SINGLE USE PLASTIC REDUCTION INITIATIVE

YELLOWSTONE ENVIRONMENTAL COORDINATING COMMITTEE

APRIL 9, 2013 – DRAFT
YELLOWSTONE ENVIRONMENTAL COORDINATING COMMITTEE

The Yellowstone Environmental Coordinating Committee (YECC), a team of National Park Service (NPS) employees, park concessioners, and non-profit partners, work together combining extensive resources to elevate the potential for sustainability achievements in Yellowstone National Park. The unique partnership was established in 2008 to facilitate communication and promote cooperation between the greater Yellowstone workforce in order to reinforce the Park's environmental stewardship programs, work collectively on parkwide environmental goals, and coordinate joint educational efforts and outreach.

The team includes representatives from NPS, Delaware North Companies, Medcor Inc., Xanterra Parks and Resorts, Yellowstone Park Service Stations (YPSS), Yellowstone Association (YA), and the Yellowstone Park Foundation (YPF).
Plastics Reduction Initiative

Executive Summary

The Yellowstone Environmental Coordinating Committee (YECC) is working collaboratively to reduce the impacts of single use plastics in Yellowstone National Park. Throughout their lifecycle, single use plastics significantly impact the environment. The YECC's approach to reduce these impacts focuses on the reduction, reuse, recycling and rethinking of plastic water bottles.

Goal: Reduce single use plastics in Yellowstone National Park.
Definition: Plastic that is disposed of after one use.
Examples: Plastic bottles, packaging, utensils, bags, office supplies, etc.
Objectives:
- Provide staff and visitors with ample opportunities to fill water bottles with potable water within developed areas and campgrounds.
- Educate staff, partners and visitors on the importance of plastic reduction, reuse of water bottles, and encourage long-lasting behavior change beyond the boundaries of the park.
- Provide visitors compelling alternatives to purchasing single use plastics at a comparable cost.
- Ensure that all programs and partners in Yellowstone are involved in and actively supporting the Plastics Reduction Program.

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PURPOSE AND NEED

INTRODUCTION

Plastics play an important role in almost every aspect of our lives and make up more than 12 percent of the municipal solid waste stream in the US, a dramatic increase from 1960, when plastics were less than one percent of the waste stream. The largest category of plastics are found in containers and packaging (e.g., soft drink bottles, lids, shampoo bottles).

The recycling rate for different types of plastic varies greatly, resulting in an overall plastics recycling rate of only 8 percent, or 2.4 million tons in 2010. The recycling rate for PET bottles (plastic bottles and jars) is a large contribution at 29%. Yellowstone has developed a successful partnership to ensure that its PET plastic is recycled efficiently. These bottles are used in the manufacture of carpet backing.

Yellowstone recycled 56.7 tons of plastic in 2011 out of a total of 2,333 tons, and 71.82 tons in 2012 out of a total of 1,335 tons. Although this is a good recycling rate it is a lot of plastic - much of which did not need to be in Yellowstone in the first place. Also, there is still a large percentage of plastic in Yellowstone's waste that is not recycled because it is thrown in the trash and not the recycling bins and therefore ends up in the landfill. The West Yellowstone Compost Facility that processes all of Yellowstone's waste estimates that 50% by volume of the waste that is derived is plastic, mostly plastic bags and bottles.

The reduction of plastics is important to many different aspects of sustainable operations. Making, providing and disposing of plastic takes energy, petroleum based materials and resources. When considered on a life-cycle basis, the use of disposable plastic water bottles has significant impact compared to the use of local tap water and refillable bottles. These impacts may be magnified in remote national parks like Yellowstone because of the additional transportation, waste disposal, and litter removal involved. ...from NPS policy.

Policy and Guidance:

The Federal Government is making improvements in environmental and energy performance following direction from several Executive Orders, Memorandum of Understanding and other guidance. E.O. 13423 specifically calls for the implementation of "cost effective waste prevention and recycling programs".

The NPS Call to Action commits the National Park Service to "Go Green" and reduce greenhouse gas emissions, while the Green Parks Plan outlines how the NPS will live up to that commitment, reduce its impact on the environment, mitigate the effects of climate change, and integrate sustainable practices into every aspect of operations.

Yellowstone's Strategic Plan for Sustainability sets specific goals and objectives for reducing the impact of operations on the environment. Those that apply specifically to this initiative are as follows:
GOAL: Purchase environmentally friendly products and minimize the lifecycle impacts of purchased materials.

