

REPORT TO CONGRESS
STATUS OF EFFORTS TO ACCELERATE FOREST ECOSYSTEM RESTORATION UNDER THE
FOUR FOREST RESTORATION INITIATIVE (4FRI)

Summary

With a common goal of accomplishing landscape-scale forest restoration in the ponderosa pine ecosystems of northern Arizona, United States Department of Agriculture's (USDA) Forest Service (FS), along with partners and a collaborative of more than 30 stakeholders, are continuing efforts to accelerate restoration in the Four Forest Restoration Initiative (4FRI) project area. The goals of the 4FRI project are to restore forest ecosystems, reduce threats of destructive wildfire to thriving forest communities, support sustainable forest industries that strengthen local economies, protect critical watersheds, conserve natural resources, and maintain aesthetic values. Since 2010 to date, 4FRI has treated more than 940,000 acres, with approximately 140,000 acres of mechanical treatments and more than 800,000 acres of prescribed or managed wildfire treatments.

4FRI has a number of recent accomplishments that are accelerating the pace and scale of forest restoration in northern Arizona. Included in this report are brief updates on the release of a 1.2 million-acre Draft Environmental Impact Statement (DEIS) for forest restoration, the release of a Request For Proposals (RFP) for up to 800,000 acres of forest restoration treatments, accomplishments under the Collaborative Forest Landscape Restoration Program (CFLRP), and efforts underway to modernize and innovate forest product sales.

Innovations and Modernization

4FRI continues to take an innovative approach, using partnerships and new technologies with the goal of increasing the pace, scale and efficiency of restoration treatments. In 2017, FS staff, The Nature Conservancy (TNC), and industry partners were convened by the Ecological Restoration Institute in Phoenix to identify efficiency and modernization actions that could be tested during 4FRI implementation. The workshop identified 19 potential action items. The collaborative prioritized nine of the 19 items. Actions and milestones have been tracked for nine items by the Collaborative Accelerating Restoration Team. The remaining 10 items had additional resolutions through the National and Regional Forest Product Modernization (FPM) efforts. Other items were identified for later action. On October 29 and 30, 2019, the parties reconvened to review progress including:

- **Digital Sale Prep** - The use of digital technologies to prepare timber sales through tablet-facilitated Designation by Prescription (DxP) and "virtual boundaries" is currently underway on the Kaibab National Forest (NF) and the Coconino NF. The Apache-Sitgreaves NFs have used this technology in timber sales and completed digital site preparation with virtual boundaries. New virtual boundaries protocols have been moved into final review for inclusion in the new national handbook direction.
- **Unmanned Aircraft Systems** - Currently the agency has restricted the purchase and piloting of Unmanned Aircraft Systems (UASs). Since we abide by restrictions from

the Federal Aviation Administration, the agency may use UAV's for natural resource management through contracts or partners. 4FRI is collaborating with the U.S. Geological Survey and TNC to fly over project areas and demonstrate how data collected by UAS's can help streamline timber sale monitoring and the minimum resources required to do so.

- **Log accountability, branding, barcoding** - The Southwestern Region has received preliminary approval from the Washington Office to allow Contracting Officers to waive branding and painting where appropriate and consistent with existing law and regulation. Barcoding of load tickets would create efficiencies for both the FS and partners by enabling electronic tracking and accounting of log loads. The FS National Technology and Development Program is producing a report identifying available technology, equipment and costs for industry and FS to implement electronic log load tracking and accountabing.
- **Increased weight limits for logging trucks** - The Arizona Department of Transportation (ADOT) has introduced the Healthy Forest Initiative, which is a permit process to allow increased load limits for timber transport. The Federal Bridge Formula provides uniformity of vehicle axle configurations and weights to protect roads and bridges and is used by all public road agencies including the FS. The FS and ADOT are working in close coordination to establish the different load weights and axel configurations that would be allowed on Arizona roads and bridges.
- **Cruise with LiDAR** - The goal of the Cruise with LiDAR action was to investigate the efficacy of LiDAR (enhanced 3-D imagery) for deriving timber volume estimates. LiDAR imagery has been collected for most of the ponderosa pine within the 4FRI footprint.
- **Increase collaboration with industry** – The goal of increasing collaboration with industry was to create and facilitate two-way dialogue and provide specific information on the appraisal process. The annual 4FRI Industry Roundtable is an opportunity to collaborate with industry.
- **Good Neighbor Agreement (GNA)** - The FS and Arizona Department of Forestry and Fire Management (DFFM) have entered into a GNA to build capacity to increase the number of acres available for treatment by having Arizona DFFM assist with sale preparation activities. Depending on the State's capacity, work may begin during the FY 2020 field season.
- **Merchantability standards** – Approved in November 2019, the Southwestern Region has finalized a reclassification of forest products and merchantability specifications. The effort will better align FS products and merchantability specifications with local industry needs.
- **Minimum rates for low-value forest products** – On June 5, 2019, FS Washington Office issued a letter titled “2430 Rates – Low-Value Forest Products,” setting the national minimum rate at \$0.25 per CCF (hundred cubic feet of wood).

Contracting and Procurement

In September 2019, the FS Southwestern Region published the Solicitation for 4FRI's Phase 2 Integrated Resource Stewardship Contract Request for Proposals (RFP). The intent is to

issue one or more large-scale, long-term (20-year) stewardship contracts that will increase the pace and scale of restoration in northern Arizona.

