National Significant Wildland Fire Potential Outlook

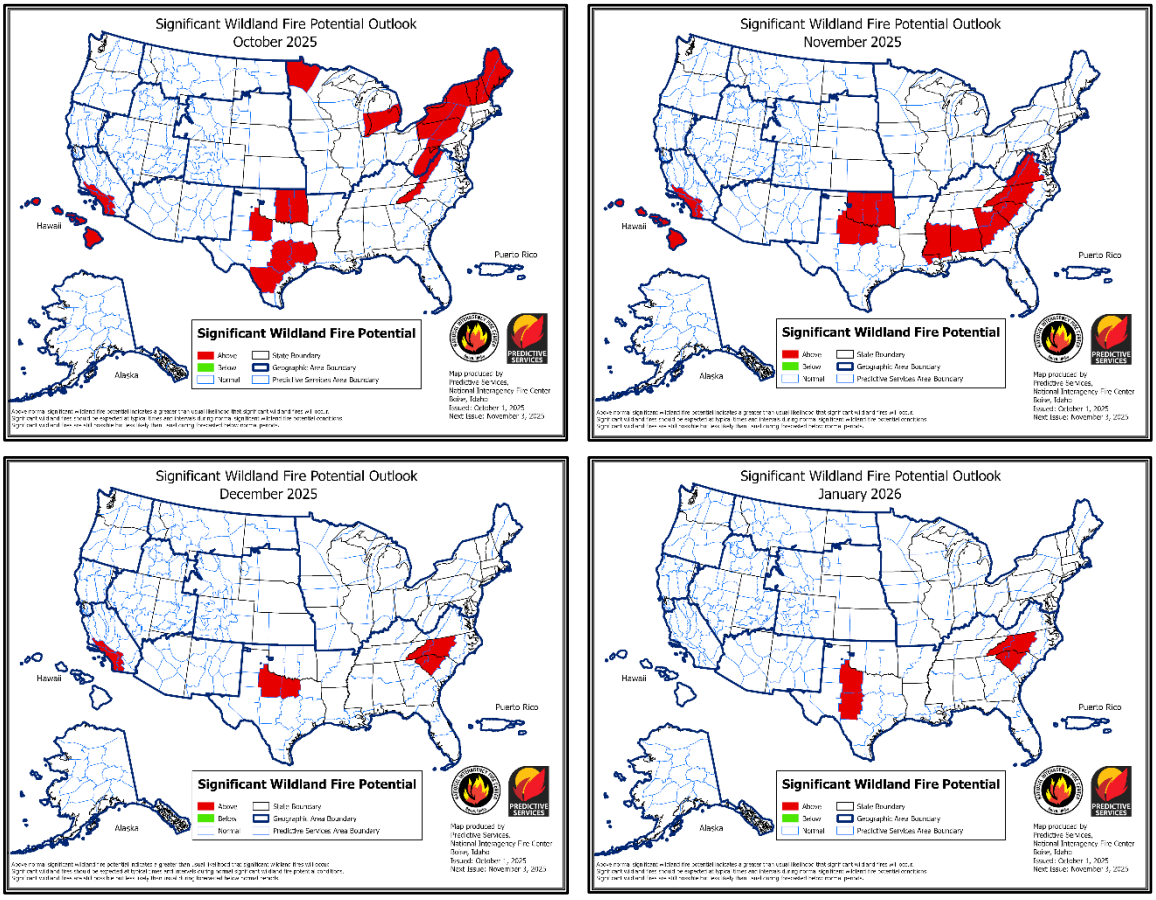
Predictive Services
National Interagency Fire Center

Issued: October 1, 2025
Next Issuance: November 3, 2025

Outlook Period – October 2025 through January 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 increased across the US in early September, primarily in the Northwest Geographic Area. Activity then moderated gradually the rest of the month, with most areas showing low levels of activity, but the Northwest remained moderately active and the Eastern and Southern Areas observed a slight increase in activity. The National Preparedness Level increased to four (on a scale of 1-5) September 4 due to large fires in several geographic areas, but primarily due to the significant increase in activity in the Northwest. The National Preparedness Level then decreased to three September 12 and two September 23, corresponding to the decrease in activity. Total acres burned through September is below the 10-year average at 71%, but with an above average tally of wildfires of 115%.

September precipitation was below normal across most of the eastern US near and east of the Mississippi Valley, except for small areas of near to above normal precipitation in the Ohio and Tennessee Valleys. Below normal precipitation was also observed in much of Texas and

Oklahoma but was above normal for most of the central and northern Plains. In the West, most of California observed above normal precipitation that extended east into the Southwest, then northeast into Nevada, southeast Oregon, and southwest Idaho. Below normal precipitation was observed in Washington, northern Idaho, much of Montana, western Wyoming, and Utah. Overall, drought increased across the US during September, with over 43% of the country in drought. Drought intensified in northern New England and developed southwestward into much of the central Appalachians, Ohio/Mid-Mississippi Valleys, and Lower Great Lakes. Drought also developed in portions of Southeast. Small areas of drought improvement occurred in the Four Corners states, with drought removal in South Florida.

Climate Prediction Center and Predictive Services outlooks issued in late September indicate above normal temperatures are likely across much of the US through January, although the Northwest into the northern Plains temperatures are likely to be close to normal. Wetter than normal conditions are likely in the Northwest eastward into North Dakota into January, with above normal precipitation expected in Florida in October. Above normal precipitation is also likely to develop in late fall and early winter in the Great Lakes. Below normal precipitation is forecast for October for New Mexico, the southern Plains, and Lower Mississippi Valley northeast through the Ohio Valley into the Lower Great Lakes and Northeast. Below normal precipitation is likely for the southern quarter of the US November through January. For Alaska, temperatures are likely to be near to above normal, with above normal precipitation also favored for much of the state by late fall and early winter.

Above normal significant fire potential is forecast for October for a large swath of the northeastern US, from northern New England into northern New York, then southwestward into portions of the central and southern Appalachians. Above normal potential is also forecast for portions of Texas, Oklahoma, southern Lower Michigan, and northwest Minnesota in October. Above normal potential is forecast for the southern California coast and mountains in October that will persist through December. For November, most of the Northeast will return to normal significant fire potential, but above normal potential will expand from the east slopes of the southern Appalachians into the Piedmont, then southwestward into the Lower Mississippi Valley. Above normal potential is also forecast in November for North Texas and most of Oklahoma. Most of these areas will return to normal in December, except for North Texas, the east slopes of the southern Appalachians, and Piedmont. Most of the US will have normal potential in January, except portions of central Texas, the east slopes of the southern Appalachians, and Piedmont, which will be above normal. For Hawai'i, above normal significant fire potential is forecast for October and November, returning to normal for December and January.

