

Protect or Profit: Reasons why the Grand Canyon is not a Designated Preserve

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Introduction

On May 6, 1903, President Theodore Roosevelt visited the Grand Canyon. In a passionate speech, he instructed Americans to, “Leave it as it is...[because] The ages have been at work on it, and man can only mar it...keep it for your children, your children’s children, and for all who come after you, as one of the great sights which every American...should see” (Roosevelt, 1903). Roosevelt went on to proclaim the Grand Canyon a national game preserve in 1906 (The Library of Congress, n.d.) and he later declared the land a national monument in 1908 (Krug et al., 1947). In turn, the former game preserve area became known as the Kaibab National Forest (See Figure 1), and surrounded the new national monument (Forest Service National Website^b, n.d.). In 1919, President Woodrow Wilson officially made the Grand Canyon a national park (U.S. Department of the Interior^a, n.d.). The designation of the canyon as a national park replaced its status as a national monument, though President Bill Clinton established a different national monument called the Grand Canyon-Parashant National Monument nearby (See Figure 2) in 2000 (Clinton, 2000).

Different law-enforceable land use designations and protections for the region came with each of these labels. When the Grand Canyon was a game preserve, the Secretary of Agriculture had the authority to instate regulations that protected wildlife from being over hunted or overfished in the area (Roosevelt & Adee, 1908). However, by being designated as a game preserve, the Grand Canyon sustained the introduction of species like trout, bass, or catfish that not only attract fishermen, but also possibly outcompete, or even predate on, native species (U.S. Department of the Interior^j, n.d.). As a national monument, the Grand Canyon was protected from urbanization, or in the words of the proclamation, “warning [was] given to all unauthorized persons not to appropriate, injure or destroy any feature of this National Monument or to locate or settle upon any of the lands reserved” (Roosevelt & Root, 1908). However, neither the designation of the Grand Canyon as a game preserve nor subsequently as a national monument nullified the region’s initial designation as a national forest, i.e. a place that could be used for range, water, recreation, and timber (Forest Service National Website^a, n.d.): None of these titles were about wildlife or ecosystem preservation, but about resource conservation.

As a national monument, the Grand Canyon is discussed as government property, with lands reserved for governmental use, more so than as a natural region to be undisturbed. Even as a national park, the Grand Canyon is recognized by the National Park Service (NPS) as a place

that, “contains a variety of resources.” An NPS webpage defines a national monument as an area that, “lacks [a national park’s] diversity of attractions” (U.S. Department of the Interior^b, n.d.). Seeing the NPS use commercial language to describe landscapes like the Grand Canyon, one must wonder to what extent wildlife preservation and ecosystem health are now, or have ever been, prioritized in the area that now is Grand Canyon National Park (GCNP). There is certainly some effort in caring for the environment at the Grand Canyon, as illustrated by many park communications, like a 2022 Facebook post asking park visitors to secure their trash to prevent coyotes from scavenging campsites for leftovers that are harmful to their health (Grand Canyon National Park, 2022). However, if there are currently other national parks that have been additionally designated as nature preserves (U.S. Department of the Interior^c, n.d.), placing animals and plants as the focus of the park’s purpose rather than people, it must be intentional that the Grand Canyon has not received a designation as a nature preserve or the ecosystem protections that accompany that label. In this paper, the Grand Canyon will be evaluated as a resource and attraction, in the way that it has been labeled by the NPS and American presidents over the course of history. An analysis will be offered as to why the Grand Canyon has never been protected as a national nature preserve, and why it most likely never will be.

Figure 1. Map of Kaibab National Forest.

