

NPS Plastics Elimination and Reduction Plan

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Executive Summary

On June 8, 2022, the Secretary of the Interior issued Secretary's Order 3407 (SO), which aims to reduce the procurement, sale, and distribution of single-use plastic (SUP) products and packaging, with a goal of phasing out SUP products on Department-managed lands by 2032. The SO builds upon Executive Order 14057 (EO) which calls for agencies to increase waste diversion from landfill and prioritize sustainable acquisition and procurement. The National Park Service's (NPS) mission to preserve the natural environment for the enjoyment of this and future generations is uniquely aligned with the goals of SO 3407. The NPS, its commercial service providers, and partners have a significant opportunity to lead and serve as a model in its plastic-reduction efforts.

The NPS Green Parks Plan (GPP) provides a sustainability vision for NPS operations across key sustainability goal areas, including a goal to Buy Green and Reduce, Reuse, and Recycle which aims to achieve net-zero waste and sustainable procurement. Aligned with the Department of Interior's goal, and the GPP, this NPS Plastics Elimination and Reduction Plan outlines the implementation principles and strategy the NPS will use to phase out the procurement, sale, and distribution of SUP. Consistent with the GPP net-zero waste goal, the NPS will also explore reduction of other plastics where practicable and/or as resources allow even as SUPs are prioritized.

Implementation Principles

The following four implementation principles shall inform decisions and the Implementation Plan as the NPS pursues its single-use plastic reduction goal.

- 1. Foster a sustainability ethic and empower employees and partners, in alignment with the GPP.
- 2. Work with partners, internal and external to DOI, to achieve the Secretarial goal.
- 3. Prioritize source reduction when developing and implementing phase-out and reduction policies.
- 4. Apply systems-based and life-cycle approaches informed by data and science.

Implementation Plan

The Implementation Plan outlines steps for planning and executing plastic phase-out and reduction efforts. The Implementation Principles will guide how goals are achieved.

Plan Schedules and Annual Targets. SO 3407 sets the goal of phasing out SUP on DOI-managed lands by 2032. The NPS will pursue an implementation schedule that aims to meet this goal. The NPS will identify targets—e.g., as percentages or as specific products—based on research and assessment of alternatives.

The steps in the plan include:

1. *Define Scope & Exemptions.* Under the SO, SUP refers to plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags. In addition, the NPS will identify other plastics for reduction or elimination, where practicable and as resources allow even as SUPs are prioritized. The NPS may make exemptions to the phase out of SUP in certain circumstances, including, if necessary, for medical, public safety, public health, or scientific items, or for items for which there is a well-functioning circular

economy. Short-term exemptions may also be made if no alternative products currently exist or if alternative products are not practical due to supply or other factors.

2. Collect Data. The NPS will determine an appropriate methodology to gather and analyze the plastics profile at parks and utilize this information to better understand how plastic is purchased, used and disposed of at parks; collect data and lessons learned from past studies and demonstration projects across different settings in parks; review authorizations (e.g., contracts) to identify plastic reduction opportunities and challenges; and review existing or planned work to reduce plastic use.

3. Analyze Alternatives. The NPS will conduct an analysis of alternatives to plastic products. Per SO 3407, alternatives may include compostable or biodegradable materials, or 100 percent recyclable or 100 percent recycled materials (with a circular economy plan) as defined in section 2 of the Save Our Seas 2.0 Act. Per Implementation Principle 3, the NPS will prioritize source reduction over compostable, biodegradable, or products that are 100% recyclable or made from 100% recycled materials. The NPS will analyze alternatives from a life-cycle perspective and based on the existing science and data, per Implementation Principle 4.

4. *Plan and Prioritize Approach.* The NPS will develop decision criteria to determine which products to target first; prioritize policies or programs that can be adopted Service-wide and/or are targeted location-specific efforts that have a high return on investment; identify and catalog infrastructure needs; and learn from other bureaus.

5. Develop Tools and Resources. The NPS will develop tools and resources to aid parks in the implementation of plastic reduction strategies. The NPS will create a central repository, such as a SharePoint site, to house existing tools and resources, as well as other tools and resources to be developed.

6. Fund the Work. The NPS will quantify the funding needed to implement park plastic reduction efforts. The NPS will seek funding through traditional appropriations process and from philanthropic partners to transition away from and reduce SUP.

7. *Implement the Plan.* The NPS will implement the identified strategies, guided by the Implementation Principles. Implementation will include adopting policies service-wide, conducting pilots where appropriate to test approaches and create case studies to learn from, and applying plastic-reduction strategies to authorizations (e.g., contracts).

8. Conduct Outreach and Education to Shift Public Behavior. The NPS will collaborate with employees, residents, contracted entities, partners, as well as visitors through proven strategies and best practices tailored to educating and engaging with these target audiences. Outreach and education to these stakeholders will be critical to the success of this plan.

9. Measure and Report. The NPS will implement measurement and reporting practices to track progress towards plastics reduction goals.

Introduction

On June 8, 2022, the Secretary of the Interior issued Secretary's Order 3407 (SO), which aims to reduce the procurement, sale, and distribution of SUP products and packaging, with a goal of phasing out SUP products on Department-managed lands by 2032. The SO builds upon Executive Order 14057 (EO) which calls for agencies to increase waste diversion from landfill; aggressively reduce the amount of SUP products procured, sold, and distributed; prioritize products that can be reused, refurbished, or recycled; and purchase products that contain recycled content or are biobased. As stated in the SO, the United States is one of the world's largest generators of plastic and other types of waste, and the U.S. Government is the largest purchaser in the world with significant market power and ability to drive change through its waste reduction and procurement policies (Council on Environmental Quality).

See Appendix 4: Rules, Regulations, and Guidance for additional information on these and other relevant policies.

Sustainability in the NPS

The National Park Service (NPS), its commercial service providers, and partners have a significant opportunity to lead in plastic-reduction efforts. The NPS's mission to preserve the natural environment for the enjoyment of this and future generations is uniquely aligned with the goals of SO 3407. Furthermore, the NPS has the unique ability to reach its more than 300 million annual visitors and the broader public, to spread awareness of the urgency to reduce plastic use.

The NPS strives to make park operations and infrastructure more sustainable, advancing the agency's mission of environmental stewardship. Since 1998, the Department of the Interior's (Department or DOI) policy is that each of its bureaus develop, implement, and conduct thorough recycling programs that ensure compliance with the spirit and intent of applicable federal, state, and local recycling requirements and provisions; promote sound environmental practices by preventing pollution and recovering resources through recycling; and educate and monitor for recycling participation at all of its activities, including those of contractors and concessioners (DOI Manual Part 515: Environmental Management, Chapter 3: Recycling).

The NPS Green Parks Plan (GPP) provides a sustainability vision for NPS operations across key sustainability goal areas, including a goal to Buy Green and Reduce, Reuse, and Recycle. Specifically, the GPP (2016) calls for the NPS to achieve a 50% annual diversion rate across the agency. The updated GPP (2023) calls for achievement of net-zero waste and sustainable procurement.

From composting and dedicated recycling bins to water bottle filling stations and propane canister recycling, the NPS continues to implement new and innovative approaches to reduce waste sent to landfills and reduce the greenhouse gas emissions that cause climate change. In 2021, the NPS diverted 26.5 percent of its waste from landfills or waste-to-energy facilities through recycling programs at 296

parks.¹ Many NPS sites provide materials and programs to inform and educate park visitors on the benefits of recycling, reducing waste generation, and composting.

Commercial service providers (i.e., concessioners, commercial use authorization (CUA) holders, leases) cooperating associations, and other NPS partners have already implemented various plastic reduction strategies and continue to incorporate sustainable practices into their procurement processes, internal activities, and sales to visitors. Some recent examples include the Be Straw Free campaign, increasing the sale of reusable water bottles, eliminating plastic bags in retail stores, eliminating single-use toiletry products in plastic containers in hotel rooms, and installing water bottle refilling stations.

The NPS Plastics Elimination and Reduction Plan Supports the Green Parks Plan

The NPS Green Parks Plan (GPP) provides a sustainability vision for NPS operations across key goal areas. The GPP is the GHG mitigation component of the NPS response to Climate Change and is closely coordinated with the NPS Climate Change Response Strategy (CCRS) which is being released in the spring of 2023. The updated GPP (2023) recognizes NPS sustainability accomplishments and the current administration's ambitious carbon-neutrality goals to maintain the NPS in its position as leading environmental stewards in the face of a changing climate.

The NPS Plastics Elimination and Reduction Plan supports the GPP's goal to Buy Green and Reduce, Reuse, and Recycle goal to achieve net-zero waste and sustainable procurement.

About This Plan

This NPS Plastics Elimination and Reduction Plan builds upon this foundation and outlines the implementation principles the NPS will use to eliminate SUP and the specific steps for planning and executing plastic reduction efforts across the NPS.

