

National Significant Wildland Fire Potential Outlook

Predictive Services National Interagency Fire Center



Issued: June 1, 2025 Next Issuance: July 1, 2025

Outlook Period – June through September 2025

Executive Summary

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



Fire activity increased gradually across the US during May, except for the Southern Area, which observed an overall decrease in activity. Activity increased more substantially in the middle of the month with the National Preparedness Level increasing to two (on a scale of 1-5) May 14 due to large fires in the Eastern and Southwest Areas. Other geographic areas observed a more modest increase in activity over the month. Total acres burned through May is very close to the 10-year average at 99.5%, with an above average tally of wildfires of 133%.

May precipitation was above normal from central Texas and Oklahoma eastward into the Southwest, then north along the Atlantic Coast. Other areas where above normal precipitation was observed included the Lower Colorado River Valley, southern High Plains, and western Dakotas. However, precipitation was below normal in much of the Midwest, central and northern California, Northwest, Great Basin, and portions of the central and northern Rockies. Less profound precipitation deficits were also observed in May for portions of South Texas, Florida,

and the southeast Atlantic coast. Overall, drought decreased across the US in May, with the greatest improvement near the East Coast, where little drought now remains. However, drought persists in much of the southwestern US, Florida, and portions of the northern Rockies into the northern Plains and Upper Midwest.

Climate Prediction Center and Predictive Services outlooks issued in late May indicate above normal temperatures are likely across much of the US through September, with the West, Northeast, and southern Plains most likely to be above normal. Drier than normal conditions are expected across the northern half of the West and much of the Plains into the Midwest through September, as well. Above normal precipitation is most likely along the Gulf and East Coasts through September, with above normal precipitation likely in the Southwest over the summer due to the North American Monsoon. Warmer and wetter than normal conditions are likely in Alaska through September.

Above normal significant fire potential is forecast across portions of the Southwest, southern Great Basin, Inland Northwest, and Idaho Panhandle in June. Significant fire potential is also forecast to be above normal in June for portions of California, western Nevada, South Florida, the Carolina coast, south-central Texas, and the Upper Midwest. Potential will return to normal in the Southeast and Southwest in July. However, above normal potential will expand in July to cover much of California, the Northwest, northern Great Basin, northern Rockies, and southern Plains, with above normal potential persisting in the southern Great Basin and northern Minnesota. For August, above normal significant fire potential will persist across much of California into the Northwest, northern Rockies, northern Minnesota, and southern Plains, while expanding into the northern High Plains. In September, potential will return to normal in the southern Plains, and northern Minnesota but persist in much of the northwestern US and California. For Hawai'i, normal significant fire potential is forecast for June, with above normal potential for lee sides July through September, while Alaska is forecast to have normal potential through the summer.

Past Weather and Drought

Temperatures in May were above normal from central California through the Great Basin into the northern Rockies, northern Plains, and Minnesota. Temperatures were also above normal along the Gulf and East Coasts. Temperatures were near average in the Northwest, and near to below average from New Mexico northeastward into the Lower Great Lakes. Temperatures were near to below normal for most of Alaska in May, with the North Slope and panhandle having more consistent below normal temperatures. Temperatures across Hawai'i were near to below normal for the Big Island, with slightly above normal temperatures for the western islands.

Precipitation across the US in May was above normal from much of central and eastern Texas into the Southeast. Above normal precipitation then extended northward along the East Coast into New England. Smaller areas of above normal precipitation were noted in the Lower Colorado River Valley, the southern High Plains, and western Dakotas. Precipitation was below normal from southeast Arizona into West Texas, then across much of the West from central and northern California into the Great Basin, Northwest, and northern Rockies. Precipitation was also below normal for the Midwest, with portions of northern Minnesota, northern Wisconsin, and Upper Michigan receiving less than 50% of their normal May rainfall. Much of Alaska received above normal precipitation in May, especially portions of south-central Alaska, the southeastern Interior, and panhandle, but portions of the North Slope were drier than normal. Precipitation in Hawai'i was above normal on the eastern half of the Big Island, but below normal for most of the rest of the state. Snowpack across the western US continued to melt faster than normal in May, with many areas becoming snow-free below 6,000 feet two to three weeks earlier than normal.

Fire activity gradually increased across most geographic areas over the course of May. However, a more significant uptick in activity occurred May 10-14 in the Southwest and Eastern Areas that

resulted in the National Preparedness Level increasing to two May 14. A record-setting heat wave occurred in the northern Plains and Upper Midwest May 10-13 with temperatures 20 to 35 degrees above normal, including the earliest ever 100°F temperature recorded in Minnesota May 11. Strong southerly sustained winds of 20-30 mph with gusts to 45 mph also occurred during the heat wave and resulted in dozens of new fires, including several large fires such as the Camp House Fire in northeast Minnesota that destroyed 144 structures. Fire activity moderated some in Minnesota at the end of the month, but the latter half of the month also saw increases in activity in California, the Great Basin, Northwest, and Northern Rockies Geographic Areas.



