



US Forest Service
US Wildland Fire Service

Fire Environment Mapping System (FEMS) Field Sample Database User Guide Version 3.6

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Overview

The Field Sample Database (FSD) is a web-based query system that enables users to view sampled and measured live- and dead-fuel moisture information. The FSD is a module within the Fire Environment Mapping System (FEMS). The system utilizes a database that is routinely updated by fuels specialists who monitor, sample and calculate fuel moisture data.

Purpose of FSD

FSD serves multiple purposes. Firstly, NFMD provides a repository for sampled live- and dead-fuel moisture. Fuel moisture data can now be stored in a database that serves as a national archive of the fuels record. Secondly, it provides a resource for anyone who has a need for fuel moisture data. A national database eliminates the need for multiple requests for data or exhaustive searches for such data, which can often result in little or no success. Thirdly, it allows for easy viewing of the data in formats that are consistent with other applications used in the land management arena.

History of FSD

The idea of a national fuel moisture database arose in late 2001 when the Predictive Services program was in its infancy.

Over time, fuels sampling data became available to Predictive Services. Unfortunately, the data arrived in multiple formats – spreadsheets, web pages, Portable Document Format (pdf), lists and others – which were difficult to synthesize in a coherent fashion. In Fall, 2005, BLM Utah fuels specialists and Eastern Great Basin (EGB) Predictive Services meteorologists analysis and comparison.

In Spring, 2006, EGB introduced the EGB Fuel Moisture Database. During the busy fire season in central Idaho, the EGB database became an indispensable tool for fire behavior specialists working on fires in the area. When the Predictive Services meteorologists from all the Geographic Area Coordination Centers gathered in November 2006, they agreed to develop a national database built on the EGB model. The NFMD is the result.

At a national level NFMD was hosted at the Fire Science Lab in Missoula, Montana. NFMD has existed there, with limited funding form since early 2018.

In the past couple of years, the database has become unstable and required a rebuild in 2023. User access continued to be an issue. In 2022, an effort to modernize and centralize the database to bring the database under the FEMS application was initiated.

At the end of 2023 there was a final push made to complete the FSD Module within FEMS and deploy for the 2024 field season.

The initial release of the Field Sample Database was released in FEMS 2.0 in April 2024.

The map display of the Field Sample Database was included in the release of FEMS 3.1 in March 2025.

Additional reports functionality with PowerBI was introduced in FEMS 3.4.

FEMS V 3.5 focused on adding Fire Danger Catalog Management functionality for FEMS Admin users. A limited number of Mesonet stations were also added for both Weather and Fire Danger.

What's New in V3.6

- Improved Fire Danger charts.

- Expanded Period of Record (POR) for all stations.
- Additional Mesonet stations were added, some with restrictions.
- Data flags for stations to indicate gaps in data.

Access

The Field Sample Database is accessed through FEMS. FEMS is an open system available for public viewing. [FEMS \(usda.gov\)](https://fems.usda.gov)

A FEMS account will provide access to additional data.

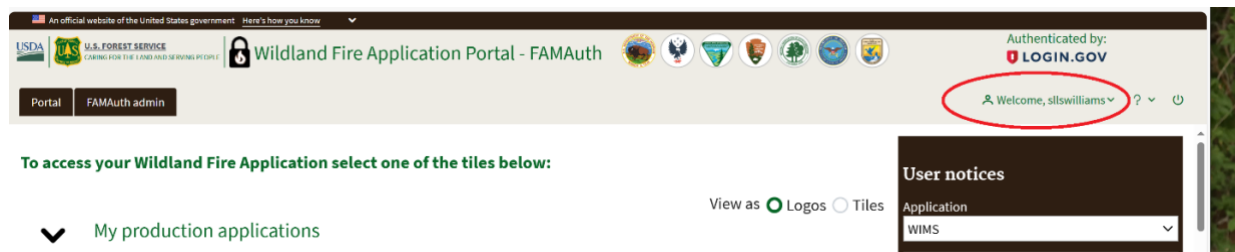
Requesting Access

To request access through FAMAAuth ([FAMAAuth](#)) either with a Login.gov account or through eAuth.

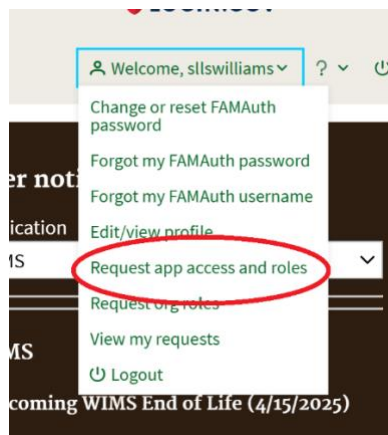
See the [FAMAAuth User Guide](#) for assistance in creating a FAMAAuth account.

Once logged in:

Locate your account dropdown in the upper right corner.



Select “Request app access and roles”.



Select “FEMS” and “PROD”.

Request application access and roles

To request access to more than 1 application, please click the plus button below.

Application access	Instance(s)
FEMS-Fire Environment Mapping System	PROD
DATAWH-Data Warehouse	
EGP-Enterprise Geospatial Portal	
EIS-e-ISuite Enterprise	
F&AM-F&AM	
FEMS-Fire Environment Mapping System	
FEPP-FEPP FEPMIS	

Application.

- You CAN NOT validate your request (Do not enter your own name, e-mail or phone number).
- Agency employees: enter manager or supervisor.
- Contractors/Vendors: enter your government contracting office personnel.

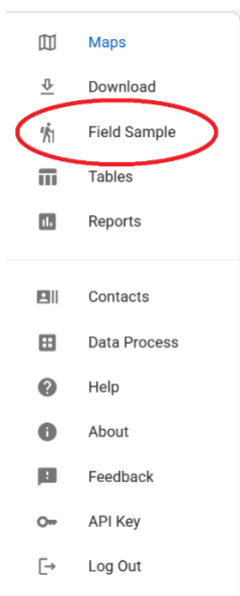
An initial Fire Environment Mapping System (FEMS) account will only grant general user access.

