



National Significant Wildland Fire Potential Outlook

Predictive Services
National Interagency Fire Center

Issued: August 1, 2026

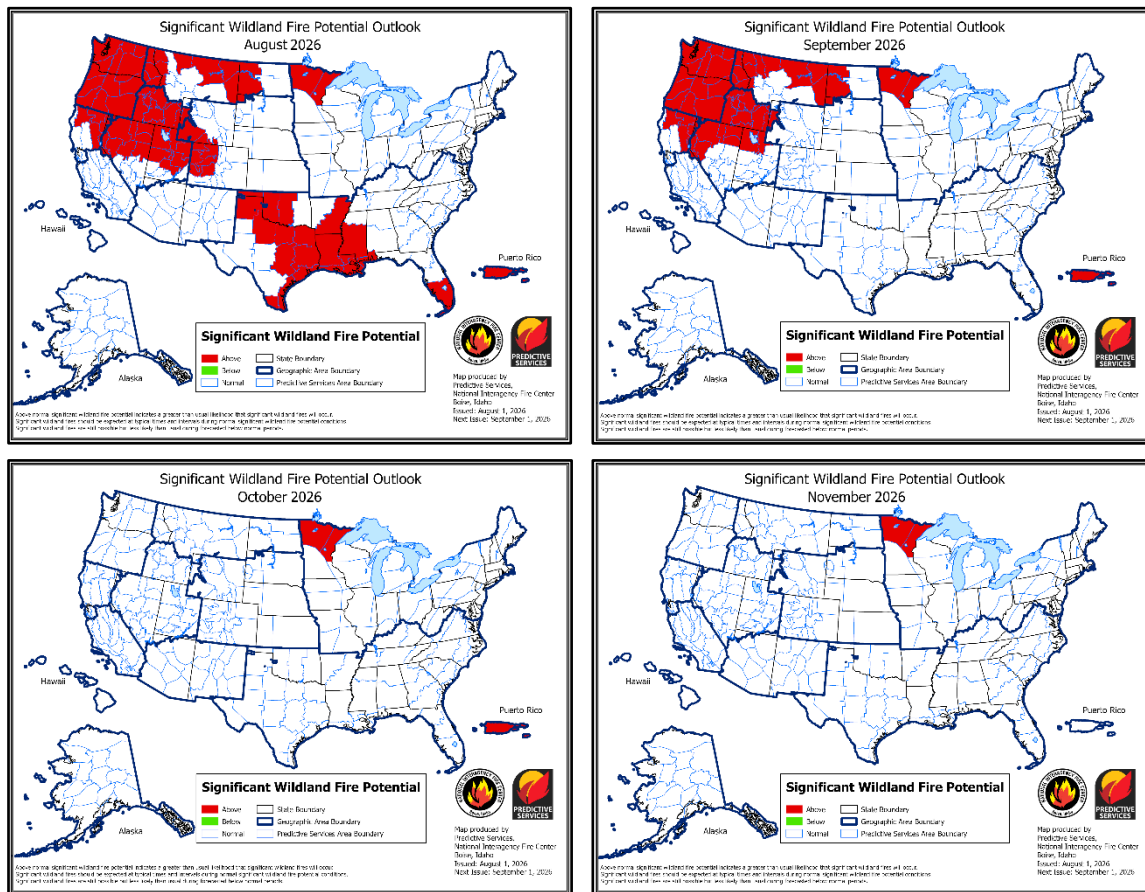
Next Issuance: September 1, 2026

Outlook Period – August through November 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 continued to slowly increase the first half of July, but a rapid acceleration in activity was observed beginning July 14 through the end of the month due to two major lightning events in the northwestern U.S. The Great Basin, Rocky Mountain, and Southwest areas remained active through the first half of July before the North American Monsoon began and reduced activity for the rest of the month although the northern Great Basin observed an increase in activity at the end of July. The Eastern Area had a big increase in activity early in the month that persisted most of the month, but the Northwest had the greatest increase due to the lightning events. With the significant increase in activity mid-month and beyond, the National Preparedness Level increased to five (on a scale of 1-5) on July 18. As of July 31, over 6 million¹ acres have burned across the country, which is 165% of the previous 10-year average. So far this year 44,004 wildfires have been reported, also above average, at 128%.

July precipitation anomalies were below normal across most of the West Coast into northern Idaho and northwest Montana, with mixed anomalies observed in most of the Intermountain West. Precipitation was also below normal across most of the Plains, except for the Texas Hill Country, which was well above normal and observed extensive flooding the first half of the month. Rainfall was less than average for most of the northern Gulf Coast into coastal South Carolina and Florida, but mostly above normal from North Carolina to southern New England. Precipitation was below normal in northern New England, with mixed anomalies in the Great Lakes. Overall drought decreased across the country, but drought still covers nearly 48% of the U.S. Drought improvement occurred in the Tennessee Valley to the Mid-Atlantic, while also improving on much of the central and southern Plains, southern Arizona, and central Idaho into Montana. Drought persisted, intensified, or developed in the Northwest, Great Basin, Colorado, and northern New Mexico. Rapid drought onset was observed in the Dakotas to northeast Minnesota and northern Wisconsin.

Climate Prediction Center and Predictive Services outlooks issued in late July forecast temperatures that are likely to be above normal across the West through much of the central and southern Plains into the Mid-Atlantic and Southeast. There is no favored outcome for temperatures from North Dakota to the Northeast and most of Alaska for August while temperatures are likely to be above normal in the fall for Alaska. Below normal precipitation is likely in much of the southern Plains for August, and for much of the Northwest August through November. Precipitation is likely to be above normal for the Southwest and most of the Great Basin in August, expanding into much of the central and southern High Plains for the fall. Above normal precipitation is also expected in the Southeast beginning in October. Alaska is also likely to be wetter than normal through November.

