

North American Seasonal Fire Assessment and Outlook

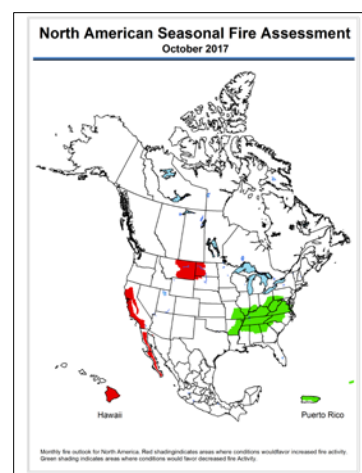
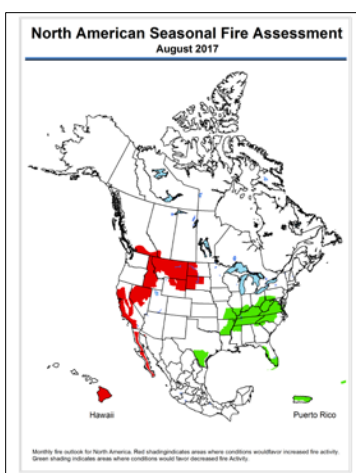
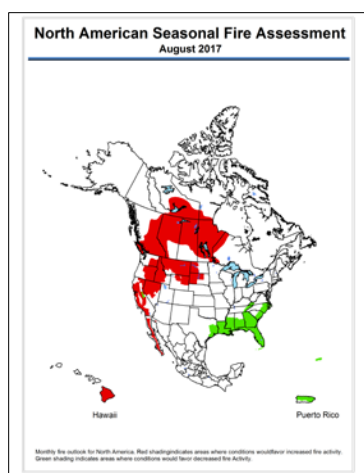
National Interagency Fire Center • Natural Resources Canada • Servicio Meteorológico Nacional
United States Canada Mexico

Outlook Period August, September, and October 2017 Issued 11 Aug 2017

Executive Summary

A strong ridge remained over the western half of North America and strengthened as a deep trough over the eastern continent anchored in place. A series of weak troughs associated with a persistent Gulf of Alaska low moved through the northwestern U.S. and western Canada, bringing thunderstorms but little rainfall. This thunderstorm activity ignited fires from eastern Alaska to northern California. Continued hot and dry conditions followed by scattered thunderstorms ignited fires in late July across Saskatchewan, Manitoba, and western Ontario. Moist conditions dominated most of eastern Canada, although the Maritime Provinces were dry. Meanwhile, a strong surge of monsoonal moisture brought scattered rain and thunderstorms to the southwestern U.S., decreasing fire activity in the Desert Southwest but starting more fires across the Great Basin and the northern Rockies. Windy conditions associated with the passing troughs along the U.S.-Canada border aided in large growth of several fires across the region. Strong storms over Mexico mitigated much of the fire threat as the summer rainy season continued. Very dry conditions with much below normal precipitation covered most of western Canada and the Prairie Provinces, the northwestern U.S. and the northern Plains. Much above normal precipitation fell across the southern and central Rockies, the Great Basin, the Southwest, the Midwest, the Northeast, the Mid-Mississippi Valley, and the southern Plains.

Fire activity across western Canada and the western U.S. typically peaks in August. Fires in British Columbia, Alberta, Washington, Oregon, California, Idaho, and Montana will continue under hot and dry conditions expected through mid-August. Elevated fire potential will continue through most of August for the northwestern quarter of the U.S., the mountains of California, southern and central British Columbia, Alberta, Saskatchewan, Manitoba, and western Ontario—extending as far north as Lac la Martre, midway between Great Slave Lake and Great Bear Lake. By September, elevated fire



Monthly fire outlook for North America for August (left), September (middle), and October 2017 (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.*



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risk will remain over most of the northwestern quarter of the U.S. but Canada will see elevated risk remaining only across southern British Columbia and extreme southwestern Alberta.

Critical Factors

The critical factors influencing significant fire potential for this outlook period are:

