



National Significant Wildland Fire Potential Outlook

Predictive Services National Interagency Fire Center

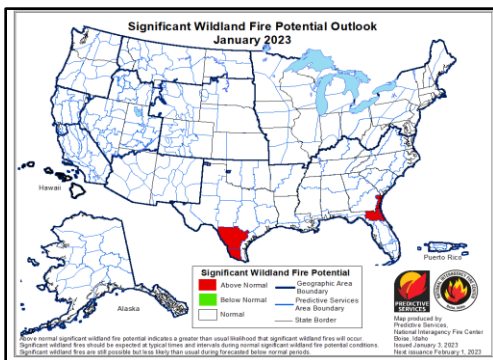
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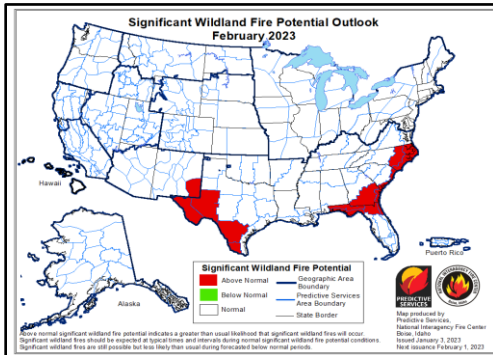
Outlook Period – January through April 2023

Executive Summary

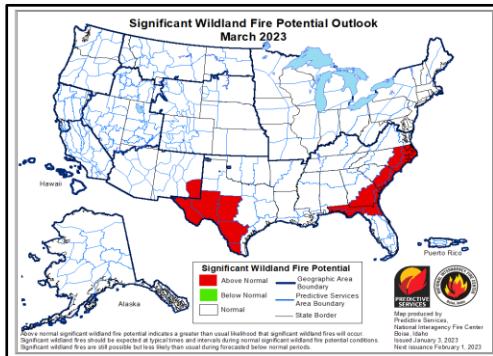
The significant wildland fire potential forecasts included in this outlook represent the cumulative forecasts of the ten Geographic Area Predictive Services units and the National Predictive Services unit.



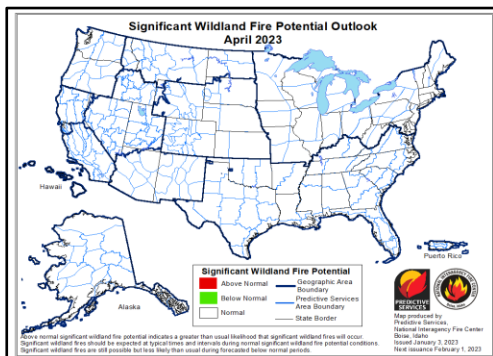
Significant fire activity was minimal across the US during December as consistent upper-level trough passages with enough precipitation limited significant fire potential. However, it remained dry across much of the central and southern High Plains into the Rio Grande Valley, with occasional elevated fire weather conditions. Year-to-date acres burned for the US is just above the 10-year average, with the number of fires about 10% above average.



Another modest reduction in drought occurred for the US in December, with improvements scattered throughout the country, but drought continues in about half of the country. The most intense drought continues on portions of the southern and central Plains, which had another month of below normal precipitation, including some areas receiving none. Near to above normal precipitation fell on much of the West Coast, northern Intermountain West, northern Plains through the western Great Lakes, and in the Northeast. Most of the US had near to below normal temperatures, including record low temperatures behind a strong Arctic cold front just before Christmas.



Near to below normal temperatures and near to above normal precipitation are likely from the Pacific Northwest to the Great Lakes into March. Warmer and drier than normal conditions are likely through March along the southern tier of the CONUS, especially in much of the Southwest, southern High Plains, Gulf Coast, and southeast Atlantic Coast. Drought is anticipated to expand into portions of the Four Corners, south Texas, and on the southeast Coastal Plain, but drought conditions will likely improve across the northern tier of the West, northern Plains, and in portions of the Ohio and Mississippi Valleys.



