



United States Department of the Interior



NATIONAL PARK SERVICE
Colorado National Monument
1750 Rim Rock Drive
Fruita, Colorado 81521

February 5, 2013

Memorandum:

To: Regional Director, Intermountain Region

From: Superintendent, Colorado National Monument

Subject: Request for Approval to Eliminate the Sale of Water in Individual Disposal Containers

On December 14, 2011, Director Jarvis issued policy on the recycling and reduction of disposable plastic water bottles in parks. The policy stated "where appropriate, superintendents may request approval from the regional director to eliminate the sale of water in disposable plastic bottles by analyzing the addressing the following factors – in writing." By copy of this memorandum, Colorado National Monument (COLM) is requesting approval to eliminate the sale of water in individual plastic disposable containers.

Colorado National Monument has experienced an increased amount of litter associated with disposable plastic bottles along Rim Rock Drive, along the rims and within all the inner canyons. These bottles are also the largest contributor to litter along ledges below the canyon rims and can be costly and dangerous to remove. In addition, waste associated with disposable bottles has become a noticeable part of the park's waste stream, compromising an estimated 10% of the park's recyclables.

There are significant environmental and monetary costs associated with the removal of litter, transport of litter to landfills, and recycle centers. As an effort to work towards "Greening" our park and being fiscally responsible, Colorado National Monument would like to eliminate the sale of water packaged in disposable water bottles starting March 2013.

We realize that a discontinuation of the sale of water in disposable containers is only one of the actions that would be taken; the park will also be implementing an Environmental Management Program in 2013, which will include a robust park wide solid waste recycling program. Over the last year, we have installed three fill stations and stocked our cooperative association bookstore with a variety of BPA- free reusable water bottles for purchase. We have developed new signage at fill stations that is intended to educate visitors about fill stations and to encourage visitors to use reusable water bottles instead of individual disposable water bottles while still providing a safe and enjoyable park experience.

As a commitment to support the National Park Service's new policy on the recycling and reduction of disposable plastic water bottles in parks, Colorado National Monument Association's board members have agreed to voluntarily discontinue the sale of disposable water containers in their bookstore.

For these reasons, we respectfully request permission to eliminate the sale of water packaged in individual disposable bottles. Attached please find the required analysis of the potential impacts and effects of discontinuing the sale of water sold in individual disposable water bottles per the director's policy memorandum.

Attachments

Concur:



Date:

3/15/13

Colorado National Monument Analysis of Potential Impacts/Effects of Disposable Water Bottle Ban

1. **Amount of waste eliminated and pros/cons** to overall park operations by volume, Colorado National Monument (COLM) could eliminate up to 10% of what is currently recycled.

Pros: • Decreases in plastics going to the landfill • Decreases in monetary costs to any visitor who would have purchased more than one bottle of water within the park; and if our education efforts are successful, visitors may save additional money as they continue to refill their reusable bottles after they leave the park. • Savings of resources used and Green House Gases (GHCs) released during the transportation of waste and recyclables and during the recycling process. • Decreases in litter associated with disposable bottles along both inner canyon and rim trails as well as below the rim. (Per NPS custodial/waste management staff, plastic bottles (and associated litter) are one of the top two sources of litter along Rim Rock Drive, rim trails, and litter found in the bottom of the park's canyons). • Decreases in risk to park staff and volunteers as below the rim litter removal can require technical skills and increased risk. • Reduces risk of plastic bottle ingestion by birds, rodents, and larger mammals. • Diminishes release of toxic chemicals such as bisphenol A (BPA). Toxins leached from plastics are known to have negative effects on wildlife. Decreases the amount of litter along the canyon rims and roadside is also unsightly for visitor enjoying the natural beauty throughout the park.

Cons: • Bottled water is a high profit margin item for Colorado National Monument Association (CNMA). If reusable bottle sales (lower profit margin) do not make up for this, CNMA could incur some financial loss. (See #6 for additional analysis). • Some people perceive a risk to visitors of dehydration. (Bottled water is a relatively recent retail innovation and this concern had been well addressed before its advent. Water filling stations have been placed in the campground, picnic areas, and visitor center. Reusable bottles starting at prices just a few cents above the cost of one disposable bottle of water are being sold at the visitor center by the CNMA.

2. **Infrastructure Costs and funding source(s)** for filling stations was completed in 2012. Total construction cost was \$10,000. Funding sources included a donation from the Colorado National Monument and base funding.