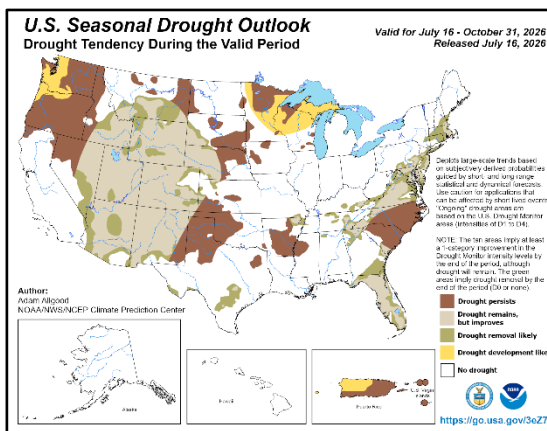
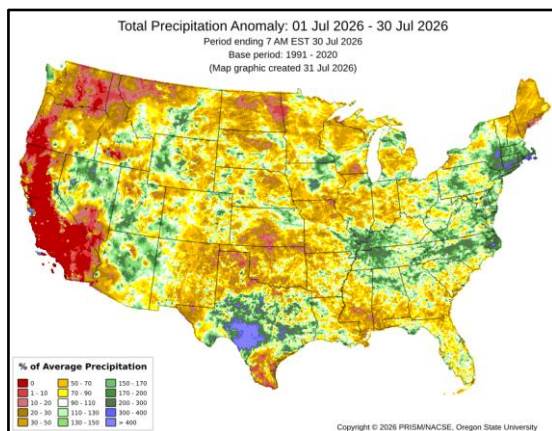
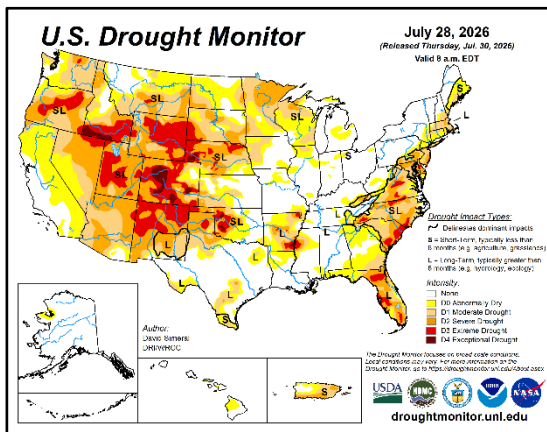
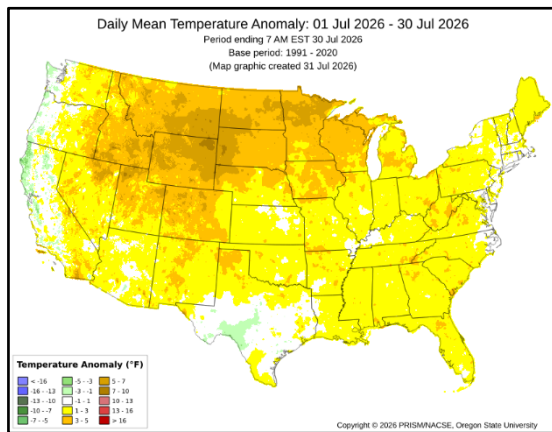
From the current and past weather, as well as forecast conditions, August significant fire potential is forecast to be above normal across most of the northwestern U.S., from central Utah, northwest Colorado, western Wyoming, and northwest Montana westward to the Pacific Northwest coast and northeast California. Above normal potential is also forecast for much of the northern Plains, northern Minnesota, southern Plains, Lower Mississippi Valley, south Florida, and Puerto Rico and the U.S. Virgin Islands. For September, potential is forecast to return to normal in much of the Southern Area, western Colorado, and southwest Wyoming. However, above normal potential will persist across northern Utah, northern Nevada, northeast California, Oregon, Washington, Idaho, northern Montana, western North Dakota, northern Minnesota, Puerto Rico, and the U.S. Virgin Islands. In October, most areas will have normal potential except for northern Minnesota, Puerto Rico, and the U.S. Virgin Islands, which will remain above normal. In November, all areas of the country will have normal significant fire potential except northern Minnesota, where above normal potential will persist.

Past Weather and Drought

Temperatures in July were above normal for most of the contiguous U.S., including the northern Rockies, northern Plains, and northern Minnesota where temperatures were 3-7°F above average. Near to slightly below normal temperatures were observed on the West Coast and much of central and south Texas. Temperatures in Alaska were below normal and near normal for much of Hawai'i except the Big Island, which was above normal.

Precipitation in July was above normal along the East Coast from North Carolina to southern New England, with above normal precipitation also stretching back to the Tennessee Valley. Precipitation more than 400% of normal occurred in the Texas Hill Country, mainly at the beginning of the month when extensive flooding occurred. Below normal precipitation was found just to the north from the Red River Valley to the Canadian border, although small areas of near to above normal amounts also occurred on the Plains. Areas of above normal precipitation occurred in Arizona, Nevada, Utah, western Wyoming, and south-central Montana due to a persistent monsoon surge from July 12-26. However, precipitation was below normal along much

of the West Coast except for the Olympic Peninsula of Washington. Below normal precipitation also occurred in northern Idaho to northwest and north-central Montana. Precipitation in the Great Lakes was mixed, with areas of either above or below normal precipitation depending on how many thunderstorms moved through each location. Precipitation was below normal for northern New England and the Alaska panhandle, with above normal precipitation for southwest and south-central Alaska. Most of Hawai'i received near normal rainfall, but Kauai and the eastern third of the Big Island were above normal.



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).

Several notable events resulted in an increase in fire activity during July. Very dry conditions persisted in the Four Corners with relative humidity in the single digits during the day and 10-30% at night. Occasional southwest breezes also occurred with the dry conditions with several fires in Utah and Colorado burning very actively, and the Babylon Fire in southeast Utah making several large runs. In addition, dry lightning in northern Minnesota July 6 was followed by record breaking heat of 100-105°F and breezy southwest winds resulting in several large fires exceeding 10,000 acres in the Boundary Waters Canoe Area Wilderness. Precipitation occurred in these areas mid to late July that eased the conditions.

In the northwestern U.S., persistently very dry conditions were present when the first monsoon surge moved into Oregon and Washington July 12-14. Scattered mixed wet and dry thunderstorms resulted in over 300 fires from July 14-16 and at least 30 large fires exceeding 1,000 acres. This event was followed by a second dry lightning event July 22-23 that resulted in another 19 fires greater than 1,000 acres as of the end of July. These events were followed by a strong southwest wind event July 24-25 that resulted in over 500,000 acres burning in the two states. At the end of July, the monsoon quickly waned, with two short-duration heat waves in the

northern Rockies. Occasional mixed wet and dry thunderstorms during this period resulted in increased activity in the northern Rockies across much of Montana and northern Wyoming.

Overall drought decreased across the U.S. during June but nearly 48% of the country remains in drought as of July 28. Drought developed and/or intensified in portions of the Northwest, southeast California, northern New Mexico, and central Colorado. Drought also rapidly developed across the northern Plains, northern Minnesota, and northern Wisconsin. Drought improved over the past month in east-central Idaho and much of Montana, as well as central Arizona and northeast Nevada. Much more substantial drought improvement was noted across Texas and Oklahoma through Arkansas, Kentucky, and Tennessee into the Mid-Atlantic. Drought also improved across the central High Plains.

Areas of extreme to exceptional drought also decreased, with 10% of the country in these categories. Extreme to exceptional drought is most widespread across the eastern Great Basin and central Rockies, with smaller areas in central Oregon, north-central Washington, Nebraska, Oklahoma, Arkansas, Florida, Mississippi, South Carolina, North Carolina, Virginia, and the Delmarva Peninsula.