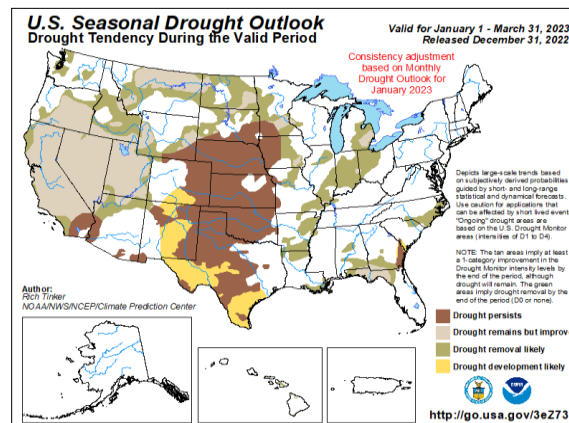
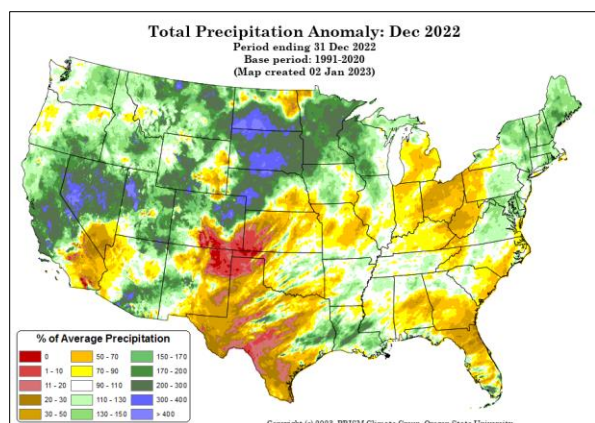
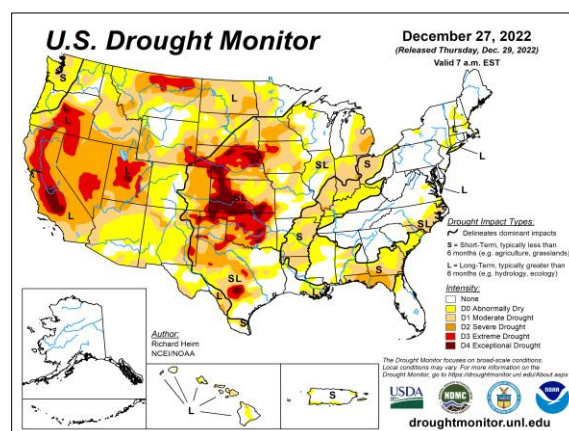
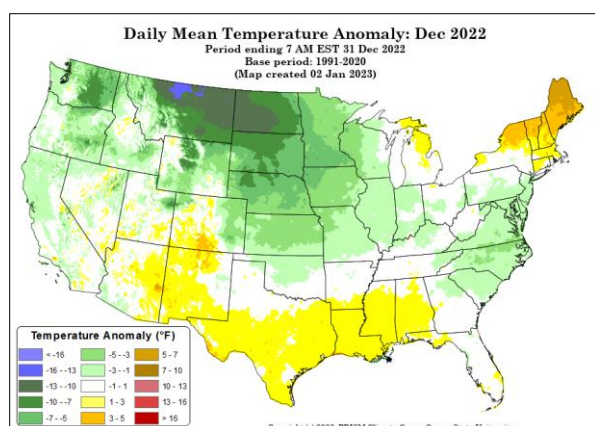
Above normal significant fire potential is likely in portions of south Texas, northeast Florida, and coastal Georgia in January due to continued warmer and drier than normal weather. Above normal potential will expand to include southwest Texas, southeast New Mexico, the Florida Panhandle, southeast Georgia, and the coastal Carolinas in February and March. Above normal potential will also likely increase into parts of central Texas during March. However, all areas are forecast to return to near normal significant fire potential in April due to green-up and a likely pattern change during spring. Portions of the central Plains, especially the High Plains, may have periods of above normal potential during dry and windy weather events, especially if precipitation deficits worsen. The rest of the US will have near normal significant fire potential through April, with many areas out of fire season until spring arrives.

Past Weather and Drought

Multiple moderate to strong atmospheric rivers brought precipitation to the West Coast and across much of the Intermountain West. Snowpack is near to above normal across the West, except for portions of the southern Rockies, and some basins have received approximately 200% of normal for snow water equivalent in and around the Sierra. Snowpack and snow cover are also near to above normal across Alaska, while Juneau, AK set a new annual precipitation record this year. A historically strong winter storm affected along and east of the Rockies across the CONUS in late December, including record low temperatures and precipitous temperature drops associated with the Arctic cold front. Blizzard conditions affected portions of the northern Plains, Great Lakes, and Northeast for multiple days. As of December 30, at least 60 people died in eight states, including nearly 40 people in Erie County, NY, due to this storm.

