



National Significant Wildland Fire Potential Outlook

Predictive Services
National Interagency Fire Center

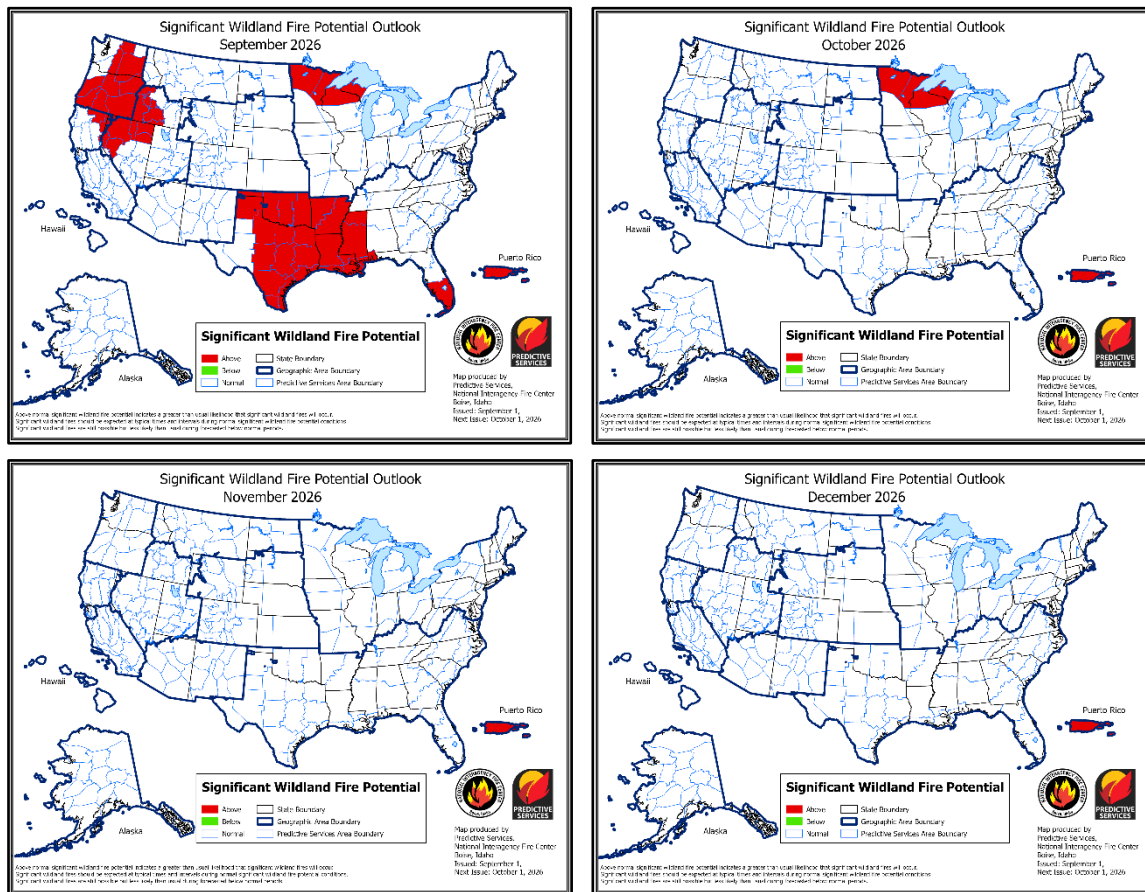


Issued: September 1, 2026
Next Issuance: October 1, 2026

Outlook Period – September through December 2026

Executive Summary

The significant wildland fire potential forecasts included in this outlook represent the cumulative forecasts of the ten Geographic Area Predictive Services units and the National Predictive Services unit.



Fire activity was extremely high the first half of August, with national resources stretched and support needed from active-duty military, Australia, and New Zealand. Activity moderated slightly the second half of the month but remained at high levels. The Northwest remained the most active geographic area in the country, with the Northern Rockies and Great Basin also active. Moderate levels of activity were observed in California, the Southwest, and Rocky Mountain Areas, while the Southern Area increased notably in the second half of the month. The Eastern Area and Alaska trended downward except for a destructive wildfire near Tok, Alaska, mid-month. As fire activity was high through the month, the National Preparedness Level remained at five (on a scale of 1-5) throughout the month. As of August 31, 8,238,284 acres have burned across the country, which is 166% of the previous 10-year average. So far this year 52,253 wildfires have been reported, also above average, at 126%.

August precipitation anomalies were below normal across most of the West Coast into northern Idaho and northwest Montana, with below normal precipitation also found from the Greater Four Corners into the southern Plains and Lower Mississippi Valley. Below normal precipitation was also observed in the Upper Mississippi Valley, northern New England, and South Florida. Rainfall was above average across eastern Wyoming and most of Nebraska eastward into the Mid-Atlantic, while mixed anomalies were noted in central California and the Great Basin. Overall drought increased significantly across the country and now covers nearly 57% of the country. Drought improved along much of the East Coast and in portions of the Southwest, central Rockies, and central Plains. However, drought developed and/or intensified in the Northwest, Upper Midwest, and northern New England. Rapid drought onset was observed in the southern Plains and Lower Mississippi Valley.

Climate Prediction Center and Predictive Services outlooks issued in late August forecast temperatures that are likely to be above normal across most of the country from the Continental Divide to the Appalachians in September. However temperatures near to below normal are likely in the northwestern U.S. Above normal precipitation is likely in most of the West and portions of the Northeast in September, with below normal precipitation likely in the central Plains to Mid-Mississippi Valley and eastern North Carolina. The following three months from October to December are likely to be warmer-than-normal for the northern tier of the country and the West as well as Alaska. Precipitation is likely to be above normal in the southern tier of the U.S. and potentially drier than normal in the Northwest and portions of the Great Lakes. The forecast pattern is typical of El Niño, but the strongest correlations for this pattern in an El Niño is in mid to late winter, after this outlook period.