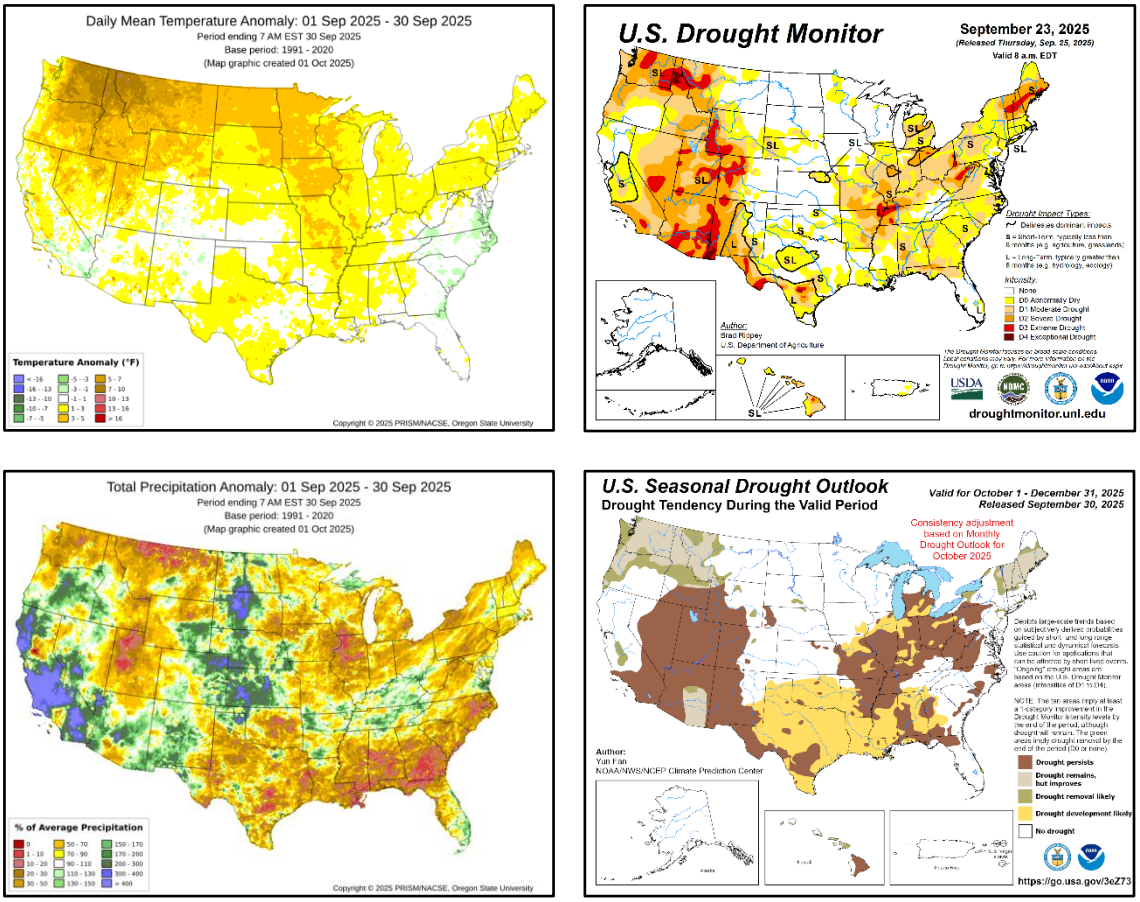
Past Weather and Drought

Temperatures in August were above normal across the northwestern US into much of the Plains and Mississippi Valley then extending into the Northeast. Temperatures were near normal in portions of the southwestern US, with near to below normal temperatures in the Southeast. Temperatures were above normal for most of Alaska, except the western third of the state, while Hawai'i recorded above normal temperatures in September except Molokai, which was near to below normal.

Precipitation across the US in August was above normal across much of California into Nevada, southeast Oregon, and southwest Idaho. Above normal precipitation was also observed across much of the central and northern Plains, with smaller areas of above normal precipitation in the Ohio and Tennessee Valleys, southeast Florida, and far eastern Virginia. Precipitation was mostly below normal from the Mississippi Valley to the East Coast except for the areas of above normal precipitation mentioned above. Precipitation was well below normal for much of the Southeast, with much of the Northeast also recording little precipitation before heavy rain September 25-26 resulted in monthly anomalies 50-90% of normal. Precipitation was also below normal in much of Utah north into Montana then westward into Washington. Precipitation in Alaska was above

normal in the northeast, but below normal in the Copper River Basin and much of western Alaska. Precipitation was well below normal for most of Hawai'i but was above normal in Kaua'i.

Fire activity increased significantly in the Northwest at the beginning of September, mainly due to a significant overnight dry lightning outbreak from southwest Oregon into north-central and northeast Washington. A more modest increase in activity was observed in California at the beginning of the month. Otherwise, a steady downtrend of activity was observed throughout the West in September. However, persistent dryness in much of the eastern US in September resulted in an unusual modest increase in initial attack activity in portions of the Eastern and Southern Areas. The most persistently dry areas since June from Pennsylvania to northern New England observed the most activity, as well as portions of central Texas.



