## North American Seasonal Fire Assessment and Outlook

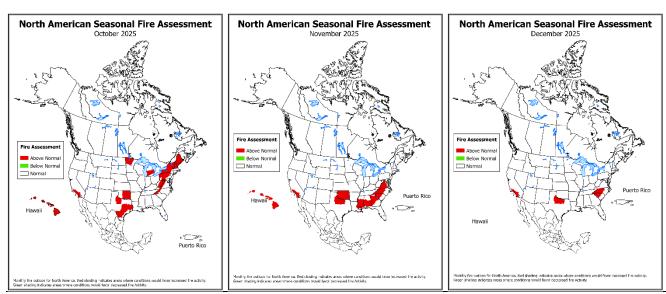
National Interagency Fire Center • Natural Resources Canada • Servicio Meteorológico Nacional
United States Canada Mexico

# Outlook Period October 2025 through December 2025 Issued 16 October 2025

## **Executive Summary**

Dry and warm conditions continued through much of Canada through the late summer. Positive geopotential height anomalies covered most of Canada, with the maximum extending from the Northwest Territories east to Hudson Bay. This kept warm air over most of the country with very high values in parts of British Columbia and Alberta, and often reaching far into the Territories. Positive monthly mean anomalies of 5 C or higher resulted in daily or monthly record warmth being set at some locations.

Some western regions had no measurable rainfall in about a six-week period with Pacific storms unable to move inland due to the blocking ridge. Rainfall was heavier along the Pacific coast, some interior central and southwestern British Columbia locations, and in southeastern Saskatchewan and southwestern Manitoba where above normal amounts fell. Toward the end of September, weather patterns became more variable but most inland locations only received localized bands of showers and light rainfall.



Monthly fire outlook for North America for October 2025 (left), November 2025 (middle), and December 2025 (right). Red shading indicates areas where conditions would favor increased fire activity. Green shading indicates areas where conditions would favor decreased fire activity. *Click on each image to see larger versions*.

The highest positive September temperature anomalies reached Ontario, where values exceeded 3 C along the central Manitoba border. These anomalies tapered off eastward through the province but were still about 0.5 degrees above normal along the Quebec border. A tiny pocket of normal temperatures occurred slightly west of Ottawa. Quebec's September temperatures were close to normal in the southwest and the far north around Ungava Bay, while they were above normal elsewhere, and greatest along the Gulf of St Lawrence. Dry conditions also dominated Ontario and Quebec. Near the Manitoba border, Kenora and Earlton only received 15-20% of their normal September rainfall. Normal to above normal rainfall occurred only in pockets in far northwestern Ontario, a strip from Lake Superior

to Hudson Bay, a few small areas farther east around the Great Lakes, and north of a La Grande Rivière to Schefferville line in Quebec.

Atlantic region temperatures fluctuated and resulted in near-average monthly values. Eastern Nova Scotia, eastern Prince Edward Island, and patches of western Newfoundland had slightly above normal September averages. Drought was intense, and tropical storms stayed offshore, contributing to the precipitation deficit. The only regions with normal September rainfall were a tiny slot of west-central New Brunswick, northeastern Newfoundland, and sections of southern and central Labrador. Some Atlantic regions set their driest September on record, and others were in the top five driest. Lightning activity was low in the southern Atlantic region, with New Brunswick's September total lowest on record (2002-2025) and Nova Scotia's second lowest on record. In contrast, Labrador had above normal lightning activity, although moist conditions reduced chances of lightning fires.

Drought prolonged fire activity in some locations, including Nova Scotia, where late-starting fires resulted in evacuations. Other pockets of the country have fire that will continue burning or smoldering, but activity generally waned during September. Overall, Canada appears to have recorded the second-highest total area burned in modern records at over 8 million hectares. This number is subject to change over the coming months as some active burning continues and mapping is refined.

Fire activity in the US increased significantly in the Northwest in early September, then decreased across the rest of the month into early October except for a modest increase in the Southern and Eastern Areas. September precipitation was mostly below normal east of the Rockies, except for areas of above normal precipitation across the central and northern Plains. Precipitation was above normal in most of California and the Southwest, but below normal in most of the Rockies and Washington. Overall, drought increased across the US into early October, with 45% of the country now in drought. Drought expansion was extensive across the eastern US but limited in the West. Temperatures have been above normal in the northern half of the country, but within a couple degrees of normal in the southern half.

