



US Forest Service  
US Wildland Fire Service

# Fire Environment Mapping System (FEMS) Fire Danger User Guide Version 3.6

April 2, 2026

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# Overview

**IMPORTANT:** Beginning October 1, 2025, Fire Environment Mapping System (FEMS) is the operational and authoritative NFDRSv4 database.

## History of the United States Fire Danger Rating System

The beginnings of a National Fire Danger Rating System (NFDRS) started in 1968. However, the first version was not released until 1972 and was a manual system.

In 1975, the first automated version was made available as the Administrative and Forest Fire Retrieval and Management System (AFFIRMS). In 1978 Version 2 of NFDRS was incorporated into AFFIRMS. This revision addressed a number of issues in the original system including: its poor response to long-term drought and its inability to depict live fuel dynamics to better rate fire danger conditions in the southeastern United States.

In response to concerns by users in the southeastern states concerned about the accuracy and applicability a modified version (Version 3) was released. This version included better recognition of how fuel moistures change during periods of drought and precipitation. In 1993, AFFIRMS was replaced by the Weather Information Management System (WIMS) as the processor for NFDRS.

Work to update NFDRS began as early as 2000 with the development of a new dead fuel moisture model (Nelson) and a new phenology model (Jolley) reducing the need for human intervention. Discussion for Version 4 (previously known as NFDRS2016) began in 2007. In 2011 new sub-models were implemented and tested in WIMS and the Wildland Fire Decision Support System (WFDSS). Approval was received to change the system by the NWCG Executive Board in 2014, and the new models were released during the fall of 2017 and winter of 2018.

After over four decades a new version of NFDRS was adopted March of 2023. NFDRS Version 4 is a fully automated system and more consistent. It provides an improved response to drought and can more easily be applied to gridded weather. In addition, this system has been simplified by reducing the number of fuel models to five.

The Fire Environment Management System (FEMS) was introduced in July 2023 initially as an application to store and display weather information. Fire danger modeling was first released in FEMS in June 2025 (FEMS V3.2). At that time WIMS remained the authoritative database for NFDRS. A transition period from June through September was designed for users to familiarize themselves with FEMS and begin the transition away from WIMS.

FEMS fully incorporates NFDRS V4. In contrast to WIMS, which provided once daily calculations and forecasts. FEMS provides hourly calculations based on hourly weather forecasts and observations. Additionally, model parameters have been set to national settings to provide consistency while further development continues.

In V3.5 Catalog Management functionality was added for FEMS Admin users. A limited number of Mesonet stations were also added to FEMS for both Weather and Fire Danger.

### What's New in V3.6

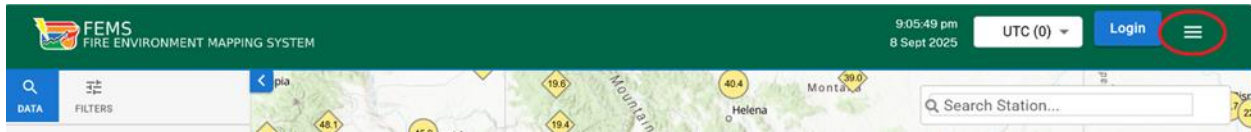
- Historic Fire Danger data for RAWS stations is now available through 10/31/2025.
  - The Period of Record (POR) for calculating Fire Danger Percentiles is through 12/21/2024.
- Hourly and Daily Fire Danger data is now available Restricted Mesonet stations.
- A Queued Download option is now available for large files.
- The option to Zip a download file is now available for all download formats.

# Home Screen

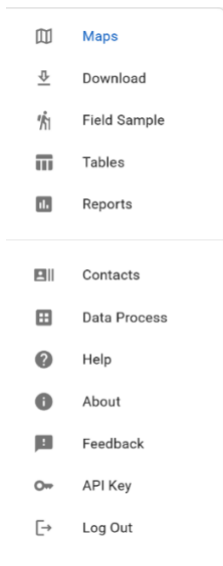
1. Click on the “LOGIN” button.



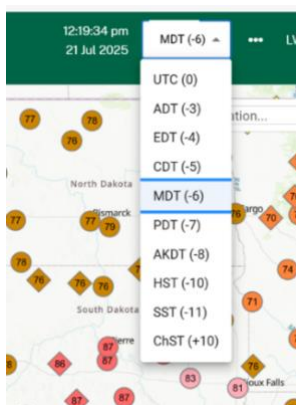
2. Click on the “Hamburger” icon in the upper right:



3. A list of menu options will appear; selections will vary with user roles:



4. Data can be displayed in UTC or Standard Time:



# Accessing Fire Danger

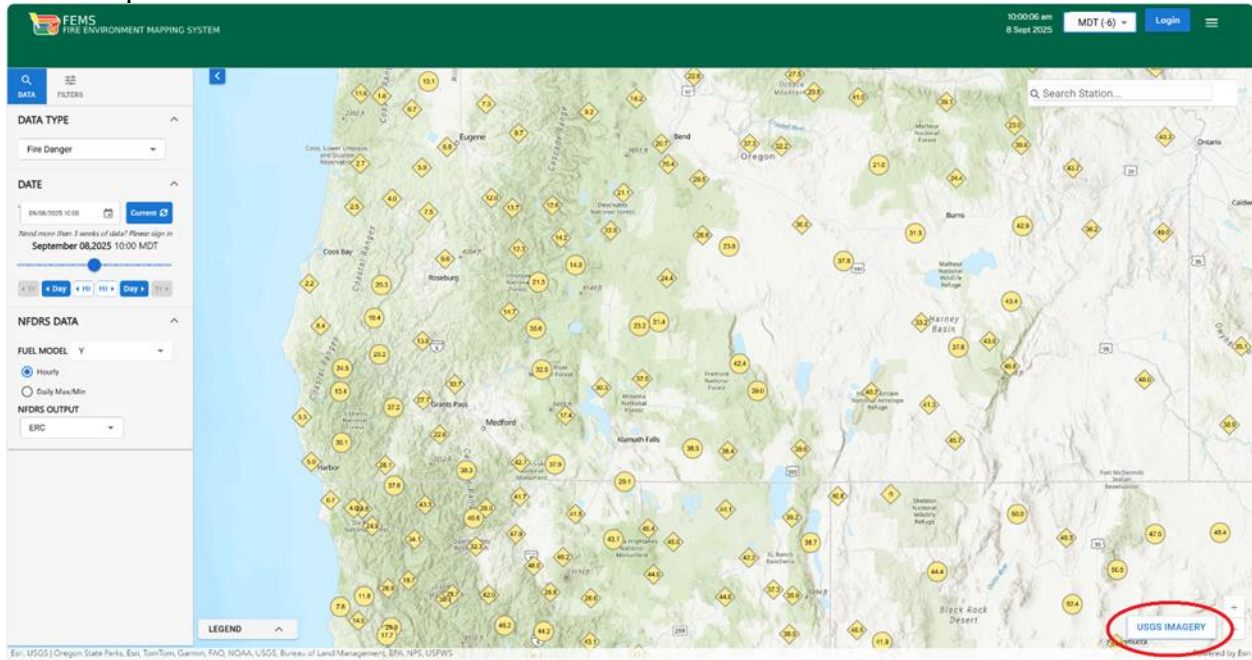
Fire Danger can be accessed by either the Map or Tables Menu.

## Map Option

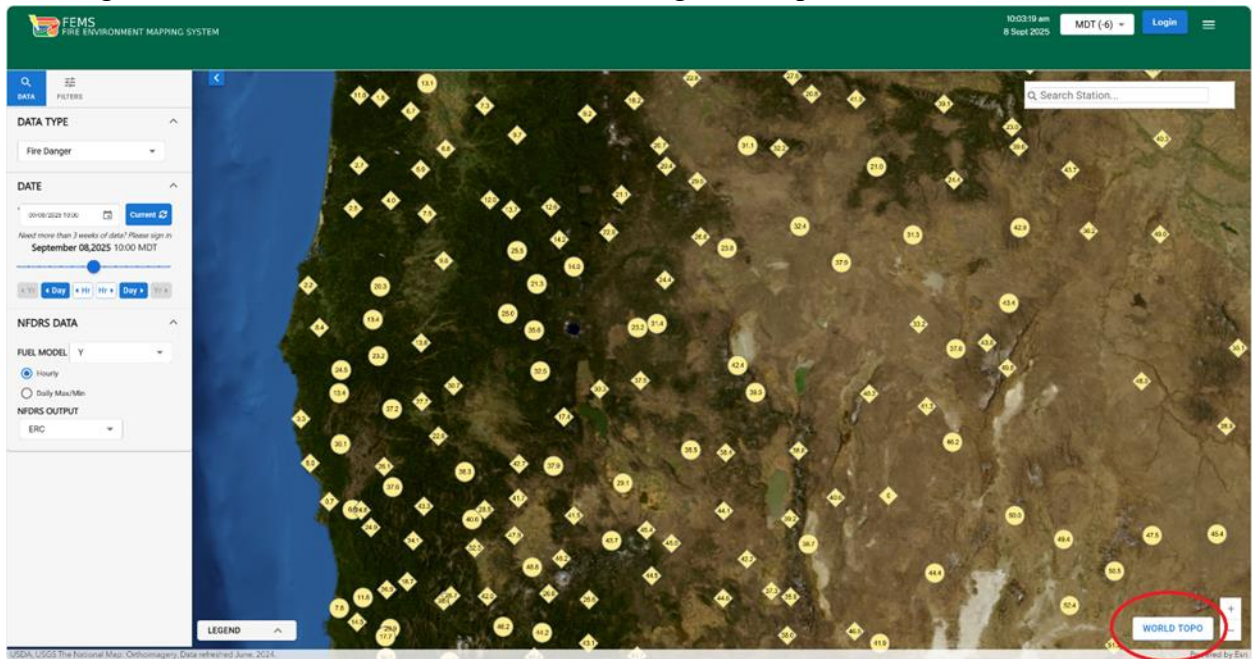
### Navigating Maps

Two options are available for viewing the map.

World Topo is the default.

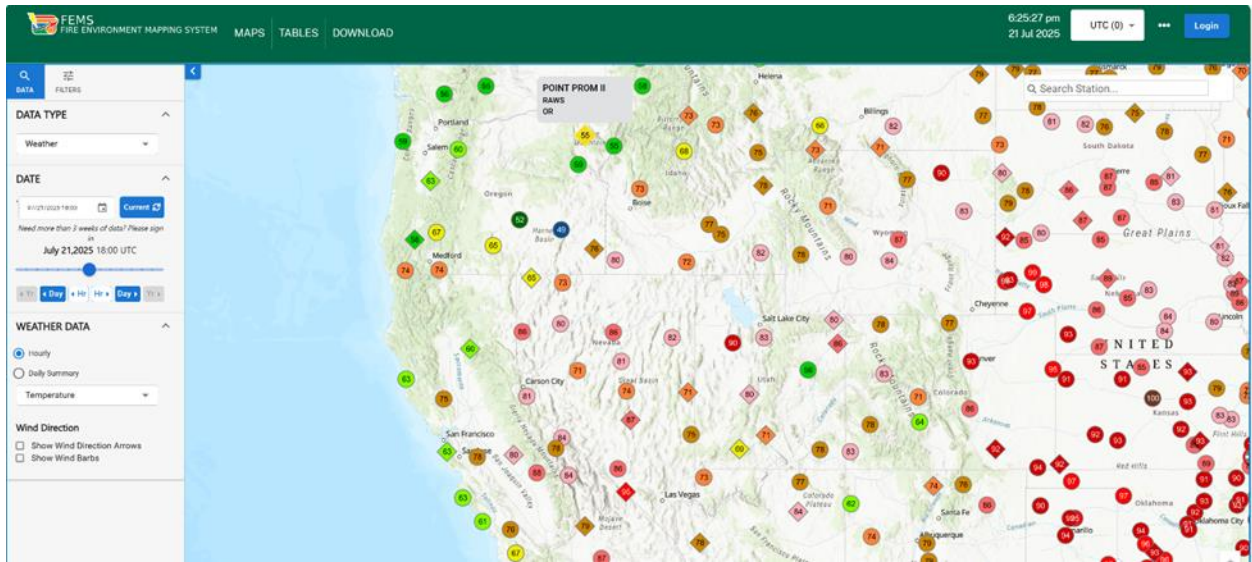


Clicking on the “USGS IMAGERY” label will change the map.



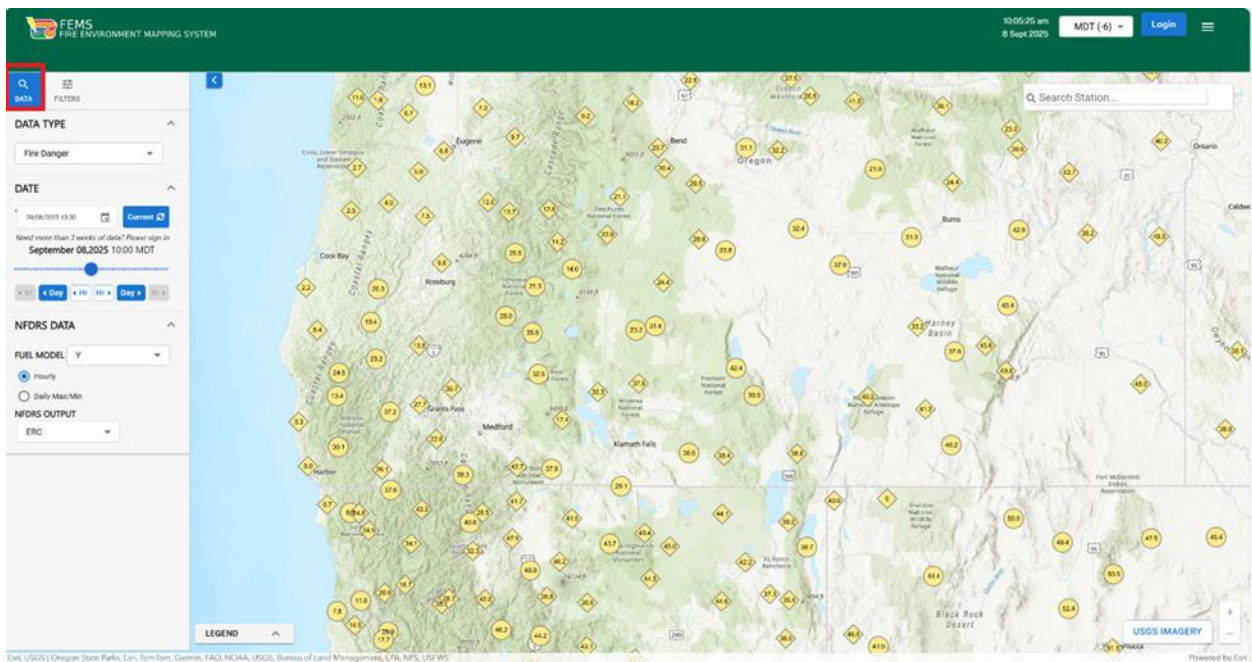
Zoom Capability, the map can be enlarged to locate the desired area or weather station.

Selections on the left side will determine the map data displayed:

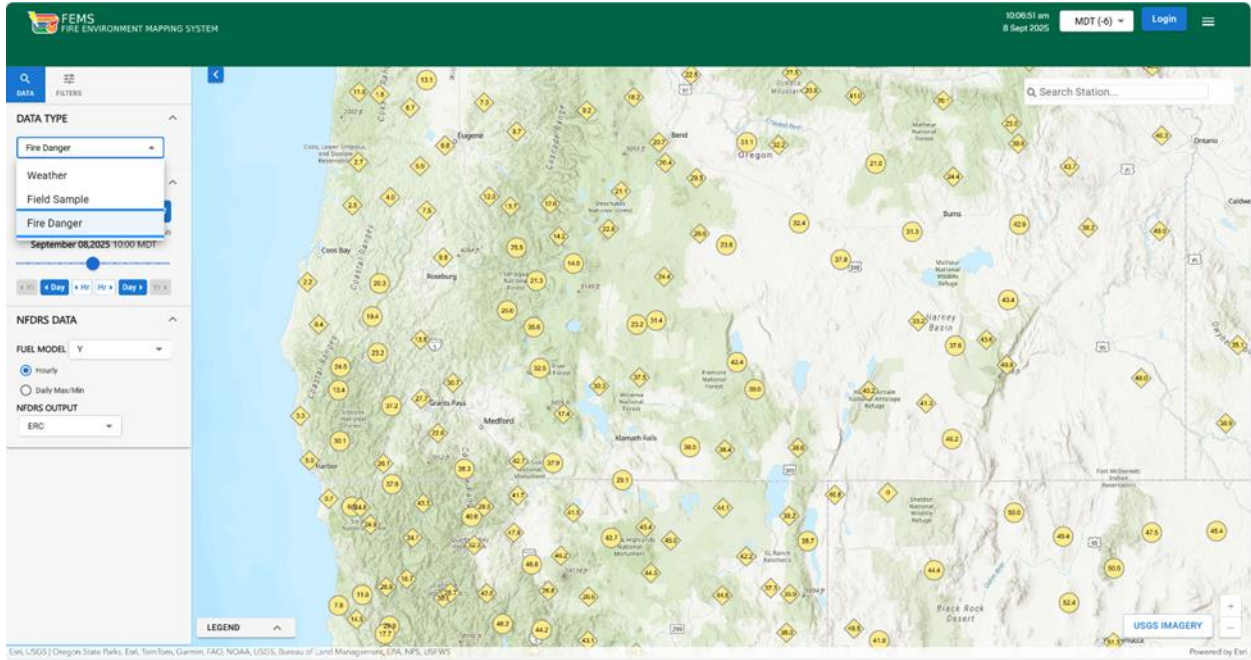


Data Tab:

