

National Significant Wildland Fire Potential Outlook

Predictive Services National Interagency Fire Center

Issued: December 1, 2020 Next Issuance: January 1, 2021



Outlook Period – December 2020 through March 2021

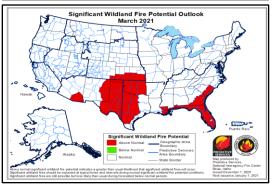
Executive Summary

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.









Large fire activity diminished over the West in November continuing the trend from late October. Precipitation and colder temperatures spread farther south across the West leading to increasing fuel moisture and greatly reduced large fire potential through mid-month. However, by the end of November, most of the United States (US) experienced below normal precipitation with average to above normal temperatures leading to a decrease in fuel moisture, especially across the southern tier of the US.

During November, several significant wildfires occurred along the Sierra Front and across the Plains. On November 17 during a downslope wind event, three rapidly spreading significant wildfires emerged along the Sierra Front, and a day later, several large wildfires ignited on the central and southern Plains. Multiple offshore wind events developed across California, including Santa Ana winds, with the strongest around Thanksgiving. While initial attack increased, no significant large fires were reported.

La Niña and current fuel conditions remain the principal drivers of significant fire potential into spring. Drought conditions are expected to continue for much of California, the Great Basin, and the Southwest into the winter with drying expected to increase across portions of the southern Plains and Southeast. Offshore wind events will continue to be a concern across southern California in December given the dry fuels and lack of forecast precipitation through early December. Wind events may also drive short duration large fire activity in portions of the Great Basin, Southwest, and northern California, especially at lower elevations.

Warmer and drier than normal conditions are expected across the southern tier of the US this winter and into spring due to La Niña and other large-scale climate forcing. As a result, drought intensification and expansion across portions of the Plains, Southwest, southern California, Texas, and along the Gulf coast into Georgia are likely. Above normal significant fire potential is forecast in portions of the Southwest, southern and central Plains, and the Southern Area, especially near the Gulf and Atlantic coasts this winter into spring due to these warmer and drier conditions. Strong wind and low relative humidity (RH) events could occasionally increase significant fire potential in portions of the Great Basin as well.

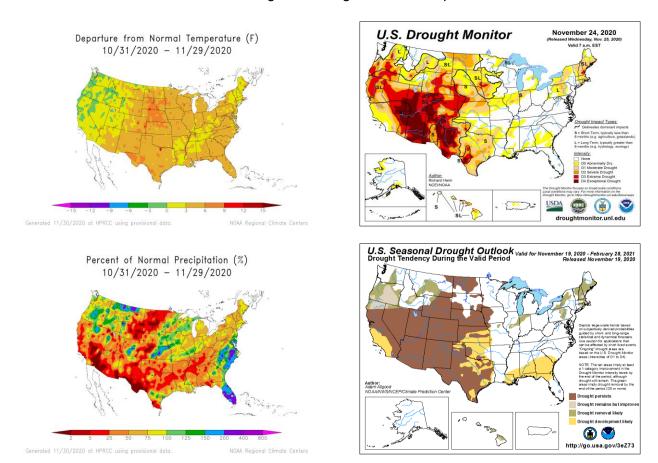
Past Weather and Drought

After a warm start to November, an upper-level trough dropped south and deepened over the West at the end of the first week in November. This brought below normal temperatures and widespread precipitation, including heavy snow in the mountains, across much of the West. This significantly lowered fire danger across the West and ended fire season for many high-elevation areas in the Intermountain West. Another round of precipitation, including heavy mountain snow, occurred around mid-month for most of the Pacific Northwest, Northern Rockies, and into the Sierra and portions of the Colorado Rockies. However, the southwest quarter of the West missed most of this precipitation. Snow water equivalent and snowpack were generally above average across the West until the last seven to ten days of November with warmer and drier conditions lowering values.

Remnants of Hurricane Eta dropped significant rainfall in South Florida and into portions of the Carolinas and Mid-Atlantic. Heavy rain also fell late in the month across portions of the Gulf states. However, below normal to record low precipitation was observed across the southern tier of the contiguous US (CONUS) and on portions of the High and Northern Plains. Warmer than normal temperatures were generally observed across the CONUS except in portions of the Pacific Northwest, Northern Rockies, and Great Basin.

