



PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY

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**GREENLATINOS**  
*Luchando por la Liberación Ambiental*



**BEYOND PLASTICS**

BENNINGTON COLLEGE

June 23, 2021

Secretary Deb Haaland  
Department of the Interior  
1849 C Street, N.W.  
Washington DC 20240  
Via registered mail and email: [naomie\\_germain@ios.doi.gov](mailto:naomie_germain@ios.doi.gov)

**RE: REDUCING PLASTICS IN NATIONAL PARKS**

Dear Interior Secretary Haaland,

Many national parks are drowning in discarded single-use plastic water bottles. These plastic bottles are the biggest single component of park solid waste streams.

To cope with the rising tide of plastic, some park superintendents at major parks, like Grand Canyon, made the decision to go bottle-free after building water “filling stations” throughout the park. But the International Bottled Water Association snuffed this nascent bottle-free movement out. It successfully lobbied the Trump administration to bar any park superintendent from restricting the sale of plastic water bottles – no exceptions.

Public Employees for Environmental Responsibility, GreenLatinos and Beyond Plastics are leading a drive to reverse the Trump pro-plastic policy. Together we are submitting the attached Rulemaking Petition to help combat the tsunami of plastic waste flooding our national parks and support the direction of park superintendents by –

- 1) Eliminating the sale of single-use plastic water bottles in every national park unit;
  - 2) Cutting plastics in solid waste streams of all park units by 75% by the end of 2026; and
  - 3) Requiring each park to monitor and report its progress in going green.
-

We urge you to adopt the rulemaking in this petition to further the mission of the national park system.

Sincerely,

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**Before the Department of the Interior  
National Park Service  
WASHINGTON, D.C. 20240**

*Petition for Rulemaking Governing Plastic Water Bottles in the National Park System*

**Petition for Rulemaking**

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## Summary

This petition seeks the adoption of U.S. National Park Service (NPS) policies to accomplish three objectives:

1. To eliminate the sale of single use plastic water bottles in every national park unit, effective as soon as possible, and within no more than one year.
2. To set a national park system-wide goal of reducing plastics in solid waste streams of all park units by 75% by the end of 2026.
3. To require that each park unit monitor and post on its website the components, size, and both direct and indirect costs of its solid waste stream on an annual basis.

## History

To reduce litter, save money from trash hauling, and shrink its greenhouse gas footprint, in 2010 Grand Canyon National Park (Grand Canyon) told its concessionaires to prepare to cease all individual-size plastic water bottle sales by January 1, 2011. At that time, disposable plastic water bottles represented nearly one-third of Grand Canyon's waste stream.

Grand Canyon spent more than \$310,000 to build ten new water filling stations so that visitors using canteens or other reusable containers would have ample access to high quality water. Both Zion and Hawaii Volcanoes National Parks had already imposed similar bans. On December 22, 2010, little more than one week before it became effective, then-Superintendent Steve Martin informed park concessionaires in a terse letter that the ban is "delayed until further notice. The Director of the National Park Service is...reviewing the matter further and will advise us in due time."

At that time, the NPS provided no written explanation to the Grand Canyon for the reasons for the action or the duration of the "Director's review." In June 2011, NPS Director Jon Jarvis went further, directing, without public announcement, that no park may eliminate plastic water bottle sales to preserve "consumer choice."

Documents uncovered by Public Employees for Environmental Responsibility (PEER) indicated that lobbying by then- National Park Foundation President Neil Mulholland on behalf of Coca Cola, a major bottled water maker, led directly to the NPS decision. In one such document, Director Jarvis wrote "While I applaud the intent, there are going to be consequences, since Coke is a major sponsor of our recycling efforts."

On December 14, 2011, Director Jarvis reversed course and issued Policy Memorandum 11-03. This policy set conditions under which parks could go plastic-free, including after mandatory "consultation with NPS Public Health Office" and annual surveys of "visitor satisfaction, buying behavior" and concessionaire "sales revenue." Eventually, 23 of the 63 National Parks successfully ended the sale of single use plastic water bottles under this policy.

However, as part of this policy reformulation, the National Park Service abandoned a goal of significant reduction in plastic use system wide. In 2010, the draft "Green Parks" plan called for

a halt in disposable water product sales and installation of drinking water filling stations (capable of filling canteens or reusable containers) in 75% of all visitor facilities by 2016. That draft goal was quietly dropped in 2013. The final Green Parks plan substituted a 2016 goal that parks cut solid waste streams by half. It is doubtful parks can approach this goal without reducing plastic bottle volume.

