Setting Up NFDRS2016 Fuel Model/Index Combinations for Evaluation in WIMS

1. Find NFDRS2016 Critical Percentile Values
   - Find NFDRS2016 critical percentile values using FFP (90th, 97th & 80th, 95th)

2. Activate Desired NFDRS2016 Fuel Model/Index Combinations & Supply Percentile Thresholds
   - Navigate to the Default NFDRS Parameters Screen FastPath - (ENFDR) – GO – Enter 'Station ID', - set 'Effective Date' to 09-Jun-18 and hit 'FIND'
   - Activate the new NFDRS16 Fuel Model(s) that will be used for the test. The new fuel models will automatically appear on the ID list but they need to be activated... (if done correctly the changes made to the fuel model should be highlighted in green)
   - Complete the Staffing Index (SI) and Decision Class (DC) fields and enter the Staffing Index percentile basis (90th, 97th or 80th, 95th) and associated values (from step 1).

Adopt 2016 Models ☐

Del	Active Fuel Models	Pri	ID	HS	Herb Date	Greenup Date	88 Ssb	S l p	G r s	C l i	MXD	SCM	Herb FM	Woody FM	X-1000	SI	DC	SI%	Val	SI%	Val
☐	☑	1	7G ▼	F ▼	16-Sep-18	24-May-18	▼	2=26-40% ▼	P ▼	3 ▼	L ▼	30	23.4	70	29	BI ▼	5	90	79	97	89
☐	☐	2	16V ▼	▼			▼	2=26-40% ▼	P ▼	▼	L ▼	108				▼					
☐	☐	3	16W ▼	▼			▼	2=26-40% ▼	P ▼	▼	L ▼	62				▼					
☐	☐	4	16X ▼	▼			▼	2=26-40% ▼	P ▼	▼	L ▼	104				▼					
☐	☑	5	16Y ▼	▼			▼	2=26-40% ▼	P ▼	▼	L ▼	5				BI ▼	5	90	38	97	42
☐	☐	6	16Z ▼	▼			▼	2=26-40% ▼	P ▼	▼	L ▼	19				▼					

(Staffing Idx Breakpoints: Low — SI%, Val; High — SI%, Val)

   - Scroll up to top of ENFDR screen and hit save.
   - *NFDRS2016 values will now be available via DIDX and DIDM screens.*

3. Recalculate to Populate Staffing Level and Adjective Rating Fields for NFDRS2016	
• Navigate to the Recalculation Screen FastPath - (ENRR) – GO	
• Set Type to '2016 Indices Only'	
• Set dates to '09-Jun-2018 - present'	
• Select the 'Find' button	
• Perform the recalculation	
• *Staffing Levels & Adjective Ratings for NFDRS2016 fuel models should now be available via DIDX*	

Recalculate NFDRS ENRR
Enter NFDRS Recalculation Parameters

Station ID: 420917   [List]

Type: 2016 Indices Only ∨

Observation Date(s):

From: 09-JUN-18

To: 19-JUL-18

[Find] [View/Edit Live Fuel Parameters] [View/Edit Snow Flag]

4. Compare Legacy vs. NFDRS2016 Index Values, Staffing Levels & Adjective Ratings Using DIDX
   - FastPath > (DIDX) > GO
   - Enter Station ID, Set Type to O/R+N, Select a few day time frame starting on 09-JUN-18, > Find

   Display Index Format DIDX

   Station ID: 040917 or SIG [   ]   Type: O/R+N ▾   Start Date: 09-JUN-18   End Date: 13-JUN-18

   Select which fuel models to display
   ☑ P1: 7G2P3 ☐ P2: 16V2P ☐ P3: 16W2P ☐ P4: 16X2P ☑ P5: 16Y2P ☐ P6: 16Z2P

   - DIDX should return legacy and NFDRS2016 values for any *active* fuel models selected

