Climate & Earth Systems | Jun 4, 2026 | 8 min read | By Bryan White

The 2026 Wildfire Forecast: Compounding Vulnerabilities in the West

Environment * Climate Change * Conservation

The Convergence of Wildfire Vulnerability

The 2026 United States wildland fire season reflects a convergence of climatological, ecological, and historical vulnerabilities. Entering summer, the western landscape was shaped by entrenched drought, record-low alpine snowpack, and a rapid oceanic transition into an El Ni o phase.[1][3] Layered atop anthropogenic warming that has altered the thermodynamic coupling between the atmosphere and wildland fuels, these conditions advanced the high-risk window for large wildfires weeks ahead of historical schedules.[1][4]

By early April 2026, U.S. burned area reached 1.6 million acres (231% of the ten-year average), escalating by late May to 2,412,214 acres across 30,588 fires -- 195% of the decadal average in acreage and 140% in ignitions.[1] Following dry antecedent conditions linked to an early-year La Ni a, National Interagency Fire Center (NIFC) and Climate Prediction Center outlooks projected above-normal summer temperatures across the West, central Plains, and Southeast, with mid-year models projecting over 5.5 million acres burned nationally.[1][8] Subsequent autumn totals far surpassed those initial projections: by November 20, 2026, NIFC reported 70,127 wildfires burning 9,498,549 acres year-to-date (nearly double the 4.92 million acres burned over the same period in 2025).[5]

Hydrological Deficits and the Collapse of the Western Snowpack Buffer

Underlying the 2026 wildfire trajectory was an expansive deficit in regional hydrology. By early June 2026, the U.S. Drought Monitor classified 58.38% of the lower 48 states (and 48.78% of the U.S. and Puerto Rico) in drought, affecting 152.7 million residents across 45 states; as of November 17, 2026, drought persisted across 42.3% of the lower 48 states (35.1% of the U.S. and Puerto Rico).[6][7] Washington State declared its fourth consecutive statewide drought emergency in April 2026, District of Columbia authorities issued conservation advisories amid the region's driest start since 2002 (16.65 inches of first-half precipitation), and Montana launched its TroutCast fisheries drought-modeling platform.[1][9]

| Historical Period | | Metric / Dataset | | Peak Drought Extent & Severity |

| Summer 1934 | | Living Blended Drought Product | | 66.2% of lower 48 states in drought (record high).[6] |

| February 1977 | | Standardized Precipitation Index | | 22.9% of US in Exceptional Drought.[6] |

| September 2012 | | US Drought Monitor | | 54.8% of US in drought.[6] |

| June 2026 | | US Drought Monitor | | 58.38% of lower 48 states in drought.[1][6] |

High-elevation snowpack normally buffers western forests by releasing meltwater through early summer.[10] By early April 2026, however, 90% of western Snow Telemetry (SNOTEL) stations registered below-median snow water equivalent (SWE), with 78% below the 20th percentile.[2][11] May 2026 peak SWE established all-time SNOTEL lows across Wyoming, Utah, Colorado, and New Mexico, while warm anomalies left mid-elevation Idaho nearly snow-free.[10] Early meltout exposed subalpine timber weeks ahead of schedule, exemplified in May 2026 by the 254-acre Spread Creek Fire at 8,500 feet in Wyoming's Bridger-Teton National Forest and Montana's Jericho Creek Fire.[1][10]

| State / Region | | 2026 Peak SWE Status | | Historical Context |

| Arizona | | 25% of median[2] | | Record low peak[2] |

| Oregon | | 29% of median[2] | | Second lowest on record (behind 2015)[2] |

| New Mexico | | 44% of median[2] | | Upper Rio Grande Basin at 36% of median[2] |

| Washington | | <50% of median below 4,500 ft[2] | | Cascade and Olympic snow drought[2] |

| WY, UT, CO | | 32-53% below prior record lows[10] | | New benchmark SNOTEL era lows[10] |