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

Overall drought decreased across the US since late May with just over 31% of the US in drought as of May 27, a decrease in area of almost 6%. Drought persisted in the southwestern US, but with a modest improvement in the Lower Colorado River Valley, while drought intensified in southern Arizona into southwest New Mexico. Drought improved across much of the East Coast and portions of central Florida, with drought improvement also observed in portions of the central Plains. Drought intensified in southwest Florida, with drought developing in portions of northeast and northwest Oregon. Drought is also present in Hawai'i, from the Big Island to Molokai, plus portions northern Cascades in Washington. Extreme drought persists in the southwestern US and covers portions of southeast California, southern Nevada, southern Arizona, southern and central New Mexico, western Colorado, and southwest Texas. Smaller areas of extreme drought are noted in portions of southwest Florida, southeast Wyoming, north-central Nebraska, and westcentral North Dakota. Exceptional drought persists in southeast Arizona, southwest New Mexico, southwest Texas, and southeast Nevada.

Weather and Climate Outlooks

El Niño-Southern Oscillation (ENSO) neutral conditions have persisted in the equatorial Pacific Ocean with sea surface temperatures near to slightly below average. The Climate Prediction Center is forecasting ENSO neutral conditions to continue through the summer, with a greater than 50% chance of neutral conditions continuing into early fall. However, significant uncertainty continues with the ENSO forecast for the fall due to the spring predictability barrier. The negative phase of the Pacific Decadal Oscillation (PDO) persists and is likely to be a small factor for this outlook. The Madden-Julian Oscillation (MJO) was active over the winter but has weakened this spring and is expected to remain weak for the next month. The ENSO neutral conditions will continue to be the main driver of this outlook, with modest effects from the PDO and limited impacts from the MJO.

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

Alaska is slowly entering fire season. A damp spring has kept fuels from drying significantly. Fire danger is currently on the lower end of normal, but it would only take a few days of drying to increase fire danger. It is expected that Alaska will have a normal fire season.

The US Drought Monitor identifies a small area around the Matanuska Valley as abnormally dry, with all other areas normal. The spring has brought very cool and damp weather, and most fuels are sufficiently wet moving into June. The eastern Interior is the only area that has escaped most of the rain and shows some drying has occurred in the leaf litter.

Forecasts issued by the Climate Prediction Center for the next few months show warmer and wetter than normal conditions are likely for most of Alaska this summer. Though warmer than normal is likely due to a warming climate, the skill for long term precipitation prediction in Alaska is low and is difficult to anticipate more than a week or so in advance. Precipitation in June is expected to be normal with afternoon showers and thunderstorm chances on most days.

Most wildfires arising this spring have continued to be human ignitions and have been easily caught. A couple of lightning fires have occurred and have mostly diminished on their own. Moisture under the upper duff layer continues to prevent significant spread.

Fuels are now snow free in most of the state, except for the northernmost Interior and Brooks Range. Overall, fuels are damp going into June, except for fine fuels in the eastern Interior, which are quite dry. However, duff layers remain generally damp and are not yet ready to support more vigorous fire growth.

With most fuels still somewhat damp, Alaska is making a slow entrance to fire season. However, normal fire potential is expected for June, as lightning activity is increasing, and the eastern Interior is drying out. By late June and early July, activity will reach its peak as lightning coincides with long summer days that warm and dry the duff layers. By late July and early August, rain winds down the season as daylight hours shorten and sun angle lowers. All these factors point to a normal Alaska fire season for this outlook period.



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

Northwest

Portions of the Northwest Geographic Area (NWCC) across eastern Washington and northcentral Oregon are expected to experience above normal significant fire potential for June, particularly during the second half. Conditions are expected to worsen through the summer, ultimately resulting in all Predictive Service Areas (PSAs) having above normal significant fire potential for August and September.

Once again, May brought low pressure systems across the Pacific Northwest but relatively little beneficial rain. Some PSAs received wetting to soaking rainfall and high elevation snow over short periods but rarely saw consecutive days of precipitation. With few exceptions, monthly precipitation totals were less than 80 percent of average with several areas at less than 25 percent of average. Temperatures in May remained within a couple degrees of average.

Regional snowpack continued rapid melting at rates faster than average through May given mild temperatures and no significant reinforcing precipitation. Very few basins are holding snow cover at or above their end of May daily averages.

The US Drought Monitor shows moderate drought persisting since the end of April from the Washington Cascades west to Interstate 5 and the Puget Sound. Areas of abnormally dry designations expanded to cover the remainder of western Washington plus the northern half of western Oregon. Abnormally dry designations now also cover the Blue Mountains, with smaller areas of moderate drought now in the latter two locations.

Initial attack activity remained minimal across the geographic area in May. By month's end, rangeland fire activity increased as lower-elevation live fuels began to cure. A fire in north-central Oregon grew 1,500 acres in a single burn period with wind alignment. Prescribed fire operations slowed by late May.