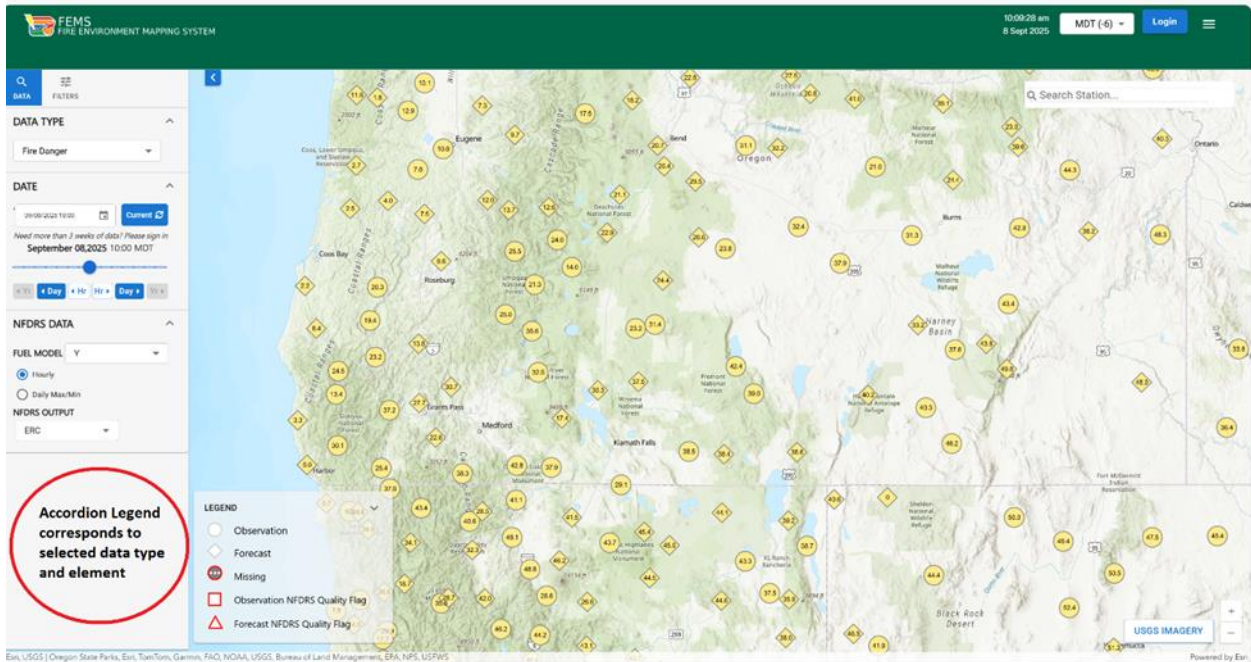
Under the “Data” tab, accordion menus and radial buttons will aid selections:



Selections on the left will determine what the map displays.

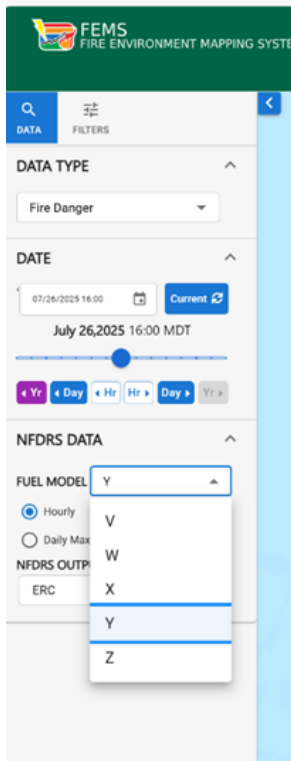


The Legend corresponds to the selected data type and element:

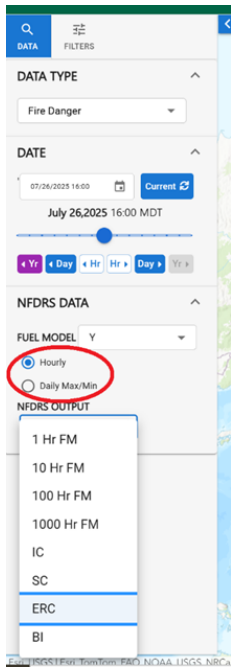


Here the selected data type is Fire Danger.

Select the desired Fuel Model:



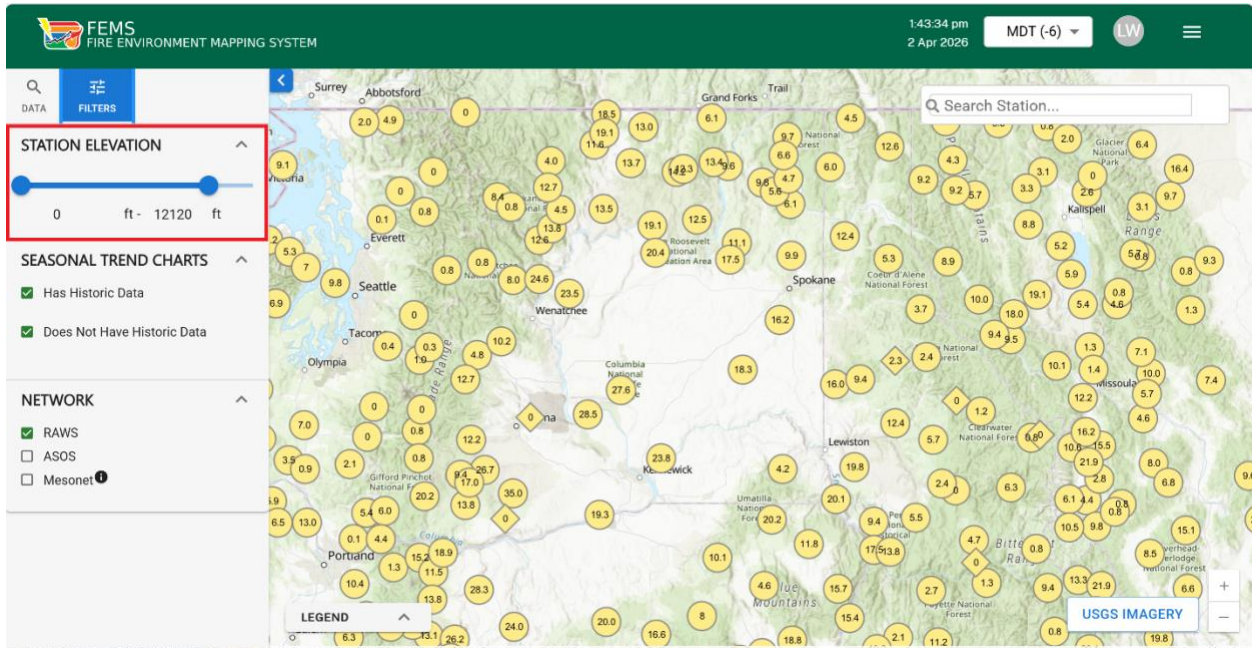
Select the desired NFDRS Output to be displayed on the map:



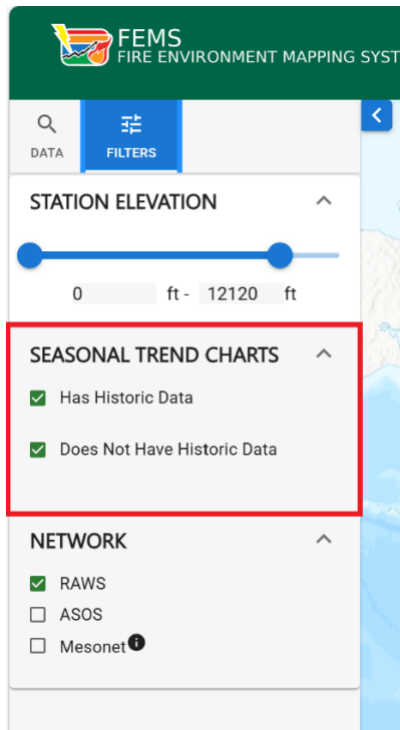
## Filter Tab:

Under the “Filter” Tab there are several filter options to narrow the stations displayed.

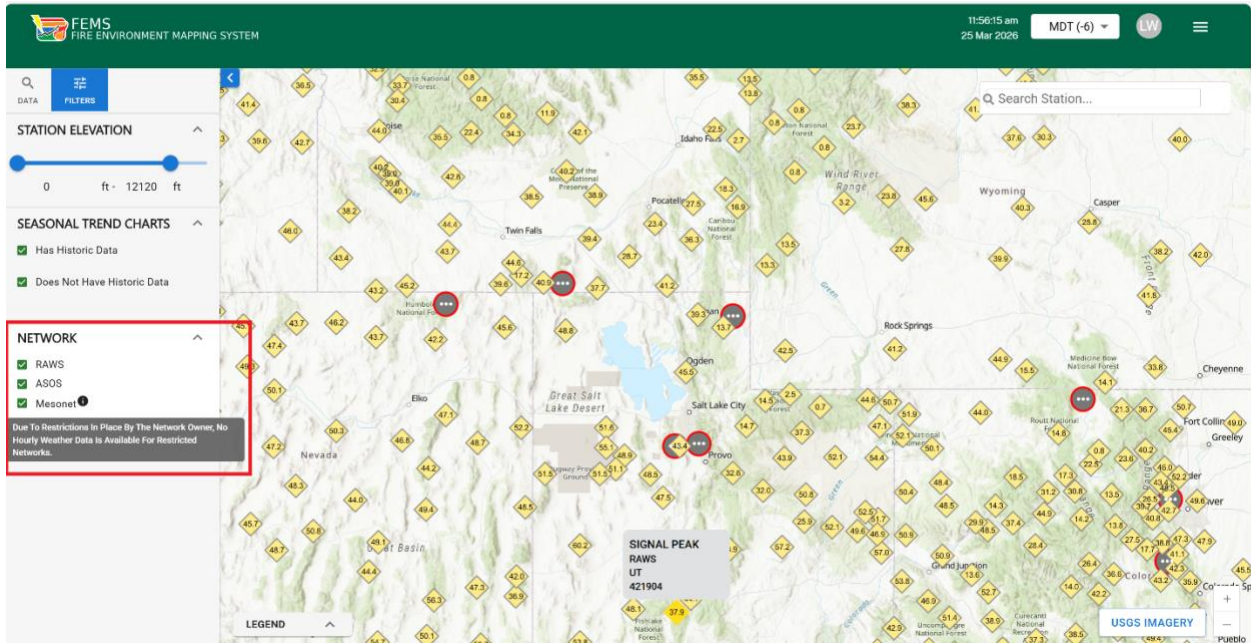
“Station Elevation” can be adjusted to only display stations at a desired elevation by adjusting the slider bar.



“Seasonal Trend Charts” check boxes filter out stations with or without historical data.



“Networks” check boxes will display only the selected networks.

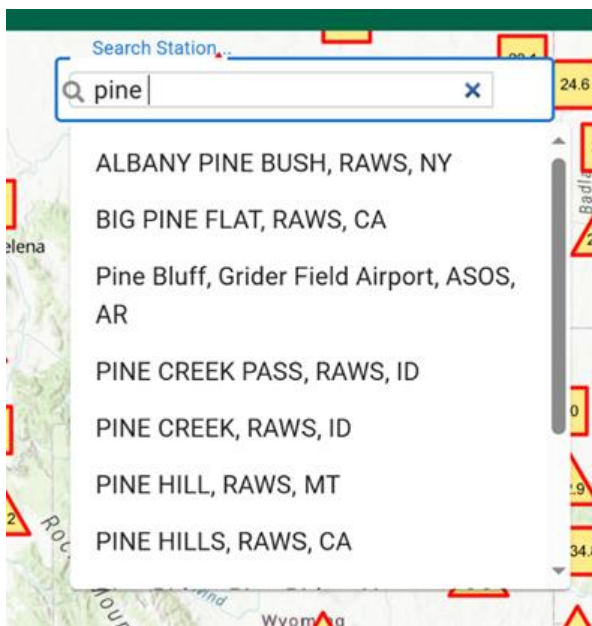


### Restricted Mesonets

While hourly weather data is not available for Restricted Mesonet Networks, hourly and daily fire danger indices are available.

### Dynamic Search:

The dynamic search function can be used to display the desired weather stations:



To display the fire danger data, click on the station icon. All Fire Danger Indices will display. The map view will only display three days of observations and forecasts. Additional data is available on the “Go To” options. The table format is the default display.

**PINE CREEK, RAWS, ID**

STATION METADATA

EXPAND TO VIEW CHART

EXPAND TO VIEW OBSERVATION TABLE

<< SCROLL TO CURRENT OBSERVATION >> [Go To Table](#)

DATE (LST)	07/25/25 MST	07/26/25 MST	07/27/25 MST
Min 1 HR FM/Time	4.9 / 17:00	5.0 / 17:00	5.7 / 17:00
Min 10 HR FM/Time	6.1 / 18:00	5.8 / 19:00	6.1 / 0:00
Min 100 HR FM/Time	9.5 / 21:00	8.9 / 20:00	8.6 / 20:00
Min 1000 HR FM/Time	10.1 / 13:00	10.1 / 20:00	9.9 / 20:00
KBDI	374	380	385
HERB FM	30	30	30
WOODY FM	60	60	60
GSI	0.26	0.27	0.27
Max IC/Time	36.9 / 16:00	45.5 / 16:00	33.6 / 17:00
Max SC/Time	2.3 / 15:00	3.5 / 16:00	2.3 / 17:00
Max ERC/Time	55.2 / 18:00	55.9 / 18:00	56.0 / 18:00
Max BI/Time	27.8 / 15:00	33.8 / 16:00	28.1 / 17:00

### Chart and Station Metadata:

Options are available to view the data in chart form as well as the Station Metadata by clicking the down carrots.

**PINE CREEK, RAWS, ID, 101222**

STATION METADATA

NETWORK	NETWORK ID	OWNER
RAWS	2	USFS
LATITUDE	LONGITUDE	ELEVATION
44.25028	-116.19861	5400
GRASS TYPE	ASPECT/SLOPE	AVG ANNUAL PRECIP
PERENNIAL	S/1: 0-25%	29.33

[Go To Catalog](#)

EXPAND TO VIEW CHART

[Go To Charts](#)

NFDRS Outputs ERC

ERC

35.52

18

0

Mar 23 Mar 24 Mar 25 Mar 26 Mar 27 Mar 28 Mar 29 Mar 30

— ERC — ERC Forecast

EXPAND TO VIEW OBSERVATION TABLE

<< SCROLL TO CURRENT OBSERVATION >> [Go To Table](#)

DATE/HOUR	7-26/5:00	03-27-26/6:00	03-27-26/7:00	03-27-26/8:00
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## Go To Options:

### Go To Table:

Observed Indices are depicted with solid lines.

Forecasted Indices are depicted with dotted lines.

To return to the Stations Table, click on the “View All Stations” link.

Network: RAWS | State: ID | Agency Owner: USFS

[View All Stations](#)

**Fire Danger** | Station Metadata | Catalog | Seasonal Trend Charts

Date Range:  Daily  Hourly  
 Start Date: 07/12/2025 | End Date: 08/02/2025 | Fuel Model: Y

Date(LST)	Min 1 hr FM/Time	Min 10 hr FM/Time	Min 100 hr FM/Time	Min 1000 hr FM/Time	KBDI	Herb FM	Woody FM	GSI	Max IC/Time	Max SC/Time	Max ERC/Time	Max BI/Time
07/27/25	5.7 / 17:00	6.1 / 0:00	8.6 / 20:00	9.9 / 20:00	385	30	60	0.27	33.6 / 17:00	2.3 / 17:00	56.0 / 18:00	28.1 / 17:00
07/26/25	5.0 / 17:00	5.8 / 19:00	8.9 / 20:00	10.1 / 20:00	380	30	60	0.27	45.5 / 16:00	3.5 / 16:00	55.9 / 18:00	33.8 / 16:00
07/25/25	4.9 / 17:00	6.1 / 18:00	9.5 / 21:00	10.1 / 13:00	374	30	60	0.26	36.9 / 16:00	2.3 / 15:00	55.2 / 18:00	27.8 / 15:00
07/24/25	5.1 / 17:00	6.0 / 18:00	10.2 / 22:00	9.9 / 14:00	368	30	60	0.26	35.9 / 15:00	2.3 / 15:00	54.5 / 18:00	27.8 / 15:00
07/23/25	5.6 / 17:00	7.3 / 20:00	11.3 / 23:00	9.4 / 9:00	363	30	60	0.24	31.6 / 17:00	2.1 / 17:00	52.7 / 17:00	26.2 / 17:00
									23.6 /		52.8 /	24.8 /

### Go To Catalog:

The Station Catalog for Fire Danger is available by selecting the “Go To Catalog” located with the Station Metadata:

Stations | Field Sample Sites | NFRS Catalogs

PINE CREEK [View On Map](#) | Search All Stations... | [View All Stations](#)

Network: RAWS | State: ID | Agency Owner: USFS

**Fire Danger** | Weather | Station Metadata | **Catalog** | Seasonal Trend Charts

DROUGHT CATALOG | DEAD FUEL CATALOG | LIVE FUEL CATALOG | FUEL MODEL CATALOG | FUEL MODEL

NATIONAL DROUGHT CATALOG | NATIONAL DEAD FUEL MOISTURE CATALOG | NATIONAL LIVE FUEL MOISTURE CATALOG | NATIONAL | V, W, X, Y, Z

**Drought Catalog**

CATALOG NAME	KBDI THRESHOLD	INITIAL KBDI
NATIONAL DROUGHT CATALOG	880	100

**Dead Fuel Catalog**

CATALOG NAME	1 HR FUEL MOISTURE STICK RADIUS	10 HR FUEL MOISTURE STICK RADIUS	100 HR FUEL MOISTURE STICK RADIUS	1000 HR FUEL MOISTURE STICK RADIUS
NATIONAL DEAD FUEL MOISTURE CATALOG	0.2	0.6	2	3.81

**Live Fuel Catalog**

CATALOG NAME	Herbaceous		Woody	
NATIONAL LIVE FUEL MOISTURE CATALOG	Herbaceous Temp Min Min	-2	Woody Temp Min Min	-2
	Herbaceous Temp Min Max	5	Woody Temp Min Max	5

To view the station on the map, click on the “View on Map” link.

