



FIGHTING FUTURE FIRES WILDFIRE CRISIS STRATEGY IN THE PACIFIC NORTHWEST

Early implementation brings challenges, opportunities for forests, U.S. Forest Service

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The Pacific Northwest region is home to five of 21 Forest Service investment landscapes, designated to prioritize resources to address wildfire risk to infrastructure and communities as part of the Forest Service's 10-year Wildfire Crisis Strategy (WCS).

In 2022, the Central Washington Initiative landscape, which includes a large portion of the Okanogan-Wenatchee National Forest and surrounding lands, and Central Oregon landscape, comprised of the Deschutes National Forest and the Crooked River National Grassland, were established.

Criteria for establishing these landscapes was a combination of high wildfire risk to surrounding communities and a history of local, cross-boundary collaboration on large, landscape-scale projects.

In 2023, areas on and around the Mt. Hood National Forest and Colville National Forest were designated as additional WCS investment landscapes.

An area of southern Oregon, including the western half of the Fremont-Winema National Forest, was included in the larger Klamath River Basin landscape, which encompasses the Klamath River watershed (including areas of northern California on and around the Klamath National Forest and Shasta-Trinity National Forest).

These investments are funded in large part through special appropriations approved as part of the Bipartisan Infrastructure Law and the Inflation Reduction Law as well as other landscape-scale restoration programs, such as Collaborative Forest Landscape Restoration projects and Joint Chiefs projects, and as part of fuels reduction programs funded through regular appropriations.

We're also working with partners to implement projects that reduce wildfire risk both on investment landscapes and on other forests across Washington and Oregon.



Washington Dept. of Natural Resources partnered with the Colville National Forest to burn brush piles in the East Trout Good Neighbor Authority project area during a prescribed fire in fall, 2022. USDA Forest Service photo.

FIRE IS A NATURAL PART OF OUR LANDSCAPE

The Pacific Northwest Region (Washington and Oregon) is home to sixteen national forests, one national grassland, and a national scenic area. These forests represent varied and diverse ecosystems – from high deserts to the south and east, to subalpine peaks, to grassland savannahs and coastal rainforests. One thing they all have in common is a history of being shaped by natural and human-caused fire.

Fire-dependent ecosystems rely on fire in numerous aways. Fire breaks down woody debris to cycle carbon and other nutrients back into the soil in dry forests. It clears ground-level overgrowth in wetter areas, and can remove invasive, non-native vegetation and encroaching trees on grasslands. Many native trees, flowers, and berries flourish in areas recently treated by fire. Wildlife can also benefit; fresh growth following a fire provides open space and grazing opportunities for game animals while burned out logs and roots provide places to hide, rest, and breed for animals, insects, and even aquatic species.

The use and natural occurrence of fire on Pacific Northwest landscapes predates written records. Researchers, including fire ecologists and ethno-botanists, are working to recover that history. While there's still much to learn, carbon records make it clear Pacific Northwest forests and grasslands are experiencing an escalating "fire deficit" compared to the prevailing conditions 500-1000 years ago. More than a century of aggressive fire suppression has excluded natural fire from the landscape and resulted in a buildup of woody material across the Pacific Northwest. This overgrowth of woody material acts like kindling when a natural fire ignition occurs, such as lightning, resulting in uncharacteristically large and intense wildfires. Instead of experiencing frequent, low intensity fires, our forests are now at exceptionally high risk of very large, highintensity, stand-replacing fires.

With the region's climate in a warming trend (with average temperatures climbing 2 degrees Fahrenheit in the past 100 years and expected to climb at least 2 degrees further during the next 50) it's imperative that we restore a more sustainable balance. We must cultivate more acceptance of prescribed and managed fire and build more resilience to fire into landscapes and our infrastructure.



The Bootleg Fire scorched portions of the Fremont-Winema National Forest on and around the Gearhart Mountain Wilderness. Historically, frequent burning would have ensured fires burned at low severity, sparing trees and limbs to preserve the upper canopy while supporting a cycle of renewal and new growth at ground level. Here, new vegetation emerges even after the area experienced high-severity fire; however, the exposed soil will be highly susceptible to erosion. It will take many years and considerable effort to regrow a healthy, diverse forest in severely burned areas like this one. USDA Forest Service photo.

INVESTMENTS TO REDUCE WILDFIRE RISK

Funding provided in the Bipartisan Infrastructure Law and Inflation Reduction Law represent a historically significant investment in reducing wildfire risk in high-risk areas and a down payment on the full scope of work outlined by the Wildfire Crisis Strategy.

The work includes mechanical fuels reduction, such as piling brush, trimming lower tree limbs, and removing smalldiameter (6" and under) trees, followed by use of prescribed or managed natural fire to reduce piles and remaining fuels.