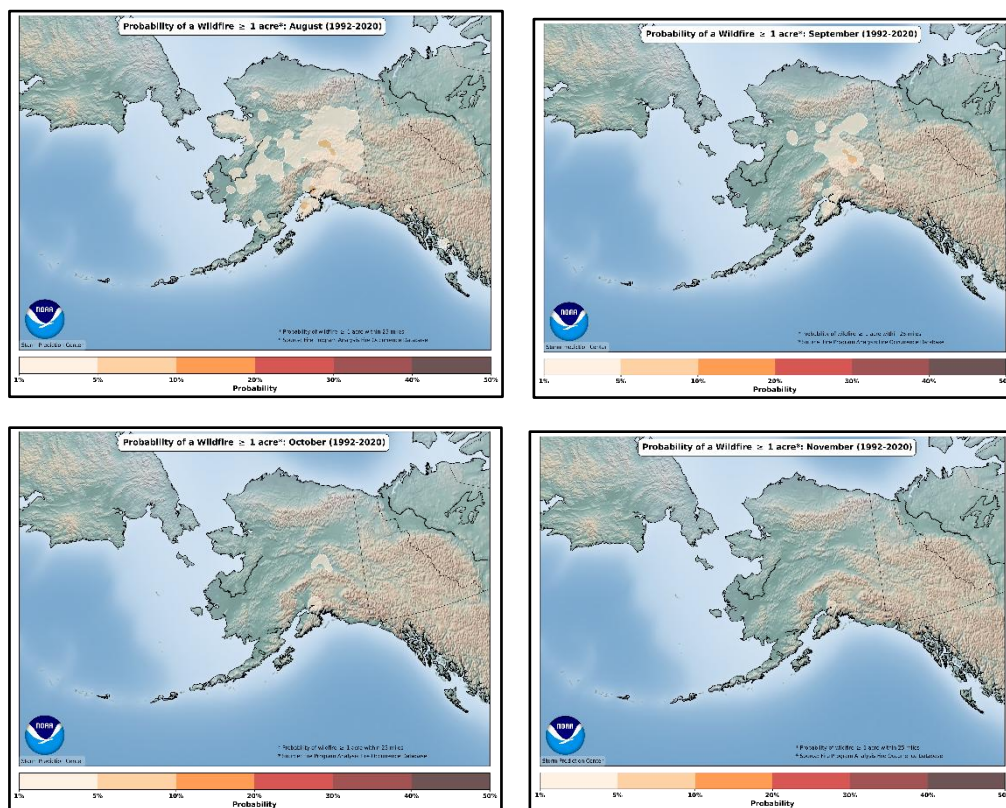
Drought is expected to persist and expand across Northwest through October, with drought development also expected on much of the Plains into the Upper Great Lakes where it does not currently exist. Drought is forecast to improve along the East Coast and in much of the Intermountain West due to another strong surge in the North American Monsoon that is expected to begin the second week of August.

Weather and Climate Outlooks

El Niño developed in June and continues to strengthen, with central Pacific sea surface temperature anomalies now approaching 1.5 C above average, the threshold for a strong El Niño. El Niño is forecast to continue to strengthen throughout the summer and into the fall by the Climate Prediction Center (CPC). The CPC forecasts El Niño to persist through the fall and winter, with 100% confidence. Moreover, the CPC is forecasting a greater than 95% chance of a strong El Niño by September, and a greater than 80% chance of a very strong El Niño by November. In fact, many of the models used by the CPC and internationally show a better than 50% chance of this El Niño being the strongest on record. Most of these models show the central Pacific sea surface temperature anomaly exceeding 3 C October through December.

The Pacific Decadal Oscillation (PDO) remains in a negative phase and is likely to remain negative through the outlook period. The Madden-Julian Oscillation (MJO) was active in the western Pacific Ocean into the Atlantic last month but weakened when it moved into the Indian Ocean. The MJO is forecast to become active once again as it moves into the western Pacific in mid-August, although not as strong as it was in early to mid-July. This active phase of the MJO will have an impact on the outlook for much of July, but the main climate driver for the outlook will be the 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 during the next four months. The season has had a mix of hot and dry periods followed by cool and showery weather. This has kept fire activity manageable with only a small complement of resources from out of state. Though August will start out warm and dry, the fuel conditions will limit fire activity, keeping conditions normal.

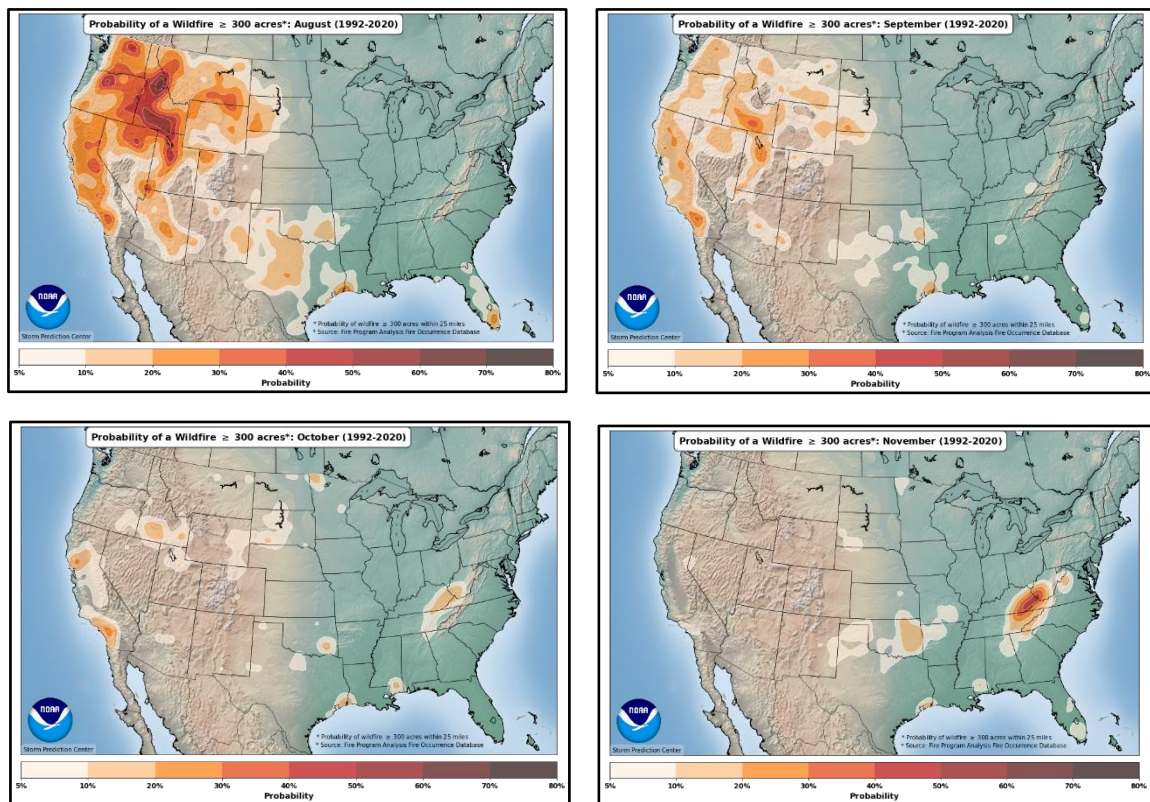
This summer's weather pattern has been progressive, with short periods of hot and dry weather followed by cool and wet conditions. The most recent update to the U.S. Drought Monitor shows an area of abnormally dry conditions around the Kotzebue Sound coast, but based on fire weather indices and first-hand reports, this area is not of elevated concern. Stations around the state show variable dryness in surface fuels but are generally wet in the sub-surface duff due to the periodic rains.