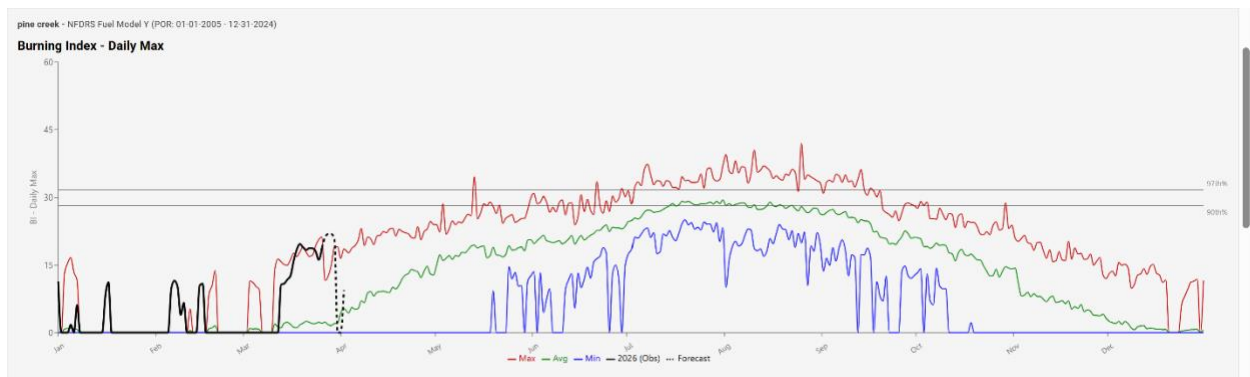
## Go To Charts:

Seasonal Trend Charts are available by clicking on “Go To Charts” located with the NFDRS Output Charts.

- “Period of Record” (POR) has been updated through 12/31/2024.



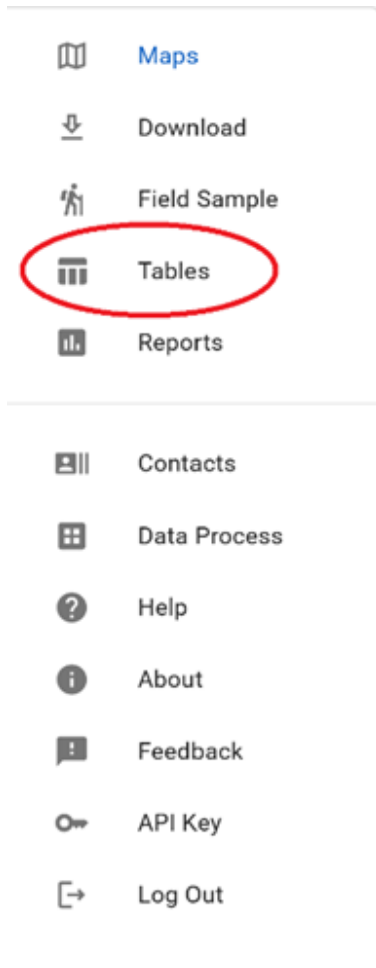
- Additional Indices are available by scrolling.



**IMPORTANT:** Seasonal Trend Charts are not available for all weather stations. Seasonal Trend Charts require a period of historical weather data which is not available for recent RAWS and ASOS stations.

## Tables:

Fire Danger and station information is available in table form by accessing the “Tables” option in the menu.



The “Stations” tab will open:

STATION NAME ↑	STATION ID	NETWORK	STATE	AGENCY OWNER
10K	55522198	RAWS	NM	USFS
3 MILE	102004	RAWS	ID	USFS
7 MILE RIDGE	313302	RAWS	NC	S&PF
Aberdeen, Aberdeen Regional Airport	55522405	ASOS	SD	NWS
Abernathy 5ENE	55522971	Mesonet	TX	WestTX Mesonet
ABERNATHY MTN.	451209	RAWS	WA	S&PF
Abilene 3NE	55523687	Mesonet	TX	WestTX Mesonet

Click on the desired station or use the dynamic search view weather and station information.

Dynamic search and filters are available to isolate the desired weather station.

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there are navigation tabs: FEMS FIRE ENVIRONMENT MAPPING SYSTEM, MAPS, TABLES, DOWNLOAD, and FIELD SAMPLE. The current time is 11:07:29 pm on 26 Jul 2025, and the user is logged in as LW Lani Williams. The interface is divided into two main sections: Stations and Field Sample Sites. The Stations section is active, showing a search bar with 'Pine Creek' entered. Below the search bar, there are filters for Network (All), State (All), and Agency Owner (All). A dropdown menu shows search results for 'PINE CREEK PASS, RAWLS, ID' and 'PINE CREEK, RAWLS, ID'. Below this, a table lists various weather stations with columns for NETWORK, STATE, and AGENCY OWNER.

	NETWORK	STATE	AGENCY OWNER
10K	RAWS	NM	USFS
3 MILE	RAWS	ID	USFS
7 MILE RIDGE	RAWS	NC	S&PF
Aberdeen, Aberdeen Regional Airport	ASOS	SD	NWS
ABERNATHY MTN.	RAWS	WA	S&PF
Ablene, Abilene Regional Airport	ASOS	TX	NWS
Acadiana Regional Airport	ASOS	LA	NWS
ACE BASIN	RAWS	SC	FWS
ACORN WOMAN PEAK	RAWS	OR	USFS

Once the station is selected a variety of information is available.

### Fire Danger Indices:

- Observed Indices are depicted with solid lines.
- Forecasted Indices are depicted with dotted lines.
- Links to view the station on the map or return to the station list are depicted in blue.

The screenshot shows the FEMS Fire Environment Mapping System interface for the Pine Creek station. The top navigation bar is the same as in the previous screenshot. The interface is divided into two main sections: Stations and Field Sample Sites. The Stations section is active, showing the station name 'Pine Creek' and a link to 'View On Map'. Below this, there are tabs for Fire Danger, Station Metadata, Catalog, and Seasonal Trend Charts. The Fire Danger section is active, showing a date range from 07/12/2025 to 08/02/2025 and a fuel model of 'Y'. Below this, a table displays Fire Danger Indices (FMI, KBDI, Herb FM, Woody FM, GSI, IC, SC, ERC, BI) for various dates and times.

Date: HR (LST)	1 hr FM	10 hr FM	100 hr FM	1000 hr FM	KBDI	Herb FM	Woody FM	GSI	IC	SC	ERC	BI
08-01-2025 13:00 (MST)	8.4	9.7	8.3	9.3	411	32.2	61.4	0.31	17.7	1.7	54.3	24.3
08-01-2025 12:00 (MST)	9.0	10.1	8.3	9.3	411	32.2	61.4	0.31	15.7	1.7	53.4	23.8
08-01-2025 11:00 (MST)	9.5	10.3	8.3	9.4	411	32.2	61.4	0.31	13.4	1.5	52.8	22.5
08-01-2025 10:00 (MST)	9.9	10.3	8.3	9.4	411	32.2	61.4	0.31	12.0	1.5	52.5	22.2
08-01-2025 09:00 (MST)	10.4	10.3	8.4	9.4	411	32.2	61.4	0.31	10.6	1.4	52.2	21.9

## Station Metadata Tab:

This tab will display the metadata associated with the station.

The screenshot shows the FEMS (Fire Environment Mapping System) interface. The top navigation bar includes 'FEMS FIRE ENVIRONMENT MAPPING SYSTEM', 'MAPS', 'TABLES', and 'DOWNLOAD'. The user is logged in as 'MDT (4)' at 4:13:06 pm on 27 Jul 2025. The main content area is titled 'Stations' and 'Field Sample Sites'. The selected station is 'Pine Creek', with a 'View On Map' link. Below this, the 'Station Metadata' tab is active, showing a table with the following data:

Location Data					
NETWORK	STATE	AGENCY OWNER	LATITUDE	LONGITUDE	ELEVATION
RAVFS	ID	USFS	44.25028	-116.10861	5400

Site Characteristics		
GRASS TYPE	ASPECT/SLOPE	AVG. ANNUAL PRECIP
PERENNIAL	S/ 1: 0-25%	29.33

## Catalog Tab:

This tab will display the Station Catalog depicting the parameters associated with the fire danger calculations.

The screenshot shows the FEMS interface with the 'Catalog' tab selected. It displays a table of fire danger parameters:

DROUGHT CATALOG	DEAD FUEL CATALOG	LIVE FUEL CATALOG	FUEL MODEL CATALOG	FUEL MODEL
NATIONAL DROUGHT CATALOG	NATIONAL DEAD FUEL MOISTURE CATALOG	NATIONAL LIVE FUEL MOISTURE CATALOG	NATIONAL	V, W, X, Y, Z

**Drought Catalog**

CATALOG NAME	KBBI THRESHOLD	INITIAL KBBI
NATIONAL DROUGHT CATALOG	800	100

**Dead Fuel Catalog**

CATALOG NAME	1 HR FUEL MOISTURE STICK RADIUS	10 HR FUEL MOISTURE STICK RADIUS	100 HR FUEL MOISTURE STICK RADIUS	1000 HR FUEL MOISTURE STICK RADIUS
NATIONAL DEAD FUEL MOISTURE CATALOG	0.2	0.64	2	3.81

**Live Fuel Catalog**

CATALOG NAME	Herbaceous Temp Min Min	Woody Temp Min Min
NATIONAL LIVE FUEL MOISTURE CATALOG	-2	-2

For additional information regarding the fire danger parameters see:

[FEMS Summary of Changes V1.pdf](#)

## Seasonal Trend Charts Tab:

This tab provides an alternate method to view the seasonal trend charts.



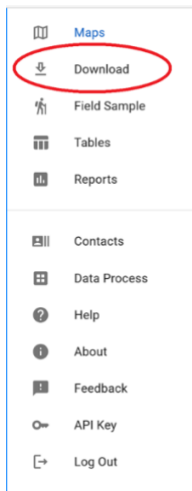
## Data Download:

Additional data in FEMS is available as a Data Download.

1. Click on the “Hamburger” icon to open the Menu:



2. Select the “Download” option in the menu:



3. Select “Fire Danger” as the Data Subject Area:

## FEMS Data Download

Options to refine your download will appear as you make selections.  
Changes to selections may impact your available options and selections.

Data Subject Area *Required*

Fire Danger

Weather

Field Sample

Site Metadata

Fire Danger

Select a Data Set

Date Time Frequency *Required*

- Daily
- Hourly

4. Select desired Fuel Model(s).
5. Select desired Data Set:

## FEMS Data Download

Options to refine your download will appear as you make selections.  
Changes to selections may impact your available options and selections.

Data Subject Area *Required*

Fire Danger

Fuel Model(s) *Required*

Y X

Data Set *Required*

Select a Data Set

Fire Danger Observation

Fire Danger Forecast

Fire Danger Observation and Forecast

Data Format *Required*

Select a Data Format

Date Range *Required*

Start Date      End Date

00/00/0000      00/00/0000

6. Select a “Data Format”
7. Select the desired “Data Range”

8. Select the desired Station or Stations.
9. Select “Download Data”.
10. Depending on file size, a “Copy Data Link” option may be available for additional analysis.
  - a. The Copy Data Link (CDL) replaces the WXML functionality in WIMS by generating an API.

## FEMS Data Download

Options to refine your download will appear as you make selections.  
Changes to selections may impact your available options and selections.

**Data Subject Area** Required

Fire Danger

**Fuel Model(s)** Required

Y X

**Data Set** Required

Fire Danger Observation

**Date Time Frequency** Required

Daily

Hourly

**Data Format** Required

CSV (UTC)

Time is in UTC

**Date Range** Required

Start Date: 02/23/2017

End Date: 03/25/2026

**Start Hour** ?: 00:00

**End Hour** ?: 23:00

Forecast data may be incomplete on day seven

**Selected Station(s)** Required

wagontown

- Up to 300 stations and 1 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 150 stations and 2 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 100 stations and 3 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 75 stations and 4 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 60 stations and 5 fuel model can be selected for requests that are greater than or equal to 20-years worth of data

These are your selected stations. Total stations selected: 2

Pine Creek, RAWS, ID, 101222 x Wagontown, RAWS, ID, 102712 x

[Clear All](#)

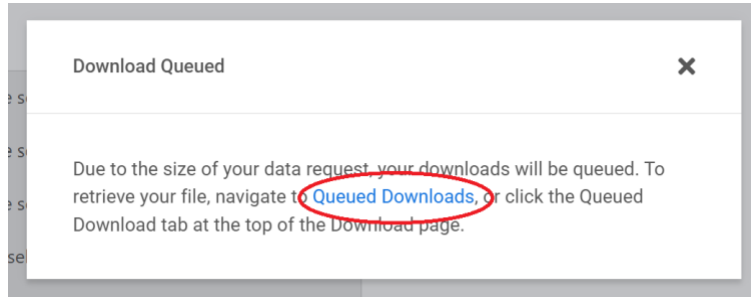
[Download Data](#) [Copy Data Link](#)

Additional selections will vary depending on the Data Subject Area. Times displayed in Local Standard Time (LST) at the station site and are not currently adjusted for Daylight Savings Time.

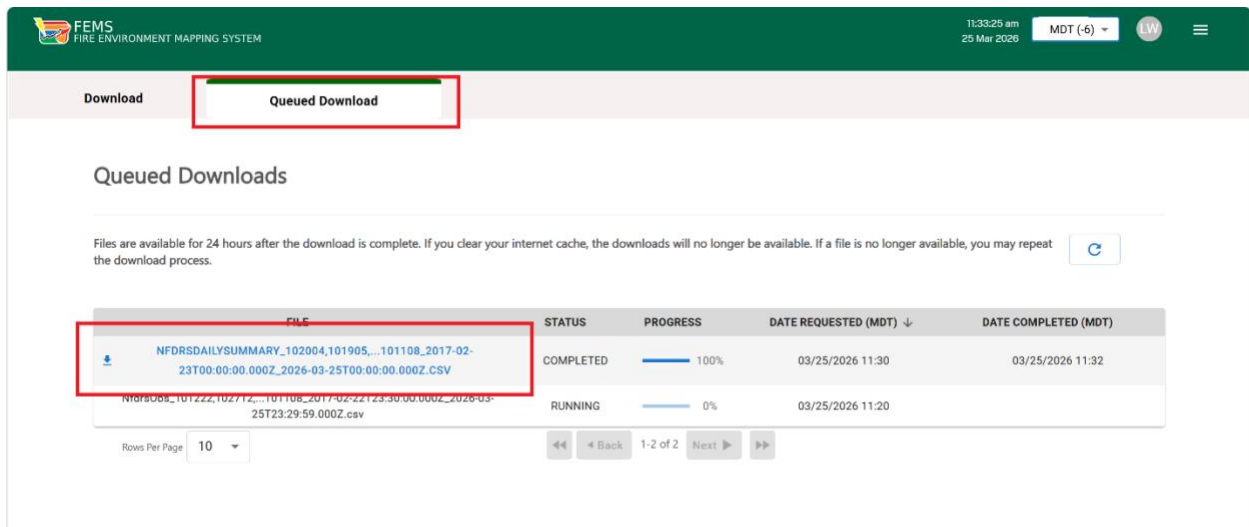
## Queued Download

Data sets too large for a direct download will be available on the “Queued Download” tab.

1. The “Copy Data” link will not be available.
2. After selecting the “Download Data” button a popup will appear with a link to the “Queued Download” tab.



3. Access is also available by selecting the “Queued Download” tab directly.
4. The files will be listed with their progress.
  - a. When completed, click on the file name to download.



5. Downloads will be available for 24 hours.

## Zip Files

The option to Zip a download file is now available for all download formats.

## FEMS Data Download

Options to refine your download will appear as you make selections. Changes to selections may impact your available options and selections.

**Data Subject Area** Required

Fire Danger

**Fuel Model(s)** Required

Y X

**Data Set** Required

Fire Danger Observation

**Date Time Frequency** Required

Daily

Hourly

**Data Format** Required

CSV (UTC)

CSV (LST - Local Standard Time)

ZIP (UTC)

ZIP (LST - Local Standard Time)

## FEMS Data Download

Options to refine your download will appear as you make selections. Changes to selections may impact your available options and selections.

**Data Subject Area** Required

Fire Danger

**Fuel Model(s)** Required

Y X

**Data Set** Required

Fire Danger Observation

**Date Time Frequency** Required

Daily

Hourly

(Daily) Maximum/Minimum data will be downloaded from midnight to midnight local station time.

CSV (LST - Local Standard Time)

ZIP (LST - Local Standard Time)

## Creating SIGS with the Data Download:

Fire Danger Indices can be displayed in a SIG format by using the Data Download feature in FEMS by selecting multiple stations.

### FEMS Data Download

Options to refine your download will appear as you make selections. Changes to selections may impact your available options and selections.

**Data Subject Area** Required

Fire Danger

**Fuel Model(s)** Required

Y X

**Data Set** Required

Fire Danger Observation and Forecast

**Date Time Frequency** Required

Daily

Hourly

**Data Format** Required

CSV (LST - Local Standard Time)

Time is adjusted to time zone of station but not adjusted for daylight savings.

**Date Range** Required

Start Date: 03/13/2026

End Date: 04/03/2026

**Start Hour** Required: 00:00

**End Hour** Required: 23:00

Forecast data may be incomplete on day seven.