Multiple high-risk wind events occurred during November, including multiple Santa Ana wind events. Three significant fires ignited on November 17 along the Sierra Front in far eastern California and western Nevada during an intense downslope windstorm. Wind speeds gusted in excess of 80 mph and RH fell below 15% as the Laura 2, Pinehaven, and Mountain View Fires rapidly spread near Doyle, CA, Reno, NV, and Walker, CA, respectively. A day later, several large wildfires emerged on the southern and central Plains as dry and windy conditions overspread the region.

Strong offshore wind events affected northern and southern California the week of Thanksgiving with Santa Ana winds peaking on Thanksgiving and the day after. East-northeast winds gusted to more than 100 mph on the ridgetops in the Sierra with wind gusts of 60-70 mph and RH below 15% in the mountains of southern California. Initial attack increased, but no significant large fires were reported.



Left: Departure from Normal Temperature (top) and Percent of Normal Precipitation (bottom) (from High Plains Regional Climate Center).

Right: U.S. Drought Monitor (top) and Drought Outlook (bottom) (from National Drought Mitigation Center and the Climate Prediction Center)

Weather and Climate Outlooks

La Niña continues with below average sea surface temperatures (SSTs) in the Equatorial Pacific Ocean. The Climate Predicter Center (CPC) forecasts a 95% chance that La Niña conditions will persist through the winter and a 65% chance they will continue into May. La Niña will continue to significantly impact the winter fire season in California by producing persistent drier than average conditions along with a possible higher frequency of wind events. Warmer and drier conditions are also likely to continue for much of the Great Basin and Southwest this winter and potentially into the spring. Drier than normal conditions are also likely to develop across portions of the Southern Area this winter and into spring.

Geographic Area Forecasts

<u>Alaska</u>: Normal fire potential is expected in Alaska for the winter. With snow covering most of the state, Alaska is out of fire season.

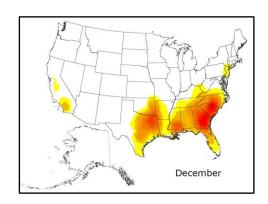
The US Drought Monitor shows abnormally dry conditions over the northwest coast and parts of south-central Alaska, including Kodiak, the Kenai Peninsula, and the Chugach Mountains. However, Alaska is now covered in snow, so cold temperatures and snowfall will prevent fires from being an issue. Weather in Alaska in December is typically well below freezing in most areas, with snow likely to remain through March or April. La Niña, which is expected throughout the winter, typically brings a cool but somewhat dry winter to much of Alaska.

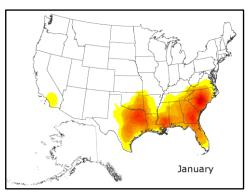
With the winter's permanent snowpack generally established over the burnable areas of Alaska, fire season is over for the winter, and conditions are expected to be normal through March.

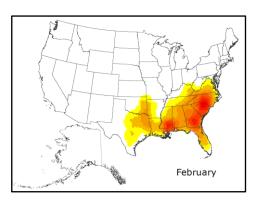
Northwest: The Northwest Geographic Area is out of fire season. The risk of large, costly fires between December and May is historically very small. "Normal" (i.e., low) significant fire potential is expected.

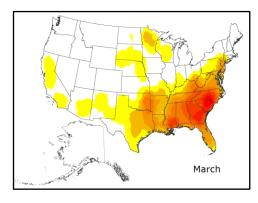
A series of Pacific frontal systems moved across the Northwest Geographic Area in November bringing rain and cooler weather. Temperatures across the Northwest Geographic Area were above normal for much of early November but gradually fell to near or below normal for western Washington and northwest Oregon. Farther inland and in southwest Oregon, temperatures were near normal for the month. Precipitation was above normal for much of Oregon and western Washington. Far eastern Washington recorded less than normal precipitation.

Initial attack activity was light for the region in November with no new large fires reported in November. The geographic area is at Preparedness Level 1. Energy Release Component (ERC) values fell to near zero by late November west of the Cascades. East of the Cascades, ERC values hovered near normal for late November for both Oregon and Washington.