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).*

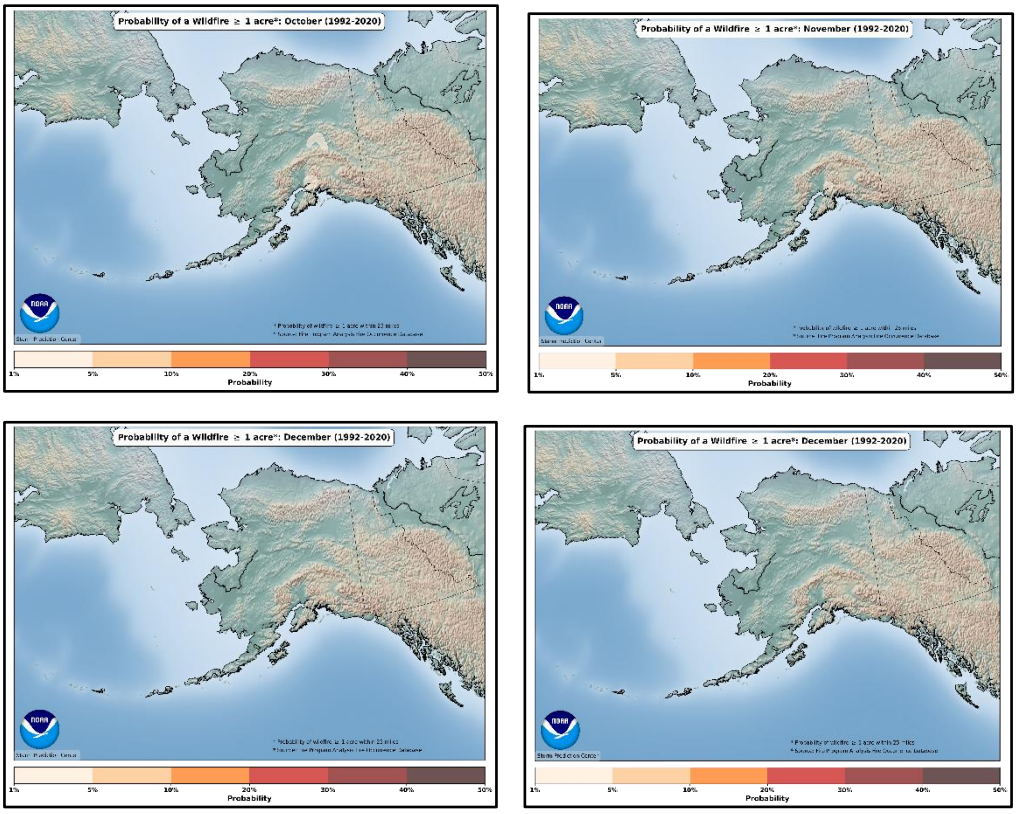
Overall drought increased across the US since late August with over 43% of the US in drought as of September 23. Drought intensified in northern New England during the month, with drought expansion south and west into much of the central Appalachians, Lower Michigan, Ohio Valley, and Mid-Mississippi Valley. Drought also developed in portions of the Southeast. Drought persisted in the southwestern US, although with slight improvement in central New Mexico and southern Arizona. Drought also persisted in much of the Rockies, with slight improvement in western Colorado and portions of Wyoming, while drought also persisted in much of the Great Basin, Northwest, and California. Drought improvement was limited to the areas mentioned above, portions of the central Plains, and southeast Florida.

Weather and Climate Outlooks

El Niño-Southern Oscillation (ENSO) neutral conditions persist in the equatorial Pacific Ocean with sea surface temperatures now slightly below average and trending toward La Niña. The

Climate Prediction Center is forecasting La Niña to develop this fall, with a greater than 70% chance of occurrence. La Niña is favored to persist through the winter, but with a lower probability of 54%, and a greater than 40% chance that ENSO neutral conditions will return mid-winter. A strongly negative phase of the Pacific Decadal Oscillation (PDO) persists but has weakened recently and remains a factor for this outlook. The Madden-Julian Oscillation (MJO) has been weak for much of September and is forecast to remain weak in October, not factoring in this outlook. The likely shift to La Niña will continue to be the main driver of this outlook, coupled with the negative PDO.

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.) Note that December is shown twice, and January occurrence is similar to December.

Alaska

Season-ending rain has minimized fire potential for most of Alaska. Though the Upper Tanana Valley and Copper River Valley have not had as much precipitation, fuels have received enough rain to minimize concern. With waning daylight hours, lowering sun angle, minimal lightning, and snowfall right around the corner, the likelihood for any new significant fires is low. Accordingly, the outlook for the next four months is normal.

September was warmer than normal but also wetter than normal. Several inches of rain were recorded across most areas of the state. The southeast Interior, including the uppermost Tanana Valley and Copper River Basin, continue to have below normal rainfall amounts, but the US Drought Monitor does not identify this as an area of concern.

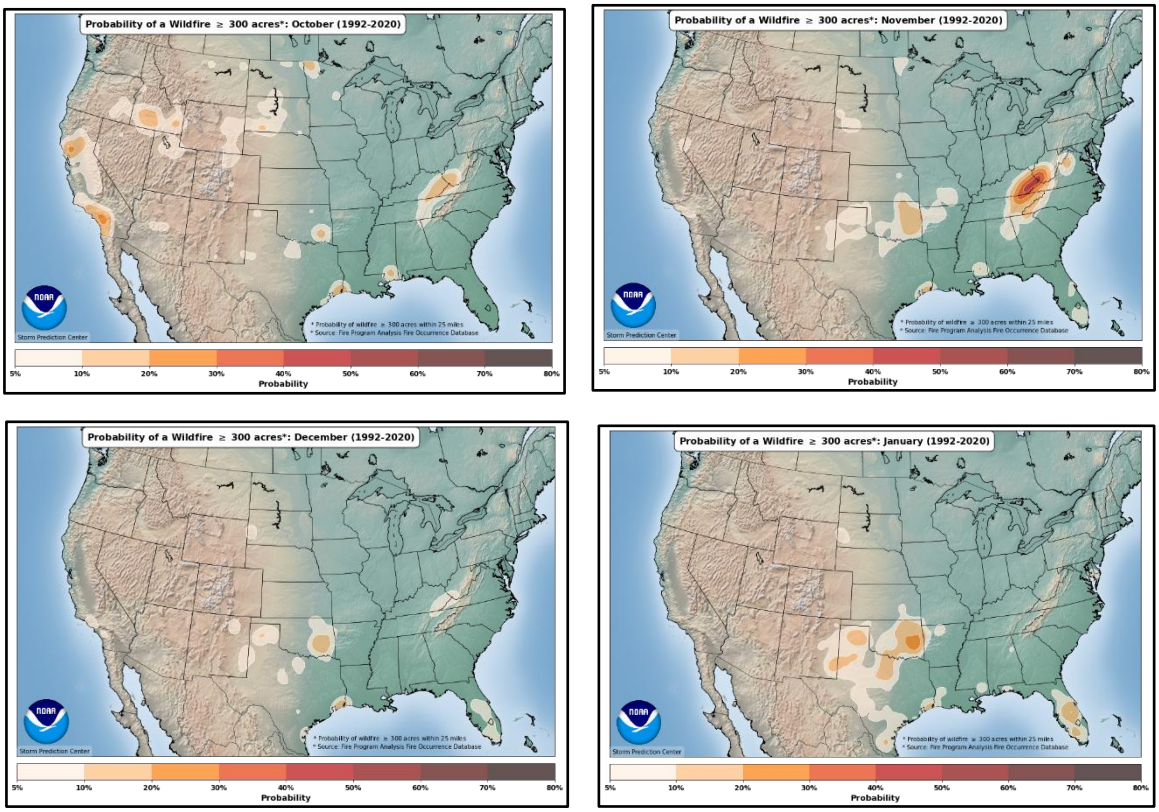
Climate Prediction Center outlooks for October and the following months show warmer than normal conditions for most areas, with the panhandle likely to be wetter than normal. A warmer than normal winter is more likely due to our ever-warming climate, despite the likelihood of a La