[Previous 5 Days And 7-Day Forecast](#)

**Selected Station(s)** Required

Town Creek

- Up to 300 stations and 1 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 150 stations and 2 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 100 stations and 3 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 75 stations and 4 fuel model can be selected for requests that are greater than or equal to 20-years worth of data
- Up to 60 stations and 5 fuel model can be selected for requests that are greater than or equal to 20-years worth of data

These are your selected stations. Total stations selected: 3

Pine Creek, RAWLS, ID, 101222 x Wagontown, RAWLS, ID, 102712 x Town Creek, RAWLS, ID, 101708 x

[Clear All](#)

[Download Data](#) [Copy Data Link](#)

### FEMS Data Download

Options to refine your download will appear as you make selections. Changes to selections may impact your available options and selections.

**Data Subject Area** Required

Fire Danger

**Fuel Model(s)** Required

Y X

**Data Set** Required

Fire Danger Observation and Forecast

**Date Time Frequency** Required

Daily

Hourly

(Daily) Maximum/Minimum data will be downloaded from midnight to midnight local station time.

**Data Format** Required

CSV (LST - Local Standard Time)

Time is adjusted to time zone of station but not adjusted for daylight savings.

**Date Range** Required

Start Date: 03/13/2026

End Date: 04/03/2026

Forecast data may be incomplete on day seven.

[Previous 5 Days And 7-Day Forecast](#)

Average Fire Danger Outputs

**Selected Station(s)** Required

Town Creek

These are your selected stations. Total stations selected: 3

Pine Creek, RAWLS, ID, 101222 x Wagontown, RAWLS, ID, 102712 x Town Creek, RAWLS, ID, 101708 x

[Clear All](#)

[Download Data](#) [Copy Data Link](#)

Depending on file size, the data may have a “Copy Data Link”. Large files will be downloaded as a “Queued Download”. The “Copy Data Link” (CDL) replaces the WXML functionality in WIMS. In the Data Download select the “Copy” option to generate an API.

Additional Resources:

Copy Data Link:

[TechTip\\_Copy Data Link in FEMS.pdf](#)

Using Copy Data Link in Excel:

[TechTip- Using the Copy Data Link from FEMS in Excel.pdf](#)

Using FEMS Get Data Manipulation (URL):

[FEMS TechNote-2025-09-Get Data Manipulation.pdf](#)

## Program Administration

With the release of FEMS V3.5 FEMS users with the “Admin” role have the ability to modify Fuel Moisture Catalogs.

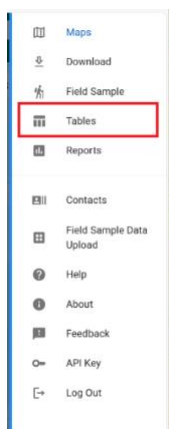
Accessing NFDRS Catalogs:

To access NFDRS Catalogs:

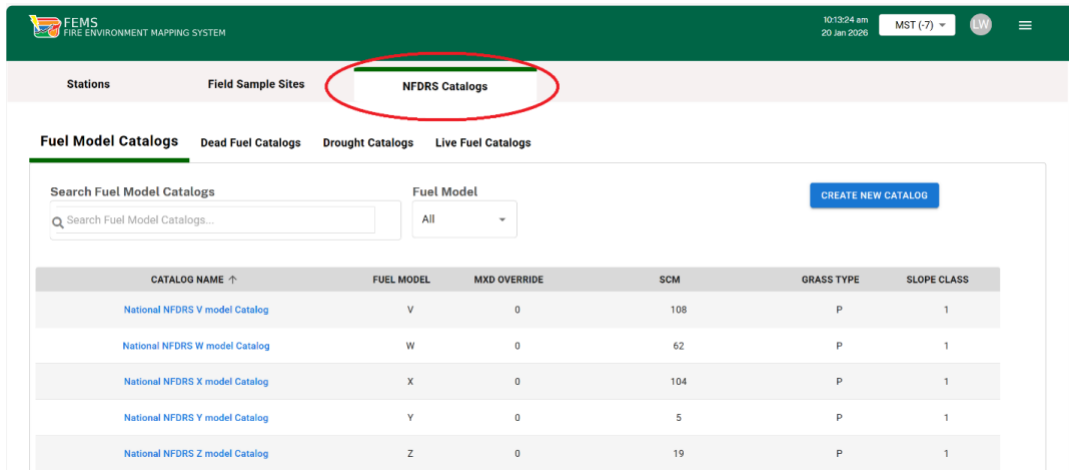
1. Log into FEMS.
2. Click on the “Hamburger” icon.



3. Select the “Tables” option.



4. A new screen will open.
  - a. Select the “NFDRS Catalogs” tab.



## Fuel Model Catalogs

The “Fuel Model Catalogs” tab lists all the fuel models available to calculate fire danger for stations in FEMS.

FEMS users with the “Admin” role have the ability to create and edit fuel moisture catalogs and assign them to stations in FEMS.

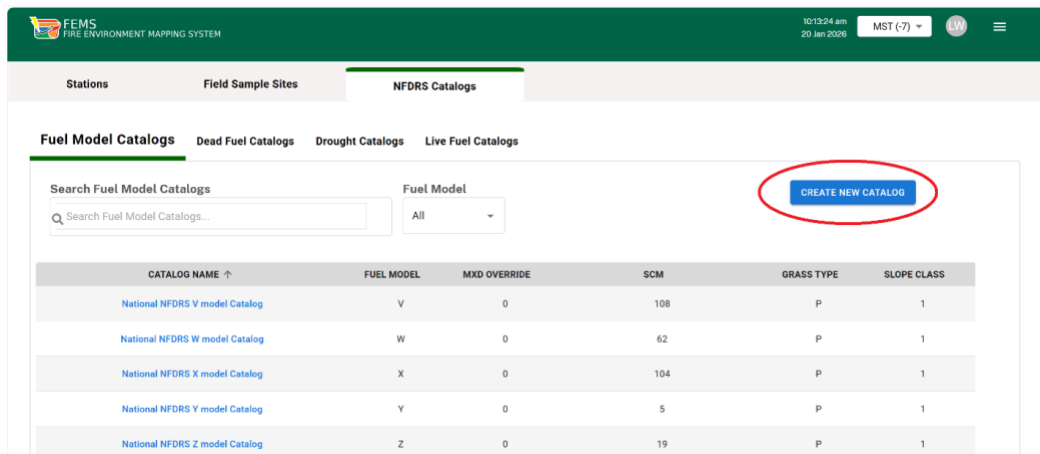
Fuel moisture models can either be created individually (Dead Fuel Catalog, Drought Catalog or Live Fuel Catalog tabs) or in the “Fuel Model Catalogs” tab.

Catalog Management (Edit/Delete) functionality is in the individual tabs.

## Create a New Fuel Model Catalog

To create a new fuel model catalog:

1. Click on “Create New Catalog” button.



2. A new screen will open:

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

Enter Fuel Model Catalog Name

Fuel Model(s)\*

V X W X X X Y X Z X

Adjust for Each Fuel

Slope Class (Fuel Model V)\*

1

Slope Class (Fuel Model W)\*

1

Slope Class (Fuel Model X)\*

3. Enter the required fields
  - a. Enter a “Fuel Model Catalog Name”.
  - b. Select the appropriate Fuel Model:
    - i. The default will show all fuel models. Selection can be made by “X”ing out the fuel model or highlighting in the dropdown.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

New Fuel Moisture Catalog Test\_02022026

Fuel Model(s)\*

V X W X X X Y X Z X

All  
V  
W  
X  
Y  
Z

Slope Class (Fuel Model W)\*

1

- c. Parameters can be adjusted for the selected fuel(s).
        - i. The field is multi-select.
        - ii. The selected fields will become editable.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM 12:23:00 pm MST (-7) LW

### Add a New Fuel Model Catalog

Fuel Model Catalog Name\* Cancel Add

New Fuel Moisture Catalog Test\_02022026

Fuel Model(s)\*

V X W X X X Y X Z X

Adjust for Each Fuel

Grass Type X Dead Fuel Catalog X

- Grass Type
- MXD Override
- SCM
- Drought Catalog
- Dead Fuel Catalog
- Live Fuel Catalog

Slope Class (Fuel Model X)\*

4. Select from the existing fuel moistures models or create new.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM 12:59:57 pm MST (-7) LW

### Add a New Fuel Model Catalog

Fuel Model Catalog Name\* Cancel Add

New Fuel Moisture Catalog Test\_02022026

Fuel Model(s)\*

V X W X X X Y X Z X

Adjust for Each Fuel

Grass Type X Dead Fuel Catalog X

Create New Live Fuel Catalog

Live Fuel Catalog (V, W, X, Y, Z)\*

Search Live Fuel Catalogs

5. The parameters selected to edit will determine the fields that are available to edit. If not selected the field will be “grayed out”.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

LW Test 02042026

Fuel Model(s)\*

Adjust for Each Fuel

Drought Catalog X Dead Fuel Catalog X Slope Class X

Slope Class (Fuel Model Y)\*

1

Grass Type (Fuel Model Y)\*

P

- In this example, the dynamic search function can be used to associate an existing Drought Catalog, or the “Create New” button can be selected to create a new Drought Catalog.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

Beta Test 1

La Nina Drought Catalog

LW Drought Test 01212026

National Drought Catalog

Rr

Trudi Test Catalog 1

Trudi Test Catalog 10242025

Trudi Test Drought Catalog 1

Trudi Test Drought Catalog 102925

Trudi Test Drought Catalog W 103025

Trudi Test Drought Catalog Z

Search Drought Catalogs

Create New Drought Catalog

Create New Dead Fuel Catalog

Dead Catalog (Fuel Model Y)\*

*(Note – This is the test database. Only the “National Catalog” is actual. All other catalogs are only for testing FEMS functionality.)*

7. To create a new Drought Catalog:
  - a. Select the “Create New” button.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\*  
LW Test 02042026

Fuel Model(s)\*  
Y

Adjust for Each Fuel  
Drought Catalog x Dead Fuel Catalog x Slope Class x

Create New Drought Catalog

- b. A new screen will appear.

**Add a New Drought Catalog**

Drought Catalog Name\*  
LW Drought Catalog Test

KBDI Threshold\*  
725

Initial KBDI\*  
125

Cancel Add

- c. Fill in the required fields.
      - i. Drought Catalog Name
      - ii. KBDI Threshold
      - iii. Initial KBDI
    - d. Click the “Add” button.
    - e. A banner will appear that shows the new catalog has been saved.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM

11:07:01 pm UTC (0) LW

✓ The Drought Catalog, LW Drought Catalog Test, was saved. ✕

8. Once created, use the dynamic search field to select the new catalog.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

Enter Fuel Model Catalog Name

Fuel Model(s)\*

Y X

Adjust for Each Fuel

Drought Catalog X Dead Fuel Catalog X Slope Class X

Create New Drought Catalog

Drought Catalog (Fuel Model Y)\*

Q, LW Drought Catalog Test

Create New Dead Fuel Catalog

9. Follow the same process for the Dead Fuel and Live Fuel Catalogs.

10. When all fuel models have been selected, the “Add” button will become active.

11. Click the “Add” button.

**Add a New Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Add

LW Test Fuel Model Catalog 02042026

Fuel Model(s)\*

Y X

Adjust for Each Fuel

Drought Catalog X Dead Fuel Catalog X Slope Class X

Create New Drought Catalog

Slope Class (Fuel Model Y)\*

1

Create New Dead Fuel Catalog

Grass Type (Fuel Model Y)\*

P

12. A banner will appear indicating that the catalog has been saved.

**FEMS**  
FIRE ENVIRONMENT MAPPING SYSTEM

11:17:07 pm  
4 Feb 2026

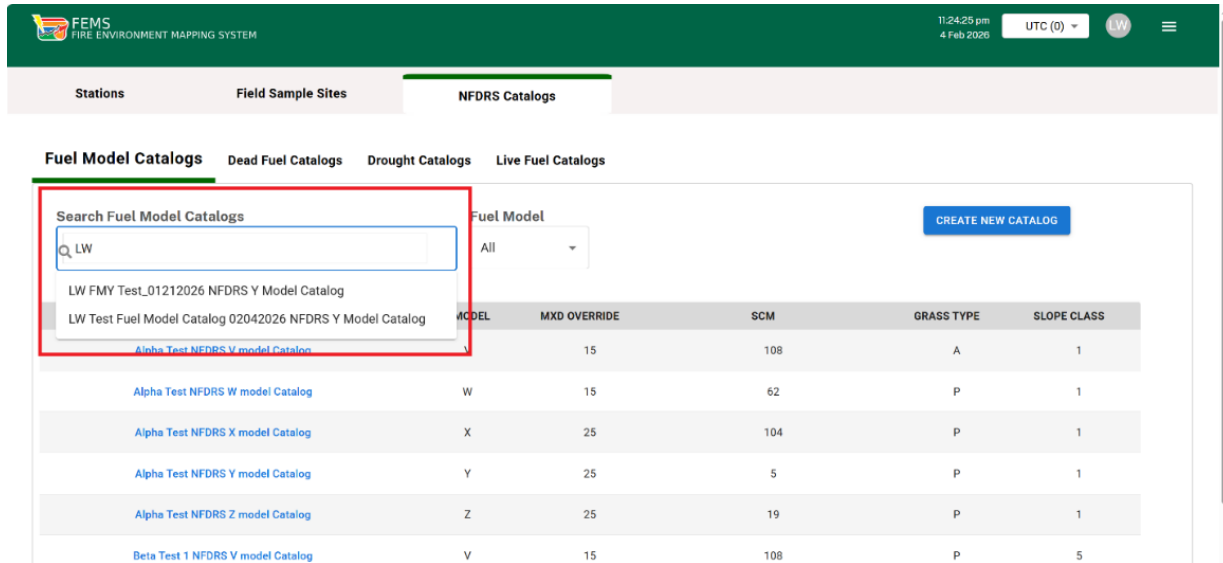
UTC (0)

LW

✓ The Fuel Model Catalog(s), LW Test Fuel Model Catalog 02042026 for Y, was saved. X

## View/Edit Fuel Model Catalog

1. Select from the table or use the dynamic search to select the desired fuel model catalog.



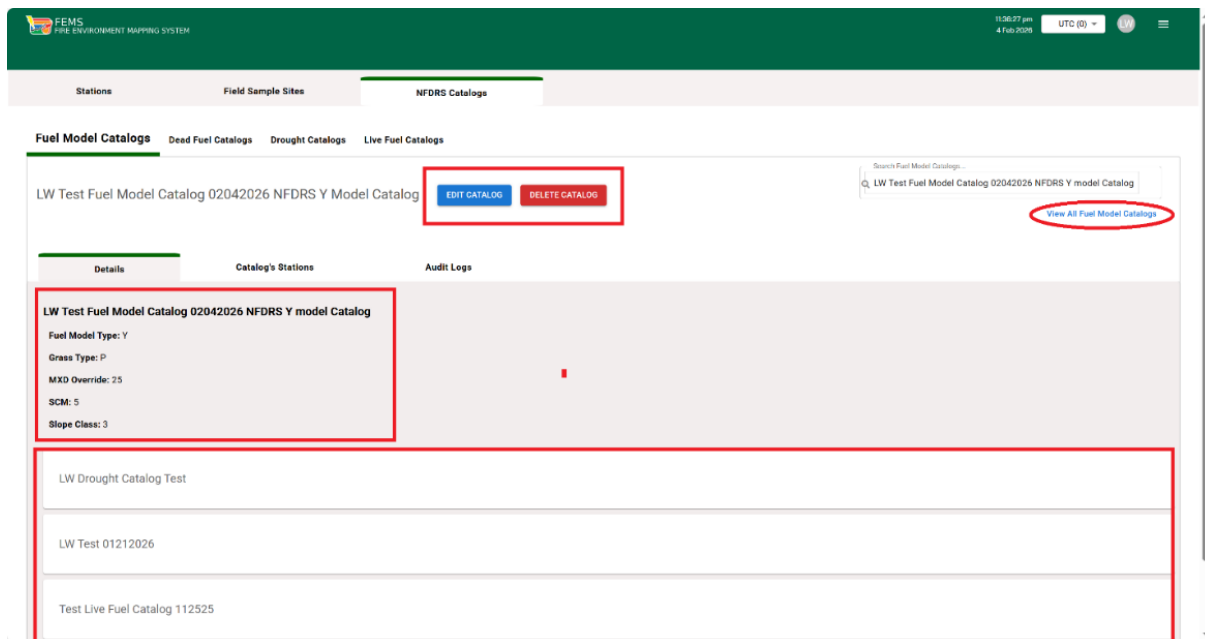
The screenshot shows the FEMS Fuel Model Catalogs page. At the top, there is a navigation bar with 'Stations', 'Field Sample Sites', and 'NFDRS Catalogs'. Below this, there are tabs for 'Fuel Model Catalogs', 'Dead Fuel Catalogs', 'Drought Catalogs', and 'Live Fuel Catalogs'. A search bar is highlighted with a red box, containing the text 'LW'. Below the search bar, a dropdown menu shows two search results: 'LW FMY Test\_01212026 NFDRS Y Model Catalog' and 'LW Test Fuel Model Catalog 02042026 NFDRS Y Model Catalog'. A table of fuel model catalogs is displayed below the search results. The table has columns for 'MODEL', 'MXD OVERRIDE', 'SCM', 'GRASS TYPE', and 'SLOPE CLASS'. The table contains several rows of data, including 'Alpha Test NFDRS V model Catalog', 'Alpha Test NFDRS W model Catalog', 'Alpha Test NFDRS X model Catalog', 'Alpha Test NFDRS Y model Catalog', 'Alpha Test NFDRS Z model Catalog', and 'Beta Test 1 NFDRS V model Catalog'. A 'CREATE NEW CATALOG' button is visible in the top right corner.