Normal fire season progression across the contiguous U.S. and Alaska shown by monthly fire density (number of fires per unit area). Fire size and fire severity cannot be inferred from this analysis. (Based on 1999-2010 FPA Data)

Climate outlooks suggest winter and spring is likely to be colder and wetter than normal over much of the Pacific Northwest. This will keep significant fire concerns very low to nonexistent through the spring.

Northern California and Hawai'i: For the North Ops region from December through March, significant fire potential is normal in all areas. Normal is defined as less than one large fire per Predictive Service Area per month. Significant Fire Potential in Hawai'i is Normal from December through March, although some lee side locations may see drought conditions persist longer into winter.

Occasional light precipitation reached the North Ops region beginning late in the first week of November and has received enough precipitation to see fuels indices modify significantly. As of late November, fuels indices in many areas were near normal and comparable to normal levels of April and May. Enough precipitation is expected into the middle of December to prevent fuels indices from moving back toward extreme levels. Additionally, north-northeast and offshore wind events that would hasten the drying of fuels and bring a return to higher fire danger are expected to be brief and infrequent into the middle of December. Due to longer, colder nights, frequent strong inversions, and relatively high fuel and soil moisture, three or more consecutive days of moderate to strong north-northeast and offshore winds would be necessary to bring lower elevations back to higher fire danger, and outlooks currently do not show such a pattern.

Overall, the outlook for North Ops from December through March is for warmer and drier than normal conditions. However, even near normal precipitation is not necessary to keep fire potential low – only occasional light precipitation with no long duration moderate or stronger north-northeast and offshore wind events. Another winter-spring fire weather concern occurs when more than two weeks of no precipitation occurs prior to spring green-up. Middle elevations that are snow-free and have fuel loading of litter and dormant fuels can see fire potential increase during windy weather. This situation is more of a shorter-term forecast issue and not seen multiple weeks in advance.

SSTs surrounding the Hawai'ian Islands are warmer than normal, and the warm SSTs are expected to continue through March, leading to above average temperatures in the region. Rainfall has been well below average in all areas this summer and this fall, leading to Abnormally Dry and drought conditions across the entire region. A weak La Niña pattern is expected to continue into the spring. The outlook calls for rain events to become more common beginning in December, leading to improving drought conditions.

<u>Southern California:</u> Significant fire potential will be above normal mainly across the lower elevations of southern California in southeastern Santa Barbara County, Los Angeles County, and Orange County in December. Otherwise, expect normal large fire potential across the region through March.

The weather pattern across central and southern California was progressive in November, with a series of upper-level Pacific troughs and ridges moving into the region. A strong ridge of high pressure brought well above normal temperatures November 1-5 and again November 15-16. Temperatures were 10-20°F above normal during these periods and record daily high temperatures were set on November 4-5 and November 16. A couple of deep low-pressure areas dropped south from the Pacific Northwest bringing temperatures that were 15-25°F below normal from November 7-8 and many record low maximum temperatures were set. These two areas of low pressure brought scattered showers and thunderstorms to the region November 7-8. Most of the Sierra, including its foothills, and most mountain locations from San Bernardino County to San Diego County received 0.5-2 inches of rainfall during this time. Elsewhere, most locations received less than a half inch of rainfall. Most of the High Sierra and higher elevations of San Bernardino and Riverside Counties received a foot of snow. A couple of weak Pacific troughs brought scattered showers across central California, mainly from the Monterey-Fresno County line northward, on November 13 and November 17-18. Most central California locations received less than a quarter inch of rainfall with each of these troughs, but 0.5-2 inches of rain was observed over the central Sierra and the Big Sur Coast. The snow level across the Sierra rose to between 7,000 and 8,000 feet with these two troughs. For most of the region, temperatures were slightly above normal with below normal precipitation in November. Weak Santa Ana wind events occurred on November 5 and November 15-16.