Niña winter, which historically brought colder than normal temperatures to most of the state. La Niña often leads to a snowier (wetter) than normal winter for Alaska, but the skill for long-term precipitation prediction in Alaska is low and is difficult to anticipate more than a week or two in advance.

Fire activity was minimal for the month of September with less than ten human ignitions, and all were quickly caught.

Fuels are very wet across the state as September ends. Only four stations in the southeast Interior show a value other than low for Buildup Index, which is a measure of the total fuel available for combustion in the duff layers. Surface fuels are also wet and not receptive to ignitions, as evidenced by Fine Fuel Moisture Codes of low to moderate statewide.

Fire season is effectively over for Alaska. Daylight hours continue to shrink, and the sun angle is already low even at midday, with near or below-freezing temperatures at night and highs in the 40s during the day. The permanent winter snowpack is likely to be established in late October for most areas, dealing the final blow to any remaining fire potential. It is expected that October through January will exhibit normal fire activity in Alaska.



Normal fire season progression across the contiguous US 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

Significant fire potential across all Northwest Predictive Service Areas (PSAs) is expected to remain normal, which is typically low to very low, October through January. Fire activity should continue to decline as cooler and wetter fall conditions return to the region.

September featured an active but inconsistent weather pattern. No single pattern dominated for more than a few days. The most impactful period occurred early in the month when low-pressure brought widespread thunderstorms. Most storms produced moderate rainfall, but a few nighttime storms ignited new fires, especially in northeast Washington and southwest Oregon.

Later in the month, thermal troughs developed west of the Cascades, reducing overnight relative humidity recovery and producing moderate east wind events. These were followed by dry cold fronts and gusty west winds east of the Cascades.

Despite the frequent systems, the region remained warmer and drier than normal. The warmest conditions were observed in northeast Oregon and eastern Washington. A corridor from southwest Oregon to southeast Washington received above-average rainfall from early thunderstorms, though this was not consistent across that area. Cold fronts brought brief wetting rains west of the Cascades, which were short-lived but beneficial in reducing fire activity.

Drought conditions changed little during the month. The Ochoco Mountains in Oregon saw slight improvement, dropping to moderate drought. Extreme drought persisted in the north Washington Cascades, southeast Washington, and far northeast Oregon. Southeast Oregon remained free of drought.

Initial attack activity was above average at the beginning of September due to the significant lightning event. This led to a surge in new ignitions, several large fires, and the deployment of multiple Complex Incident Management Teams. The region elevated to Preparedness Level four (on a scale of 1-5) during this period. By mid-September, ignition frequency dropped below average and remained low for the rest of the month.

The Bear Gulch Fire that has been burning since July on the Olympic Peninsula grew by about 10,000 acres over two days in mid-September under a thermal trough despite receiving two inches of rain in mid-August. In central Washington, the Lower Sugarloaf and Labor Mountain Fires continued to challenge containment efforts, with two dry cold fronts contributing to significant growth the latter half of the month. In northeast Washington, the Crown Creek Fire caused notable structure loss. In southwest Oregon, the Moon Complex experienced large growth during a thermal trough induced offshore wind event near the end of the month.

September continued the summer trend of fluctuating Energy Release Component (ERC) values across the region. ERCs peaked east of the Cascades in early September, with the east slopes of the Washington Cascades reaching the highest daily values over the past 20 years. These conditions supported active fire growth.

As the month progressed, beneficial seasonal changes and moderating weather improved fuel conditions across Washington and Oregon, aiding suppression efforts. However, another period of fuel dryness occurred at the end of the month. Fires that had not been fully contained experienced renewed growth due to the weather events on top of lingering dry conditions and seasonally stressed fuels.

The Climate Prediction Center expects ENSO-neutral conditions to continue into early October, followed by a brief La Niña phase during the winter. A return to neutral conditions is possible in the spring. Historical patterns for this type of ENSO transition have produced a wide range of outcomes, from persistent ridging to sustained troughing, which lowers confidence in the seasonal forecast. However, longer nights and cooler, wetter seasonal trends still reduce the likelihood of significant fire activity.

Temperatures are expected to be near average across most of the Northwest through the end of the year. By January, below-average temperatures are favored for Washington and northwest Oregon. Precipitation is expected to be above average in October for Washington and northern Oregon. By January, there is no strong signal favoring either wetter or drier conditions. This combination suggests that snowpack accumulation may be slow to begin, except at the highest elevations.

Given the current conditions and climate forecast, significant fire potential is expected to remain normal across the Northwest through January. However, brief periods of wind-driven fire spread remain possible in central and eastern areas until multiple soaking rain events occur.

Northern California and Hawai'i

For northern California, significant fire potential is projected to be normal for October through January. Historically during October one or less significant fires occur on average within each Predictive Services Area (PSA), with the average less than one November through January. Hawai'i's significant fire potential will remain above normal for October and November before returning to normal for December and January.

