In the Washington Office Fire and Aviation Management program, we recognize and value all of the accomplishments made towards implementing sustainability efforts at incidents and fire caches across the nation. We have the opportunity to learn from each other and do even more to help reduce our consumption and overall use of financial and natural resources during the 2018 field season. This can be done without compromising firefighter and public safety or impeding incident operations.

We can continue to accomplish sustainability goals by limiting the amount of waste produced; increasing alternative approaches and technologies to conserve energy and resources; and by focusing on efforts that will ultimately lead to an institutionalized sustainability culture. I applaud the efforts that are being championed across the nation, as shown in Appendix A.

This fire season, I encourage fire leaders to continue this important work by pursuing the following sustainability best management practices that meet incident objectives and provide for personnel health and safety:

Incident Leadership and Sustainability Presence
- Within the Delegation of Authority, include expectations for sustainable operations (refer to Appendix B for sample language). The hosting unit should provide local expertise on recycling capabilities and other opportunities for sustainable operations. Consult local Green Team Chair, Dispatch Centers, or applicable staff member.
- Identify staff (i.e., Facilities Unit Leader, Sustainable Operations Coordinator (ordered as a Technical Specialist or Resource Advisor) to work with incoming teams (Type 1, 2, and 3) assisting in the implementation of sustainable operations at incident command posts, incident bases and spike camps.

Awareness and Communication
- Consider soliciting feedback regarding sustainable operations occurring at incidents. Include sustainable operations information in after action reviews and closeout meetings.
- Increase awareness through inserting relevant sustainability messaging into incident action plans and operational briefings.
- Work with Public Information Officers to assist in the dissemination of sustainable operations information at incidents.
Regional Fire Directors

Recycling at Fire Camps

• Identify local recycling opportunities at fire camps through the use of contracted recycling services and/or facilities unit based on sustainability input received from the hosting unit.
• Divert waste generated at camps from the landfill by recycling or other appropriate processes (e.g., reduce, re-use). A 2017 trial (Whitewater Fire) demonstrated that diversion rates of 50% are achievable.

Incident Transportation

• Seek alternative sources of transportation in lieu of renting single passenger-occupied vehicles. Resources are encouraged to coordinate with local Dispatch Centers to arrange for shuttles, carpooling, or other means of travel to incident command posts.
• Use the most fuel-efficient vehicle for the job, when available.
• Minimize vehicle idling, when appropriate.

Energy

• Pursue the use of renewable or alternative energy sources, where possible.
• Manage energy consumption proactively during operations through the use of efficient technologies.

Water

• Provide and encourage the use of appropriate potable water options to limit the use of bottled water.
• Implement water conservation tactics (e.g., washing vehicles).

Green Purchasing

• As required by U.S. Department of Agriculture and Forest Service policy, comply with sustainable acquisition criteria: To view acquisition criteria, click here.

We are Leaders of change. To ensure progress on these issues, I am personally working with our National Greening Fire Team - a network of employees at all levels of the fire community - who are helping to identify the most effective sustainability strategies and practices to be championed over the next several years.

For more information or to provide feedback related to sustainability operations, successes, or challenges, contact Bobbie Jo Skibo, bobbiejoskibo@fs.fed.us. In addition, bookmark and check the National Wildfire Coordinating Group website for current and forthcoming sustainable operations information: To view the NWCG site, click here.

/s/ Shawna A. Legarza, PsyD
SHAWNA A. LEGARZA, PSYD
Director Fire and Aviation Mgt

Enclosure

cc: FAM Leadership, Regional Foresters, Jaelith Rivera
APPENDIX A: Success Stories

1. Recycling Vendor Pilot
   Oregon, Whitewater Fire, 2017
   In 2017, the Whitewater Fire on the Willamette National Forest in Oregon piloted a new recycling program. The incident management team, with support from Forest leadership, hired a recycling contractor that set up all of the waste and recycling collection for the basecamp, prepared materials for processing, and generated statistics to measure results. This approach proved successful and repeatable. Public Information staff helped generate a video that documents this process and how it can work on other incidents. To view the video, click here.

   Colorado, Arizona, and Oregon, 2016 - 2017
   A team led by the U.S. Department of Energy’s NREL conducted assessments at six fires during the 2016 and 2017 fire seasons as part of ongoing efforts by USFS to reduce energy use, water use, and waste generation and implement renewable energy technologies.

   The Type I and II incidents included: Cold Springs and Hayden Pass fires (Colorado, 2016) and the Highline, Boundary, Millis, and Whitewater fires (Arizona and Oregon, 2017). At these fires NREL/FS staff visited the Incident Command Post (ICP), base camps, and a spike camp. NREL staff observed several examples of current best practices that could be broadly replicated and identified additional potential opportunities for energy, water, and waste reduction. A final report outlining the findings is scheduled to be released in Fall 2018.

3. Sustainable Operations Coordinator Pilot Program
   Oregon, Collier Butte Fire, 2015
   As a part of the Greening Fire Team’s ongoing efforts, a team member was able to visit the Collier Butte Fire camp in 2015 at Gold Beach, Oregon, to help implement sustainable practices. Some the practices implemented included improvements to recycling, food composting, waste diversion, and reduction of bottled water usage. The work that was implemented resulted in the development of a draft sustainability coordinator checklist for use on incidents. The checklist and final pilot program report can be found at the Greening Fire Team SharePoint site along with other background information and resources. To visit the internal USFS's Greening Fire Team site, click here.

4. Waste to Energy Statistics
   Oregon, Redmond Cache, Ongoing
   The Northwest Incident Support Cache located in Redmond, Oregon has partnered with a local company that converts waste to energy via incineration and hydrothermal power generation. In 2017 the Cache collected, from all large fires within Region 6 (as well as other National Interagency Support Caches),
unserviceable standard cache equipment and supply items that could not otherwise be recycled and diverted them away from the landfill. The preapproved items were then collected and shipped to the waste energy facility. A total of 76,369 pounds of materials were diverted and converted to electric power supplied to the local power grid.

5. Interagency Website for Sustainable Operations
   NWCG, 2018
   The Logistics sub-committee website nested within the NWCG broader site will host future information related to the National Greening Fire effort. Please bookmark the following site and visit it into the future for updated information as it becomes available: To visit the National Greening Fire site, click here.

6. “Grassroots to Grasstops” Sustainability Effort
   USFS Agency-Wide, 2008 - Present
   Beginning in approximately 2008, the concept of sustainability, fostered by passionate personnel, began to spread throughout the fire community. Today, the grassroots movement continues to build momentum while gaining the support of high level (grasstops) leadership. By limiting the amount of waste produced and increasing alternative approaches and technologies to conserve energy and resources, we are meeting our important mission -- to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.
APPENDIX B: Delegation of Authority language options:

BROAD STATEMENT:
➢ Incorporate sustainable operations in all incident management activities to minimize environmental, social, and fiscal impacts without compromising firefighter and public safety or impeding incident operations.

SPECIFIC ACTIONS:
➢ Implement sustainability best management practices (insert BMP’s - listed above - that are applicable to your incident).