3. **Contractual implications on CNMA** is not an issue. The Colorado National Monument Association has been involved in the discussions of removal and is supportive of discontinuance of bottled water sales.

4. **Operational costs** of filling stations including utilities and regular public health testing. The park estimates that it will spend about \$85 a year on each filling station, which includes switching their operation from fall/winter to winter/spring and water quality sampling. With a total of three fill stations, that is a total of \$255 per year.

5. Cost and availability of BPA-free reusable containers: The lowest priced reusable bottle is sold by CNMA is \$2.99; and is BPA-free. CNMA also sells a variety of BPA-free, reusable, souvenir bottles at a range of prices. Bottled water in the park starts at approximately \$1.50 per bottle.

6. Effect on CNMA Sales Revenue: Sales information for our CNMA is provided below. Our belief, is that CNMA will not have a substantial loss in gross sales revenue as individual plastic water bottle sales will be replaced by reusable water bottle sales.

Colorado National Monument in partnership with the Colorado National Monument Association has installed water filling stations at four different locations including two at the park's visitor center. The park and CNMA staff does not know how many people have brought in their own bottles to be filled. However, the park has received numerous compliments on the new fill stations and our effort to reduce plastic waste. New signs have been posted near the fill stations to help direct visitors to the fill stations.

CNMA has the approval of their Board of Directors to voluntarily discontinue the sale of bottled water in 2013. The following is a summary of their bottled water sales: Colorado National Monument Association.

The following is a summary of the water bottle sales by CNMA for 2011 and 2012

2011 Total Sales of Disposable Water Bottles

3180 bottles sold Total Sales: of H2O = \$4,503 Total sales \$319,405 and percentage of total sales: 1.4%

Refillables 2011: #1209 stainless—qty. 60, \$891

2012 Total Sales of Disposable Water Bottles Sold

3,321 bottles sold Total Sales: of H2O = \$4,668 Total sales \$291,068 and percentage of total sales: 1.6%

2012 Grand Total Refillable bottles number of bottles: 212 \$2,482.65

7. Availability of water within concessioner food service operations: NO food service operations in COLM

8. Visitor Education in the park and on line so that visitors may come prepared with their own water bottles:

Within the park, information about the filling stations and reusable water bottle promotion will be available in the park's 2013 Visitor Guide – The Guide and on all new filling stations. Information will be posted at the entrance stations, campground and visitor center.

Information will be posted on the park's Content Management System under Planning Your Visit and on the home page. The CNMA will also post information on their website to share this information with park visitors and local community members.

Information on the ban of individual disposable water bottles will be put out to the media in a news release in February 2013 and will be posted on the park's News Release page.

9. Results of consultation with NPS Public Health Office. The type of fill stations purchased do not pose any new health issues for the park. The Public Health Office (Joseph Winkelmaier) reviewed the design of the water filling stations, commented on placement of the stations to meet public needs and all aspects were found to be satisfactory. The NPS Public Health Office is fully supportive of this ban, as any concerns about public safety have been addressed.

10. A sign plan so that visitors can easily find filling stations has been implemented. There is currently signage in place at all of the water filling stations within the park.

Colorado National Monument's interpretive staff has also designed informational signs at the visitor center's water filling station to educate the public about the environmental benefits of refilling water bottles.

11. Safety considerations for visitors who may resort to not carrying enough water or drinking from surface water sources with potential exposure to disease

Fill station locations were chosen specifically to provide immediate water access to the largest number of people who might have an immediate need.

All trailheads have information signs encouraging visitors to carry water.

12. A system for annual evaluation of the program, including public response, visitor satisfaction, buying behavior, public safety, and plastic collection rates

On an annual basis the park would monitor and collect the following data:

- Visitor satisfaction/public response by using the visitor comment forms – log in complaints/compliments (Public Response and Visitor Satisfaction).
- Visitor and Resource Protection Staff – will continue to track incidents/contacts related to water availability and dehydration (Public Safety).
- Safety Officer/NPS Public Health Representative will keep a log of any safety issue related to water availability. (Public Safety).
- CNMA will track sales of reusable water bottles (Buying Behavior).
- Interpretation will track sales with CNMA (Buying Behavior).
- Maintenance will track collection rates (Collection Rates).

A position in the park will be designated as the "project manager" to collect all of the data and evaluate the data on an annual basis.

13. Results of consultation with CNMA. Consultation with CNMA began on an informal scale in January 2011. These discussions included the development of alternative products that are both sustainable and affordable (various price points) in order to allow the organizations an opportunity to recoup revenue currently associated with bottled water sales.