IMPORTANT: Assigned higher roles are needed to enter fuel sample data and those roles can be granted by **contacting your Area (GACC) Editor**.

Log into FEMS and open the menu by clicking on the “Hamburger” icon:



Area Editor information is available by selecting “Field Sample” from the menu FEMS:



Search for your Area (GACC) Editor to request roles:

Field Samples

Search All Sites...

Area: [Dropdown Menu]

Group Status: All | Groups: All

ADD AN AREA | ADD A GROUP | ADD A SITE

GROUP EDITOR(S)	AREA NAME ↑	AREA EDITOR(S)	GROUP STATUS
Jen Barnes, Eric Show More...	Alaska	Eric Miller	Active
Bryan Daigle	Eastern Area	Matt Malesic, Travis Show More...	Active
David Sloan, Steven Show More...	Eastern Area	Matt Malesic, Travis Show More...	Active
Eric Rebitzke, Nick Show More...	Eastern Area	Matt Malesic, Travis Show More...	Active
Logan Scherschel, Jeremy Show More...	Eastern Area	Matt Malesic, Travis Show More...	Active
Matthew Way, Brian Show More...	Eastern Area	Matt Malesic, Travis Show More...	Active
Chad Graeve, Lindsey Show More...	Eastern Area	Matt Malesic, Travis Show More...	Active
Glenn Palmgren, Keith	Eastern Area	Matt Malesic, Travis	Active

Until field sample roles are granted users will not be able to enter fuel sample data.

Roles and Definitions

- Field Sample Collector
 - Enters and edits Fuel Moistures
- Field Sample Group Editor
 - Can enter and edit Fuel Moistures
 - Creates and edits Field Sample Sites
 - Creates and edits Field Sample Groups
- Field Sample Area Editor
 - Can enter and edit Fuel Moistures and Sample Sites
 - Creates and edits Field Sample Groups
 - Creates and edits Field Sample Areas

Request access for the role that fits your needs.
You will be required to list a contact. You cannot list yourself.

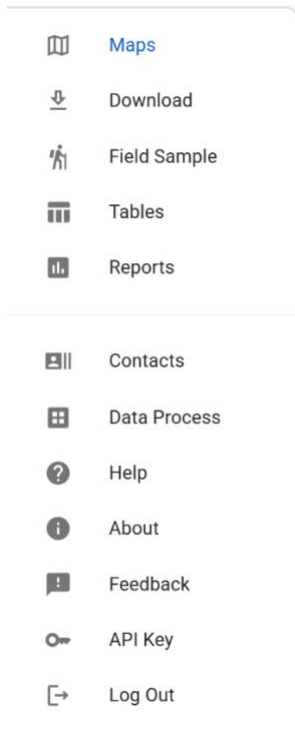
Home Screen

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

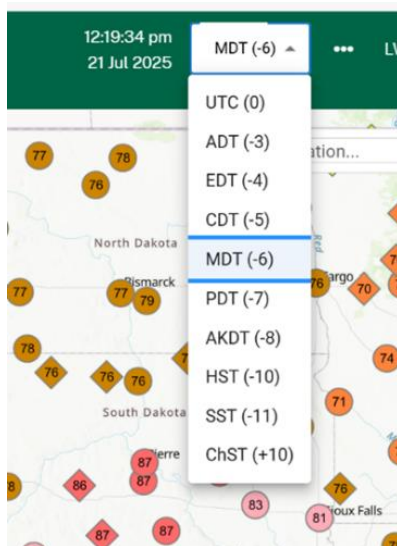
2. Click on the “LOGIN” button.



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



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



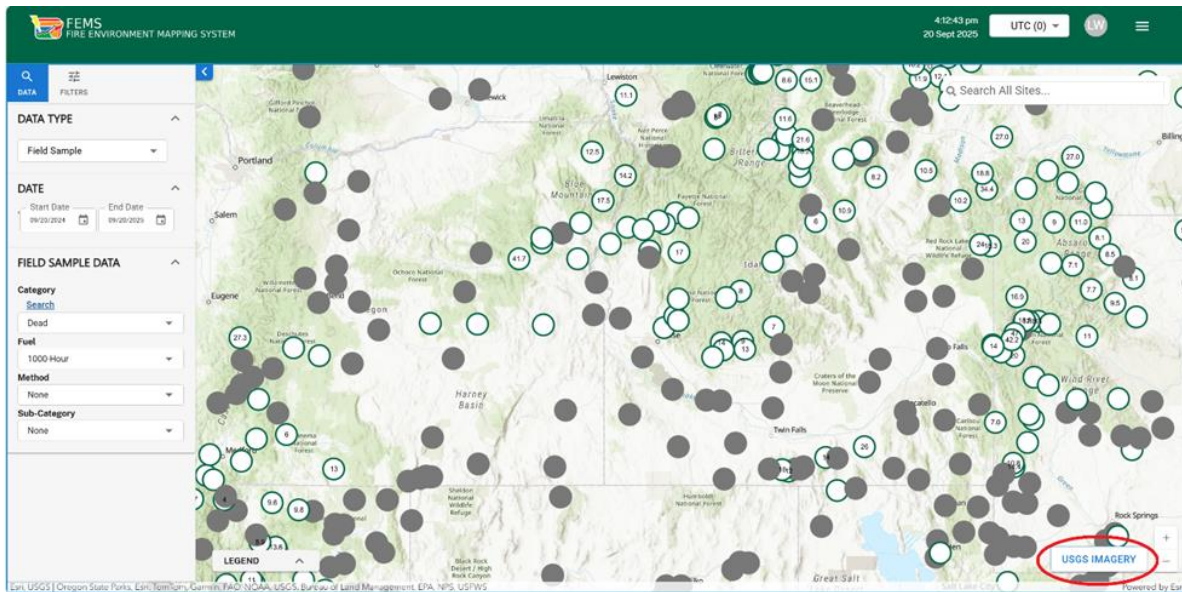
Accessing Fuel Samples

The Field Sample Tables can be accessed by either the Map or Tables Menu.

