

Fuels and Fire Behavior Advisory

All of Minnesota's Wildlands and Interface Communities

Friday, June 11, 2021

Subject: Near Record Temperatures in early June and Severe Rainfall Deficits so far this year are flash drying green vegetation and dead fuels. Flammability and wildfire threat are rising prematurely.

Discussion: June is normally the period of minimal fire activity in Minnesota, when the flush of green vegetation makes ignition and initial spread difficult. But this year, green vegetation is already stressed, fires are carrying through marshes, and torching behavior is being reported. And the extended forecast and outlooks for the rest of June show building drought, expanding fuel availability, and increasing potential for extended attack fire events.



Figure 1. Aichele Road Fire from June 5th. Lightning ignition that burned into and through wetland marshes. Note the many brown patches instead of lush green in the image

Difference from normal conditions: Buildup Index values are setting new daily records at stations across the states. Temperatures have been and are expected to continue well above normal. Relative humidity has regularly fallen below 30% and even into the teens in a few cases. Rainfall deficits for spring into summer is threatening records set in memorable 1988 and 2002 seasons. Typical conditions produce around 50 fires and 300 acres for all of June. This year, after only 8 days, nearly 80 fires (record 318 in 1988) have been reported and approaching 400 acres (3215 acres in 2002) have burned.

Concerns to Firefighters and the Public:

- Expect increasing ignition from lightning ignitions. Storms can be severe, impacting fire operations. Human caused ignitions from fireworks will be an increasing concern with summer celebrations.
- Unusually hot and dry conditions raise the prospect of both extreme fire events and heat related health hazards.
- **Readiness fatigue among fire agency personnel who have other, impacted, workloads.**
- **Defensible space and home hazard concerns as well as evacuation readiness.**

Mitigation Measures:

- Thoroughly brief all resources, local and inbound, to the unusual fuel availability and flammability. Make sure they can identify hazard fuels and recognize important thresholds for big changes during operational period.
- Anticipate extended attack when responding to new fires and review planned processes.
- Ensure forecasts are monitored and that expected changes are reported to incident personnel.
- Communicate the situation and your concerns with your emergency services cooperators.
- Encourage Firewise mitigation and home safety planning.

Area of Concern: All of Minnesota

Issued By: Travis Verdegan, Predictive Services, MIFC, Grand Rapids, MN.

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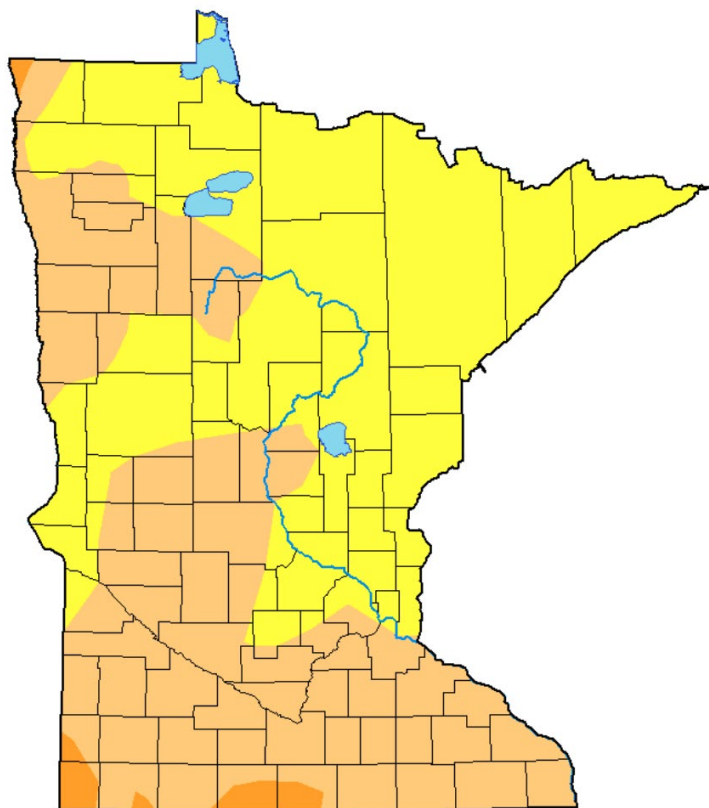
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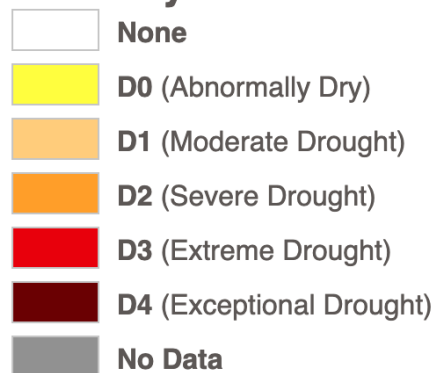
Drought Monitor

Map released: Thurs. June 10, 2021

Data valid: June 8, 2021 at 8 a.m. EDT



Intensity



Buildup Index (BUI)

June 10, 2021