On January 2, 2013, a letter was sent to CNMA stating that new water filling stations had been installed and that the NPS would no longer allow the sale of water in plastic bottles within park boundaries after March 31, 2013 (See attached letter).

CNMA has the approval of their Board of Directors to voluntarily discontinue the sale of bottled water in 2013. The following is a summary of their bottled water sales: Colorado National Monument Association.

14. Timeline of phase in period: By May 2012, CNMA broadened their line of reusable bottles to include a variety of choices at a variety of price points. During the summer 2012, CNMA began discontinuing further purchase and stocking of plastic water bottles; during Spring 2013, information about the park's voluntary reusable water bottle program will be distributed to media outlets and park staff once there is regional approval (other notifications include the park's web site, so that visitors will be informed of their options and the environmental benefits of their choices).

In December of 2011, NPS Director Jarvis issued a service wide policy on management of disposable plastic water bottles in parks. This new policy allowed for elimination of the sale of water packaged in disposable plastic bottles with the approval of the appropriate Regional Director. After performing the required assessment of the potential impacts and effects of a disposable water bottle ban, Colorado National Monument submitted a request for approval in January 2013.

If approved, the park would immediately inform the Colorado National Monument Association of the forthcoming ban on the sale of water in individual disposable containers, and would coordinate with CNMA to ensure they could sell, transfer or return any product they already have in stock. Ideally, the ban would take effect 30 days from approval.



United States Department of the Interior

NATIONAL PARK SERVICE

Fort Raleigh National Historic Site Wright Brothers National Memorial

Cape Hatteras National Seashore

1401 National Park Drive

Manteo, NC 27954

252-473-2111




IN REPLY REFER TO:

C46 (CAHA-S)

MAY 29 2013

Memorandum

To: Gordon Wissinger, Acting Regional Director, Southeast Region

From: Barclay C. Trimble, Superintendent, Outer Banks Group 

Subject: Request of Approval to Eliminate the Sale of Plastic Water Bottles Provided by Park Concessioners

On December 14, 2011, Director Jarvis issued Policy Memorandum 11-03, *Recycling and Reduction of Disposable Plastic Bottles in Parks*. The policy stated "Where appropriate, superintendents may request approval from their regional director to eliminate the sale of water in disposable plastic bottles by analyzing and addressing the following factors - in writing." By copy of this memorandum, the Outer Banks Group is requesting regional approval to eliminate the sale of plastic water bottles from concession operations at Cape Hatteras National Seashore (Seashore).

Significant environmental and monetary costs are associated with the removal of litter, transport of waste and recyclables, disposal of non-biodegradable plastics in landfills, and recycling of plastics. As a fiscally responsible, Climate Friendly Park, the Seashore is interested in minimizing all of these cost and believes that the most effective way to do so would be to eliminate the sale of water packaged in individual disposable containers.

While we realize that a ban on the sale of water in disposable containers is only one of the actions that can be taken, we have just begun an education program intended to increase visitor use of refillable water bottles and decrease dependence on water sold in disposable plastic containers. The attached evaluation and analysis has determined that eliminating the sale of plastic water bottles would result in minimal impact to concessioner's gross sales revenue because disposable bottled water makes up a minimal percentage (0.3% for Oregon Inlet Fishing Center and 1.2% for Avon Fishing Pier) of total gross revenue. In addition, for 2013 our cooperative association has created/purchased reusable water bottles and these sales items are creating a successful revenue stream while still providing a safe and enjoyable experience.

TAKE PRIDE
IN AMERICA 

For these reasons, we respectfully request permission to eliminate the sale of water packaged in individual disposable containers. Attached please find the required analysis of the potential impacts/effects of a ban on the sale of water in individual disposable containers in the parks per the Director's policy memorandum.

Attachments

Concur: 

Date: 6/25/13

Outer Banks Group - Cape Hatteras National Seashore, Fort Raleigh National Historic Site, Wright Brothers National Memorial – Analysis of Potential Impacts/Effects of Plastic Water Bottle Ban on Park Operations, Concession Operations, and Cooperative Association

1. Amount of waste eliminated and pros/cons to park concession operations.

The Outer Banks Group (Group) has a parkwide recycling program that includes paper, plastic, aluminum, and glass products, which accounts for 30% of the Group's overall solid waste. In 2012, the Group recycled 97 tons of material.

Eastern National (Eastern), which is the Group's cooperating association, operates visitor center bookstores at all three parks. Waste products generated through their activities are included in the Group's waste stream and appropriate items (glass, paper, plastic, and aluminum) are recycled and reported through the Group's recycling efforts.

