

December 19, 2023

Memorandum

To: MNICS Task Force

From: Operations Working Team

Operations Working Team Chair

and

RX Fire and Fuels Working Team

Rx Fire and Fuels Working Team Chair

Subject: MNICS Task Force tasking to Operations and RX Fire and Fuels Working Teams regarding identifying improvements to current Red Flag Warning parameters.

Background:

Task Force members had a discussion on whether Red Flag Warning days were being properly captured, especially during the early and late seasons. Task Force tasked Operations Working Team and RX Fire and Fuels Working Team to collaborate on a possible product that can be easily understood or explained to the general public. This product must also be readily implementable by the field organizations.

December 6, 2023, both assigned Working Teams discussed the taskings during their annual meetings held in Duluth. Both Working Teams resolved to have their respective Chairpersons have a meeting to discuss the recommendations from their Team.

December 12, 2023, Working Team Chairpersons met via phone call to discuss the taskings and Team recommendations. Also discussed was the (current) 2023 Minnesota Fire Weather Operating Plan [2023 MN Fire AOP \(weather.gov\)](#) in regards to it's Red Flag Warning criteria and procedures.

Red Flag Warning Criteria includes wind speed, both sustained and gusts, and relative humidity. Fuel composition is not a factor but is a recommended consideration. The National Weather Service (per the MN Fire AOP) is directed to contact the State of Minnesota Predictive Services Coordinator to gather fuel composition considerations. This process is also reciprocated when the Predictive Services Coordinator has critical fuels information to share with the NWS. The Predictive Services Coordinator is informed of statewide conditions by many formats. One format is, being briefed by the local wildland fire agencies throughout the state. This takes place with a bi-weekly call with all fire agencies. The local fire agencies are briefed by the Predictive Services Coordinator by a daily Morning Intel Information email provided by MNCC Intelligence.

National Weather Service has a nationally approved procedure when it comes to issuing weather Watches, Warnings and Special Weather Statements. This procedure is uniform across the nation and the product of this procedure is to make their messaging consistent and clear to the general public.

Collaborative Working Team Recommendations:

- 1) The current procedures regarding issuing Red Flag Warnings are sufficient. However, the National Weather Service has six offices that forecast for Minnesota. Not all National Weather Service offices follow the Minnesota Fire Weather Operating Plan with regularity. If these offices

followed the Plan, it would create a consistency with forecasting in Minnesota. This could reduce the number of days missed by a Red Flag Warning as well as the days Warnings were issued but did not meet criteria.

- 2) The MN Predictive Services Coordinator has discussed with a research institute regarding a possible pilot project in Minnesota that could refine the Red Flag Warning process. Until more research is completed, the Working Teams do not feel it necessary to attempt to change the criteria or considerations.
 - a. A per agency emphasis on current fire weather and fuels briefing procedures may be warranted so all local wildland fire agencies are aware and informed.
- 3) The products produced by the National Weather Service are designed to be uniform and consistent. This enables clear messaging provided to the general public.