Strategic Goal

Plastic products, including SUP, are used throughout the NPS—including in park operations, and by commercial service providers, partner operations, and visitors. Sources range from offices, food and beverage services, retail services, lodging and campgrounds, to name a few. In accordance with the EO and SO, the NPS will work to reduce, and ultimately eliminate, the procurement, sale, and distribution of

¹ The 2021 diversion percentage was obtained from the Department of Interior's Solid Waste Management (SWM) Database which requires annual reporting by all park units of NPS building and non-building waste for which the NPS is responsible for waste management or holds the waste and recycling hauling contracts. While the SWM Database is not intended to collect data from commercial service providers and partners, when the NPS is responsible for waste management or holds the waste or recycling hauling contract for buildings where those service providers and partners operate, and that waste cannot be disaggregated from NPS operations waste, that data may be included parks' reported data.

SUP no later than 2032. Consistent with the GPP net-zero waste goal, the NPS will also explore reduction of other plastics where practicable and/or as resources allow even as SUPs are prioritized.

Implementation Principles

The following four implementation principles shall inform decisions as the NPS pursues its plastic reduction goals.

- 1. Foster a sustainability ethic and empower employees and partners, in alignment with the GPP.
- 2. Work with partners, internal and external to DOI, to achieve the Secretarial goal.
- 3. Prioritize source reduction when developing and implementing the phase-out policy.
- 4. Apply systems-based and life-cycle approaches informed by data and science.

Relationship between the Implementation Principles and Implementation Plan

Given NPS's size and complexity, a robust decision-making and implementation process will be needed to ensure that the plan is executed effectively. The four implementation principles shall inform decisions as the NPS implements its plastic reduction plan, from data collection through measurement and reporting. For example, when analyzing alternatives to single-use plastics, NPS will leverage Implementation Principle 3: Prioritize source reduction, by prioritizing source reduction over compostable, biodegradable, or products that are 100% recyclable or made from 100% recycled materials. The Implementation Principles are referenced throughout the Implementation Plan to further underscore how they will be used during implementation.

Implementation Principle 1: Foster a sustainability ethic and empower employees and partners, in alignment with the Green Parks Plan

Meeting both the EO and SO requires support, commitment, and creativity from every level of the organization. Implementation will require commitment of time and financial resources and action shall be taken by leadership to meet the financial and resource needs associated with each step of the plan, such as infrastructure investments, higher prices for products without plastic content or that are more durable, and staff time to conduct waste stream monitoring. Additionally, given staffing limitations, limited expertise, and to reduce the burden on parks, contracted support may be necessary to conduct studies, analyze waste management efforts, and monitor impacts.

Implementation Principle 2: Work with partners, internal and external to DOI, to achieve the Secretarial goal

The NPS will not achieve plastic reduction goals in isolation. Collaboration across parks, regions, and program offices will ensure key stakeholders are engaged, their expertise informs decisions, and there is shared responsibility. Engagement and collaboration with commercial service providers (e.g., concessioners), contractors and other partners will be needed to identify and execute near and long-term solutions.

The NPS will also work closely with external partners to develop, phase, and execute actions in the implementation plan. The NPS will tap into expertise and leverage research and resources of other DOI bureaus and offices, federal and state agencies, suppliers, gateway communities, non-profits, universities, and others.

Implementation Principle 3: Prioritize source reduction when developing and implementing phase-out and reduction policies

Because of the limitations of recycling and the life-cycle environmental and social benefits that are unlocked by preventing waste at the source (i.e., by avoiding the production of plastic in the first place), decisions and actions to reduce plastic use in the NPS will prioritize source reduction.

The term "source reduction" derives from the Pollution Prevention Act (PPA) which Congress passed in 1990. Pollution prevention is reducing or eliminating waste at the source by modifying production processes, promoting the use of nontoxic or less toxic substances, implementing conservation techniques, and reusing materials rather than putting them into the waste stream. The term also includes redesign of products and substitution of raw materials. Pursuant to the requirements of PPA, the Environmental Protection Agency (EPA) has taken the statutory definition of pollution prevention/source reduction and applied it to specific programs. The EPA's Sustainable Materials Management Program's Non-Hazardous Materials and Waste Management Hierarchy prioritizes source reduction and shall guide the elimination of SUP and significant reduction or elimination of other plastics.²



The U.S. EPA hierarchy, from most to least preferred, includes:

- Source Reduction and Reuse
- Recycling and Composting
- Energy Recovery
- Treatment and Disposal

² The EPA is now in the process of reviewing the waste hierarchy to determine if potential changes should be made based on the latest available data and information. When a new hierarchy is finalized, this plan shall be updated to reflect any changes.

Actions at the top of the waste hierarchy should be prioritized before descending the hierarchy. As a result, actions that reduce waste at the source and encourage reuse practices will be prioritized first and foremost. Where source reduction and reuse are not currently feasible, recycling and composting should be prioritized next.

Implementation Principle 4: Apply systems-based and life-cycle approaches informed by data and science

The NPS shall prioritize systems thinking and life-cycle decision making, informed by the latest science and data, to achieve its plastic reduction goals.

Systems and Life-Cycle Approach

The NPS will use a systems-thinking approach to identify opportunities for success. Systems thinking looks at an issue in terms of relationships rather than by splitting it into its individual parts. Part of a systems approach is to consider the upstream and downstream, or life cycle, impacts of decisions, as different alternatives have different impacts to climate, land, and water.

Circular Economy

Both source reduction (Implementation Principle 3) and a systems and life-cycle approach (Implementation Principle 4) are consistent with a circular economy. As defined by the U.S. EPA, **a** circular economy reduces material use, redesigns materials, products, and services to be less resource intensive, and recaptures "waste" as a resource to manufacture new materials and products. The Save Our Seas 2.0 Act refers to an economy that:

- uses a systems-focused approach and involves industrial processes and economic activities that are restorative or regenerative by design,
- enables resources used in such processes and activities to maintain their highest value for as long as possible, and
- aims for the elimination of waste through the superior design of materials, products, and systems (including business models).

Source: U.S. Environmental Protection Agency

As such, life-cycle perspectives, approaches and tools shall guide the NPS in the selection of plastic alternatives. Components of this approach include:

- Source reduction should be prioritized to achieve life-cycle benefits, per the U.S. EPA Waste Management Hierarchy and Implementation Principle 3: Prioritize source reduction when developing and implementing phase-out and reduction policies.
- Alternatives should be chosen based on consideration of multiple aspects (e.g., climate impact, sourcing from sustainably managed forests, recyclability, toxicity).
- Alternatives that use materials and products that have been designed to be more durable, reusable, repairable and recyclable at their highest value.

- Alternatives should be price competitive but must look at the full cost, not just the initial cost of the product.
- Alternatives should maximize co-benefits and not create worse or unintended problems.

Science-Driven Approach

The NPS shall use the best, currently available science, and state of research to inform decisions. Vast expertise, research, and resources have been and are being developed by partners, and the NPS will look to them for the latest information.

In order to ensure scientific integrity when using science and data to inform decision making during the implementation of the plastics strategy, the NPS will abide by federal transparency and data integrity principles and look to guidance from the Scientific Integrity Official per Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking issued in January, 2021.

Data-Driven Approach

The NPS will leverage existing and future data to be collected to drive decisions about how to prioritize implementation actions.

See Collect Data for more on data collection and utilization.

Implementation Strategy

This implementation strategy outlines specific steps for planning and executing plastic reduction efforts across the NPS. Work on several steps of the implementation strategy will have to occur concurrently.



Plan Schedules and Annual Targets

SO 3407 sets the goal of phasing out SUP on Department-managed lands by 2032. The NPS will pursue an implementation schedule that aims to meet that goal, ensuring sustained, long-term adoption.

Years 1-2 (2023-2024): Collect Information, Set a Baseline, Analyze Alternatives, Determine Schedules and Initial Targets, Begin to Update Policies, and Begin to Initiate Implementation

Collect Information, Establish a Baseline, and Develop a Tool: In the first year of implementation, the NPS will focus on collection of information and establishment of a baseline for plastic procurement, sale, and distribution. The NPS will adapt existing reporting mechanisms and/or establish new reporting mechanisms to collect data and monitor progress on an annual basis. In Year 2, the NPS will implement a tool to account for plastic being procured, sold, and distributed to track progress toward the ultimate phase-out.

Analyze Alternatives: Also in the first year, the NPS will conduct an analysis of alternatives to SUP products. The NPS will then prioritize rollout based on the outcomes of the Plan and Prioritize the Approach step, to ensure policies and programs have high impact and use resources efficiently.

Determine Schedules and Initial Annual Targets: The NPS will determine a timeframe for the policies to be implemented. Based on the prioritization process in the Plan and Prioritize the Approach section, a draft schedule for updates to acquisition and procurement policies and practices is:

- High Priority: 6-9 months
- Medium Priority: 9 months to 1 year
- Lower Priority: 1-2 years

The NPS will identify targets—e.g., as percentages or as specific products—based on research and analysis of alternatives.

