



# National Greening Fire Team

## Quarterly Bulletin

Winter 2021

### Greening Fire Team Success Stories

GFT Microgrant Success Stories – The Northwest Incident Support Cache took initiative to build a water re-use system to be used in conjunction with firehose pressure testing. The project cost \$2,050 and is estimated to reduce water consumption and waste by 95% or 4,500 gallons per year!

The Carson Interagency Hotshots utilized GFT microgrant funds to test a renewable power system in the field. Their project is expected to reduce AA battery waste by 1,154 pounds per year, while saving \$10,400 annually in battery purchases. In a similar initiative, the Lolo Interagency Hot Shots deployed portable, renewable power at a cost of \$4,124, which is expected to reduce battery waste by 446 pounds per year and save \$4,400 annually. Renewable power enabled these crews to recharge radios and other critical communication devices such as cell and satellite phones, government-issued laptops, and iPads. The Hotshots said that the renewable power systems were a priceless asset that allowed them to increase their operational self-sufficiency - a significant accomplishment, particularly in COVID-19 and resource-strained environments.

With \$2,053 in GFT microgrant funds, the San Juan National Forest purchased 100 military-grade, reusable water containers to replace single-use plastic bottles and cubitainers during fire operations. The team estimates they will save \$14,487 annually while reducing landfill waste by a minimum of 180 pounds per year. The reusable containers are BPA-free, rugged and puncture proof, and have a pour spout for ease of use in the field.

### GFT Spotlight: Tsering Wangden, BLM Civil Engineer; Oregon/Washington State Office, National Greening Fire Team Member

#### How did you first get involved in the effort to make fire operations less impactful to the environment?

When I started working for the BLM in 2016, I was in a meeting with the Sustainable Operations Task Team, during which a district representative shared with us a white paper she had written on how to make fire operations more “green.” Prior to that, the only experience I had with fire operations was when I was working on the Okanogan-Wenatchee National Forest as a driver one summer. I noticed many things that were being purchased, and I assumed recycling was happening. When I heard about the National Greening Fire Team in 2019, I wanted to make sure BLM District staff knew about this effort.



#### How can we further our actions to reduce waste and increase recycling tied to fire operations?

Though it may not be feasible to have incident recycling where there are fewer than 200 crew members, recycling and waste reduction should still happen. If we can get crew members on small incidents to recycle and reduce waste, that would be a great achievement.

**What challenges to implementing sustainability practices have you encountered with fire operations?**

Changing social behavior is always a challenge. One key method that has less environmental impact is to reduce waste by buying less.

**Describe the sustainability advocacy efforts that you have undertaken in your position with the BLM and in your role in fire operations.**

As the Sustainability Coordinator for BLM in Oregon and Washington, I have focused on reducing energy and water use intensities for our administrative sites, which include fire facilities, through our annual Sustainability Project Competition. The National Greening Fire Team is an interagency effort, so with support from Oregon State Office Fire Management Officer Jeff Fedrizzi, I continue to foster the connection between the BLM and the GFT.

**What motivated your sustainability efforts and desire to integrate such principles into your work?**

I come from a refugee camp in India. I was raised in a family and a community that instilled in me the values of natural resource conservation as well as respect and appreciation for all the abundance that our planet provides. These words from Chief Seattle resonate with me and motivate me to continue this effort, "The Earth does not belong to us. We belong to the earth."

**What do you believe are the biggest opportunities to decrease the environmental footprint of incident operations?**

I don't have a lot of knowledge about incident operations. I would assume it takes a lot of energy to set up an incident command post. I think using renewable sources of energy where possible and feasible would vastly help reduce the footprint.

**Do you have a single sustainability-related achievement that you are most proud of?**

Being sustainable whether it's at home and work is a challenge especially in the consumer driven society and "throw away" culture we live in. I think every effort toward sustainability is something to be proud of. I would be most proud if I could make the closed loop system (a process of collecting and reprocessing recycled goods without losing the integrity of the original material) work as it should.

**How can we better engage our interagency partners?**

On behalf of BLM, I am very grateful that the Forest Service has taken the lead on this important topic. Since forest fires know no boundaries, "greening fire" really is an interagency effort. GFT has done a great job raising awareness by giving presentations to different Coordinating Groups, and should continue doing so. Liz Ryan puts it well when she says, "Knowledge is power only when it is shared with others."

**Incident Recycling Program Update**

To date, 61 requests for incident recycling have been logged in the Interagency Resource Ordering Capability system. This is a 400% increase from orders in 2020! Incident Management Teams that were dispatched out of the Northwest Interagency Coordination Center (NWCC) to the Cub Creek Fire achieved the HIGHEST waste diversion rate of all incidents in 2021 at a whopping 48%! Kudos to CA Team 1 IMT 1, PNW 3 IMT 1, CA Team 2 IMT 1, and NW Team 9. In terms of total pounds of material recycled or otherwise diverted from community landfills, NWCC also achieved the highest total (over 180,000 pounds) of all GACCs.