Consistent cold frontal passages, including cold air intrusions extending through the southern US led to mostly near to below normal temperatures across the CONUS, except in portions of the Southwest, Texas, and central Gulf Coast. Below normal precipitation was focused on the southern Rockies, southern and central High Plains into south and central Texas, and portions of the Gulf Coast, Florida, and southeast Coastal Plain. The Mojave and Sonoran Deserts and from the Ohio Valley into Michigan had below normal precipitation but deficits diminished at the end of December.

Scattered minimal to modest drought improvements were noted in the CONUS, especially from Kentucky into north Alabama and Georgia. However, drought continues in about half of the country, and drought intensified in portions of the southeast Coastal Plain, Michigan, and central High Plains. Multiple atmospheric rivers affected much of the West, and heavy rain associated with Gulf of Mexico moisture fell in the Southeast, Lower and Mid-Mississippi Valleys, and Ohio Valley into the Great Lakes during the last week of December, which will help ameliorate drought conditions in these areas. The most intense drought remains on the southern and central Plains, with extreme to exceptional drought also in portions of California, Oregon, Nevada, Utah, and Montana.



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 Drought Outlook (bottom) (from National Drought Mitigation Center and the Climate Prediction Center)

Weather and Climate Outlooks

La Niña conditions continue, with below average sea surface temperatures (SSTs) over much of the equatorial Pacific Ocean, but SSTs have warmed slightly in the past month in portions of the equatorial Pacific Ocean. La Niña conditions will continue but gradually weaken through winter according to most guidance. The Climate Prediction Center (CPC) is forecasting a 71% chance of neutral El Niño-Southern Oscillation (ENSO) conditions returning in spring. Other teleconnection patterns, such as the Madden-Julian Oscillation, Pacific Decadal Oscillation, Pacific-North American Pattern, and Arctic Oscillation are likely to influence weather and climate during the outlook period, but La Niña is forecast to remain the dominant influence through February.

Geographic Area Forecasts

Alaska: Normal significant fire potential is expected in Alaska through April, and Alaska will be out of fire season through March. Typical conditions are expected in April, with the first wind-driven grass fires of the season occurring as the snowpack retreats.

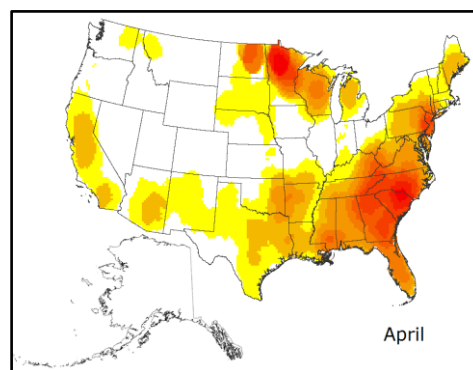
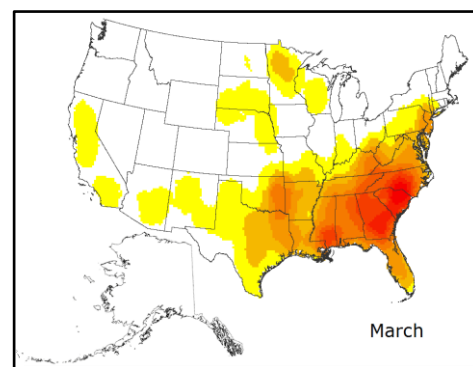
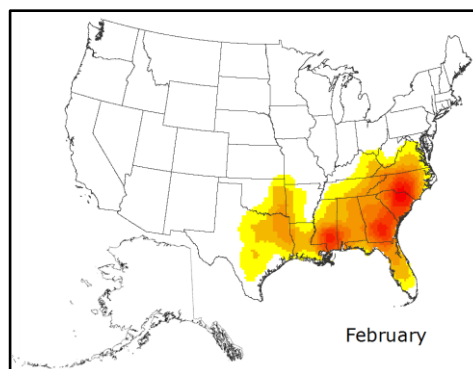
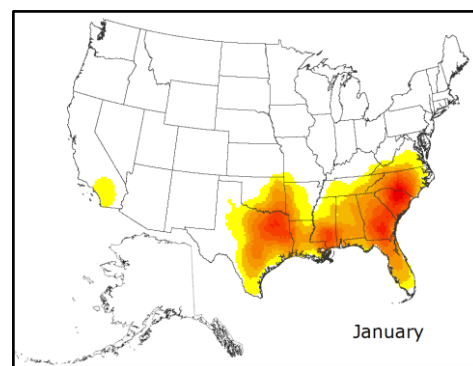
Ample precipitation has fallen across much of Alaska during the fall and early winter, and no areas of the state are in drought status. With no wildfire activity in the state, Alaska is out of fire season. Fuels across most of the state are snow-covered. Areas that don't have snow are generally coastal with cool and damp conditions, so fuel burnability is very low statewide.

