



NATIONAL WILDFIRE COORDINATING GROUP

NWCG Memorandum 20-006

August 6, 2020

TO: NWCG Executive Board Members

FROM: Frank Guzman, Chair, NWCG Executive Board

A handwritten signature in black ink, appearing to read "Frank Guzman", is positioned to the right of the "FROM:" line.

SUBJECT: Update to the NWCG National Fire Danger Rating System (NFDRS) 2016 Rollout and Transition Plan

Purpose: The purpose of this memorandum is to provide an update to the rollout and transition plan for the 2016 version of the National Fire Danger Rating System (NFDRS2016). This also serves as a request for units which meet the below criteria to formally transition to the new system in the Weather Information Management System (WIMS) as outlined in this document. Please distribute this information through your agency channels.

Issue/Action: In July 2019, the NWCG Executive Board approved a proposal from the Fire Danger Subcommittee (FDSC) to update the initial NFDRS2016 Rollout Plan. Memorandum 2019-002, NFDRS 2016 Release, <https://www.nwcg.gov/sites/default/files/memos/eb-m-19-002.pdf>, includes a timeline with the expectation that all units will be fully transitioned to NFDRS2016 by January 2021.

Since 2017, the FDSC has worked in close coordination with geographic subject matter expert teams to conduct workshops for fire and agency administrator personnel on the new model and ways that it can be incorporated into Fire Danger Operating Plans (FDOP) and other fire business applications. These workshops, including virtual sessions and webinar events, will continue over the next year to provide training and assistance to ensure all units meet the deadline.

The NFDRS2016 model is loaded into WIMS to support the transition and facilitate the evaluation and confirmation of changes made in the new system by trained users. Over the next five years, the NFDRS will continue to evolve as we move into more user-friendly products such as spatial display capabilities, long-term forecasting (7 to 16 days) of NFDRS indices, and more robust analysis tools. These updates are a product of updating and transitioning to the new NFDRS2016 system.

Several units indicate they are ready to operate in the NFDRS2016 environment currently. The FDSC will support those units that are ready to make the switch over to the NFDRS2016 system, permitting that the considerations below have been addressed. Those units that are still in the evaluation stage or have additional adjustments to make are asked to work closely with their geographic area leadership to confirm the ability to meet the NWCG NFDRS2016 rollout timeline.

Things to consider prior to transition:

1. Have you participated in a Fire Danger Applications workshop with the partners in your state?

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2. Have you interacted with your geographic area subject matter expert group with questions or concerns related to NFDRS?
3. Have you completed a FireFamilyPlus (FF+) analysis to determine your new critical percentile breakpoints in WIMS?
4. Have you coordinated with your partners and integrated all the models needed inside your WIMS station catalog for everyone that will be using the data off that station for decision-making?
5. Have you assessed historical data for snow flag quality? This data was derived from satellite imagery and may not always be correct. As you build your fire danger dataset in FF+, it is important to do a thorough quality assessment on your data.
6. Has the unit identified the geographic subject matter experts that have been given training to make minor tweaks in the model and to address seasonal curing trends or other unit-specific issues?
7. Have agency relevant FDOPs and other documents been updated to reflect the new breakpoints and thresholds and been approved by all participating agencies within the plan?
8. NFDRS2016 is a next-generation system which aligns with common interagency goals to use the best available science and technology to provide decision-makers with improved efficiencies, increased accuracy, and a much clearer understanding of the associated risks. Has interagency cooperation and collaboration occurred at every level to encourage participation in the rollout by all state and federal agencies with responsibility to make and implement risk-based wildland fire management decisions?

Background and Coordination: In September 2016, the NWCG Executive Board issued Memorandum 16-019, Update on Revisions to the National Fire Danger Rating System, <https://www.nwcg.gov/sites/default/files/memos/eb-m-16-019.pdf>, providing an update of the transition to the NFDRS2016. The primary objective is to provide a stable NFDRS2016 system along with updates to the WIMS, <https://famit.nwcg.gov/applications/WIMS>, and FF+, <https://www.firelab.org/project/firefamilyplus>, to ensure end users are comfortable with the new model outputs and associated applications.

As we continue to move forward with the integration of NFDRS2016, there are several user communities still working toward updates which will allow them to begin using and displaying data from the NFDRS2016 model. The most notable of these are WFDSS, WFAS, and Predictive Services. These groups currently have plans in place for the implementation of the new model over the next year. To support the transition between these connected communities, please continue to run the legacy fuel model G through December 2021. The legacy NFDRS 1978 and 1988 models will be archived and unavailable for operational use after December 2021, per the NWCG NFDRS2016 rollout.

The NWCG NFDRS website, <https://www.nwcg.gov/committees/fire-danger-subcommittee/nfdrs>, is designed to facilitate education regarding the new science and improve the utilization of NFDRS2016 through the standard interagency applications of the system.

Contact: Jon Wallace, Fire Danger Subcommittee Chair, 208-830-1853, jon_wallace@fws.gov.

Distribution:

NWCG Committee Chairs

NWCG Staff

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