



Greening Fire
Sustainable Operations

SUSTAINABILITY COORDINATOR REPORT
COLLIER BUTTE FIRE, GOLD BEACH, OR

Aug. 10-11, 2015
Dylan McCoy, WIF MRRD Oregon

INTRODUCTION

The Greening Fire Team (GFT) has discussed the importance of helping fire operations to be more sustainable since 2000. This year, the Greening Fire Team was able to staff the Collier Butte Fire with a GFT employee whose sole focus was learning and assisting in sustainability efforts.

The Collier Fire started on August 6, 2015 in the Kalmiopsis Wilderness by lightning strike. Incident Command Post (ICP) was at the Curry County Fairgrounds in Gold Beach, OR. GFT employee Dylan McCoy (report author) was dispatched to the Collier Butte Fire on Aug 10, 2015. By that time, 3 other spike camps were established at remote settings west of the Kalmiopsis Wilderness Boundary. ICP staff was roughly 280, InciWeb showed the entire fire staff at 619 on August 14, 2015. The Collier Butte Fire was in Type 2 status on August 11, 2015, and was staffed by Oregon Team 3 (OR IIMT3). Kelsey DeJean, Logistics Chief, and Penni Borghi, Base Camp Manager Trainee, welcomed me as an assistant in sustainability coordination.

ICP AT TIME OF ARRIVAL: 1400 AUGUST 10, 2015

Penni had ordered a large cardboard collection container on Thursday, August 6, and it arrived the morning of Monday, August 10. In the meantime, some cardboard recycling was collected in a large facilities tent, but much of it entered the waste stream via the trash collection container, resulting in the sign below.





All recyclables were collected in this tent until a plan for getting the materials to a recycling facility was established.

Water bottle collection containers were setup from day 1 of the ICP by C2 Camp Team out of Warm Springs, Oregon. Red containers were provided by the fairgrounds facility itself, and C2 made the tops for the grey bins as needed.



I was able to tie in with Bitsy Stiller and Byron Cheney, Receiving and Distribution Managers (RCDM), Rick and Rob Rollins, Food Managers, and Barry Phelps, Ground Support Unit Leader.

Bitsy and Byron were both more than aware that the Redmond Fire Cache (Redmond, OR) that was supplying the incident kept track of those items and that items shipped back, damaged or functional, would count towards reducing fire loss, meaning reducing the overall cost of the fire in terms of supply.

Rick, Rob, and the food contractors had containers lined with bio-degradable bags to collect food waste and eating materials like bio-degradable cups, utensils, plates, etc.

Barry Phelps and his ground support team were trucking supplies from ICP to the spike camps daily, returning with waste from those camps that was mostly going into the garbage bin and entering the waste stream. Recyclables collected were consolidated in the recycle tent (photo above).

ICP RECOMMENDATIONS AND RESULTING ACTIONS

I contacted Redmond Fire Cache Assistant Manager Eve Ponder to reconfirm her recycling program. Eve reminded me that while the cache does count returned Fire supplies towards reducing fire loss, it is up to the incident to keep track of returned items and quantify them. I relayed that to Bitsy, Byron, and Penni. Additionally, the Redmond Cache has setup a very thorough recycling system at the Redmond Cache for sorting and transporting materials to recycling facilities. Redmond Cache employee Ryan Jackson emailed me a list of materials they accept for recycling:

Shrink wrap, wood scrap, fence barricade (000608), plastic trash cans (001005), plastic tables, plastic banding, plastic tool sheaths, sleeping bags, BDU's jeans and shirts, plastic buckets, hard hats (000109), plastic sheeting (clear and black), metal all kinds, sleeping pads (001566), liner (000597), cardboard, paper, batteries all kinds, waste fuel/oil, plastic cubee liners, and fire shelters.

The fact that Redmond Cache recycles these items is not standard across the Forest Service, and this list fluctuates with changes in what the cache can actually get to recycling facilities each year.

Eve Ponder recommended that we use cache item 000880 to line a 4'x4'x3' wire bin that the cache also supplies for collecting the various recyclable items at camp. By the time I left camp (1400 on Aug. 11, 2015), the following (see photos below) had already been setup. Penni also had the camp staff sort the recyclables to prepare them for loading onto a cache supply van for backhaul to the Redmond Cache.



Byron mentioned at the end of some fires, they try to collect waste fuel/oil, especially pre-mixed fuel and oil, in a large drum and have the district come and collect it in their own container to use as a base for slash fuel. If the district isn't interested in the fuel, Byron said it can be costly to pay a company to properly dispose or re-refine the fuel/oil mix. I went ahead and drove over to the ranger station, contacting the fire personnel there, who was more than eager to save future fuel purchasing costs by stocking up on the slash mix now. I gave the information to Byron, and they were able to work out an arrangement where the district either hauled over one of their own collection tanks on a trailer or the supply team held it in a drum for later collection.

During that trip, I also made contact with a gentleman who raised pigs and was very interested in collecting the food scraps from the kitchen to feed to his animals. The guy setup an arrangement with Rick and Rob to collect food scraps daily after 1700, further reducing materials entering the waste stream and improving relations with the local community.