Two concessioners operate within Cape Hatteras National Seashore (Seashore), and they include Oregon Inlet Fishing Center, Inc. operating the Oregon Inlet Fishing Center (OIFC) and E.W.N. Development Company operating the Avon Pier (Avon). Cape Hatteras Fishing Pier, Inc. (Frisco Pier) is an expired contract and is not currently operating within the park but concessioner facilities are still located within the park boundaries and possessory interest purchase of the assets has not occurred. Both operating concessioners are responsible for gathering and disposing of solid waste generated by their operations including recyclable material. Data is not available related to the overall solid waste generated by these concessioners; however, based on sales, approximately 8,400 and 2,000 water bottles are sold annually from OIFC and Avon respectively. By eliminating the sale of concessioner provided water bottles, a reduction in the amount of solid waste going to the landfill will occur; however, an estimated percentage of reduction cannot be determined since the Group's solid waste contractor cannot provide waste information.

Pros:

- Decreases plastics going to the landfill.
- Decreases monetary costs to any visitor who would have purchased more than one bottle of water at the OIFC or Avon; and if our education efforts are successful, visitors may save additional money as they continue to refill their reusable bottles after they leave the park units.
- Savings of resources used and Green House Gases (GHCs) released during the transportation of waste and recyclables and during the recycling process.
- Decreases in litter associated with disposable bottles along highways, waterways, and beaches (Staff observations indicate that water bottles are routinely observed in these areas).
- Diminishes release of toxic chemicals such as bisphenol A (BPA). Toxins leached from plastics are known to have negative effects on wildlife.
- Cost to install water filling stations would be borne by the National Park Service and not by concession.
- Ample sales outlets outside the boundaries of all three units that can provide bottled water for purchase.

Cons:

- Bottled water is a high profit margin item for the park concessioners. If reusable bottle sales (lower profit margin) do not make up for this, concessioners and partners could incur some financial loss. (See #6 for additional analysis).
- A perceived risk could occur related to visitors being dehydrated as a result of not purchasing bottled water.
- Costs associated with the design and/or purchase of refillable water bottles and providing them as a sales item may increase operating costs.

2. Infrastructure Costs and funding source(s) for filling stations

Suitable locations have been identified at OIFC and Avon for the placement of water filling stations. These stations would be installed along the store front of these locations and require only minimal installation efforts. The Seashore has identified appropriate procurement sources to purchase water filling stations for OIFC and Avon. Total cost is estimated to be \$12,300 with funding provided by the Seashore's concessions franchise fees. Additional filling stations will also be installed throughout the park units, using a variety of fund sources, to provide easy access to water in high traffic visitor areas.

3. Contractual implications on concessioners, including considerations of new leaseholder surrender interest or possessory interest

Sec 2(b) of the concessions contracts for Oregon Inlet Fishing Center, Inc. (OIFC), Avon-Thornton Limited Partnership, now E.W.N. Development Company (Avon Pier), and Cape Hatteras Fishing Pier, Inc. (Frisco Pier) states: "The Director reserves the right to determine and control the nature, type and quality of the merchandise and services described herein to be sold or furnished by the Concessioner within the Area."

OIFC is the park's biggest seller of disposable bottled water and currently the only concessioner selling reusable bottled water containers. Their initial contract term was set to expire on December 31, 1999. The concessionaire is under a one year continuation of service set to expire on December 31, 2013. The new Concession Prospectus is currently under WASO review, and expected for release this spring with an anticipated award date of January 1, 2014.

Avon's initial contract term was set to expire on December 31, 1999. The concessioner is under a one year continuation of service set to expire on December 31, 2013. The new Concession Prospectus is currently under draft, and expected for release next spring with an anticipated start date of January 1, 2015.

Frisco Pier has an expired contract as of January 1, 2012, which has not been renewed. The Seashore is in ongoing discussions to close out the contract with the existing concessioner and cease commercial operations permanently in this location.

The Seashore expects to include language in all new Concession Contracts eliminating the sale of disposable bottled water. OIFC and Avon have had discussions with the Seashore's Concessions Management Specialist regarding the removal of disposable water bottles, and

at this time the Seashore does not anticipate either new leasehold surrender interest in the new Contracts or possessory interest in the current Contracts.