Station ID	Obs Date	Obs Tm	Obs Type	MSGC	Wind SP	WDY FM	HRB FM	1H FM	10 FM	HU FM	TH FM	XH	IC	SC	ERC	BI	SL	R	KBDI	FL	LR	LO	HC Rsk	HO
40917	13-Jun-18	12	N	16Y2P	11	60.0	30.0	6.22	11.43	14.77	20.25	0.00	42.0	4.4	23.7	25.4	3	M	69	18	0	0	0	0
40917	13-Jun-18	12	O	7G2P3	11	114.2	134.7	3.65	5.17	11.29	15.61	17.98	41.7	9.7	42.4	48.0	3	M	69	34	0	0	0	0
40917	12-Jun-18	12	N	16Y2P	6	60.0	30.0	6.20	10.26	15.86	21.68	0.00	35.6	3.1	21.0	20.4	3	M	62	14	0	0	0	0
40917	12-Jun-18	12	O	7G2P3	6	112.9	129.7	3.36	4.89	11.05	15.72	18.09	33.3	5.6	42.7	37.5	3	M	62	27	0	0	0	0
40917	11-Jun-18	12	N	16Y2P	5	60.0	30.0	6.80	11.29	18.31	23.20	0.00	29.4	2.7	16.4	17.3	2	M	56	12	0	0	0	0
40917	11-Jun-18	12	O	7G2P3	5	111.4	124.4	3.45	5.00	11.20	15.83	18.20	30.2	5.0	42.2	35.2	3	M	56	25	0	0	0	0
40917	10-Jun-18	12	N	16Y2P	6	60.0	30.0	7.49	12.56	21.00	24.33	0.00	25.0	2.8	12.5	15.4	2	M	52	11	0	0	0	0
40917	10-Jun-18	12	O	7G2P3	6	110.3	119.9	4.30	5.64	10.99	15.99	18.36	26.5	5.5	41.2	36.4	3	M	52	26	0	0	0	0
40917	09-Jun-18	12	N	16Y2P	15	164.0	192.8	9.22	15.54	23.69	24.94	0.00	22.1	4.7	8.7	16.6	2	M	50	12	0	0	0	0
40917	09-Jun-18	12	O	7G2P3	15	108.5	114.4	7.34	7.97	10.47	16.07	18.41	22.2	12.6	39.1	52.1	3	M	50	37	0	0	0	0

Total number of rows retrieved: 10 Completeness percentage: 33.33%

   - You should note differences between legacy and NFDRS2016 values in *most* of the fields.

5. Compare NFDRS Fuel Model Outputs Using New Comparative Analysis Tool (COMP)
   - Fast Path (COMP) – GO, Choose Start and End Dates, Select 'fetch station data'

   COMPARE FUEL MODELS

   Station: 420916
   Start Date: 27-Jun-18
   End Date: 11-Jul-18

   [Fetch Station Info]   [Feedback]

   - Configure the Fuel Model, Obs Type and Fuel Moisture/Index selections per your station using the screen shot below as an example...and ensure 'Both' is selected. *Values/graphs should update dynamically when changes are made*.

   COMPARE FUEL MODELS

   Station: 040917
   Start Date: 08-JUN-18
   End Date: 5-Feb-19

   [Fetch Station Info]   [Feedback]

   8 FUEL MODELS RETURNED 08-JUN-18 TO 5-FEB-19 STATION 040917

   Fuel Model P6: 16Z2P ▾   Obs Type N ▾   Fuel Model P1: 7G2P3 ▾   Obs Type O/R ▾

   [Grid] [Graph] [Both] [Export]

   ☐ FM1 ☐ FM10 ☐ FM100
   ☐ FM1000 ☐ FMHERB ☐ FMWOOD
   ☑ ERC ☐ SC ☑ BI
   ☐ IC ☑ ABSOLUTE
   ☐ PERCENTILE

   RESULTS FOR 242 DAYS   16Z2P-N   VS. 7G2P3-O/R

FUEL MODELS		16Z2P-N		7G2P3-O/R	
Date	Time	ERC	BI	* ERC	* BI
2018-06-09	12	31.1	57.6	39.1	52.1
2018-06-10	12	42.0	44.8	41.2	36.4

   - Take note of the differences and trends. Check COMP periodically and make notes on how the different fuel models perform with respect to the actual fire danger/fire activity of the week.

6. Evaluate and Ask Questions/Provide Feedback
   - Use DIDX to evaluate differences between calculated Staffing Levels and Adjective Fire Danger Ratings
   - Use COMP to evaluate differences in model output values and trends
   - The process to evaluate and submit questions & feedback regarding the NFDRS2016 and WIMS:
     - NFDRS2016 => Slack.com
     - WIMS => COMP Feedback Button