Public Information Officers have become increasingly engaged with sharing the incident recycling program results. Check out some of their videos:

- [Incident Recycling video from Dixie Fire](#) (California)
- [Recycling video from Antelope Fire](#) (Oregon)
- [Recycling video from Jack Fire](#) (Oregon)
- [Recycling video from Bootleg Fire](#) (Oregon)

## Greening Fire Team Ambassador Program Update

The [GFT network](#) continues to grow from 17 Ambassadors in 2018 to 118 today. GFT Ambassadors are individuals who simply have a desire to help advance sustainability best practices in incident operations. All geographic areas are now represented in the network, including employees from the Forest Service, Bureau of Land Management, National Park Service, National Renewable Energy Laboratory, state agencies, CALFIRE, and others. The program remains grassroots and action-oriented and is expected to continue growing as interest and awareness expand across the interagency environment.

### How Do I Sign Up to Become a Greening Fire Ambassador?

Simple! Receive approval from your supervisor, email the GFT, and request to join the Ambassador Network. If you know which Level of Involvement (LOI) or actions that interest you, please include that information in your email. If not, we will look forward to learning more about your aspirations or what you have already accomplished via our Fall 2020 survey. As a reminder, all levels of experience and involvement are welcome in the GFT Ambassador network!

### Want to Join a GFT Ambassador Working Group?

If you have a passion for recycling, green procurement, logistics, education or communication, we can use your help!

- Incident Recycling Group - We need champions from all geographic areas and all agencies to assist in our efforts to expand incident recycling services in 2022.
- Green Procurement Group - We need help researching green vendors, products, and services such as solar/battery light towers, alternatives to diesel generators, “greener” handwash stations, etc. We also need help analyzing potential resource and cost savings, finding procurement pathways for these products and services, and piloting new technologies, products, and services.
- Communications, Education, Outreach Group - We need help developing and creating documents, guides, and other resources for toolkits, educational materials, graphics, and other informative resources to educate, highlight accomplishments, and solicit further involvement on the Greening Fire Team.
- Admin, Management, and Data Tracking Group – We will welcome assistance from anyone who wants to help with strategic plans, accomplishment reports, GIS maps of our accomplishments, and related items.

To sign up as a GFT Ambassador, email the GFT Shared Inbox: [SM.FS.greeningfire@usda.gov](mailto:SM.FS.greeningfire@usda.gov).

- In the Subject Line write: “GFT Ambassador Program Sign Up”
- In the Message Body, provide the following:
  - Contact information
  - Level of involvement (bronze, silver, gold, platinum)
    - Reference the [Master LOI Matrix](#)
  - Tasks you would consider completing over the next year
    - Reference the [Master LOI Matrix](#)

### Recycling Myth Buster #4 – Recyclables are being landfilled, right?

The goal when recycling is to separate the individual components of a product to base materials such as aluminum, paper, and plastic. This eliminates the need to mine new materials or create them from scratch. Most products are comprised of several different materials. For example, a water bottle is made up of at least two types of plastic - the cap is made of a different plastic type than that of the bottle. The cap, therefore, must be separated from the bottle for recycling to be effective, whether it is limited by the recycling facility’s capabilities or the market structure for these materials.

The Bad News: Recyclers in the U.S. were mostly selling these “marketable materials” to overseas markets. In 2017, China imposed a strict rule that limited contaminants in certain recycled materials to 0.5%. U. S. recyclers were not able to meet this impossible requirement. Foreign markets stopped taking some materials altogether. **Since the market wasn’t there, some cities had no option but to throw their recyclables into the landfill.**

The impacts of these changes varied since recycling is not standardized across the United States. A waste industry publisher reported that at least ten states were “heavily” affected, and at least 38 states experienced “noticeable” impacts.

The Good News: There is currently a growing market for recycled materials. Many governments have enforced regulations on the use of virgin polyester, replaced by recycled polyester. In 2020, China banned the use of non-recyclable plastic in metropolitan cities and this rule is expected to expand throughout the country by 2022. The recycled plastic market is growing in other countries as well. Many companies are stepping up to produce a circular economy through Extended Producer Responsibility (EPR) by working together to improve packaging so it is reused and not wasted.

In short, if producers are responsibly making innovative materials and consumers continue to recycle properly, less waste will be sent to the landfill. Everyone has a role in creating a successful circular economy!

## **Green Procurement Initiative Update**

Given the breadth and scale of purchased products and services on incidents, Sustainable Acquisition or “Green Procurement” offers great promise to expand the greening fire program. To date, 69 potential companies that could provide greener products and services have been identified. Company vetting is underway to better understand the “green” attributes of the products, pricing, availability, and if the technology is appropriate for field use. Federal Sustainable Acquisition requirements are articulated in Federal Acquisition Regulation (FAR) Part 23 as well as the Energy Independence and Security Act (EISA) of 2007 and other legislation.

## **GFT Fun Facts**

- **118** – The current number of Greening Fire Team Ambassadors in our network!
- **69** – The number of “green” companies identified so far that could provide green products or services on incidents
- **621,575** – the total pounds of recyclable material that was diverted from community landfills in 2021