MODEL	MXD OVERRIDE	SCM	GRASS TYPE	SLOPE CLASS	
Alpha Test NFDRS V model Catalog	V	15	108	A	1
Alpha Test NFDRS W model Catalog	W	15	62	P	1
Alpha Test NFDRS X model Catalog	X	25	104	P	1
Alpha Test NFDRS Y model Catalog	Y	25	5	P	1
Alpha Test NFDRS Z model Catalog	Z	25	19	P	1
Beta Test 1 NFDRS V model Catalog	V	15	108	P	5

2. A new screen will open with the details of that specific fuel model.

## Fuel Model Catalog Details Tab

1. This screen will display:
  - a. The fuel model parameters.
  - b. The associated Drought, Dead and Live Fuel Moisture Catalogs.



The screenshot shows the FEMS Fuel Model Catalog Details page. At the top, there is a navigation bar with 'Stations', 'Field Sample Sites', and 'NFDRS Catalogs'. Below this, there are tabs for 'Fuel Model Catalogs', 'Dead Fuel Catalogs', 'Drought Catalogs', and 'Live Fuel Catalogs'. The page title is 'LW Test Fuel Model Catalog 02042026 NFDRS Y Model Catalog'. There are two buttons: 'EDIT CATALOG' and 'DELETE CATALOG'. A search bar is visible in the top right corner. Below the search bar, there is a link 'View All Fuel Model Catalogs'. The page is divided into three sections: 'Details', 'Catalog's Stations', and 'Audit Logs'. The 'Details' section is highlighted with a red box and contains the following information: 'LW Test Fuel Model Catalog 02042026 NFDRS Y model Catalog', 'Fuel Model Type: Y', 'Grass Type: P', 'MXD Override: 25', 'SCM: 5', and 'Slope Class: 3'. The 'Catalog's Stations' section is highlighted with a red box and contains three entries: 'LW Drought Catalog Test', 'LW Test 01212026', and 'Test Live Fuel Catalog 112525'. The 'Audit Logs' section is empty.

2. From this screen:
  - a. The fuel model catalog fields can be edited:
    - i. Fuel Model
    - ii. Fuel Model Parameters
    - iii. Fuel Moisture Catalogs
  - b. Stations can be added to the selected fuel model catalog.
  - c. To return to the Fuel Model Catalog table, select the “View All Fuel Model Catalog” link in blue.

## Editing a Fuel Model Catalog

To edit a fuel model catalog:

1. Click on the “Edit Catalog” button.
2. A new screen will open.
3. The fuel model(s), and associated parameters can be edited as well as the fuel moisture models.

## Edit Fuel Model

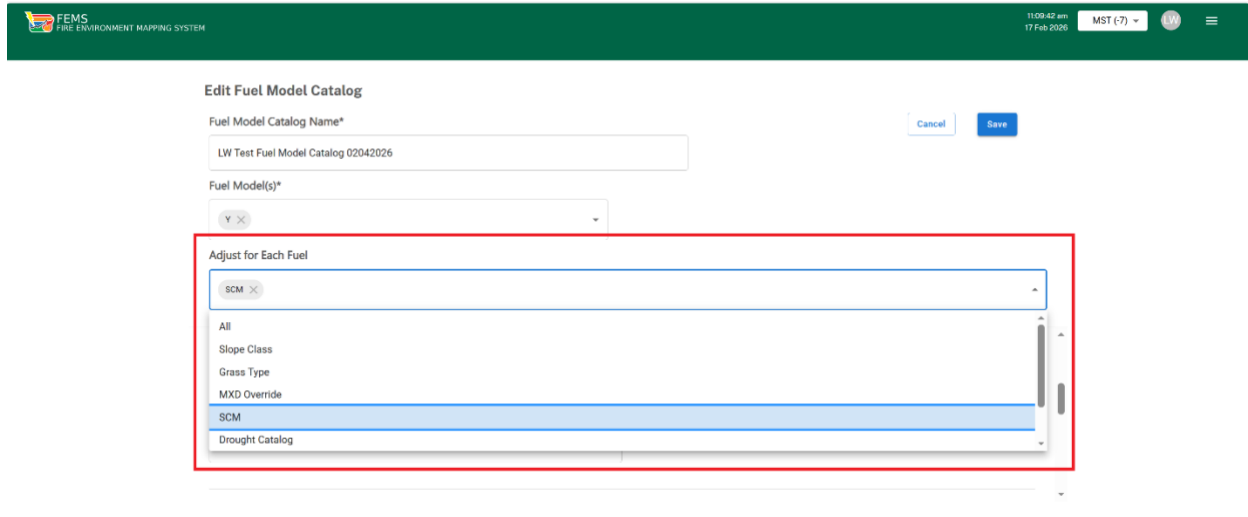
To edit the fuel model:

1. From the “Fuel Model(s)” dropdown, select any additional fuel models.
2. To delete a fuel model type, highlight the fuel model in the dropdown or select the “X” .

## Edit Fuel Model Parameters

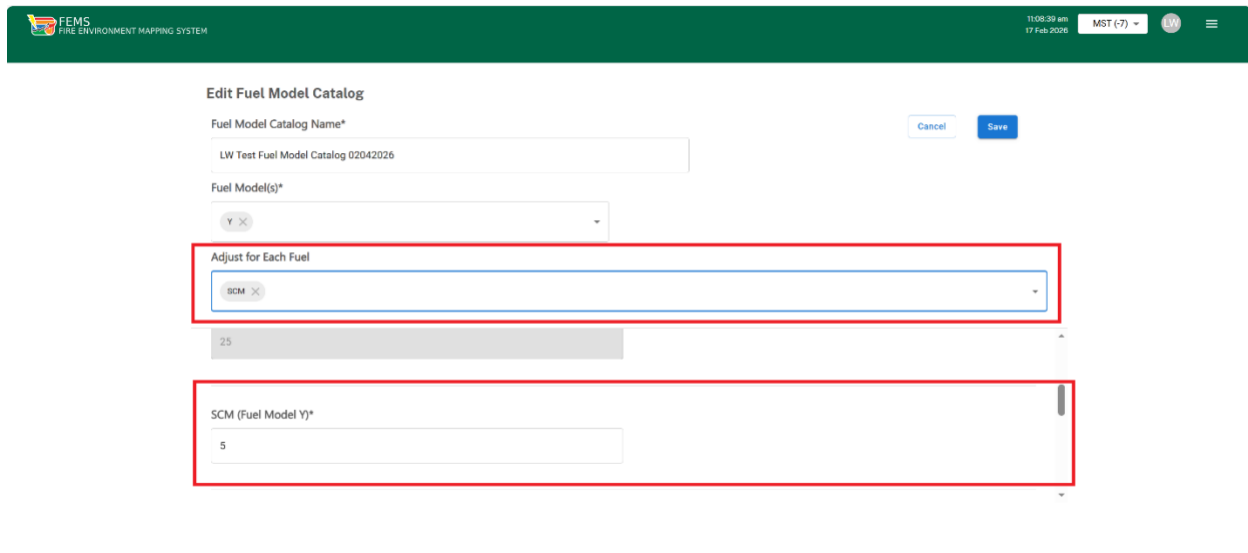
To edit the fuel model parameters:

1. From the “Adjust for Each Fuel” dropdown, select any additional parameters to edit.
2. To delete a parameter, highlight the desired parameter in the dropdown or select the “X”.



The screenshot shows the 'Edit Fuel Model Catalog' form in the FEMS system. The 'Fuel Model Catalog Name\*' field contains 'LW Test Fuel Model Catalog 02042026'. The 'Fuel Model(s)\*' dropdown shows 'Y X'. The 'Adjust for Each Fuel' dropdown menu is open, displaying a list of parameters: 'SCM X', 'All', 'Slope Class', 'Grass Type', 'MXD Override', 'SCM', and 'Drought Catalog'. The 'SCM' option is currently selected and highlighted in blue. The 'Cancel' and 'Save' buttons are visible at the top right of the form.

3. This will open parameter fields below to allow editing,



The screenshot shows the 'Edit Fuel Model Catalog' form with the 'Adjust for Each Fuel' dropdown menu closed. The 'SCM X' option is now selected in the dropdown. Below the dropdown, the 'SCM (Fuel Model Y)\*' field is visible, containing the value '5'. The 'Cancel' and 'Save' buttons are still present at the top right.

## Edit Fuel Model Moisture Catalogs

To edit fuel moisture catalogs:

1. Use the dropdown, to select the desired fuel moisture model or use the “Create New XXX Fuel Moisture Model” button to create a new associated fuel moisture model.

**Edit Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Save

LW FMY Test\_01212026

Fuel Model(s)\*

Y X

Adjust for Each Fuel

Trido Test Dead Fuel Catalog 10162025

Trudi Test Catalog 101725

Trudi Test Dead Catalog Z 2

Trudi Test Dead Fuel Catalog 1

Q tr | X

Create New Dead Fuel Catalog

### Complete All Edits

Once all edits have been made, Select the “Save” button.

**Edit Fuel Model Catalog**

Fuel Model Catalog Name\* Cancel Save

LW FMY Test\_01212026

Fuel Model(s)\*

Y X

Adjust for Each Fuel

Create New Dead Fuel Catalog

Dead Catalog (Y)\*

Q Trudi Test Catalog 101725 | X

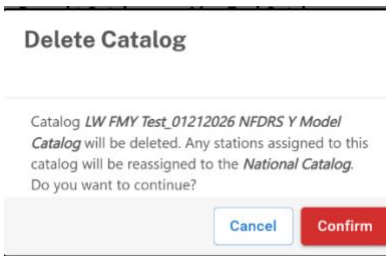
1. A banner will appear at the top of the screen indicating that the Fuel Model Catalog edits have been saved.



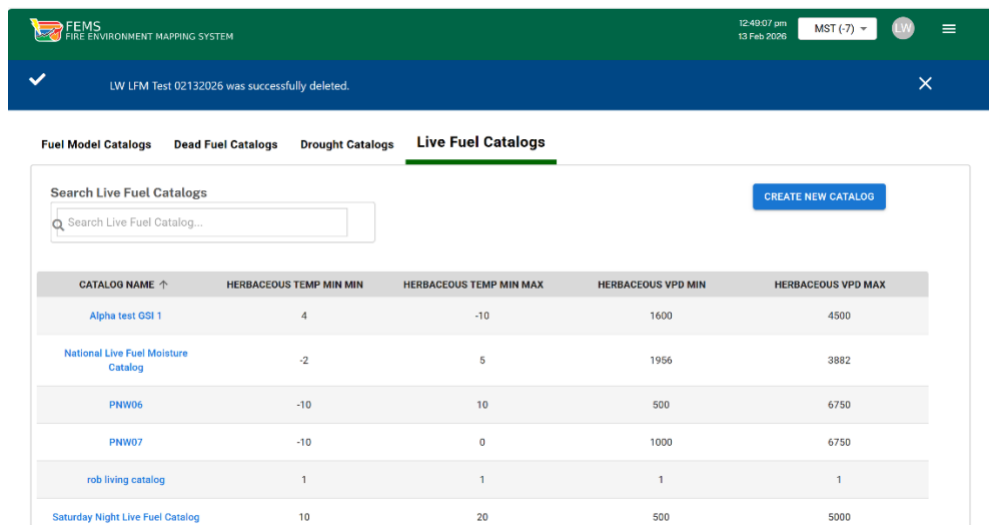
### Deleting a Fuel Model Catalog

To delete the selected fuel model catalog:

1. Click on the “Delete” button.
2. A popup will appear requiring confirmation.
3. To delete, click on the “Confirm” button.



4. A banner will appear at the top of the screen and the “Fuel Model Catalog” tab will appear.



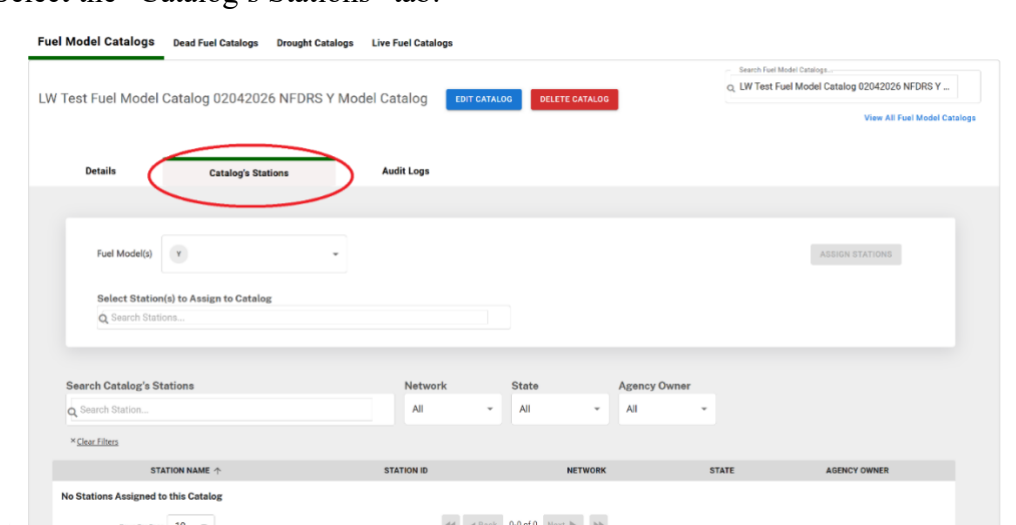
**IMPORTANT:** The National NFDRS Fuel Model cannot be deleted.

## Fuel Model Catalog Stations Tab

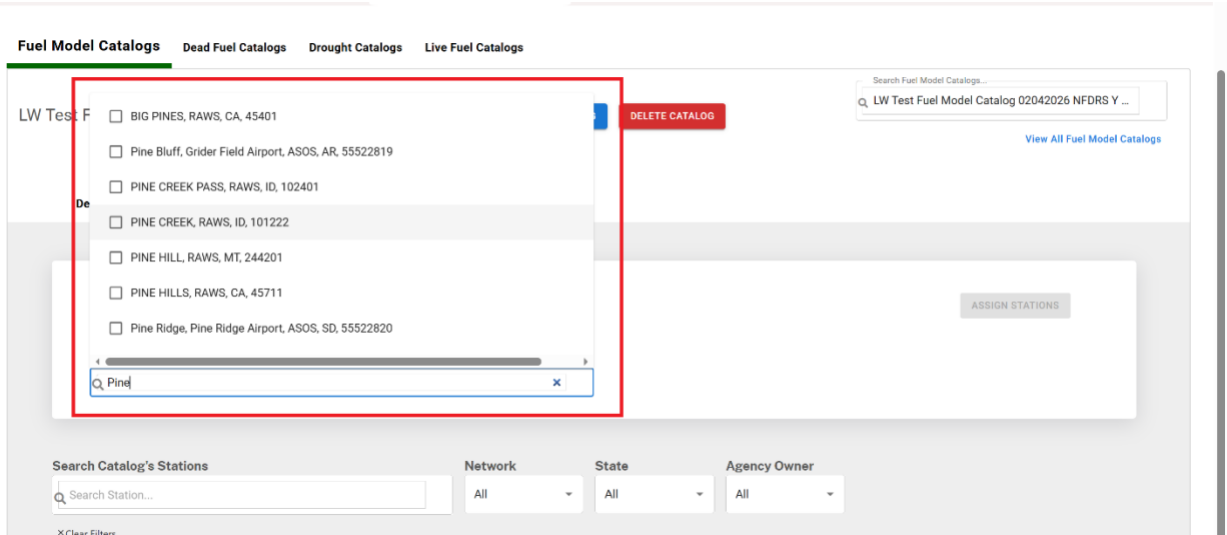
### Station Selection

To add stations to the selected fuel model.

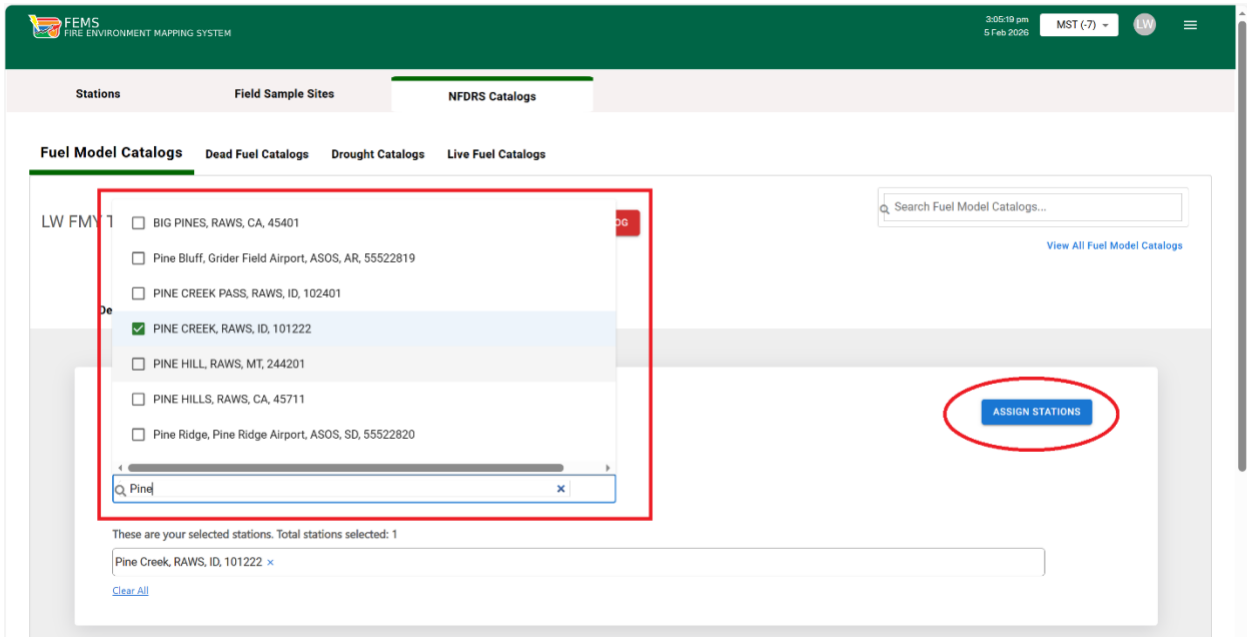
1. Select the “Catalog’s Stations” tab.



