



Memorandum No. 18-001

Date: 26 February 2018

TO: NWCG Executive Board Members

FROM: Garth Fisher, Chair, NWCG Executive Board

SUBJECT: National Fire Danger Rating System 2016 Release

The purpose of this memorandum is to 1) announce that the National Fire Danger Rating System 2016 (NFDRS2016) will replace the existing 1978 and 1988 NFDRS models by May 2020, and 2) provide information about the transition to the new system.

Please distribute this information through your agency channels.

Purpose and History of NFDRS2016 Development

In September of 2014, the NWCG Executive Board approved a revision to the US National Fire Danger Rating System (NFDRS). The intent of the revision effort was to ensure that the new system was simpler, more intuitive, and more user friendly, and that it could serve as an effective primary decision support tool for firefighters and fire managers across the country when determining staffing needs, fire danger and fire strategies.

The revision effort was collaborative and interagency in nature, and was led by the NWCG Fire Danger Subcommittee. NFDRS2016 was field tested during the 2017 fire season. Results indicated the new system was ready for broad scale implementation.

Significant improvements include:

- Improvements to the calculations of fire danger indices and components
- An updated system to calculate live and dead fuel moisture values
- Automation of the calculations in the Weather Information Management System(WIMS)
- Reduction in the number of fuel models to more accurately reflect fire danger levels over the landscape

These changes will result in a major simplification of the NFDRS. Many unused system components have been removed, while the core usefulness and functionality of the system remain essentially unchanged. NFDRS2016 will be easier to use and understand.

Transition to NFDRS2016

Full transition to the NFDRS2016 by 2020 will involve a collective and collaborative effort common to interagency wildland fire management. The NWCG Fire Danger Subcommittee will work with each geographic area (GA) to form GA leadership groups to help with the transition. These groups will be comprised of NFDRS technical experts (graduates of S-491 or Advanced NFDRS) and local/geographic area leaders in operations, fire planning, and/or fuels management (several of these groups have already been established). Leadership group members will have extensive knowledge of NFDRS2016. They will serve as primary points of contact for NFDRS2016 related issues, conduct workshops, and assist with other transition activities.

NWCG standards are interagency by design; however, the decision to adopt and utilize them is made independently by the individual member agencies and communicated through their respective directives systems.

Key dates and activities for the transition to NFDRS2016 are provided below. NFDRS users and other stakeholders may attend or access various workshops and/or training modules based on level of expertise and learning needs. The Fire Danger Subcommittee encourages broad participation in these workshops, as they will promote understanding and effective use of NFDRS2016 across agency boundaries. Detailed information on these activities will be communicated through established channels at the appropriate management level. Information will also be available at <https://www.nwcg.gov/committees/fire-danger-subcommittee>.

February 2018 - August 2018:

- GA leadership groups will be formed.
- April 2018, GA leadership groups will attend a NFDRS2016 workshop at NAFRI to prepare for GA rollout workshops.
- April 2018, NFDRS2016 will be widely available for use. WIMS and FireFamily Plus updates will be complete.
- Four online and/or instructor-led NFDRS2016 lessons will be available for previous S-491 students (Fire Danger Subcommittee recommends all previous S-491 students take these lessons).

September 2018- May 2019:

- GA leadership groups will conduct NFDRS2016 workshops geared toward field level practitioners.
- The Alpha version of the updated S-491 course will include instruction of the NFDRS2016 model.

June 2019 - December 2019:

- Local units will evaluate NFDRS2016 outputs and finalize new decision thresholds based on the new model.

May 2020:

- All units will be fully transitioned to NFDRS2016.

Feedback from users (as well as a simple "Adopt NFDRS2016" checkbox in the WIMS application) will be used to adjust the transition date as necessary. However, we anticipate a successful and relatively seamless transition to NFDRS2016 by May 2020.

For questions, contact your agency representative on the Fire Danger Subcommittee
<https://www.nwcg.gov/committees/fire-danger-subcommittee/roster>.

Distribution:
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