



# 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.

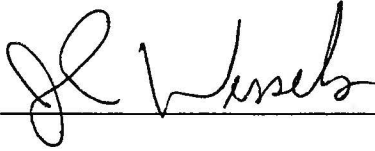
We realize that a discontinuation of the sale of water in disposable containers is only one of the actions that would be taken; the park will also be implementing an Environmental Management Program in 2013, which will include a robust park wide solid waste recycling program. Over the last year, we have 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 H<sub>2</sub>O = \$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 H<sub>2</sub>O = \$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.