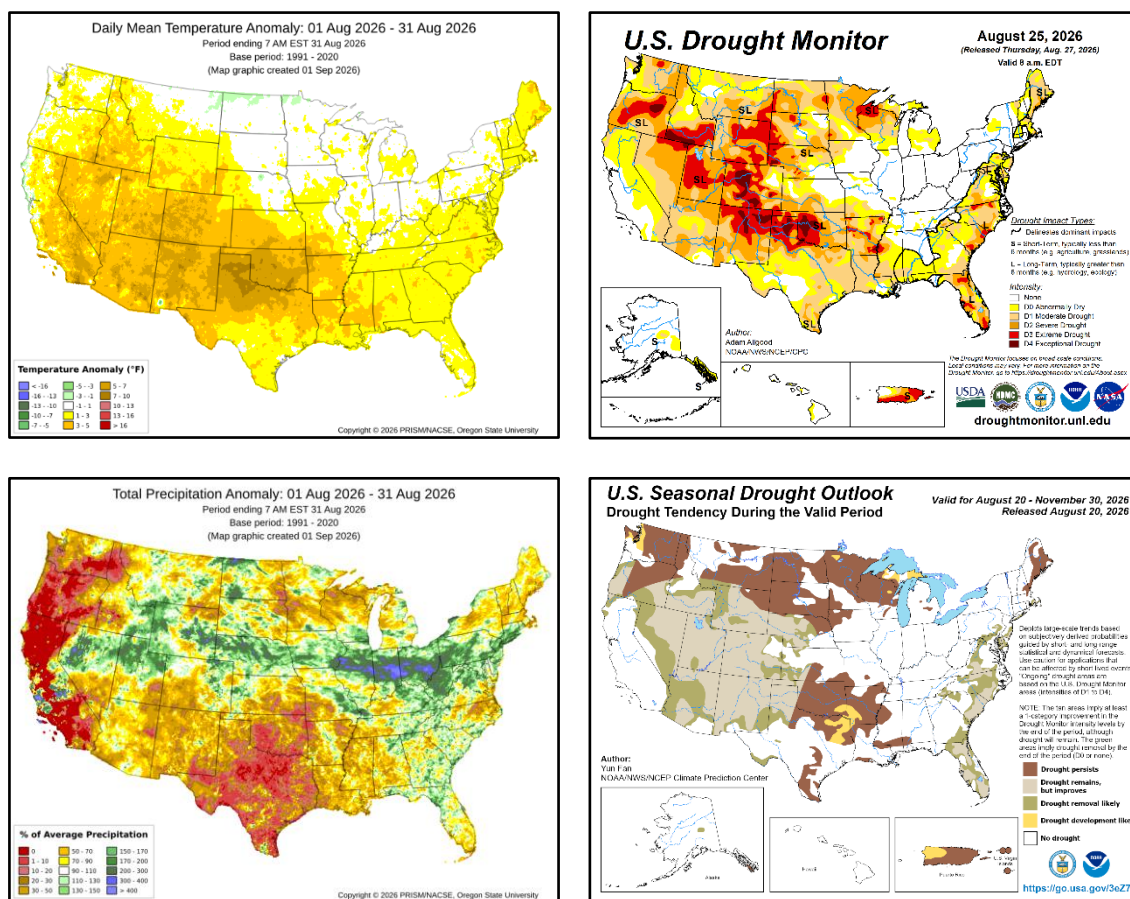
From the current and past weather, as well as forecast conditions, September significant fire potential will remain above normal in most of the Northwest, far northern California, central and southern Idaho, northern Nevada, and northern Utah. Above normal potential is also forecast for much of the southern Plains into the Lower Mississippi Valley, South Florida, northern Minnesota, northern Wisconsin, western Upper Michigan, Puerto Rico, and the U.S. Virgin Islands. For October, significant fire potential will be normal for most of the country except for northern Minnesota, northern Wisconsin, western Upper Michigan, Puerto Rico, and the U.S. Virgin Islands, which will remain above normal. Significant fire potential will be normal for the contiguous U.S. and Alaska for November and December but will remain above normal for Puerto Rico and the U.S. Virgin Islands.

Past Weather and Drought

Temperatures in August were above normal for most of the contiguous U.S., with the greatest anomalies in the Southwest to the southern Plains where many areas observed temperatures 5–10°F above average. Near normal temperatures were observed in the northern Plains and Midwest. Temperatures in Alaska and Hawai'i were above normal, as well.

Precipitation in August was below normal for most of the West Coast, western Idaho, and northwest Montana. Below normal precipitation also occurred across much of the Four Corners into the southern Plains and Lower Mississippi Valley. Much of Texas and Oklahoma received less than 20% of normal rainfall for August. Precipitation was mostly above normal from northern Nevada and Utah into Wyoming and Nebraska, then into Iowa, the Ohio Valley, and the Mid-Atlantic, with well above normal rainfall in Indiana and Ohio resulting in areas of flash flooding the past month. Precipitation was mostly below normal in South Florida and northern New England, with the rest of the contiguous U.S. observing mixed anomalies. Precipitation in Alaska was above normal in the western third of the state but well below normal for the eastern half of the state, especially for the southeast Interior and the panhandle. Hawai'i observed well above normal precipitation, mostly due the passage of Hurricane Lala which dumped up to 40 inches on portions of the Big Island and resulted in catastrophic flooding. This season's erratic North American

Monsoon brought a surge of precipitation back into the Greater Four Corners region late in August, resulting in a deadly flash flood in the Grand Canyon on August 29.



Left: Departure from Normal Temperature (top) and Percent of Normal Precipitation (bottom) (from PRISM Climate Group, Oregon State University). Right: U.S. Drought Monitor (top) and Seasonal Drought Outlook (bottom) (from National Drought Mitigation Center and the Climate Prediction Center).

A very strong wind event occurred August 1 in the Northwest and resulted in extreme growth on many of the ongoing fires in Washington such as the Little Giant and Sinlahekin fires, while several new fires burned over 800 structures in Spokane, Washington. Fire activity remained elevated due to above normal temperatures and drier than normal conditions across much of the West, with large fires emerging in New Mexico early in the month, which is very unusual as the monsoon was much weaker than normal. However, mid-August observed a brief but significant surge in monsoon moisture across much of the West which aided in decreasing fire activity to somewhat lower levels the remainder of the month. However, very hot and dry conditions in the southern Plains and Lower Mississippi Valley resulted in a flash drought, with fire activity significantly increasing the latter half of August in these areas. Drier-than-normal conditions in South Florida resulted in periodic large fires, as well, also unusual for August.

Overall drought increased significantly in August, with nearly 57% of the country in drought as of August 25, largely due to flash drought development in the southern Plains and Lower Mississippi Valley. Drought also developed and/or intensified in portions of the Northwest, northern Plains, Upper Midwest, and northern New England. Drought improved over the past month in portions of the Southwest, central Rockies, central Plains, and much of the East Coast. Areas of extreme to exceptional drought also decreased, with nearly 12% of the country in these categories. Extreme to exceptional drought is most widespread across central Oregon, the eastern Great Basin, central Rockies, Texas Panhandle, and western Oklahoma. Exceptional drought is observed in portions of Oregon, Idaho, Nevada, Colorado, New Mexico, Texas, Oklahoma, and Nebraska.

