and observations from other protected areas can provide some estimation. One analogous case study comes from Wienerberg recreation area, a forested park bisected by a roadway outside Vienna, Austria (Arnberger and Eder 2008). Video monitoring over the course of one year was used to identify and characterize interactions between varied recreation groups: walkers, dog-walkers, joggers, bicyclists, skaters, and drivers. Upon review of the videotapes, researchers discovered that avoidance behavior was overwhelmingly more common than adaptive behavior. That is, recreationists of different groups were more likely to move to different areas of the park's trails than to adjust their behavior in order to accommodate one another. Separating uses can be a tourism management tool, but the authors note that a "prerequisite for displacement behavior is the availability of space" (p. 45). In the case of Delaware Water Gap National Recreation Area, recreationists may not have sufficient space to disperse away from each other. For example, the park's McDade Trail sends hikers along a scenic path adjacent to the Delaware River, but this path is also just a few feet from portions of the proposed scenic byway. This provides great opportunity for drivers that want to pull over and step a few feet into the grass, but it simultaneously forces hikers close to traffic. Rather than promote automobile-based tourism in the park, the National Park Service should consider supporting the existing outdoor recreation activities.

The Austrian case study also provides troubling data on the kinds of park users most likely to have conflicts. Drivers were overrepresented in conflicts: they represented approximately 1% of the observed park users but 10% of the interactions between users (Arnberger and Eder 2008). Bicyclists were also overrepresented in conflicts, suggesting that fast-moving recreationists may be more problematic than slow-moving ones. While reduced speed limits on U.S. Route 209 may mitigate this potential problem, an alternative measure would be not to promote automobile-based tourism in the first place.

Some of the scenic byway management techniques suggested by the National Park Service will degrade the park's naturalness, which will in turn create additional user conflicts. If the scenic byway proposal is successful, the agency plans to use some of the funding for selective thinning of roadside trees in order to increase visibility of the Delaware River from the roadway (Chiara Palazzolo, project manager, pers. comm.). This rationale benefits drivers in that it heightens the visual experience for them, but it adversely affects other park visitors. In particular, it will make passing automobiles visible (and possibly audible) to canoeists and kayakers on the river, degrading their sense of remoteness and naturalness. Such a change to the environment could potentially result in legal ramifications for the National Park Service. The portion of the Delaware River that flows through the park was designated by Congress as a National Scenic River in 1978. As such, the Park Service must protect and enhance the intrinsic qualities of the river, described legislatively as "outstandingly remarkable values" (P.L. 90-542). The scenic value from the river is one such value that must be preserved under the Wild and Scenic Rivers Act. Thus, the suggested roadside management along U.S. Route 209 could leave NPS open to lawsuits brought by river users.

### **Management recommendation**

Examination of legal mandates for the National Park Service, generally, and Delaware Water Gap National Recreation Area, specifically, shows that the National Scenic Byways Program is not necessarily contrary to the NPS mission. In fact, the designation of U.S. Route 209 as a scenic byway could help the agency meet its objective of providing opportunities for recreation. But there are serious concerns over

how this new sort of tourism program would affect wildlife, the park's naturalness, and existing park users. In an attempt to increase tourism and appease a wide range of recreationists, the National Park Service may actually cause more conflicts between user groups. In this case study, the wisest decision may be for the National Park Service to focus its efforts on the existing broad array of low-impact, outdoor, nature-based forms of recreation rather than submit its proposal for the designation of U.S. Route 209 as a scenic byway.

### Endnotes

1. See court cases such as *Isle Royale Boaters Association v. Norton*, 330 F.3d 777 (6th Cir. 2003) or *Southern Utah Wilderness Alliance v. National Park Service*, 387 F. Supp. 2d 1178 (D. Utah 2005), both of which saw recreation groups pitted against administrators over appropriate use of resources.
2. The NSBP was established by the Intermodal Surface Transportation Efficiency Act of 1991 (P.L. 102-240). It was reauthorized in 1998 by the Transportation Equity Act for the 21st Century (P.L. 105-178).
3. To browse all of the nation's scenic byways or search for a particular one, see [www.byways.org/explore](http://www.byways.org/explore).

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