



United States Department of the Interior

NATIONAL PARK SERVICE

Mount Rainier National Park
55210 238th Avenue E.
Ashford, Washington 98304-9751

IN REPLY REFER TO:
10.A.

June 16, 2016

Memorandum

To: Regional Director, Pacific West Region

From: Superintendent, Mount Rainier National Park

Subject: Recommendation to Eliminate the Sale of Disposable Plastic Water Bottles

Rainier Guest Services (RGS) was awarded Concession Contract No. CC-MORA002-14 (Contract) by Regional Director Lehnertz on March 26, 2014. This new 15-year Contract, effective April 1, 2014, requires the operation of overnight accommodations, food and beverage, retail sales, and other services within Mount Rainier National Park.

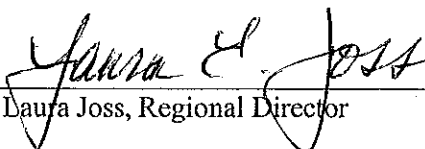
As part of its response to the Contract solicitation, RGS committed to the installation of hydration stations at Paradise, Longmire, and Sunrise, and eliminating the sale of disposable plastic water bottles within the first year of the Contract. The Service incorporated this commitment into Exhibit B of the Contract (Operating Plan, page B-30), first requiring RGS to complete the analysis per Policy Memorandum 11-03: *Disposable Plastic Water Bottle Recycling and Reduction*.

The analysis required by Policy Memorandum 11-03 has been completed and is attached. The analysis has been reviewed by the National Park Service's solid waste consultant and addresses the specific factors that must be considered in any decision to eliminate the sale of disposable plastic water bottles in a national park unit. In summary, the hydration stations have been installed and are operational; signage and information on the location of the filling stations will be in place for visitors this summer; potable water is readily available at each of the major developed areas of the park; reasonably priced, reusable water containers will be available for purchase at each of the locations where bottled water has previously been sold. The financial impact of not selling bottled water was considered by RGS in its proposal to the Contract solicitation.

Considering the analysis, the contractual commitments proffered by RGS, the environmental benefits of reduced waste, and the educational and stewardship role of the National Park Service, the park requests approval of this collaborative effort with RGS to eliminate the sale of disposable plastic water bottles, effective July 1, 2016.

Randy King

Attachment

Concur: 
Laura Joss, Regional Director

Mount Rainier National Park
Plastic Water Bottle Elimination of Sales Analysis
June 16, 2016

Mount Rainier National Park (the Park) has expressed an interest in reducing the environmental impact of bottled water product use in the Park and is considering implementing the elimination of sales provision of the Director's Policy Memorandum 11-03 – Disposable Plastic Water Bottle Recycling and Reduction (PM 11-03). The Park will also be continuing and enhancing existing recycling programs, introduction of green products, and environmentally responsible purchasing and education programs supporting other provisions of PM 11-03.

A. Waste Elimination – pros/cons to overall park operations

Plastic bottled water sales represented the largest percentage of bottled beverage sales accounting for 33% of total bottled beverage sales in the four outlets where beverage sales are allowed – Paradise Inn / Jackson Visitor Center / National Park Inn and Sunrise Lodge. In 2015, bottled water sales amounted to 26,232 units.

1. Pros

- a. Rainier Guest Services (RGS) estimates that 55% of the total bottled water volume (units) would be eliminated from the current recycled product stream either from electing not to purchase a bottled water product or purchasing a reusable container.
- b. Reduction in the amount and cost of concessioner and Park recycling resources required, due to the reduction of volume of recycled disposable plastic bottles, including a reduction in the Green House Gas (GHG) emissions from the reduced transportation of recycled materials.
- c. Reduced costs to visitors who choose to either not purchase a bottled water product or choose to purchase a reusable water container and continue to utilize that container in the future (best alternative).
- d. Decrease in litter associated with bottled water containers consumed in the Park and not properly recycled.
- e. Reduced risk potential of wildlife ingestion of discarded plastics associated with bottled water products.