Climate Prediction Center (CPC) outlooks for August indicate higher chances for above normal temperatures for eastern Alaska. Above normal precipitation is expected for most of the state, with a lean towards drier than normal conditions only in the panhandle. As El Niño strengthens, CPC signals a high likelihood for a warmer and wetter than normal fall.

The spring fire season started slowly, and the hot and dry weather didn't arrive until just prior to the summer solstice. Though there were a fair number of lightning ignitions over a large swath of the state in July, very few fires showed much resistance to control. As a result, fires were easily caught and growth was limited. With widespread rain covering the mainland during the third week of July, most fires were declared controlled and subsequently demobilized.

Buildup Indices are well below normal for this time of year showing that most duff fuels are very wet. The deepest duff has a few pockets of drier concern in various locations, but the threat of holdover fires or more lightning ignitions is low since the mid and upper duff is not burnable. Fine fuels fluctuate a lot from one day to the next, but unless there are strong winds to carry a surface fire, they don't pose a significant barrier to control.

As we move into August, daylight hours are getting shorter, sun angle is decreasing, and the air mass is becoming harder to dry. Thus, with wet duff fuels, even a hot and dry forecast in August will not be enough to instigate significant fire behavior. Some new starts will occur, and there may be a few busy days, but fires are expected to be easy to control. Therefore, normal fire potential is expected for August and the ensuing three months.



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 and ongoing drought will keep significant fire potential above normal across all Predictive Services Areas (PSAs) in August. Fuels are now cured at most elevations and aspects, and Energy Release Component (ERC) values are at or above average for the time of year, indicating strong potential for large, costly, long-duration incidents when weather conditions align. With El Niño in place and outlooks favoring above normal temperatures and no indication of sustained wetting rainfall, August is expected to continue offering opportunity for new significant fires when lightning or human ignitions occur.

July was generally warmer and drier than average across Oregon and Washington, with limited relief from scattered showers and thunderstorms. Temperatures ran about 2–6°F above normal over most of the region, with only small pockets near normal west of the Cascades. Precipitation maps show large areas receiving roughly 25–50 percent of normal July rainfall, with some interior

basins dropping below 25 percent, except for localized thunderstorm cores with much-above-normal totals. Additionally, low pressure off the Washington Coast brought several days of rain across the Olympic Peninsula and the north Washington Cascades late in the month.

Two main lightning episodes and two wind episodes were most notable. On July 15, a mixed wet and dry thunderstorm event affected central Oregon with additional lightning starts in parts of Washington. On July 22, a second event produced mostly dry lightning over roughly the eastern quarter of Oregon and again triggered ignitions across other areas of eastern Washington. These ignition events were followed by a moderately strong, dry cold front on July 25. Winds gusted 30–40 mph across most areas east of the Cascade crest and increased low-level instability supported spotting and fast rates of spread on existing fires.

Drought from June continued through July. Abnormally dry conditions and moderate drought remained widespread across central and eastern Oregon plus eastern Washington. Severe and extreme drought persisted across south-central and southeast Oregon and parts of the Columbia and Klamath Basins. Local thunderstorm rainfall brought small areal improvements, but regional long-term deficits largely continued. This year's drought continues to build upon the cumulative effects from multiple recent years of drought for many areas.

The first half of July saw normal fire activity. Fire activity increased sharply in mid-July following several rounds of lightning, with more than 600 new fires starting over a ten-day period. Most of these ignitions were low-elevation rangeland fires that spread quickly under aligned winds and receptive fuels. Two notable fires developed on the Wallowa-Whitman and Umatilla National Forests at high elevations that are typically still snow-covered in mid-July. On July 25, the strong wind event east of the Cascades supported large fire growth and contributed to over 300,000 acres of additional growth. The largest concentration of fires occurred in central Oregon, eastern Oregon, and the Columbia Basin. By the end of July more fires began to occur in timber.

ERCs remained at average to above average across most of the Northwest. Low-elevation live fuels are fully cured and continuous. At mid and upper elevations, live fuel curing is patchier, with green fuels still present on north- and east-facing aspects. The moderating influence of green-up is diminishing quickly during each warm and dry period as live fuels continue to cure. These curing fuels are increasingly supporting large fire growth and contributing to higher resistance to control.

El Niño–Southern Oscillation (ENSO) has now clearly shifted into El Niño. The Climate Prediction Center (CPC) expects El Niño to persist through early spring 2027 and very likely strengthen to a very strong event by late fall. Even with this, late-summer and fall fire weather in Oregon and Washington will still be driven mainly by regional ridging and troughs and by onshore flow. Historical El Niño fall seasons show a very low chance of widespread, prolonged offshore east-wind events as occurred in 2017 or 2020.

CPC outlooks favor above normal temperatures across Oregon and Washington in August. They also favor above normal temperatures for the September–November season. August is expected to stay warm under ridging over the interior West. Confidence is highest east of the Cascades, where fuels are already much drier than typical. West-side temperatures also lean warm. Onshore flow periods may briefly cool and moisten fuels but are not expected to dominate. In fall, the above normal signal suggests a slower shift into cool-season conditions. Cured fuels will remain exposed longer, even as fire occurrence normally drops later in the year.

For August, CPC guidance shows a slight tilt toward below normal or near-normal precipitation in Oregon and Washington. There is no indication of a sustained wet pattern. The September–November outlook keeps a below normal precipitation tilt over the Pacific Northwest. The U.S. Seasonal Drought Outlook indicates continuing or worsening drought across all of Oregon and Washington through at least the end of October. This points to late-season weather dominated by scattered or short-lived frontal systems. Repeated, widespread wetting storms are unlikely

through September, while probabilities for these wet fall systems increase rapidly from October into November. Long-term moisture deficits are likely to carry into the shoulder season.

Analog years 2015 and 2018 continue to support this pattern. Anecdotally, 2026 also feels very similar to 2024, particularly across central and eastern Oregon. In all three years, September and October were generally warm and relatively dry across Oregon and Washington, followed by more cool-season storminess and higher humidity in November, especially along the coast and west of the Cascades. Fire-occurrence and acreage in these analogs were somewhat above average in some Predictive Service Areas (PSAs) during October and November, likely linked to El Niño influences. However, total acres burned in those months were very small compared with peak summer, and from a strategic perspective those late-season acres are not considered significant for seasonal risk.

August and September will remain above normal for significant fire potential across all PSAs. Warm, dry conditions, ongoing drought, and cured fuels at all elevations support continued potential for large, costly, long-duration incidents when lightning or human ignitions occur.

For October and November, significant fire potential is assessed as normal across all PSAs. Increasing cool-season systems, higher humidity, and shorter burn periods reduce the likelihood that new starts will grow substantially. From a strategic standpoint, there is a very low probability of significant incidents during these late-season months, even though scattered smaller fires are still possible.