- Offer visitors environmentally responsible, choices and minimize disposable products such as plastic water bottles. (Action items due: 2013)

- Purchase of commodities with little packaging, recyclable or biodegradable materials, non-toxic components and low embodied energy from manufacturing and transportation. (Action items due: Ongoing)

GOAL: Educate employees and visitors on the importance of purchasing and waste reduction, to inspire them to buy green and reduce waste in Yellowstone and at home.

- Inform visitors of the environmental impacts of their purchases and opportunities to minimize waste associated with their visit (Action items due: 2016).

GOAL: Ensure the most sustainable use of waste products:

- Divert municipal solid waste from landfills – 75% diversion by 2016 and 90% diversion by 2020

To help us reach these goals Yellowstone National Park (through the Yellowstone Environmental Coordinating Committee) supports finding more environmentally preferable alternatives to petroleum-based plastic water bottles. While there are circumstances where petroleum-based plastic water bottles may be necessary (e.g. emergency situations, assistance to poverty-stricken areas, etc.), generally speaking, the broader environmental impacts associated with their use are both globally and locally significant enough to warrant action toward dramatically reducing the use of such containers.

BACKGROUND

YNP Reduction Efforts to Date
Examples of Plastic Reduction Programs:

Delaware North Companies:
Yellowstone General Stores continues to implement Delaware North’s Environmentally Preferable Purchasing Policy providing guidelines on the procurement and management of Sustainable Environmentally Friendly “Green” goods and services used by the Company. Eco-Products, disposable compostable dishware and cutlery are purchased for DNC’s food service operation: Bowls, Plates, To-Go Clamshells and Containers, Cups, Cup Sleeves, Knives, Forks, Spoons, Straws. Paper napkins, paper liners, and wood stir are biodegradable. DNC purchases literally hundreds of thousands of these products each year which will be

Yellowstone Environmental Coordinating Committee
converted to compost. During 2012 over 60,000 reusable bags were sold. Interpretive signs were used to communicate their importance.

Cleaning products are purchased in bulk to reduce packaging waste. DNC continued to use the Geami packaging system which uses Kraft paper, a renewable resource which is easily recyclable and biodegradable, rather than bubble wrap (a petroleum/plastic based product). The General Stores continued to reuse packing material when possible (e.g. cardboard, bubble wrap, packing peanuts, Styrofoam, etc.) for guest purchases.

Xanterra Parks & Resorts:
- Eliminated in-room plastic liners for waste and recycling receptacles with a small compostable paper liner. This program is estimated to reduce hundreds of thousands of plastic bags annually.

- Provides bulk dispensers in all fast-food operations to reduce the use of individually packaged condiments.

- Repurposes old linen into handmade laundry bags to offset plastic bag use as a result of park-wide laundry services.

- Since 2009, Xanterra has been purchasing compostable disposables for all applicable operations. This includes utensils, cups, and to-go containers.

- Xanterra is in the process of installing two new dedicated water bottle filling stations during the summer of 2013 in the Mammoth Hot Springs Hotel and the Old Faithful Snow Lodge.

- Utilizes reusable bulk soap dispensers in all guest rooms, public restrooms, and camper services buildings to eliminate plastic waste as a result of the guest amenity program.

- Disposable plastic bags have been eliminated in all Xanterra retail operations in favor of a 100% recycled FSC-certified paper bag. Additionally, guests are provided with a reusable gift bag with any purchase of $50 or more (also 100% recycled content).

- During the 2012-2013 winter operating season at the Mammoth Hot Springs Hotel, Xanterra is piloting a 3-bin waste collection system. Instead of the option of sorting only by recyclable vs. non-recyclable, guests now have separate bins for recycling, compost, and landfill waste. This system is intended to increase Xanterra’s waste diversion rate incorporating new and enhanced waste messaging and signage.