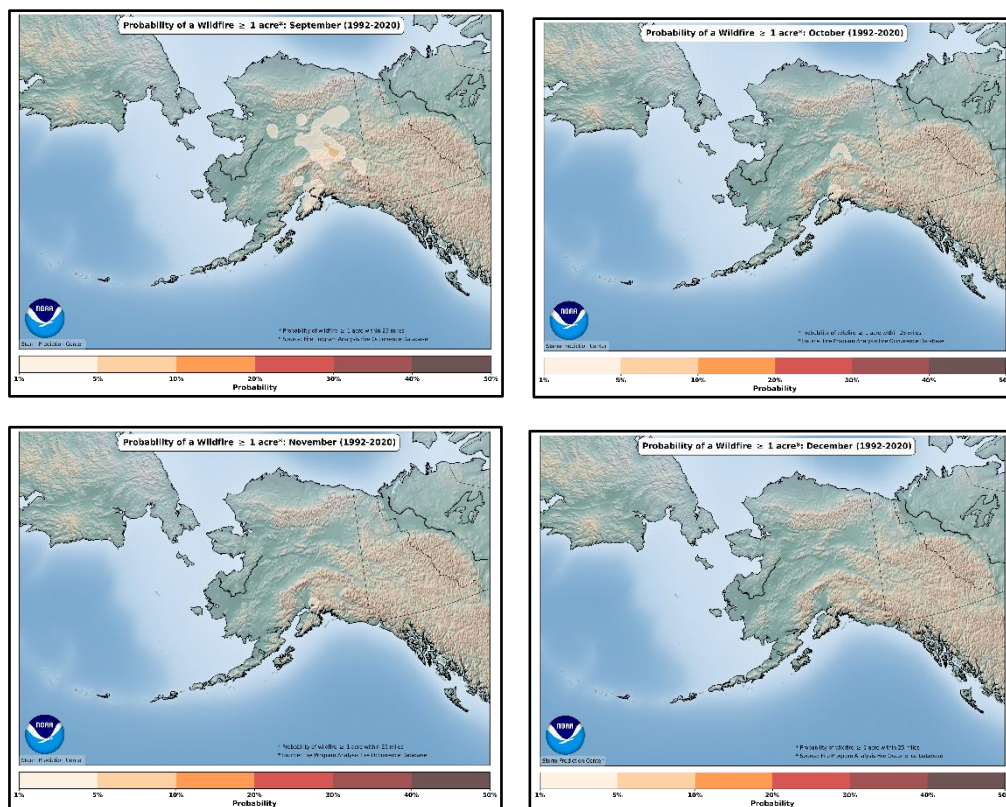
Drought is expected to improve in many areas of the country the next three months, most notably in the southern two-thirds of the West and along the East Coast. Drought is most likely to persist in the Northwest, northern Plains, Upper Midwest, southern Plains, Lower Mississippi Valley, and Maine.

Weather and Climate Outlooks

El Niño continues to rapidly strengthen in the equatorial Pacific Ocean. Central Tropical Pacific sea surface temperature anomalies are more than 1.5 C above average, the threshold for a strong El Niño, and are nearing the 2 C threshold for a very strong El Niño. El Niño is forecast to continue to strengthen into the fall by the Climate Prediction Center (CPC). The CPC forecasts El Niño to persist through the fall and winter, with 100% confidence, with a greater than 95% chance of a very strong El Niño by November that could last through the winter. In fact, most of the models used by the CPC and internationally show this El Niño to be the strongest on record, and the CPC forecast is for a 69% chance that the strength would exceed the previous strongest El Niño since 1950.

The Pacific Decadal Oscillation (PDO) remains in a weakly negative phase and is likely to remain negative through the outlook period. The Madden-Julian Oscillation (MJO) was generally weak in August except for some brief enhanced activity in the western Pacific. The MJO is forecast to remain weak in September, and its impact is often significantly less during an El Niño. Therefore, the main climate driver for the outlook will be the very strong El Niño.

Geographic Area Forecasts



Normal fire season progression across Alaska shown by the probability of a fire greater than 1 acre within 25 miles. Fire severity cannot be inferred from this analysis. (Based on 1992-2020 FPA Data. Analysis courtesy of the Storm Prediction Center.)

Alaska

Normal significant fire potential is expected for Alaska over the next four months. Alaska is moving out of fire season as wet fall weather settles in. Though some fire activity persists in the southeastern Interior, it will continue to slow over the next few weeks as colder air arrives.

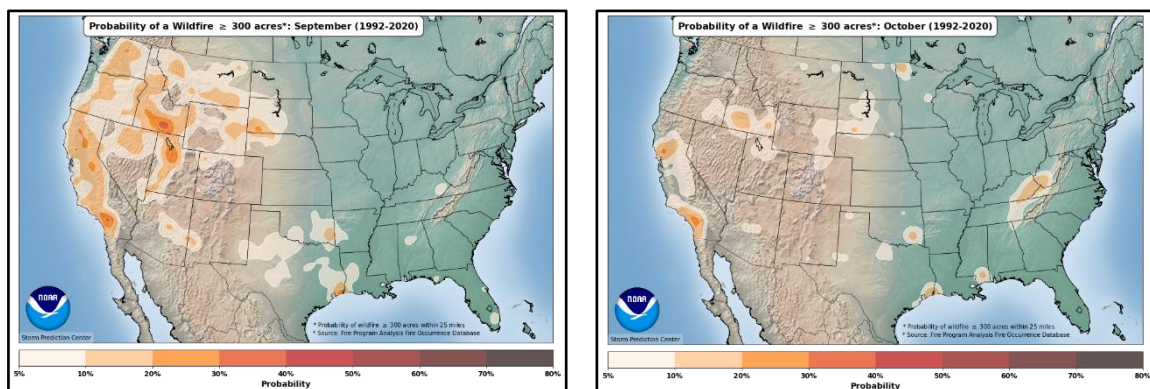
The most recent update to the U.S. Drought Monitor shows an area of abnormally dry conditions over parts of the central and southeastern Interior and a small area of moderate drought surrounding the Fairbanks area. Drought is also identified over the panhandle. Per fire weather indices and firsthand reports, the driest area is the southeastern Interior, including the Upper Tanana Valley and Copper River Basin. Though these areas have been extremely dry, they have started receiving rain, and temperatures and humidities are moderating to the point that fire activity has drastically decreased.

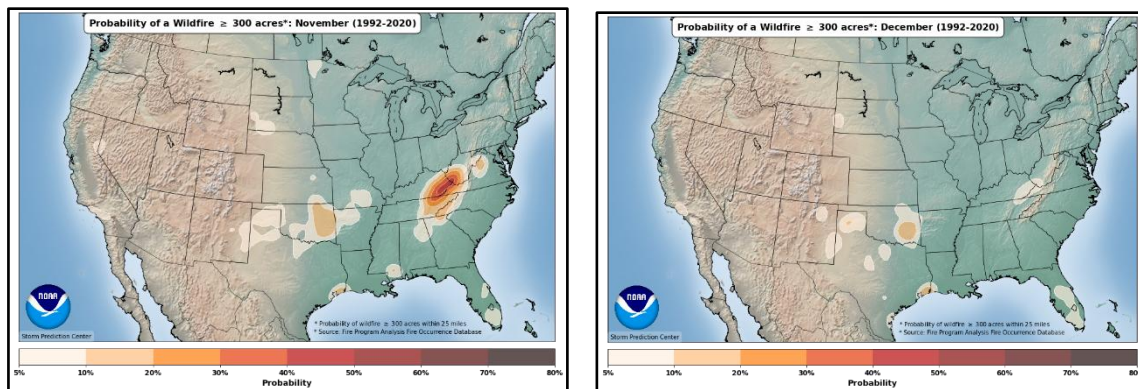
Climate Prediction Center outlooks for September indicate that after a colder start to the month, warmer and wetter weather is likely for most of the state. With the strong El Niño in place, this is even more likely as it and the changing climate tend to bring warmer and wetter weather for fall and winter in Alaska.