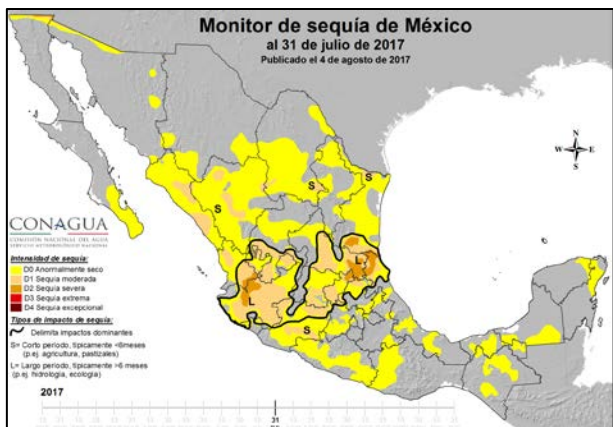
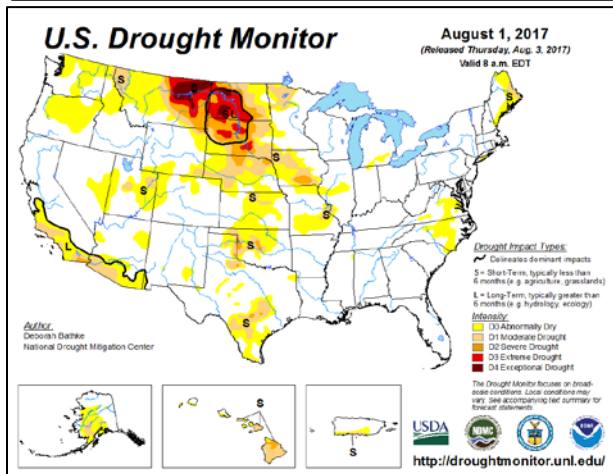
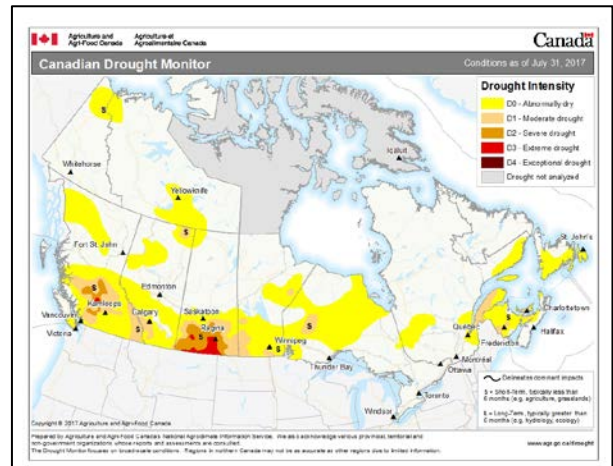
El Niño-Southern Oscillation: Equatorial Pacific sea-surface temperatures remain slightly above normal in the central Pacific. ENSO remains in a neutral state. The latest forecasts continue to indicate this neutral pattern will continue through the remainder of the northern hemisphere summer and into the fall.

Drought: Drought intensified along the Canadian-United States border with severe to exceptional drought conditions in southern Saskatchewan spreading into eastern Montana, North and South Dakota, and parts of Nebraska and Iowa. Moderate to severe drought also developed in southern Alberta and British Columbia. In central Mexico, delayed onset of the rainy season led to moderate to severe drought conditions across parts of Nayarit, Jalisco, and northern Michoacán in the west to Veracruz, San Luis Potosí, and southern Tamaulipas in the east. Areas of abnormally dry conditions continued or were expanding across the northwestern quarter of the country to the U.S. border.

Fire Season Status: Although Canadian national wildfire numbers and area burned were less than 75% of average for the end of July, ignitions were close to normal in British Columbia and Yukon and above normal in the National Parks. However, area burned was much above normal in British Columbia and Yukon. Fire activity in the western U.S. increased rapidly as fuels dried quickly and a sudden and deep surge of monsoon moisture brought thunderstorms into the Great Basin. Troughs across the Canada-U.S. border spread fire activity into the northern Rockies and the Northwest where little rainfall had occurred in several weeks. In Mexico through late July, over 619,000 hectares burned, third highest total since 1998 through July. The states of Jalisco, Chihuahua, Sonora, and Oaxaca recorded the most acres burned to date.

Canada Discussion

August: Elevated fire risk in southern British Columbia is expected to continue through August due to minimal rainfall and warm temperatures through the late spring and summer. A general drying trend



and warm temperatures in Alberta, Saskatchewan, Manitoba, western Ontario, and the Northwest Territories south of about 63N is expected to create elevated fire risk.

September: With cooling temperatures across Canada, fire activity will be low. Elevated fire danger may continue in southern British Columbia and southwestern Alberta, areas that have been dry during the spring and summer.

October: Minimal fire activity is expected as fall temperatures and precipitation patterns spread across Canada.

United States Discussion

August/September: August typically represents the peak of the western fire season in the U.S. Very dry and hot conditions in the northwestern quarter of the country will increase the potential for large fires across eastern Oregon and Washington, northern Nevada, western Idaho, most of Montana, and the western Dakotas. The mountains and foothills of California will also have increased potential for large fires. This will continue into the September before conditions begin to moderate and the frequency of precipitation increases in the early fall. Periods of wet weather across the Gulf Coast, the Mid-Atlantic region, and the Ohio-Tennessee Valleys will lower fire potential. The big island of Hawaii will continue at an elevated risk of wildfires with warm and dry conditions continuing.

October: Conditions will moderate across much of the West as fall conditions and more frequent precipitation events mark the end of fire season. The coastal areas and interior foothills of California will remain at higher potential as the region enters its typical fall fire season. The High Plains of eastern Montana and western North Dakota remain in severe or worse drought. Windy conditions in the fall could lead to rapidly spreading fires in dry fuels. Continued wet conditions in the East will keep much of the area from the Mid-Atlantic to the Mid-Mississippi Valley at below normal fire conditions.

Mexico Discussion

August/September/October: The summer rains, despite deficits in parts of central and northwestern Mexico, were sufficient to mitigate most of the wildfire threat across the country. The only area with an elevated risk of fires is the state of Baja California through the early fall.

Additional Information

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

United States:

National Significant Wildland Fire Potential Outlook

http://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf

Canada:

Canadian Wildland Fire Information System

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

Mexico:

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http://smn.cna.gob.mx/index.php?option=com_content&view=article&id=156&Itemid=113

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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