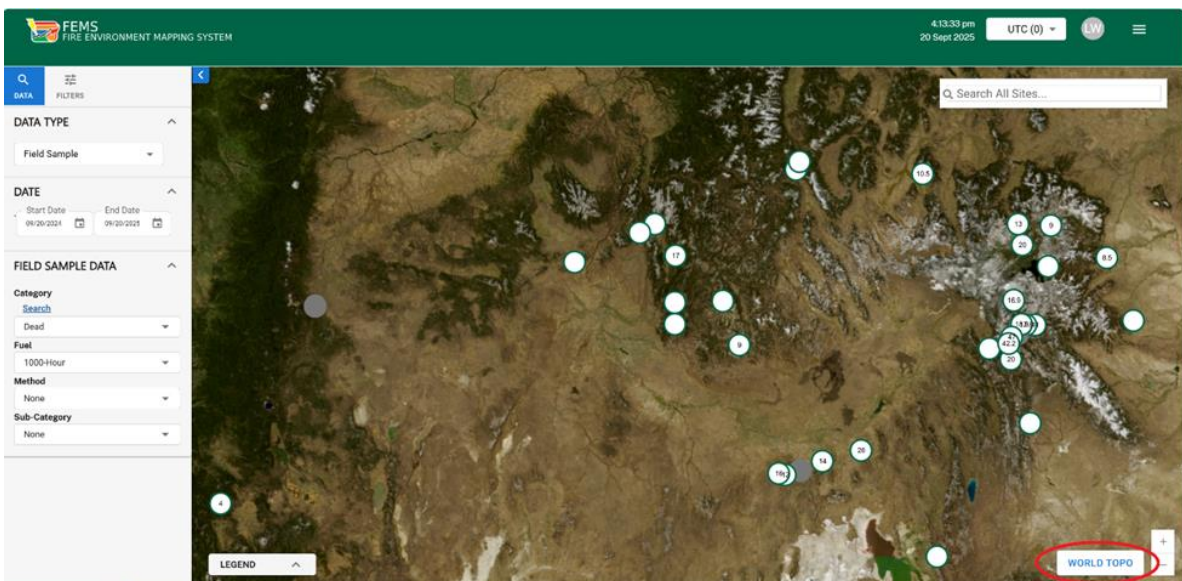
Map Option

Navigating Maps

Two options are available for viewing the map. World Topo is the default.

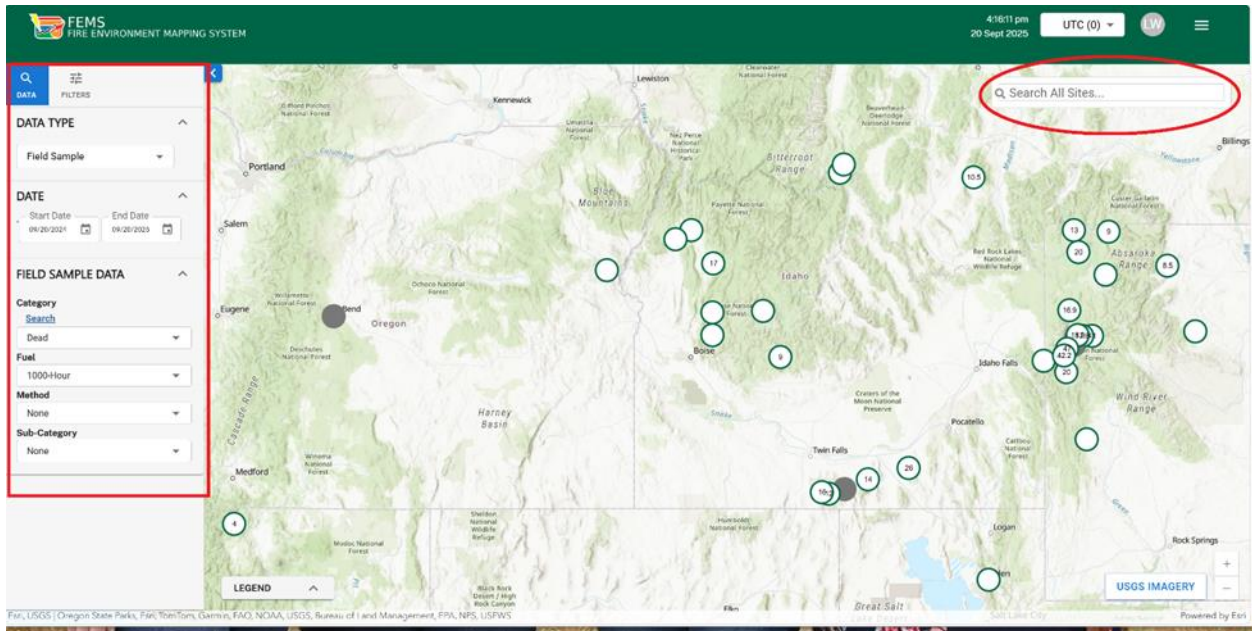


Clicking on the “USGS IMAGERY” label will change the map.