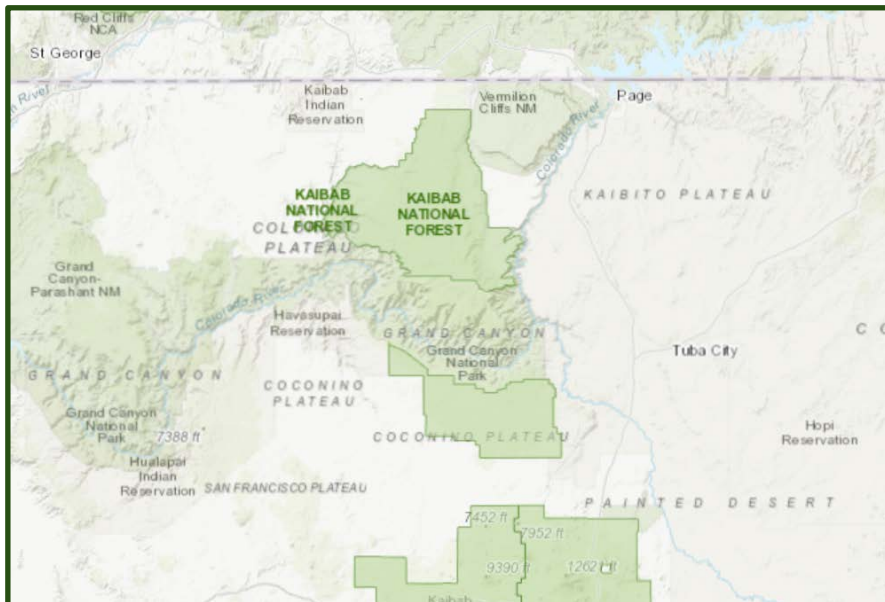
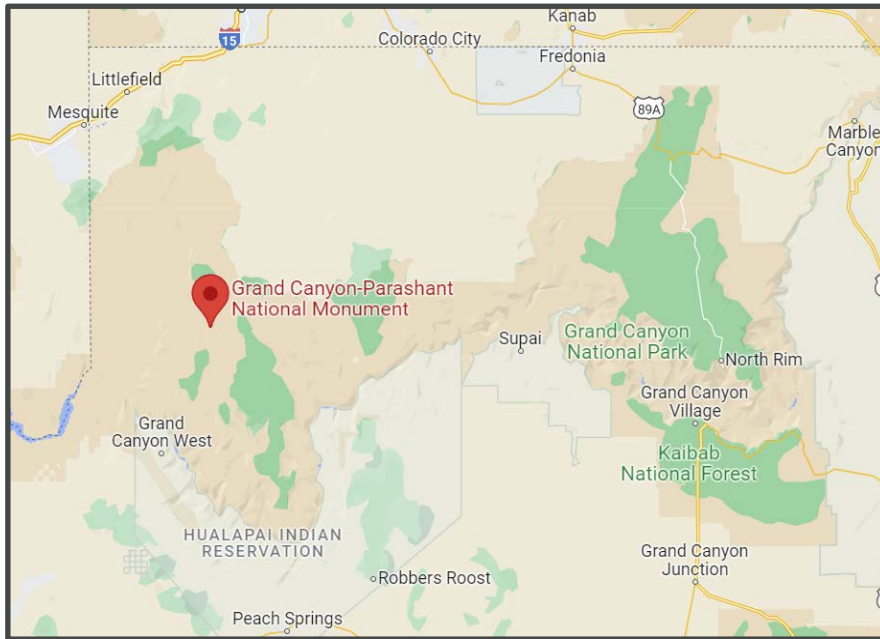


Figure 2. Map indicating the Grand Canyon-Parashant National Monument's location with respect to the Grand Canyon National Park.