Climate Prediction Center and Predictive Services outlooks issued in late September indicate above normal temperatures are likely across much of the US through December, with the greatest chance for above normal temperatures in the Southwest and Northeast. However, no clear signal for temperatures is forecast in the Northwest. Wetter than normal conditions are likely in the Northwest into the winter, but drier than normal conditions are forecast across the southern tier of the US, except Florida which may see above normal rainfall early in the period. Most of the US will have normal significant fire potential through December corresponding to the seasonal decrease in activity for most areas. However, portions of the northeastern US, Great Lakes, southern Plains, and southern California will have above normal potential for October. Fire potential is expected to be above normal for much of the Southeast, portions of the Plains, and southern California into November, with smaller areas of above normal potential in December. Above normal potential is forecast for Hawai'i into November before returning to normal in December.

Recent weather patterns had mixed effects on drought conditions across Mexico. Average temperatures remained above normal between July and September. Precipitation was below average in July and August but exceeded normal levels in September. These mixed conditions led to a nationwide decrease in drought.

There is a high probability for the transition from ENSO-neutral to La Niña in the coming months. For Mexico, this pattern can favor warmer and, for some regions, drier conditions for the October-December quarter. Indeed, the seasonal forecast for October through December anticipates above normal temperatures nationwide and below normal precipitation for much of central and northern Mexico. Only the southernmost Mexican states are forecast for above normal precipitation. However, the negative trend of the Pacific Decadal Oscillation (PDO), the positive trend of the Pacific North American (PNA) pattern, and ENSO conditions add greater uncertainty to precipitation and temperature forecasts.

While Mexico's year-to-date fire statistics show that that 2025 has been a relatively active and impactful year, peak wildfire season ended in September, as is typical. Wildfire activity and potential are forecast

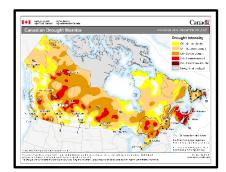
to remain minimal through December, but relatively brief periods of increased activity remain possible during the outlook period due to human activity.

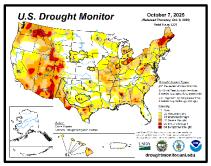
## **Critical Factors**

The critical factors influencing significant fire potential for this outlook period are global climate patterns related to sea surface temperatures, particularly in the Pacific Ocean, and large scale, longer-term soil moisture deficits:

#### El Niño-Southern Oscillation and Other Climatic Teleconnections:

El Niño-Southern Oscillation (ENSO) neutral conditions have transitioned to La Niña the past six weeks, with the Climate Prediction Center issued a La Niña Advisory October 9. Sea surface temperatures in the equatorial Pacific Ocean continue to decrease and are now 0.5 C below average. The Climate Prediction Center is forecasting La Niña to persist into the winter, with a 55% chance of La Niña persisting through the winter. A strongly negative phase of the Pacific Decadal Oscillation (PDO) persists but has weakened recently and remains a factor for this outlook. The Madden-Julian Oscillation (MJO) has been weak for much of September, but has recently emerged in the western hemisphere October 10, and may influence the pattern the remainder of the month. The shift to La Niña will continue to be the main driver of this outlook, coupled with the negative PDO, with some influence form the emerging MJO possible, as well.







Left: Canadian Drought Monitor from Agriculture and Agri-Food Canada. Middle: United States Drought Monitor. Right: Mexican Drought Monitor from CONAGUA-Servicio Meteorológico Nacional.

#### Drought

As of September 30, 85% of Canada is characterized as abnormally dry or in moderate to exceptional drought, marking one of the highest known percentages of the nation experiencing drought. Drought continued to intensify in much of Canada and is present in every province and territory. The region with the most extensive extreme drought surrounds the Bay of Fundy, partially in New Brunswick and partly in Nova Scotia. Some Atlantic locations in western Nova Scotia and Prince Edward Island recorded their driest summer period on record. A small patch of extreme drought is also present in west-central Alberta, just touching British Columbia near Dawson Creek. Patches of extreme drought are scattered through each province and territory except possibly Nunavut, where drought is currently not assessed. Only small areas of the country are drought-free, with the largest extents along coastal British Columbia and winding through the southern Prairie Provinces.

Agriculture and Agri-Food Canada reports nationally on drought and provides detailed information on changes and impacts at <a href="https://agriculture.canada.ca/en/agricultural-production/weather/canadian-drought-monitor/current-drought-conditions">https://agriculture.canada.ca/en/agricultural-production/weather/canadian-drought-monitor/current-drought-conditions</a> (accessed October 10, 2025). While drought levels are severe in many regions, impacts on the 2026 spring fire season are possible if snow levels remain light. However, 2026 summer fire activity will be dictated by late spring and summer rainfall.