Drought is starting to increase across interior central and southern California with the desert areas bordering Nevada and Arizona now under severe to extreme drought due to the lack of monsoonal showers and thunderstorms this past summer. Interior parts of central California and most desert locations of

southern California are experiencing Moderate drought. Coastal areas and the coastal valleys of central and southern California and the mountains from Kern County to San Diego remain drought free. There has been a significant increase in the 1000-hour dead fuel moisture in November and almost the entire area is now between normal and the 10th percentile. There was also a substantial increase in the 100-hour dead fuel moisture and now most of the region is near or slightly below normal for this time of year. Live fuel moisture has increased slightly but remains very low and mainly between 50% and 70%.

The weather pattern will likely remain progressive from December through March. However, the main storm track will likely continue to be focused over the Pacific Northwest and northern California in December with above normal SSTs in the Gulf of Alaska and well below normal SSTs continuing over the Equatorial Pacific. High pressure aloft will oscillate in the Eastern Pacific allowing a few areas of low pressure to drop southward when the high pressure migrates farther west. Depending on their tracks, these low-pressure areas will either bring scattered cold showers to the area or strong offshore winds to southern California. When the high pressure aloft is just off the California Coast, it will create well above normal temperatures regionwide and lighter offshore winds across southern California. Wetter storms will be more likely during the winter months as the high pressure off the California Coast is expected to weaken, and the high pressure will most likely weaken as forecasts suggest SSTs in the Gulf of Alaska will cool and SSTs over the Equatorial Pacific will warm.

Cured fine fuels along with little precipitation will allow for above normal significant fire potential from southeastern Santa Barbara County to the lower elevations Orange and Riverside Counties in December during Santa Ana wind events. The higher elevations of San Bernardino and Riverside Counties and most of San Diego County have received enough rainfall to reduce significant fire potential back to near normal. While most of central California received well below normal precipitation, its large fire potential will be near normal in December because this area rarely receives strong winds with low humidity this time of year. Significant fire potential is expected to be near normal January through March regionwide as heavier and more frequent periods of precipitation become more likely.

<u>Northern Rockies:</u> Significant wildland fire potential for the Northern Rockies Geographical Area is expected to be normal/out-of-season for the period from December through March.

The first week in November brought extreme fluctuations with a flip from very cold and snowy to very warm and windy. This was followed by a split from west to east, where there were much cooler and wetter conditions west of the Continental Divide with a series of weak upper-level trough passages. However, record warmth and dryness continued with Chinook wind events along the eastern slopes of the Continental Divide. These events accelerated snow melt between weather systems and kept fuels exposed to the winds.

Severe drought in North Dakota expanded into northeast Montana, while a small sliver of Extreme drought developed in southeast Montana surrounded by Severe drought (D2) according to the US Drought Monitor. In the southern half of Montana, Moderate drought (D1) persists. The only areas of the Northern Rockies that do not reflect abnormally dry conditions are in the northern half of Idaho and northwest and northcentral Montana.

In the western PSAs high elevation snowfall and rain/snow events at lower elevations provided adequate precipitation to alleviate fuel dryness. These events occurred about every three days in November with the mountains receiving terrain-enhanced precipitation, but lighter amounts in the valleys. East of the Continental Divide, conditions were much drier and freeze-dried fuels remained exposed to several wind events. Precipitation was well-below average in the eastern PSAs due to persistent downslope flow from a progressive, westerly pattern.

The Northern Rockies Geographical Area has been at Preparedness Level 1 since mid-October with minimal fire activity and fire potential. During a particularly warm, dry, and windy episode the second week of November in southwest and south-central Montana, there were several large fires on the Beaverhead-Deerlodge and Custer-Gallatin National Forests (PSAs 9 and 12, respectively). Those fires were short-

lived as precipitation and successful suppression operations mitigated fire spread on those incidents. Since then, there have been favorable conditions for prescribed burning, especially pile burning.

Based on operational forecasts and CPC outlooks for the first week of December, persistent drying may continue in eastern Montana and North Dakota, while the western half of the Northern Rockies should maintain adequate precipitation. Thereafter, NOAA's 30-day and seasonal outlooks for the December – March period depict colder and wetter than normal conditions for all of the Northern Rockies, which should eliminate the west-east split and help relieve the persistent dryness in the eastern PSAs. One of the underlying factors in these outlooks is the strengthening La Niña pattern that is anticipated to continue into spring. Based on these outlooks and the most similar analog year (i.e., 2017), normal significant fire potential is expected for the outlook period.