Macro-Climatic Drivers: Vapor Pressure Deficit and the El Ni o Transition

Anthropogenic climate change drives the multi-decadal surge in western burned area -- which doubled from 1.69 million acres/year (1984-2000) to 3.35 million acres/year (2001-2018) and reached 8.8 million acres in 2020 -- primarily via Vapor Pressure Deficit (VPD).[4][12][13] Under the Clausius-Clapeyron relation, saturation vapor pressure increases exponentially with temperature, widening the moisture gap between saturated capacity and ambient air so the atmosphere desiccates soils and vegetation.[13][15] In the interior Southwest, a 1970-2019 decline in warm-season near-surface specific humidity -- driven by reduced spring precipitation and lower water vapor flux into the lower troposphere -- accounts for nearly one-quarter of the VPD-induced rise in forest burn area.[14]

In spring 2026, background aridity intersected with a rapid El Ni o-Southern Oscillation transition.[3] By mid-May, equatorial Pacific sea surface temperatures reached +0.4 deg C to +0.9 deg C anomalies in Ni o-3.4 and +1.0 deg C in Ni o-1+2 alongside rising subsurface heat, intensifying into a strong El Ni o with +2.5 deg C Ni o-3.4 anomalies by November 2026.[3][16] The World Meteorological Organization and NOAA noted that El Ni o suppresses summer precipitation across the Pacific Northwest and northern Rockies while influencing late-summer North American Monsoon moisture in the Southwest.[1][3][16]

| Forecast / Observation Period | | El Ni o Status & Persistence | | Observed / Projected Intensity |

| May - July 2026 (Spring Outlook) | | 82-98% emergence odds[16] | | Rapid Eastern Pacific transition (+1.0 deg C Ni o-1+2)[1] |

| August - September 2026 | | >95% persistence[1] | | Strong warm-phase buildup

(>40% strong odds)[1] |

| Nov 2026 - Mar 2027 (Nov 2026 Advisory) | | Active El Ni o (>79% through JFM 2027)[3] | | +2.5 deg C Ni o-3.4; ~60% odds of RONI +2.5 deg C[3] |

Ecological Phase Shifts, Invasive Fine Fuels, and the Legacy of Fire Exclusion

Across the 122-million-acre Great Basin, invasive annual grasses -- chiefly cheatgrass (Bromus tectorum), medusahead, red brome, and ventenata -- have replaced discontinuous native sagebrush-steppe (historical 25-75-year fire return intervals) with continuous fine fuel beds burning every 3-5 years across 88 million acres and converting >25,000 mi2.[17][18][19] Experimental and geospatial studies show that cheatgrass competitively displaces native plants first and fuels the grass-fire cycle second, especially under wet-to-dry precipitation whiplash swings.[18][19]

In timbered mountains, aridity compounds a century of fire exclusion following the 1910 "Big Burn" and the U.S. Forest Service's 1935 "10 a.m. rule" mandating next-morning suppression.[20] Combined with pinyon-juniper infilling, suppression left dense ladder fuels primed for high-intensity crown fires.[20][21] Operational strain further compounded 2026 risk following federal forestry workforce attrition of roughly 3,400 Forest Service employees alongside Interior Department staffing shifts.[8]

Regional Forecasts, Smoke Resilience, and Observed 2026 Burn Totals

Mid-season NIFC outlooks projected sustained above-normal fire potential across the West, where May fires in northern Nevada and southern Idaho burned 1,000-7,000 acres across cured carryover grasses into timber.[1][7] By November 20, 2026, national totals reached 70,127 wildfires burning 9,498,549 acres as seasonal activity eased to National Preparedness Level 1.[5]

| Region | | Early Season (June) | | Mid-Season (July-Aug) | | Late Season (Sept) | | Key Drivers & Fuel Factors |