The Climate Prediction Center (CPC) forecasts that precipitation will be near normal for much of Alaska, with a moist signal over the west coast and drier conditions in the panhandle, Kenai Peninsula, and Copper River Basin. CPC also indicates a trend for warmer temperatures along the North Slope and colder temperatures in southeast Alaska. March and April are typically very dry months for Alaska, and no departure from this behavior is expected in 2023.

With the winter snowpack established in many areas and seasonable cold, damp weather in the forecast, Alaska is out of fire season through March. The winter snowpack typically begins melting at lower elevations in April as cured fine fuels from the previous season are exposed and wind-driven grass wildfires become possible to begin the 2023 season.

Northwest: Normal (i.e., very low) risk of significant fires is expected for the Northwest Geographic Area through April. Some improvement of drought conditions is expected over the winter, and climate outlooks suggest the Pacific Northwest will remain colder and wetter than typical into spring.

Periodic precipitation continued across the Pacific Northwest in December. While the west side lagged climatology, it saw the largest precipitation accumulations in the geographic area through the month, with many coastal and Cascade stations reporting over a foot of liquid equivalent so far in December. The east side surpassed climatology, but generally accumulated from less than an inch to around four inches. Temperature was cooler than normal for December, with Arctic air



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

arriving the third week of the month, bringing much colder than normal temperatures, particularly to eastern Washington. Warmer than average temperatures arrived around Christmas. Snow water equivalent is above normal for most reporting basins in the geographic area, with only a couple basins in the northern Cascades and the Olympics slightly below normal.

Drought designations improved slightly along the Oregon-Washington border and in northeastern Washington in December. Extreme southwestern Oregon was the only area to see drought conditions worsen. Except for portions of northeast Oregon and southeast Washington, the entire geographic area remains in some form of drought designation, with extreme to exceptional drought areas persisting in central Oregon.

Wildfire activity was minimal through December due to wet winter weather. Only two fires were discovered during the month with minimal acreage reported. Fire danger indices remained above seasonal average for most of the geographic area through much of December. Several Predictive Services Areas (PSAs) continued to set new daily record high energy release components (ERCs) through the month, with the largest departure from normal being in central Washington (PSA NW05). Wetter systems arrived before Christmas, bringing most PSAs close to seasonal normal fuel moistures and ERCs, but some central and eastern PSAs are still above previous record daily ERCs, with 100- and 1000-hour fuel moistures correspondingly low.

Northern California and Hawai'i: Significant fire potential is projected to be normal through April. Historically during January through April, less than one large fire occurs for each Predictive Services Area (PSA). Hawaii's significant fire potential is forecast to be normal from January through April.

The weather pattern during December across northern California was generally unsettled with several cool and wet intrusions. Average temperatures were below normal with the coolest anomalies east of the Cascade-Sierra Crest. Precipitation was generally above to well above normal, with the strongest anomalies found across southern and eastern portions of North Ops. The most notable atmospheric river events occurred on December 10, December 27, and December 30. A weak northerly and easterly wind event with marginally low humidity affected North Ops on the December 15, otherwise no other dry-gusty wind events occurred.

Long-term drought conditions improved during the month, but varying intensities remained. Herbaceous fuels responded to the abundant soil moisture and showed a solid green-up signature below 3,000 feet. The previous carryover grass crop continued to get altered or broke down due to a myriad of factors, including the unsettled weather pattern, green-up, frosts, and freezes. A few storm systems provided snow cover between 2,000 to 4,000 feet but, by the end of the month snow cover was generally limited to above 4,000 feet. Water stored within the snowpack improved from around 100% of normal December 1 to between 110% to 175% of normal December 30. Limited shrub sampling revealed a gradual rise in moisture levels. Cooler temperatures, widespread frosts and freezes, and shorter daylight hours likely reduced more significant moistening or green-up across the lower elevations. Fire business was light with generally less than one initial attack fire reported on average per day. Prescribed burns remained active during the first three weeks, mostly pile burns, but some were very small understory burns.

The weather outlook for January through April calls for mixed temperature and precipitation anomalies, with some months being a bit wetter while others on the drier side. Similarly, some months will experience near to above normal temperatures while others are likely to be near to below normal. The driest monthly signature shows up for February as a near West Coast ridge potentially becomes more dominant. Critically dry fuel moisture alignments are not likely to be reached for any great length of time or over a larger area during the four-month outlook. Long-term drought will remain, but the intensities are likely to weaken.