Begin to Update Acquisition and Procurement Policies and Practices: The NPS will update acquisition and procurement policies and practices to reduce SUP and other plastics. The NPS will identify existing policies that, if changed or enforced, would result in substantial Service-wide impacts and prioritize updates to those policies. Implementation of changes in established contracts will need to take place at the time those contracts are up for renewal, but policies to be incorporated into future renewals and new contracts will be prepared and ready to be deployed. In the meantime, efforts should be made to modify the contracted activity based on operations and maintenance plans as feasible, provided that the change is not a material change to the contract operationally or financially.

Begin Implementation of Service-Wide Policy: The NPS and its partners have already started reducing plastic use, such as through waste management plans, green purchasing programs, and recycling programs. The Zero Landfill Initiative, a partnership between NPS, the National Parks Conservation Association, the National Parks Foundation, and Subaru of America, also helps parks reduce plastic use and increase recycling of all materials through the Don't Feed the Landfill program. The NPS will leverage completed pilots and demonstration projects to begin rolling out Service-wide policy and/or targeted location-specific efforts with a high return on investment. The NPS will ensure that policies and strategies align with each of the Implementation Principles laid out in this strategic plan and are scaled to the size and operations of the park.

At the end of Years 1-2, the NPS will affirm current processes and priorities and modify subsequent year activities as needed.

Years 3-4 (2025-2026): Expand Implementation

During Years 3 through 4, the NPS will further implement strategies and requirements Service-wide, continue to gather the latest research and studies, and continue to gather metrics and indicators through reporting mechanisms set up in Years 1-2. Broad-scale deployment will require new funding sources, so the NPS will continue to commit leadership support to resourcing and continue to work with partners to expand available funding sources.

Years 5-9 (2027-2031): Full-Scale Deployment

The NPS will deploy successful programs across all NPS operations and park commercial service providers building upon the efforts initiated in Years 3-4. NPS expects to pick up speed as strategies, infrastructure, access to vendors, etc. expand and become more mainstreamed across the NPS system and in the US generally. The NPS will continue to gather information and track progress via the tool developed in previous years. The NPS will modify its implementation plan to reflect changes in either

recycling or composting markets, availability of alternatives, or changes in internal process as needed to ensure the full phase-out will be achieved on schedule.

No Later than Year 10 (2032): Achieve 100% Phase-Out (Elimination) of Single-Use Plastics

No later than Year 10, the NPS will achieve its goal to phase out 100% of SUP, establish a circulareconomy, and reduce other plastics. The NPS strives to achieve this goal prior to the 2032 year set out in the SO, based on the GPP goal to achieve net-zero waste.

1. Define Scope and Exemptions

The SO focuses on SUP products that are procured, sold, and distributed by NPS park units. Under the SO, the term "single-use plastic products" means plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags. In parks, these items are typically associated with food service or retail services and can be generated in either back-of-house (e.g., internal NPS operations, commercial service providers, or partner operations) or front-of-house (i.e., visitor-facing) operations.

Common SUP products, named in the SO, include:

- Plastic and polystyrene food and beverage containers,
- Plastic bottles,
- Plastic straws,
- Plastic cups,
- Plastic cutlery, and
- Plastic disposable plastic bags.

Consistent with the GPP net-zero waste goal, the NPS will also explore reduction of other plastics where practicable and/or as resources allow even as SUPs are prioritized. Other plastic may include (1) other problematic and unnecessary plastic (e.g., products with toxic chemicals and black plastics since the black pigment in black plastic is often not detectable by sorting technologies at recycling facilities), and (2) plastic that originate outside NPS boundaries, as a study in the three Zero Landfill Initiative pilot parks (Grand Teton, Denali, and Yosemite National Parks) revealed that two-thirds of visitors disposed of items brought from outside park boundaries within the parks. NPS will address those plastics specifically called out in the SO while at the same time addressing waste reduction of other waste streams including other plastics in accordance with NPS policy. NPS recognizes that efforts to reduce other plastics are secondary in priority to the SUPs in the SO.

Exemptions

The NPS may make exemptions to the phase out of SUP in certain circumstances. Exemptions may be made, if necessary, for medical, public safety, public health, or scientific items, or for items for which there is a well-functioning circular economy.

Short-term exemptions may be made if no alternative products currently exist or if alternative products are not practical due to supply or other factors. Before short-term exemptions are made, substitute

products or processes must be evaluated based on the U.S. EPS's non-hazardous materials and waste management hierarchy and steps to identify alternatives to existing plastic product use must be documented.

Short-term exemptions may also be made for the term of an existing contract if the contract cannot be modified. However, efforts should be made to modify the contracted activity based on operations and maintenance plans as feasible, provided that the change is not a material change to the contract operationally or financially.

The NPS will continually seek to shorten the list of exempted product uses. For example, where shortterm exemptions were made when alternative products were deemed impractical due to supply or other factors, the exemption will be reassessed as technology improves, supply of alternatives becomes available, and as practical alternatives emerge.

The NPS will issue separate guidance on who is responsible for seeking and approving exemptions.

Voluntary Efforts Beyond NPS Requirements

For parks, commercial service providers, and partners that want to take plastic elimination or reduction actions before annual targets are established, they shall collaborate with the Washington D.C. Area Support Office (WASO) about specific activities for their park unit or property. The NPS will establish a process for working with parks (e.g., through a superintendent's request) to approve pilot programs. The NPS will issue separate guidance for how parks, commercial service providers, and partners can seek approval by the WASO office for a voluntary pilot.

2. Collect Data

Currently, data on the use and disposal of plastic in the NPS are limited. In line with *Implementation Principle 4: Apply systems-based and life-cycle approaches informed by data and science*, the NPS will collect data to inform decisions and the approach to elimination efforts. This section outlines an approach to collect information on current plastic use and establish a baseline of both data and current understanding of plastics generation.

Account for Plastics

Currently, solid waste data are reported for NPS operations via the DOI Solid Waste Management Database and by concessioners via annual reporting as directed under terms of their contracts, but a breakout of plastics-specific data are in these reports is relatively limited. The NPS will determine an appropriate methodology to gather, analyze, and track the plastics profile at parks and utilize this information to establish a baseline and measure the effectiveness of this effort.

First, the NPS will determine which data on plastic will be collected. Data sources may include:

- Plastics data from the DOI Solid Waste Management (SWM) Database for park operations.
- Plastics data from concessioner environmental management software (EMS) sustainability reports and/or reporting on solid waste.
- Park-level waste characterization studies (for example, the Zero Landfill Initiative, which includes extensive data and analysis for three parks).

• Qualitative data on plastic brought into parks by visitors to understand external sources of plastic generation and quantitative data, as data are available based on park waste characterization studies or future studies.

Questions to ask to determine additional data sources include:

- How products are purchased (i.e., purchasing mechanisms, including micro-purchases)
- Who makes the purchase (e.g., park operations, residents, suppliers)?
- How products are distributed (either for end use or for resale, if applicable)?
- Who is the primary end user?
- What is the post-use management (e.g., disposal, reuse, recycling)?

Next, the NPS will determine how data on plastic procurement, sales, and distribution will be collected, such as by:

- Identifying methods and approaches others have used to collect plastics data.
- Identifying plastic procurement reports available through concessioners or suppliers.
- Developing a standard approach for data collection that can be used if none exists or adapting existing methods (e.g., expanding the data call in the DOI's Solid Waste Management Database).
- Developing a tool to track plastic procurement and disposal data in a centralized manner.
- Developing a format for presenting the data to facilitate decision-making by various stakeholders.

Review Contracts, Concessions, and Procurement Mechanisms

The NPS will review authorizations (e.g., contracts) to identify plastic reduction opportunities and challenges. Specifically, the NPS will review authorizations related to:

- Contracting and procurement for internal NPS operations including the use of purchase cards.
- Commercial service providers (concession contracts, commercial use authorizations, and leases).
- Grants and Cooperative Agreements (e.g., for other in-park operators such as Residential Environmental Learning Centers Learning Centers [RELCs] and Cooperating Associations).
- Special Park Uses (e.g., for special events, rallies, and demonstrations).
- Scope of Sales for Cooperating Associations and Partnerships held at the park-level.

The NPS will develop a protocol for collecting and maintaining basic information for the various categories of contract and procurement mechanisms identified above. The NPS will also develop a format for collecting this information and determine how it will be presented to facilitate decision-making by various stakeholders.

Review Existing or Planned Work to Address Plastic Reduction

The NPS has several ongoing or planned programs, pilots, case studies, initiatives, and/or policies that address elimination and/or significant reduction of the purchase, use and disposal of SUP products as well as other plastics. The NPS will gather information about these programs to understand current efforts and their impacts across different settings in parks (e.g., back-of-house, front-of house, campgrounds, stores) and synthesize best practices and lessons learned. To further identify best practices, the NPS will also review successful efforts to reduce single use plastics made by external entities, such as local governments, universities, and the private sector.

