COVID-19 Response Effort Provides Crucial Firewood Supply to Hopi and Navajo Homes

In the last six months, more than 100 cords of wood have been donated and delivered to the Hopi Tribe and Navajo Nation through growing collaborative efforts. The USDA Forest Service, Tribal Extension agents, Tribal partners, the National Forest Foundation (NFF) and Joe Dirt Excavating have worked together to provide life sustaining wood supplies to meet needs of many tribal members. This collaborative group welcomes new partners that wish to join this effort.

The wood is desperately needed for cooking, boiling water, and heating inside many Hopi and Navajo homes, in an area where Tribal border closures associated with the COVID-19 pandemic have made it difficult for Tribal members to collect and transport firewood from nearby forests. Also, the closure of the Black Mesa coal mine in 2019 increased local dependence on wood as a fuel source.

To help meet this need, the Forest Service is coordinating with partners to harvest and deliver wood from forest restoration projects to Tribes. The fuel-wood is a product that comes from forest thinning projects that are part of the Four Forest Restoration Initiative and NFF’s Northern Arizona Forest Fund projects, among others. As part of these first efforts, wood has been delivered by Joe Dirt Excavating, with funding from the NFF and discretionary funds from tribal extension programs.

Since March, the group has successfully delivered 100 cords of wood to three Hopi and Navajo communities. Tribal extension agents and Jeanne Stevens, USFS Tribal Relations Specialist, coordinated with Tribal members and organizations including Gore to cut and distribute the wood to Tribal elders and others in need.

The group is now looking for funding and resources to help this program continue, including an effort to bring wood from New Mexico in collaboration with Nathan Notah and Kristy Kinlicheenie of Window Rock Federally Recognized Tribal Extension Program (FRTEP), and Alexandra Carlisle of Shiprock FRTEP.

Click here for a video about the effort.
**Update: 4FRI Phase 2 Request for Proposals**

The solicitation period for the 4FRI Phase 2 Request for Proposals closed on May 12, 2020. To protect the integrity of the competitive process, no information about the proposals — including the number of proposals, who submitted proposals, or the team evaluating the proposals — will be disclosed.

**GFFP Tests a Rapid Wildfire Risk Assessment Pilot Project**

In summer 2019, the Greater Flagstaff Forests Partnership (GFFP) implemented a targeted pilot program to demonstrate and refine application of the “Rapid Wildfire Risk Assessment” approach in the community of Starlight Pines, near Happy Jack. In 2.5 days, 612 parcels were each assessed from the street in 60 seconds. Data were entered into a digital tablet, which allowed us to test the survey instrument, data collection, mail merge and data storage. Property owners were then sent a postcard with their fire risk rating and an invitation to request a more detailed, walk-around, 60-minute assessment. This rapid approach is designed to provide resources that give residents the tools needed to mitigate wildfire ignition on their property.

**Lessons Learned:**
- GFFP found that some communities are overseeing similar programs (i.e., cost-share grants, FireWise Board activities). Therefore, it is important to communicate with key community members/organizations to assure their interest in the program. If the community agrees to participate, be sure to develop an outreach campaign so that the community knows what to expect.
- Ensure the fire department, or another agency, is willing to conduct follow-up 60-minute assessments.
- Conducting the assessments from an identified, signed vehicle was effective and efficient.
- Considering the main objective of the 60-second approach is to raise wildfire risk awareness and mitigation efforts, refine the protocol with objective and simplified questions.
- Using an iPad, ArcGIS and Survey 123 was an efficient and effective means to collect and store data and to incorporate mail merge for the postcards.
- Given the back of the house was not visible from the street in the 60-second assessment, we did not want to give homeowners a false sense of security by indicating a “Low-Moderate” rating. Rather, the lowest rating used was “Moderate.” This rationale should be clearly stated on the postcard.

For more information, click [here](#).

**The Ecological Restoration Institute Awarded Wood Innovations Grant to Expand Wood Products Industry in the Southwest**

The US Forest Service’s [Wood Innovations Grant program](#) awarded the Ecological Restoration Institute’s Dr. Han-Sup Han a $260,000 grant to lead a Wood Utilization Team across three states focused on increasing forest restoration efforts through the expansion of forest products business clusters in the Southwest.

With this funding, Dr. Han plans to build on the research and development infrastructure of three university-based research units that comprise the [Southwest Ecological Restoration Institutes](#)—the New Mexico Forest and Watershed Restoration Institute, the Colorado Forest Restoration Institute and the [ERI](#) at Northern Arizona University—to support the expansion of forest products business clusters through focused workshop training events, applied research studies, and forest product marketing efforts.

Across the Southwest, projects that thin and remove small-diameter trees to restore forest health and prevent catastrophic wildfire are often hindered by a lack of markets for the low-value wood and biomass needed to fund operations. For several years, the Forest Service, industry partners, ecologists, and stakeholders have worked to overcome this barrier to reinvigorate the regional forest products industry and spur forest restoration efforts.