A solid flush of green-up, less standing dead grass from the previous growing season, and periods of elevated dead fuel moisture will mitigate significant fire potential across the lower elevations, while snowpack mitigates the threat across upper elevations. Fire business could increase some during dry-extended periods but is not expected to be excessive. The mid elevations, found between significant green-up and snowpack, will have the most potential for moderate fire growth, but the potential will be limited

because the areal extent will be limited. A normal amount of dry and gusty northerly and offshore wind events should occur during the next four months but could be somewhat enhanced during February.

Sea surface temperature (SST) anomalies surrounding the Hawai'ian Islands are near to a little above normal. Average temperatures during December were generally near to above normal with a cooler than normal anomaly across portions of the Big Island. Precipitation anomalies were generally above normal thanks in large part to a strong cold frontal passage on December 18-19, which created flooding rains and high-elevation snow. Long-term drought improved across all the islands, although most still have some designated dryness and drought conditions.

The four-month weather outlook calls for near to above normal temperatures consistent with the above normal SST forecast. Above normal precipitation is also expected during the outlook period with a wetter rainy season. Gusty extended wind events impacted the islands during December and enhanced trade winds will likely continue at times during the next couple of months as La Niña weakens. Therefore, some drier leeward pockets will remain but should be localized. Drought intensities will also continue to ease. Significant fire potential is projected to be normal from January through April.

Southern California: A pair of strong winter storms brought widespread and beneficial wetting rain and mountain snow at the beginning of December. One storm arrived on December 3-4, which impacted central and northern California. A second, more powerful, storm brought heavy rain to central and southern California on December 10. The two storms summed together resulted in one of wettest Decembers of the past few years. Another storm arrived just before New Year's.

The second storm had abundant moisture available, resulting in heavy precipitation on west and southwest aspects of the central California coast and the Transverse Ranges of southern California. Local amounts of over two inches of rain occurred on the central coast and over a foot was recorded in areas of the Sierra Foothills and the mountains of Santa Barbara and Los Angeles Counties. Lighter amounts occurred south and east of Los Angeles County, but amounts were enough to keep fire activity minimal.

Temperatures were generally cooler than normal in December due to the storms and frequent cold air intrusions across the Great Basin. Offshore wind events last month were very minor and inconsequential. Tule Fog developed around December 17 across the San Joaquin Valley, which was very persistent the week after. Later in the month, strong ridging over the eastern Pacific drew closer to the region, resulting in warmer than normal conditions.

The storms of December brought a wholesale change in fuel conditions. Dead fuel moisture (DFM) was at near record low levels at the beginning of December, but by the middle of the month, DFM was well above average. Seasonal grasses began to grow rapidly at elevations below 3,000 feet, and at the time of this writing, many areas of South Ops have an extensive grass crop. Some native shrubs are showing new growth and leaves, but more substantial growth is still a few weeks of warmer weather away.

Snowpack totals climbed to well above normal levels across the Sierras, with snow water equivalent (SWE) figures over 150% for most watersheds of central California. The Sierra, over 7,000 feet, are covered under several feet of snow, but there has been some melting in open areas of the foothills and with the latest atmospheric river.

The combination of extensive grass growth at lower elevations and deep snow in the high country should keep fire potential minimal the next few weeks. However, DFM may drop low enough to allow for ignition in finer fuels between these two zones – especially in areas from 3,000 feet to around 6,000 feet – if dry, windy conditions return in January and February.

A La Niña remains in place across the equatorial Pacific, but there are signs its strength is beginning to wane. According to the latest outlook from the Climate Prediction Center (CPC), there is a 71% chance of El Niño-Southern Oscillation (ENSO)-neutral conditions developing during February through April. Indeed, the depth and areal coverage of below normal ocean temperatures appear to be shrinking, and there is a good chance that neither a La Niña nor an El Niño will be impactful by the spring.

The closest analog year to the current and forecast ENSO conditions is 2012. The 2012 rainy season started off relatively wet before conditions turned drier in January and February. But there was a “late precipitation rally” in March and April when well above normal precipitation was recorded. In fact, during that season, March and April were far wetter than December-February (the climatologically wettest months of the year for most of South Ops). While there are other factors that govern large-scale weather patterns across the Pacific, ENSO is one of the most significant in determining winter and spring precipitation.