The inventory should include projects from:

- NPS parks and regions
- Other bureaus within DOI
- Other federal agencies
- State and local governments
- Large institutions such as universities
- Private sector
- Other countries (e.g., European Union Directive on SUP, United Kingdom ban on SUP)

For these projects, data collection will include the following to the extent feasible:

- Information about innovative acquisition and procurement strategies and policies.
- Information about innovative circular economy/waste management strategies and policies (e.g., extended producer responsibility).
- Infrastructure needs and how they were addressed.
- How organizations prioritized their efforts.
- How environmental justice was considered.
- Lessons learned.

The NPS will rely on existing compilation of projects on plastics as much as possible, particularly for those outside of the NPS and DOI.

3. Analyze Alternatives

The NPS will conduct an analysis of alternatives to plastic products. Per SO 3407, alternatives may include compostable or biodegradable materials, or 100 percent recyclable or 100 percent recycled materials (with a circular economy plan) as defined in section 2 of the Save Our Seas 2.0 Act.

Per Implementation Principle 3: Prioritize source reduction, the NPS will prioritize source reduction over compostable, biodegradable, or products that are 100% recyclable or made from 100% recycled materials. In addition, per Implementation Principle 4: Apply systems-based and life-cycle approaches informed by data and science, the NPS will analyze alternatives from a life-cycle perspective, based on multi-attribute decision making, and based on the existing science and data.

To determine SUP alternatives, the NPS will:

- Leverage commercial service providers and partners' expertise to gather information on alternatives, in particular those that have already transitioned to alternatives in many parks (per *Implementation Principle 2: Work with partners, internal and external to DOI, to achieve the Secretarial goal*).
- Rely on Department-level or other federal agencies' (e.g., EPA, GSA, or USDA) analyses and research on alternatives to plastic products.
- Review science-based recommendations and employ results of life-cycle analyses and tools such as the Understanding Packaging Scorecard.
- Develop an annotated list of resources, including existing reports and case studies on alternatives.
- Draw from alternative systems and products that have been used in pilot projects
- Investigate operational alternatives that result in lower use of single use plastics (e.g., plastics in materials handling), in addition to one-for-one product alternatives.
- Identify a graphic, or develop a graphic if one does not exist, that shows the various entities that
 impact the manufacture, distribution, purchase, use and management of SUPs and other
 plastics, the processes involved, and disposal pathways. This graphic will help the NPS and its
 partners understand the inputs and outputs of plastic use in the NPS and how different
 alternative systems and products might be most effective within the life cycle.

4. Plan and Prioritize the Approach

The goal to phase out SUP and to reduce or phase out other plastics will require interim steps and iterative efforts. Progress will require prioritizing efforts, setting realistic goals, planning for implementation, establishing a feedback loop, and fostering strong commitment at all levels of the organization. Active participation by parks, employees, commercial service providers, partners, and visitors will contribute to the success of the plan. Below are areas where the NPS will establish priorities.

Apply Decision Criteria

The NPS will develop a decision matrix to determine which products to target for reduction and elimination first. For example, the decision matrix may consider criteria that target:

- Products that are most impactful to climate change and the environment.
- Products with toxic chemicals.
- Products that hinder or disrupt the recyclability or compostability of other items.
- Products with the highest likelihood of litter or ending up in the environment.
- Products that have established or ongoing promising practices at a park or parks.
- Products that have sustainable alternatives which are readily available and are pricecompetitive.

These criteria reflect the need to understand each of the products from a life-cycle and systems perspective.

Prioritize Products and Operations

Based on the decision criteria above, the NPS will develop a list of high-, medium-, and low-priority plastic product streams and operations to address via specific strategies. The NPS will develop a timeline to address each category of products based on this prioritization. For each category of products, the NPS will assess applicable best practices and strategies from the Collect Data step above, and determine geographic priorities (e.g., whether to roll out elimination efforts Service-wide, in particular regions, or by park or operations type). Ultimately, this prioritization should balance maximizing the impact of efforts with implementing low-hanging fruit.

Identify Infrastructure Needs

The NPS and its partners will identify and catalog the infrastructure needs, including reducing plastic use at the source and ensuring that alternatives are diverted from landfill. Infrastructure may be needed to:

- Support reuse systems (e.g., water bottle refill station, dishwashing infrastructure).
- Improve waste collection systems and equipment to contribute to a robust and healthy secondary recycling materials market.
- Explore new technologies for waste reduction.
- Improve visitor education (e.g., pre-trip planning and better signage).
- Improve composting programs to divert bio-based and compostable alternatives to plastic from landfills.
- Coordinate with local gateway communities on infrastructure solutions.

Learn from Partners and Other Bureaus

NPS commercial services providers such as concessioners and leaseholders, and other partners, such as cooperating associations, have already implemented many innovative plastics reduction and waste management solutions. The NPS will continue to leverage their expertise as they identify solutions and collaborate with them for use throughout the Park Service.

Further, the NPS will work collaboratively with other bureaus and agencies to develop expertise on different strategies based on the main types of plastic each group generates and share those strategies. For example, DOI has already established a collaborative workgroup related to plastic reduction which includes NPS Sustainable Operations and Maintenance Branch (SOMB) and Commercial Services Program. Sharing strategies will advance the goal of combining purchasing power to move the market towards elimination and alternatives.

Develop Contingency Plans

As demonstrated during the COVID pandemic, natural disasters or other circumstances may cause a disruption in normal operations either in the short-term or for extended periods. The NPS and its partners should stipulate the continued prioritization of source reduction, reuse, and plastics alternatives in contingency plans for unforeseen events and disasters.

If, per *Implementation Principle 4: Apply systems-based and life-cycle approaches informed by data and science*, there is a need to revert to the use of plastic to protect public health and safety, efforts should reinstate plastic reduction efforts as soon as possible after the resolution of the event.

5. Develop Tools and Resources

The NPS will develop tools and resources (e.g., data collection templates, model language for concession contracts, sample implementation plans, outreach materials) to aid parks in the implementation of plastic reduction strategies and initiatives. The NPS will create a central repository, such as a SharePoint site, to house existing tools and resources, as well as other tools and resources to be developed. The central repository can also link to other existing SharePoint sites, such as the Zero Landfill Initiative's SharePoint site.

Access to these tools and resources through the central repository will be critical for seeking input on and socializing new policies, sharing best practices as Service-wide policies go into action, and sharing the latest science and research.

The NPS will continually add to the available resources to reflect the latest set of successful programs and research, ensuring that all information is up to date.

6. Fund the Work

Funding will be required throughout implementation, from data collection, tracking, and reporting to infrastructure projects. Broad-scale deployment will require new funding sources, so the NPS will continue to commit leadership support to resourcing and continue to work with partners to expand available funding sources.

The NPS will develop a strategy to fund and execute park plastic reduction efforts based upon its assessment of opportunities. Examples of possible efforts which will require funding include:

- Conducting a baseline study of the generation of plastic and ongoing studies to monitor how plastic reduction efforts impact plastic generation over time.
- Staff positions dedicated to in-park project coordination for sustainability efforts, as staff will be one of the greatest NPS assets for implementation.
- Infrastructure projects, such as water bottle refill stations, reuse programs, and recycling infrastructure.

The NPS will seek funding through traditional appropriations process and from philanthropic partners such as:

- Funding from park partners like the National Park Foundation (NPF) and Friends groups.
- Funding partnerships with universities to support data collection, data analysis, and research.
- Research internship programs to support data and research efforts.

To facilitate the identification and execution of funding, the NPS will develop strategies and tools for parks to use to seek funding or form partnerships to carry out aspects of implementation plans.

7. Implement the Plan

Based on the steps above, the NPS will implement the identified strategies, guided by the Implementation Principles and established schedules and targets. Implementation will include updates to authorizations (e.g., contracts); implementation of policies for source reduction; and other strategies to eliminate SUP and reduce other plastic at all stages of the supply chain. Throughout implementation, the NPS will evaluate the effectiveness of strategies and further hone its approach to address stakeholder feedback, encourage adoption of strategies, identify efficiencies and economies of scale, identify barriers to adoption, and improve outcomes.

Given the different material streams and activities leading to the procurement and use of plastic, the NPS will need to take a diversified approach based on product type and entity. A single strategy may not work for all products so there will need to be a mix of strategies for different products or groups of products.