After hitting seasonal lows in mid-May, Energy Release Component (ERC) values have been steadily increasing toward the end of May. Large-diameter dead woody fuels are drying but remain too moist to burn. Green-up continues at mid to upper elevations, while herbaceous fuels at lower elevations have peaked and begun curing. Recent fire activity confirms elevated single day burn potential in rangeland fuels east of the Cascades, especially where curing aligns with wind and slope conditions.

Central Pacific sea surface temperatures are near average with El Niño Southern Oscillation (ENSO) neutral conditions expected to persist through October.

The Climate Prediction Center (CPC) forecasts below average precipitation covering most of Oregon and eastern Washington for June. All areas show below average precipitation in July through early August at 33-50% confidence. Precipitation confidence weakens for later August, particularly west of the Cascades. September's forecast has low confidence and thus no indications for either above or below normal precipitation. The CPC forecasts suggest a higher likelihood of above-average temperatures (40-60%) from June through September, with the highest probabilities in southeast Oregon.

The moisture track for the North American Monsoon remains an unknown factor for this summer, with current predictions keeping the track east of the NWCC. Past similar ENSO analogs showed a variety of lightning amounts over the peak fire season months, thus overall confidence is low for the likelihood and abundance of natural ignitions this summer.

While lightning ignition potential remains uncertain, overall temperature and precipitation outlooks indicate human ignition impacts will remain at or above 2024 levels. This results in all NWCC PSAs having above normal significant fire potential by August and continuing into September. The pattern begins in June with five central and eastern PSAs having above normal significant fire potential due to increasingly dry dead woody fuels and a higher likelihood for live fuel curing by mid-June. In addition to the three northeastern PSAs (NW05, NW09, NW10), this updated outlook for June (compared to June outlook issued in May) expands the area of above normal potential westward to include two PSAs (NW06, NW08) in central Washington and Oregon, east of the Cascades. For July, four more PSAs (NW01, NW07, NW11, and NW12) are added, accounting for all areas east of the Cascades plus the Olympic Peninsula. All twelve NWCC PSAs

are expected to experience above normal significant fire potential for August as seasonal drought persists. Precipitation uncertainty warrants maintaining all PSAs with above normal potential for September.

Northern California and Hawai'i

Significant fire potential is projected to be near to above normal for June through August and above normal areawide during September. Historically during June, generally one to three large fires occur per Predictive Service Area (PSA) except for the North Coast and Far Eastside, where less than one large fire occurs on average. During July and August, generally one to four large fires occur per PSA except for the North Coast, where the average remains less than one. For September the PSAs generally average one to two large fires except for the Far Eastside and Bay Area PSAs, where the average is less than one. Hawaii's significant fire potential is expected to be normal for June but above normal for the leeward sides from Molokai southward July through September.

The weather pattern during May was highly variable. The most impactful wetting events occurred during the first half of the month. Precipitation was generally below normal, although a very small area of near normal precipitation was found in the far northeast. Average temperatures were generally near to above normal, but near to below normal temperatures were found in areas near the coast as well as across the far north. The first notable heat wave of the season occurred May 30-31, with temperatures well above 100°F in the Sacramento Valley. A little under 2,400 lightning strikes were recorded during the month, falling well shy of the 2012-2022 May average of nearly 5,400 strikes. May also saw a mix of both northerly and onshore wind events. There were four dry northerly wind periods, with the May 4-5 event being the strongest. The strongest onshore wind event occurred May 31. The first National Weather Service Red Flag Warning of the year was issued for May 18-19 due to gusty and dry northerly winds across the Sacramento Valley.

Dead fuel flammability fluctuated in May due to two moist events and three noticeable drying periods. During the last week of May, the regional Energy Release Component (ERC) value ranged between the 60th to 80th percentile. Green-up of live fuels encompassed most of the region except for the higher mountain ridges that still had snow or across the lowlands where the curing process became more evident. Herbaceous curing was generally found as high as 2,500-3,500 feet in elevation by the end of the month. Some low elevation shrub species reached their peak moisture levels early in May and began to cure the latter half of the month. Snowpack continued to erode quickly during most of the month, with snow cover generally limited to sheltered areas and elevations above 6,500-7,000 feet by the end of the month. Moisture found within the snowpack decreased from 70-80% of normal on May 1 to 25-30% of normal by May 29. Drought conditions remained absent across northern California during May. As of May 23, the one-month Evaporative Demand Drought Index (EDDI) showed no clear short-term drought impacts across northern California.

Wildfire activity increased noticeably during May. The daily wildfire average rose from the average of four fires per day during April to nearly 13 fires per day in May, which slightly exceeds the May historical (2008-2024) daily average of a little under 11 fires per day. Individual fire growth also increased, with several fires growing beyond 50 acres, and two fires greater than 100 acres by the end of May. Both large fires occurred in grassland dominated landscapes, and the largest was the 261-acre Midway Fire west of Tracy. Several broadcast prescribed burns were conducted throughout the month.