After a moderate season with little acreage burned, August saw two large fires that needed attention during the late season hot and dry spell. The Tatlanika Fire southeast of Nenana started growing rapidly after over a month of little activity, while the Mukluk Fire emerged in Tok during a very dry and windy day, destroying homes and immediately requiring a Complex Incident Management Team. In the last week of August, season ending rains have finally begun to arrive, leading to much slower fire growth and low fire behavior. This trend is expected to continue into September.

Multiple rounds of wetting rain have dropped fire weather indices to low for all fuel layers and types in the western two-thirds of the state. In the southeastern Interior, including Copper River Basin, duff fuels remain moderately dry, though fire danger metrics have improved with several rain events in the last week of August. Cooler, wetter weather in the early September forecast is expected to continue decreasing indices.

Fire activity is expected to be normal from September through December as Alaska transitions from fall to winter in the next two months. September will likely see a few human ignitions, which should be easily managed. Any wildfire activity will be most concentrated in the southeastern Interior, where fuels are drier and sunshine will be most dominant. By mid-October, snow will move into most Interior locations and will push south of the Alaska Range into south-central Alaska and the Copper River Basin by early November, effectively ending the fire year.





Normal fire season progression across the contiguous U.S. shown by the probability of a fire greater than 300 acres within 25 miles. Fire severity cannot be inferred from this analysis. (Based on 1992-2020 FPA Data. Analysis courtesy of the Storm Prediction Center.)

Northwest

Warm, dry conditions, persistent drought, and critically cured fuels will keep significant fire potential above normal across most of the Northwest's Predictive Services Areas (PSAs) in September. However, the two PSAs encompassing areas west of the Cascade crest to the northern and central coasts (NW01, NW02), as well as northeast Washington (NW09), will return to normal due to cooler weather and slow-moving low-pressure systems expected to bring higher humidity and multiple days of precipitation during the first half of the month. Energy Release Component (ERC) values reached seasonal peaks in August, and fuels remain highly receptive to ignition elsewhere, with only brief early-month moderation expected in the remaining PSAs outside these areas. El Niño has now fully developed from the prior La Niña, and outlooks favor above normal temperatures with no indication of a sustained wet pattern, meaning drying may quickly resume once the early September systems depart. Historical analogs and past transitions into El Niño also suggest an elevated likelihood of at least one moderately strong east-wind day in September, further reinforcing opportunity for new significant fires to arise when lightning or human ignitions occur.

August opened with a strong wind event on the first day of the month, when a dry cold front produced sustained 20–30 mph winds and 40–50 mph gusts across eastern Washington, the Columbia Basin, and eastern Oregon, sharply accelerating spread on several large fires that ignited in late July and igniting numerous new fires. Persistent high pressure through the rest of the month kept conditions hot, dry, and unstable with poor overnight humidity recovery. Additional dry frontal passages and recurring Pacific upper-level troughs brought fast-moving thunderstorms, lightning ignitions, and erratic outflow winds.

Temperature and precipitation patterns in August reflected these conditions. Oregon ran 2–6°F above normal across central and southern areas and 6–8°F above normal in far southeastern Oregon, while Washington and the Oregon coast stayed near normal. West-side rainfall was less than 25% of normal. East of the Cascades, a band from north-central Oregon to south-central Washington saw near-normal to above-normal precipitation, with isolated 400–800% of normal under thunderstorm cores, values that are amplified given August's very low average rainfall. Much of the surrounding region remained 25–75% of normal.

Drought expanded and intensified across both states in August. Moderate and severe drought spread farther east of the Washington Cascades. In Oregon, severe and extreme drought grew, and a new exceptional drought area emerged near the Klamath Basin. The extreme to exceptional drought area along the southeastern Oregon–Idaho border also expanded, reflecting both short-term August deficits and continued long-term drying.

Fire activity remained elevated throughout August, with only one brief slowdown near the end of the month. The period began with a significant growth event driven by a Potentially Dangerous Situation Red Flag Warning event east of the Cascades. This weather pattern led to substantial expansion on existing fires in eastern Oregon and Washington and contributed to three new large fires near Spokane, Washington, which together damaged or destroyed more than 800 structures within the city. Although overall ignition numbers across the Northwest were below average, new ignitions were very efficient, resulting in rapid fire growth under the prevailing dry and unstable conditions.

August's ERC values remained at average to above-average levels across most of the Northwest, with all PSAs reaching their seasonal peaks midmonth. Low-elevation live fuels and mid- to upper-elevation fuels east of the Cascades were fully cured and formed continuous fuelbeds. Timber fuels west of the Cascades dried more slowly, but their flammability increased noticeably by mid-month. A Fuels and Fire Behavior Advisory has been in effect for the Northwest since mid-July, highlighting the persistent drying trends and elevated fire potential across the region.

El Niño–Southern Oscillation has transitioned from La Niña into El Niño, and Climate Prediction Center (CPC) guidance indicates a greater than 90% chance of a very strong event developing during fall and winter. Despite this strengthening signal, fire weather patterns in Oregon and Washington through September and October will still hinge primarily on regional ridging, troughs, marine pushes, and passing frontal systems. Historically, El Niño fall seasons also tend to produce lower precipitation amounts with individual storm systems.

September is expected to begin with slow-moving low-pressure systems, bringing a longer period of cooler temperatures, higher humidity, and multiple days of precipitation across parts of the Northwest, especially western Washington, far northwest Oregon, and far northeast Washington. These systems will more meaningfully slow drying rates in the affected PSAs, though long-term drought elsewhere will limit regional impacts. As the month progresses, conditions are still expected to trend back toward typical late-summer and early-fall variability, with alternating short ridges and troughs rather than a sustained cool or wet regime.

Outlooks issued by CPC favor above-normal temperatures for the latter half of September and the October–December season. After the low-pressure period at the beginning of September, warmth is most likely east of the Cascades, where fuels remain critically dry and fully cured. West-side temperatures also lean warm, with periodic marine pushes offering only brief cooling. The persistent warmth suggests a slower transition into cool-season conditions, leaving cured fuels, particularly in drought-affected areas, exposed later into the fall.

The September outlook shows above-normal precipitation across the Northwest, largely tied to the early-month low-pressure system. For October–December, CPC maintains a below-normal precipitation tilt for Oregon and Washington. While intermittent frontal systems will bring short-lived moisture, guidance does not support a sustained wet pattern until later in the cool season. Widespread, repeated wetting events remain unlikely through September, with probabilities for more organized storm systems increasing from late October to November. Persistent drought and cumulative moisture deficits will continue to influence fuel receptiveness and late-season fire potential.

This year continues to follow similarities of 2015, 2018, and 2024. In those years, September and October were warm and relatively dry across Oregon and Washington, followed by cooler and wetter conditions in November. While late-season fire activity increased modestly in some PSAs during October and November, total acreage was small relative to summer peaks and not strategically significant for seasonal risk. One of the analog years, 2018, also underwent a La Niña to El Niño transition. In the broader historical record, three of the four such transitions since 1979 (2006, 2009, and 2023) each produced a single day with a 90th-percentile east-wind pressure gradient. This indicates an elevated likelihood that 2026 will experience at least one similar

east-wind day, especially if upper-level high pressure should become established over or west of the Geographic Area.