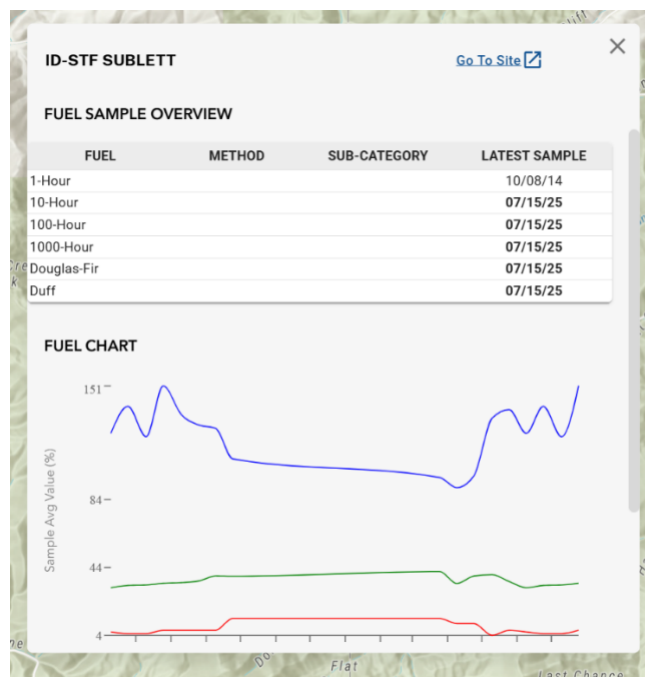


Viewing Field Sample Data

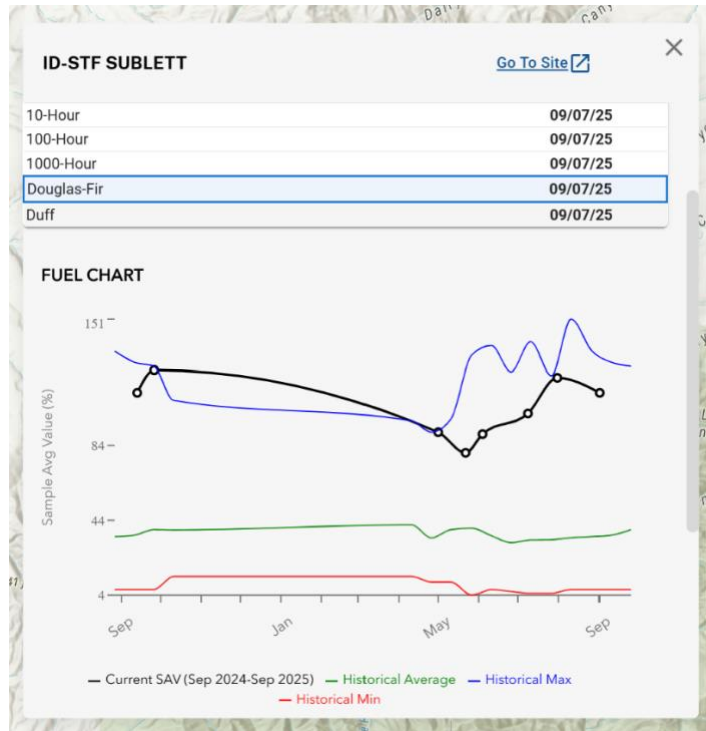
1. Data Type: Select Field Sample
2. Filter Field Sample Data: This step is essential to display sites with data.
3. Selections on the left side will determine the map data displayed.
4. You can use the “Search” option or navigate through the map.



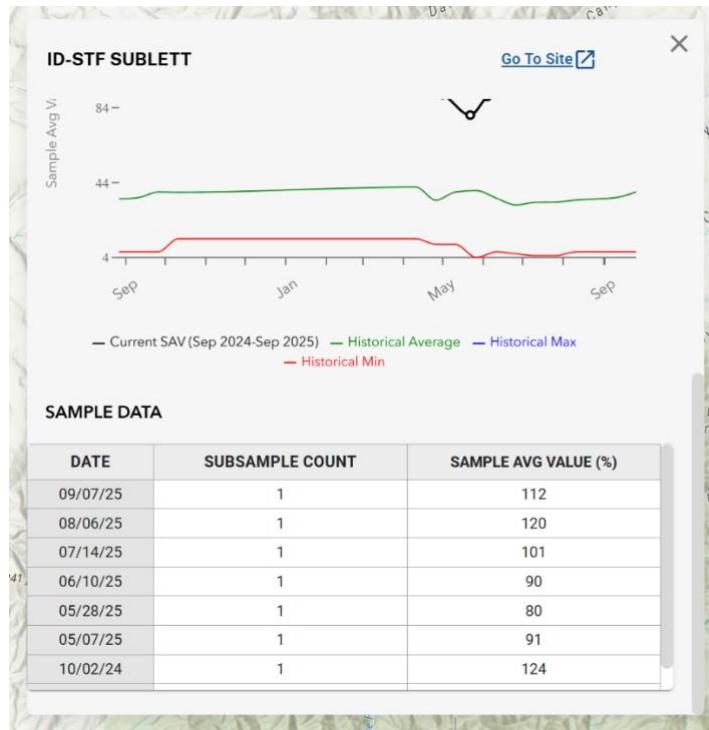
5. Click on the site to display the current data.



6. Select the desired fuel type.
 - a) When a specific fuel type is selected, a black line will depict the current fuel moisture values.



7. Scroll to see the fuel moistures in table form.



8. Click on the “Go To Site” link to access the tables for additional information.
9. Users with authorized roles will be able to perform edits and record fuel moistures from here.

The screenshot shows the FEMS Fire Environment Mapping System interface. The breadcrumb trail is: FIELD SAMPLE HOME > GREAT BASIN > SAWTOOTH SOUTH > ID-STF SUBLETT. The page title is "ID-STF Sublett" under the "SITE METADATA" tab. A search bar is present with the text "Search All Sites...". Below the search bar are filter options for Sample Start Date (09/19/2024), Sample End Date (09/20/2025), Sample Type (All), Sample Status (All), Category (All), Sub-Category (All), and Method (All). There is a "Clear Filters" link and a "+ New Sample" button. A table displays the following data:

	TYPE	CATEGORY	SUB-CATEGORY	METHOD
>	10-Hour	Dead		+
>	100-Hour	Dead		+
>	1000-Hour	Dead		+
>	Douglas-Fir	Tree		+
>	Duff	Dead		+

Data Tab:

Under the “Data” tab, date selection and dropdowns will aid selections by narrowing the search based on: Category, Fuel, Sampling Method or Sub-Category. However, since most samples may not list Sampling Method or Sub-Category, it is recommended to leave those fields as “None”.