The changeable patterns during April and May should gradually decline during June with a pronounced warm and dry signal showing up this summer, especially across the interior and away from coastal influences. The thunderstorm season associated with the North American Monsoon is expected to start on time, if not a little later than normal, across the Desert Southwest and is expected to be unusually active. This could portend some moisture and lightning surges northward during July and August, although the main surges are likely to be farther south and

east of the area. Compared to last summer, a little more of a monsoon influence is expected across northern California this summer, but impactful wind and heat events are likely to outnumber impactful lightning events.

Based on current fuels conditions and future weather predictions, near to above normal significant fire potential is projected in northern California from June through September. Flash drought conditions are likely to provide critically flammable live and dead fuel alignments earlier than is typically observed during the summer season and result in unusually long or extended flammable fuel periods. Live fuels will initially be a fire spread inhibitor across the mid and upper elevations but may become a carrier across the lower elevations as June progresses. Concerns are likely to peak during August and possibly extend into September. The one caveat will be marine influences, which are likely to take the edge off the dry heat impacts near the coast. Significant fire growth is likely to be initiated mostly during heat waves and their subsequent breakdowns, and lightning periods are likely to be a little more impactful compared to last year. The fire environment is likely to become less suitable for prescribed burning as June progresses and further limited during the summer due to the anticipated enhanced flammable fuel periods.

Sea surface temperature (SST) anomalies surrounding the Hawai'ian Islands were above average during May. Average temperature anomalies were generally near to above normal although some cooler anomalies were found across the Big Island. Precipitation anomalies were mixed and included near to below normal amounts across most of the islands. Above normal precipitation occurred across western portions of the Big Island. The most active precipitation days occurred May 16-17, favoring the windward sides. Drought remained most notable across the southern tier of the island chain with moderate to extreme levels. Herbaceous fuels remain in a mixed phase of both curing and green-up across the leeward sides. No National Weather Service Red Flag Warnings were issued for Hawai'i in May, and there were very few notable wind events. Satellites did not indicate any significant hot spot signatures due to wildfires although smaller fires were reported during the last week of May.

The El Niño Southern Oscillation (ENSO) is currently in a neutral state and is expected to remain neutral during the four-month outlook period. Hawai'i's average temperatures during the next four months should generally be above normal. Precipitation anomalies during this dry season are expected to be mixed. The northern islands should tend toward near to above normal while the southern tier of the islands, especially the Big Island, are expected to tend toward near to below normal. Precipitation will remain a wildcard and will help to alter the herbaceous state across the leeward sides, and the drought signal is likely to fluctuate, as well. The Big Island and Maui have the highest likelihood of maintaining or intensifying drought conditions, with anticipated stress on the live fuels. Drought is also likely to keep herbaceous fuel loading lower than the last two years. Based on the weather projections and current state of the fuels in Hawai'i, normal significant fire potential is expected for June, but above normal potential has been assigned to the leeward sides from Molokai south during July through September.

Southern California

Since the start of the water year (October 1) central and southern California have remained well below average for precipitation. Most areas received less than 70% of their average precipitation since October 1. The driest anomalies are in the southern and easternmost portions of the geographic area. Temperatures have remained 1-3°F above average across most of central and southern California during May.

The El Niño Southern Oscillation (ENSO) continues to remain in a neutral state as sea surface temperatures remain near average in the equatorial Pacific.

The US Drought Monitor shows areas of moderate drought across portions of the Central Valley. Areas of severe and extreme drought are observed across the South Coast and Southern California Mountains Predictive Service Areas (PSAs), and throughout most of the deserts. Recent warm and dry spells allowed for 100-hour and 1000-hour dead fuel moistures to fall below normal for nearly all PSAs while Energy Release Component (ERC) rose to above normal for all 16 PSAs. Live fuel moisture began to significantly decrease across the geographic area in May.

Fire activity has remained above normal for the fire year thus far. One notable fire that began in late May is the Inn Fire in Mono County. The Inn Fire is a good indicator that there is potential for above normal significant fire activity among the larger fuel types in the Sierra this summer. This fire occurred at an elevation above 7000 feet in areas of timber.

Climate models show below normal precipitation being favored for central and southern California the next four months as the neutral state of ENSO is forecast to persist through the summer.

Due to increasing fire activity in May, a large fire at an elevation above 7,000 feet in an area of timber fuel types, and a likely drier than normal summer, above normal significant fire potential is forecast for most PSAs into September. There is a greater chance for timber dominated fires during this summer compared to 2023 and 2024. Larger fires are also possible in the smaller fuel types of coastal areas as the marine layer becomes less pronounced over the next couple of months.

Northern Rockies

Above normal significant wildland fire potential in the Northern Rockies Geographic Area (NRGA) will develop over north Idaho in June and spread eastward through western and north central Montana in July. Above normal significant wildland fire potential will continue to spread eastward in August, reaching all of Montana and the western part of North Dakota. Long range weather projections do not signal significant relief in late August or September so the September outlook will be unchanged from August. Yellowstone National Park and the eastern half of North Dakota will be the only areas with normal potential in August and September.