4. Operational costs of filling stations including utilities and regular public health testing

The park estimates that it would spend about \$85 a year on each filling station, which includes routine water quality sampling. Total operating costs are expected to be \$175 for two stations. Similar cost will be associated with the other units installed throughout the park and these cost are comparable to current cost associated with replacement/rehab of existing water fountains, spigots, etc., that will be replaced with the new filling stations.

5. Cost and availability of BPA-free reusable containers:

The lowest priced reusable bottle sold by OIFC is \$7.50 and it is BPA-free. Only OIFC sells BPA-free, reusable, souvenir bottles. Bottled water, sold by the Concessioner, ranges from \$0.59 per bottle for a 16oz bottle to \$1.99 for a 1-liter bottle.

Eastern has never sold plastic water bottles at the Group; however, they have carried a 20 oz. metal bottle until March 2013 when it was replaced by a stainless steel, 24 oz. bottle at a cost of \$19.95.

6. Effect on concessioner and cooperating association sales revenue

Sales information for our concessioners and partners is provided below. Our belief, based on the provided data, is that the concessioners will not suffer a substantial loss in gross sales revenue because disposable bottled water makes up a small percentage of total general merchandise revenue. The sale of reusable water bottles also has the potential to make up some of the lost revenue from eliminating the sale of disposable water bottles.

Avon Fishing Pier

Avon continues to sell bottled water and does not currently provide any reusable water bottle options within their retail operation. The number of bottled water containers sold is provided below; however, actual water bottle sales revenue was not provided by Avon. Estimated water bottle revenue based on an estimated retail amount of \$1.99 per bottle.

	2010	2011	2012
Bottled Water Sold	2,067	1,974	2,084
Estimated Gross Revenue for Water Sales	\$4,113	\$3,928	\$4,147
% of Total Gross Revenue	1.2%	1.3%	1.2%

Oregon Inlet Fishing Center

The OIFC is the largest provider of bottled water in the park. According to their records, OIFC has seen sales for bottled water decrease from 2011 to 2012 by approximately 768 units sold, but they also experienced a decrease in the number of reusable water bottles sold by approximately 12 units sold.

	2011	2012
Bottled Water Sold	8,839	8,071
Gross Revenue for Water Sales	\$9,570	\$8,965
% of Total Gross Revenue	0.43%	0.3%

Reusable Water Bottles	26	14
Gross \$	\$180	\$105

	Most Expensive	Least Expensive
Reusable Water Bottle Prices	\$7.50	\$7.50
Disposable Bottled Water Prices	\$1.99	\$0.59

Eastern National Cooperating Association

Reusable water bottles are sold by Eastern and available at the Group's five visitor centers. Plastic water bottles have not been sold by Eastern at the Group; however, they have carried 20 oz. metal bottles until March 2013 when it was replaced by a stainless steel, 24 oz. bottles at a cost of \$19.95. Both bottles have a sales price of \$19.95.

	2012
Reusable Water Bottles	236
Gross \$	\$4,708

7. Availability of water within concessioner food service operations

Avon and OIFC are fishing and charter boat operations and do not provide food service operations in the form of restaurants, food counters, or cafeterias. However, they provide pre-packaged food, beverages, and fountain drinks. Water can be obtained at OIFC through a water dispenser located at the fountain drink machine. Drinking water is not available at Avon other than through the purchase of bottled water.

8. Visitor Education in the park and on-line so that visitors may come prepared with their own water bottles

Education of park visitors regarding the use of water filling stations and re-usable water bottles has been limited. Various educational ideas have been discussed with the current concessioner. The Seashore would work with both concessioners and our cooperating association to implement the following:

- provide information about this program on the concession/cooperating association websites
- provide signs on refrigerated cabinets where bottled drinks are available
- place signs on merchandise stands identifying the availability of reusable water bottles and purpose of this program
- provide information during the charter booking process prior to visitors arriving to the park
- provide information within printed publications related to these operations

The Seashore would include information about the filling stations and our reusable water bottle promotion in the park newspaper, *In the Park*, and on all filling stations. A site bulletin would be developed and made available on-line and throughout the Group. Information on the program would be put to the media in a news release and posted on the Group's News Release pages. The Group would develop a webpage dedicated to the use of filling stations and the reusable water bottle program. This site would be updated to reflect that water in individual disposable containers is no longer sold at our concession facilities/cooperating association; and a link to this page would be featured on the Group's individual home page to ensure easy access to information about the change.