In May 2017, Congress adopted budget language directing the NPS to suspend a policy allowing more parks to discontinue plastic water sales and undertake a review of that policy and alternatives. Rather than conduct any review, the Interior Department, NPS' parent agency, ordered the policy rescinded altogether that August.

In an announcement dated August 16, 2017, then-acting NPS Director Michael Reynolds indicated that the agency was “discontinuing Policy Memorandum 11-03, commonly referred to as the ‘Water Bottle Ban’... effective immediately.” Reynolds declared that henceforth visitor choice would determine plastic bottle usage at all national parks, noting that “The change in policy comes after a review of the policy’s aims and impact in close consultation with Department of the Interior leadership.”

## **Petition for Rulemaking: Plastic-Free National Parks**

PEER, pursuant to the Administrative Procedures Act (16 U.S.C. 553 (e)) and Department of the Interior regulations (43 C.F.R. Part 14), hereby petitions the NPS to govern through rulemaking its contribution to global and local plastic pollution by eliminating sale of plastic single-use water bottles and reducing the plastic waste at each Park Unit.

The Administrative Procedures Act directs that “[E]ach agency (of the Federal Government) shall give an interested person the right to petition for the issuance...of a rule.” 5 U.S.C. 553.

### **Standing to File**

**PEER** is an IRS 501(c)(3) non-profit organization incorporated under the laws of the District of Columbia. PEER serves the professional needs of the local, state, and federal employees – the scientists, hydrologists, biologists, and rangers – charged with the protection of America’s environmental resources, including the resources within the national park system. As such, PEER is “an interested person” under the Administrative Procedures Act.

**GreenLatinos** is a national non-profit organization that convenes an active comunidad of Latino/a/x leaders, emboldened by the power and wisdom of our culture, united to demand equity and dismantle racism, resourced to win our environmental, conservation, and climate justice battles, and driven to secure our political, economic, cultural, and environmental liberation.

**Beyond Plastics** is a nationwide project that pairs the wisdom and experience of environmental policy experts with the energy and creativity of college students to build a vibrant and effective anti-plastics movement. Our mission is to end plastic pollution by being a catalyst for change at every level of our society.

## Argument in Support of Petition

### I. PLASTIC WASTES ARE BURDENING NATIONAL PARKS

According to the NPS, disposable plastic water bottles represent the biggest source of trash in parks. The posture of NPS to embrace “consumer choice” as the sole criterion governing its generation of plastic waste is both costly and conflicts with the conservation mission of national parks.

As noted, Grand Canyon National Park moved to end sale of plastic single-use water bottles in 2011 after discovering that such disposable plastic water bottles constituted approximately one-third of that park’s entire waste stream, representing 300 tons of garbage required for annual disposal.

In an email obtained under the Freedom of Information Act (FOIA), one NPS concessions specialist wrote that the 2017 edict ending the ban on plastic bottle sales “would mean that Grand Canyon National Park would again become responsible for hundreds of thousands if not millions of discarded plastic water bottles per year that once filled park dumpsters (not just concessioners’ dumpsters) at an enormous rate.”

At Yellowstone National Park, a 2013 review revealed that plastic water bottles –

- Represent 50% of Yellowstone’s solid waste load;
- Were the only park waste stream that is increasing on both a percentage basis and in absolute terms; and
- Increasingly end up in park trash even as plastic bottle recycling rates also rise and total trash per visitor day is on the decline.

Notably, Yellowstone bans sales of plastic bags but decided to forego any such ban on the sale of plastic bottles.

A 2016 NPS assessment of the annual impact from just the 23 parks that banned plastic water bottle sales under the discontinued 2011 policy found these parks –

- Prevented the disposal of 2 million disposable plastic water bottles;
- Prevented use of 112,000 pounds of polyethylene terephthalate (PETs);
- Prevented release of up to 141 metric tons of carbon dioxide equivalents; and
- Saved up to 3,350 million BTUs of energy.

Significantly, NPS did not publish this assessment, which was conducted during the timeframe that the decision was reached to forbid park bottle bans. It was obtained under a FOIA request.

While national park visitation fell in the 2020 pandemic year to approximately 200 million visitors, that number is expected to climb to levels in excess of 300 million (levels experienced in 2018 and 2019) this year and beyond. The solid waste burden created by that volume of visitors is expected to grow, absent changes in national park management policies.

## **II. PLASTIC WASTES IN PARKS CARRY ADVERSE ENVIRONMENTAL CONSEQUENCES**

Most plastic water bottles do not biodegrade; instead, they photo degrade. One piece turns into two, four, eight and so on—until the microparticulate embed in organic matter and poison our entire ecological and food system.