Adopt Policies and Programs Service-Wide

The NPS will prioritize policies or programs that can be adopted Service-wide and/or targeted locationspecific efforts that have a high return on investment. Examples of policies to examine for possible Service-wide adoption include:

- Implementing a reusable product system for plastic items, such as refillable water bottles and reusable food serviceware and drinkware.
- Implementing phase-out schedules on certain products as determined based on research and assessment of alternatives.
- Conducting pre-trip and in-park outreach and education for certain visitor behaviors (e.g., discouraging bringing SUP into parks; encouraging use of water refill stations and reusable hot beverage containers; encouraging proper sorting for recycling or composting).
- Requiring consistent, universal labels and signage about the phase out of SUP and reduction of other plastic products, including clear labeling on what products and materials can be recycled or composted.
- Strengthening push and pull policies to reinforce recycled plastics markets (e.g., ensuring a supply of high value secondary plastics through better collection of contamination-free materials and increasing the purchase of recycled content products).
- Requiring Grants and Cooperative Agreements recipients and other partners in parks to phase out the purchase of SUP and reduce the purchase of other plastic, if using funds from the NPS.
- Revising Scope of Sales templates and guidance to require phasing out the purchase of SUP and reduce the purchase of other plastic.
- Conducting pilots, where appropriate, to test approaches and create case studies to learn from.

This is not a comprehensive list; consideration of which policies to include for the prioritization exercise should be based on initial and ongoing information gathering and monitoring of progress.

After a list of policies is developed, the Implementation Principles should guide the criteria used for implementation.

Apply Plastic Reduction to Commercial Services Provider Authorizations

The NPS will apply these plastic-reduction strategies for service providers with authorizations to operating on the parks. Prioritization of implementation of these contract changes may be based on:

- Authorizations with best market/economic potential for procuring single-use plastic alternatives (e.g., high value contracts; large market share; opportunities to combine purchasing power with another bureau, agency, or department).
- Authorizations with relative high amounts of plastic procurement.
- Authorizations with products that have high quantities of plastic packaging or plastic used for transport (e.g., plastic wrap around pallets)
- Authorizations that are up for renewal (versus contracts already issued where there may be limitations to requiring the contracted entity to adopt plastic reduction practices although they may be encouraged).
- Other criteria based on initial and ongoing information gathered.

8. Conduct Outreach and Education to Shift Public Behavior

Outreach and education to NPS employees, residents, partners, and visitors will be critical to the success of this plan, as employees and visitors are a predominant source of plastic generation in the NPS. This section details strategies and best practices for engaging ad collaborating with these target audiences.

Employee and Partner Engagement and Culture

Training and engagement of employees of NPS, commercial service providers, and partners will be critical to achieving the goals of this initiative. To this end, the NPS will identify and implement strategies to engage employees.

Strategies may include:

- Developing materials to encourage in-park employees to reduce plastic use and increase recycling of plastics and plastic alternatives (e.g., glass or aluminum) and composting in work as well as in residential settings.
- Connecting messaging about plastic reduction to other park messages, such as protecting wildlife or historical sites, to make communication consistent and reinforce familiar messages that build on shared values.
- Connecting plastic reduction to other organizational goals, plans, and requirements.
- Providing training on plastic reduction efforts to both permanent and seasonal employees as well as to commercial service providers and partners, including both in-person and virtual webinar trainings.
- Seeking employee input and ideas on projects and programs to eliminate SUP and reduce the use of other plastic.
- Understanding what types of plastics employees bring into the park and ways to reduce that source of plastic generation, such as investigating opportunities for collaboration within gateway communities and businesses to reduce plastic commodities coming into parks.

Organizations, including the NPS, often rely on employee champions who are passionate about environmental and social issues to initiate and execute sustainability efforts. While champions are great assets to the NPS, the NPS must incorporate plastic reduction (and other sustainability) goals into the normal workflow of all employees.

Visitor Outreach and Education

Visitor outreach and education is another crucial component of reducing plastic use. Plastics in parks is generated through in-park sales and is also brought in by visitors from outside the park. Maximizing plastic reduction efforts will require varied approaches to visitor outreach and education. Strategies may include:

- Understanding the explicit details of what types of plastics visitors bring into the parks to provide targeted outreach and education for these types of plastics.
- Updating and enhancing online trip planning resources to prepare visitors for NPS-wide efforts to reduce plastic and eliminate SUP, along with zero-waste and pack-it-in, pack-it-out policies, and bringing their own water bottle.
- Developing information and messaging specific to the plastic reduction initiative and providing it to prospective visitors (e.g., 5 things visitors can do now to help with this effort).
- Providing visitor choice plastic reduction strategies (e.g., provision of water bottle filling stations, low-cost reusable water bottles, dry mix for energy drinks, more recyclable packaging such as beverages in aluminum bottles), and then educating visitors about their options available within the park for alternative product purchases and reuse programs and why their choices matter (e.g., established recycling processes and markets and for recycled aluminum).
- Developing and sharing resources for interpretative rangers, including resources for the Junior Ranger programs and visitor center displays and activities.
- Standardizing signage and labeling on recycling, composting, and waste receptacles throughout offices, parks, and commercial service provider operations to ensure recyclable and compostable materials stay out of the landfill and remain in the circular economy.

Outreach and Education Best Practices

Since different audiences respond to different types of messaging, outreach and education must be tailored to the specific audience. The NPS will leverage studies that demonstrate which specific messages resonate with different audiences to influence behavior change most effectively. For example, the results of a study at three national parks found that messages emphasizing ease concepts were two times more effective at changing campground visitor waste disposal behaviors than control conditions (Taff et al., 2022). To implement these outreach and education efforts, The NPS works collaboratively with its commercial service providers and partners to align messaging and strategies.

9. Measure and Report

The NPS will implement measurement and reporting practices to track progress towards plastics reduction goals.

Measurement

Based on the information and data gathered under Collect Data, the NPS will develop appropriate and replicable measurement techniques to estimate the amount of plastics procured, sold, and distributed in waste streams.

The NPS will track standardized metrics for both plastic waste and procurement data. The NPS will develop standardized metrics; a starting list may include:

- Overall estimate of plastic generation, as shown in waste streams, by NPS operations, by commercial service providers and partners, and from sources outside park boundaries.
- Plastic procurement data by NPS operations and commercial service providers and partners³.
- Percentage of NPS park unit operations and commercial services providers and partners that have transitioned to plastic alternatives, reuse systems, etc.
- Percentage of commercial services providers and partners that have clauses requiring SUP phaseout; other plastic reduction, where practicable; and data tracking on plastic procurement.
- Percentage of suppliers that have committed to phasing out plastic in packaging.

Evaluating the makeup of the NPS's waste streams will provide a holistic picture of what is being procured, sold and distributed by the NPS as well as what is being brought into parks from outside park boundaries to help inform decisions. The NPS will utilize waste characterization studies as available for park, concessions, and partner operations to determine current park plastic waste profiles, and to collect ongoing samples at select parks to monitor the impact of plastic reduction efforts. Data from waste characterization studies can be used to extrapolate systemwide plastic generation and diversion rates and monitor plastic reduction performance over time.

A limitation of waste characterization studies is their inability to attribute waste to the generator (i.e., whether the item was sold in the park or brought in from outside the park boundary). Similarly, they can be resource-intensive so should be used when best able to inform decision-making and program design and should not delay the other implementation steps. Where waste characterization studies are not feasible, the NPS will use existing studies (e.g., waste characterization studies at similar parks or local entities) to estimate this information.

Observational studies can also be conducted to observe procurement and waste-related behavior, such as documenting products sold in stores or provided in lodging and observing visitor sorting behavior at waste receptables.

Measurement practices may also involve exploring the climate change and carbon reduction impacts of plastic reduction efforts (e.g., reduced hauling).

³ The ability to obtain waste and procurement data is dependent upon the authorization type and the terms of the authorization. The NPS has the authority in the standard contract to obtain reports determined necessary by the Service. The NPS is sensitive to the burden that can be placed on commercial service providers through various data and report requests. The NPS would coordinate and collaborate with them to ensure that the information being collected is needed and can be accomplished in a manner as efficient as possible.

Reporting

Parks report annually on park-generated waste to the DOI Solid Waste Management Database and concessioners report solid waste data under the terms of their contracts. Reporting requirements and mechanisms will need to evolve as the plastics reduction strategy is implemented. In particular, the NPS will centralize existing reporting mechanisms as well as additional reporting mechanisms from the various stakeholders, including the NPS, commercial service providers, and partners.

The NPS will prepare annual reports tracking progress toward plastic reduction goals and modify its reduction plans as needed to continuously improve.

Appendices

Appendix 1: Secretary Order No: 3407 Department-Wide Approach to Reducing Plastic Pollution



THE SECRETARY OF THE INTERIOR WASHINGTON

ORDER NO. 3407

Subject: Department-Wide Approach to Reducing Plastic Pollution

Sec. 1 **Purpose.** This Order prioritizes Departmental action to reduce the amount of plastic waste produced by the Department of the Interior (Department) in support of the goals of Executive Order (EO)14057, entitled "Catalyzing Clean Energy Industries and Jobs through Federal Sustainability," and to further reestablish the Federal Government as a leader in sustainability.

Sec. 2 Authorities. This Order is issued under the authority of section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended. Other authorities for this Order include, but are not limited to, EO 14057, (December 8, 2021).

