

FIRE BEHAVIOR OUTLOOK

FORECAST NUMBER: 068	TYPE OF FIRE: Initial Attack
FIRE NAME: MNICS Statewide Outlook	OPERATIONAL PERIOD: 7/18/2017 -7/24/2017
DATE ISSUED: 7/18/2017	TIME ISSUED: 0834
UNIT: MN-MFC	SIGNED: <i>William J. Glesener</i>
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INPUTS

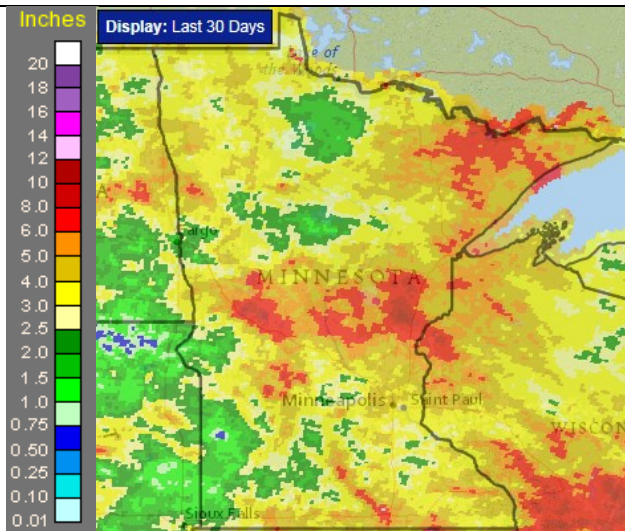
WEATHER SUMMARY:

NORTHWEST: Scattered showers and a few thunderstorms will continue east through areas generally along and south of Highway 200 early this morning, exiting west central Minnesota by late afternoon. Areas north of Highway 200 will remain dry today. Skies will gradually clear from north to south. Winds will generally be light and variable today as high pressure builds in this afternoon and evening from the northwest. This will result in fair to good smoke dispersal. Small chances for thunderstorms remain in the forecast through Wednesday for the southeast North Dakota and west central Minnesota, with Thursday looking warmer and dry. Another chance of rain Friday night into Saturday with drying again into next Monday.

NORTHEAST: A cool front will continue shifting south and east through the Northland today, bringing chances of showers and thunderstorms. Otherwise, high pressure will be building in behind this front. The northerly flow in its wake will usher in drier air. Highs will range from the upper 70s and low 80s, and minimum relative humidity ranging from 35 to 45 percent across northeast Minnesota, to much higher in Wisconsin. The high pressure will give the Northland a fairly sunny and dry day Wednesday. Expect light winds, highs in the lower 80s, and widespread minimum RH of 40 to 45 percent. The seasonably warm weather will continue through the rest of the week. There will be a trend for increasingly more humid days leading up to the end of the week. Saturday and Saturday evening is the next best opportunity for thunderstorms.

CENTRAL & SOUTH: The active weather pattern will continue through the end of the week across the area. Heavy rainfall will be possible through the period with the southern third of Minnesota the most favored area for rainfall amounts of greater than 2 inches through Friday. A cold front will move through the region Saturday and this will end the severe weather threat that should last into early next week.

HAINES INDEX: 5-6 (Moderate statewide to High in NE) **LAL:** 3-4 (Widely Scattered to Scattered T-storms)



OUTPUTS

FIRE BEHAVIOR

GENERAL:

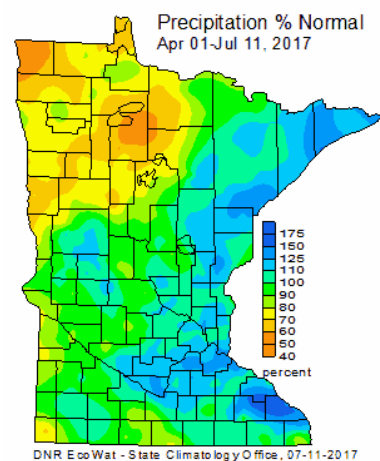
Continued active weather patterns will cross the state this week keeping enough moisture around to keep fire danger low on most soils. Areas from International Falls to Fargo and I-94 and south continue to receive just enough precipitation to keep the long term indices on the edge. Expect nuisance fires to occur but spread slowly with low flames on drier uplands. Slightly higher fire activity may occur in the areas mentioned earlier if ignitions are on dry sandy or rocky soils.

It should be noted that some areas are getting missed by these scattered rain events and need in excess of 2 inches in the next two weeks to stay in low to moderate fire danger. If they continue to be dry, many locales will move to high fire danger, especially on sandy uplands.

Burning Index (BI-g) and Energy Release Component (ERC-g) are both high in the western 1/2 to 2/3 of the state with the NE holding in low to moderate. 1000-hr fuels are wet in the NE with dry to very dry values in the NW and SW respectively. The Build-up Index is high to very high in the NW and SW with low to moderate in the east central and NE parts of MN. The Drought Code is extreme in and around the east side of upper and lower Red Lake including Kelliher and Waskish.

FINE DEAD FUEL MOISTURE: 5-8% / 8-11% (Unshaded / Shaded) Note: Lowest moistures will be in the NW.

PROB. OF IGNITION: 45-65% / 25-40% (Unshaded / Shaded) Note: Highest probabilities will be in the NW.



Note: This is a general fire behavior forecast for the state of Minnesota. It is designed to provide wildland fire managers with an overall geographic area view of fire behavior potential and to help wildland firefighters with the fire order "initiate all actions based on current and expected fire behavior". Firefighters must use on-site observations and spot weather forecasts to calculate site-specific fire behavior for individual wildland fires. Fire behavior spread rates describe only surface fire conditions and do not factor crowning or spotting.

SAFETY



UNFAMILIAR WITH WEATHER AND LOCAL FACTORS INFLUENCING FIRE BEHAVIOR

Weather / Fire Behavior Category

- Ask questions of local experts! What kinds of questions would you ask?
- Does the operational period plan give you adequate weather and information? What kinds of weather forecasts can you get? What other weather or local information do you look for in the shift plan?
- Can you get information from resources that have been on the fire? What questions will you ask of the crew that you are replacing?
- Is there any other way to obtain information? List common sources of information on weather and local factors (Examples: Web based weather Activity Planner, Point Forecast Matrix, NOAA Internet Briefing)
- To reduce risks:
 - Base all actions on current and expected fire behavior.
 - Post lookouts.
 - Establish escape routes and safety zones.
 - Take extra caution! Discuss a fire where you relied on information from the local unit (perhaps where your fire knowledge and experience was very different from how they did things—southeast or Alaska).
 - Recognize and report visual indicators (clouds, WX obs., cold front passage, inversion breaking)

References:
Incident Response Pocket Guide