Above normal significant fire potential will continue through September across all PSAs except NW01, NW02, and NW09, which are designated normal due to expected cooler, wetter conditions and higher humidity during the first couple weeks of the month. For the remaining PSAs, persistent warmth, very dry fuels at all elevations, and ongoing drought will continue to support the potential for large, long-duration incidents. Early September low-pressure systems may briefly reduce risk broadly, but a return to strong upper-level ridging with hot, dry surface conditions could quickly offset those decreases, especially if an east wind event materializes later in the month.

October through December significant fire potential is forecast to be normal across all PSAs. Increasing cool-season storm systems, higher humidity, and shorter burn periods substantially reduce the likelihood that new starts will grow to significant size. Although scattered smaller fires remain possible, the probability of large, resource-intensive incidents during these months is very low, particularly given improved fuel moisture and shorter days.

Northern California and Hawai'i

Significant fire potential is projected to remain above normal across northeastern California during September; otherwise, normal potential is expected across this outlook's four-month time frame. During September a total of eight significant fires is typically observed across northern California followed by four during October, one in November, and less than one during December. Hawaii's significant fire potential is expected to remain normal for September through December.

The August weather pattern for northern California was largely dominated by ridging and subsequent partial to full breakdowns of the ridge therefore leading to several critical fire weather events. There was one heat wave from August 3–9. Average temperatures were near-normal close to the coast and above to well above normal farther away from the coastal influences. Most of the measurable precipitation in August was either convectively or marine layer induced. Precipitation anomalies were generally below normal, although there were areas of near to above normal anomalies found near the coast and across the eastern tier where thunderstorms occurred. As of August 26, thunderstorm impacts for the month were minimal with less than 300 strikes observed. The largest number of lightning strikes occurred August 24 across the northeast corner with nearly 230 observed. The 2000–2025 Vaisala lightning average for August is nearly 8,400, therefore strike counts were well below average through August 26. As of August 28, Red Flag Warnings were issued by the National Weather Service for 10 separate days in August, mainly due to dry and gusty onshore wind events. This aligns with the August monthly average of 10.1 Red Flag days (based on 2006–2025). High-Risk Significant Fire Potential was issued by Predictive Services on 14 separate days through August 28 due to either hot-dry-unstable conditions, wind, or lightning events.

Dead fuel moisture fluctuated during August with a significantly flammable period experienced during the first two weeks. Regional Energy Release Component (ERC) values based on 122 Remote Automated Weather Stations were near to above normal and above the 85th percentile most of the month. Near or record high ERC values, based on a 21-year dataset, were recorded August 3–11. Live fuels continued to cure across all elevations. Herbaceous fuels were generally in a cured or mostly cured phase below 6,000 feet, with annual grasses cured at all elevations. Woody fuels continued to trend more flammable with most Predictive Services Areas (PSAs) experiencing near to slightly below normal moisture values. The main exception was found across the Northern Sierra PSA where sampling was mixed but generally above normal. The amount of moderate drought increased slightly across the northern tier from late July to late August. The two-month Evaporative Demand Drought Index values on August 25 indicated below normal vegetative stress across most of the area, although 30-day values indicated some stress across the northern tier, likely due to the heat wave the first two weeks of August.

Wildfire business in northern California decreased slightly during August compared to July. The daily wildfire ignition average through August 26 was 15.1 while the July average was 17.7. This August also saw fewer ignitions than normal, as compared to the month's average of 21.2 daily ignitions (based on 2008–2025). A total of six large fires were reported through August 26. Two of these required a Complex Incident Management Team to manage them. In contrast, the regional significant fire average for August (based on 1992–2025) is 16.8. The regional preparedness level remained at three throughout the month. Prescribed burning was limited due to resource needs elsewhere.

There will be several coupled ocean and atmospheric states in play during the next several months impacting how the jet stream influences northern California's weather. This means continued fluctuations in the weather patterns but upper-level troughing appears to be the consensus pattern during the next four months. Mixed temperature and precipitation anomalies are expected, although there is a higher probability for wetter conditions during November and a stronger propensity for warmer-than-normal conditions during the next few months. The number of wind events should be normal during the next few months, although those assessments are tough to make farther out in time. Convection and thunderstorms will elevate the risk at times during September, but lightning ignitions should wane from October onward.

Based on the current fuel state and future weather predictions, above normal significant fire potential is projected for September across the northern and eastern tier of northern California; otherwise, normal potential is expected during most of the four-month period. Critical to near critical flammable live and dead fuels should align the most across the north and east where drought conditions currently exist. Offshore wind events will be a big wildcard, especially for areas west of the Cascade-Sierra Crest where abundant amounts of cured fine fuels exist. During September eight large fires are typically observed, with four during October and one or less in November and December.

Sea surface temperature (SST) anomalies surrounding the Hawai'iian Islands were near to above average during August. Significant weather events occurred, with the most notable one being the passage of Hurricane Lala August 14–16. Copious amounts of rainfall impacted the southern tier of the island chain, especially the windward side of the Big Island where extensive areas of catastrophic flooding were reported. Strong winds also accompanied the storm's passage and increased hazard fuel loading. Precipitation during August was generally above normal except for Kauai, which observed near to below normal rainfall. Average temperature anomalies were mixed across the island chain although a pronounced warmer tilt was found across the Big Island. Drought was not found across the island chain during the month, and the amount of abnormally dry areas found in the U.S. Drought Monitor shrunk between late July to late August. Herbaceous fuels were generally in a mixed phase. No Red Flag Warnings were issued by the National Weather Service in Hawai'i in August. The largest fire, burning a little over 200 acres, was reported on the Big Island August 11.

The El Niño-Southern Oscillation (ENSO) is in an El Niño state and will continue to strengthen and likely become very strong during the next four months. Temperature anomalies in Hawai'i are likely to be above normal. Precipitation anomalies should be mixed with a lean towards above normal across most of the island chain during the next couple of months although the northern tier is likely to trend drier. Drier than normal conditions should overtake most of the island chain during the typical wet season, potentially initiating a return to widespread drought conditions and eventual stress on live fuels. Normal significant fire potential is projected for Hawai'i for the four-month outlook period with the highest potential across Kauai.

Southern California

For most of August, upper-level high pressure migrated between the Great Basin and the Four Corners areas, bringing near- to above-normal temperatures to central and southern California. However, the ridge shifted to the southeastern U.S., and an upper-level trough set up just off the West Coast, bringing slightly below-normal temperatures August 12–15. Like July, southern California saw extended periods of warmer than normal temperatures for much of August; however, there were no periods of excessive or record-breaking heat outside the deserts. Overall, temperatures were 2–8°F above normal for the month. Isolated to scattered showers and thunderstorms occurred mainly over the mountains and deserts August 6–16 and again from August 20 through month's end. However, isolated showers and thunderstorms occurred across the lower elevations August 11–12 and again August 27–28. Most locations received near- to below-normal rainfall for the month. Winds were typical of August, as occurred in July, with afternoon southwest-to-northwest winds of 15–25 mph with gusts to 40 mph over the mountain ridges and through desert passes and a sea breeze of 10–20 mph elsewhere.