Sec. 3 **Definitions.** Under this Order, the term "single-use plastic products" means plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags.

Sec. 4 **Background.** On December 8, 2021, President Biden issued, EO 14057, which includes a focus on sustainable acquisition and procurement. Plastic waste is a priority environmental problem. Less than 10 percent of all the plastic ever produced has been recycled, and recycling rates are not increasing. Plastics, including unnecessary and easily substituted single-use plastic products, are devastating fish and wildlife around the world. Our oceans are downstream of all pollution sources, so they bear the brunt of the impacts: of the more than 300 million tons of plastic end up in the ocean every year, and plastic makes up 80 percent of all marine debris found from surface waters to deep-sea sediments. Marine species ingest or are entangled by plastic debris, which causes severe injuries and death, and plastic pollution threatens food safety and quality, human health, coastal tourism, and contributes to climate change.

The United States is one of the world's largest producers of plastic waste and other types of waste, and the U.S. Government is a large consumer with significant market power and the ability to drive change through its waste reduction policies and procurement patterns. Section 208 of EO 14057, entitled "Sustainable Acquisition and Procurement," creates an opportunity for the Department to lead by example in aggressively reducing the amount of single-use plastic products it procures, sells, or distributes while prioritizing products that can be reused, refurbished, or recycled.

Since 1849, the Department has been charged with numerous management and stewardship responsibilities with respect to Government-managed lands, waters, resources, and ecosystems. Today, the Department manages more than 480 million acres of public lands, 2.5 billion acres of

the Outer Continental Shelf, and 750 million acres of marine national monuments across more than 2,000 locations that host nearly 400 million visitors each year. As the steward of 20 percent of the Nation's lands, including national parks and national wildlife refuges; the Federal agency responsible for the conservation and management of fish, wildlife, plants, and their habitats; and a producer of nearly 80,000 tons of municipal solid waste in fiscal year 2020, the Department has an obligation to play a leading role in reducing the impact of plastic waste on our ecosystems and our climate.

As documented by the United Nations Environment Program, additional nonhazardous, environmentally-preferable alternatives to single-use plastic products have been developed in recent years and are readily available. Bags made of paper, bioplastics, and composite can replace single use plastic bags, as can reusable cloth or thicker plastic alternatives. Bottles made of bioplastics, glass, and aluminum, and laminated cartons can replace single-use plastic bottles, as can reusable bottles made of glass, aluminum, or stainless steel. Similar materials can replace single-use plastic in food packaging, beverage cups, tableware, and other products, giving the Department a range of options to consider in this effort to account for the variety of geographic locations and social contexts in which Departmental facilities operate.

Sec. 5 **Reducing Single-Use Plastic Products.** The Department's Chief Sustainability Officer (CSO), working with the Office of Environmental Policy and Compliance within the Office of Policy, Management and Budget, is leading the Department's sustainability efforts and working with Bureaus and Offices to further the goals of EO 14057. The following explicit directions and timelines are necessary to ensure the Department's sustainability plans include bold action on single-use plastic products:

- a. Within 90 days of the issuance of this Order, the CSO shall issue guidance to Bureaus and Offices on its implementation to include:
 - Development of a process to account for single-use plastic products being procured, sold, or otherwise distributed by Bureaus and Offices and concessionaires;
 - (2) A review of contracts, concessions, and procurement mechanisms to identify singleuse plastic product reduction opportunities and challenges; and
 - (3) Development of sustainable procurement plans to support the goals of section 208 of EO 14057 that include specific approaches to phasing out single-use plastic products by the end of 2032.
- b. Within 270 days of the issuance of this Order, Bureaus and Offices shall submit draft sustainable procurement plans that:
 - Include schedules and targets to make annual progress toward reducing the procurement, sale, and distribution of single-use plastic products from current levels with a goal of phasing out single-use plastic products by 2032;
 - Include schedules for updates to their acquisition and procurement policies and practices to reduce single-use plastic products;
 - Include annual reporting on progress toward reducing procurement, sale, and distribution of single-use plastic products;

- (4) Include a schedule for reporting on how they will phase out single use plastic products by 2032;
- (5) Include an analysis of alternatives to single-use plastic products, such as compostable or biodegradable materials, or 100 percent recyclable or 100 percent recycled materials (with a circular economy plan) as defined in section 2 of the Save Our Seas 2.0 Act (Public Law 116-224);
- (6) Identify opportunities to shift public behavior to reduce single-use plastic products, such as installing additional water fountains and reusable water bottle filling stations;
- (7) May include short-term exemptions if no alternatives currently exist, or for the term of an existing concession or procurement contract, if justification is provided;
- (8) May include exemptions for medical, public safety, public health, or scientific items, or for items for which there is proof of a circular economy plan, if justification is provided; and
- (9) May include funding requests, if justified, for implementation costs.
- c. Within 365 days of the issuance of this Order, the CSO shall review the draft plans and provide Bureaus and Offices feedback, and Bureaus and Offices shall refine and submit final sustainable procurement plans.

Sec. 6 **Effect of the Order.** This Order is intended to improve the internal management of the Department. This Order and any resulting reports or recommendations are not intended to, and do not create, any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other persons. To the extent there is any inconsistency between the provisions of this Order and any Federal laws or regulations, the laws or regulations will control.

Sec. 7 Expiration Date. This Order is effective immediately and will remain in effect until it is amended, superseded, or revoked, whichever occurs first.

Secretary of the Interior

Date: JUNE 8 2022

Appendix 2: Implementation Guidance: Secretary Order No: 3407 Department-Wide Approach to Reducing Plastic Pollution

Attachment B

Implementation Guidance Secretary Order No: 3407 Department-Wide Approach to Reducing Plastic Pollution Phasing out single-use plastics by the end of 2032

1. Deliverables

- a. Each Bureau and Office shall develop a Draft Sustainable Procurement Plan and submit it to Dawn Gunning, Sustainability and Environmental Compliance Manager, at dawn gunning@ios.doi.gov by March 5, 2023.
- b. The Sustainability Council, as established in DM 515 Chapter 4, will be utilized as the governance body to foster collaboration, engagement, review and consensus on the content of the Draft Sustainable Procurement Plans.
- Each Bureau and Office shall submit a final Sustainable Procurement Plan by June 8, 2023.

2. Bureau and Office Point of Contacts (POC)

- a. By October 6, 2022, each Chief Sustainability Officer shall provide the name, title, bureau, and office of their respective POCs to Dawn Gunning, Sustainability and Environmental Compliance Manager, at dawn gunning@ios.doi.gov.
- b. Bureaus and Offices may provide more than one POC to represent each of the major acquisition areas including: Federal Acquisition Regulation (FAR) based contracts; concessions; and grants to coordinate with Department staff to implement the requirements of SO 3407.
 - POCs will work in collaboration to develop a standard process for their respective bureau or Department-wide to account for single-use plastics being procured, sold, or otherwise distributed by Bureaus and Offices in areas including, but not limited to, concessions, grants, vendors (conference planning, meetings, food services, etc.), facility maintenance and laboratories.
 - POCs will present the proposed standard process, challenges, and opportunities to the Sustainability Council, Sustainability Advisory Group, for consideration.
 - 3. POCs will work collaboratively to develop a standard template for the Sustainable Procurement Plans.
 - 4. POCs will be familiar with areas of operations that present the most opportunities to reduce single-use plastics.

3. Draft Sustainable Procurement Plans shall include:

- A review of contracts, concessions, and procurement mechanisms to identify singleuse plastic product reduction opportunities and challenges.
- b. Schedules and annual targets addressing the reduction of procurement, sale, and distribution of single-use plastics.
- c. Data collection methods, metrics, and reporting requirements to reflect the specific approaches proposed to phase out single-use plastics by the end of 2032.

- d. A schedule for updates to acquisition and procurement policies and practices to reduce single-use plastic products.
- e. Analysis of alternatives to single-use plastic products, such as compostable or biodegradable materials, or 100% recyclable or 100% recycled materials (with a circular economy plan) as defined in section 2 of the Saxe our Seas 2.0 Act (PL 116-224).
- f. Opportunities and actions to shift public behavior to reduce single-use plastic products.
- g. Short-term exemptions if no alternatives currently exist, or for the term of an existing concessions or procurement contract, if justification is provided.
- h. Exemptions for medical, public safety, public health, or scientific items, or for items for which there is proof of a circular economy plan, if justification is provided.
- i. Funding requests, if justified, for implementation of the Sustainable Procurement Plan.
- 4. **Resources** Provided below as guidance, awareness tools and examples to assist with meeting the goals of the SO:
 - a. General Services Administration:
 - i. Green Procurement Compilation/SFTool
 - Cafeteria & Food Services Sample Solicitation/Contract Language, Sustainability in Concessions (see Page 3)
 - b. Environmental Protection Agency:
 - i. Trash Free Waters
 - ii. Sustainable Materials Management
 - iii. Food Service-Related Source Reduction Programs
 - iv. Buying Green for Federal Purchasers
 - c. Centers for Disease Control and Prevention:
 - i. Food Service Guidelines for Federal Facilities: A Model for Your State or Community
 - ii. Health and Sustainability Guidelines for Federal Concessions Vending Operations
 - iii. Food Service Guidelines for Federal Facilities

Appendix 3: Glossary of Terms

Circular Economy: A circular economy reduces material use, redesigns materials, products, and services to be less resource intensive, and recaptures "waste" as a resource to manufacture new materials and products. The Save Our Seas 2.0 Act refers to an economy that uses a systems-focused approach and involves industrial processes and economic activities that are restorative or regenerative by design, enables resources used in such processes and activities to maintain their highest value for as long as possible, and aims for the elimination of waste through the superior design of materials, products, and systems (including business models). It is a change to the model in which resources are mined, made into products, and then become waste. (Source: U.S. Environmental Protection Agency, https://www.epa.gov/recyclingstrategy/what-circular-economy).