YNP Waste Diversion:
### 2012 Total Solid Waste Diversion from Yellowstone National Park (YNP)

<table>
<thead>
<tr>
<th>Recycling</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum/tin/mixed cans</td>
<td>30.78</td>
</tr>
<tr>
<td>Cardboard</td>
<td>309.87</td>
</tr>
<tr>
<td>Glass</td>
<td>188.13</td>
</tr>
<tr>
<td>Paper (Office, Newspaper, Slick)</td>
<td>94.83</td>
</tr>
<tr>
<td>Plastics (Film and Containers)</td>
<td>71.82</td>
</tr>
<tr>
<td>Propane/Iso Butane Canisters</td>
<td>2.58</td>
</tr>
<tr>
<td>Bear Spray Canisters</td>
<td>0.14</td>
</tr>
<tr>
<td>Antifreeze</td>
<td>1.99</td>
</tr>
<tr>
<td>Batteries</td>
<td>9.66</td>
</tr>
<tr>
<td>CD/DVD/Floppies</td>
<td>0.02</td>
</tr>
<tr>
<td>Cooking Grease</td>
<td>23.59</td>
</tr>
<tr>
<td>Electronics</td>
<td>11.94</td>
</tr>
<tr>
<td>Lamp Ballasts</td>
<td>0.02</td>
</tr>
<tr>
<td>Lamps - Fluorescent Lights</td>
<td>1.71</td>
</tr>
<tr>
<td>Linens and Textiles</td>
<td>15.40</td>
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<tr>
<td>Mattresses</td>
<td>28.59</td>
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<tr>
<td>Manure</td>
<td>372.05</td>
</tr>
<tr>
<td>Oil Filter</td>
<td>4.47</td>
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<tr>
<td>Oil Used</td>
<td>42.86</td>
</tr>
<tr>
<td>Other - lost &amp; found, donated items, fuel</td>
<td>21.24</td>
</tr>
<tr>
<td>Packaging for Retail Shipments</td>
<td>3.36</td>
</tr>
<tr>
<td>Printer/Toner &amp; Ink Cartridges</td>
<td>0.49</td>
</tr>
<tr>
<td>Steel/Scrap Iron</td>
<td>0.00</td>
</tr>
<tr>
<td>Tires</td>
<td>64.41</td>
</tr>
<tr>
<td>Wood Chips/Wood Pallets/Slash</td>
<td>34.79</td>
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<tr>
<td><strong>Total Recycled</strong></td>
<td><strong>1,335</strong></td>
</tr>
</tbody>
</table>

#### 2012 Summary

<table>
<thead>
<tr>
<th></th>
<th>Tons</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill</td>
<td>1,484</td>
<td>41%</td>
</tr>
<tr>
<td>Compost</td>
<td>785</td>
<td>22%</td>
</tr>
<tr>
<td>Recycling</td>
<td>1,335</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Waste (Trash, Compost &amp; Recycling)</strong></td>
<td><strong>3,604</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Overall Park-wide Diversion Rate** | 2,119 | 59%
The amount of plastic recycled by the park has increased in recent years, more than doubling from 35.6 in 2007 to 71.8 in 2012. This could be due to the combination of increased use of plastics and an increase in consumer awareness of recycling opportunities.

Since the construction of the park’s compost facility in 2003, visitation to the park has increased. It peaked in 2010 and has since declined slightly. Total municipal waste produced by the park and sent to the compost facility has not steadily increased or decreased, but has fluctuated around 2,000-2,500 tons per year (averaging 2,296 tons per year from 2005 to 2012).
Because visitation has increased and generated waste has not steadily increased, waste generated per person has been going down, decreasing 20% from 1.64 pounds per person in 2006 to 1.32 pounds per person in 2012.
Compost facility/tipping fee background information

Examples of NPS Plastic Reduction Efforts:

14 parks, including Grand Canyon, Zion and Saguaro National Park are now bottled water-free."

In the past few years, National Park Service (NPS) policy on plastic has received a good deal of attention due to the ban of disposal plastic water bottle sales in certain parks. Both Zion and Hawaii Volcanoes have banned the sale of water bottles within the parks. When Grand Canyon considered following suit, Jon Jarvis, the director of the NPS, issued a Policy Memorandum on 14 December 2011 specifically regarding disposable plastic water bottles. This policy specifies that parks may ban the sale of plastic water bottles after completing a thorough impact analysis that addresses issues like public health and safety considerations, pros and cons to park operations, and contractual implications.

John Wessels, the Intermountain Regional Director, recently stated in an official National Parks Service press release that,

"Four parks should set the standard for resource protection and sustainability, Grand Canyon National Park has provided an excellent analysis of the impacts the elimination of bottled water would have, and has developed a well-thought-out plan for ensuring that the safety, needs and comfort of visitors continue to be met in the park. I feel confident that the impacts to park concessioners and partners have been given fair consideration and that this plan can be implemented with minimal impacts to the visiting public."