Seasonal forecasts lean above normal for temperatures and below normal for precipitation for most of the area in June, July, and August. Areas of preexisting drought, particularly over the western end of the NRGA, combined with these weather outlooks, support above normal potential. Concern is heightened because pattern comparison with equatorial and ocean temperature patterns matches other years when significant fire activity has occurred in the NRGA, including 2006, 2017, and 2021.

The first half of May had two short periods of well above normal high temperatures, which supported windows of fire activity. After the second period of hot temperatures May 9-12, a wetter period occurred across a large portion of the NRGA, centered on the western half of North Dakota. This moisture resulted in well above normal precipitation during the month for western North Dakota and above normal moisture for the southern half of Montana and southeast North Dakota. It was drier west of the Continental Divide, with well below normal precipitation for north Idaho. Most of western Montana and northern Idaho had near normal temperatures in May, with slightly above normal temperatures for areas east of the Continental Divide.

Snowpack ended up slightly below normal, which means longer term drought impacts like ground water deficits have not been mitigated. Drought monitoring showed one to two categories of drying over north central Montana and north Idaho, contrasted with one to two category improvements over southeast Montana and western North Dakota. Moderate to severe drought is still observed over the NRGA west of the Continental Divide and over parts of eastern Montana and western North Dakota.

Warm and dry conditions in April west of the Continental Divide led to dry dead and downed forest fuels by early May. This dryness occurred before spring grasses and herbs became lush with moisture. As a result, early season wildfires posed containment challenges in areas where snow

had just melted. In June, much of the NRGA, except eastern North Dakota and south-central Montana, will experience drought. Higher temperatures and below normal precipitation will dry out dead and downed fuels quickly, increasing fire spread risks. While live fuels will initially help slow fire spread, they will lose moisture as the season progresses. Areas that have received above normal spring moisture face a risk of higher grass fuel loading, but this fuel matrix contribution will be delayed until late July when drying pushes grasses towards dormancy.

Seven large fires exceeding 100 acres were reported in May, and three of the fires exceeded 1,000 acres. The Sawlog Fire in southwest Montana was the longest duration fire, persisting for two weeks. The first half of May featured windows for prescribed fire. Live fuel growth and greening in the latter half of the month brought a strong reduction in activity.

Long-term forecasts for June through August lean toward above normal temperatures and below normal precipitation for the NRGA. Drought signals indicate multiyear precipitation deficits could yield the greatest impact first over the western portion of the NRGA. Fuel loads and persistent summer heat will elevate the threat later to the rest of Montana and western North Dakota. The greatest uncertainty over the severity of this summer fire season relates to the North American Monsoon, which might not provide as much mid-summer higher relative humidity and precipitation relief compared to the summers of 2022-2024. Above normal significant wildland fire potential is expected to develop in north Idaho in June, spreading eastward through Montana in July and August and possibly reaching western North Dakota. September weather forecasts look normal, which means significant wildland fire potential will remain above normal due to increasing fall winds and lack of strong moisture signals.

Great Basin

Significant fire activity is expected to increase to above normal over southern areas of the Great Basin, primarily in the mid to higher elevations. These areas are stricken by long-term drought and have been hotter and drier than normal the latter half of May. However, the drought conditions have also led to a below normal fine fuel crop in the lower elevations in the south, where fire conditions should remain normal. Otherwise, fire activity is expected to be normal for June in most other areas as periods of cooler temperatures and precipitation continued through May into early June across the northern half of the region. Low pressure systems may still move through the Great Basin through at least mid-June, bringing periods of cooler temperatures, higher humidity, and precipitation, especially across the northern half of the region. However, fires will likely emerge at times in areas that remain drier, especially in portions of western and southern Nevada into western and southern Utah.

The North American Monsoon is now expected to start a little later than normal this year due to the persistent low-pressure troughs moving across the West, which delays the formation of an upper-level ridge over the Four Corners that drives the monsoon. Therefore, above normal significant fire potential is expected to continue at higher elevations of southern areas through the first half of July, although areas farthest south may receive enough monsoonal moisture to return to normal. By July and August concerns shift northward to northern and western Nevada and southern Idaho. Fine fuel carryover is expected to be above normal in the lower elevations, with multiple crops of new cheatgrass due to late spring moisture in some areas. Meanwhile, despite the healthy winter snowfall, prolonged warm and dry conditions so far this spring and potentially continuing into July will result in above normal potential for the higher elevations of Idaho by the latter half of July or early August.

Temperatures overall in May were above normal. Precipitation was below normal in most areas as well, except for southern areas that saw above normal precipitation that mainly fell at the beginning of the month. Water year precipitation since October 1 was well below normal across much of the Great Basin, except in far northwest Nevada and western Idaho, which was near to just above normal. The spring snowpack maximum was near normal over the northern half of the Great Basin, and just above normal over parts of northwest Nevada and southwest Idaho in early

April which has melted more rapidly than normal due to the warm and dry weather. The southern half of Utah, southern Nevada, and the Arizona Strip had much below normal snowpack. The only areas of the Great Basin with no drought are northern Nevada and southern and western Idaho. Drought continues across the southern half of the Great Basin with severe to extreme drought across much of southern and eastern Nevada, western Utah, and the Arizona Strip. Moderate drought covers the rest of the southern half of the Great Basin, with pockets of moderate to severe drought in northern Utah, western Wyoming, and the Salmon-Challis National Forest in Idaho. Drought will likely persist and worsen in much of the Great Basin through summer.