| Pacific Northwest | | Above Normal (East) | | Above Normal (Widespread WA/OR/ID) | | Above Normal | | Cascade snow drought; El Ni o warmth and dry anomalies.[1] |

| Northern California | | Above Normal (Lower elev.) | | Above Normal (Non-coastal) | | Above Normal | | Cured cheatgrass; high VPD and whiplash fine fuels.[1][7] |

| Southern California | | Above Normal (Lower elev.) | | Normal | | Normal | | Early fine-fuel curing; mid-summer marine layer moderation.[1] |

| Northern Rockies | | Normal to Above Normal (E. MT/ND) | | Above Normal (SW MT, ID Panhandle) | | Normalizing (ID); High (SW MT) | | Record-low SWE exposing high-elevation timber early.[1] |

| Great Basin | | Above Normal (Central/South) | | Above Normal (Spreading N to ID/WY) | | Normalizing (UT) | | Continuous cheatgrass fuel beds bridging into timber.[1] |

| Southwest | | Above Normal (Late June peak) | | Normalizing (Monsoon onset) | | Normalizing | | Low specific humidity; dry lightning before monsoon.[1] |

| Eastern & Southern US | | Above Normal (MN, WI, MI pockets) | | Above Normal (SE TX, W LA) | | Normalizing | | Northern pine heat anomalies; southern cyclical drying.[1] |

Adapting to a Permanently More Combustible Landscape

Both the June 2026 forecast and the 9.50-million-acre cumulative season confirmed by late November 2026 underscore that western fire regimes are governed by multi-season atmospheric aridity and fuel continuity rather than calendar dates.[5][13] Record-low snowpack stripped high-elevation timber of its hydrological buffer against rising VPD, while Great Basin invasive annual grasses and the strengthening 2026 El Ni o amplified fire spread.[3][10][19] Mitigating losses requires pairing proactive fuels management and firefighting workforce capacity with building-level smoke filtration resilience.[8][21]

Updates... (Nov 23, 2026): Updated cumulative 2026 U.S. wildfire totals to the November 20, 2026 NIFC National Incident Management Situation Report (70,127 wildfires; 9,498,549 acres burned at Preparedness Level 1) and pinned Ref. [5] to the permanent archived November 20, 2026 NICC IMSR PDF (IMSR_CY26_11202026.pdf); updated U.S. Drought Monitor coverage to the November 19, 2026 NIDIS national bulletin (42.3% of the lower 48 states in drought as of November 17, 2026); and upgraded Ref. [14] with its exact OpenAlex online date (Feb 9, 2024; Mar 2024).

References

* [1] Capital Press. (Jun 4, 2026). Risk period for big Western fires arriving early. https://capitalpress.com/2026/06/04/risk-period-for-big-western-fires-arriving-early/

* [2] NIDIS / Drought.gov. (Mar 12, 2026). Snow Drought Current Conditions and Impacts in the West. https://www.drought.gov/drought-status-updates/snow-drought-current-conditions-and-impacts-west-2026-03-12

* [3] NOAA Climate Prediction Center. (Nov 12, 2026). El Ni o/Southern Oscillation (ENSO) Diagnostic Discussion. https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_disc_nov2026/ensodisc.shtml

* [4] UCLA Newsroom. (Nov 4, 2021). Increasingly frequent wildfires linked to human-caused climate change. https://newsroom.ucla.edu/releases/frequent-wildfires-human-caused-climate-change

* [5] National Interagency Fire Center (NIFC) / NICC. (Nov 20, 2026). National Incident Management Situation Report (IMSR) -- November 20, 2026 (2026 Year-to-Date Wildland Fire Statistics). https://www.nifc.gov/sites/default/files/NICC/1-Incident%20Information/IMSR/2026/November/IMSR_CY26_11202026.pdf

* [6] NIDIS / Drought.gov. (Nov 19, 2026). National Drought Status (Week of Nov 11-17, 2026). https://www.drought.gov/national