The screenshot shows the FEMS mobile application interface. The "DATA" tab is selected, and the "FILTERS" section is expanded. The "DATA TYPE" is set to "Field Sample". The "DATE" section shows "Start Date" as 01/07/2025 and "End Date" as 01/07/2026. Below this, the "FIELD SAMPLE DATA" section is expanded, showing the following filter options:

- Category: Select a Category
- Fuel: Select a Fuel
- Method: None
- Sub-Category: None

Filter Tab:

Under the “Filter” Tab the elevation filter can be used to narrow the stations displayed.

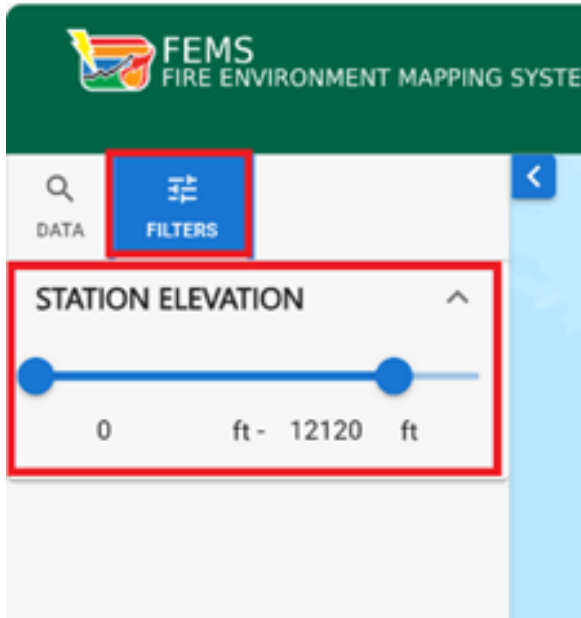
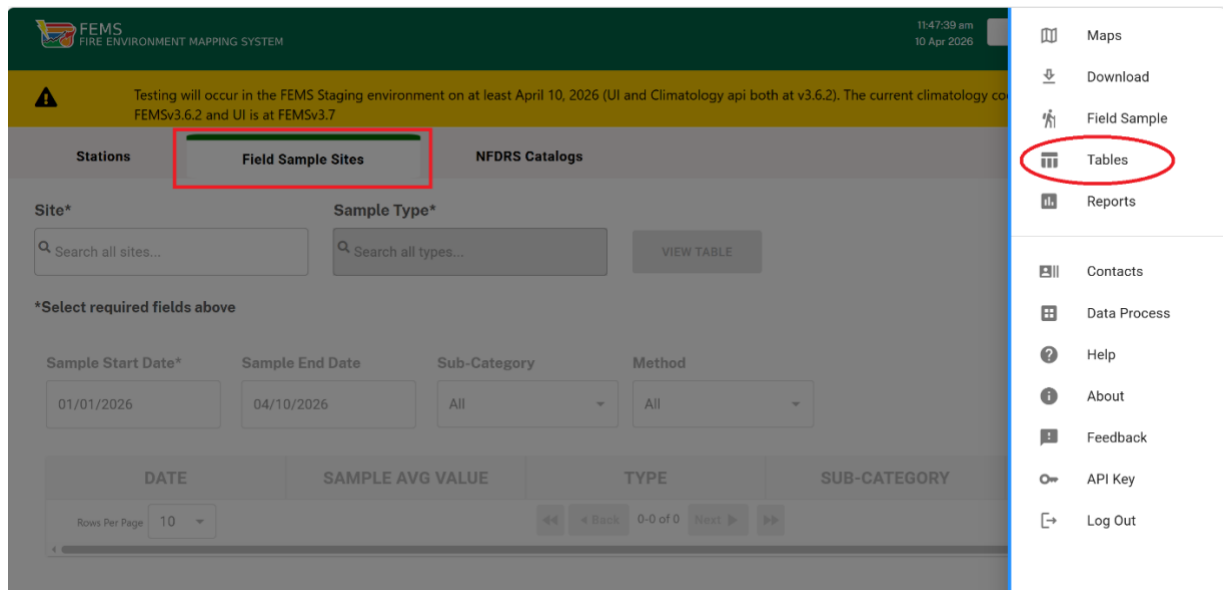


Table Option

Navigating Field Sample Tables

To View Field Sample Tables:

1. Select the “Tables” from the menu option.
2. Select the “Field Samples Sites” tab:



3. The blank table will appear.
4. Use the dynamic search function to view the desired Sample Site.
5. Select the “Sample Site”.

6. Select “Sample Type”. It is best to select “ALL” to ensure the greatest likelihood of viewing data.
7. Select Sample Dates.
8. Select the “View Table” button.
9. The use of additional filters will provide views of specific data.

DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
07/23/2025	11.00%	1000-HOUR		
07/23/2025	102.00%	DOUGLAS-FIR		
07/23/2025	91.00%	FIR, SUBALPINE		
07/23/2025	95.00%	FESCUE, IDAHO		
07/23/2025	153.00%	SAGEBRUSH, MOUNTAIN BIG		
07/02/2025	195.00%	FESCUE, IDAHO		
07/02/2025	86.00%	DOUGLAS-FIR		
07/02/2025	93.00%	FIR, SUBALPINE		
07/02/2025	230.00%	SAGEBRUSH, MOUNTAIN BIG		
07/01/2025	22.00%	1000-HOUR		


To View Field Sample Site Metadata

1. After filtering for a specific site, there will be a “carrot” to the right of the site name.

2. Select the “carrot” to display the “Site Metadata”.

Stations | **Field Sample Sites** | NFDRS Catalogs

Site* Sample Type* [VIEW TABLE](#)

ID-STF Salt Creek **SITE METADATA** 

LATITUDE	LONGITUDE	ELEVATION	REMARKS	AGENCY LANDOWNER	ASPECT	
43.5352	-114.8623	7771 ft	Sage is Mountain	USFS - US Forest Service	N	
CREATED DATE	AREA NAME	GROUP NAME	STATE	STATUS	SLOPE	SAMPLE DATES
06/09/2015	Great Basin	Sawtooth North	Idaho	Active	5: 76%+	06/03/2015 - 07/23/2025