Other parks, like Denali, have instituted plastic reduction. Doyon/ARAMARK Joint Venture, Denali’s concessioner, has installed DRIP (Denali Reduction in Plastic) water filling stations in the park to encourage visitors to refill water bottles rather than buying disposable bottles. This could immediately reduce waste from plastic water bottles, and works toward their goal of eventually discontinuing packaged water sales in the park.¹

Economic benefits of recycling programs (jobs, by-products). Mark to input case study as a microcosm example.

PURPOSE AND NEED

The purpose of the proposal is to provide a long-term, phased reduction of single use plastic bottles in YNP.

GOALS & OBJECTIVES

The goals and objectives for this plan are as follows:

Goal: Reduce single use plastics in Yellowstone National Park.

Objectives:

- Provide staff and visitors with ample opportunities to fill water bottles with potable water within developed areas and campgrounds.
- Educate staff, partners and visitors on the importance of plastic reduction, reuse of water bottles, and encourage long-lasting behavior change beyond the boundaries of the park.
- Provide visitors and employees compelling alternatives to purchasing single use plastics at a comparable cost.
- Ensure that all programs and partners in Yellowstone are involved in and actively supporting the Plastics Reduction Program.

ALTERNATIVES

Two alternatives have been discussed by the YECC for consideration in the Plastic Reduction Initiative. The alternatives are as follows:

- A - Meet all objectives – provide alternative purchase options for single use plastic items and educate visitors and employees on the impacts of plastics and environmentally preferred opportunities.
- B - Ban the Bottle! … considered but dismissed
ALTERNATIVE A – SINGLE USE PLASTICS REDUCTION INITIATION & EDUCATION

Alternative A consists of a concerted effort to actively reduce single use plastic and to meet all the objectives of the plan without introducing a complete ban on bottled water sales:

Though the focus of this initiative is to reduce the amount of single-use plastics in Yellowstone, some plastics will still be used in the park. All partners: the NPS, its concessions and non-profit partners will take action to reduce single use plastic to the greatest extent practical and reasonable.

Objective 1:

- Provide staff and visitors with ample opportunities to fill water bottles with potable water within developed areas and campgrounds.

Identification of a “water filling station”

... A water filling station shall be anywhere that an employee or visitor can fill a standard bottle with potable water without assistance; a simple tap, a water fountain or a specifically designed bottle filling station. All stations will be safe for dispensing potable water and efforts will be made to provide stations that are attractive and easy to find in all developed area visitor use areas. Filling stations will meet public health standards.

Summary of Proposed Water Filling Station Locations

YNP is committed to providing a water filling station in all of the following locations:

- General Stores
- Hotel Lobbies
- Campgrounds
- Visitor Education Centers
- Gas Stations
- Employee Dormitories
- One after-hours station at all developed areas

Note: YECC recognizes that there are many opportunities that already exist as “water filling stations” throughout the park. Any location that has an existing tap, water spigot, or dispensing unit for potable water could be used as a filling station. Priority locations will be labeled to promote the use of using drinking water from the tap.
Approved Water Filling Stations being used in Yellowstone

1) Indoor Station

Design

**Type A – bottle filling and counter**

The units installed at Yellowstone General Stores are the Elkay EZH2O in-wall model and the Elkay EZH2O- Retrofit model. Costs for the in-wall units with installation range in price from $2000-3,000 per unit depending on location and availability of water lines. The Retrofit units run approximately $1,000 including installation.

*Example of water filling station (bottle filler) and interpretation Canyon General Stores*

Type B – Water Fountain

Need photo of drinking fountain

Type C – Tap
Example of water filling station (tap) and interpretation at Tower General Stores

2) Outdoor Station

One 24/7 outdoor (accessible) station will be provided at all developed areas during the summer months. Stations could be a simple tap with appropriate labeling for drinking water or:

e.g. ELKAY OUTDOOR BOTTLE FILLER | LK4400BF Floor Mount
Flow Rate: 0 GPH$3,605 *
COST = $3,605 unit only

Yellowstone Environmental Coordinating Committee
More photos needed: soda fountains, gooseneck drinking fountains, campground hydrants, Mammoth Hotel historic shell, concrete log from Madison, outdoor taps, pumps, etc.

Objective 2:

- Educate staff, partners and visitors on the importance of plastic reduction, reuse of water bottles, and encourage long-lasting behavior change beyond the boundaries of the park.