Americans consume nearly 50 billion single use plastic water bottles each year; 80 percent of which end up polluting our oceans, lakes, rivers, and landfills. Because such little value is attached to plastic bottles, people often discard them on the ground where they become trapped in terrestrial ecosystems or float into our ocean.

Plastic bottles take approximately 400 years to fully degrade in landfills and even longer in natural ecosystems. The non-biodegradable nature of these products means that the majority of nine billion tons of plastic created since the 1950's are still present in our environment. In our oceans, plastic bottles build up over time and create huge areas of floating plastic, like the Great Pacific Garbage Patch which is estimated to contain 2 million tons of plastic waste.

Plastic contamination is not just an issue of waste accumulation- plastics are also manufactured and often incinerated in communities where low-income people and people of color live. The production of plastic feedstocks and the raw fossil fuels used to make most plastics affect communities' immune, reproductive, development and respiratory systems. This is impacting communities of color and low-income community's health in disproportionate ways.

Aquatic animals are some of the most affected species from plastic contamination. Nearly 100 million aquatic animals die per year directly from plastic. A review by Oceana in November 2020 found that nearly 1,800 animals from 40 different species swallowing or becoming entangled in plastic since 2009. Of those, a staggering 88% were species listed as endangered or threatened with extinction under the Endangered Species Act. Terrestrial animals are also impacted. They often confuse plastic bottles, and specifically bottle caps, for food and eat them. This leads to serious health problems for the animals, often damaging their digestive systems. In addition, many smaller animals get trapped inside plastic bottles, leading to their death.

On land and in our ocean, plastic bottles break down into small fragments over time. These pieces contain harmful chemicals like Polychlorinated Biphenyls (PCBs). When plastic fragments finally disintegrate the chemicals are released in high concentrations that can kill microorganisms in soil and water.

Most all the plastics entering the ocean end up on the seabed, where they will take centuries to degrade, releasing chemicals, microplastics, and nano-plastics in the process. These releases are harmful to both marine life and the ecosystem balance. Once exposed to solar radiation, certain types of single-use plastics undergo a gradual degradation and fragmentation, which, in turn,



releases GHGs, such as methane and ethylene. The greenhouse gas contribution of methane is 34 times that of carbon dioxide.

In addition, Bisphenol A (BPA) is one of the most studied PCBs and is commonly released by plastic water bottles as they degrade. Studies have found that BPA mimics estrogen in the human body. This has been linked to an increased risk of getting some chronic diseases like asthma, diabetes, and cancer. For example, women who have elevated levels of PCBs in their bodies are found to have lower rates of successful pregnancies.

The plastics within bottled water can be laced with chemicals that contain thousands of endocrine (hormone) disruptors, which permeate the water we drink. Exposure to hormone-disrupting chemicals that leach through plastic bottles can also negatively affect development in utero.

For these reasons, many cities in the U.S., ranging from New Haven, Connecticut to San Francisco, California, have taken steps to limit or eliminate plastic water bottle sales. Similarly, many countries have adopted limits on plastic water bottles, including municipalities in Canada, Australia, Chile, and India.

The current administration has prioritized addressing climate change and set goals to cut greenhouse gas emissions by 50% by 2030. They have also prioritized environmental justice as part of the mission of every agency by directing federal agencies to develop programs, policies, and activities to address disproportionate health, environmental and climate impacts on disadvantage communities. Producing these bottles is a greenhouse gas intensive process which requires burning some 20 billion barrels of oil. This is in addition to the millions of tons of CO<sub>2</sub> byproduct emissions generated through every step of the production process.

Environmental justice requires the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The proposed rule can and should improve public health and the environment and the overall well-being of all communities. It is a step forward in efforts to right past wrongs and move toward environmental justice.

### **III. PRIOR PARK BOTTLE BANS WORKED WELL**

In its report to Congress on March 28, 2016, the NPS identified only 23 parks with water bottle bans but found that most of these parks experienced hefty reductions in both their total waste stream and recycling load after going bottle-free, including:

- Arches and Canyonlands National Parks which eliminated 15% of their total waste stream and 25% of their recycling load;
- Grand Canyon National Park which cut its total waste stream by 20% and reduced its recycling load by 30%; and
- Saguaro National Park which saw a 15% reduction in its total waste stream and 40% in its recycling load.

These cuts were achieved with minimal visitor complaints and often with support of concessionaires. There were no reports of any of the horror stories invoked by foes of bottle bans. In fact, there is evidence of public support. A National Parks Conservation Association and Subaru survey found that nearly four out of five (79%) visitors would support the removal of single use water bottles in national parks if it would significantly help reduce waste.