<u>Great Basin:</u> Normal significant fire potential is expected for the Great Basin geographic area December through March. However, depending on moisture, we will have to continue to monitor the southern half to two-thirds of the Great Basin when cold fronts move through as there could be periods of elevated fire potential during wind events, especially due to the dry and dormant fuels.

Temperatures across the Great Basin have been near to below normal over the past 30 days as cold fronts have swept through the region. Precipitation over the last 30 days has been well below normal across the southern half of the Great Basin, and only near or slightly above normal over parts of Idaho, Wyoming, and northwest Nevada due to a strong cold front dropping south in the middle of November bringing wetting rains and mountain snowfall. No precipitation has occurred over parts of far southern Nevada in months.

The drought has intensified to extreme to exceptional drought over much of Nevada (except far northern and western portions of the state), Utah and the Arizona Strip due to the abnormally dry conditions from July through November due to the lack of monsoon moisture, and minimal fall moisture. Moderate to localized extreme drought also is occurring over a small portion of south-central Idaho due to summer dryness and in areas where cold frontal precipitation has been lower. These drought areas are expected to persist into the winter across Nevada, Utah, and the Arizona Strip and improve across Idaho due to recent moisture and likely additional moisture this fall and winter as cold fronts largely target the northern half of the Great Basin. La Niña is expected to strengthen through the winter with the storm track targeting northern areas of the Great Basin more often through the fall/winter. The storm track may dip farther south into Nevada by January, however most above normal precipitation through the winter is expected to be across Idaho and Wyoming into far northern Nevada and Utah.

Fine fuel loading remains 100-300% of normal across parts of Nevada, Utah, the Arizona Strip, and southern Idaho, especially in parts of southern and eastern Nevada, western Utah, and the Arizona Strip. Higher fuel loadings have been more sporadic across parts of western Nevada, southern Utah, and Idaho. Most of the higher fuel loadings over the northern half of the Great Basin are due to dead carryover fuels. New fine fuel growth was sporadic and low in many areas over the northern half of the Great Basin. Southern areas of the Great Basin saw new fine fuel growth earlier this year due to a wetter winter and spring.

Hot weather occurred periodically July through October with periods of record heat, along with breezy winds at times and very dry conditions. Cold fronts brought significant precipitation during the first half of November to Idaho, Wyoming, and parts of the northern half of Nevada and the higher terrain of Utah. Very strong winds also accompanied a mid-November cold front prior to the moisture arriving, which drove several significant fires along the Sierra Front. Fuels remain very dry over the southern half of the Great Basin where ERCs are still above normal and near record levels for the time of year, although much lower than critical values. However, fuel moisture has come up and ERCs have dropped significantly over the northern and western half of the Great Basin due to the most recent cold front. Fuel moisture is much higher in Idaho and Wyoming due to more widespread showers, prolonged higher RH, and cooler temperatures.

Fire activity in the Great Basin slowed considerably in November. However, a strong wind event on November 17 drove several new large fires along the Sierra Front that were non-natural starts. Three large fires in particular, the Laura (near Doyle, CA), Pine Haven (Reno, NV), and Mountain View (Walker, CA)

were catastrophic and burned several residences. These fires only lasted around 24 hours, but were fast moving with the wind and significant. These types of fires could occur again in December and January during windy periods in areas that experience long term drying.

Dry and seasonally warm conditions will end November with storms returning in December bringing precipitation to the northern half of the Great Basin. As cold fronts return, breezy to strong winds are likely, and this will be a concern in areas that have prolonged dryness. At this time, the southern half of the Great Basin is expected to be drier than normal heading into the winter months, while precipitation may start increasing over the winter in northern areas toward Idaho and Wyoming as La Niña strengthens.

Fire activity typically decreases significantly through October and is minimal from November through winter. Moisture and colder weather that has affected most of Idaho and Wyoming will likely be enough to minimize any significant fire concerns through winter. While no significant moisture is expected to end fire season across southern and eastern Nevada, southern Utah, and the Arizona Strip, longer nights and shorter days will continue to limit fire activity and keep most new fires in December without wind to a burning period. Therefore, normal significant fire potential is expected December through March.