Given the expectation of a decreasing ENSO signal, we are expecting a below average period of precipitation from January to February, followed by wetter than normal conditions in March and April. Temperatures are expected to be above normal, especially across inland areas. DFM will trend below normal and there will be some fire potential during offshore wind events, which should have near normal frequency. However, live fuels should keep significant fire potential low the next few months. Seasonal grasses will begin to cure in March, but the expectation of wetter weather in the early spring may forestall grass fire season for a few weeks. Significant fire potential, thus, may remain near normal until May.

Northern Rockies: Significant wildland fire potential in the Northern Rockies Geographic Area (NRGA) for January through April is expected to be normal. December has maintained cold temperatures and snow cover over much of the geographic area, and this pattern is expected to continue through the winter months. The persistent cold combined with near normal moisture should limit fuel stress and fire potential.

Since November 1, the NRGA has experienced persistent cold averaging 5 to 10 degrees below normal. This has supported retention of any moisture that has fallen in the region and the Standardized Precipitation Evapotranspiration Index indicates better than normal moisture retention in central and eastern Montana. Snow cover has been persistent over the Plains, which has limited threats of wind driven prairie fires. Mountain snowpack is not showing substantial deviations from early winter normals. Extreme drought is still indicated over north-central Montana, but general trends are for improvement.

Most fuels have been snow covered, though cold temperatures have preserved the snow and kept meltwater from significantly changing the fuel state. Minimal fire activity has been observed during the past two months. Fuel moistures and fire danger are near seasonal normals.

Near normal significant fire potential is expected for the NRGA January through April. Weather forecasts are indicating a lapse in the severe cold in the beginning of the new year, but this will be associated with a moist Pacific flow, which will keep the airmass from drying out. Seasonal outlooks are trending towards normal temperatures by the beginning of spring. This trend is associated with the breakdown of the La Niña, with long-range predictions indicating an El Niño-Southern Oscillation (ENSO)-neutral state by late spring or early summer. Pre-green-up fire activity may be possible in April, but current conditions do not support a disposition for significant amounts of activity.

Great Basin: Normal (i.e., minimal) significant fire potential is expected for the Great Basin January through April.

A prolonged wet period has affected the Great Basin, from an above average monsoon across southern and eastern portions of the geographic area during the mid and late summer months, followed by cold, wet conditions across northern and central areas the past two months. Recent heavy snowfall has pushed snowpack across higher elevations up to 120-180% of normal. A moderate La Niña is expected to keep wet and cold conditions for many areas into early 2023, before a transition to ENSO neutral conditions by spring, with more uncertainty in longer range precipitation and temperature trends.

There has been minimal, typical “off-season” fire activity. Above average snowpack will continue to build in the mountains, and grasses are matted down and dormant in the lower elevations. Precipitation patterns from late winter to spring will determine what kind of fine fuel crop awaits many areas for the upcoming fire season.

Southwest: Normal significant fire potential is anticipated for much of the geographic area from early winter through the mid-spring. Some areas of above normal significant fire potential are expected, in both February and March, on portions of the New Mexico eastern plains.

The early arrival of the North American Monsoon in mid-to-late June ended the large fire season in the Southwest Area and was one of the more robust monsoonal periods in recent history for many portions of the region. October through much of December have been wetter than average for many areas along and east of the divide region, with even some wetter than average areas farther west in Arizona. Temperatures have trended above normal overall for the geographic area, but non-eastern portions of Arizona and eastern New Mexico did have near to below normal temperatures in December.

Through the heart of the winter and early spring, given the ongoing La Niña, the expectation is that a warmer and overall drier than normal weather pattern will ensue. The jet stream will generally remain off to the north, and the Southwest Area will likely reside beneath frequent mid to upper-level northwest flow. Some areas of near normal precipitation and high elevation snow will be likely across the northern tier of the geographic area, elsewhere, below normal precipitation is expected overall. Given the ongoing dryness across the Plains through winter, areas of above normal significant fire potential are expected across sections of the eastern plains of New Mexico by late winter and early spring. Elsewhere, despite the drier and milder conditions, significant fire potential will remain normal areawide through April.

Rocky Mountain: Normal significant fire potential is expected across all areas of the Rocky Mountain Area (RMA) for the outlook period, which typically means low fire potential. However, the outlook period may have a few periods of elevated fire potential along and east of the Front Range Foothills and across portions of southeast Colorado and western Kansas due to persistent drought and the availability of cured and freeze-killed fuels that may lack sufficient moisture or snow cover when dry and windy conditions occur.

Weather patterns fluctuated significantly across the RMA since the end of November. A few deep, cold troughs moved over the geographic area in the first half of December and brought snow to the western mountains, along with significant snow accumulations to the Dakotas and most of Nebraska. Just prior to the Christmas holiday weekend, a very cold and intense Arctic airmass descended out of Canada and overspread the central United States, bringing widespread sub-zero daytime temperatures to South Dakota and most of the High Plains that lasted for a few days.