By contrast, Zion National Park cut its total waste stream by only 3% and its recycling load by just 6%. Zion estimated that 60% of its recycling and 3% of its waste stream still consists of plastic bottles even after its sales ban went into effect in 2013. Nonetheless, NPS briefing documents indicated that this modest reduction at Zion constituted more than 60,000 fewer plastic bottles each year, and a reduction of 5,000 pounds of trash.

The last NPS briefing paper on the subject credited the ban with preventing “disposal of up to 2M disposable plastic water bottles per year” with accompanying hefty savings in energy, landfill space, and tons of “carbon dioxide equivalents” in just the then 23 parks with such bans. However, a senior Interior official ordered this 2017 briefing paper not be circulated because “It does not reflect the views of the new Administration and will need to be rewritten....”

Unfortunately, the documents reflect that NPS had stopped collecting any data on the policy after 2016.

Finally, even though only a small percentage of national parks implemented a bottled water ban prior to 2017, those parks reflected millions of visitors coming through their gates each year. These parks used this opportunity to educate and encourage people to do the right thing for the environment and their own health by eliminating the use of single use plastic water bottles. That educational opportunity is currently foreclosed.

#### **IV. SYSTEM-WIDE GUIDANCE IS NEEDED**

The National Park System is a decentralized collection of park units. The operation of each park unit is usually solely the task of that park’s administration rather than part of a centralized system where park operations are consolidated into larger subunits.

In order to affect practices in all individual parks, a national mandate and program will be required. The implementation of Policy Memorandum 11-03 illustrates this point. In the months following that new policy, only three parks banned plastic water bottle sales. In the next year, three more parks adopted such bans. The following year was a watershed in which 17 parks also adopted bans.

This total of 23 parks with bans by the end of 2014 plateaued thereafter. That number had not grown by the time Policy Memorandum 11-03 was rescinded in 2017.

It should be noted that Policy Memorandum 11-03 did not encourage or direct parks to enact bans. It merely set conditions precedent to the enactment of any ban. (However, very few of the parks that adopted bans were able to produce any records documenting their adherence to the requirements of that policy.) Nor did it set any system-wide quotas or goals for the more than 423 National Park Sites or 63 National Parks.

National parks have a conservation mission. NPS leadership should encourage conservation throughout the system in as many ways as possible. As tax-supported institutions, national parks should also explore ways to reduce their direct and indirect impacts on the environment, especially in areas, such as beverage sales, which are peripheral to the park mission.

## **Conclusion**

Consumer choice was the rationale offered for the 2017 prohibition on national park bans on sales of plastic water bottles. Consumer choice may be a guiding principle for shopping malls, but it should not be a guiding principle for national parks. Instead, national parks should set examples for their visitors of promoting conservation and preventing environmental degradation.

The limited experience that NPS had with plastic bottle bans was overwhelmingly positive, prompted little visitor complaint, and significantly reduced park solid waste streams. These results were achieved with little encouragement or leadership from NPS Headquarters. Much more could be accomplished with a system-wide approach, including individual park water bottle sale bans, overall plastic load reduction goals, and a required management focus on reducing parks' waste, carbon, and energy footprints.

For those reasons, adopting the rulemaking urged by this petition furthers the mission of the national park system.

## Appendix

### PROPOSED RULES

1. Subsection (c) to be added to 36 CFR 5.15 (Plastic Disposable Water Bottles), to read:

(a)...

(b)...

c. Each Superintendent shall prohibit the sale of water in disposable plastic containers in any facility in a national park system unit where a concessionaire or other NPS-approved vendor, including commercially operated vending machines, offering beverages for sale to the public. This prohibition will occur within one year of the adoption of this paragraph.

2. A new Director's Order (#96: Plastic Reduction and Elimination) is adopted, to read:

#### **DIRECTOR'S ORDER #96: Plastic Reduction and Elimination**

It is the policy of the National Park Service that all park superintendents and our park partners strive to shrink their environmental, carbon and energy footprints and, where possible, eliminate the sale of disposable plastic bottles and reduce the amount of plastic in park waste streams.

a. **Bottle Ban.** Each superintendent will require concession operators to halt the sale of disposable plastic water bottles or other containers. Each superintendent will require concession operators to sell reusable water bottles.

b. **Filling Stations.** Each superintendent shall ensure that there are adequate sources of free potable water available for park visitors and appropriate signage directing visitors to such facilities.

c. **System Goal.** The national park system shall strive to reduce its environmental, carbon, and energy footprints. As part of this goal, NPS shall reduce plastics in solid waste streams of all park units by 75% by the end of 2026.

d. **Waste Report Card.** Each superintendent shall monitor the solid waste stream for that park unit and annually post on its website the components, size, as well as direct and indirect costs of its solid waste stream on an annual basis.