These drier winters typically increase the likelihood of non-natural starts that could be driven by strong winds for a burning period or two in more heavily populated areas. Therefore, additional events similar to the November 17 fires that affected the Sierra Front could occur again in December or January, depending on moisture. This will need to be monitored during each event through winter in areas where drier weather persists, especially in areas of above normal or more continuous fine fuels.

<u>Southwest</u>: Normal significant fire potential is expected across the Southwest Geographic Area in December and January with above normal significant fire potential in portions of west Texas and eastern New Mexico (i.e., PSAs 14S, 14N, 13) in February and March. Southeast Arizona and far southwest New Mexico (i.e., PSA 6S) is forecast to have above normal significant fire potential in March.

Over the past two months high temperatures have been mainly 6-9°F above normal across most areas along and west of the New Mexico central mountain chain with temperatures generally from 4-6°F above normal on the High Plains. Precipitation is near to below average across most of the region and 25% of average or below across most areas west of the Continental Divide with the driest areas across far southwest Arizona and most of southwest Texas. Some areas along and east of the Continental Divide and portions of far northern New Mexico near the Colorado border have received some precipitation recently. Overall, though, precipitation has averaged around 25-50% of normal for much of New Mexico over the past two months.

A moderate La Niña continues, and this usually results in normal to above normal temperatures through winter. Cold frontal passages will become more likely and regular as early winter arrives with some brief respites from the warmer than normal conditions. Nevertheless, below normal precipitation is still expected across the Southwest Area through winter.

Long range outlooks indicate normal to warmer than normal temperatures and dry conditions throughout winter. A negative Pacific North American (PNA) pattern could arrive periodically during the next few months offering at least brief periods of windy and cooler conditions with a chance of precipitation focused across northern Arizona and New Mexico and on the High Plains.

Normal significant fire potential is expected for the next couple of months. The western half of Arizona could experience occasional increases of fire activity with critical north wind events. However, the combination of shorter days and colder overnight temperatures will likely preclude any significant issues through the month of January.

As February and March arrive, areas of above normal significant fire potential are expected to evolve across the plains of New Mexico and much of west Texas, given the continuation of the expected generally drier and warmer than normal conditions. There will be concerns across the plains in the Southwest Area during this timeframe with wind driven fire events. As March arrives, concerns will spread to over the

southern tier of both New Mexico and Arizona as the overall drier winter combines with winds from passing upper-level troughs.

Rocky Mountain: Although drought is still in place across the Rocky Mountain Area (RMA), and the geographic area was warmer than average during much of November, occasionally cool conditions and limited precipitation has kept the risk for new large fires near normal. Near normal significant fire potential is forecast across the geographic area during December. Warm and dry long-range forecasts are expected to result in above normal significant fire potential over southeast portions of the RMA January – March.

Warmer and drier than average conditions developed during November across the RMA, especially across eastern portions of Wyoming and Colorado and onto the Plains. The US Drought Monitor portrays little change from last month with the Exceptional drought west of the Continental Divide in Colorado and Extreme drought in much of Colorado, central and eastern Wyoming, and western Nebraska. Large fire activity has been near normal, which is characterized by very few or no large fires with most fires short duration and wind-driven on the Plains.

This time of year, the fuels most available to burn are in brush and grass regimes across the Plains and are available to burn during warm, dry, and windy conditions. These conditions occur periodically with increasingly frequency during the early spring pre-green-up period of February through March.

Most precipitation in the RMA is likely to occur during the latter portion of November across Colorado into Kansas and eastern portions of Nebraska. Otherwise, dry conditions with mild temperatures are predicted during the first week of December. CPC forecasts show warmer and drier than normal conditions across southern portions of the geographic area through the winter and early spring with northern portions of the area cooler and wetter than normal.

