WIMS TechNote-2019-02

Fire & Aviation Management Staff

Date: **May 7, 2019**

System: **WIMS 5.0**

Subject: **Adopting/Un-adopting NFDRS 2016 Fuel Models in WIMS**

Purpose: **Inform users of consequences of adopting NFDRS 2016Fuel Models**

Contact: **Interagency Incident Applications (IIA) Helpdesk**
                   1-866-224-7677
                   https://iiahelpdesk.nwcg.gov/contact-us

Scope: **WIMS 5.0**

Adopting NFDRS 2016 Fuel Models in WIMS may have downstream consequences because NFDRS data are shared widely among many different agencies and users groups. Daily NFDRS indexes based on 78/88 fuel model are no longer operationally computed after adopting 2016 fuel models.

Due to this issue, in WIMS 5.1 (projected for production release in June 2019) the ability to Adopt/Un-adopt will be disabled until unintended downstream data usage has been coordinated and accommodated.

If WIMS station managers want to stop seeing the 78/88 models they should use ENFDR or ESTA to clear the check box under "Active Fuel Models." Then they will not be displayed in DIDX/DIDM but will remain available on a daily basis for others that use those indices. And with WIMS 5.1, non-active fuel model data will not be displayed in any of the other Display modules as they are now. Also, forecasted indices for 2016 fuel models are not yet available in WIMS.

Here is a summary of what happens when you Adopt/Un-adopt 2016 Fuel Models:

1. **No historical weather observations are deleted from WIMS by adopting 2016 fuel models.** The station's entire period of record of daily type "O" observations (could be 20+ years) and hourly type "R" records from 14-Aug-2014 to current day/hour are preserved.

2. **All existing daily NFDR records for 78/88 fuel models are deleted.** This could include as far back as 14-Aug-2014. NFDR records never have been stored permanently in WIMS.

3**.** Legacy fuel models **cannot be** "added back in" after adopting 2016 fuel models.

4. You can "Un-adopt" 2016 fuel models by un-checking the button in ENFDR. This will delete all type "N" NFDR records for the 2016 fuel models and the 2016 fuel model parameters. The 78/88 fuel model parameters (Model, Slope, Grass, Percentiles, etc.) in use when 2016 was adopted are restored. **The historical daily NFDR records are not restored**

5. If you Un-adopt 2016 fuel models, daily NFDR records for the 78/88 fuel models can be regenerated for the Station Period of Record via the ENRR (recalc function). This only takes a few moments to do for a station, but for 78 fuel models some care is required for annual green-up and freeze cycles, especially the current year (2019).

6. If you Un-adopt 2016 fuel models, you can add 2016 fuel models back, but you'll need to recalculate type "N" records to recreate daily year-to-date 2016 fuel models NFDR records. This takes about 3 minutes/year of hourly weather.

7. Currently NWS Forecasts are not being processed for 2016 fuel models (all fields are -999) as has been the case since last June. Forecasts for 2016 Fuel Models will be WIMS 5.1 (June 2019).