9. Results of consultation with NPS Public Health Office

Seashore staff consulted with the NPS Public Health Office regarding the removal of plastic water bottles from the Group's waste stream and any concerns regarding the installation of filling stations throughout the Group. The NPS Public Health Office expressed support of this effort and commended the park for taking a proactive approach to managing its waste stream. Public health officials cited specific requirements that needed to be considered when installing filling stations that included routine water quality sampling and cleaning as conducted for other potable drinking water locations throughout the Group. The Group will incorporate these requirements for all filling stations installed.

10. A sign plan so that visitors can easily find filling stations

Current plans call for the placement of filling stations at concession operations/cooperating association/high traffic visitor use areas within the Group. These stations would be placed in prominent locations either at the front of the facilities or adjacent to primary entry points. Language regarding their location would be placed on printed material and signs within buildings where reusable water bottles and beverages are sold. Locations of these facilities would be placed on the park map in the *In the Park* newspaper, and a site bulletin.

11. Safety considerations for visitors who may resort to not carrying enough water or drinking from surface water sources with potential exposure to disease

Filling station locations have been chosen specifically to provide immediate water access to all patrons of the Avon and OIFC concessions and other high visitor use areas. These locations provide the appropriate amount of water to meet the needs and uses of these operations and will in most cases replace water drinking fountains which are not currently designed to allow for filling of reusable water bottles. Water filling stations would be connected to a municipal water supply, which substantially reduces the health risk to park visitors. Water stations would be inspected through regular health inspections to minimize

health risks. Additionally, concession operations would be responsible for regular cleaning of the filling stations to meet required health standards.

12. A system for annual evaluation of the program, including public response, visitor satisfaction, buying behavior, public safety, and plastic collection rates

On an annual basis the park would monitor and collect the following data:

- Visitor satisfaction/public response by using visitor comment forms (Public Response and Visitor Satisfaction).
- Concession staff would track incidents related to water availability and dehydration associated with patrons of their facilities (Public Safety).
- Safety Officer/NPS Public Health Representative would log any safety issue related to water suitability or availability (Public Safety).
- Concessions/Cooperating Association would track sales (Buying Behavior).
- Concession Specialist and Concession staff would track collection rates (Collection Rates).

The Seashore's Concession Specialist would be designated as the "project manager" to collect all of the data and evaluate the data on an annual basis.

13. Results of consultation with concessioners and cooperating associations

Consultation with the two operating concessioners located in the park began on an informal scale in January 2013. These discussions included the development of alternative products that are both sustainable and affordable (various price points) in order to allow the organizations an opportunity to recoup revenue currently associated with bottled water sales which is minimal as Avon has a seasonal closure in December and does not open again until April so the inventory is depleted. OIFC is a year-round operation with a slow season that begins in late fall and ends in mid to late April, so the inventory during this period is also minimal. Both concessioners were unsupportive of the idea, because of the amount of competition in the local community, while the cooperating association is very supportive of the concept and already developed various designs and types of bottles for sale.

14. Timeline of phase in period

Prospectuses are currently under development for both the Avon and OIFC concession operations. As a result, the Seashore would like to eliminate the sale of disposable bottled water beginning with the initiation of the new contracts. The OIFC prospectus is expected to be complete and available for bid beginning in June 2013 with a contract award and new operation beginning January 2014. The Avon prospectus is expected to be completed and open for bid in spring 2014 and a new contract awarded in early 2015. Implementation throughout the three parks would begin in early 2014.

The Group anticipates being able to install water filling stations by winter 2013-2014 when one concessioner is closed, the other has very minimal operations and visitation to all the parks is low. This would allow installation of the stations to take place during a time that would cause the least impact to park visitors and concessioners.

Information about the concessioner's reusable water bottle program would be developed this

fall and made available for posting on the Seashore's webpage, printed in the Seashore's newspaper, and available to concessioner's for printing prior to their next operating season.

If approved, the Seashore would immediately inform concessioners of the forthcoming ban on the sale of bottled water, and would coordinate with concessioners and cooperators to ensure they could sell, transfer, or return any product they already have in stock which we expect is very minimal. The Seashore would also notify WASO and SERO concession programs to make necessary modifications to the concession prospectuses. The WASO and SERO concession staff is aware of this direction by the Seashore and are ready to incorporate any changes to the respective prospectus.

Laura

United States Department of the Interior



NATIONAL PARK SERVICE
Pecos National Historical Park
P.O. Box 418
Pecos, NM 87552



In reply to:

NOV 05 2013

Memorandum

To: Acting Regional Director, Intermountain Region
Through: Acting Deputy Regional Director, Intermountain Region
From: Superintendent, Pecos National Historical Park /s/
Subject: Request for Approval to Eliminate the Sale of Water in Disposable Plastic Bottles

We have modified the drinking fountain in the E.E. Fogelson Visitor Center to enable users to fill reusable water bottles. The park has worked closely with Western National Parks Association (the vendor of bottled water) to facilitate a smooth transition from selling disposable plastic bottles to producing and marketing reusable bottles only.