In late FY 2022, land managers for the Central Washington Initiative (Okanogan-Wenatchee National Forest) and Central Oregon landscapes (Deschutes National Forest with the Crooked River National Grassland) received the first of up to ten years of annual funding for wildfire risk reduction projects.

The Mt. Hood, Colville, and Fremont-Winema National Forests received their first round of funding in FY 2023.

Image: state stat

Consistent with the national Wildfire Crisis Strategy, land managers are directing funding to existing projects, while

Map of Wildfire Crisis Investment Landscapes in Washington and Oregon.

simultaneously working to build capacity within the organization and with partners for new projects consistent with existing five-year plans while also incorporating new planning priorities being established in accordance with legislation outlined in the Bipartisan Infrastructure Law.

Early successes

Acres treated, year to date (updated July 3, 2023):

- For FY 2023, the Central WA landscape completed 1800 acres of spring burning, combined with 3700 completed in the fall for a total of 5600 acres burned in four high-risk firesheds and 5730 total acres burned. Unfortunately, damp spring weather has paused that effort for the season earlier than hoped.
- On the Colville, 4829 acres have been treated with Rx fire, year to date.
- Mt. Hood has treated 174 acres with fire but is investing heavily in mechanical fuels reduction and is on track to complete 1400 acres of treatment this year. By next month, they will have 8 active contracts and 2 agreements for fuels reduction projects within designated WUI.
- Fremont-Winema has treated an additional 322 acres with prescribed fire, in addition to the 3119 treated using natural fire on Dillon Creek fire, for a total of 3439 acres treated with fire this fiscal year, so far.
- Central Oregon (Deschutes NF and Crooked River NG) reported 2101 acres treated with prescribed fire, year to date (note: this may increase when they catch up on some delayed reporting in FACTS).

Dillon Creek Fire:

Following fuels reduction treatments for a planned prescribed fire on an area of the Fremont-Winema National Forest within the Klamath Basin Wildfire Crisis Strategy investment landscape, a lightning-sparked ignition burned the project area naturally. The resulting fire burned at low intensity, returning carbon to the forest floor and creating open space for wildlife browse, completing planned treatment to improve health and resiliency on more than 3000 acres of forest.

Regional Prioritization Framework:

The Bipartisan Infrastructure Law directs the Forest Service to plan strategically to reduce wildfire risk, particularly in its highest risk forest areas and communities. The Pacific Northwest Region's Wildfire Crisis Team is tackling that challenge by building a prioritization framework and tools for landscapes to assess local needs through a fire-risk and fireresiliency lens. The region is piloting use of this tool and



The Dillon Creek Fire was managed for natural resource benefits, completing work started by mechanical thinning and other fuels reduction treatments prior to a lightning-sparked ignition in late spring, 2023. USDA Forest Service photo.

resulting geospatial analysis products on the Central Oregon landscape, a project that culminated with a twoday workshop with forest line officers and staff representing all management areas in June. Using feedback from the workshop, the regional team hopes to refine these tools and expand their use to other landscapes.

Challenges we face

While we address existing "shovel-ready" projects, we're planning future projects with partners who can help us implement them. This process is not simple and will not produce 'overnight' results. Challenges include:

- Seasonal weather conditions suitable for using fire are limited. Prescribed fire takes place in spring and fall, when weather conditions prevent fires from burning too quickly and too intensely. But late spring and early fall rainfall can make vegetation too wet to burn. Too little rainfall makes vegetation too dry to burn safely.
- **Fuels treatment projects are long-term investments.** With pre-project planning, the NEPA process, and subsequent contracting and agreements, it takes on average at least three years for work to commence "on the ground." Additionally, an acre can't be treated just once; multiple rounds of preparatory fuels reduction treatments, usually over a period of several years, are needed first. Once fire is applied, treatments must be repeated regularly to maintain those conditions.
- **Staffing is an ongoing issue.** We're hiring and training across our workforce and increase our capacity for planning and conducting projects. This includes hiring and training firefighters, NEPA planners, data analysts, GIS technicians, contract specialists, and more. It will take time to build the staff we need to plan and implement projects at the rate needed for this effort to be successful.
- **Capacity is challenging, everywhere.** Growth, in terms of equipment and workforce, among both industry and other partners has been limited by previous funding. Existing capacity is further constrained by increased demand as we compete with similar projects on privately-owned and state-managed lands, and with fire- and post-fire work. In some cases, this results in higher costs.
- Litigation. Several current projects in the region, including some on WCS landscapes, have been delayed by litigation. We recognize there are many values in play that inform varying perspectives on forest management, but the scientific consensus is clear forests are in crisis. If we don't act quickly to reduce wildfire risk, we face greater risk to communities and forest survival. *We must find areas of broad agreement to move forward and reduce fire risk for everyone, and for the forests we depend on.*