Drought changed little in August compared to July. The main difference is that moderate drought expanded across more of the lower and eastern deserts. Abnormally dry conditions continue across the Sierra and most desert locations as well as most of San Diego County from the mountains westward and in the mountains of Riverside County. Otherwise, most of central and southern California are not in drought. Very dry conditions caused both the 1,000-hour and 100-hour dead fuel moisture to fall well below normal at the beginning and end of the month. Humid conditions resulted in dead fuel moisture increasing to slightly above normal mid-month. Live fuel moisture is now mostly between 60% and 80%, slightly below normal for this time of year.

Sea surface temperatures off the California coast are above normal and not expected to change much through September. Therefore, temperatures are expected to remain above normal across the region in September. Strong El Niño conditions will likely keep monsoon shower and thunderstorm activity below normal in September. However, there is a good possibility of remnants of tropical systems bringing scattered showers and thunderstorms in September, consistent with the strong El Niño. With the very strong El Niño, temperatures are likely to lean below-normal this fall and early winter with above-normal precipitation. However, the strongest cool and wet signal for California in a strong El Niño is in January and February, so there is a chance the fall and early winter will not be as wet as forecast. Regardless, the overall pattern still favors the first storm of the season out of the Gulf of Alaska coming before the first Santa Ana wind event. In addition, the number of Santa Ana wind events this fall will likely be less than normal as storms drop down the West Coast instead of moving inland into the Pacific Northwest before dropping southward into the Great Basin and Desert Southwest. It is likely that most storms will be warm this fall and early winter, with potentially more atmospheric rivers than normal. Therefore, the potential for significant fires will be near normal across central and southern California September through December.

Northern Rockies

The significant fire potential outlook for September for the Northern Rockies Geographic Area (NRGA) has been adjusted to reflect normal for all areas, which will continue through December. Long range forecasts driven by a strengthening El Niño signature favor above-normal temperatures during the transition from summer to fall. Short term forecasts favor episodes of cooler weather and chances of precipitation for the western half of the NRGA, which should bring relief to the driest areas. If rainfall is below normal during September, then October outlooks will need to be updated, but precipitation during September coupled with decreasing daylight is usually effective at dramatically slowing wildfire activity.

Across the month of August, three broad areas trended drier, with other locations showing a patchwork of precipitation due to the erratic behavior of thunderstorms. The Idaho Panhandle

received little to no moisture, resulting in the continuation of severe drought conditions. Southeast Montana into western North Dakota saw only 20–40% of normal precipitation, leading to an escalation of drought into the severe to extreme categories. Central and eastern North Dakota received 30–50% of normal precipitation, and drought intensified by two to three categories in that region. During the final two weeks of the month, thunderstorms produced spotty but sufficient precipitation in southwest and central Montana to bring coverage close to normal, which in turn slowed live vegetation curing.

Fire activity has been elevated during August due to a high volume of lightning. Significant fire activity was close to normal in Montana but ended up being below normal in northern Idaho with only one new large fire reported. One factor limiting the fire activity early in the month was frequent intrusions of heavy smoke from Washington and Oregon, which slowed surface heating for days at a time. The geographic extent of large fire activity extended from the Idaho Panhandle into southeast Montana. The month started off hot, dry, and windy August 2–3 as an usually strong front crossed the NRGAs but activity slowed August 13–14 as monsoon moisture moved into the area providing a cooldown and an increase in humidity, but precipitation amounts were not quite high enough to generate a true season slowing event. The NRGAs preparedness levels this August have been maintained at higher levels compared to the previous two years and will likely match August 2023, when the NRGAs remained at preparedness level three or higher for the entire month.

There are dry areas in the NRGAs, but early September outlooks favor low pressure over the Pacific Northwest with high pressure becoming a feature over the Plains. This limits hot and dry potential and brings a better moisture flow into the region. There have been years where fire activity re-escalates in late September and early October, but few of those years are associated with El Niño patterns.

Great Basin

Above-normal fire activity at the end of August should continue into early September but become tempered by brief monsoonal wet episodes in the south and east of the Great Basin, along with some cold fronts brushing the north. Models hint at significant warming and drying in the latter half of September, followed by greater uncertainties related to the development of a record strong El Niño.

Temperatures over the last 30 days have been very warm, 3–6°F above normal for most of the region, while precipitation has only been 20–40% of normal across eastern and southern areas, as well as southwest Idaho. However, there were islands of wetter than normal precipitation, mainly across northern Nevada, as well as most of the central Idaho mountains into Wyoming and southward across the Wasatch and Uinta Mountains and beyond into the mountains in central and southern Utah. The U.S. Drought Monitor has most southern and central areas in severe to extreme drought, with southwest Idaho and northeast Nevada having areas of exceptional drought.

Fuels across much of the Great Basin were at near-record dry levels to start August. Several monsoon moisture pulses provided both lightning and widespread wetting rain, which took the edge off fuels during the latter part of the month. Going into September, Energy Release Component (ERC) values are near late summer normals, in the 80th–90th percentiles in western areas, but moister in eastern areas, mostly in the 60th–70th percentiles. Live fuel moisture (LFM) in the low elevation brush continues to be very dry, mostly 60–90%, which supports extreme fire behavior, although there remains some variability with LFM rising in some eastern areas. Also, in the wetter eastern areas of Utah and the Arizona Strip, a new, secondary grass crop has started

to emerge. Elevated concern persists for portions of northern Nevada and southern Idaho where there are areas of above-normal carry-over fuels from the past two years.

Fire activity in August was very active overall, especially at the start of the month with the Great Basin going to preparedness level five (on a scale of 1–5). Then some mid-month moisture reduced large fire growth, allowing a brief return to preparedness level three before activity made a significant uptick late in the month, prompting an upgrade back to preparedness level four. A secondary push of monsoon moisture toward the end of August moistened fuels considerably across the eastern Great Basin. However, in a pattern also observed in July, some areas of recent wetting rains have seen fire activity resume, increasing quickly after only a few warm and dry days, likely the ramifications of this past winter's snow drought.

A wet start to September is expected, including the possibility of at least one tropical storm being pulled inland across the Southwest into the southern and central areas of the Great Basin. Afterward, an area of strong high pressure is expected to reform across the West by mid-September, with increasingly warm and dry conditions likely for much of the latter part of the month. This high pressure will begin to get suppressed by increased shortwaves dropping down from the Pacific Northwest by the end of September into October. Afterward, the outlook becomes increasingly uncertain as the strongest El Niño on record may begin to influence our weather. Due to the recent above-normal fire activity, plus the pattern of rapidly resuming fire activity after every ensuing brief dry spell, above normal significant fire potential was kept for the northwestern half of the Great Basin in September. Confidence is too low from October onward regarding any deviation from normal, especially with the record strong El Niño likely to bring extreme weather conditions later this year.