In compliance with the policy memorandum issued by the Director on December 14, 2011, an attached analysis on potential impacts of the program to switch from sales of disposable bottled water to reusable bottles seeks your approval to continue its implementation.

Recommend Concurrence: *Mary Risser*
Mary Risser, Acting Deputy Regional Director

Concur: *Laura E. Joss* 11/5/13
Laura E. Joss, Acting Regional Director

Pecos National Historical Park

Analysis of potential impacts from switching to the sale of reusable water bottles from disposable bottles.

1. Elimination of waste and the overall pros/cons to park operations.

The Pecos National Historical Park (PECO) could significantly eliminate overall waste and aid in the park's recycling program. Of the 1.79 tons of material recycled by the park in Fiscal Year 2012, approximately 25% was comprised of disposable plastic bottled water or other plastic containers. This is especially true during the summer months when park visitation is at its peak and when the overwhelming majority of bottles are sold. Eliminating plastic water bottles would certainly reduce the park's overall waste and create a more sustainable solid waste/recycle management plan.

Pros:

- Although the park has undertaken an aggressive approach to recycling, plastic bottles inevitably still end up at the landfill. The percentage of bottles getting to this point would be greatly reduced with the discontinuation of bottled water sales and the adoption of a reusable water bottle policy.
- We can expect to see that the average visitor who buys multiple bottles of water will alternatively purchase a reusable bottle. This bottle can be filled multiple times and over a brief period (even after the visitor leaves the park) will garner the visitor savings. Visitors may be inclined to spend funds on other items from the association.
- Reduction of Green House Gases (GHG's) and savings of resources used during transport and process of waste and recyclables.
- Reduction in time and labor in handling waste and recyclables by Facility Management staff.
- Reduction in litter associated with disposable bottles.
- Protection of wildlife, birds, rodents, and mammals are often enticed to plastic bottles perhaps believing they contain either food or water whereby they will inadvertently swallow pieces of the container. It is well documented that these pieces can cause wildlife to choke and create blockages in the digestive tract when ingested.
- Reduce the release of toxic chemicals that plastics are known to contain, which have a negative impact on wildlife.

Cons:

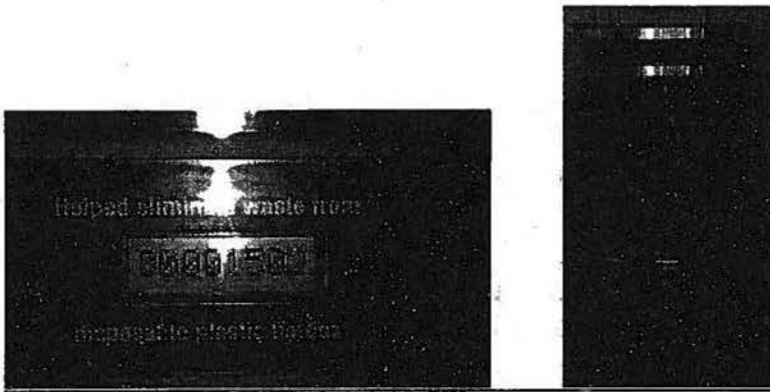
- Bottled water has a high profit margin for the Western National Parks Association (WNPA). If sales of reusable bottles do not come into line with the profits of bottle water, WNPA

would incur a significant financial loss (see #6 for analysis of sales). Nevertheless, WNPA is supporting the park in its elimination of bottled water.

- Risk of visitor dehydration. (Widespread use of bottled water has occurred within a relatively short time and historical accounts do not show this to be a significant problem. These concerns were well managed before the advent of bottled water by placing drinking fountains at strategic locations. In addition, reasonably priced reusable bottles would offer a way for visitors to stay hydrated at a relatively low cost.)

2. Infrastructure costs and funding source(s) for filling stations

PECO has replaced the drinking fountain in the EE Fogelson Visitor Center with an Elkay EZH₂O refillable station and its use has been increasing since its installment. The current number on refills at this time is 1502 bottles.



The cost and installation of the water station was paid for from park operational funds. Total cost for unit and installation amounted to \$2,000. Cost includes labor for the installation and modification.