Grand Canyon Funding

Funding for the NPS comes from three main sources. The first is Congress, which allocates a budget for the NPS as a federal agency in the Department of the Interior (DOI). The second is park entrance fees and any fines park visitors incur during their time at a national park. Third, the NPS generates revenue from private donations, both from individuals and corporate donors (National Park Foundation^a, n.d.). Funding from Congress is fairly straightforward: It is granted as part of the annual appropriations cycle just like it would be to any other bureau. Visitor fees and philanthropy are the primary funding sources of the NPS that can lead to problems for the Grand Canyon. As per the NPS's Annual Park Ranking Report for Recreation Visits in 2022, GCNP is the second most visited national park in the United States, after only the Great Smoky Mountains (U.S. Department of the Interior^c, n.d.). Visitors to the Grand Canyon made up 5.34% of all visitors to any national park in 2022, which means that the Grand Canyon also accounted for a large percentage of the total revenue that the NPS made in 2022 from park entrance fees, particularly considering that the GCNP has a higher park entrance fee, \$20 per person as opposed to some other parks that are free to enter or only charge \$10 or \$15 (U.S. Department of the Interior^k, n.d.). Of the top 63 most visited national parks in the country, only eight are also categorized as national preserves. Of these eight national parks and preserves, seven make up less than 1% of all national park visits, and of those seven, four make up less than 0.1% of all visits (U.S. Department of the Interior^c, n.d.). These numbers illustrate that the role of these eight parks

in generating revenue for the NPS through park entrance fees is minor compared to that of GCNP (see Table 1). In fact, the combined number of recreation visits at all eight of these national parks and preserves in 2022 totals 3,187,059 which is short of the number of visitors to just the Grand Canyon that same year by over 1.5 million people.

Table 1.

Park	Rank	Recreation Visits	% of Total
Grand Canyon NP	2	4,732,101	5.34%
New River Gorge NP & PRES	18	1,593,523	1.80%
Glacier Bay NP & PRES	36	545,758	0.62%
Great Sand Dunes NP & PRES	41	493,428	0.56%
Denali NP & PRES	44	427,562	0.48%
Wrangell-St. Elias NP & PRES	56	65,236	0.07%
Katmai NP & PRES	57	33,908	0.04%
Lake Clark NP & PRES	60	18,187	0.02%
Gates of the Arctic NP & PRES	62	9,457	0.01%

Private philanthropy also plays a large role in how economic needs overpower ecosystem needs at national parks including the Grand Canyon. Subaru of America is the NPS’s largest corporate partner, having given over \$55 million to the NPS directly and over \$68 million to other organizations working alongside NPS to support the national parks (National Park Foundation^b, n.d.). Subaru has well-established environmental initiatives like its zero-landfill production plants (Subaru of America, 2023), which it has been able to translate into efforts at the NPS, like a waste-reducing program run in Denali, Yosemite, and Grand Teton (National Park Foundation^b, n.d.). All three parks that benefited from the pilot of this initiative with Subaru are preserves in some capacity: Denali is declared as a national park and preserve (U.S. Department of the Interior^d, n.d.), Yosemite was founded to protect the region from “industrial speculation and hazardous tourism” (U.S. Senate, 2019), and Grand Teton contains the Laurance S. Rockefeller Preserve Center (U.S. Department of the Interior^c, n.d.). Not all NPS corporate partnerships have benefited the national parks in ways other than funding, however. In fact, the interests of some corporate donors have led to delayed implementation of environmentally beneficial practices at the national

parks. For example, in 2011 the Grand Canyon was going to move towards a ban on plastic bottles, but the plan was tabled after officials at the GCNP received pushback from the Coca-Cola company. Coca-Cola sold Dasani water at the park and donated over \$13 million to the NPS (Barringer, 2011), and since this business partnership was an important source of funding for the parks in general, the GCNP had to continue suffering the negative effects of plastic litter until an agreement could be reached that would keep Coca-Cola happily donating. Such an arrangement was not reached, and the ban on plastic was not instated until eleven years later in 2022, Deb Haaland, the Secretary of the Interior, ordered a ban on single-use plastics at lands managed by the DOI, including the national parks (Haaland, 2022). This move was done in response to an executive order issued by President Joe Biden for reducing waste. Even with this ban, plastic will only be phased out by 2032, about 20 years after an effort to reduce plastic waste at national parks was originally attempted (Hauser, 2022).