- YNP will develop a consistent park message which will be communicated to employees and visitors. The message will promote the quality of Yellowstone’s tap water. For example;

  “Yellowstone’s tap water is clean, treated and great to drink! We encourage you to fill your bottle at any Yellowstone tap.”

Yellowstone’s Division of Education and Youth Programs will be engaged in interpretive messages. Examples of messaging opportunities:

  - Park newspaper
  - Consistent labeling of filling stations
  - Interpretive programs
  - Employee training
  - Flyers and posters

- Inform staff and visitors of the nearest “bottle filling station” throughout the Park.

- Educate visitors and employees about the reduction of single use plastic beverage containers and the replacement of these items with more environmentally preferable packaging such as aluminum.

- Provide statistics on the energy used to produce single use plastics compared to the impacts of producing and using alternatives (tap water; beverages in cans, cartons, etc.)

- The potential public health concern of cross contamination will be addressed through education of visitors and employees. Guidance regarding use, proper cleaning, and special infectious circumstances will be provided as part of the overall plastics reduction visitor and employee education.
Objective 3:

- Provide visitors and employees compelling alternatives to purchasing single use plastics at a comparable cost.

Provide reusable beverage containers:

- All concessionaires will continue to provide a variety of styles and price point options for the purchase of reusable beverage containers in all retail, food, and beverage outlets.

- All employees will receive a reusable beverage container at check-in to establish a conservation ethic. (NPS?)

- Reusable beverage containers will be conveniently located next to the water filling stations as well as within the coolers.

Provide drinks in containers other than plastic:

- Continually research alternatives to beverages that come in single use plastic bottles.

- Each concessionaire will annually review their product line of single use plastic bottled beverages and attempt to switch every possible beverage to products that are more environmentally friendly. This will likely focus on switching to aluminum packaged products.

- All park vending operations will switch to beverages in aluminum containers.

- Continue to provide and promote the use of fountain drink filling opportunities. These stations provide the opportunity for guests to reuse a container or utilize a single use compostable beverage cup.
<table>
<thead>
<tr>
<th>Type</th>
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<tbody>
<tr>
<td>Glass</td>
</tr>
<tr>
<td>Aluminum</td>
</tr>
<tr>
<td>Cardboard</td>
</tr>
<tr>
<td>Eco-friendly</td>
</tr>
<tr>
<td>Plastic</td>
</tr>
</tbody>
</table>

**Reduce small-serve plastic beverage containers**

- Promote the sale of beverages in larger containers, ex. one gallon v. 16 oz or 20 oz.

**Objective 4:**

- Ensure that all programs and partners in Yellowstone are actively supporting the Plastics Reduction Program.

By working collaboratively through the Yellowstone Environmental Coordinating Committee, the National Park Service and all park partners will be involved in the plastic reduction program. Specific initiatives will include:

**Office Supplies**

Many office supplies, provided by the park’s Supply Center as well as items that are purchased by individuals are made of single use plastics and are thrown away or recycled at the end of their use. Shipping and packaging of products is also an area where a large amount of plastic is used and then discarded.

The National Park Service at Yellowstone has recently pledged to work to “green” its office supplies. Through this effort, it will explore possibilities for decreasing the environmental impact associated with the production, shipping, and use of its office supplies.

- The NPS will evaluate products including pens and pencils, binders, and sheet protectors, among others.
• Research the availability of non-plastic packaging options for items like rubber bands and paper clips, which are currently packaged in many small plastic bags within cardboard boxes.

• Reducing plastic in packaging of other items that the park purchases in large quantities.

Greening Wild-land Fires

Emergency incidents, particularly wild-land fire where huge numbers of personnel are often operating out of temporary camps are notorious for producing large quantities of waste, particularly plastic waste most of this coming from the provision of food and water. The U.S. Forest Service has set a goal for all wild-land fire camps to be net zero waste by 2013 and are making efforts to look at all aspects of fire suppression operations in reducing waste including: the catering contracts and food service, providing water to the fire line, packaging equipment and supplies, opportunities for camps to operate from municipal water sources.

• Yellowstone’s Green Team will work with the park’s wild-land fire chief and the U.S. Forest Service “Greening Fire Team” to collaborate on waste reduction efforts for fighting fire in Yellowstone National Park.

• Contact information for the park’s recycling contractor and COR for recycling will be listed in command station booklets for easy access.