To learn more about the 2020 Forest Service’s Wood Innovations Grants, click [here](#).
The Kaibab National Forest is teaming with USDA Forest Service Forest Health Protection, Northern Arizona University and the Arizona Elk Society to treat aspen stands infested with a tiny insect that is quickly becoming a major threat to the iconic tree species. The treatments are not only intended to help limit the spread of the insects in specific locations but also to inform research to aid in the long-term preservation of healthy aspen stands across the Southwest.

Oystershell scale is considered by many experts to be an emerging invasive species issue with the potential to severely damage or even destroy northern Arizona’s aspen over the coming years unless successful treatment techniques can be developed. Research into the biology and management of the species is considered critical for the future of aspen.

Oystershell scale are tiny, armored insects that live under protective covers on soft twigs or bark of their host plant. Mature scales are about one-eighth-inch long and are the general shape of an oyster's shell. The insects' hard, protective coverings, which are constructed of wax, shed skins and other substances, are exceptionally difficult to penetrate, making treatments such as insecticide spraying more challenging on a large scale.

The tiny insects feed on their host plant with mouthparts that are several times longer than their bodies, enabling them to consume large areas of plant tissue. Oystershell scales can quickly overwhelm their host, even though they may not immediately be noticeable due to blending in well with the underlying bark. As the number of insects increase, an extensive crust of scales develops that can entirely encircle the trunks of host trees, and injury symptoms including dying limbs, tree tops and whole trees rapidly ensue.

Kaibab National Forest managers are documenting expanding acres of heavily scale-encrusted trunks and dead or dying trees in many aspen stands on the forest’s south zone. With only about 2,000 total acres of aspen in these areas, tree specialists and researchers are eager to gain as much information as possible on how to effectively manage oystershell scale and preserve aspen on the landscape.

To read more about this collaboration to protect regional aspen stands, click here. For additional information on oystershell scale research at Northern Arizona University, contact Dr. Kristen Waring at kristen.waring@nau.edu or Connor Crouch at connor.crouch@nau.edu.

**What Can You Do?**

Removal of OSS crawlers and adult scale can be accomplished by scrubbing down the infested area with a stiff sponge. A strong jet of water from a garden hose may also be used to displace and kill the fragile crawlers and works well for hard to reach areas. Remember to check the entire tree trunk and branches for infested patches. Repeat treatments once or twice throughout June. Adult scales can be removed anytime of the year; however, the crawler stage is most vulnerable and treatments during this time increase effectiveness.

For more information on treatment methods see the Colorado State University Extension, Oystershell Scale Fact Sheet No. 5.513. To learn more about what the Forest Service and NAU are doing to investigate and reduce OSS impacts on the Kaibab National Forest, click here.

For further information about this insect or other forest health concerns, contact Aly McAlexander, Forest Health Specialist, at (602) 771-1415 or amcalexander@dfm.az.gov.
Situated adjacent to the City of Williams is a mountain of great importance to local citizens, private entities, municipalities, jurisdictions and tribes that help steward its well-being. It is known as Bill Williams Mountain, and it is an iconic feature of the northern Arizona landscape.

The Kaibab National Forest, in partnership with Coconino County, the National Forest Foundation, and the Arizona Department of Forestry and Fire Management, began technical steep slope forest restoration and fuels reduction work on the mountain in September 2019. This project is a top priority for all of the partners in order to reduce unnaturally dense timber stands and heavy accumulations of dead and down woody fuels on the highest portion of the mountain’s north face in areas difficult to access.

The partners’ mutual goal is to reduce risks to life and property and protect critical watershed drainages that deliver the vital water supply to the City of Williams as well as to many other communities to the south. This effort will also reduce the risk of a potentially destructive wildfire and the probability of post-wildfire flooding that would likely have devastating effects on the mountain’s natural resources and on essential infrastructure and neighborhoods in the community below.

The collaboration between the dedicated partners was developed to implement the first stages of strategic planning and to secure resources to begin the complex steep slope restoration treatments on the mountain.

**Project Accomplishments To Date**

**Phase 1 Steep Slope Treatment**
- 300 acres cut
- 100 acres of material removed

**Other Treatments**
- 3,500 acres offered in timber sales
- 700 acres of hand thinning
- 200 acres of mechanical thinning
- 1,200 acres scheduled for treatments

Severe wildfire and post-wildfire flooding in the area would threaten lives, property and important community and forest resources. It would also result in exorbitant costs to communities and local governments in both the short and longer terms. In addition to immediate expenses including fire suppression, evacuation, and post-fire rehabilitation and repair, long-term impacts could include damage to or complete loss of homes, businesses, and highway, railroad and utility infrastructure, as well as significantly reduced tourism and sales tax revenue.

To tell the story of Bill Williams Mountain and share the importance of the restoration effort, the partners developed a series of videos at [www.youtube.com/user/coconinocnty](http://www.youtube.com/user/coconinocnty). From the county channel, search “forest restoration initiative,” and the three videos will display. To view photos of the project, visit [https://bit.ly/BWMProjectPhotos](https://bit.ly/BWMProjectPhotos), and to read the full article, click [here](https://bit.ly/BWMProjectPhotos).