Atmospheric patterns remained very changeable during September. Stalled low-pressure systems cut off from the main jet stream and warm-dry ridge systems were the predominate pattern types. There were no significant heat wave periods although average temperatures were near to above normal. Due to the slow evolving nature to the pattern, wetting precipitation events occurred during different stages of the month and impacted different areas. The most impactful wetting period occurred at the end of September due to an atmospheric river. Precipitation anomalies were generally near to above normal. There were a total of three breezy and dry northerly wind periods with the strongest occurring September 26 favoring the Sacramento Valley. This event prompted a Red Flag Warning from the National Weather Service and a High Risk from Predictive Services. Other High Risk and/or Red Flag Warning issuances occurred during the first week due to lightning, gusty outflow winds, and deep atmospheric instability. Lightning observed using the Earth Networks platform through September 28 was a little over 15,000 strikes and broke the September monthly record. The 2012-2024 Earth Networks Total Lightning Network (ENTLN) monthly average for September is a little over 2,700 strikes, and the record value before this year was 14,417 in 2017.

Dead fuel moisture was at critically dry levels areawide during the first six days of September, which was followed by an extended cool-moist period that triggered unusually high values during the second week of the month. Fluctuations occurred during the latter half of the month with only a few Predictive Service Areas (PSA) reaching a critically dry level based on Energy Release Component values observed September 27. Live shrub and tree canopy fuels continued to cure in September, with most species and elevations in the flammable to critically flammable state, consistent with seasonal trends. Based on all the sample sites, most live fuel moisture readings were near normal with some areas a little below normal while other areas were a little above average for this time of year. Most of the herbaceous fuel bed, especially across exposed areas, was in the cured to mostly cured state. However, the periods of abundant rainfall created patchy germination, primarily impacting the lower elevations of the Coast Range and Sacramento Valley. It was not enough to offset the amount of standing dead herbaceous fuel left over from the previous growing season. The US Drought Monitor revealed very little change from late August through late September with a small patch of moderate drought persisting across the far northwest corner. The one- and two-month Evaporative Demand Drought Index (EDDI) values on September 24 showed a short-term drought or stress signal across the Greater Bay Area.

Wildfire business fluctuated during September with the busiest period found during the first few days when abundant lightning occurred with a flammable to critically flammable fuel bed. The daily wildfire ignition average during September was 16, compared to the average of 26 new fires per day observed during August. This was near the September 2008-2024 daily ignition average of 15. Two large fires were reported, and both occurred within the Northwest Mountains PSA. The Root Fire located near Castella grew to nearly 700 acres on September 1 and required a Type 3 Incident Management Team. The regional average of September significant fires based on a 1992-2023 database is nine. The regional preparedness level (PL) went from four to three on September 9. Prescribed burning including larger landscape burns increased during September, especially the last week of the month as weather conditions and resource availability allowed.

Various weather forecast sources suggest mixed temperature and precipitation anomalies during the next four months. The jet stream is likely to be active and make timely if not frequent moisture intrusions at times. Whiplash weather patterns have been observed during the past few cool seasons, especially when there has been a La Niña combined with a strong negative Pacific Decadal Oscillation, which are both expected to occur this fall. The frequency of northerly and/or offshore wind events is likely to be normal, which is generally two to three varying strength events per month. Very changeable weather patterns are expected, which will lead to a wide range of outcomes during the outlook period.

Based on the current fuel state and future weather predictions, normal significant fire potential is projected for October through January in northern California. Unusually flammable live and dead fuel alignments are likely to be minimal or occur for short periods during the outlook. The region is expected to undergo an important transformation during October and November with timely moisture events resulting in additional germination and growth of the herbaceous fuels across the lowest elevations. The longer nights and lowering sun angle will also lessen the risk or shorten burn periods. Some dry and gusty wind events are likely to occur, and if there is enough drying ahead of the event some spread could occur in the grass and shrub fuel dominated areas. This risk will abate progressively as new growth sufficiently offsets the flammability of remaining dead fuel.

Sea surface temperature (SST) anomalies surrounding the Hawai'ian Islands were near to above average during September. Average temperature anomalies observed during September were generally near to above normal. Precipitation anomalies were near to below normal across most of the island chain although a significant frontal event brought heavy rainfall to Kaua'i and the northern tier of the island chain September 25-26. Drought conditions changed slightly between late August to late September with the Big Island observing intensification. The most severe drought conditions remain across Molokai, Maui, and the Big Island. Expansive areas of cured herbaceous fuels were found across the island chain. No Red Flag Warnings were issued from the National Weather Service during the month. Two large extended attack fires were reported in September, one on the windward side of Maui in mainly cured herbaceous fuels and the other on the windward side of the Big Island in a deeper duff environment.

The El Niño Southern Oscillation (ENSO) is currently in a neutral state and is expected to trend towards a weak La Niña in the coming months, likely resulting in mixed temperature and precipitation anomalies in Hawai'i during the next four months. Average temperature anomalies should generally be near to above normal. The precipitation forecast is a bit trickier with a below normal signal for the Big Island while mixed signals are present across the rest of the island chain. Drought stress should continue broadly for the next one to two months and could combine with enhanced trade wind periods, typical of La Niña. Wetting events are likely to become more commonplace and allow for less stress in the live fuels while promoting herbaceous green-up by December. Weaker La Niñas have been associated with more Kona Lows. Based on the weather projections and current state of the fuels, above normal significant fire potential is forecasted for October with less of a footprint during November that favors the southern tier of islands. A more noticeable transition from flammable to less flammable should occur during November, but more so during December and January, so normal significant fire potential is forecast December and January.

Southern California

High pressure centered over the Desert Southwest most of September caused temperatures to be near normal across the broad region. However, a deep area of low pressure over northern California brought well below normal temperatures September 9-14. Overall, most locations in southern California observed near to a little below normal temperatures for September. Isolated to scattered monsoon showers and thunderstorms formed mainly over the mountains and deserts September 1-7, peaking September 2 when scattered showers and thunderstorms moved across

most of the area. A deep area of low pressure that moved over northern California brought isolated showers and thunderstorms to the Sierra and northern deserts September 10-12. The remnants of Tropical Storm Mario brought widespread showers and thunderstorms to the entire region September 17-18. A weak area of low pressure stalled over the area bringing isolated to scattered showers and thunderstorms to the area September 21-28. A deep trough brought scattered showers to central California from the Monterey/Fresno County line northward September 29-30. Overall, precipitation was well above normal across the region for September. There were strong and erratic winds in and near thunderstorms, but overall, winds were light throughout September.