Sample Start Date* Sample End Date Sub-Category Method

DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
07/23/2025	11.00%	1000-HOUR		
07/23/2025	102.00%	DOUGLAS-FIR		
07/23/2025	91.00%	FIR, SUBALPINE		
07/23/2025	95.00%	FESCUE, IDAHO		
07/23/2025	153.00%	SAGEBRUSH, MOUNTAIN BIG		

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:

- Maps
- Download**
- Field Sample
- Tables
- Reports
- Contacts
- Data Process
- Help
- About
- Feedback
- API Key
- Log Out

3. Select “Field Sample” or Site Metadata” as the Data Subject Area:

The screenshot shows the top navigation bar with 'Download' (highlighted in green) and 'Queued Download'. Below is the heading 'FEMS Data Download' and a note: 'Options to refine your download will appear as you make selections. Changes to selections may impact your available options and selections.' The 'Data Subject Area' dropdown menu is open, showing options: Weather, Field Sample (highlighted), Site Metadata, and Fire Danger. Below the dropdown, 'Start Date' and 'End Date' labels are visible.

Field Sample Data Download

1. Select “Field Sample” from the “Data Subject Area”.
2. Using the dynamic search field, select stations.
 - a. “Select All” and multi-select options are available.
 - b. Undesired stations can be “X”ed out.

The screenshot shows the 'Download' tab selected. A list of stations is displayed with checkboxes: 'Select All', 'BIA - Bureau Of Indian Affairs-GBCC-Boise FO-Kuna', 'BLM - Bureau Of Land Management-GBCC-Boise FO-Blackstone', 'BLM - Bureau Of Land Management-GBCC-Boise FO-Hammett', 'BLM - Bureau Of Land Management-GBCC-Boise FO-Kuna', and 'BLM - Bureau Of Land Management-GBCC-Boise FO-Simco'. A search bar contains 'Boise'. Below the list is the 'Date Range' section with 'Start Date' (02/09/2026) and 'End Date' (03/11/2026). At the bottom are 'Download Data' and 'Copy Data Link' buttons.

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

Search Required

These are your selected sites. Total sites selected: 13

BLM - Bureau Of Land Management-GBCC-Boise FO-Blackstone × BLM - Bureau Of Land Management-GBCC-Boise FO-Hammett × BLM - Bureau Of Land Management-GBCC-Boise FO-Kuna ×
BLM - Bureau Of Land Management-GBCC-Boise FO-Simco × BLM - Bureau Of Land Management-GBCC-Boise FO-Triangle × BLM - Bureau Of Land Management-GBCC-Boise FO-Wild West ×
S&PF - State And Private Forestry-GBCC-Idaho State Southwest-Boise Basin × USFS - US Forest Service-GBCC-Boise NF-Cascade North Zone ×
USFS - US Forest Service-GBCC-Boise NF-Emmett North Zone × USFS - US Forest Service-GBCC-Boise NF-Idaho City SZ × USFS - US Forest Service-GBCC-Boise NF-Lowman North Zone ×
USFS - US Forest Service-GBCC-Boise NF-Mountain Home - Grouse Creek × USFS - US Forest Service-GBCC-Boise NF-Mtn Home RD - South ×

[Clear All](#)

Date Range Required

Start Date: 05/01/2022

End Date: 03/11/2026

Select Fuel(s)

Search Fuel Types	Category	Sub-Category	Method
<input type="text" value="Search Fuel Type"/>	All	All	All

FUEL NAME ↑	SITE NAME	CATEGORY	SUB CATEGORY	METHOD	LAST SAMPLE DATE
-------------	-----------	----------	--------------	--------	------------------

3. Select “Date Range”.
4. Data can be filtered using dynamic searches and dropdowns by:
 - a. Fuel Type
 - b. Category (All/Dead/Tree/Shrub/Forb/Grass)
 - c. Sub-Category (All/Disturbance/Lower/Middle/New/Old/Upper)
 - d. (Sampling) Method (All/Gravimetric/Moisture Probe)

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

Search Required

These are your selected sites. Total sites selected: 13

BLM - Bureau Of Land Management-GBCC-Boise FO-Blackstone × BLM - Bureau Of Land Management-GBCC-Boise FO-Hammett × BLM - Bureau Of Land Management-GBCC-Boise FO-Kuna × BLM - Bureau Of Land Management-GBCC-Boise FO-Lowman × S&PF - State And Private Forestry-GBCC-Idaho State Southwest-Boise Basin × USFS - US Forest Service-GBCC-Boise NF-Cascade North Zone × USFS - US Forest Service-GBCC-Boise NF-Emmett North Zone × USFS - US Forest Service-GBCC-Boise NF-Mtn Home RD - South ×

[Clear All](#)

Date Range Required

Start Date: 05/01/2022

End Date: 03/11/2026

Select Fuel(s)

Search Fuel Types:

Category	Sub-Category	Method
All	All	All

	SUB CATEGORY	METHOD	LAST SAMPLE DATE
1000-Hour	Mountain Home - Grouse Creek	Dead	07/17/2022
1000-Hour	Emmett North Zone	Dead	09/08/2023
1000-Hour	Idaho City SZ	Dead	09/18/2023
1000-Hour	Lowman North Zone	Dead	06/29/2024
1000-Hour	Lowman North Zone	Dead Old	08/15/2024
1000-Hour	Cascade North Zone	Dead	06/12/2025
1000-Hour	Emmett North Zone	Dead Gravimetric	07/15/2025
1000-Hour	Idaho City SZ	Dead Gravimetric	07/16/2025
1000-Hour	Mountain Home - Grouse Creek	Dead Gravimetric	07/21/2025
100-Hour	Lowman North Zone	Dead	07/14/2023

Rows Per Page: 1-10 of 93

5. Select the “Download Data” button.
6. A CSV file will be generated.
7. A “Copy Data Link” option is also available for additional analysis.