Northern California and Hawai'i

Significant fire potential is projected to be normal near the coast, in the Greater Bay Area and within large portions of the Sacramento Valley during the outlook period. Above normal potential is forecast for the Northwest Mountains, Northeast California, Northern Sierra, and Far Eastside Predictive Services Areas (PSAs) during August and September then drops to normal for October and November. During August an average of 17 large fires are observed across northern California falling to eight in September, four in October, and one in November. Hawaii's significant fire potential is normal for August through November.

Both upper-level ridges and troughs influenced Northern California's weather during July. The weather pattern was persistent with a near offshore upper-level trough while the ridge was generally centered somewhere across the interior of the U.S. near the Four Corners. There were no distinct heat wave periods and average temperature anomalies were mixed but generally near normal due to the persistent onshore flow. Rainfall was mainly associated with thunderstorms although some heavier drizzle periods occurred near the coast. Precipitation anomalies were generally near to below normal although smaller patches of above normal occurred. There was a total of 12 lightning days, amounting to a little over 1,100 strikes. The largest number of lightning strikes came July 13 and 14. The 2000-2025 Vaisala lightning average is a little shy of 10,800 strikes placing July's results well below normal. Red Flag Warnings were issued by the National Weather Service for 11 separate days due to either dry-gusty onshore wind events or lightning. The July monthly Red Flag day average is 8.6. High Risks were issued by Predictive Services on 10 separate days for wind or lightning.

Dead fuel moistures experienced some fluctuations during the month with two distinct drying periods and a brief moistening period. Regional Energy Release Component (ERC) values based on 122 RAWs sites were near to above normal from July 9 onward. Normal values during most of July range between the 85th to 90th percentile based on a yearlong climatology. Herbaceous fuels were generally in a cured or mostly cured phase below 4,000-5,000 feet and a mixed phase above that elevation level although annual fuels were mostly cured at all elevations. Herbaceous loading generally remained near to above normal although some desiccation was visible across the area. Woody fuels trended more flammable as evident by more short-range spotting reports

as July progressed. Based on the past 30 days of sampled readings, most PSAs are experiencing shrub values near to a little below normal with the exception being the Northern Sierra PSA where readings are generally above normal. Drought remained across the far north and east although it intensified from the moderate to severe category across the far northwest corner. The two-month evaporative demand drought index (EDDI) values on July 27 showed less than usual vegetative stress across most of the area with normal stress found across the far north and east. This is indicative of the more persistent onshore flow during the past two months.

Wildfire business increased during July compared to June. The daily wildfire ignition average through July 28 was 17.9 while the June average was 16.6. July 2008-2025 daily ignition average is 24.6. A total of 15 large fires were reported through July 28. Several of these fires needed a type 3 organization to manage them while one, a nearly 70,000-acre fire, required a Complex Incident Management Team. Most large fires burned in grass and brush but some had a timber component. The regional large fire average for July based on a 1992-2025 database is 14.7. The regional preparedness level changed from two to three (on a scale of 1-5) on July 12. Prescribed burning was limited although some projects were completed with all fuel types impacted.

There will be several coupled ocean and atmospheric states in play during the next several months impacting how the jet stream influences the region's weather. There appears to be more of a propensity for onshore influences which should provide periods of cool-moist weather near the coast while areas farther inland should trend warmer than normal during the multi-month period. The number of wind events, mostly onshore, should be near to slightly above normal during the next couple of months. Convection and thunderstorm development will be a big wildcard. Lightning will play an important role during the next one-to-two months due to offshore low tendencies and an active east Pacific tropical cyclone season. At least one extended heat wave event (+3 days) should occur during the next couple of months, and one is expected to occur in the first week of August.

Based on the current fuel state and future weather predictions, above normal significant fire potential is projected for August and September across the more mountainous PSAs of the north and east while near normal activity should be found across coastal influenced areas and most of the Sacramento Valley. Confidence in the weather forecast is less further out so normal potential is projected for the entire region during October and November. Critical to near critically flammable live and dead fuels should be the norm during the next couple of months although a few notable moistening periods will also be possible. Lightning events will be the biggest wildcard, and the impactful ones are tough to predict several days to weeks in advance.

Sea surface temperature (SST) anomalies surrounding the Hawai'ian Islands were near to above average during July. Precipitation and average temperature anomalies were mixed across the island chain. Warmer than normal readings were generally found from Maui to western portions of the Big Island and coincided with below normal precipitation. Drought was not present during the entire month although some dryness was found across the eastern tier of islands. Herbaceous fuels were generally in a mixed phase although more curing was evident across the leeward locations compared to previous months. No Red Flag Warnings were issued by the National Weather Service. Fire business activity reported by the media picked up during the last couple of weeks. The Kawaihae Road fire, located on the Big Island, grew to 680 acres between July 25-26 mainly in cured grass.

The El Niño Southern Oscillation (ENSO) is in an El Niño state and will continue to strengthen during the next four months and become very strong. Temperature anomalies in Hawai'i are likely to be mixed with a tendency towards near to above normal readings. Precipitation anomalies are likely to be mixed on a month-by-month basis but likely lean towards above normal through October then trend below normal late in the outlook period. The frequency of tropical cyclone activity and tropical moisture surges should be elevated during the next few months and likely bring some impacts to the island chain. Drought stress is likely to be limited during the outlook period. Seasonal curing will create a flammable herbaceous fuel bed at times across the leeward

sides, therefore creating increased risk but the risk is likely to be a mosaic across the landscape. Normal significant fire potential is projected for the four-month outlook period.

Southern California

High pressure centered off the California Coast brought near normal temperatures to central and southern California during the first couple weeks of July. During the last two weeks of July, high pressure migrated back and forth between the Great Basin and the Rockies maintaining near normal temperatures across the region. There were no periods of excessive heat during the month with only brief periods of a little below normal and a little above normal temperature. Overall, temperatures were within a couple degrees of normal for the month. Southeast flow aloft around the high pressure that migrated back and forth between the Great Basin and Rockies brought isolated monsoonal showers and thunderstorms to the mountains and deserts most days July 12-26. Scattered light showers and sprinkles moved across the entire region July 12-13 and then again July 20. Most locations received below normal rainfall for July since thunderstorms were isolated, but there was near to above normal rainfall across Monterey and San Benito Counties as well as the Sierra from Fresno County northward. Normal winds occurred during the month, with afternoon southwest to northwest winds of 15 to 25 mph with gusts to 40 mph over the mountain ridges and through the desert passes along with a sea breeze of 10 to 20 mph elsewhere.

There have been only minor changes in the drought in July compared to June. There is now moderate drought near the entire portion of the Colorado River instead of just over San Bernardino County. There has also been an increase in abnormally dry conditions over the central deserts from San Bernardino County down to Imperial County. Most of central California west of the Sierra and most locations across Southern California west of the central deserts continue to have no drought. However, most of San Diego County from the mountains westward and the mountains of Riverside County continue to have abnormally dry conditions. Both the 1000-hr and the 100-hr dead fuel moisture were near normal for the entire month. The live fuel moisture is mainly between 70% and 90% which is near to slightly below normal for this time of year.