Green-up continues across northern areas of the Great Basin, and the curing process has begun across much of Nevada and Utah. Southern areas of the region are now cured in the lower elevations while mid to higher elevations are in transition. Dried, dormant, carryover grasses will still be abundant over southern Idaho, northern Nevada, and portions of northwest Utah. Prolonged dry periods followed by gusty winds, will still pose a brief localized wildfire risk in these areas in June. Fire danger indices indicate higher than normal fire danger for the time of year in southern areas due to drought, but fuels are not critically dry yet. Periods of cooler temperatures and precipitation through mid-June will keep fire danger moderate in many areas. Drier than normal areas of western Nevada and southwest Idaho are expected to remain dry, keeping fuels more receptive in those areas.

Wildfires are becoming more frequent at lower elevation sites in Nevada, Utah, and southern Idaho, and a few have grown into the thousand-acre range. These fires will gradually increase through June with dried grasses burning around greener fuels until nearly all herbaceous fine fuels become cured and available for consumption later in the month.

The progressive weather pattern from May will continue through at least mid-June, with periods of cooler temperatures, higher humidity and precipitation, including southern portions of the Great Basin. The continuation of cold fronts moving in from the Pacific Ocean, which may continue past mid-June, will most likely delay the development of the North American Monsoon. This will likely keep southern areas of the Great Basin drier than normal through the first half of July.

The first area of concern for June will be western Nevada and the Sierra foothills, which will largely remain dry the first half of the month. Grasses are drying quickly, and sagebrush fuel moisture is already below average, with some areas at critical levels or near historical lows for the time of year. Recent fires along the Sierra Front have fully consumed grass and brush fuels. Therefore, above normal significant fire potential for June was added to portions of western Nevada into the eastern Sierra, where conditions will continue to dry. These areas are also more susceptible to strong winds as cold fronts move through the region.

The second area of concern for mid to late June will be southern areas of Nevada, Utah, and the Arizona Strip in the mid to higher elevations. These areas have seen well below normal snowpack and precipitation the past several months resulting in increasing drought. Moisture will move across southern areas early in June, but unless that moisture is well above normal, fuels will dry out quickly by mid-June.

Monsoon moisture is expected to be a bit more delayed than normal, while uncertainties exist on how far north its extent will be. Therefore, the above normal significant fire potential in southern areas is expected to extend into at least mid-July, except for the far southern areas, which should begin to observe increasing relative humidity by mid-July. Central and northern Utah will be monitored for possible areas of above normal fire potential in July, but confidence is too low to add them yet.

Another concern for July will be the lower elevations of northern Nevada and southern Idaho. These areas have abundant carryover fine fuels from last year along with multiple crops of new fine fuel growth resulting from precipitation that occurred in the winter and spring, plus the additional precipitation expected through early June. Therefore, above normal fire potential can be expected for much of western and northern Nevada into southern Idaho for July and August. The Salmon-Challis National Forest is forecast to have above normal potential in July due to expected warm and dry weather rapidly melting the remaining snowpack.

Areas in central Idaho farther west toward the Payette and Boise National Forests are likely to delay above normal significant fire potential until August, but climate outlooks strongly suggesting prolonged warmth and dryness for most of the summer. Above normal fire potential will linger into September across western and northern areas as fall cold fronts move in, bringing stronger winds to areas that remain critically dry.

Southwest

The potential for significant fires is expected to be above normal across southeast and central Arizona as well as southwest and southcentral New Mexico in June. These areas are experiencing very dry fuel conditions in the shrubs and trees, with above average grass loading in some areas as well. Significant fire activity normally peaks during the month of June across the Southwest Geographic Area, with fire danger normally abating following the onset of the North American Monsoon.

Average temperatures over the past 30 days have been 3-5 degrees above normal across the geographic area. Precipitation was well above normal over western Arizona and northeast New Mexico and well below normal elsewhere. As of May 27, the US Drought Monitor indicated widespread areas of extreme drought with pockets of exceptional drought focused over far southwest Arizona and southeast New Mexico, with moderate to severe drought elsewhere. The Climate Prediction Center Seasonal Drought Outlook predicts that drought will persist across all but far eastern New Mexico.

Live fuel moisture samples taken in the shrubs and trees are very low for the time of year across southwest New Mexico and southeast Arizona, indicating major drought stress. Fuels in these areas are likely to contribute to rapid rates of spread and spotting. Current conditions are closer to what would be expected during the peak of fire season in mid-June. The herbaceous grass crop across portions of southern Arizona is heavier than normal and may contribute to rapid rates of spread across the landscape. Fuels and Fire Behavior Advisories have been issued for these critical fuel conditions across southeast Arizona and southwest New Mexico.