Unfortunately, the NPS faces financial pressures that force the agency to focus on revenue to be able to stay open. Ecotourism may cause environmental concerns like erosion and pollution (Marion & Leung, 2001) at the parks, but it generates funding for the NPS through park entrance fees. Corporate donors may have agendas that slow down the NPS in making efforts to better take care of the environment at national parks, but these same corporations donate millions of dollars towards maintaining the parks each year. The NPS makes allowances in parks that are not designated as preserves, like the Grand Canyon, since these areas are not legally intended to be wildlife safe-havens. These allowances are not necessarily all bad: the NPS forgoes the preservation of large parks in order to get funding from them, and that sacrifice allows the NPS to have the means to take care of its small preserves.

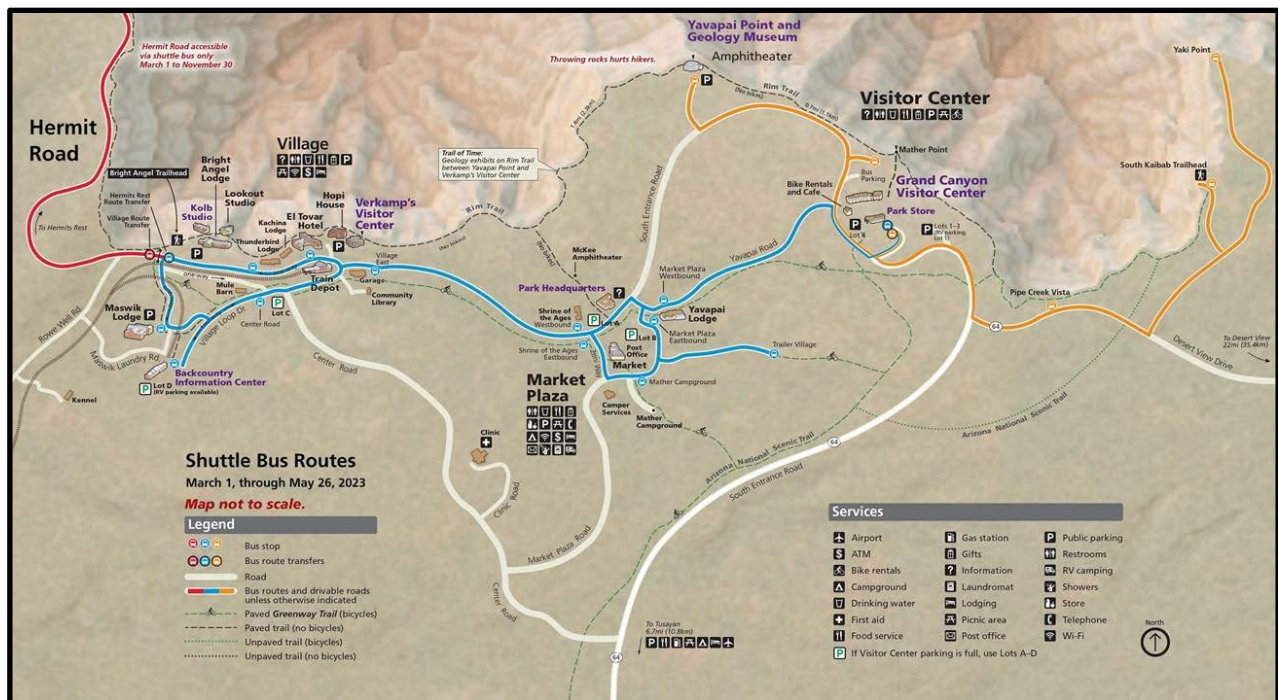
Outside Influences That Affect the Grand Canyon

There are other reasons why the Grand Canyon has not been declared a national nature preserve and likely never will be. The local economy in the regions around the national park is trapped in the Grand Canyon's orbit, depending heavily on the park's ability to attract tourists. In 2011, GCNP had 4,298,178 visitors who spent \$467,257,000 supporting 7,361 jobs in the Arizona cities around the park (Cui et al., 2013). The economic benefit of tourism around the Grand Canyon predominantly supports the local economy, as the park attracts consumers to shops, restaurants, and lodges in a somewhat isolated location. If the Grand Canyon were to receive the designation of a national preserve, the people who would ordinarily flock to the canyon for its recreational attractions might go elsewhere, particularly if there were increased restrictions around hunting and fishing. The GCNP already loses the entrance fees of hunters who would have come to the canyon but could not obtain a hunting permit: there is currently more interest in hunting at the GCNP than there are permits available. For example, in 2021, over 45,000 people applied for one of 12 available permits to hunt bison at the GCNP, and this was during a period of only 48 hours for which the application remained open (Firozi, 2021).