Commercial Service Providers: NPS commercial service providers, consisting of concessioners, leaseholders, and commercial use authorization holders.

Commercial Visitor Services⁴ are authorized under a concession contract or commercial use authorization in accordance with P.L. 89-249 issued in 1965 (the 65 Act) and P.L. 105-391 issued in 1998 (the 98 Act) (recodified in Title 54 U.S.C. Chapter 1019) and regulations at 36 CFR 51. Concession contracts provide commercial visitor services that are determined to be necessary and appropriate for public use and enjoyment of park units. There are about 500 concession contracts. Many of these activities, such as lodging, food and beverage and retail services, involve SUP and contribute to park solid waste streams. Commercial Use Authorizations (CUAs) may be issued for commercial services which are appropriate, but not necessary, and which have a minimal impact on the resources and values of the park unit. CUAs provide a wide variety of services including guided hiking, rafting, backpacking, bicycle tours, climbing, and kayaking, as well as equipment rentals, transportation services including air taxi and water taxis, and food trucks. Occasionally CUA holders may have facilities assigned to them as part of their operations. There are over 6,000 CUA-holders and their operations may at times include direct or incidental food service and other activities that could involve SUP. Leases are issued by the NPS as an adaptive means to reuse NPS facilities no longer necessary for the Service's use. Leases are authorized in accordance with the NPS General Leasing Authority contained in 54 U.S.C. 1021 and the Historic Leasing Authority, 54 U.S.C. 306121. Services offered by a leaseholder must be appropriate but are not necessary. They may include visitor services such as lodging, restaurants and retail. They may also provide services that are not used by park visitors such as office space or private residences. Many of these services utilize SUP and other plastic.

Cooperating Associations are private, non-profit corporations which support the education, scientific, historical, and interpretative activities of the NPS in a variety of ways (e.g., form Management Policies). One such way is through the assignment of space, or a building and operation of park retail stores, often located in the park visitor center. Several cooperating associations operate in multiple parks, while others operate only in one park. In addition to selling interpretive items, they may also hold

⁴ For the purpose of this document, leases are grouped under commercial visitor services, as the leases that would be most affected by a plastic reduction strategy are those that provide services to visitors (e.g., hotels, restaurants).

a CUA or a concession contract to sell convenience items such as sunscreen, insect repellant, toilet paper, and bottled water, etc. These retail activities may involve the use of SUP and other plastic.

Interagency Agreements: Some other agencies may utilize NPS facilities under an Interagency Agreement. These organizations may utilize SUP or other plastic, and contribute to NPS solid waste streams.

Pollution Prevention: Pollution prevention is reducing or eliminating waste at the source by modifying production processes, promoting the use of nontoxic or less toxic substances, implementing conservation techniques, and reusing materials rather than putting them into the waste stream.

Problematic and Unnecessary Plastic: Plastic packaging items, components, or materials where consumption could be avoided through elimination, reuse or replacement and items that, post consumption, commonly do not enter the recycling and/or composting systems, or where they do, are detrimental to the recycling or composting system due to their format, composition, or size. (Source: U.S. Plastics Pact's Problematic and Unnecessary Materials Report)

Residential Environmental Learning Centers (RELCs):⁵ RELCS provide benefits to scientists, educators, youth programs and visitors though permitting, guidance on field work, providing science education programs and other activities. There are 18 RELCs in the NPS. Many RELCs are provided with park facilities to operate including housing and food service. Some centers are authorized through a cooperative agreement to operate an RELC for both educational purposes and for other revenue generating activities events such as weddings and receptions.⁶

Single-Use Plastics (SUP): Plastic items intended to be disposed of immediately after use, including plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags. (Source: Secretarial Order 3407)

Source Reduction: The term "source reduction" derives from the Pollution Prevention Act (PPA) which Congress passed in 1990. Pollution prevention is reducing or eliminating waste at the source by modifying production processes, promoting the use of nontoxic or less toxic substances, implementing conservation techniques, and reusing materials rather than putting them into the waste stream. The term also includes redesign of products and substitution of raw materials. Pursuant to the requirements of PPA, EPA has taken the statutory definition of pollution prevention/source reduction and applied it to specific programs. This includes the Sustainable Materials Management Program's Non-Hazardous Materials and Waste Management Hierarchy which the NPS Strategy references and relies upon. The hierarchy prioritizes source reduction.

Special Park Uses are issued for activities in parks the provide a benefit to an individual, group, or organization rather than the public at large and which are not initiated, sponsored, or conducted by the Service and are not concessions, CUA or lease activities or recreation activities for which the NPS charges a fee. These may include activities such as weddings, road-races, and others. These activities,

⁵ The name RELCs is under review and may change to "Outdoor Schools" in the future. This document will be updated if this change occurs.

⁶ Recent decisions with Financial Assistance (FA) are that the legal mechanisms for operating an RELC for both educational purposes and for other revenue generating activities will primarily be a cooperative agreement, not Commercial Use Authorizations or Special Park Uses, except in very specific instances.

largely conducted without NPS direct oversight may include the use of SUP and other plastic, and contribute to NPS solid waste streams.

Appendix 4: Rules, Regulations, and Guidance

Several policies include requirements and authorization for the NPS to reduce plastics. This section provides an overview of relevant rules, regulations, policies, and guidance that support the elimination of SUP and waste reduction efforts in the NPS.

- Executive Order 14057— Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability. released in December 2021 by the Biden Administration, sets a goal to annually divert from landfills at least 50 percent of non-hazardous solid waste, including food and compostable material, and construction and demolition waste and debris by fiscal year 2025; and 75 percent by fiscal year 2030. In addition, the EO calls for agencies to prioritize products that can be reused, refurbished, or recycled.
- Secretarial Order 3407— Department-Wide Approach to Reducing Plastic Pollution. SO 3407
 prioritizes Department action to reduce the procurement, sale, and distribution of SUP products
 from current levels with a goal of phasing out SUP products by 2032. "Single-use plastic
 products" means plastic items intended to be disposed of immediately after use, including
 plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and
 disposable plastic bags.
- Departmental Manual, Part 518: Waste Management, Chapter 1: Comprehensive Waste Management. 518 DM 1 prescribes policy, responsibilities and functions related to management of solid and hazardous materials, and certain hazardous substances. The policy outlines four principles for comprehensive waste management:
 - a) Wherever feasible, the Department will seek to prevent the generation and acquisition of hazardous wastes.
 - b) Whenever waste generation is unavoidable, the Department will work to reduce the amounts (toxicity or risk) generated through the use of sound waste management practices.
 - c) The Department will manage waste materials responsibly to protect not only the resources entrusted to it, but the many people who live and work on Departmental managed lands, and those who enjoy those lands and facilities each year.
 - d) Wherever feasible, the Department will move aggressively to clean up and restore areas under its care that are contaminated by pollution.

The requirements are applicable to all Departmentally managed lands and facilities including with external groups such as concessionaires, contractors, permittees, and lessees.

- **Departmental Manual, Part 515: Environmental Management, Chapter 3: Recycling Programs.** 515 DM 3 provides policy, responsibilities and functions related to recycling programs. The policy requires each bureau and office to develop, implement and conduct a thorough recycling program to:
 - a) Assure compliance with all applicable Federal, State and local requirements.
 - b) Promote sound environmental practices by preventing pollution and recovering resources through recycling.

- c) Educate and monitor for recycling participation at all activities (including concessionaires, contractors and others).
- d) Identify and assign recycling responsibilities.

The policy outlines certain program criteria, e.g., specifying that the programs should be as inclusive as practicable to allow for maximum employee participation and collection of the widest number of resources. The policy also details the different categories of proceeds from recycling and how these proceeds can and cannot be used.