Field Site Data Download

1. Select “Site Metadata” from 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*

Site Metadata

Weather

Field Sample

Site Metadata

Fire Danger

Download Data Copy Data Link

- 2. Using the dynamic search field, select stations.
 - a. "Select All" and multi-select options are available.
 - b. Undesired stations can be "X"ed out.

Download Queued Download

Select All

BIA - Bureau Of Indian Affairs-GBCC-Boise FO-Kuna

BLM - Bureau Of Land Management-GBCC-Boise FO-Blackstone

BLM - Bureau Of Land Management-GBCC-Boise FO-Hammett

BLM - Bureau Of Land Management-GBCC-Boise FO-Kuna

BLM - Bureau Of Land Management-GBCC-Boise FO-Simco

BLM - Bureau Of Land Management-GBCC-Boise FO-Triangle

Boise

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

Site Metadata

Search Required

Search All Sites...

These are your selected sites. Total sites selected: 14

- BIA - Bureau Of Indian Affairs-GBCC-Boise FO-Kuna
- BLM - Bureau Of Land Management-GBCC-Boise FO-Blackstone
- BLM - Bureau Of Land Management-GBCC-Boise FO-Hammett
- BLM - Bureau Of Land Management-GBCC-Boise FO-Kuna
- BLM - Bureau Of Land Management-GBCC-Boise FO-Simco
- BLM - Bureau Of Land Management-GBCC-Boise FO-Triangle
- BLM - Bureau Of Land Management-GBCC-Boise FO-Wild West
- S&PF - State And Private Forestry-GBCC-Idaho State Southwest-Boise Basin
- USFS - US Forest Service-GBCC-Boise NF-Cascade North Zone
- USFS - US Forest Service-GBCC-Boise NF-Emmett North Zone
- USFS - US Forest Service-GBCC-Boise NF-Idaho City SZ
- USFS - US Forest Service-GBCC-Boise NF-Lowman North Zone
- USFS - US Forest Service-GBCC-Boise NF-Mountain Home - Grouse Creek
- USFS - US Forest Service-GBCC-Boise NF-Mtn Home RD - South

[Clear All](#)

Download Data Copy Data Link

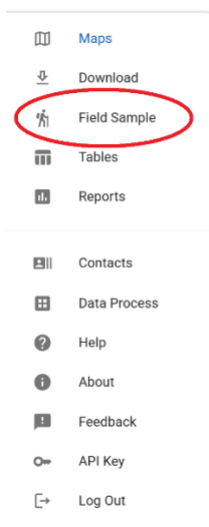
3. Select the “Download Data” button.
4. A CSV file will be generated.
5. A “Copy Data Link” option is also available for additional analysis.

Queued Download Tab

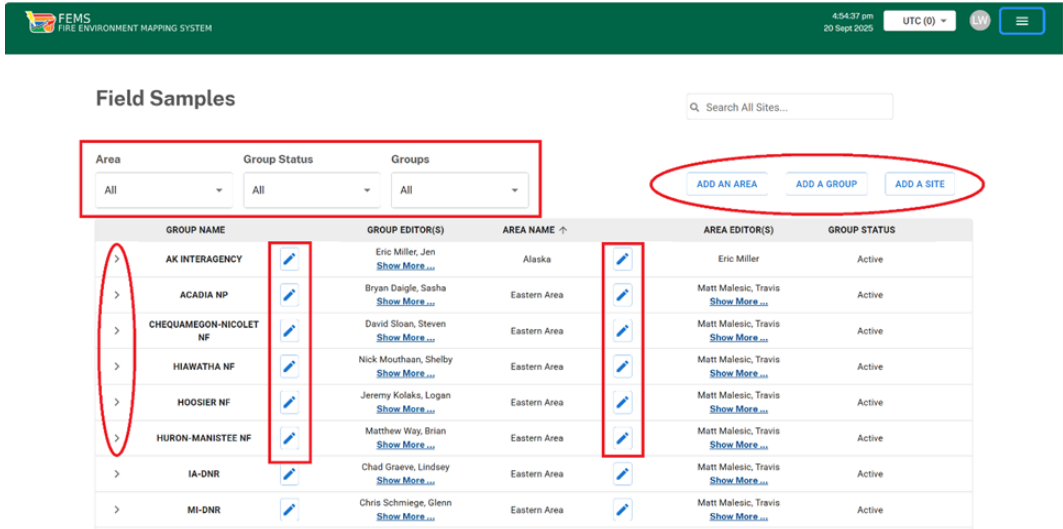
The “Queued Download” Tab only applies to Weather and Fire Danger Downloads.

Program Administration

1. Sign into FEMS and select “Field Sample” from the menu.



2. Field Samples can be filtered by Area (GACC), Group Status (Active, Inactive, All) or Group.
 - a) Buttons to add Areas, Groups and Sites are available based on roles. Greater functionality will be released in the future.

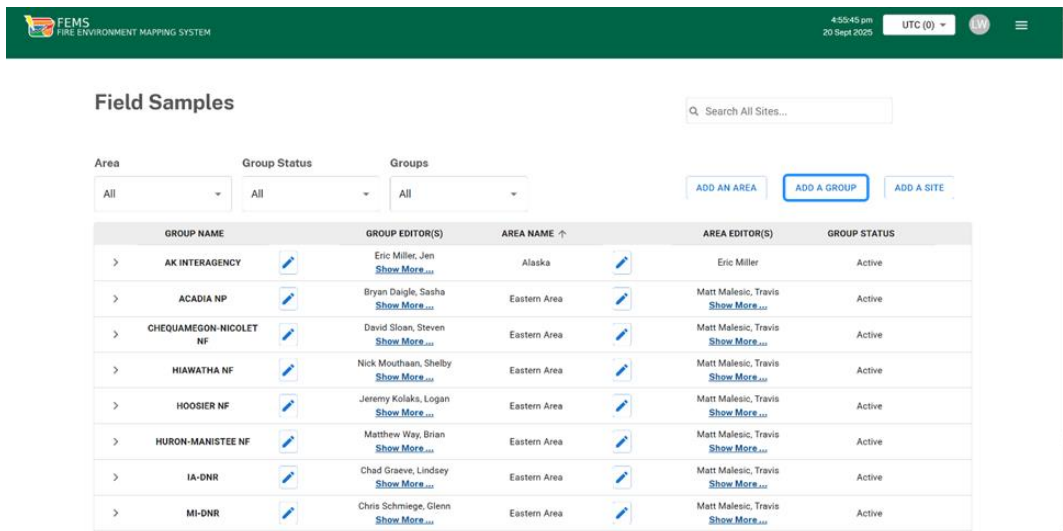


Field Sample Area Editor

Adding, and Editing Field Sample Groups is a role that is assigned to the **Field Sample Area Editor**.