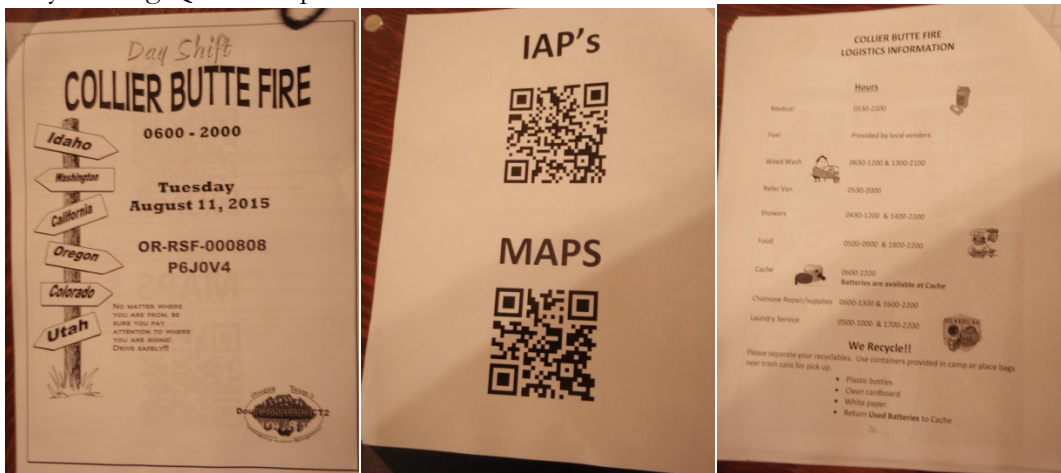
At time of arrival, ICP had a potable water truck on scene next to the shower unit with 4 spouts advertised for filling cubee containers. I witnessed most fire personnel simply using the bottled water supplied by the lunch truck. After talking with Penni, I posted some Greening Fire Team Green Tips (Appendix A) and had the camp crew make some sandwich boards to post at the lunch truck that reminded folks about the option of filling their reusable water containers at the potable water truck. The sandwich boards hadn't been made by the time I left.



Kelsey DeJean mentioned that the incident was using a pre-approved magnesium-chloride mixture for dust abatement on the roads leading to the spike camps, stating that this saved water from having to be used on a daily basis.

On the first day of my arrival, I mentioned to Penni that having a section in the Incident Action Plan (IAP) that reminds folks to recycle and how to do it would be beneficial, in addition to mentioning it at the morning and/or evening briefing. I found that the IAP already had a small note about recycling, but could be improved to include all recyclable materials and a reminder on where to drop them off. Recycling or other sustainable reminders hadn't been mentioned at briefings by the time I left.

I mentioned to Penni that encouraging the use of the QR code for IAPs and maps could save a lot of paper if the team was willing to print less copies of both as a result. That was an item they were looking into when I left, but the IAP already had big QR codes printed on it before I had arrived.



Penni contacted the ground support team and directed them to have the camps sort out all of the recyclable items so the trucks could haul them back to ICP and quickly get them into the proper collection bins.

Rick and Rob established contacts in the community to come pickup leftover cooking grease for refinement into bio-diesel for fueling their vehicles.

CONCLUSION

From my experience, having staffed many fires from Type 5 to Type 1 in various roles, the Collier Butte Fire ICP and overall operations had well-established sustainability procedures in place at the time of arrival. That said, I always think that there is room to further investigate and implement procedures that can reduce the cost, waste, and overall impact of an incident.

OR IIMT3 was very supportive of the idea of making fire operations more sustainable. This fact showed in the efforts they had made prior to my arrival and subsequent efforts given my recommendations and attempts to assist. This attitude towards sustainability is necessary in order to achieve a true maximization of resource benefit, reduction of fire loss (cost), and reduce overall waste and footprint of fire operations as a whole.

Before I left the incident, discussions with Penni Borghi and other fire staff revealed great support of the role I was playing as a self-titled Sustainability Coordinator on the fire. Whatever the position is called, the team made it clear that having someone around to focus on sustainability and to help take action to make the fire operations more sustainable was very helpful and could continue to be important into the future. On this note, I believe it important to establish a Sustainability Coordinator role for fire incidences. Penni Borghi mentioned that having this person on scene the first 3 days of the incident would be most effective in establishing the sustainability system, leaving the rest to the team once established. Penni also mentioned that having a local District/Unit sustainability leader available and trained to assist with sustainability on these incidences would further assist in making efforts more effective and less costly and time consuming.

The Greening Fire Team has worked for many years to try to establish a common appearance of recycling collection containers for fire incidences. The non-uniform look of the bins on this incident is common, and can lead to confusion as to which bin is designated for collecting each recyclable item. While the wire bins setup to contain large amounts of recyclables works fine as a consolidation and loading point, the smaller bins distributed around the fire not only need an appearance that is recognizable as a recycling container, but needs to be able to be stored easily in cache warehouses for supply. Simply painting or finding bins of the same make as normal cache-supplied trash containers that are a different color and marking them with recyclable symbols may solve this problem.

Lastly, with approval from Penni Borghi, I contacted Carolyn Stein, Bring Recycle Executive Director, a non-profit group I had worked with in Eugene, OR, who had been interested in observing fire operations in an attempt to learn and assist in future fire sustainability efforts. Carolyn had an employee (Scott Uding) working at Bring who had previously worked as fire suppression personnel. Carolyn and Scott made a trip to the Collier Butte Fire on August 13, 2015, and drafted a report of their visit (Appendix B).

CONTACTS

Dylan McCoy, Greening Fire Team member: dylanmccoy@fs.fed.us 541-822-7239

Dennis Fiore, Greening Fire Team Lead: dfiore@blm.gov 541-610-3107

Penni Borghi, OR IIMT3 Base Camp Manager Trainee: pborghi@fs.fed.us 530-279-1552

Carolyn Stein, Bring Recycle Executive Director: carolyn@rethinkbusiness.org 541-746-3023

Greening Fire Tip



Consider Bulk Water on Fires

Bring your canteen to fire assignments

- Refill your canteen at potable water trucks or fill stations

- Remember to keep your canteen clean!



Don't drown in refuse, just hydrate through reuse!

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Original Flier Copy Available: dylanmccoy@fs.fed.us, dfiore@blm.gov

(Appendix B)