- NPS 2006 Management Policies: The Guide to Managing the National Park System. NPS 2006 Management Policies is the Service-wide document that sets out the laws, policy, and other guidance for stewardship of the national park system and NPS programs. Highest of three levels of guidance documents in the NPS Directives System, adherence to policy is mandatory. Meant to inform all management decisions, the document outlines all aspects of NPS functions and responsibilities including park management, park system planning, land protection, natural resource management, cultural resource management, wilderness preservation and management, interpretation and education, use of the parks, park facilities, and commercial visitor services. The policy document addresses only those policies applicable to management of the national park system and does not address NPS-administered programs that serve conservation and recreation but are not directly related to the national park system (e.g., The Rivers, Trails and Conservation Assistance Program, National Historic Landmark Program, National Register of Historic Places, etc.).
- NPS Green Parks Plan (GPP). The Green Parks Plan provides a sustainability vision for NPS operations across 10 goal areas, including a goal to Buy Green and Reduce, Reuse, and Recycle. Specifically, the GPP calls for the NPS to achieve a 50% annual diversion rate across the agency.
- Federal Acquisition Regulations (FAR) Part 23. FAR Part 23 details the environmental and
 occupational safety aspects of Federal Acquisitions. This includes Sustainable acquisition policy,
 energy and water efficiency and renewable energy, the use of recovered materials and biobased
 products, contracting for environmentally preferable products and services, and ozone depleting
 substances and greenhouse gases.
- Federal Acquisition Regulations (FAR) Part 52. FAR Part 52 Contains the required contract clauses for biobased product certification, affirmative procurement, recovered material certifications, EPA-designated item recovered material content, energy efficiency, and service and construction contracts.
- Save Our Seas 2.0 Act. This Act, signed into law in December 2020, seeks to enhance the United States' domestic programs to address marine debris, international engagement to combat marine debris, and domestic infrastructure to prevent marine debris.

Appendix 5: Applying the Waste Management Hierarchy

This U.S. EPA materials management hierarchy⁷ serves as an approach to implementation. The actions in this Appendix are under development will be updated as more practices and strategies are developed and/or identified through research and pilot projects.



Source Reduction and Reuse

- Eliminate the need (e.g., by changing a process or practice that requires SUP).
- Purchase and use more durable products.
- Adjust practices and develop infrastructure to allow for reuse options.
- Find and use non-single use plastic alternatives.
- Purchase in bulk and reduce or eliminate plastic and other packaging.
- Request that manufacturers redesign products to eliminate plastic.
- Purchase items with packaging that have been light-weighted.

Applying these types of practices within the NPS would require looking for opportunities with:

- FAR contracts
 - Large contracts
 - Micro purchases
- Commercial Services contracts.
 - Leases Note: Leaseholders are given a property right to use facilities and the NPS does not typically dictate significant operational requirements on leaseholders. Thus, consultation with leaseholders will involve awareness and education.
 - Commercial service provider contracts. Purchase of recycled goods.
 - Commercial Use Authorizations
- Public Behavior. Conduct visitor outreach through NPS-wide and park-wide social media encouraging visitors to avoid bringing plastics into parks.

⁷ The EPA is now in the process of reviewing the waste hierarchy to determine if potential changes should be made based on the latest available data and information. When a new hierarchy is finalized, the NPS will update this plan to reflect any changes.

- Product replacement. Find and use alternatives to products that contain plastic.
- Operations. Look for opportunities to reuse or fix things rather than replace.

Recycling and Composting

- Double-check to see if any of the above strategies can be applied before moving to this stage in the hierarchy.
- Purchase plastic products that can be easily recycled and are locally recycled.
- Purchase compostable products as an alternative to single use plastic products. Not all biobased products are compostable so make sure that the item can be composted.

Applying these types of practices within the NPS would require looking at:

- Operations
 - Purchase recycled, recyclable or compostable products.
 - Identify and socialize funding streams (e.g., Environmental Management Program, National Parks Foundation, and DOI) for recycling or composting infrastructure (e.g., compactors and trailers) and employees' salaries.
 - Find partners with which to partner in recycling operations (e.g., DOD and big-box stores).
 - Find markets for recycling or composting.
- Commercial service provider contracts. Increase recycling or composting. Require purchase of recycled, compostable, or recyclable products.
- Public Behavior. Encourage proper recycling and composting at parks through signage and infrastructure.

Energy Recovery

• Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolization, anaerobic digestion, and landfill gas (LFG) recovery.

Treatment and Disposal

• Least desirable management option. Prior to disposal, treatment can help reduce the volume and toxicity of waste. Treatments can be physical (e.g., shredding), chemical (e.g., incineration), and biological (e.g., anaerobic digestor).

Appendix 6: Single Use Plastic Alternatives

This appendix, currently under development, will provide common single-use plastic alternatives and case studies from implementation of single use plastic transitions from across the NPS. Some examples include the Be Straw Free campaign; sales of reusable water bottles and water in aluminum bottles and paper cartons; installation of water bottle refilling stations; elimination of plastic utensils and Styrofoam products; elimination of single-use toiletry products in plastic containers in hotels; new and improved electronic/battery recycling; and implementation of zero-waste strategies.

DOI Template Section Name	DOI Template Section Description	NPS Plastics Reduction Strategic Plan & Implementation Strategy	NPS Section Description
1. Executive Summary	This paragraph includes a summary of the Bureau/Office Sustainable plan.	Executive Summary.	This section includes a summary of NPS's plan.
2. Schedules and Annual Targets Addressing the Reduction of Procurement, Sale, And Distribution of Single- Use Plastic Products	This paragraph includes the bureau schedules and targets to make annual progress toward reducing the procurement, sale, and distribution of single-use plastic products from current levels with a goal of phasing out single- use plastic products by 2032. If a review of contracts, concessions, and procurement mechanisms to identify single-use plastic product reduction opportunities and challenges has not yet been done, include plans to complete in this section.	Section: Plan Schedules and Annual Targets.	This section includes NPS's year by year schedule, including NPS's plan to set a baseline and then determine a schedule and initial annual targets in Year 1 (2023/2024). The review of contracts, concessions, and procurement mechanisms will be done under the Collect Data step and is planned for Year 1 (2023-2024).
3. Updates to Acquisition and Procurement Policies and Practices	This paragraph includes schedules for updates to acquisition and procurement policies and practices to reduce single- use plastic products.	Section 7. Implement the Plan.	This section includes NPS's plan to implement updates to procurement policies as well as apply plastic-reduction strategies to authorizations (e.g., contracts).

Appendix 7. Crosswalk between This Plan and the DOI Template for Sustainable Procurement Plan

4. Data collection methods, metrics, and reporting requirements to reflect the specific approaches proposed to phase out single-use plastics by the end of 2032	This paragraph includes a schedule for reporting on how they will phase out single use plastic products by 2032.	Section 2. Collect Data and Section 9. Measure and Report.	The Collect Data section includes NPS's plan for establishing a plastics data baseline and the Measure and Report section includes NPS's plan to develop and track standardized metrics to track progress. The Plan Schedules and Annual Targets section indicates that data collection and setting of the baseline will incur in Year 1 (2023-2024).
5. Analysis of Alternatives to Single- Use Plastic Products	This paragraph includes an analysis of alternatives to single-use plastic products, such as compostable or biodegradable materials, or 100 percent recyclable or 100 percent recycled materials (with a circular economy plan) as defined in section 2 of the Save Our Seas 2.0 Act (Public Law 116-224).	Section 3. Analyze Alternatives to Single- Use Plastics	This section includes NPS's approach to conducting an analysis of alternatives to plastic products. For example, NPS will prioritize source reduction (Implementation Principle 3), will analyze alternatives from a life-cycle perspective (Implementation Principle 4), and will leverage other federal agency and partner research (Implementation Principle 2).
6. Opportunities to Shift Public Behavior to Reduce Single-Use Plastic Products	This paragraph includes an approach to identify opportunities to shift public behavior to reduce single-use plastic products, such as installing additional water fountains and reusable water bottle filling stations.	Section 8. Conduct Outreach and Education to Shift Public Behavior	This section includes NPS's approach to identifying opportunities to shift public behavior to reduce SUPs.
7. Single-Use Plastic Short-Term Exemptions, If No Alternatives Currently Exist	This paragraph includes short-term exemptions if no alternatives currently exist, or for the term of an existing concession or procurement contract, if justification is provided.	Section 1. Define Scope & Exemptions	This section explains when short-term exemptions may be made, if justification is provided.

8. Single-Use Plastic Exemptions for Medical, Public Safety, Public Health, Or Scientific Items	This paragraph includes exemptions for medical, public safety, public health, or scientific items, or for items for which there is proof of a circular economy plan, if justification is provided.	Section 1. Define Scope & Exemptions	This section explains that exemptions may be made for medical, public safety, public health, or scientific items, if justification is provided.
9. Funding Requests	This paragraph includes funding requests, if justified, for implementation costs.	Section 6. Fund the Work	This section includes potential funding sources for the NPS and possible efforts that would require funding.