Sea surface temperatures off the West Coast are now above normal and little change is expected through September. Thus, we can expect above normal temperatures across the region through September. There will likely be a near to below normal amount of monsoon showers and thunderstorms through September as strong El Niño conditions remain in place. Strong El Niño conditions will likely bring near to below normal temperatures and near to above normal precipitation to the region in October and November. The first storm from the Gulf of Alaska will likely arrive mid to late October. There will likely be a below normal amount of Santa Ana wind events this fall and it is likely that a storm from the Gulf of Alaska will come before the first Santa Ana event. The storms for this fall and winter are likely to be warm and coupled with atmospheric rivers. Significant fire potential will be near normal across central and southern California through November.

Northern Rockies

The outlook for the Northern Rockies Geographic Area (NRGA) is heavily weighted towards weather expected in the first two weeks of August. The last half of July has been particularly dry and hot across the majority of the NRGAs and buffers of moisture that were established in June are being eradicated quickly. A forecasted dry cold front for the first two days of August will be followed by 10 days where monsoon activity is not expected to reach most of the NRGAs. Two areas of focus will be the northwestern part of the NRGAs which has seen the greatest moisture deficits since the start of summer and a large portion of Montana east of the Continental Divide and western North Dakota where thunderstorms are expected in an area where fuels are becoming receptive. Other areas will reflect normal outlooks.

During July temperature anomalies across the geographic area were 3 to 5°F above normal with portions of southeast Montana and southwest North Dakota reporting 5 to 10°F above normal. Moisture was particularly sparse in north Idaho and northwest and north-central Montana and along the North Dakota – Minnesota border where less than 0.30 inches of precipitation was received during the month. The resultant anomaly indicates these areas have received less than 20% of normal moisture. The only areas to report positive precipitation anomalies during the month were parts of south-central and northeast Montana and southeast North Dakota. Despite sporadic thunderstorm activity maximum vapor pressure deficits reflect abnormal drying occurring over southeast Montana and southwest North Dakota.

Fire activity during the month has not featured many significant large fires. A major increase in fire activity occurred July 17 and 18 after significant lightning over north Idaho and northwest Montana. Most of these fires were 0.1 to 1 acre in size which reflected resistance to spread. Additional lightning on July 22 was followed by a wind event on July 24 which supported larger fires and an uptick in suppression challenges. By the end of the month fires were reaching hundreds of acres in size and lightning was generating fire starts across eastern Montana and western North Dakota which expands the area of fire potential in the NRG. This leads to confidence that the landscape is changing despite the drought monitor not showing extreme drought. Areas that feature severe drought align with areas which likely support above normal fire potential in August.

Weather forecasts for early August project multiple dry cold fronts impacting the NRG with limited chances for precipitation, especially east of the Continental Divide. Areas with the greatest moisture deficits in north Idaho and western Montana are expected to have above normal potential in August and September. This does not include southwest Montana where monsoon moisture delivered better rainfall. Another area of above normal potential in August and September will be areas across northern Montana except Glacier Park and the surrounding wilderness, which will be normal in August but above normal in September. Eastern and south-central Montana and western North Dakota will also be above normal in August and September because thunderstorm activity is expected to continue in August while fuels become increasingly receptive to fire.

Great Basin

Above normal significant fire potential is expected to continue in August across all but portions of southern Nevada, central and southern Utah, and the Arizona Strip. Above normal potential will then move mostly into Idaho, Wyoming, northern and western Nevada by September, with a return to normal conditions by October regionwide. The North American Monsoon was active in July in Utah and eastern Nevada but has since dwindled heading into August. The dry and hot conditions will return to much of the Great Basin to peak summer fire danger, except for southern areas of Nevada, Utah, and the Arizona Strip that will see sporadic moisture pulses from the monsoon to keep fire danger lower.

Average temperatures over the last 30 days have been 2-6°F above normal for most of the region with periods of record heat, especially in the eastern half of the Great Basin. Some areas over the eastern half of the region exceeded the hottest temperatures ever recorded in mid-July, with Salt Lake City, Utah hitting 109°F July 12. Due to an extended period of monsoon moisture from mid to late July, many areas of the Great Basin were well above normal for precipitation. However, the heavier precipitation was more localized to the higher terrain in Utah, and a bit more widespread in parts of western and northern Nevada and central Idaho. Despite the wetter than normal precipitation, fuels have not responded as much as would be expected. Sagebrush and juniper die off and the significant long-term drought has allowed significant fire activity to increase

much faster than what would normally occur following longer-term moisture. The U.S. Drought Monitor has most of the eastern two thirds of the Great Basin in severe to extreme drought, with a portion of far southwest Idaho and northeast Nevada in exceptional drought. The Climate Prediction Center is forecasting some improvement in the coming months over the eastern half of the Great Basin.

Snowpack at the late March peak was at record low levels across Utah and much of Nevada, only 10-30% of normal, with lower readings in far southern mountains near the Arizona-Utah border. Farther north across the Idaho and Wyoming mountains, peak end of March snowpack was higher, 60-75% of normal, which was still below normal and much of the middle slopes in those areas that are normally snow covered were bare much earlier than normal. The effects of the lack of snowpack and intensifying drought are having a significant impact on overall fuel dryness throughout the fire season.

Fire danger was moderated from the extreme levels in early July across the Great Basin due to persistent moisture from mid to late July. However, due to the more localized nature of precipitation in some areas, along with widespread die off in the brush and juniper, fire danger has been quickly increasing heading into August. Energy Release Component and fuel moisture will likely reach record levels across Idaho and Wyoming in early August. Even though most lower elevation areas across the southern half of the Great Basin have less fine fuel growth due to the dry winter, recent fire spread has been significant as spread from juniper to juniper occurred under windy conditions prior to July moisture. Tall grasses have also been observed in higher elevations of Utah due to the lack of winter snowpack, which is highly unusual. In the lower elevations of southern Idaho and far northern Utah and Nevada, fine fuel loading is above average, and there are areas of significant carry-over fuels from the past two years in addition to new growth, especially in southern Idaho.

Significant fire activity decreased significantly in the latter half of July but gradually increased to end the month. Light to moderate initial attack occurred every day, along with fires in the 5,000 to 20,000-acre range.

A hot and dry start to August is expected. Afterward, the warmest and driest conditions will shift to the northern and western areas of the Great Basin later in the summer as a strong El Niño unfolds, and pulses of monsoon moisture continue to move into the southern and eastern Great Basin mid to late August and into September. Additional moisture may spread north later in August; however, confidence is low on the northern extent. Live fuel moisture dropped to record dry levels across the southern half of the Great Basin in June and early July, while dead fuel moisture was below the 10th percentile. Despite increased moisture from mid to late July, some areas continue to see well below normal and near record fuel moisture. Farther north, brush and timber fuel moisture is below normal and trending down. Continued hot and dry conditions heading into August will keep significant fire potential high in many areas. Monsoon moisture is expected to move into the southern Great Basin from mid to late August, with an overall downward trend in fire danger. Overall, significant fire potential should decrease in the southern Great Basin later in August, while remaining higher farther north and west through September. A return to normal significant fire potential is expected by October. However, we will continue to monitor southern Idaho in areas where fine fuel loading is high as the potential for stronger prefrontal winds increase in early fall.