2. Use the dynamic search feature to locate the desired station.



3. Select the desired station(s).
  - a. Multi-select is available for this feature.
4. Click on the "Assign Stations" button.



5. A banner will appear at the top of the screen, and the station will appear in the table.

✓ The Fuel Model Catalog(s), LW FMY Test\_01212026 for Y, was saved. ✕

Fuel Model(s) Y ASSIGN STATIONS

Select Station(s) to Assign to Catalog

Search Catalog's Stations  

Network: All
State: All
Agency Owner: All

✕ Clear Filters

STATION NAME ↑	STATION ID	NETWORK	STATE	AGENCY OWNER
LITTLE ANDERSON	101710	RAWS	ID	USFS
PINE CREEK	101222	RAWS	ID	USFS

Rows Per Page: 10 « Back 1-2 of 2 Next »

## View Stations in the Fuel Model Catalog

To view stations in the Fuel Model Catalog

1. Select the “Catalog’s Stations” tab.
2. A number of search criteria can be used to search for the desired station.
  - a. Dynamic search by name
  - b. Search by Station Network
  - c. Search by State
  - d. Search by Agency Owner
3. View the Stations table.

Search Catalog's Stations  

Network: All
State: All
Agency Owner: All

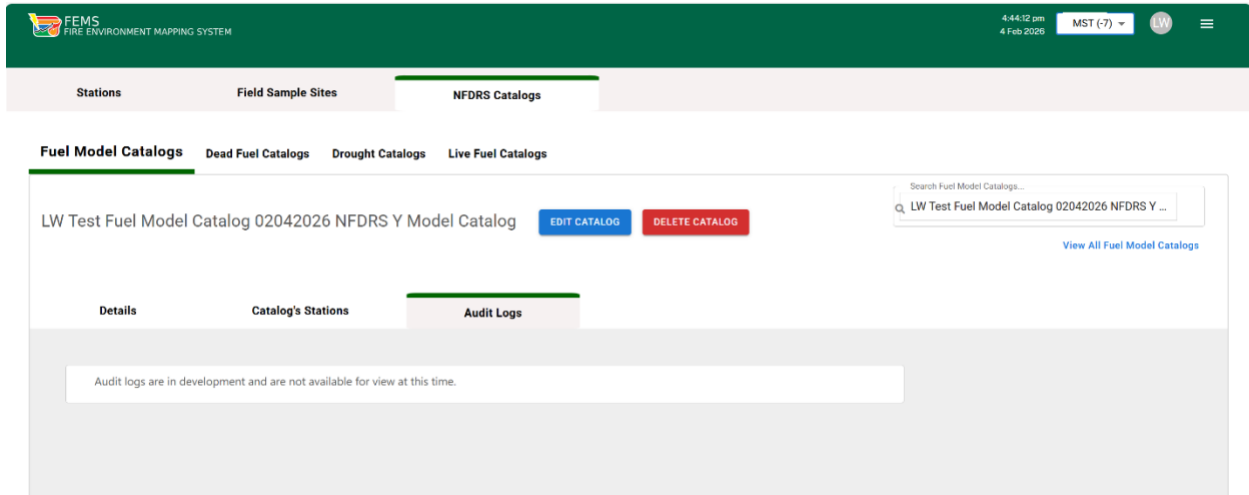
✕ Clear Filters

STATION NAME ↑	STATION ID	NETWORK	STATE	AGENCY OWNER
CHISOS BASIN	417403	RAWS	TX	NPS
ELEPHANT MTN WMA RAWS	417404	RAWS	TX	S&PF
FORT DAVIS	417201	RAWS	TX	S&PF
PANTHER JUNCTION	417401	RAWS	TX	NPS
PINERY	417101	RAWS	TX	NPS
PX WELL	417105	RAWS	TX	NPS
THE BOWL	417103	RAWS	TX	NPS
WOLF DEN DMP	417202	RAWS	TX	S&PF

Rows Per Page: 10 « Back 1-8 of 8 Next »

## Fuel Model Catalog Audit Logs Tab

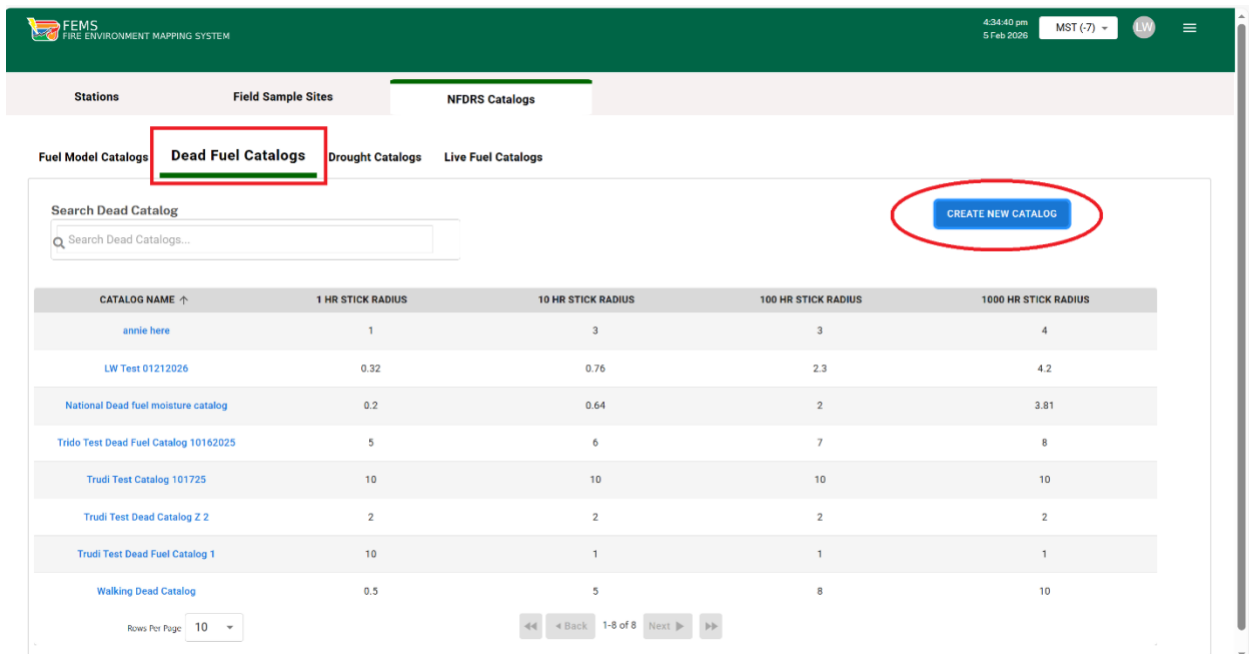
This tab will display changes to fuel model catalogs and is planned for future development.



## Dead Fuel Catalogs

The “Dead Fuel Catalogs” tab allows for the creation and management of the Dead Fuel Moisture input of the Fuel Model Catalog.

Begin by selecting the “Dead Fuel Catalogs” tab.

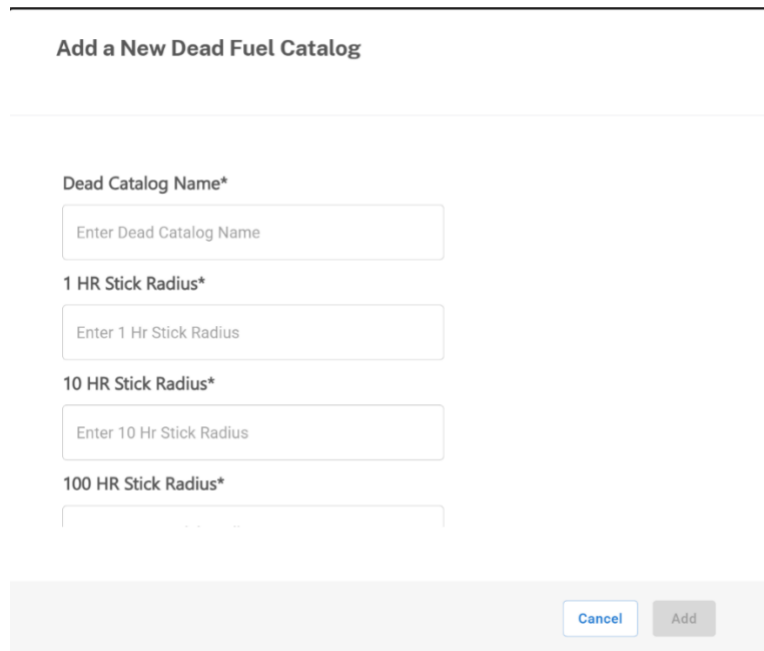


*(Note – This is the test database. Only the “National Catalog” is actual. All other catalogs are only for testing FEMS functionality.)*

## Creating a New Dead Fuel Moisture Catalog

To create a new Dead Fuel Moisture Catalog:

5. Click on the “Create New Catalog” button.
6. A popup will open.



The screenshot shows a modal window titled "Add a New Dead Fuel Catalog". It contains four input fields, each with a label and a placeholder text:

- Dead Catalog Name\***: Placeholder "Enter Dead Catalog Name"
- 1 HR Stick Radius\***: Placeholder "Enter 1 Hr Stick Radius"
- 10 HR Stick Radius\***: Placeholder "Enter 10 Hr Stick Radius"
- 100 HR Stick Radius\***: Placeholder "Enter 100 Hr Stick Radius"

At the bottom right of the form are two buttons: "Cancel" (in blue) and "Add" (in grey).

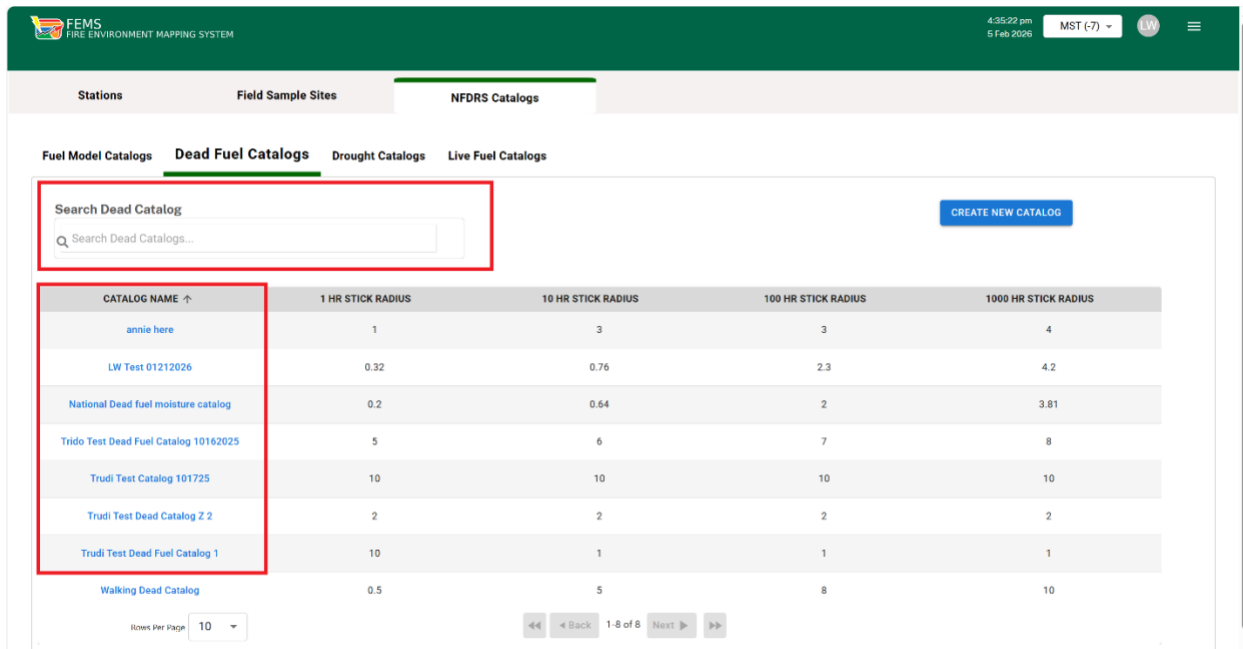
7. Enter the required information:
  - a. Dead Catalog Name
  - b. 1 HR Stick Radius (2 decimal numbers between 0 and 10)
  - c. 10 HR Stick Radius (2 decimal numbers between 0 and 10)
  - d. 100 HR Stick Radius (2 decimal numbers between 0 and 10)
  - e. 1000 HR Stick Radius (2 decimal numbers between 0 and 10)
8. Click on the “Add” button.
9. A banner will appear at the top of the screen indicating that the new Dead Fuel Catalog has been saved.



## Editing a Dead Fuel Moisture Catalog

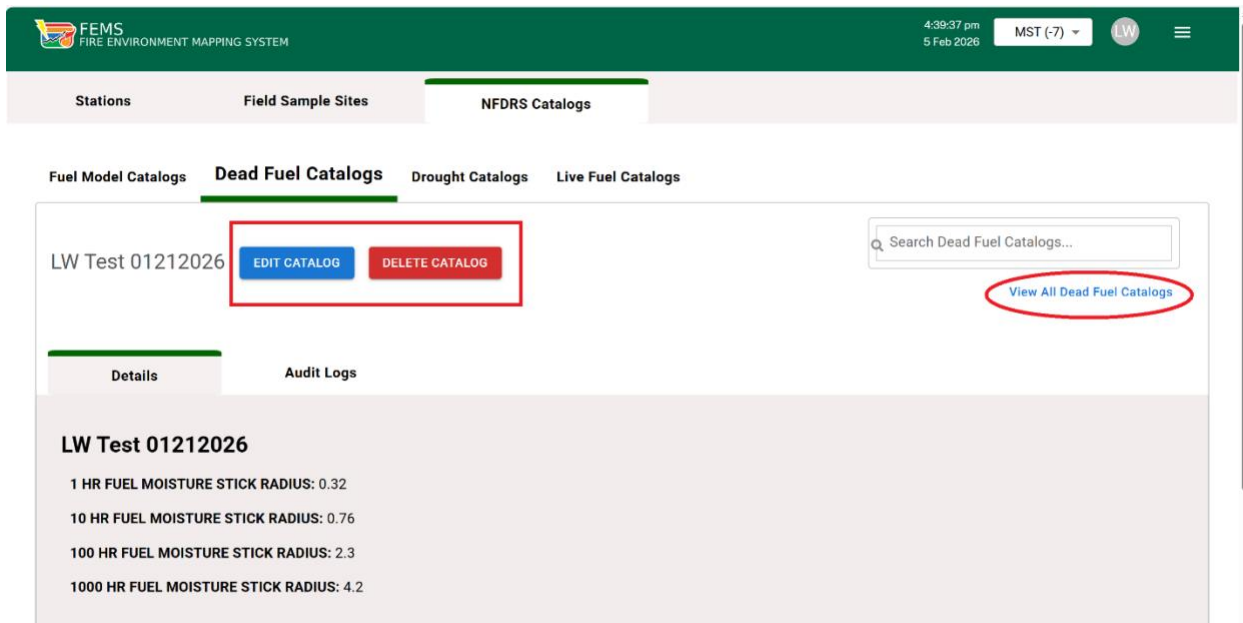
To edit an existing dead fuel moisture catalog:

1. Select from the table or use the dynamic search to select the desired dead fuel moisture catalog.



## Dead Fuel Catalog Details Tab

1. A new screen will open displaying the details of the selected dead fuel moisture catalog.
2. From this screen you can edit or delete the selected Dead Fuel Catalog.



## Edit Dead Fuel Moisture Catalog

To edit the selected catalog:

1. Click on the “Edit Catalog” button.
2. A popup will appear.

3. Edit the desired fields.
4. Click the “Save” button.

---

Edit Dead Fuel Catalog

---

Dead Catalog Name\*

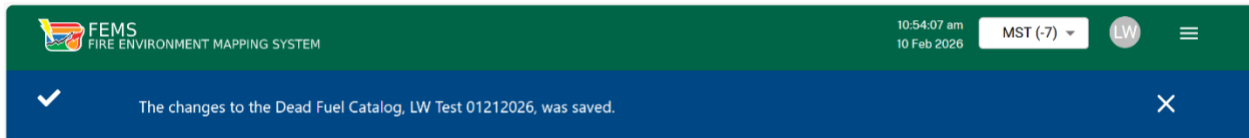
1 HR Stick Radius\*

10 HR Stick Radius\*

100 HR Stick Radius\*

1000 HR Stick Radius\*

5. A Banner will appear at the top of the screen to indicate the edits have been saved.



## Deleting a Dead Fuel Moisture Catalog

To delete the selected dead fuel moisture catalog:

1. Click on the “Delete” button.
2. A popup will appear requiring confirmation.
3. To delete, click on the “Confirm” button.

### Delete Catalog

Catalog *LW Test 01212026* will be deleted. Do you want to continue?

- A banner will appear at the top of the screen and the “Dead Fuel Catalogs” tab will appear.