Fire activity has been increasing, particularly over the latter half of May, with multiple incident management teams being deployed within the geographic area. As of June 1, the Southwest Geographic Area is at preparedness level three (on a scale of 1-5).

The month of June will begin with a generally cool and wet pattern as a series low-pressure systems track across the region. Hotter and drier weather will move in by the middle of the month, however, bringing overall fire potential back to above normal for much of the area. The last two weeks of the month will likely see the greatest increase in significant fire activity as seasonal temperatures peak, relative humidity falls to critical levels, and lightning activity increases with the first pulses of the North American Monsoon.

Monsoon storms will bring deeper moisture into the Southwest Geographic Area during the month of July, which will gradually decrease the overall potential for significant fires to seasonal levels. Precipitation is forecast to be above normal across Arizona and far western New Mexico during the month of July, indicating a robust monsoon season. Normal significant fire potential is expected for August and September as monsoon moisture continues across the region.

Rocky Mountain

Above normal significant fire potential is expected in southwest Colorado for June and northeast Wyoming for August and September. Otherwise, normal significant fire potential for the Rocky

Mountain Area (RMA) is expected through September. May saw more areas east of the Continental Divide receive precipitation, but the west side of the Divide continued to see below average precipitation. Temperatures for much of the area were at or above normal for May. Drought conditions have largely remained unchanged, with drought persisting across much of the area.

May brought increasing showers and thunderstorms to the Rocky Mountain Area, resulting in normal to above normal precipitation in eastern Wyoming and Colorado extending into western Kansas and Nebraska, and across much of South Dakota. The West Slope of Colorado into western Wyoming remained below average throughout the month. May's observed temperatures across much of Wyoming, northern Colorado, Nebraska, and South Dakota were at or above average, while southern Colorado and Kansas were near or below average. The areas in north-central Wyoming around the Bighorn Mountains as well as portions of central South Dakota and southeast Kansas saw drought conditions come to an end with the increased precipitation. Meanwhile, the West Slope of Colorado into southern Wyoming, and northeastern Colorado into central Nebraska continued to see worsening drought conditions from the lack of precipitation and warm temperatures. Much of the rest of the area saw drought conditions continue with no change.

With the increased showers and thunderstorms, most of the area is now in full green-up. Several of the precipitation events had significant totals, and fire danger values dropped below the long-term average as a result. However, with the ongoing drought and less precipitation, the West Slope of Colorado is starting to see the grasses dry out and support more fire spread.

Initial attack activity has been increasing following typical seasonal trends. Lightning starts are starting to become more common, especially west of the Continental Divide where the fuels are more receptive. Despite the increasing activity and drying fuels, most fires have been contained within one operational period and been less than 10 acres.

Temperatures are expected to remain above normal through the outlook, with the highest chance centered on the Four Corners. June will see southwest Colorado trend closer to normal for precipitation while the rest of the RMA will continue to be below normal. This will likely be a gradual increase in showers and thunderstorms as the monsoon starts to develop in the southwestern US. The middle of summer will see the Four Corners region trending above normal for precipitation as monsoon activity increases. The remainder of the RMA through September will remain below normal for precipitation.

With drought conditions on the West Slope and the expected increasing thunderstorm activity as the monsoon begins, southwest Colorado will have increased significant fire potential in June while the rest of the area will remain normal. The above normal potential in southwest Colorado will largely end in July as more frequent showers and thunderstorms develop as the monsoon intensifies. The area of concern going into August and September will shift to northeast Wyoming, with continued drought conditions and forecast below normal precipitation.

Eastern Area

May was wetter for much of the eastern half of Eastern Area with above normal precipitation for the Northeast and Mid-Atlantic amid near normal temperatures. Fire activity decreased in these areas for May, and low activity is likely to continue as green-up progresses. However, southern New England and the eastern edge of the Mid-Atlantic will be monitored as some burnable fuels remain after green-up. The seasonal forecast from the Climate Prediction Center (CPC) calls for above normal temperatures and above normal precipitation, which are expected to keep fire potential normal this summer.

Farther west and south, the Ohio Valley and the Appalachians are also well into green-up, with much of the area nearing 100%. Mean daily relative humidity throughout May was variable, with extended periods having relative humidity above 50%, interspersed with drier days that never

exceeded 40%. Thus far the dry periods have been short, keeping overall fuel moistures from dropping to critical levels and ensuring significant fire potential remains normal to just below normal for June, possibly longer.

Green-up is nearly complete across Eastern Area's southwestern tier of states. With relative humidity values consistently above 40%, fire potential here has been low. The absence of critically dry fuels, combined with the CPC forecasts for near normal precipitation and near to above normal temperatures, will keep significant fire potential normal for this area into the summer.

The Great Lakes have been drier than normal, especially for northern Minnesota, northern Michigan, and northern Wisconsin. Green-up progression has been very slow, keeping fuels available to burn. The area has consistently seen relative humidity remain below 30%, and spring rainfall has been well below normal too. When combined with the CPC forecasts for above normal temperatures and near to below normal precipitation, areas from Lake Superior into northwest Minnesota are now expecting the above normal significant fire potential that began in May to persist into June and continue into August for northern Minnesota.