Overall drought increased across the US since late August with 45% of the US in drought as of October 7. Drought expanded across much of the eastern US throughout September, with intensification in northern New England. Drought development was most notable in the Mid-Mississippi and Ohio Valleys, Lower Great Lakes, and Southeast. However, drought was removed in South Florida due to a wet

September. Drought persisted in much of the Rockies, although slight improvement was noted in western Colorado and portions of Wyoming, while drought also persisted in much of the Great Basin, Northwest, and California. Drought is forecast to improve in the Northeast and Northwest through the end of the year, but drought development and intensification are forecast across the southern Plains into the Lower and Mid-Mississippi Valleys into the Ohio Valley and Lower Michigan.

Recent abundant rainfall has reduced drought in parts of Mexico. By September 15, the national percentage of areas with moderate to exceptional drought was just over 9%, representing a more than 4% decrease from the end of August. Rainfall was above average across Mexico's northwestern, northeastern, west-central, central, and southern regions during the first half of September. This significant precipitation was driven by the passage of four tropical waves over the southern territory, the Mexican Monsoon, the descent of three frontal systems in the north, and the movement of Hurricane Lorena and Tropical Storm Mario along the Pacific Coast. Heavy rains recorded during this two-week period helped to reduce areas experiencing moderate to exceptional drought in the northern and northwestern regions. Conversely, precipitation deficits were recorded in the eastern and southern regions, plus the Yucatán Peninsula, which resulted in a slight increase in abnormally dry and moderate drought conditions in those specific areas.

#### Fire Season Status:

As of October 9, Canada has recorded approximately 5,600 fires, with just over 300 currently active. To date, roughly 8.3 million hectares have burned, making 2025 the second largest area burned on record. Note this is lower than reported in the September outlook issuance largely due to ongoing fire mapping efforts. September fires were characterized by the drought conditions occurring coast-to-coast. Nationally, there have been slightly less fires than normal for a season, indicating that many of this year's fires have been large, particularly in Saskatchewan, Manitoba, and the Northwest Territories.

This year, every province and territory (except Nunavut, which does not report fire statistics) outside of the Yukon, Quebec, Newfoundland, and Prince Edward Island had more area burned than their 25-year normal. Even though Newfoundland had less area burned than normal, dry conditions on the Avalon Peninsula helped to create a challenging fire season.

During September, the most significant fire activity occurred in the Cariboo region in British Columbia, the Great Slave Lake region in the Northwest Territories, west central Saskatchewan, and north central Nova Scotia. Evacuations occurred in the Northwest Territories (where smoke was also an issue for many surrounding communities throughout the month), western Saskatchewan, as well as for many rural homes in Nova Scotia. Another notable event occurred in late September when a wildfire near Peachland, British Columbia resulted in numerous evacuations and alerts in the Okanagan Valley. During mid and late-September smoke from fires in Washington state drifted over Canada, resulting in degraded air quality for much of southern British Columbia, Alberta, and Saskatchewan. Recent news reports describe localized fires starting in grain harvesting equipment due to accumulation of extremely dry chaff and dust, with some fires spreading into nearby forest or other vegetation.

By the end of September, cooler temperatures in the Northwest Territories resulted in diminishing fire activity. Similar trends followed in British Columbia, Alberta, and Saskatchewan by the final week of the month. The out-of-control fire in Nova Scotia remains as such due to the extreme drought conditions and dry fuels, although rain just prior to this report may have helped calm the situation. Many agency preparedness levels have recently dropped. As of October 9, all are at two or lower, except Nova Scotia, which sits at three.

In the US, fire activity increased significantly in the Northwest at the beginning of September, mainly due to a significant overnight dry lightning outbreak from southwest Oregon into north-central and northeast Washington. A more modest increase in activity was observed in California at the beginning of the month. Otherwise, a steady downtrend of activity was observed throughout the West in September into early October. A more modest increase in activity was noted across the past few weeks in the Eastern and Southern Areas. The National Preparedness Level increased to four (on a scale of

1-5) September 4, but decreased to three September 12, two September 23, and one October 10. Through October 10, 1,906,588 hectares (4,711,179 acres) have burned across the US, just below 71% of the 10-year average. However, the 54,615 fires recorded thus far is 115% above average.