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there is a notification banner: "LW Test 01212026 was successfully deleted." Below the banner, the "Dead Fuel Catalogs" tab is selected. A search bar is present with the text "Search Dead Catalog" and a "CREATE NEW CATALOG" button. Below the search bar is a table with the following data:

CATALOG NAME ↑	1 HR STICK RADIUS	10 HR STICK RADIUS	100 HR STICK RADIUS	1000 HR STICK RADIUS
<a href="#">annie here</a>	1	3	3	4
<a href="#">National Dead fuel moisture catalog</a>	0.2	0.64	2	3.81
<a href="#">Trido Test Dead Fuel Catalog 10162025</a>	5	6	7	8
<a href="#">Trudi Test Catalog 101725</a>	10	10	10	10
<a href="#">Trudi Test Dead Catalog Z.2</a>	2	2	2	2
<a href="#">Trudi Test Dead Fuel Catalog 1</a>	10	1	1	1
<a href="#">Walking Dead Catalog</a>	0.5	5	8	10

**IMPORTANT:** When a fuel moisture catalog is deleted, it is replaced in the Fuel Model Catalog by the relevant National Fuel Moisture Catalog.

**IMPORTANT:** The National Fuel Moisture Catalogs cannot be deleted.

### Dead Fuel Catalogs Audit Logs Tab

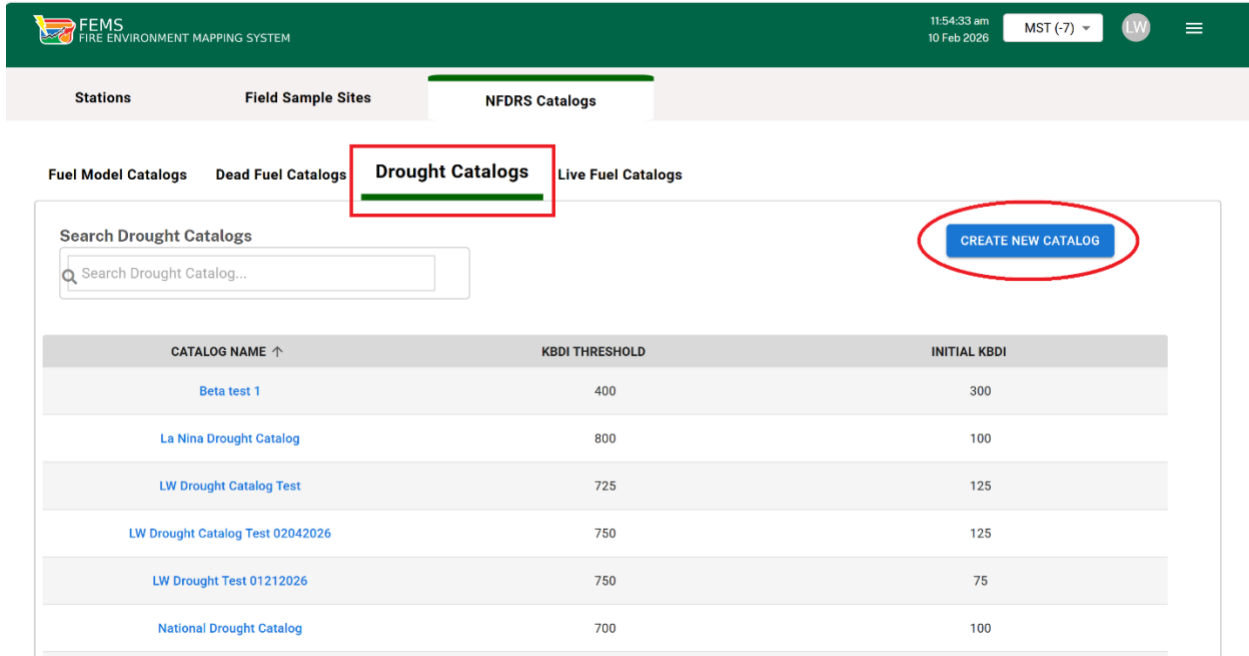
This tab will display changes to fuel moisture catalogs and is planned for future development.

The screenshot shows the FEMS Fire Environment Mapping System interface with the "NFDRS Catalogs" tab selected. Below it, the "Dead Fuel Catalogs" sub-tab is active. The "National Dead Fuel Moisture Catalog" is selected, and the "Audit Logs" tab is highlighted with a red box. A message at the bottom states: "Audit logs are in development and are not available for view at this time."

## Drought Catalogs

The “Drought Fuel Catalogs” tab allows for the creation and management of the Dead Fuel Moisture input of the Fuel Model Catalog.

Begin by selecting the “Drought Fuel Catalogs” tab.



The screenshot shows the FEMS Fire Environment Mapping System interface. The top navigation bar includes the FEMS logo, the time (11:54:33 am), the date (10 Feb 2026), and a user profile icon (LW). The main navigation tabs are Stations, Field Sample Sites, NFDRS Catalogs, and Live Fuel Catalogs. The Drought Catalogs tab is selected and highlighted with a red box. Below the tabs, there is a search bar for Drought Catalogs and a 'CREATE NEW CATALOG' button circled in red. The table below lists the following catalogs:

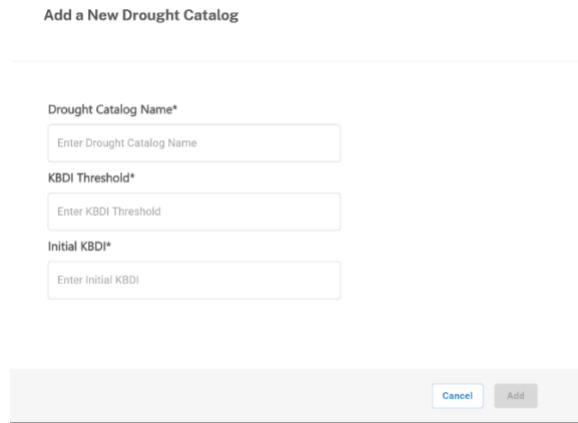
CATALOG NAME ↑	KBDI THRESHOLD	INITIAL KBDI
Beta test 1	400	300
La Nina Drought Catalog	800	100
LW Drought Catalog Test	725	125
LW Drought Catalog Test 02042026	750	125
LW Drought Test 01212026	750	75
National Drought Catalog	700	100

*(Note – This is the test database. Only the “National Catalog” is actual. All other catalogs are only for testing FEMS functionality.)*

## Creating a New Drought Fuel Moisture Catalog

To create a new drought fuel moisture catalog:

1. Click on the “Create New Catalog” button.
2. A popup will open.



The screenshot shows the 'Add a New Drought Catalog' popup form. The form has three input fields: 'Drought Catalog Name\*', 'KBDI Threshold\*', and 'Initial KBDI\*'. At the bottom, there are 'Cancel' and 'Add' buttons.

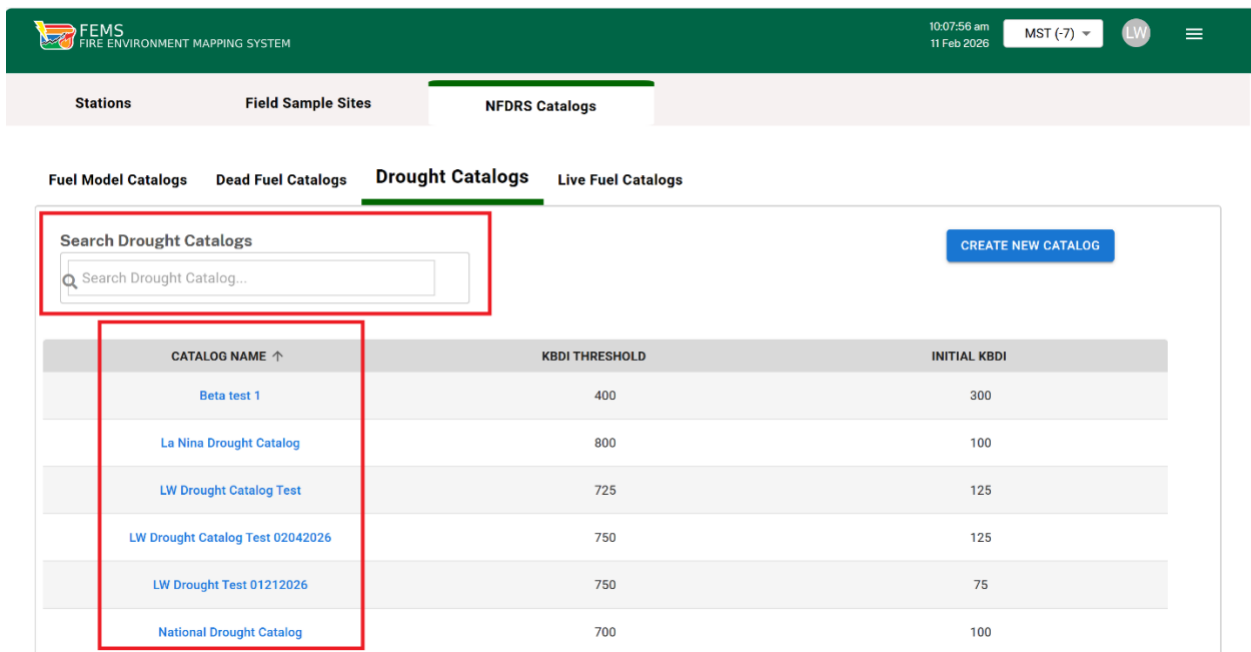
3. Enter the required information:
  - a. Drought Catalog Name
  - b. KBDI Threshold
  - c. Initial KBDI
4. Click the “Add” button.
5. A banner will appear at the top of the screen indicating that the new Drought Fuel Catalog has been saved.



## Editing a Drought Fuel Moisture Catalog

To edit an existing drought fuel moisture catalog.

1. Select from the table or use the dynamic search to select the desired drought fuel moisture catalog.



## Drought Fuel Catalog Details Tab

1. A new screen will open displaying the details of the selected catalog.
2. From this screen you can edit or delete the selected Drought Fuel Catalog.

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there is a green header with the FEMS logo and the text 'FIRE ENVIRONMENT MAPPING SYSTEM'. The time is 10:10:32 am on 11 Feb 2026, and the user is logged in as 'MST (-7)'. Below the header, there are navigation tabs: 'Stations', 'Field Sample Sites', 'NFDRS Catalogs', and 'Live Fuel Catalogs'. Under 'NFDRS Catalogs', there are sub-tabs: 'Fuel Model Catalogs', 'Dead Fuel Catalogs', 'Drought Catalogs', and 'Live Fuel Catalogs'. The 'Drought Catalogs' sub-tab is active. A search bar is located on the right with the text 'Search Drought Catalogs...'. Below the search bar, there is a link 'View All Drought Catalogs' circled in red. The main content area shows a list of drought catalogs. The first entry is 'LW Drought Catalog Test 02042026', which has two buttons: 'EDIT CATALOG' (blue) and 'DELETE CATALOG' (red), both highlighted with a red box. Below the list, there are two tabs: 'Details' and 'Audit Logs'. The 'Details' tab is active, showing the following information: 'LW Drought Catalog Test 02042026', 'KBDI THRESHOLD: 750', and 'INITIAL KBDI: 125'.

## Edit Drought Fuel Moisture Catalog

To edit the selected catalog:

1. Click on the “Edit Catalog” button.
2. A popup will appear.
3. Edit the desired fields.
4. Click the “Save” button.

### Edit Drought Catalog

Drought Catalog Name\*

LW Drought Catalog Test 02042026

KBDI Threshold\*

725

Initial KBDI\*

125

Cancel

Save

5. A banner will appear at the top of the screen to indicate the edits have been saved.



## Deleting a Drought Fuel Moisture Catalog

To delete the selected drought fuel moisture catalog:

1. Click on the “Delete” button.
2. A popup will appear requiring confirmation.
3. To delete, click on the “Confirm” button.

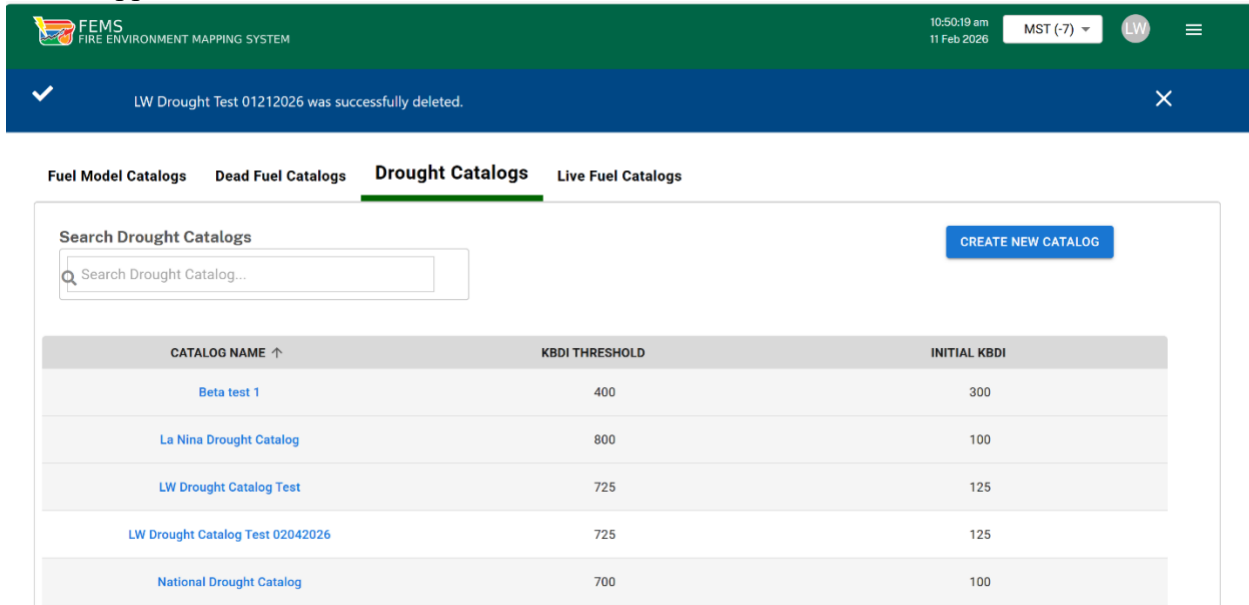
### Delete Catalog

Catalog *LW Drought 01212026* will be deleted. Do you want to continue?

Cancel

Confirm

4. A banner will appear at the top of the screen and the “Drought Fuel Catalog” tab will appear.

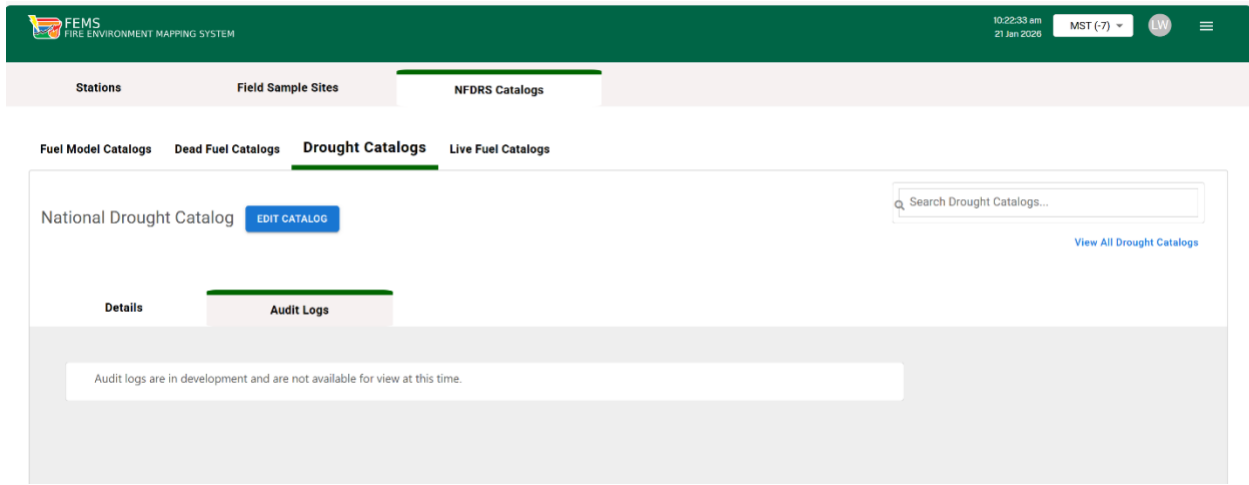


**IMPORTANT:** When a fuel moisture catalog is deleted, it is replaced in the Fuel Model Catalog by the relevant National Fuel Moisture Catalog.