Southwest

August remained hot and dry across the Southwest, with the monsoon weaker than normal due to disruptions caused by continued tropical systems in the Pacific. Temperature anomalies were generally above normal, especially in eastern New Mexico where high temperatures were 5–10°F above normal. Limited monsoonal flow kept atmospheric moisture low, and storm activity was sporadic and mostly ineffective until the end of the month across Arizona, as heavy rain resulted in deadly flooding in the Grand Canyon. Precipitation totals were well below average across both Arizona and New Mexico as most locations recorded less than an inch of rainfall most of the month, except for localized higher amounts in the Sangre de Cristo and Gila Mountains. Many storms generated lightning but were too dry or short-lived to provide meaningful relief, leading to an increase in initial attack regionwide. Fuels, which had briefly recovered after July's moisture, began trending drier again under continued warm and dry conditions.

September opens with the continuation of much-above-normal temperatures across Arizona and New Mexico, continuing the hot, dry pattern left behind by the weakened monsoon. However, unlike July and August, there is a noticeable chance for tropical storm remnants to lift north along the Mexico-Baja coast and push moisture into the region. While not guaranteed, these moisture surges could bring scattered wetting rainfall to parts of Arizona and New Mexico, potentially the first meaningful relief some areas have seen since early summer. Despite these potential rounds of tropical remnants, rainfall will likely not be widespread enough to offset the severe and persistent drought. Fire potential will likely remain elevated early in the month due to lingering dry fuels, but any tropical-related moisture and the decreasing daylight would help moderate conditions temporarily.

October trends are warmer than normal across both states, with strong probabilities for above-average temperatures. Widespread moisture probabilities are likely to diminish in the latter half of the month as hurricane season wanes. Some long-range guidance shows building dryness, with below-normal precipitation probabilities expanding across the Southwest, but this may be mitigated if tropical remnants affect the region the first half of the month. Hot afternoons and dry

air masses will promote continued curing of fine fuels and likely limit early autumn fuel recovery. Fire potential gradually decreases as days shorten, but the combination of warm temperatures and lack of widespread precipitation may keep conditions more active than a typical October, especially at lower elevations.

November is likely to remain drier than normal, as increased moisture with the strong El Niño may remain too far west to appreciably affect Arizona and New Mexico. Temperatures remain well above average in Arizona but begin to show a subtle cooling trend in eastern New Mexico as early-season cold fronts dip south. Despite this slight cool signal, moisture is likely to be limited, and any cold air intrusions appear dry and fast-moving. Fine fuels may see some seasonal moderation, but longer-term drought stress continues. November's fire potential is generally low by climatology, yet the persistent warmth in Arizona could support occasional periods of elevated activity where fuels remain receptive.

December is likely to remain drier than normal as recent analogs of strong El Niños keep moisture to the west of Arizona and New Mexico. Temperatures are likely to stay well above average in Arizona, while New Mexico shows an area of below-normal temperatures east of the central mountains. Much of the snowpack development in the early winter will hinge on temperatures when what is expected to be limited moisture arrives. Should above-normal temperatures persist, most areas that would typically see their first snowfall in November or December would continue to observe rain. With continued storm tracks and their accompanying moisture displaced to the north and west, long-term fuel recovery will continue to be inhibited. Significant fire potential in December is seasonally low, but the warm, dry conditions in Arizona may keep occasional fire activity possible during dry and windy periods.

Rocky Mountain

August continued to see periods of increased monsoon moisture move through the Rocky Mountain Area (RMA), which helped keep conditions moderated through the month. The continued monsoon thunderstorms led to many lightning ignitions, but light winds kept these ignitions small. Moving forward, the current El Niño is expected to continue strengthening and peak in November–December. With this, the RMA will return to normal significant fire potential in September and remain normal through December.

High pressure aloft near the Four Corners typically brings monsoon moisture into August, and this year was no exception. However, the high pressure did not remain consistent in strength or location in August, resulting in periods of less showers and thunderstorms across the RMA. Central Wyoming into Nebraska saw more frequent, heavier rain during the month and was above-normal for precipitation. The rest of the RMA was still 75% of average or greater, though southwest Wyoming and northwest Colorado were below 25%. Above normal temperatures continued for most of the RMA through August, except in eastern Nebraska and South Dakota where temperatures were within a degree of average. With the weather in August being dominated by the western U.S. high pressure, winds have been light throughout the month outside of outflows from thunderstorms. Drought conditions improved slightly across southeastern Wyoming and the eastern plains of Colorado the past month.

Precipitation across much of the RMA in August moderated fuel moisture at most elevations. Above average temperatures across most of the area returned fire danger indices to seasonal maximums at times, but indices did not remain critical for extended periods. Fuels have been receptive to lightning ignitions, but not conducive to rapid large fire growth. Live fuel moisture percentages have begun to trend downward as finer fuels cure moving into the fall season. Outside of wind events or outflow winds from thunderstorms in the area, fire danger has moderated in the RMA.

The RMA saw many lightning fires in t August, heavily concentrated on the Western Slope. Many of these new ignitions remained small and did not require significant resource mobilization. Moderating conditions and lack of wind also helped to keep these fires from growing large. Existing large fires in Colorado that ignited in late June and early July have seen forward progression stopped and increased containment, as Complex Incident Management Teams (CIMTs) have been released with suppression repair ongoing.

In the short term, routine rounds of precipitation will continue to support moderated conditions. Fall typically sees increasing storm systems with stronger winds moving into the RMA. The ongoing El Niño, with warmer water in the central and eastern Pacific Ocean, is expected to peak in November–December and be very strong (more than 3 C above average). A typical fall and winter during El Niño conditions brings wetter weather with normal temperatures to the southern tier of the RMA, generally south of Interstate 70, although the strongest likelihood for wetter-than-normal conditions is in January and February, currently beyond this outlook period. The northern portion of the RMA typically sees warmer conditions and near-average precipitation. The expected weather conditions during this El Niño will also lead to improving drought conditions across the RMA.

Weather conditions going into September will support continued moderating conditions, as will the developing very strong El Niño through the remainder of the outlook period. Across the RMA, significant fire potential will be normal through the entire September–December outlook period. However, due to the potential for increased wind events in the fall and winter, brief periods of elevated fire potential may occur, particularly following stretches of warm, dry weather. These elevated conditions are expected to be short-lived, generally lasting no more than one or two days.

Eastern Area

Normal significant fire potential is forecast for most of the Eastern Area through December. However, above-normal potential is forecast for northern Minnesota, northern Wisconsin, and the western Upper Peninsula of Michigan in September and October. This is due to a combination of drought already on the landscape and continued dryness forecast for those areas.

In the Midwest and Great Lakes, abnormally dry conditions and moderate drought are currently present in much of Minnesota and Wisconsin, Michigan's Upper Peninsula and central Lower Peninsula, northwestern Iowa, and southern Missouri. Severe drought is present in Minnesota, northern Wisconsin, the western Upper Peninsula of Michigan, and far southern Missouri. Extreme drought is present along the edges of Minnesota and in northern Wisconsin. Along the East Coast, moderate to severe drought stretches along the coast from Maryland and Delaware to southern Maine, with a portion of upstate New York abnormally dry.