Although drought is still in place across the RMA and the geographic area was warmer than average during much of November, occasionally cool conditions and limited precipitation with developing higher elevation snowpack has kept the risk for new large fires near normal. An active weather pattern is forecast in the short term during the latter portion of November keeping conditions cool with areas of precipitation and to a lesser extent through the first week or two in December. Normal significant fire potential is forecast to continue across the geographic area during December and normal fire activity in December is minimal across the RMA. Warm and dry long-range forecasts are pointing towards above normal significant fire potential over southeast portions of the RMA during January – March with large fires historically most common during the pre-green-up February – March period.

<u>Eastern Area</u>: Near normal fire potential is forecast across the majority of the Eastern Area into March. However, if the wetter than normal conditions do occur across the southern tier February into March, overall fire potential may be curtailed over these areas through the early spring season.

30-day soil moisture and precipitation anomalies were below normal across parts of northwestern Minnesota and northern New England towards the end of November. Longer-term drought conditions were indicated across parts of central Pennsylvania, western Iowa, and New England.

Cooler temperature trends are forecast over much of the Eastern Area into January. The cooler than normal trends are forecast to persist over parts of the Great Lakes February into March with warmer than normal trends across the eastern states in February.

La Niña ENSO conditions are expected to strengthen through the winter creating drier than normal conditions across the southern tier of the Eastern Area into January. Wetter trends are forecast to develop across much of the Eastern Area in February, lingering over the southern tier into March.

Near normal fire danger indices and fuel moisture were indicated across the majority of the Eastern Area towards the end of November. Precipitation events increased across drier portions of the geographic area through the end of November, including parts of the Northeast and Mid-Mississippi Valley. Fuel moisture

may remain below normal across northwestern Minnesota into December if precipitation events do not increase over this area.

The late fall fire season across the southern tier of the Eastern Area is forecast to gradually end through the end of November with precipitation events expected to curtail fire potential.

<u>Southern Area</u>: Overall, a general upward trend back to seasonal (i.e., average) levels is expected for most of the Southern Area through the rest of fall and then mostly seasonal fire potential through winter. While a warmer and drier than average winter is expected due to the ongoing La Niña, periodic short periods of post cold frontal dry air will likely produce episodic elevated to high fire danger. Exceptions to seasonal (i.e., average) fire potential will be portions of Oklahoma and Texas where drying is already occurring and across the southeast state area where dryness is likely to amplify over winter. Should La Niña persist and be stronger than expected into early spring, above normal significant fire potential could develop from the central and southern Gulf states to the Mid-Atlantic and Florida. However, the forecast long-range pattern should result in normal to above normal precipitation during February and March.

For the Southeast, only spotty areas of D0/Abnormally Dry dot the region with the largest area affecting part of southeast Georgia. Otherwise, high rainfall from this year's above normal tropical activity is still having lasting positive impacts to soil and fuel moisture, although a La Niña induced pattern of dryness is beginning to lower fuel and soil moistures. Dry conditions expanded and intensified from west Texas and Oklahoma into more eastern areas of these states. Rain totals since September are now four to eight inches below normal (15-35% of normal) across primarily west and northwest Texas where D3/D4 drought exists. Drought continues across west Texas periods of elevated to high fire danger are expected.

Fire activity remains mostly seasonal to below seasonal levels with light initial attack and smaller fires. Short-duration dry and windy conditions have led to occasional increases in fire activity and larger fires, especially in areas with cured fuels due to normal frosts and freezes.

Fuel moistures have dropped back to normal from very high levels during early fall. With a drying trend expected for the rest of the year, particularly for Oklahoma, Texas, and across southeastern areas of the Southern Area, fuel moistures are expected to continue declining. Given the impending onset of winter temperatures, a post leaf drop fuels environment, and high soil moisture values, the majority of fire activity will likely occur in fine fuels, which respond quickly to dry and windy weather.

With La Niña continuing through winter, periods of elevated to high fire danger are expected in portions of the Southern Area. Normal to above normal significant fire potential is forecast through March in Oklahoma and Texas with periodic increases of initial attack in the Deep South. Precipitation events are expected with the best chances in the Ohio and Tennessee Valleys and the western slopes of the Appalachians, which will significantly reduce the fire threat. An early start to fire season in Texas is likely, and conditions will be closely monitored.

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 Fire Center at (208) 387-5050 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