As is typical, the period of peak wildfire activity in Mexico abated by the end of September. Mexico has experienced a significant wildfire season in 2025, with a total of 6,796 wildfires, affecting over 1.16 million hectares across all 32 states. Grass and brush vegetation comprised 95% of the burned area, with the remaining 5% impacting forests. The states with the greatest number of wildfires were Jalisco, State of Mexico, Michoacán, Chihuahua, Mexico City, Durango, Puebla, Guerrero, Chiapas, and Morelos. Together, these states accounted for about 73% of the national total. The states with the largest burned areas were Chihuahua, Durango, Guerrero, Sinaloa, Jalisco, Nayarit, Tabasco, Baja California, Sonora, and Michoacán. Collectively, they represented 76% of the total burned area nationwide. About 20% of the nation's wildfires, 1,388 incidents, occurred in fire-sensitive ecosystems, burning 168,151 hectares, which is equivalent to 15% of the total affected area.

#### **Canada Discussion**

October/November/December: Warmer than normal temperatures are forecast across the country in October. Confidence is highest over southern Manitoba and northern Ontario. Outside of these two provinces, temperature anomalies are smaller, confidence is moderate, and precipitation anomalies are more variable. On the West Coast, a forecast strong positive anomaly indicates above normal Pacific frontal activity. Positive precipitation anomalies extend into the interior, in the northern Prairies, and southern Northwest Territories. This pattern suggests fronts will strengthen and track across this area, bringing above normal precipitation for this time of year. The southern Prairies, Ontario, and northern Quebec are more likely to receive close to normal precipitation, while Atlantic Canada and southern Quebec are more likely to be dry. The dry signal extends off the Atlantic coast and down the eastern seaboard. October temperature and precipitation anomaly maps are similar to September's forecast, somewhat increasing confidence.

The fire season is quickly ending across the country. However, persistent drought conditions across the Prairies, periods of above normal temperatures, and periods without precipitation will help to maintain above normal fire danger. In this region, the primary risk is for grass fires on windy days. Additionally, fire danger remains elevated in Atlantic Canada, particularly in the early part of the month. However, long-range probabilistic forecasts have enough rain to minimize fire risk.

November is forecast to be warmer than normal across the country. The signal is weakest along both coasts and in the Yukon. Elsewhere, anomalies are moderate, as is confidence. A strong positive precipitation signal remains along the Pacific coast. However, weaker anomalies exist across the northern Prairies than in October. Another strong positive precipitation anomaly exists over Hudson Bay, where wintertime weather systems often stall and precipitate out. The dry anomaly in Atlantic Canada expands in November, indicating a lack of frontal activity throughout the month.

The southern Prairies are likely to be snow free for periods of November and coincide with warmer than normal temperatures. These periods could provide brief windows where grass fires are possible. However, given that overnight temperatures drop quickly during the long nights, they would not persist for more than a day at a time.

The December temperature outlook is more variable than for the previous two months. Over northern Saskatchewan, Alberta, British Columbia, and the Yukon, normal to below normal temperatures are forecast. Temperatures in central Canada are likely to be near normal. Eastern Ontario, Quebec, and the Atlantic provinces are more likely to be warmer than normal, though anomalies are weak and confidence is moderate. Uncertainty is high regarding moisture on the Pacific coast, indicating there could be extended periods of both dry and wet conditions. Confidence is higher across the Prairies, where the precipitation signal indicates frontal systems initiating in Alberta and moving east. Ontario,

Quebec, and Labrador are all likely to receive near-normal precipitation. While Atlantic Canada is likely to be similar, more dry periods than wet are likely, resulting in a slight dry anomaly.

#### **United States Discussion**

October/November/December: La Niña conditions have developed over the past few weeks and will persist into the winter. Model, Climate Prediction Center, and Predictive Services forecasts for the next three months indicate above normal temperatures are likely across much of the US, especially in the southwestern and northeast US. No clear signal for temperatures is forecast through October in the Northwest, but a trend toward below normal temperatures is forecast this winter. Precipitation is likely above normal in the Northwest and Florida peninsula in October, with above normal precipitation likely to persist in the Northwest through the end of the year. Below normal precipitation is likely for the southern Plains to the Northeast in October, then extend across much of the southern third of the country into November and December.