There was less drought for September compared to August across southern California. Southern California is now under moderate to severe drought, with just one little area of extreme drought over the lower deserts. Central California remains mostly under abnormally dry conditions, with the San Joaquin Valley under moderate drought. Over most of the region, the moisture content of 1000-hour and 100-hour dead fuels was above normal all of September. Live fuel moisture continued to gradually decrease over September and is now mostly between 45% and 70%, which is a little below normal for this time of year.

There is no change to the long-term forecast as sea surface temperatures across the Pacific Basin remain well above normal and sea surface temperatures across the Equatorial Pacific remain below normal. Computer models show that these conditions will continue through the fall into the winter months. Thus, high pressure off the California coast will likely become the dominant weather feature October through January. Temperatures will most likely be well above normal and precipitation well below normal. Troughs that drop down from the Pacific Northwest into the Great Basin and Desert Southwest will bring Santa Ana wind events to southern California. The warm and dry conditions combined with strong offshore winds at times will cause the significant fire potential to be above normal across southern California from the mountains westward October through December. Significant fire potential will be near normal across central California October through December since this part of the region typically does not get strong offshore winds. Central California also normally sees cool overnight lows along with good nighttime relative humidity recovery during the fall months. A significant rainfall event is likely across the area by late December or early January causing the significant fire threat to become near normal across the entire region in January.

Northern Rockies

Significant wildland fire potential is expected to remain near normal across the Northern Rockies Geographic Area (NRGA) through the outlook period. Most of the fire activity observed in the western part of the NRGA in September received precipitation September 29-30, which will act as a strong season slowing event. Drying conditions in the remainder of the NRGA will bring short episodic concerns in October, but weather outlooks through mid-month indicate a lack of major wind events normally associated with fall fire activity.

The month of September was marked by above normal temperatures across the entire NRGA, with well above normal anomalies observed in the Idaho Panhandle and northwest Montana. Precipitation was below normal across most of Montana and northern Idaho, with well below normal precipitation in north-central Montana. North Dakota remained near normal in terms of precipitation. Severe to extreme drought continues to cover the majority of western Montana and north Idaho, with the remainder of the NRGA reporting pockets of abnormally dry conditions.

Seven new large fires were reported during the month, with most of the activity concentrated in north Idaho and northwest Montana. These ignitions were largely the result of lightning events in late August, with some fires carrying over into early September. However, fire activity diminished significantly by mid-month, following a precipitation event September 13-15 which helped moderate fire behavior and reduce the likelihood of new significant starts. Extended dry weather

through the end of the month accompanied by warm temperatures supported prescribed fire activity but also allowed increased fire activity on large fires that lingered on the landscape.

The combination of persistent warmth and below normal precipitation continued to dry fuels across the region, particularly in northwest Montana, north-central Montana, and the Idaho Panhandle. While the mid-September precipitation event provided some short-term relief, soil moisture deficits remain in many areas, especially where rainfall was limited. Curing of fine fuels has progressed across the region, and live fuel moistures have declined seasonally, though not to critical levels in most areas.

Seasonal outlooks lean toward above normal precipitation through the fall and early winter months and temperatures near normal. This is consistent with La Niña conditions that are favored to develop during the October–December period. A combination of La Niña, a negative Pacific Decadal Oscillation, and an easterly phase of the Quasi Biennial Oscillation align to support a less stable polar jet stream and more frequent storm systems moving into the north central United States during the winter months. The track of these systems will dictate how much snow cover gets generated over the Plains.

In the month of October localized elevated potential may persist in northwest Montana and north Idaho, where fuels remain dry and recent precipitation was limited. Shorter burn windows and cooler overnight temperatures will help moderate fire behavior overall. In November through January no significant signals suggest a departure from normal fire potential. As fuels transition into dormancy and snowpack begins to accumulate, fire activity is expected to decline seasonally. However, dry cold fronts and wind events could still pose brief periods of elevated risk, particularly in wind-prone areas east of the Continental Divide.

Great Basin

Normal fire potential is expected across the Great Basin throughout the October through January period, which corresponds to low fire activity and little, if any, potential for large fires. However, fine fuels could dry out quickly and remain a concern in southern Idaho as well as northern and western Nevada where above normal fine fuel loading persists. Until snow begins, these areas may have localized concerns during periods of strong winds after prolonged dry periods.

Temperatures overall in September were above normal across the northern half of the Great Basin and near to just below normal farther south. Precipitation was well above normal over much of Nevada, Idaho, Wyoming, and northern Utah and just below normal from eastern Nevada across the rest of Utah. Drought conditions have slowly expanded in both southern and northern areas, with most areas in moderate to severe drought except for far western and northwest Nevada and southwest Idaho that are only abnormally dry. There are still large areas of extreme drought across the eastern and southern half of the Great Basin. Drought improvement is likely in central Idaho through the fall.

Fuel moisture increased across all areas of the Great Basin during late August and early September due to multiple days of significant cloud cover, increased relative humidity, and showers and thunderstorms. Energy Release Component regionwide dropped below the 50th percentile and 10-hour and 100-hour fuel moisture rose significantly late in the month as cold fronts moved across the region bringing higher relative humidity, cooler temperatures, and precipitation. In some areas 1000-hour fuel moisture increased by smaller margins but still responded to the rainfall and higher relative humidity. There will still be concerns due to heavy fine fuel loading in parts of northwest and north central Nevada into southwest Idaho through the fall where cold frontal passages will increase winds. The main concerns will be after prolonged dry periods when strong winds occur for a burning period.

Fire activity decreased significantly in mid to late September across all areas of the Great Basin. New ignitions were mostly handled successfully in initial attack and some existing large fires continued to burn with periods of moderate behavior throughout the month, but none of the few new large fires that emerged became a concern.

Fire potential conditions are expected to return to normal for October through January, which would indicate low significant fire potential for the region. The only exception might be localized events across northwest and north central Nevada into southern Idaho in the areas of above normal fine fuel loading. If conditions remain drier and absent from snow, strong winds associated with cold fronts could increase fire potential for a burning period if there are ignitions.

Southwest

As of late September, the US Drought Monitor indicated widespread areas of severe to extreme drought across most areas west of the Divide, with pockets of exceptional drought along the southern border of Arizona and New Mexico. These drought conditions will likely gradually worsen into the end of the year, with drier than normal conditions expected.