There are also many Grand Canyon related staples that draw people to the region besides the park itself. For example, the Grand Canyon Music Festival, which has been held at the park since September 1983, brings nine concerts to the canyon over the course of three weeks (Grand Canyon Music Festival, 2021). As explained on the NPS webpage, "The auditorium [where the concerts of the festival take place] is within walking distance of Market Plaza, Mather

Campground, Trailer Village, and Yavapai Lodge” (U.S. Department of the Interior^f, n.d.). In addition to advertising dining, transportation, and lodging, the Grand Canyon Music Festival website offers a “comprehensive guide to GCNP information and activities” under the “plan your trip” tab for those who are interested in purchasing tickets (Grand Canyon Music Festival, 2023). Considering there are about 300 seats at each concert (U.S. Department of the Interior^g, n.d.), the festival offers a great opportunity for local businesses to promote themselves. Though attendance to the festival is free, the event brings tourists close to lodging and shopping around the festival’s auditorium where they are likely to spend money (see Figure 3). The continuation of such an anthropocentric event could be called into question if the Grand Canyon were designated as a national nature preserve, or an area meant to protect wildlife above all. The potential cancellation of the music festival and other events like it would pose a threat to the GCNP’s ability to attract the number of tourists needed to support the economy around the park during slower winter months (U.S. Department of the Interior^h, n.d.).

Figure 3. Map of shuttle bus routes around GCNP headquarters that connect the Shrine of the Ages auditorium where the Grand Canyon Music Festival takes place with Market Plaza, Mather Campground, Trailer Village, Yavapai Lodge, and other commercial areas.



Additionally, many major cities like Denver, CO, and Salt Lake City, UT have developed north of GCNP which pollute and reduce the flow of the Colorado River via contamination from farming and the flood control of dams respectively. These cities make restoring the natural ecology of the river complicated. If the Colorado River ran through a theoretical Grand Canyon Preserve, it would make it incredibly difficult to properly protect wildlife and plants in the area as demanded by the preserve designation, since urbanization along the Colorado River has brought with it mining, agriculture, and hydrologic modifications that have changed the river’s composition (Deacon & Stephens, 1996). The Hoover Dam and dams in general have impacts within the

Grand Canyon's boundaries even though they are far outside. For example, the Glen Canyon Institute explains that, due to the construction of the Hoover Dam, "In less than forty years, the cold, clear water from Glen Canyon Dam has...[caused]...the extirpation of rare native fish and other wildlife in the Grand Canyon. With shrinking populations, these endangered species face a grim future unless the natural flows of the Colorado River are restored" (Grand Canyon – Glen Canyon Institute, n.d.). However, restoring the natural flows of the Colorado is not so simple. In addition to providing water to over 16,000,000 people, the Hoover Dam irrigates over 1,500,000 acres of land, and there are over 500,000 homes that receive the power it generates (Herbert Hoover Presidential Library and Museum, n.d.). Essentially, the Colorado River, and by extension the Grand Canyon's native flora and fauna, suffer from the negative impacts of dams so that cities throughout Nevada, Arizona, and California can exist and grow (Bureau of Reclamation, 2015).

The Good

Though the Grand Canyon is far from receiving the protections that come with the label of national nature preserve, in the last decade more environmental awareness has made its way to the park. For example, park scientists are using integrated pest management techniques to remove invasive species from GCNP. Fences were recently built around the park to keep out trespass cattle. No-flight zones were established over certain areas of the GCNP to reduce noise pollution, and new systems for educating park visitors on proper methods of human waste disposal are being developed (U.S. Department of the Interior^m, n.d.). Increased collaboration has also contributed to the promotion of more environmental efforts that affect GCNP: as the NPS explains, "stakeholders from federal and state agencies, Native American tribes, and environmental and recreational organizations have partnered to create the Glen Canyon Dam Adaptive Management Program to recommend modifications to dam operations to benefit natural and cultural resources in Grand Canyon National Park and Glen Canyon National Recreation Area" (U.S. Department of the Interior^m, n.d.).