* [7] Rogue Valley Times. (Jun 4, 2026). Risk period for big Western wildfires arriving early. https://rv-times.com/2026/06/04/risk-period-for-big-western-wildfires-arriving-early/

* [8] Legis1. (Jun 3, 2026). Federal Forests Hearing: Wildfire Season, Staffing

Cuts. https://legis1.com/news/federal-forests-wildfire-hearing-season-staffing

* [9] Washington Examiner. (Jun 4, 2026). DC recommends residents reduce water usage amid drought watch. https://www.washingtonexaminer.com/policy/energy-and-environment/4594873/dc-water-recommends-residents-reduce-water-usag

* [10] NIDIS / Drought.gov. (May 14, 2026). Snow Drought Current Conditions and Impacts in the West. https://www.drought.gov/drought-status-updates/snow-drought-current-conditions-and-impacts-west-2026-05-14

* [11] NIDIS / Drought.gov. (Apr 9, 2026). Snow Drought Current Conditions and Impacts in the West. https://www.drought.gov/drought-status-updates/snow-drought-current-conditions-and-impacts-west-2026-04-09

* [12] Union of Concerned Scientists. (Apr 3, 2023). What Is Vapor Pressure Deficit (VPD) and What Is Its Connection to Wildfires? https://blog.ucs.org/carly-phillips/what-is-vapor-pressure-deficit-vpd-and-what-is-its-connection-to-wildfires/

* [13] Breeden, M. L., Hoell, A., Worsnop, R. P., & Albers, J. R. (Nov 18, 2025). Seasonal Predictability of Vapor Pressure Deficit in the western United States. Weather and Climate Dynamics, 6(4), 1443-1459. https://doi.org/10.5194/wcd-6-1443-2025

* [14] Jacobson, T. W. P., Seager, R., Williams, A. P., & Simpson, I. R. (Feb 9, 2024; Mar 2024). An Unexpected Decline in Spring Atmospheric Humidity in the Interior Southwestern United States and Implications for Forest Fires. Journal of Hydrometeorology, 25(3), 373-390. https://doi.org/10.1175/jhm-d-23-0121.1

* [15] Scripps Institution of Oceanography. (Aug 8, 2019). Research Highlight: Study Bolsters Case that Climate Change is Driving California Wildfires. https://scripps.ucsd.edu/news/research-highlight-study-bolsters-case-climate-change-driving-california-wildfires

* [16] World Meteorological Organization. (Jun 1, 2026). WMO: Prepare for El Ni o. https://wmo.int/news/media-centre/wmo-prepare-el-nino

* [17] Earth911. (May 18, 2026). When the Lawn Becomes the Fuse: How Climate Change Is Rewiring Grass and Wildfire. https://earth911.com/home-garden/when-the-lawn-becomes-the-fuse-how-climate-change-is-rewiring-grass-and-wildfire/

* [18] Working Lands for Wildlife. (Sep 29, 2023). WLFW Research Details How Wildfire Follows Cheatgrass In the Great Basin. https://www.wlfw.org/wlfw-research-details-how-wildfire-follows-cheatgrass-in-the-great-basin/

* [19] Pilliod, D. S., Welty, J. L., & Arkle, R. S. (Sep 25, 2017). Refining the cheatgrass-fire cycle in the Great Basin: Precipitation timing and fine fuel composition predict wildfire trends. Ecology and Evolution, 7(19), 8126-8151. https://doi.org/10.1002/ece3.3414

* [20] Property and Environment Research Center. (Jun 23, 2022). The Big Burn of 1910 and the Choking of America's Forests. https://www.perc.org/2022/06/23/the-big-burn-of-1910-and-the-choking-of-americas-forests/

* [21] Oregon State University Extension. (Apr 3, 2018). Fire FAQs: Managing wildfire for resource benefit (EM 9193). https://extension.oregonstate.edu/catalog/em-9193-fire-faqs-managing-wildfire-resource-benefit