Precipitation in September was above normal across the southern half of the region, and slightly below normal in northern areas. A prolonged precipitation event regionwide continued through the end of the month. With La Niña forecast by the Climate Prediction Center (CPC) to develop this fall, precipitation is expected to decline and become below normal for the rest of the year into early January.

Temperatures in September were near normal across most of the region. The CPC outlook for October is for above normal temperatures across the region. This trend is expected to continue through the end of the year and into early January.

Very few significant fires occurred in the Southwest area in the latter half of September as more moist conditions combined with rapidly decreasing burn periods, due in large part to the longer nights. Despite the CPC outlooks for warmer and drier than normal conditions through the fall and into winter, significant fire potential is expected to remain normal, becoming minimal by October and continuing into January.

Rocky Mountain

September featured an active weather pattern across the Rocky Mountain Area (RMA), bringing frequent precipitation and some high-elevation snow, which contributed to widespread drought improvement despite lingering dryness in parts of Wyoming. Regular moisture and a lack of strong winds kept large fuels from drying significantly, resulting in near-normal fire danger across the RMA. This weather pattern is expected to continue into October, with near-average precipitation, above-normal temperatures, and the potential development of La Niña conditions influencing the winter outlook. While significant fire potential is forecast to remain normal through January, brief periods of elevated risk may occur during windy, dry episodes typical of La Niña winters.

September's progressive weather pattern in the RMA included frequent low-pressure systems bringing regular rainfall and high-elevation snow across Colorado and the central Plains. Precipitation was well above normal, 200-300% of average, in areas from southeastern Wyoming through eastern Colorado into western South Dakota, Nebraska, and Kansas, while much of Wyoming remained drier at 50-70% of average. Temperatures across the RMA were generally near normal, though parts of Wyoming continued to run several degrees above the long-term average. This pattern contributed to widespread drought improvement, with many areas improving slightly on the US Drought Monitor. However, northern Wyoming saw emerging drought

conditions near the southwestern Bighorn Mountains due to persistent warmth and below-average precipitation.

Regular rounds of precipitation throughout the month limited the duration of drying periods, preventing significant drying of large fuels. Despite fine fuels drying more rapidly, the absence of strong wind events kept overall fire danger near seasonal averages across the RMA.

Most fire activity across the RMA in September consisted of initial attack incidents, with approximately 90% of fires contained within one or two operational periods and held to 10 acres or less. Fires that moved to extended attack were primarily located in the grass-dominated fuels of Wyoming, western South Dakota, and Nebraska. Vegetation here responded more rapidly to short-term drying under brief windows of favorable conditions for fire growth.

The active weather pattern across the RMA is expected to persist into October, maintaining frequent opportunities for additional precipitation. While precipitation is forecast to remain near seasonal averages, temperatures are likely to trend above normal. Looking ahead to the November to January period, La Niña conditions are favored to develop. Historically, La Niña winters in the RMA are associated with cooler and wetter conditions across the northern third of the RMA, while the southern third tends to be warmer and drier. Current long-range model guidance supports the emergence of this typical pattern as winter approaches. Additionally, La Niña winters often bring slightly enhanced wind activity across the RMA during the cool season months.

Given that current fuel conditions are near seasonal norms, and the short-term weather pattern is expected to support continued moderation, significant fire potential across the RMA is forecast to remain near normal through October. Normal fire potential is also anticipated November through January, which typically corresponds to minimal large fire activity. However, given the potential for increased wind events associated with La Niña, brief periods of elevated fire potential may occur, particularly following stretches of warm, dry weather. These elevated conditions would likely be short-lived, generally lasting no more than one or two operational periods.

Eastern Area

Above normal significant fire potential is forecast in October for northwest Minnesota, southern Lower Michigan, and eastern West Virginia northward into much of Pennsylvania, New York, and northern New England. Otherwise, normal potential is forecast through January 2026. Much of northern New England is abnormally dry or in drought status from a drier than normal summer, with drought worsening in September. Drought also has developed westward through the Lower Great Lakes and Ohio Valley into Missouri. Areas of blowdown from a strong spring derecho in northwest Minnesota are also a concern, with drier than normal conditions also emerging over the month.

Much of the Eastern Area was drier than normal for September, from northern Missouri to Minnesota east into the Northeast and Mid-Atlantic. Portions of these areas received less than 50% of normal precipitation for the month. Areas of above normal precipitation were localized in Upper Michigan, portions of southern New England, and near the Ohio River. However, much of this rainfall occurred over a 1-2-day period near the end of the month, with much of the month very dry until that time. For northern New England, the dry period extends back to June, with New Hampshire recording its driest summer since 1895. Temperatures were generally near to above normal across the region for September, with temperatures 1-5°F above normal for the Mississippi Valley.

Drought has been spreading across much of the southern tier of the Eastern Area the past month. A large area of abnormally dry conditions and drought extends from Missouri along the Ohio River into Lower Michigan and the Northeast. Severe drought has developed in portions of this region,

with extreme drought in portions of the Missouri Bootheel, Ohio, West Virginia, and northern New England.

Recent fire activity has continued to be predominantly within New England, with Maine, Vermont, and New Hampshire having significant initial attack uncommon in summer months. Live fuel moisture conditions have experienced improvement in September from more frequent periods of moisture, but several areas in the northern tier are transitioning into their normal dormant season with the occurrence of frost and shorter days. Most fires have had little surface spread but are burning deep into the ground and at times going underground and rekindling outside of control lines, requiring extensive mop-up and multiple days of resource use. These fires combined with brush dormancy and deciduous leaf fall are expected to have increased surface spread, especially during dry windy weather patterns. The Mid-Atlantic states and Great Lakes states are also having increased initial attack fires from more available surface fuels and periods of dry and windy weather.

Temperatures forecast by the Climate Prediction Center (CPC) are likely to be above normal for most of the Eastern Area through January, with the greatest chance for above normal temperatures in the Northeast. Equal chances of above or below normal temperatures are forecast for the Upper Midwest as a transition toward La Niña is expected this fall. For precipitation, CPC is showing a drier than normal swath from Missouri northeast into the Ohio Valley, Lower Great Lakes, and much of the Northeast. However, by the latter half of fall into early winter, above normal precipitation is favored for the Great Lakes, but all other areas have equal chances forecast.