Comparatively much warmer and drier downslope conditions have persisted farther south across the Front Range Foothills into eastern Colorado and western Kansas during the same period. With infrequent precipitation and lack of snow cover, areas of moderate to severe drought remain across eastern Colorado, while extreme to exceptional drought conditions continue in western Kansas and far southwest Nebraska.

Colorado and Wyoming have accumulated snow with cold, wet weather systems since the beginning of November. Even though the mountains in Colorado have established a beneficial snowpack that is near normal for early winter, southwest and southern Colorado have accumulated less; only 70 to 90 percent of normal snowpack, with a drier and warmer signature that has persisted across southern portions of the geographic area. South Dakota, western Nebraska, and northeastern Colorado received significant snowfall during the second week of December and most of these areas now retain substantial snow cover over fuels that had once been exposed and critically dry.

Although fire danger is considered low overall for many areas in the geographic area, the driest and most vulnerable areas still exist along and east of the Front Range Foothills and across portions of southeast Colorado into southwest Kansas. Precipitation deficits in the aforementioned areas are generally less than 25 percent of average and surface conditions have remained warmer and drier overall due to downslope flow that precedes winter weather systems and cold frontal passages. These same areas will continue to experience enhanced fire potential until snow cover, or a combination of colder temperatures and higher humidity values set in for an extended period to mitigate the risk.

Favorable conditions in December allowed prescribed burning to continue in many areas of Colorado, Wyoming, and the Black Hills. However, pockets of dry and exposed fuels east of the Divide also supported a few smaller wildfires, including the Sunshine Fire that started December 19 under stronger downslope winds across the Front Range Foothills into the wildland urban interface west of Boulder, Colorado. As the winds abated, the fire activity quickly ended with overnight freezing temperatures and snowfall.

Even though La Niña is expected to weaken and return to a neutral state in February, the current El Niño-Southern Oscillation (ENSO) trend will still bring a drier and warmer influence across the southern United States through the winter months. NOAA's Climate Prediction Center (CPC) suggests wetter than normal conditions are favored for most of the RMA into the first two weeks of January 2023, with a return to a warmer and drier trend across the southern portions of the geographic area by the end of the month.

Other climate signals may continue to reinforce the wetter pattern across the Intermountain West into February, especially given colder and wetter troughs that have impacted the geographic area in the last several weeks and delivered substantial snowfall amounts across the central and northern Plains. Overall, as La Niña continues to wane, a split pattern of near normal temperatures and precipitation is expected across north portions of the RMA, while warmer and drier conditions will persist across southern portions through April.

The outlook for the RMA depicts normal significant fire potential across the geographic area for the winter and early spring months through April. However, due to the persistent drought across portions of the High Plains, fire potential may be elevated at times during the outlook period, especially along and east of the Front Range Foothills and across portions of southeast Colorado and western Kansas during warm, dry, and windy weather events. Statistically, there is an increase in fire activity and large fire occurrence across the plains in March and April, which is considered normal for the geographic area's fire history. Areas of enhanced risk going into early spring will be dictated by a lack of snow cover and persistent dry conditions where fuels remain receptive and green-up has not occurred.

Eastern Area: Near normal significant fire potential is forecast across the majority of the Eastern Area January into April.

Longer term drought was in place across parts of the Mississippi and Ohio Valleys as well as the southern Lower Peninsula of Michigan towards the end of December. Thirty to 90-day soil moisture and precipitation anomalies were near to above normal across the remainder of the Eastern Area.

Below normal temperatures are expected over the majority of the Eastern Area in January and across the Upper Mississippi Valley February into March. Above normal temperatures are expected across much of the southern tier of the Eastern Area in February. According to the NOAA Climate Prediction Center and Predictive Services' long-term outlooks, wetter than normal trends are forecast across the Great Lakes January into February and are likely to increase across much of the Eastern Area in March.

Periods of below normal fuel moisture levels may persist into January across drier parts of the western Mid-Mississippi Valley. Near normal significant fire potential is expected across the majority of the Eastern Area through the rest of the winter into spring.