For August, mean temperature anomalies were above normal across almost all Eastern Area, ranging from within a degree of the average around much of the Great Lakes to three degrees above normal in Maine and over five degrees above normal in southern Missouri. Much of August's precipitation in Eastern Area followed a path from Iowa to West Virginia then up the coast to southern New England, leaving most of the states in Eastern Area with over 200% of their normal precipitation for the month. States outside of those storm tracks including Minnesota, Michigan, northern Wisconsin, southern Missouri, Maine, New Hampshire, and Vermont were left with below-normal precipitation. The largest negative precipitation anomalies were in northern Wisconsin and southern Missouri, which received less than 20% of normal precipitation.

As a result of these areas of below-normal precipitation, drought has increased up to two categories in central Minnesota, northern Wisconsin, Michigan, northwest Iowa, southern Missouri, Upstate New York, Vermont, New Hampshire, and Maine. Meanwhile, drought has

improved up to two categories from central Iowa to West Virginia and along the East Coast from the Delmarva Peninsula to southern New England.

Periods of increased initial attack within multiple states are not typical in the Eastern Area during August but have been present in the northern tier of the Great Lakes states and New England. The large fires that ignited in early July in the Minnesota Arrowhead have maintained areas of heat from deep burning organics even as multiple thunderstorms with rainfall have passed through. Flare ups during the outlook period are expected as dormancy and leaf drop add to surface fuels and where prolonged dry periods will allow deep burning layers to surface and find fuels to burn. The entire Eastern Area will be transitioning this outlook period from a live fuel system to a dead fuel system with normal fall fire activity. Periods of increased fire activity will occur in areas that do not receive long duration soaking rains from frontal systems, or at least frequent short duration rains that maintain wet surface fuels.

The Climate Prediction Center (CPC) forecasts above-normal temperatures in southern Missouri for September and above-normal temperatures for all Eastern Area outside the Ohio River Valley through November. Below-normal precipitation is forecast for northern portions of Minnesota, Wisconsin, and Michigan in September, while above-normal precipitation is forecast for the southwestern portion of Eastern Area. For the rest of the four-month forecast, no areas of above-normal precipitation are forecast, but below-normal precipitation is expected from Michigan to Maine.

Longer term models keep drier conditions in Michigan for December but bring plenty of precipitation to the East Coast. Strengthening El Niño conditions are expected to bring above-normal temperatures to all Eastern Area for December, except for far southern Missouri. As a result, above-normal fire potential is forecast to continue in northern Minnesota and start to affect northern Wisconsin and the western Upper Peninsula in September and October before cooling temperatures and moderating conditions bring fire potential back to seasonal norms for November and December. For all other areas, normal significant fire potential is forecast.

Southern Area

Flash drought in the southern Plains and portions of the Lower Mississippi Valley resulted in a dramatic increase in fire activity during August that will likely carry into September. Beneficial rainfall brought relief to parts of the Southeast over the last couple of weeks, but lingering drought over South Florida is among the most intense on record there for late summer. The coverage of extreme drought there as of late August is second only to the last very strong El Niño of 2015. Meanwhile, an extraordinary dry spell since May in the Caribbean has resulted in historic drought over Puerto Rico and the U. S. Virgin Islands, again similar to what occurred in 2015.

El Niño's influence in September and October tends to diminish the potential for hurricane activity across the Atlantic, before the jet stream reconfigures by late fall and winter, setting the stage for what will likely be a very wet end to the year over much of the Southern Area. Factors that are more difficult to pin down beyond a week or two will result in some uncertainty until that wetter pattern sets in, and confidence is low in whether heightened late summer fire activity will bleed into the more traditional fall fire season in October and November. An abrupt increase in low pressure systems tracking across the region could occur during the latter half of fall. If this pattern change is delayed until December like in 2023 and tropical activity avoids the region, it may be a busy few months ahead for the Southern Area.

Despite high confidence in a below average hurricane season, sea surface temperatures surrounding the southern U.S. are at record warm levels. If any storms manage to track towards the region, this could result in drought-busting rainfall anywhere from the southern Plains to the Florida Peninsula. Given lower odds for tropical impacts and the unusually intense drought for this time of year, above normal significant fire potential is expected over South Florida in

September. Low water levels brought on by the drought are one of the biggest factors in fire risk, and there will continue to be plenty of opportunities for lightning ignitions. Near misses from tropical systems and early season cold fronts may also enhance the potential for wind-driven fire risks in Florida and elsewhere in the Southern Area.

Confidence is higher in drought continuing to worsen over most of the southern Plains and Lower Mississippi Valley during September. Some areas received beneficial rainfall in late August, but the return of dry and unusually hot weather will likely mean any relief is temporary. An expansive area of above-normal significant fire potential is expected across Texas, Oklahoma, Arkansas, Louisiana, Mississippi, and southwestern Alabama for the month ahead. These conditions may very well continue into October and November in portions of the region, but confidence is low as to where conditions will remain driest. Fuel concerns are abundant, ranging from the recent curing of fine fuels to drought and beetle kill, along with tornado, ice storm, and hurricane damage.

Residual drought elsewhere in the Southeast could become problematic again in what looks to be a hot September. Rainfall trends are uncertain, especially due to potential tropical activity near the coast, but September into October is typically the driest part of the year for the hardwood-dominant areas farther inland. The National Drought Mitigation Center's Vegetation Drought Response Index has consistently indicated severe to extreme vegetative stress throughout large parts of the Southeast which first appeared during the unusually dry spring. Should persistent hot and dry weather result in early leaf drop that couples with critically low live and dead fuel moisture, an early start to the fall fire season cannot be ruled out. Forests across the southern Appalachians, Piedmont, and coastal plain damaged by Helene may be of particular concern, with heavy fuels in the hurricane's footprint consuming completely once ignited and contributing to a handful of challenging fires during this summer's heat waves. There are conflicting signals between seasonal forecast guidance and El Niño analogs, so normal significant fire potential is carried through the period due to the lower confidence.

With historic drought established and lower chances for beneficial tropical moisture this year, above normal significant fire potential is likely to continue across Puerto Rico and the U. S. Virgin Islands through the end of the year. Intrusions of drier air may become more frequent during October and November, enhancing fire danger, while consistent rainfall with cold fronts will be much less likely this winter than last year. Severe impacts from wildland fire are possible through the end of the year in the Caribbean.

Outlook Objectives

The National Significant Wildland Fire Potential Outlook is intended as a decision support tool for wildland fire managers, providing an assessment of current weather and fuels conditions and how these will evolve in the next four months. The objective is to assist fire managers in making proactive decisions that will improve protection of life, property, and natural resources, increase fire fighter safety and effectiveness, and reduce firefighting costs.

For questions about this outlook, please contact the National Interagency Coordination Center at (208) 387-5400 or contact your local Geographic Area Predictive Services unit.

Note: Additional Geographic Area assessments may be available at the specific GACC websites. The GACC websites can also be accessed through the NICC webpage at:

<http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>