2. Cons

- a. Visitor/public convenience and preference for a bottled water product is considerably high accounting for 33% of total bottled beverage sales.
- b. Bottled water sales represent a high volume product. Alternative sales, either thru reusable bottle sales or alternative beverage sales, may not fully replace lost revenues from bottled water sales.

B. Infrastructure costs and funding sources(s) for filling stations

RGS installed Elkay Model EZWSSM water bottle filling stations at the Paradise Inn, National Park Inn, and Sunrise Lodge to support use of refillable water bottles in high traffic areas of their assigned facilities. The Park installed Elkay model EZH2O water bottle filling station at the Jackson Visitor Center. Installation of the filling stations occurred in time to be operational throughout the 2015 summer season and use. Total construction cost for the RGS installations amounted to \$6,015; the entire funding came from concessioner funds. All filling stations include a digital counter that tracks the number of bottles saved from waste. Usage/operating statistics have not been compiled as of date of this report for the 2015 season.

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

The Park does not believe there are any contractual implications on the current concessioner, including considerations of new leaseholder surrender interest or possessory interest. Rainier Guest Services (RGS) was awarded Concession Contract No. CC-MORA002-14 (Contract) by Regional Director Lehnertz on March 26, 2014. This new 15-year Contract, effective April 1, 2014, requires the operation of overnight accommodations, food and beverage, retail sales, and other services within the Park. As part of its response to the Contract solicitation, RGS committed to the installation of hydration stations at Paradise, Longmire, and Sunrise, and eliminating the sale of disposable plastic water bottles within the first year of the contract. The Park incorporated this commitment into Exhibit B of the Contract (Operating Plan, page B-30). The financial impact of not selling bottled water was considered by RGS in its proposal to the Contract Solicitation. Water bottle filling stations are considered personal property, and do not impact the leasehold surrender interest of a concessions contract.

D. Operational cost of filling stations including utilities and regular public health testing

Fixed operating costs (electric) are estimated at \$35 per month of operation per unit. Variable cost (water usage) varies per location and on average is estimated at \$10 per month / per unit for a total monthly unit cost of \$45. Annual cost is estimated at \$855.

E. Cost and availability of BPA-free reusable containers

RGS lowest selling BPA-free reusable bottle is priced at \$3.95. RGS also sells a variety of reusable bottles priced from \$3.95 to \$19.95 to appeal to various segments. The concessioner has made reusable containers available to visitors near where beverages are sold, as well as near checkout areas.

F. Effect on concessioner and cooperating association sales revenue

Sales information from the current concessioner 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. The financial impact of not selling bottled water was considered by RGS in its proposal to the Contract Solicitation.

As noted above, bottled water sale volume accounts for the single largest percentage of overall bottled sales within Mount Rainier National Park and in 2015 totaled 26,232 units. The last five years of sales are shown in the table below:

<u>Year</u>	<u>Quantity Sold</u>	<u>Sales Price</u>	<u>Total Sales</u>
2011	15,984	\$2.25	\$ 35,964
2012	16,872	\$2.25	\$ 37,962
2013	19,158	\$2.40	\$ 45,979
2014	22,434	\$2.50	\$ 56,085
2015	26,232	\$ 2.50	\$ 65,580

The following table lists the sales of reusable water containers from the food service areas and retail outlets:

<u>Year</u>	<u>Outlet</u>	<u>Item</u>	<u>Quantity Sold</u>	<u>Sales Price</u>	<u>Total Sales</u>
2013	Food Service	Cups	265	\$9.95	\$ 2,637
	Food Service	Bottles	243	\$4.95	\$ 1,215
	Retail Outlets	Trvl. Mugs	424	\$11.95 - \$15.95	\$ 6,303
	Retail Outlets	Bottles	464	\$9.85 - \$18.75	\$ 5,404
<u>Year</u>	<u>Outlet</u>	<u>Item</u>	<u>Quantity Sold</u>	<u>Sales Price</u>	<u>Total Sales</u>
2014	Food Service	Cups	187	\$9.95	\$ 1,852
	Food Service	Bottles	407	\$4.95	\$ 2,035
	Retail Outlets	Trvl. Mugs	709	\$3.95 - \$15.95	\$ 7,179
	Retail Outlets	Bottles	659	\$4.95 - \$36.95	\$ 6,214
<u>Year</u>	<u>Outlet</u>	<u>Item</u>	<u>Quantity Sold</u>	<u>Sales Price</u>	<u>Total Sales</u>
2015	Food Service	Cups	264	\$9.95	\$ 2,627
	Food Service	Bottles	571	\$4.95	\$ 2,855
	Retail Outlets	Trvl. Mugs	516	\$3.95 - \$16.95	\$ 6,995
	Retail Outlets	Bottles	1,203	\$4.95 - \$36.95	\$ 14,910

G. Availability of water within food service operations

Water is readily available in each food service operation. Within the quick service venues water is a selection made from the beverage dispenser within each outlet. Within the full service food service venues, water is provided on request as part of the table service. And, as stated earlier, National Park Inn, Paradise Inn, Sunrise and the Jackson Visitor Center all host a filling station.

H. Visitor education in the park and online so that visitors may come prepared with their own water bottles

The Park and the concessioner would promote the use of refillable water bottles and the availability of the filling stations, and other potable water sources, on their associated website(s) and social media outlets. The Park will promote this information in the visitor information newsletter and handout, *The Tahoma News*. The concessioner will promote the use of reusable water containers in each outlet, both food and retail, where sales are made.

I. Result of consultation with NPS Public Health Office

The Public Health Office was consulted and made aware of the potential elimination of sales of water bottles within Mount Rainier National Park. No adverse opinion to the elimination has been communicated.

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

Signage and information on the location of the installed filling stations will be in place for visitors as of the summer of 2016. A formal signage package for concessioner locations has not been developed, however the location of water bottle filling stations is noted and will be updated within the Park Service Tahoma News. Within the concession facilities, the water stations have been located in highly visible, high traffic areas of their assigned facilities.

K. Safety considerations for visitors who may resort to not carrying enough water or drinking from surface water exposure to disease

The installation of water bottle filling stations at the locations noted will enhance the availability of water stations at key visitor access points that have the highest traffic and largest volume. Impact on experienced hikers and backcountry hikers is anticipated to be minimal since such visitors are generally prepared to spend an extended time on the trail or backcountry and would have a hydration pack or other water carrying container (Nalgene bottles) and/or water filters for purifying local water sources. Inexperienced hikers will continue to have other options for hydration aside from water since the proposed elimination of sales would only include bottled water. Products such as "Gatorade" or vitamin enhanced beverages would still be available at current locations.

In the event of a severe potable water shortage, suspension of the bottled water elimination of sales would be an option that the Park could exercise when overall public health and safety warrants.

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

On an annual basis both the concessioner and the Park would collect and evaluate the following:

- Visitor comments / response from visitor comment forms and response logs (Public Response/Visitor Satisfaction);
- Estimated Collection volume or weight for total plastic recycling amounts (Plastic Collection Rates).

On an annual basis the concessioner would collect, evaluate, and provide to the Park the following:

- Sales data on refillable water containers and other bottled beverage products (Buying Behavior);
- Digital counters on the filling stations will provide volume data, allowing the Park to track visitor utilization.

On an annual basis the Park would collect and evaluate the following:

- Safety Office to collect and log any safety related issue pertaining to any lack of potable water availability (Public Safety);
- Preventative Search and Rescue staff will collect and log incidences of water dehydration related to water availability (Public Safety).

M. Timeline of phase in period

- The fill stations and other water fixtures are installed and functioning; reusable water bottles are currently stocked and available in all concessioner sales outlets. Only a few days would be required to disseminate the public information on water sources and reusable container availability.

