



Memorandum No. 16-019

Date: 7 September 2016

TO: NWCG Executive Board Members

FROM: John Glenn, Chair, NWCG Executive Board

A handwritten signature in black ink, appearing to read "John A. Glenn".

SUBJECT: Update on revisions to the National Fire Danger Rating System

The purpose of this memorandum is to provide an update on revisions to the National Fire Danger Rating System.

In September of 2014, the NWCG Executive Board approved a revision to the US National Fire Danger Rating System (NFDRS). Completion of the updated system, NFDRS2016, is expected November 1, 2016. NFDRS2016 will include three significant changes:

- Replace Fosberg Dead Fuel Moisture Model with the Nelson Dead Fuel Moisture Model.
- Replace Burgan Live Fuel Moisture Model with the Growing Season Index-based live fuel moistures.
- Reduce the number of fuel models in the NFDRS from 40 down to 5.

Implementing these changes will result in a major simplification of the NFDRS. Many unused system components will be safely removed, while the core usefulness and functionality of the system will remain essentially unchanged. The NFDRS will be easier to use and understand.

The NFDRS2016 model development work is complete and is now being incorporated into the primary NFDRS processors: Weather Information Management System (WIMS) and Fire Family Plus (FFP). Technical documentation is 95% complete and waiting for case studies that require the use of the new FFP application to complete. For the latest information on the status of the NFDRS2016 implementation go to <http://www.wfas.net/nfdrs2016>.

The NWCG Fire Danger Curriculum Unit has been working on a revision to the S-491 Intermediate Fire Danger Rating course which will incorporate the NFDRS2016 into a scenario based format. The revised S-491 will be presented within the next two years. Until then the current S-491 class is still valid. Refresher training videos for employees who have previously completed S-491 are being developed, and will be available starting in March of 2017. The videos will focus on the key aspects and impacts of NFDRS2016. Videos will be accessible from the NWCG Fire Danger Subcommittee webpage at <http://www.nwcg.gov/committees/fire-danger-subcommittee/resources>.

Workshops to support the transition to NFDRS2016 are being arranged for each Geographic Area for winter 2016-spring 2017.

In 2017 and 2018, the field may use both versions and compare both the outputs and the decisions made. This will provide the Fire Danger Subcommittee feedback on how the NFDRS2016 compares to the older version at supporting sound decision making. The new WIMS contains a module where users will be able to compare models inside the program and provide feedback based on results. We encourage you to provide feedback thru the 2018 fire season.

NWCG Memorandum No. 14-018 provides additional background information on the reasons for the change. It is available on the NWCG Website at <http://www.nwcg.gov/sites/default/files/memos/eb-m-14-018.pdf>.

Contact Information: For more information contact Jon Wallace, Fire Danger Subcommittee Chair, 208-830-1853, jon_wallace@fws.gov or Gary Jarvis, NFDRS2016 Rollout Project Lead, garyjrvs@gmail.com.

cc: Jon Wallace, Chair, Fire Danger Subcommittee; Robyn Heffernan, Chair, Fire Environment Committee; NWCG Committee Chairs; NWCG Staff