Southwest

As July began, the region remained hot and dry, with temperature anomalies well above normal. Conditions improved midmonth as monsoon moisture pushed into the Southwest, bringing cooler temperatures, especially across the higher terrain in Arizona. The atmosphere moistened quickly, allowing wet thunderstorms to develop almost daily. Rain totals were highest along the Mogollon Rim, where many stations reported 2 to 5 inches of rainfall. New Mexico didn't fare quite as well;

as most northern and central mountain areas received around half an inch to an inch of rainfall, with localized amounts up to 3 inches. Fuels regionwide observed some relief as the month started out with Energy Release Component in the 90th and 97th percentiles that trended down toward the 50th percentile at the end of July. An abundance of lightning was seen with these storms, but the wet thunderstorms helped ease some of the burden on any new initial attack.

August looks to begin with the monsoon flow being disrupted by persistent tropical systems in the eastern Pacific, which continue to siphon moisture away from the region. Storm coverage has decreased some from the initial onset, but the second week of August should see the return of richer moisture to the region. Above normal temperatures reinforce high evaporative demand allowing fine fuels to dry between storms, especially across western Arizona and much of New Mexico where the monsoon performance has been the weakest. But compared to the start of July, it will take several weeks of significant drying to return to previous fuel moisture levels. Fire potential remains slightly elevated in areas that have missed out on rainfall, but higher humidity will help mitigate.

September offers gradual improvement as intermittent surges of monsoonal moisture are expected, though there could be some interference from tropical systems in the eastern Pacific. Seasonal guidance leans toward above-normal rainfall for both Arizona and New Mexico, with Arizona favored for more organized moisture. Warm anomalies persist, maintaining elevated evaporative demand and allowing fuels to dry between rainfall events. Fire potential will begin to trend downward where storms become more regular, but pockets of concern remain across western Arizona and New Mexico where rainfall continues to be inconsistent.

October typically marks the transition out of the monsoon, but guidance does not indicate a clear direction on how significant the drying will be behind. Early month guidance supports some potential for above normal precipitation, though Pacific tropical systems may continue to influence moisture availability. Any early October rainfall helps sustain moderated fuel conditions, but above normal temperatures can still promote periodic re-drying during clear stretches. Fine fuel moistening, steadily reducing large-fire potential across both states, though isolated activity may persist in western Arizona, lower desert regions, and areas that experienced limited monsoon moisture and lower fuel moisture.

November brings cooler temperatures, weaker evaporative demand, and a shift toward mid-latitude frontal systems becoming the primary precipitation drivers. Overall rainfall chances diminish, with storm activity dependent on Pacific storm track variability. Fuels continue to cure, but fire potential drops across both states due to seasonality and lower sun angle. Remaining concerns will be localized, mainly in dry desert basins or areas that underperformed during the monsoon. November effectively concludes the fire season across Arizona and New Mexico, though isolated starts may still occur under dry, breezy conditions.

Rocky Mountain

Large fires starting in late June showed consistent growth through the first half of the month before monsoon moisture moved into the Rocky Mountain Area (RMA). Significant fire potential in August will begin to shift more to the north across the RMA, as the heat and drier weather is more focused in Wyoming through South Dakota. Fire activity will largely be dictated by drying periods between surges of monsoonal moisture.

July normally sees the monsoon arrive and this month was no exception, arriving nearly on time. Prior to the arrival of the monsoon, rainfall was lacking across most of the RMA. Much of the Colorado West Slope was well below normal, and areas near Grand Junction, Colorado saw no measurable rain through the first half of July. A heatwave across the Western U.S. July 12-14 brought many record high temperatures, including all-time records. Relative humidity also struggled to recover above 30 percent across much of Colorado during the early part of the month.

As the monsoon moisture started to move into the area, showers and thunderstorms became more common. The initial rounds of thunderstorms did not produce much rain reaching the ground, but after several days of storms, much needed rain began to fall. The monsoon moisture peaked in intensity the third week of July, before weakening some by the end of the month. Despite the monsoon, July was still slightly below normal for precipitation with above average temperatures. Drought conditions did not change much in the last month, with only some slight worsening along the Front Range during the first half of the month.

Precipitation across Colorado moderated dead fuel moisture in smaller diameter fuels. Conditions in Wyoming through South Dakota have shown a drying trend due to recent extreme heat. Current and expected fuel conditions support a northward trend in fire activity across the RMA, typical for this time of year. The Black Hills National Forest has shown critically dry dead fuels of all sizes. Live fuel moistures in the forest are approaching their historic seasonal maximum and will begin to trend downward. In northern Wyoming, high lightning ignition efficiency and active fire behavior in the evening hours highlight available fuels.

With the continued thunderstorm activity, the RMA continued to see many natural ignitions. Many of the new large fires started in the middle of July as the temperatures increased during the heatwave. However, the monsoon moisture helped limit many of the new starts to less than five acres and were contained within one or two operational periods. The large fires that started at the end of June continued into July until the monsoon brought increased moisture. From July 10-26 the RMA had 6 large fires with Complex Incident Management Teams (CIMTs) committed. Many of these fires saw increased containment and a reduction in higher level management towards the end of the month following the arrival of the monsoon.

In the short-term, much of the RMA weather will be dictated by location of a high pressure over the western U.S. The early part of August will see some moderate monsoon moisture remaining over Colorado, but the northern half of the area will be closer to normal for rainfall. By the middle of the month, there is potential for stronger monsoon moisture to push into the RMA once again bringing some moderation to conditions. Temperatures will largely be above normal throughout the month, though short periods of cooler weather are possible from the increase in monsoon moisture. Moving into the rest of the outlook period, an El Niño, warmer water in the central Pacific, will continue to strengthen. The effects of El Niño are typically stronger in the cool season but could continue to bring better rainfall to the RMA during the fall months.

The recent monsoon rains have moderated conditions in southwest Colorado sufficiently to bring the significant fire potential back to normal. However, farther north on the West Slope and into southwestern Wyoming where the rain amounts were lighter during July, above normal significant fire potential is forecast for August. Once additional surges of monsoon moisture can moderate conditions, possibly by the middle of August, the potential will decrease. For September through November, normal fire potential will persist across the entire RMA.

Eastern Area

Normal significant fire potential is forecast for most of the Eastern Area through November. However, above normal potential is forecast for northern Minnesota in August through November. This is due to combination of drought already on the landscape and continued dryness forecasted.

In the Midwest and Great Lakes, abnormal dryness and moderate drought is currently present in much of Minnesota and Wisconsin, the far western Upper Peninsula of Michigan, and western Iowa. Severe drought is present in north central Minnesota and the northwest corner of the Upper Peninsula. Along the east coast, moderate to severe drought stretches along the coast from the southern border of Eastern Area to southern Maine. Extreme drought is present in far southeast New Jersey and in much of the Delmarva Peninsula.