Southern Area: Wet weather encompassed large portions of the Southern Area (SA) in December, with many areas from central and eastern Texas and far eastern Oklahoma to the Appalachians experiencing multiple wetting to excessive rain episodes. As a result, the US Drought Monitor improved by several categories over nearly every state in the geographic area, most notably in portions of central Louisiana, central Kentucky, and from central and north Georgia to the southern Appalachians. Although some rain did occur across the coastal Southeast and northern Florida, the US Drought Monitor did show degrading conditions where rainfall was below to well below normal. Likewise, Keetch-Byram Drought Indices (KBDIs) and soil moisture improved markedly over large swaths of the South, but KBDIs near or above 500 are still in place over west and south Texas, northwest Oklahoma into the northern Texas Panhandle, northwest Kentucky, south Florida, north Florida into southeast Georgia, and in eastern North Carolina. A historic outbreak of bitterly cold air in late December has left freeze-cured herbaceous fuels throughout most of

the SA, with the main exception being central and south Florida. Fuels have also dried out considerably within and behind this Arctic air mass, but quick recovery appears likely in all areas east of the Plains heading into early January. It is also worth noting the lingering influence of the 2022 hurricane season, which left large portions of the southwest Florida coast with salt-cured fuels and much of the Florida Peninsula with above normal water levels.

January is expected to begin with the return of storminess that has the potential to produce more than a month's worth of rain in under a week's time across large portions of the central and eastern geographic area. Ensemble guidance is in excellent agreement in above normal rainfall encompassing the Mississippi Valley, central Gulf Coast, and most of the Southeast during the first week of January, but confidence decreases heading towards the East Coast.

Worsening drought, below normal streamflow, and the potential for heavy rain to remain to the north and west is the basis for maintaining above normal significant fire potential in north and northeast Florida into coastal Georgia during January. Although long-range modeling has performed poorly so far this cold season, the lingering influence of La Niña and continued support by statistical and model guidance suggests that above normal temperatures and below normal precipitation will be the rule through January, February, and March across the Southeast. Longer-term drought and this signal for warm and dry weather continue to support the risk of above normal fire potential from all northern Florida into the coastal Southeast heading into late winter and early spring. The Florida Panhandle was removed from above normal potential in January, mainly due to the expectation for heavy rain in western portions of those Predictive Service Areas (PSAs) through the first week of the month. The Apalachicola National Forest is precariously close to the edge of observed and expected heavy rain, but confidence is higher in above normal significant fire potential to its east during January. Continued drought across the panhandle, long-range forecasts, and the addition of freeze-cured fuels are the basis for above normal significant fire potential across the Florida Panhandle during February and March.

The highest confidence in predominantly warmer and drier than normal weather the next few months is across Texas. This, combined with above normal grass loading over south Texas that is now freeze-cured, along with ERCs trending to and above normal are the basis for moving up the timing of above normal significant fire potential over these two PSAs to January. The same idea of expanding above normal potential into west Texas and the Trans Pecos by February continues, with a further expansion into portions of central Texas that have observed some rainfall the past few months but remain in significant, long-term drought. According to the Texas Forest Service, most of these PSAs have near to below normal grass loading, while portions of the Trans Pecos have above normal grass loading due to the influence of 2022's impressive monsoon season. The multi-year drought and generally below normal fuel loading over grass-dominant areas of northwest Texas and central through western Oklahoma are the main basis for maintaining near normal significant fire potential for those PSAs. A critical fire weather pattern emerging in the first few days of January over portions of Texas and Oklahoma will be telling, and the same general pattern featuring windy days and poor relative humidity recovery may continue through mid-month.

Conditions for the rest of the geographic area should remain wet or wet enough for near normal fire potential heading into the spring season. A few areas are worth watching for below normal large fire potential during February and March, including eastern Oklahoma, eastern Kentucky, the central Gulf Coast, and the central Florida peninsula. Most local fire experts across the Florida Peninsula are hopeful that current water levels in the swamps are enough to preclude much of a risk this spring. The other areas mentioned will be watched closely in January to see if rainfall lives up to expectations. Overall confidence in the pattern evolution from the latter half of January into February and March is lower than normal due to a weakening La Niña that may evolve into a full-blown El Niño as early as summer 2023. Despite the La Niña and MJO-fueled warmup in early January, winters with strong high latitude blocking episodes in December tend to see the return of blocking and colder than normal conditions over at least portions of the SA later in winter and early spring. It is unclear at this time what impact that would have on the fuels. Nonetheless, increasing uncertainty in the large-scale pattern into the spring months is the primary reason for going with normal large fire potential during April, which is climatologically when most of the SA starts to see improving conditions as green-up takes hold.

Outlook Objectives

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

For questions about this outlook, please contact the National Interagency Fire Center at (208) 387-5050 or contact your local Geographic Area Predictive Services unit.

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

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