Pacific Northwest Region | April 2023

2022 Wildfire Summary

"After supporting the Southwest and Alaska this spring, the Pacific Northwest fire season started later than usual due to significant spring rains. Although we started late, we had a few significant fires in some really difficult terrain that stayed with us late into October. Then, even with a high success rate with initial attack, we saw significant impacts to a few communities with extended smoke impacts on our long duration fires that were managed strategically to reduce risks to responders." – Alex Robertson, Region 6 Director of Fire, Fuels and Aviation

Late Spring Rains

After a drier than average winter in the Pacific Northwest Region, significant rain (even snow) fell in April and May (Figure 1). Fire danger metrics and fuel moistures remained below-normal until mid-July. At higher elevations, the pronounced effects of spring rain further delayed fire-ready conditions until mid-August.

Basin Precipitation Monthly Water Year to Date 180% 160% 140% 120% 100% 40% 20% Oct Nov Dec Jan Feb Mar Apr May

Figure 1: Precipitation in the Umpqua and Rogue River Basins in Western Oregon. This trend varied across the geographic region, but rainfall was generally low in the winter and greatly increased in the spring. Source: NRCS

Assistance to Region 10 (Alaska)

The slow start to fire season allowed crews and Incident Management Teams (IMTs) from the Pacific Northwest to complete spring fire assignments in the Southwest and Alaska, where fire activity peaked in the spring. By mid-June, all Interagency Hotshot Crews from Region 6 were assigned to fires in Alaska.

Hot Temperatures Arrive

Oregon and Washington experienced nearly ten straight days of temperatures over 90 degrees in mid-July. The year's first large fires began the weekend of July 30 following a lightning storm in the Cascades. The Windigo and Potter Fires were reported in central Oregon on July 30 and 31 followed by the Cedar Creek Fire a few days later.



Photo: Active fire behavior on the Cedar Creek Fire in Oregon on the night of September 9. Photo credit: USDA Forest Service fireifghter Mike Waugh

Seasonal Winds Propel Fire Growth

In late August and early September, a series of dry cold fronts produced extreme fire behavior in both eastern Washington and eastern Oregon. Several large fires in the Wallowa Mountains grew substantially, notably the Double Creek Fire which burned over 150,000 acres in one week. On September 7, an east wind event brought 48 hours of gusty, dry air over the Cascade Mountains into western Oregon and Washington. This led to

significant growth of existing fires and several new fire starts prompting multiple evacuation orders. The communities of Oakridge and Westfir, Oregon (nearly 3,500 people) were placed under a Level 3 (go now) order as the wind-driven Cedar Creek Fire pushed westward. The east winds also brough significant smoke to populated metro areas for the first time in 2022.

Over 5,500 firefighters and support personnel were assigned to fires across Oregon and Washington during peak fire activity. The preparedness level peaked at 4 from September 2 to September 17 (Figure 2).

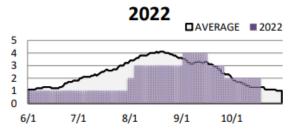


Figure 2: Days spent at preparedness levels in the Pacific Northwest in 2022. Source: NWCC

Evaluating Risk

In coordination with local leadership, several IMTs pioneered a process of Strategic Risk Assessment, balancing values at risk on the landscape with acceptable risk to firefighters. It provided IMTs and agency administrators a roadmap for decision making that remained consistent for the duration of the incident. Even with strategic risk assessments in place, fatalities still occurred, including a firefighter who died on August 10 following a tree strike on the Big Swamp Fire in Oregon.

Fire Name	Acres	National Forest
Double Creek	171,532	Wallowa-Whitman
Cedar Creek	127,311	Willamette
Windigo/Potter/Big Swamp	1,760	Willamette
Pasayten Complex	29,308	Okanogan- Wenatchee
Goat Rocks	6,196	Gifford Pinchot
Crockets Knob	4,331	Malheur
White River/Irving Peak	11,400	Okanogan- Wenatchee

A Record Breaking Fall

September through mid-October was one of the driest falls on record in the Pacific Northwest Region. Paired with above normal temperatures and poor overnight humidity recoveries, most fires west of the Cascades continued slow rates of spread. Fire managers recorded new record-low fuel moistures. An east wind event occurred the weekend of October 15 resulting in over 24 hours of active fire spread and new fire starts. Oregon Department of Forestry reported a 100-acre fire in the Clatsop State Forest in the normally moist Coast Range.



Photo: The Goats Rock Fire on the Gifford Pinchot National Forest in Washington on September 10. This was one of the smoke sources that greatly impacted western Washington. Photo credit: USDA Forest Service

Smoke in the Era of Megafires

The extended wildfire season resulted in prolonged smoke impacts to millions of people across Oregon and Washington. Long-term incidents further degraded air quality in fire-adjacent communities. Oakridge, near the Cedar Creek Fire in Oregon, endured over 50 consecutive days of "unhealthy" to "hazardous" air quality in September and October. Central and western Washington also experienced prolonged long stretches of poor air quality throughout the summer. The uptick in late-season fire activity pushed thick smoke into major metro areas (including Portland and Seattle) resulting in school closures and cancellations of multiple outdoor activities. Smoke impacts didn't subside until the arrival of wetting rain arrived at the end of October.