3. Contractual implications on concessioners, including considerations of new leaseholder surrender interest or possessory interest

Bottled water is exclusively sold by PECO's cooperating association WNPA. The association operates under an agreement with the NPS; therefore, there is no contract or possessory interest for consideration.

4. Operational cost of filling station, utilities, and public health testing.

It is estimated that the annual cost of \$70 would maintain and operate the filling station. The estimation includes the purchase and installation of a new filter. Utility costs should prove to be insignificant as the park maintains and operates its own well. In addition, water testing by park staff is already a core of park operations.

5. Providing a reasonable alternative, the cost and availability of BPA-free reusable containers.

WNPA is offering reusable bottles for visitors to purchase. Currently, there is a \$2.99 28 oz Jr. Ranger bottle and a \$12.00 32 oz Nal-gene bottle that carries the park logo. Both bottles are BPA-free, and sales of these items have steadily increased since their introduction. In addition, evidence of their use is seen above in the number of refills at the fountain. Currently 16.9 oz disposable bottles

of water with the park logo are priced at \$1.99. It would seem apparent that when visitors are given alternatives, at a reasonable price, the choice between disposable and reusable containers could prove to be negligible in terms of sales. This trend is more likely to carry on as WNPA continues to look at reasonable alternatives.

6. Impact to cooperating association of revenue derived from sale of bottled water

On average WNPA sales of disposable water bottles here at PECO are 950 bottles. Sales of bottled water are at a high point during the summer season when, for example, 593 bottles were sold in the third quarter of 2013. Based on the information provided by WNPA on sales of water (over the last 11 quarters) here at PECO, it can be expected that any loss in gross sales as a result of implementation of this program will be inconsequential. The expectation is contingent on the fact that sales of reusable bottles will continue to increase as the sale of disposable bottles is eliminated.

7. Availability of water by concessioner with food operations

PECO does not have a concessioner and/or food operations.

8. Educating visitors to the park to bring along their own water bottle to the park.

The use of the already installed water filling station indicates the public's willingness to adopt a program of filling reusable bottles for water. The park will continue to facilitate this trend by providing relevant information to the public on how our program to eliminate disposable bottles is progressing and when it is fully implemented. This will give the visitor full notification of suggested items visitors should have prior to visiting the park. Park staff will disseminate this information to the public through printed material, website, social media, and orally. All staff will be notified of the implementation that they may readily share it with visitors.

9. Results of consultation with NPS Public Health Office

Information is unavailable at the drafting of this report.

10. Sign plan enabling visitors to find filling station with ease

There is currently no signage directing visitors to the filling station. However, the filling station is strategically located within the visitor center and is found with little or no direction. If necessary, staff is always available to assist visitors in locating the station.

11. Safety considerations for visitors who may not carry enough water or drink water from surface water sources which carry a potential exposure to disease

Visitors are never more than a mile from either the newly installed filling station in the visitor center or a traditional drinking fountain at the comfort station located along the trail. Visitors using other trails are advised orally and in site bulletins about the lack of drinking water. Still, they are never more than a mile from their vehicle. The practice of notification in these areas will continue and increased through proper signage if it is deemed necessary. Because of the aridity in the area, it is rare to find surface water along the trail and the possibility of exposure to disease from such a source is limited.

12. A system for annual evaluation of the program, including public response, visitor satisfaction, purchasing behavior, public safety, and plastic collection rates

Park management will conduct an annual evaluation of the program by analyzing data collected through:

- Visitor satisfaction/public response collected from comment forms, annual satisfaction survey, and log of complaints/compliments made directly to staff in the visitor center.
- Consultations with the safety officer and issues related to water availability.
- WNPA will continue to analyze sale patterns.

13. Results of consultations with concessioners and cooperating association

Consultations with WNPA staff here at PECO have been continuous from initial discussions as to the potentiality of eliminating disposable water bottles. These consultations have led to the sale of reusable bottles that are acceptable to both parties. As a result, an agreement was reached on the timeline for the eventual elimination of disposable bottled water sales. Throughout the process, both parties have been committed to finding a common vision and have worked together in implementing a viable program.

14. Timeline of phase in period

The phase in period of action is well under way, and the park awaits the approval by the NPS-IMRO for continued implementation. Reusable bottles are on the shelf and the drinking station has already been installed. It is expected that full implementation of the program will show an overall benefit to the public, park, and cooperating association. WNPA has approximately 273 bottles of water on hand at the time of this report. Disposable bottled water sales are expected to cease when the inventory has been exhausted and the approval of the program.