In the month of July, the mean temperature anomaly has been above normal across all Eastern Area, though it has ranged from less than a degree above normal in much of Missouri and Upstate New York to over 5 degrees above normal in northern Minnesota and the Wisconsin/Michigan border.

With convective precipitation driving most rainfall in the area in the last month, precipitation amounts and precipitation anomalies are much more variable but show a general trend of higher rainfall amounts in the southern portion of the area and lower rainfall amounts in the northern portion. Less than an inch has been received in western Minnesota, southern and eastern Wisconsin, and the central Lower Peninsula of Michigan. Less than two inches of rain has fallen across upstate New York, Vermont, New Hampshire, and Maine. As a result, precipitation anomalies show that western Minnesota, Wisconsin, the western Upper Peninsula, and the area from upstate New York to Maine are below normal for precipitation in the last month. On the other hand, areas of above normal precipitation are found in central Iowa, along much of the Ohio River Valley, and along much of the East Coast from Massachusetts southward.

As a result of these areas of below normal precipitation, drought has increased by up to three levels in northern and central Minnesota, northern Wisconsin, the western Upper Peninsula, and western Iowa. Drought has also increased by one level in northern Missouri and the northern border of Indiana and Ohio, as well as the central border of Connecticut and Massachusetts. Meanwhile, drought has improved by up to two levels in southeast Missouri, southern Illinois, and portions of the East Coast reaching from the eastern tip of Maine to the southern border of Maryland.

Significant fire activity is not typical in the Eastern Area during July but has been present in the Great Lakes with large fires in northeast Minnesota. Periods of increased initial attack were also reported in the Mid-Atlantic and New England. The busiest part of the month was from July 10-15 in the Minnesota Arrowhead as very dry conditions and dry lightning was followed by a hot, dry and windy event resulted in several large fires, including the Thumb, Bear Trap, and Little Knife fires in the Boundary Waters Canoe Area Wilderness. Precipitation received from multiple thunderstorms towards the end of July has eased conditions and limited further spread. The fires are burning in the boreal forest with deep burning in organics that will flare up during prolonged dry periods until the pattern changes to frontal systems and long duration rains happen in the fall.

The Climate Prediction Center (CPC) forecasts below normal temperatures reaching into western Minnesota and above normal precipitation extending into southwest Minnesota, much of Iowa, northern Missouri, and western Illinois for August. This forecast also calls for above normal temperatures in the southern and eastern portions of Eastern Area, with below normal precipitation in the eastern Great Lakes region. In the three-month outlook extending to October, above normal temperatures continue in the eastern half of the area while below normal precipitation returns to north Minnesota, northern Wisconsin, and the western Upper Peninsula. Longer term models bring a chance of above normal precipitation to the western Great Lakes in October, but the strengthening El Niño is likely to bring drier conditions and later snowfall to the area in November.

As a result, above normal fire potential is forecasted to continue in northern Minnesota until November. Along the East Coast in Massachusetts, Rhode Island, and Connecticut, recent precipitation has temporarily eased the concern there for normal potential, but it will be monitored for any persistent dryness going forward. For the remainder of the outlook period, normal significant fire potential is forecast for all areas.

Southern Area

Despite substantial relief in portions of the Southeast during July, long-term drought continues. The Florida Peninsula has seen beneficial moisture here and there from rainy season

thunderstorms, but waterways have observed limited improvement and even some declines in water levels as periods of record heat in May and June continued into July. July was especially dry and hot for portions of the Lower Mississippi Valley, where August may start off with only scattered relief. Areas of residual long-term drought in western Oklahoma and northwest Texas, in addition to Arkansas and western Mississippi may be of particular concern due to the lack of soil moisture replenishment this summer. Meanwhile, conditions in the Caribbean are especially dire. Late May to late July was the driest such period in San Juan's 127-year history, and broad areas of Puerto Rico and the U.S. Virgin Islands are experiencing 60-day rainfall deficits of 4-8", locally as high as 14" in the El Yunque National Forest. Abundant herbaceous vegetation that grew during the wet winter and early spring is now dormant and contributing to wind-driven fires as El Niño's impacts are becoming abundantly clear over the tropical Atlantic.

Dryness is expected to worsen across the southern Plains and Lower Mississippi Valley during August, a common theme in summers with intensifying El Niño conditions. Above normal significant fire potential is forecast to develop through large parts of Oklahoma and Texas into southern and eastern Arkansas, Louisiana, Mississippi, and southwestern Alabama in the coming weeks. Flash drought impacts from extreme heat, dry air, and limited rainfall are possible for portions of the region, resulting in a rapid decline in greenness where wetter conditions occurred in spring and early summer. Updated Atlantic hurricane season outlooks favor an unusually quiet few months ahead, though tropical development is still possible close to the coast, like Arthur and Bertha. Fire activity associated with Bertha in Mississippi and Louisiana was largely contributable to the high wind shear associated with El Niño conditions that kept rainfall mostly offshore. Above normal significant fire potential has the potential to carry into September, especially over the southern Plains.

Drought relief in late July and early August over portions of the coastal Southeast has only been isolated across south Florida. Frequent intrusions of Saharan dust will continue to limit rainy season thunderstorms at times through August, with above average temperatures persisting. The net outcome of the high evaporative demand and near to below normal rainfall is a continuation of above normal significant fire potential. There are areas in the coastal Carolinas that may continue to see fire activity, as long term moisture deficits are still prevalent. July's relief was significant enough in most of the area to warrant normal significant fire potential. For all the coastal Southeast, any offshore tropical activity that enhances winds will be of higher concern if additional drought relief does not occur.

Conditions in the Caribbean will be unusually hot, dry, and breezy the next several months. Tropical waves that have affected the islands have only brought localized rainfall, a trend that will continue. Trade winds will be enhanced by El Niño, with drought likely to persist and intensify as long as tropical storms and hurricanes fail to materialize. However, distant tropical activity could lead to wildfire outbreaks if downslope winds occur in areas of fire-receptive fuels. Regardless, unusual impacts are likely in Puerto Rico and the U.S. Virgin Islands, with above normal significant fire potential continuing from August through October.

Conditions leading into the peak of the fall fire season are anyone's guess. Long range model guidance and previous history during the rapid onset of very strong El Niño conditions suggest storminess will rapidly increase in the region during October and November. However, this transition to wetter weather was significantly delayed in 2023 – something that cannot be ruled out for the time being. Given the overall lower confidence and potential for this likely historic El Niño to produce unprecedented impacts, normal significant fire potential is forecasted from September through November outside of 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>

ⁱ At the end of July, the SIT209 reporting application and national Incident Management Situation Report account for 4.8M acres burned nationwide; however, that total is known to be an underestimation, particularly in the Northwest where numerous large fires are collectively burning more than 100k acres daily. Including both final and draft fire reports, the InFORM application indicates that the current year-to-date total is at least 6.2M acres burned. Other information suggests that the national total has already exceeded 7M acres.