Above normal significant fire potential is forecast for October in northwest Minnesota, southern Lower Michigan, and southern California. Above normal potential is also forecast for portions of the southern Plains, Appalachians, and much of New York into northern New England. In November, much of the northeastern quarter will return to normal potential, but above normal potential will expand from the southern Appalachians to much of the Southeast into Alabama and Mississippi. Above normal is also forecast for Texas and most of Oklahoma in November. Above normal potential in southern California will persist through the end of the year, but potential will return to most of the Southeast except for the Carolina mountains and Piedmont, which will remain above normal. Above normal potential is also forecast across portions of central Texas into December. Above normal potential is expected across Hawai'i through November before returning to normal in December.

#### **Mexico Discussion**

**October/November/December:** The El Niño Southern Oscillation (ENSO) remained in a neutral phase through August 2025, but all available models from the North American Multi-Model Ensemble favored La Niña to emerge and persist through the boreal winter. This is consistent with recently observed trends across the surface and subsurface equatorial Pacific. The transition from ENSO-neutral to La Niña has just occurred, with a 78% chance of La Niña continuing through December. Thereafter, La Niña is favored but chances decrease to 56% for the period extending from December into February.

The Pacific/North American (PNA) teleconnection pattern is a primary mode for monitoring the variability of high and low pressure systems across the Northern Hemisphere's extratropical regions. During September, the PNA transitioned from a negative to a positive phase, which is typically associated with below-average precipitation for some parts of Mexico, plus above-to-near-average temperatures over northwestern Mexico. However, the PNA is often modulated by Pacific sea surface temperature anomalies, particularly by El Niño and La Niña episodes. Typically, positive PNA phases are more likely during El Niño, whereas negative phases tend to be linked with La Niña. Accordingly, the persistence of a positive PNA is uncertain given the onset of La Niña.

The negative phase of the Pacific Decadal Oscillation (PDO), a long-term pattern of sea surface temperature variability that primarily affects the northern Pacific Ocean (in contrast to ENSO, which is centered in the tropical Pacific), persisted into September. The negative PDO phase often amplifies La Niña effects, including increased rainfall in parts of Mexico.

The climatological forecast for October through December anticipates warm and dry conditions consistent with the weather patterns and climatological averages under the influence of La Niña. Below-average precipitation is expected for large parts of northern and central Mexico, specifically in Baja California, Sonora, Chihuahua, Coahuila, Sinaloa, Durango, Zacatecas, San Luis Potosí, Aguascalientes and Guanajuato, and portions of Nuevo León and Baja California Sur. Conversely,

above-average precipitation is expected across the southeastern Mexican states of Chiapas, Tabasco, Campeche, Yucatán, Quintana Roo, and parts of Oaxaca and Veracruz. Precipitation is anticipated to be near average for Nayarit, Jalisco, and Michoacán, while the remaining states show no clear pattern. Temperatures, both minimum and average, are expected to remain above normal across most of Mexico during this outlook period, excluding the northeast and western regions, where below average minimum temperatures are forecasted. Due to uncertainty associated with the modulating effects of the PDO and the PNA, the possibility of extreme events (both dry and wet) cannot be ruled out.

Considering the current temperature and precipitation patterns, the national drought situation, and the climatological outlook, wildfire activity across most of Mexico is expected to remain minimal during this October through December outlook period. This aligns with the typical seasonal decrease in wildfire occurrence, when the influence of rainy season patterns and environmental conditions minimizes wildfire potential. Accordingly, significant wildfire potential is expected to remain normal (low) for all parts of Mexico; however, human activity can result in brief, atypical increases in wildfire activity during this period.

#### Additional Information

Additional and supplemental information for this outlook can be obtained at:

**United States:** 

National Significant Wildland Fire Potential Outlook

https://www.nifc.gov/nicc-files/predictive/outlooks/monthly\_seasonal\_outlook.pdf

Canada:

Canadian Wildland Fire Information System

http://cwfis.cfs.nrcan.gc.ca/home

Mexico:

Servicio Meteorológico Nacional

https://smn.conagua.gob.mx/es/observando-el-tiempo/monitoreo-atmosferico-ambiental

### **Outlook Objective**

The North American Seasonal Fire Assessment and Outlook is a general discussion of conditions that will affect the occurrence of wildland fires across Canada, the United States, and Mexico. Wildland fire is a natural part of many ecosystems across North America. This document provides a broad assessment of those factors that will contribute to an increase or decrease of seasonal fire activity. The objective is to assist wildland fire managers prepare for the potential variations in a typical fire season. It is not intended as a prediction of where and when wildland fires will occur nor is it intended to suggest any area is safe from the hazards of wildfire.

## Acknowledgements

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