Recycled products – end use

The polyethylene terephthalate (PET) contained in most plastic drink bottles can be recycled into products ranging from more bottles to sleeping bag insulation and clothing fabric. Currently, most single use plastic that is successfully recycled in Yellowstone is separated at the recycling facility and goes to Dalton, Georgia where it is incorporated into carpet backing.

• The park will continue to look into other creative uses of plastic and improve its recycling program to enable efficient and creative recycling end uses.

Recycling Collection

Though Yellowstone has made huge improvements in the collection and separation of its waste there is still a large amount of plastic in the waste stream. The West Yellowstone Compost Facility staff state approximately 50% of the waste they receive is single use plastic. The NPS recognizes the importance of easy recycling particularly when people are on vacation. Effective collection also involves effective separation and options visitors have to throw their waste away.

• The NPS proposes a “trash or plastic” policy throughout the park where waste bins are not provided unless they can be accompanied by a plastic recycling bin. Green Team
staff will work with facility managers, and janitorial staff to assess and implement this proposal. It may involve some pilot studies particularly in campgrounds where presently waste bins are plentiful but there are only a few recycling stations.

Include single use plastic reduction initiatives in all operating plans.

Other commitments:

- Ban the Bag – Yellowstone has successfully eliminated all plastic bags from stores throughout the Park and will continue with this policy.

- Compostables – When feasible, single use to-go items in food services throughout the park will be 100% recyclable or compostable and contain no plastic.

- National Park Service and all park partners will move toward green meetings and social functions by reducing single use plastic items.

CUAs

IMPACTS:

Alternative A is the preferred alternative because it meets the goals & objectives and the purpose & need of the plan. This alternative would have some economic impacts on the park's concessioners, however, it is hoped that these would be off-set to some degree by creative product placement and interpretation efforts park-wide. The following is a list of potential Environmental, Social and Economic impacts of Alternative A.

ENVIRONMENTAL

Reduction of energy and materials (toxins) required to produce, transport and recycle plastic

Reduction of the staff time and management oversight needed for waste management

Increased potable water use and costs – eventually passed to visitors.

- Reduce the amount of potential litter.
- Reduce the amount of plastic being thrown into landfills.
- Reduction of fossil fuels and GHG emissions for the production, transportation and disposal of plastic beverage containers.
• Treating, distributing, and consuming more park water.

SOCIAL

• Set an example for visitors and employees of Yellowstone to take home with them.

Health Concerns

• Potential public health issues could result from inappropriate cleaning of beverage containers.

• The potential for cross-contamination from spigots/filling stations exist and could result in the transmission of viral or bacterial infections. Additionally, in instances where an easily transmittable virus is active in the park, special care must be taken (especially by tour bus operators) regarding filling reusable bottles from large coolers or dispensers.

Deb: to provide more detail re health effects of dehydration.

Potential for visitor dissatisfaction exists.

ECONOMIC

• Costs of installing stations, changing faucets, creating marketing and signage.

• Maintaining filling stations costs money often due to the cost of filters needed.

• Financial impacts of loss of revenue.

ALTERNATIVE CONSIDERED & DISMISSED

The following alternative was considered for implementation, but was ultimately dismissed from further analysis. Reasons for the dismissal are provided in the following alternative description.

Complete elimination of single use plastic bottles – This alternative was discussed initially in order to frame the development of this plan. Complete elimination of the use and sale of plastic bottles in park operations would cause significant negative financial impacts and potential for negative visitor experience.
CONSULTATION & COORDINATION

LIST OF PREPARERS

The following persons assisted with the preparation of the Plastics Reduction Plan. All are employees of the concessioners, partners, and staff of Yellowstone National Park:

Hal Broadhead, General Manager, Yellowstone Park Service Stations, YNP
Deb Brown, Director of Yellowstone Operations, Medcor, YNP
Lynn Chan, Sustainability Coordinator, National Park Service, YNP
Justin Cook, Director of Environmental Affairs, Delaware North Companies, YNP
Dennis McIntosh, Director of Facilities, Yellowstone Association, YNP
Dylan Hoffman, Director of Sustainability, Xanterra Parks & Resorts, YNP
Bianca Klein, Environmental Protection Specialist, YNP
Mary Murphy, Branch Chief of Concessions Facility Management, YNP
Molly Nelson, Engineer, National Park Service, YNP
Tom Porter, Corporate Relations Manager, Yellowstone Park Foundation, YNP
REFERENCES