The southern portions of the Great Lakes have fared somewhat better, with more regular rainfall and extensive green-up. Equal chances of above or below normal precipitation are forecast through summer, albeit with the potential for above normal temperatures, so this area's significant fire potential is expected to remain normal throughout the outlook period.

Well below normal snowpack was observed across much of the northern tier of the Eastern Area the past winter, affecting available surface fuels despite green-up occurring during the late spring into the summer. Fuels drivers that are still of concern from the lack of snowpack are standing dead grass intermixed within green grasses that are more available to ignition sources during warm and dry periods. In addition, the overall precipitation deficit since the beginning of 2024 is resulting in low water-levels in lakes, ponds, and marshes, which keeps lowland grasses and shore vegetation available to burn during warm and dry periods. Periods of above normal fire potential are expected during any hot, dry, windy events in the northern tier. It will be a concern in any areas of long-term drought that "green" fuels could be deceptive, and it may not be long before curing begins and live fuel moistures drop to levels that contribute to increased fire behavior after fires start. Convective summertime rainfall will create spotty precipitation, and potential ignitions from lightning will be a concern in areas of northern forest fuels experiencing drier than normal conditions. While it cannot be predicted with confidence, there is concern that this summer may see cycles of precipitation that foster fine fuel growth followed by extended dry periods that cause those fuels to cure may contribute to above normal fire potential. Despite these concerns, significant fire potential is most likely to remain near normal this summer for the Eastern Area's northern tier of states.

Southern Area

Welcome rainfall in May is helping to ease water woes for most of the coastal Southeast as the summer arrives. Long-term anomalies remain significant for the coastal Carolinas, where deficits are on the order of 8-15 inches since October 1. Rainfall was more variable across Florida, with the Drought Monitor update on May 27 depicting widespread severe to extreme drought in southern and western areas of the peninsula. The wet pattern that began earlier in spring over the Plains and Mississippi Valley continued, but scattered areas across Oklahoma and Texas were drier than average. More importantly, the multi-year drought over central and southern Texas is expected to be impactful as we head into summer. Concerns are highest where extreme to exceptional drought is combined with impacts to fuels from killing freezes in 2021, ice storms, and a pervasive infestation of Oak Wilt.

Some changes were made to the previous outlook for June across the coastal Southeast, mainly due to improving conditions that occurred during May. Rainfall patterns for June are of lower confidence in the Southeast, but a dry pattern will set in during early June from central Florida

northward to the Carolinas. There are hints of a mid-June tropical system that could be important in fully diminishing fire risks in areas such as the Florida peninsula that typically see large fires continue as lightning starts pick up as the rainy season commences, but the track of this yet-todevelop disturbance is highly suspect. Southwestern and western parts of the peninsula may be most likely to observe significant fire events until daily rain chances or a tropical system fill up waterways in the region. Farther to the northeast, the coastal Carolinas observed drought relief in May but are looking to dry back out for at least the start of June. Most long-range models depict drier than average conditions along the immediate coast in North Carolina and South Carolina, which could be problematic in the region's deep and still dry organic soils. Above normal significant fire potential is maintained into June for the coastal Carolinas and South Florida due to the ongoing impacts from drought. An extension of these conditions later into the summer cannot be ruled out in the Carolinas but is of low confidence for now.

Although wetter conditions have chipped away at some of the drought in central Texas and may continue to do so into early June, abundant dead fuels and a growing signal for abnormal heat later in the month warrant a maintenance of above normal significant fire potential in and around the Hill Country. Green but wilting grasses from an unusually hot May will provide a heat sink until they fully cure out this summer, which is expected to be inevitable based on long-range model guidance and analog years that featured a La Niña-like to ENSO-neutral transition. Factoring this in along with the abnormally cold water adjacent to Mexico's Pacific Coast has typically resulted in very high evaporative demand, significant heat waves, and flash drought across most of Texas and Oklahoma during June, July, and August. Models disagree on the exact placement and magnitude of these conditions, and rainfall from tropical systems could play a role by later in the summer. Assuming flash droughts occur as expected, abundant grasses from a very wet spring farther north will most certainly cure and contribute to fires spreading into the more volatile fuels. Above normal significant fire potential is forecast to expand considerably across both states by July and August, mostly in line with the previous outlook.

September is typically one of the quietest months for wildland fire across the Southern Area, but any lingering drought could certainly sway subsequent outlooks. An active hurricane season and impacts to the US coastline are a near certainty with near-record warm water adjacent to the coast, but where these systems track is unclear this far out. Analog guidance suggests the East Coast may be more at risk than in 2024. Although September would normally be too early to be a concern in the heavily shaded Appalachians, any drought late in the summer in areas impacted by Hurricane Helene could result in an early start to the fall fire season where catastrophic tree damage occurred. Confidence is too low in this scenario for now. Normal significant fire potential is forecast throughout the Southern Area for September.

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