The El Niño Southern Oscillation (ENSO) is neutral at the beginning of the period but is expected to trend toward La Niña in the fall and early winter, with CPC forecasting a better than 70% chance of La Niña developing. The Arctic Oscillation (AO) also factors into the forecast, but it is difficult to forecast more than two weeks in advance. Currently, the AO is forecast to be positive until mid-October, which leads to drier than normal conditions for much of the Eastern Area, especially as the equatorial Pacific trends toward La Niña.

Given the uncertainty in the climate models and forecasts, most of the Eastern Area is forecast to have normal significant fire potential through January. However, above normal potential is forecast from eastern West Virginia north and east into northern New York and northern New England. Fire activity has been above normal in these areas since August, especially in northern New England, and although fires have remained small thus far, the active trend is likely to continue into at least mid-October due to the forecast dry conditions. This will become of greater concern as leaf drop occurs in the middle to latter half of the month if the lack of rainfall continues. While drought is present from western West Virginia westward along the Ohio River into southern Missouri, widespread heavy rain September 23-26 has alleviated concern for the next two to three weeks.

For the Great Lakes, while the past month has been drier, it was quite wet for some areas in the spring to early summer. Currently, the underlying conditions are most concerning in northwest Minnesota and portions of Lower Michigan where the Buildup Index from the Canadian Forest Fire Danger Rating System is elevated in northern Minnesota and the southern half of the Lower Peninsula. Periods of light rainfall have kept surface fuels moist enough to sustain seasonally low fire activity thus far. However, with the dry trend from the past month forecast to persist into mid-October and areas of blowdown from this spring's derecho in northwest Minnesota and ice storm damage in Michigan, above normal significant fire potential is forecast for these areas through at least the first half of October. Otherwise, all other areas are expected to have normal potential in October. Normal potential is forecast areawide for November onward, but if the dry trend continues into November above normal potential may need to be added for some areas in the next monthly outlook.

Southern Area

Uncertainty abounds in the closing months of the hurricane season, but a developing La Niña in the Pacific is set to bring a warmer and drier than average winter to parts of the Southern Area with concerning fuel loads. Drought increased steadily through September across the Southern Area, and if tropical activity continues to avoid the region, established dryness will bring increasing significant fire potential over the next several months.

Abundant grass loads from an exceptionally wet growing season in the southern Plains will be a major factor over most of Texas and Oklahoma with the dormant season fast approaching. At least partial curing has already occurred where 30- to 60-day rainfall deficits are most significant and hot weather ruled for several weeks in late August and September. Freezing temperatures will be key to more widespread availability of fine fuels, but an expected warm end to fall and early winter may delay freezing temperatures, especially with southward extent. Dry cold fronts will be the main source of wind-driven fire risks in Oklahoma and Texas the next few months, but any Gulf tropical disturbances will enhance dry northerly winds, as well. Above normal significant fire potential for October is forecasted in the driest portions of central and eastern Oklahoma, western North Texas and across South Texas into the eastern Hill Country, southeastern Texas and adjacent areas. By November, confidence is highest in above normal significant fire potential across Oklahoma and North Texas, as drought is likely to develop quickly and intensify. Heading into the winter months, Oklahoma and eastern portions of Texas tend to be near a gradient in rainfall that differs for each La Niña, but the unusual grass loads call for a maintenance of above normal significant fire potential in most of North Texas despite the shortest days of the year. January's risk climatologically increases over Texas as wind events pick up. Long-term drought's impact to fuels in the western Hill Country may become more evident given above normal grass loads there from the wet growing season and historic flooding that occurred in July. While Arctic outbreaks may still occur, odds favor a warmer and drier than average winter there.

The highest elevations of the Appalachians in North Carolina and Virginia are forecast to see above normal significant fire potential in October, where frost occurred on several nights in early September. These areas are experiencing earlier than normal leaf color change per imagery from the USDA's ForWarn, with peak color in late September confirmed by multiple webcams. Early leaf drop will quickly make these areas susceptible to human ignited wildfires as drier weather returns in the coming weeks. Abundant down and dead heavy fuels from Helene and recent ice storms will further become fire receptive, tilting the odds towards a potentially busy dormant season in the region. Drought is presently worst in northern Virginia, but as observed in spring, it only takes 10-14 days of dry weather followed by dry and windy conditions to produce large fires in the region's complex terrain. Increasing significant fire potential will steadily move into lower elevations by November, from Virginia to the Carolinas and eastern Georgia, especially within the footprint of Helene's most severe destruction. Unless consistent high relative humidity or frequent precipitation impacts the region through the period, above normal significant fire potential should continue until green-up occurs in spring due to the fuel loading and access issues caused by Helene.

The central and eastern Gulf coastal plain and areas farther north in Alabama and Georgia have been abnormally dry the last 30 to 60 days and could enter the fall fire season with worsening drought. Uncertain tropical impacts are the main source of lower confidence from the Lower Mississippi Valley into the Southeast the next several months. Despite model guidance and climatology favoring the Florida Peninsula for rainfall associated with tropical systems or their remnants in October and November, all it would take is one storm tracking farther north to put a dent in the region's worsening drought. If tropical activity avoids the region, fire activity will likely increase across Louisiana into Mississippi and Alabama during October and reach a peak during November. Areas with excess dead pine fuels from 2023's drought, along with fuels from multiple major hurricane landfalls the last decade will tilt the odds towards above normal significant fire potential across these states in November. Predictive Services Areas along the Gulf Coast could see activity pick up during this period if drier weather prevails. If tropical activity avoids Florida

altogether, this winter's La Niña will likely bring about rapid depletion of soil moisture that may result in increasing winter fire risks and a short window for prescribed fire.

Arkansas into Kentucky, Tennessee, northern Mississippi, northern Alabama and the Georgia mountains have benefitted from recent heavy rainfall, putting a likely temporary dent in drought that developed over the summer. These areas are favored to see a dry October and November, so at least normal significant fire potential can be expected during the peak of the fall fire season. Should drought rapidly intensify, some of these areas may need to be considered for above normal significant fire potential during November given the longer-term rainfall deficits.

All in all, notable fuel concerns across broad areas, along with a developing La Niña should make for an active fall and winter dormancy fire season across the Southern Area.

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