Many non-governmental organizations (NGOs) are also working on projects independently of the Glen Canyon Dam Adaptive Management Program that improve environmental conditions in the GCNP. BirdLife International, along with its NGO partners in the United States, designated GCNP a Globally Important Bird and Biodiversity Area (IBA) in 2013 (U.S. Department of the Interiorⁱ, n.d.), aiming to help conserve the Grand Canyon as a habitat as well as the park's bird species themselves (Wells et al., 2005). Since then, research conducted by the IBA program has cataloged important bird area vegetation types and created ornithological summaries, which has led to, for example, the Grand Canyon being recognized as a major raptor migratory corridor. This recognition places a focus on promoting a healthy ecosystem in the Grand Canyon by protecting the 19 raptor species that have been recorded at least once in the park, and the 10,000 to 12,000 individuals on average that pass through the park each fall migration season (Arizona Important Bird Areas Program, 2016). In 2016, GCNP was awarded Provisional International Dark Sky Park (IDSP) status, and in June 2019, the International Dark-Sky Association officially designated the park an IDSP (U.S. Department of the Interiorⁱ, n.d.). IDSP status promotes the preservation of night skies, primarily by keeping light pollution at bay. As the International Dark-Sky Association explains in its latest International Dark Sky Park Program Guidelines, the purpose of designating a park an IDSP is in part, "to

encourage conservation professionals to recognize dark skies as a valuable resource in need of proactive protection” (International Dark Sky Association, 2018).

Conclusion

When considering the national park service’s mission to preserve the Grand Canyon so that it transcends generations, as per Theodore Roosevelt’s 1903 speech, where is the tradeoff between economic gain and environmental protection? As more tourists visit the canyon each year (U.S. Department of the Interior¹, n.d.), various types of adverse effects, from impurities in the Colorado River (U.S. Geological Survey, n.d.) to litter (Grand Canyon National Park, 2022) around the park, increasingly harm the canyon as a wildlife habitat. This leads one to wonder if the Grand Canyon’s value should be placed in its revenue-generating resources or in its beauty and importance as a relatively pristine natural space. There is not really a right answer to that question, as the role of the Grand Canyon in America is not so black and white. The Grand Canyon bolsters thousands of livelihoods and the waters that run through the park via the Colorado River sustain many cities. To the millions of people that visit the Grand Canyon each year, the national park provides a space to get away from big metropolitan areas and feel connected to nature and their humanity. ASU history Professor Paul Hirt explains, “The Grand Canyon is not just a natural environment...It’s an environment that takes your breath away. It’s an environment that hits you over the head with the profundity of the evolution of the planet...[it]...gives you an ability to think about things way beyond the human timescale and the human perspective” (Seckel, 2019). Countless testimonies exist from explorers of the Grand Canyon, modern and historical, who have felt regenerated and humbled by their experiences along the Colorado River. Perhaps having the Grand Canyon designated as a natural space for people in an ever-urbanizing world is not all negative, especially if people’s presence at the park can help keep the NPS running preservation projects elsewhere. Furthermore, though the Grand Canyon is first and foremost a national park, it has been getting more attention in recent years from both federal agencies through the Glen Canyon Dam Adaptive Management Program and private organizations like BirdLife International and the IDSP program that are working towards preserving the region as an ecological refuge, and these efforts provide hope for believing that the Grand Canyon will be around, “for your children, your children’s children, and for all who come after you, as one of the great sights which every American...should see” (Roosevelt, 1903).

Photos From the Author. Spring 2023 Grand Canyon Colloquium class trip 200 miles down the Colorado.





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