The solicitation seeks to mechanically thin between 605,000 and 818,000 acres more than 20 years. This RFP is among the first in the agency to use the 20-year stewardship authority authorized by the Consolidated Appropriations Act, 2018. The RFP Performance Area is a portion of the overall 4FRI area. It includes available acres within six separate sub-areas located in portions of the Apache-Sitgreaves, Coconino, Kaibab and, Tonto National Forests. The RFP is open to small and large businesses and seeks proposals that are sustainable, innovative, feasible, and cost-effective to increase the pace and scale of forest restoration.

The RFP will require detailed technical, financial and business proposals from offerors that demonstrate their understanding of the available wood supply, slash treatments, as well as physical and economic operating conditions. Proposals are due in the spring of 2020 with awards expected in the summer of 2020.

The RFP was accomplished through a unique partnership that includes the Salt River Project (SRP), U.S. Bureau of Reclamation (BOR), Arizona Commerce Authority (ACA), and the Arizona Department of Forestry and Fire Management (DFFM).

This unique partnership ensured the RFP was thoughtfully crafted and well-informed by a wide range of experts including foresters, forest product experts, data and financial analysts, contracting officers, policy specialists, and legal staff. The SRP, BOR, and DFFM will assist in the evaluation of proposals and make recommendations to the FS. The FS retains the responsibility for all of the decisions outlined in the Federal Acquisition Regulations and for making the final award.

Collaborative Forest Landscape Restoration Program (CFLRP)

The 4FRI project has prioritized mechanical and fuels treatments across the landscape using 5-year plans that used the following criteria for implementation: 1) areas within the wildland-urban interface, 2) areas of high crown fire potential, and 3) watersheds of concern. These priorities were a combination of candidate areas outlined by the 4FRI stakeholders' group in the 2010 Landscape Restoration Strategy and refined by the 4FRI forest supervisors in 2012.

The 4FRI project has been able to increase hazardous fuels treatments on several fronts from 2010 to the present. Forests are treating larger burn blocks and using aerial ignition to increase time efficiencies while reducing firefighter exposure. During the last 4 years, forests are sharing resources across boundaries and working with State and local firefighters to implement prescribed fire across the landscape, which has increased the pace and scale of the project results.

Overall, 4FRI implemented larger burn blocks with prescribed fire, which reduced costs through increased economies of scale. The Coconino NF, for example, has a joint burn plan with the state of Arizona to allow prescribed fire to cross jurisdictional boundaries, which

decreases costs and increases the benefit of prescribed fire across all lands. The Apache-Sitgreaves National Forests have similar long-standing understandings with the White Mountain Apache Tribe. In addition, the 4FRI forests also leverage the use of managed wildfire treatments by managing certain unplanned natural ignitions to meet resource and land management objectives. When managing to meet resource and land management objectives, managers closely monitor fire conditions, taking suppression actions only where they may be necessary, and otherwise allow the fire to burn until stopped by natural barriers or weather conditions.

sharing resources across boundaries to complete timber sales, the 4FRI Forests use indefinite delivery/indefinite quantity (IDIQ) contracts for timber sale layout and marking, and Enterprise personnel for sale layout to increase project outputs. Funds received from CFLRP increased timber sales prepared and sold in the last 4 years. With the expanded authority to use Designation by Prescription (DxP) in the 2014 Farm Bill we have used DxP to greatly decrease the time and cost of sale preparation. An example of innovative use of CFLRP funds and digital sale prep is the Phase I contract with Good Earth Power. Through this contract more than 63,000 acres have been prepared and awarded with 14,000 acres harvested using DxP from the 4FRI project.

Environmental Planning - Rim Country DEIS

The FS is analyzing another 1.2 million acres in northern Arizona under 4FRI, the project is called the Rim Country Project DEIS. On September 25, 2019, the day it was sent to the publisher, the document was made available online for public preview. The FS published the draft in the Federal Register on October 18, thereby initiating the 90-day formal comment period that concluded on January 16, 2020. The anticipated final decision of the DEIS document is expected in spring of 2021.

The Rim Country DEIS is 4FRI's second multi-forest restoration project and is located on part of the Apache-Sitgreaves, Coconino, and Tonto NFs. The project proposes restoration activities more than a 20-year period or until proposed activities are completed with a goal of increasing forest health and resiliency, and reducing the risks of uncharacteristically-severe fire in the forests of northern Arizona.

The Rim Country DEIS identifies the full suite of potential restoration activities outlined in two action alternatives – the Modified Proposed Action and the Focused Restoration Alternative. The Modified Proposed Action treats approximately 890,000 acres mechanically and 950,000 acres with the use of fire. The Focused Restoration Alternative treats approximately 480,000 acres mechanically and 530,000 acres with the use of fire. The DEIS proposes restoration of streams, riparian habitat, and aquatic resources to improve water quality and habitat for native trout and other threatened and endangered species across the planning area.

Consistent with the intent of the CFLRP, the Rim Country Project focuses on treatment of small-diameter trees and maximizing the retention of large trees as appropriate for the forest

type. Post-treatment fire would be reintroduced to the landscape to the degree suitable to fulfill its natural role in the fire-adapted ecosystem.

Conclusion

The success of these endeavors has been in large part due to the sustained collaboration that is a hallmark of 4FRI. This effort is critical to achieving the long-term vision of restored forest ecosystems and sustainable forest industries that strengthen local economies. Although there have been challenges, 4FRI is emerging as a flagship example of what a collaborative landscape-scale restoration effort can accomplish through innovation.