**IMPORTANT:** The National Fuel Moisture Catalogs cannot be deleted

## Drought Catalogs Audit Logs Tab

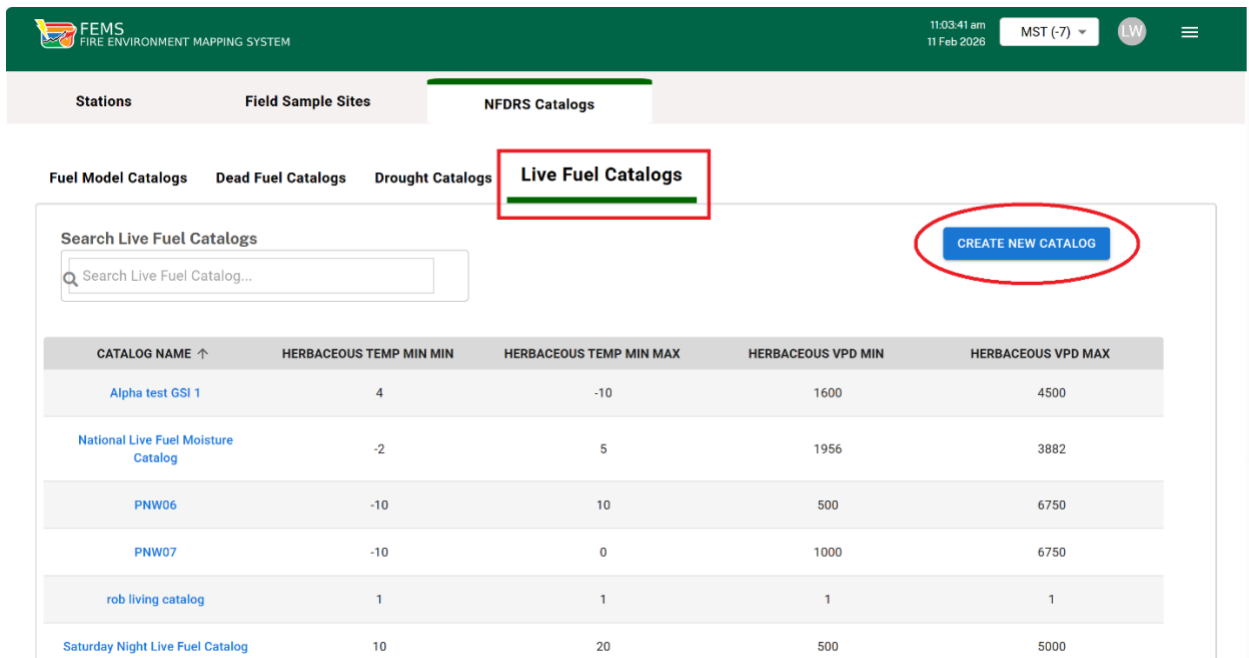
This tab will display changes to fuel moisture catalogs and is planned for future development.



## Live Fuel Catalogs

The “Live Fuel Catalogs” tab allows for the creation and management of the Live Fuel Moisture input of the Fuel Model Catalog.

Begin by selecting the “Live Fuel Catalogs” tab:



*(Note – This is the test database. Only the “National Catalog” is actual. All other catalogs are only for testing FEMS functionality.)*

## Creating a New Live Fuel Moisture Catalog

To create a new live fuel moisture catalog:

1. Click on the “Create New Catalog” button.
2. A popup will open.

The screenshot shows a form titled "Add a New Live Catalog". It contains the following fields:

- Live Fuel Catalog Name\* (input field: Enter Live Catalog Name)
- Herbaceous Temp Min Max\* (input field: Enter Herbaceous Temp Min Max)
- Herbaceous Temp Min Min\* (input field: Enter Herbaceous Temp Min Min)
- Herbaceous VPD Min\* (input field: Enter Herbaceous VPD Min)
- Herbaceous VPD Max\* (input field: Enter Herbaceous VPD Max)
- Herbaceous Day Length Min\* (input field: Enter Herbaceous Day Length Min)

At the bottom right of the form, there are two buttons: "Cancel" and "Add".

3. Enter the required information (Be sure to scroll the entire length):
  - a. Live Fuel Catalog Name
  - b. Herbaceous Temp Min Min (-20 to 20, int)
  - c. Herbaceous Temp Min Max (-20 to 20, int)
  - d. Herbaceous VDP Min (0-10000, int)
  - e. Herbaceous VDP Max (0-10000, int)
  - f. Herbaceous Day Length Min (0-86400, int)
  - g. Herbaceous Day Length Max (0-86400, int)
  - h. Herbaceous VDP Avg Flag (No, not editable)
  - i. Herbaceous Days Avg (0-100, int)
  - j. Herbaceous Max GSI (0-1,int)
  - k. Herbaceous Greenup Threshold (0.11-0.99, dec-limit 2 decimal)
  - l. Herbaceous FM Max (0-500, dec)
  - m. Herbaceous FM Min (0-500, dec)
  - n. Herbaceous Running Precip Total Min (0-50, int)
  - o. Herbaceous Running Precip Total Max (0-50, int)
  - p. Herbaceous Running Total Precip Days (0-120, int)
  - q. Herbaceous Use Precip Flag (Y or N)
  - r. Woody Temp Min Max (-20 to 20, int)
  - s. Woody Temp Min Min (-20 to 20, int)
  - t. Woody VDP Min (0-10000, int)
  - u. Woody VDP Max (0-10000, int)

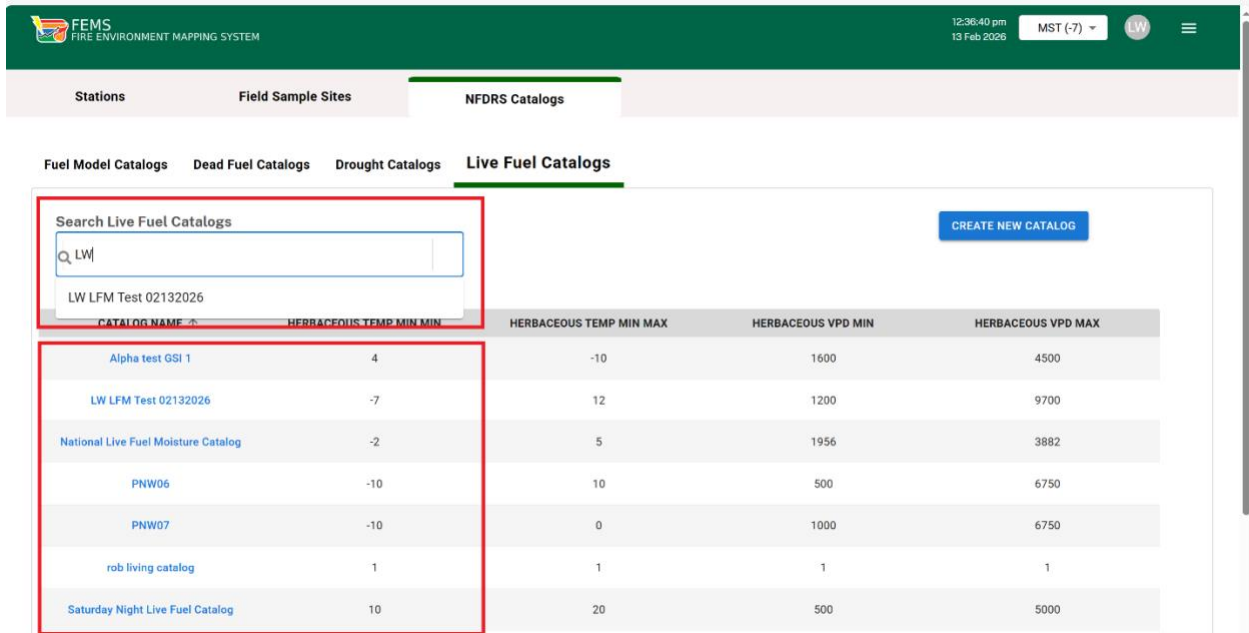
- v. Woody Day Length Min (0-86400, int)
  - w. Woody Day Length Max (0-86400, int)
  - x. Woody VDP Avg Flag (No, not editable)
  - y. Woody Days Avg (0-100, int)
  - z. Woody Max GSI (0-1,int)
  - aa. Woody Greenup (0.11-0.99, dec-limit 2 decimal)
  - bb. Woody Max (0-500, dec)
  - cc. Woody Min (0-500, dec)
  - dd. Woody Running Precip Total Min (0-50, int)
  - ee. Woody Running Precip Total Max (0-50, int)
  - ff. Woody Running Total Precip Days (0-120, int)
  - gg. Woody Use Precip Flag (Y or N)
4. When all fields have been entered the “Add” button will be activated.
  5. Click the “Add” button.
  6. A banner will appear at the top of the screen indicating that the new Live Fuel Catalog has been saved.



## Editing a Live Fuel Moisture Catalog

To edit an existing live fuel moisture catalog:

1. Select from the table or use the dynamic search to select the desired live fuel moisture catalog.



## Live Fuel Catalogs Details Tab

1. A new screen will open displaying the details of the selected catalog.
2. From this screen you can edit or delete the selected Live Fuel Moisture Catalog.

The screenshot displays the 'Live Fuel Catalogs' details for 'LW LFM Test 02132026'. The interface includes a search bar and a 'View All Live Fuel Catalogs' link. The 'Details' tab is active, showing two tables: 'Herbaceous' and 'Woody'.

Herbaceous		Woody	
Herbaceous Temp Min Min	-7	Woody Temp Min Min	-7
Herbaceous Temp Min Max	12	Woody Temp Min Max	16
Herbaceous VPD Min	1200	Woody VPD Min	6700
Herbaceous VPD Max	9700	Woody VPD Max	9600
Herbaceous Day Length Min	67000	Woody Day Length Min	7600
Herbaceous Day Length Max	82000	Woody Day Length Max	8200

## Edit Live Fuel Moisture Catalog

To edit the selected catalog:

1. Click on the “Edit Catalog” button.
2. A popup will appear.
3. Edit the desired fields.
4. Click the “Save” button.

The 'Edit Live Catalog' popup form contains the following fields and buttons:

- Live Fuel Catalog Name\* (Input field: LW LFM Test 02132026)
- Herbaceous Temp Min Max\* (Input field: 12)
- Herbaceous Temp Min Min\* (Input field: -7)
- Herbaceous VPD Min\* (Input field: [empty])
- Buttons: Cancel, Save

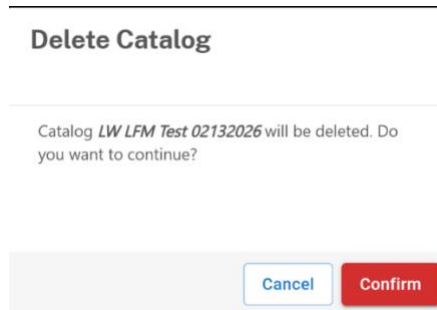
5. A banner will appear at the top of the screen to indicate the edits have been saved.



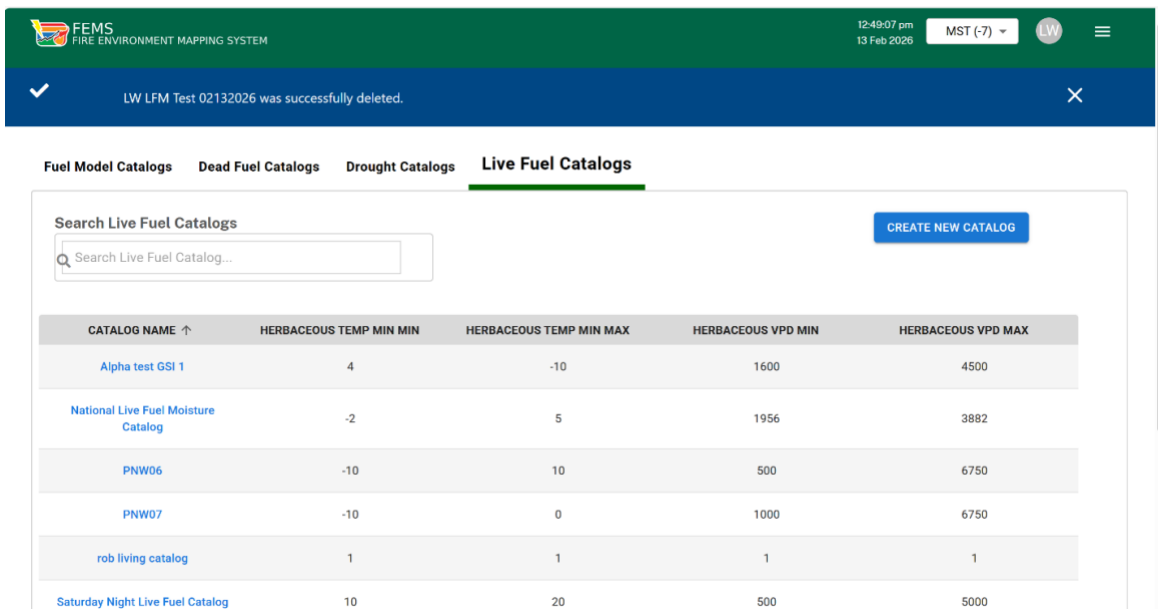
## Deleting a Live Fuel Moisture Catalog

To delete the selected live fuel moisture model:

1. Click on the “Delete” button
2. A popup will appear requiring confirmation.
3. To delete, click on the “Delete” button.



4. A banner will appear at the top of the screen and the “Live Fuel Moisture” Catalog tab will reappear.

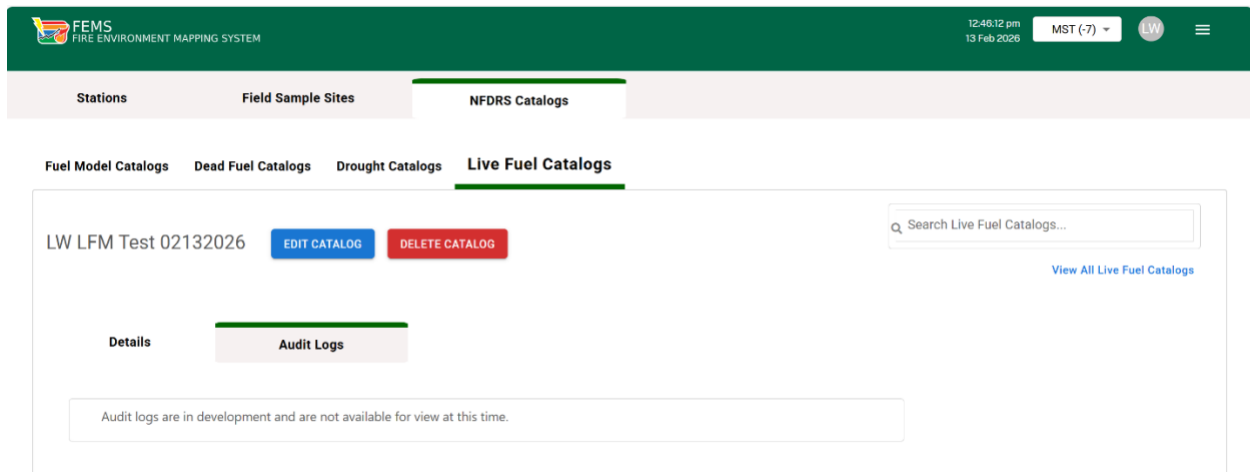


**IMPORTANT:** When a fuel moisture catalog is deleted, it is replaced in the Fuel Model Catalog by the relevant National Fuel Moisture Catalog.

**IMPORTANT:** The National Fuel Moisture Catalogs cannot be deleted

## Live Fuel Catalogs Audit Logs Tab

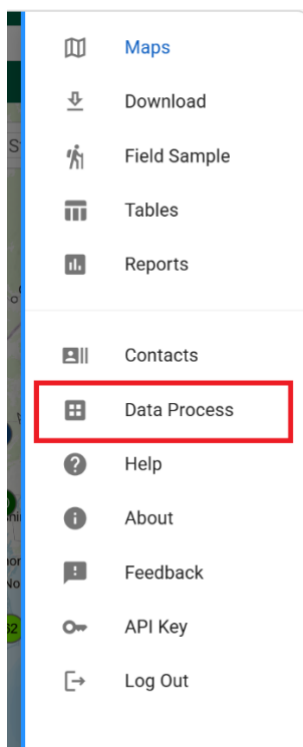
This tab will display changes to fuel moisture catalogs and is planned for future development.



## Data Process

FEMS Admin can now view the status of the NFDRS recalculation that is triggered for a station when there is a Fuel Model catalog change.

1. From the Hamburger menu, select "Data Process" from the dropdown:



2. A new screen will open. Select the “Stations Recalculate” tab:

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there is a green header with the FEMS logo and the text 'FIRE ENVIRONMENT MAPPING SYSTEM'. The current time is 10:55:17 am on 25 Mar 2026, and the time zone is MDT (-6). There are also user initials 'LW' and a menu icon. Below the header, there are two tabs: 'Field Sample Data Import' and 'Stations Recalculate', with the latter being selected and highlighted with a red box. The main content area is titled 'Stations Recalculate'. Below this title, there is a search section with a text input field labeled 'Search by Station' and four dropdown menus for 'Fuel Model Catalog', 'Drought Catalog', 'Live Catalog', and 'Dead Catalog', all currently set to 'All'. A blue circular refresh button is located to the right of these dropdowns. Below the search section is a table with the following columns: STATION NAME, FUEL MODEL CATALOG NAME, DROUGHT CATALOG NAME, LIVE CATALOG NAME, DEAD CATALOG NAME, DATE, STATUS, and UPDATED BY. The table contains five rows of data for the station 'ACORN WOMAN PEAK'.

STATION NAME	FUEL MODEL CATALOG NAME	DROUGHT CATALOG NAME	LIVE CATALOG NAME	DEAD CATALOG NAME	DATE	STATUS	UPDATED BY
ACORN WOMAN PEAK	National NFDRS Z model Catalog	National Drought Catalog	National Live Fuel Moisture Catalog	National Dead fuel moisture catalog	03-09-2026	COMPLETED	batch
ACORN WOMAN PEAK	National NFDRS Y model Catalog	National Drought Catalog	National Live Fuel Moisture Catalog	National Dead fuel moisture catalog	03-09-2026	COMPLETED	batch
ACORN WOMAN PEAK	National NFDRS X model Catalog	National Drought Catalog	National Live Fuel Moisture Catalog	National Dead fuel moisture catalog	03-09-2026	COMPLETED	batch
ACORN WOMAN PEAK	National NFDRS W model Catalog	National Drought Catalog	National Live Fuel Moisture Catalog	National Dead fuel moisture catalog	03-09-2026	COMPLETED	batch
ACORN WOMAN	National NFDRS V model		National Live Fuel Moisture	National Dead fuel moisture	03-09-		

3. Search options include:
  - a. Station Name
  - b. Fuel Model Catalog
  - c. Drought Catalog
  - d. Live Catalog
  - e. Dead Catalog
4. To refresh, click the button to the right of the search fields.