2020 Pacific Northwest Wildfire Summary

A Historic Season

The 2020 fire season was unlike any in recent history and became the season against which all subsequent fire seasons are now compared. A historic Labor Day windstorm fueled multiple megafires that ripped through forests and communities, forever changing the way wildfire is perceived west of the Cascade Mountains. Places that weren't directly impacted by fire suffered from weeks of choking smoke. Fire recovery will be ongoing for many years as the 2020 fires left lasting scars in the Pacific Northwest.

Photo: The Riverside Fire on the Mt. Hood National Forest following a historic wind event over Labor Day. The fire grew to 112,000 acres within the first 30 hours. Photo taken on September 8, 2020. Credit: USDA Forest Service



Support Down Under

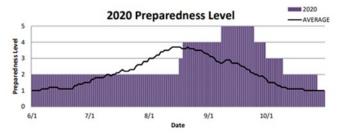
Fire season started early for many Pacific Northwest firefighters as widespread wildfires in Australia prompted an international response. From December 2019 through February 2020, several dozen crews and overhead support staff from the Pacific Northwest Region mobilized to Australia.

COVID-19 Complexities

The arrival of COVID-19 brough confusion and uncertainty. Due to restrictions on gathering indoors, visitation greatly increased on public lands resulting in an uptick in human-caused fires. By March, the majority of Forest Service personnel shifted to remote work, but this wasn't always an option for firefighters. Effects of smoke and the risk of dangerous work straining an already overburdened health care system led to a spring prescribed burning pause. COVID-19 mitigation procedures became part of every incident and included temperature checks, socially distanced meals, masking and restructuring of traditional fire camps to allow for more remote work. Despite more than 30,000 firefighters passing through the region, only a handful of positive COVID-19 cases were recorded on PNW incidents.

A Deceptively Slow Start

Higher than average June rainfall moderated fire activity and kept the Preparedness Level at 2 until mid-August when seasonal lightning storms rolled across the region. These storms ignited fires in central Oregon and Washington, including the Beachie Creek and Lionshead Fires that would eventually become destructive megafires.



Graphic: This chart highlights the length of time spent at high preparedness levels in the Pacific Northwest in 2020. Source: NWCC

Historic Labor Day Winds

Over September 6-9 a rare cold front hit the region carrying strong, dry, east winds and record low humidities. Washington felt the front first with increased fire activity in the Columbia River Gorge. As the front impacted Oregon, numerous new fire starts grew rapidly under the extreme weather conditions. Sustained hurricane-force winds blasted existing fires leading to explosive growth, much of which occurred overnight on September 7-8. The five largest fires, Lionshead, Riverside, Beachie Creek, Holiday Farm, and Archie Creek, grew by more than 100,000 acres each during a 48-hour period. The majority of fire growth occurred west of the Cascade Mountains in areas and communities not accustomed to fire activity. Thousands of people fled their homes and Level 1 (Be Ready) evacuation levels even expanded to suburban Portland. Impacts in Oregon were particularly far-reaching, including the destruction of thousands of structures and deaths of eleven people statewide. The unusual weather conditions were said to "occur once a century" by local experts.

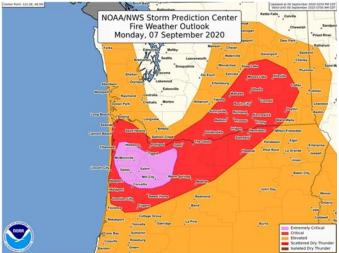


Figure: A map showing the fire weather outlook with extremely critical (pink), critical (red) and elevated (yellow) fire danger in Oregon and Washington. Credit: NOAA

Megafires Produce Mega Smoke

Following the Labor Day wind event, smoke funneled into western Oregon. For nearly ten days, the hazardous air ranked over 500 ppm giving western Oregon the poorest air quality on the planet and the worst ever recorded in the state.



Photo: Imagery showing smoke impacts over Oregon and Washington during the Labor Day wind event on September 8, 2020. Credit: NASA

A Long Season and Long Recovery

The Pacific Northwest Region recorded 3,853 incidents in 2020 – a relatively normal number but over 1.98 million acres (223% of the ten-year average) were affected by fires. September fire activity accounted for 90% of the burned acreage in 2020. Resource shortages plagued firefighting efforts following the Labor Day wind event and additional firefighting personnel arrived from the National Guard and Canada. Seasonal rains on September 18 brought reprieve from smoke and intense fire activity. Parts of Oregon were declared federal disaster areas and many evacuees returned to find their homes and communities destroyed. Across the region, the 2020 fire season was the costliest in history and left lasting economic impacts with the destruction of timber resources, beloved natural places, and structures. The largescale recovery efforts paralleled the fire season as unprecedented and are still ongoing.

Fire Name	Acres	National Forest
Lionshead	204,469	Multiple Forests
Beachie Creek	193,573	Willamette
Holiday Farm	173,393	Willamette
Riverside	138,054	Mt Hood
Archie Creek	131,542	Umpqua
Slater Fire	80,421	Rogue River-Siskiyou
Brattain	50,951	Fremont-Winema
Big Hollow	24,995	Gifford Pinchot