To Add a Field Sample Group:

1. Sign into FEMS and proceed to the Field Sample tab.
2. Click on the “Add a Group” button:



3. A popup box will appear.

Add a Group

Group Name *
Input Name

Area Name *
Search Areas

Primary Contact

Contact Name * Search Names
[Create New Contact](#)

Contact Phone Search Contact Phone
Ext. Ext.

Contact Email Search Contact Email

Position Title Search Position Title

Cancel Add

4. Complete the required fields.

- a) Select “Area Name” from the dropdown list.
- b) The “Primary Contact” field is a searchable field to avoid duplicate entries in the database.
 1. More than one contact may be listed.
 2. See “Add a New Contact” below to add a new contact.

5. When all information has been entered, click on the “Add” button.

6. A banner will appear at the top to indicate that a Group has been created.



7. Each Group must have a unique name. If a duplicate is attempted a red error banner will appear at the top.



8. To add another group, click on “Add a Group” again and begin a new group.

To Add a New Contact:

1. Select “Add New Contact”:

Add a Group

Group Name *
SW Idaho

Area Name *
Great Basin

Primary Contact

Contact Name *
Search Names
[Create New Contact](#)

Government Phone
Government Phone

Ext.
Ext.

Government Email
Government Email

Position Title
Position Title

+ Add Contact

Cancel Add

2. You will be redirected to the “Contacts” Table.
3. Click on the “ADD CONTACT” button:

Contacts

Search Directory
Search All Contact Details...

Area: All | Group: All

NAME	AREA	GROUP	PHONE	EMAIL
Aaron Betcher		Colorado State Forest Show More...	303-271-4953	ambetcher@co.jefferson.co.us
Aaron Ortega		PSICC	719-553-1634	aaron.ortega@usda.gov
Aaron Woodham		NW02-MRP	253-370-3769	aaron_woodham@nps.gov
Abel Martinez		Rancho Santa Fe Show More...	000-000-0000	Martinez@RSF-Fire.Org
Abel Martinez Firefighter			000-000-0000	Martinez@RSF-Fire.Org
Abie Carabajal	Southwest		Undefined	
Adam Zaharris		Whiskeytown NRA	530-524-7250	adam_zaharris@nps.gov
Adrian Padilla		BLM - Albuquerque Show More...	505-630-6353	ajpadilla@blm.gov
Alan Taylor			760-647-3034	ataylor04@fs.fed.us
		Santa Barbara County		

ADD CONTACT

4. A popup will appear:

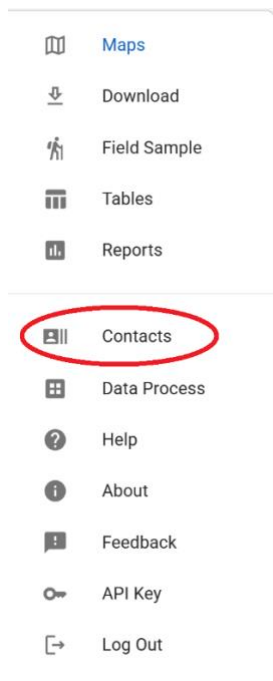
The screenshot shows a form titled "Add New Contact". It contains several input fields: "Contact Name *" with a placeholder "Enter Contact Name", "Government Phone" with a placeholder "---*---*---" and an "Ext." field, "Government Email" with a placeholder "Enter Government Email", "Position Title" with a placeholder "Enter Position Title", and "Contact Location" with a placeholder "Enter Contact Location". At the bottom right, there are "Cancel" and "Add" buttons.

5. Fill in the requested information and select “Add”.

6. The individual should now be available to add as a contact.

To Edit an Existing Contact:

1. Navigate to the “Contacts” table by selecting “Contacts” in the menu.



2. Click on the “Add A Contact” link.
3. Use the dynamic search feature on the “Contacts” table:

Contacts ADD CONTACT

Search Directory: Williams

- Jhennifer Williams-000-000-0000- Jhennifer.Williams@Usda.Gov
- Kate Williams-360-890-0882-Kate.Williams@Dnr.Wa.Gov
- Mark Williams-Salt Lake City, Utah-801-419-3848-Fire Planning-Mawilliams@Blm.Gov
- Nate Williamson-970-586-1434-Nathan_Williamson@Nps.Gov

NAME	AREA	GROUP	PHONE	EMAIL
Abel Martinez		Colorado State Forest	303-271-4953	ambetcher@co.jefferson.co.us
Abie Carabajal	Southwest	PSICC	719-553-1634	aaron.ortega@usda.gov
Adam Zaharris		NW02-MRP	253-370-3769	aaron_woodham@nps.gov
Adrian Padilla		Rancho Santa Fe	000-000-0000	Martinez@RSF-Fire.Org
Alan Taylor			000-000-0000	Martinez@RSF-Fire.Org
		Whiskeytown NRA	530-524-7250	adam_zaharris@nps.gov
		BLM - Albuquerque	505-630-6353	ajpadilla@blm.gov
			760-647-3034	ataylor04@fs.fed.us

4. Click on the **Edit link** located on the Contact Screen:

Contacts ADD CONTACT

Search Directory: Mark Williams-Salt Lake City, Utah-801-419-3848-Fx

NAME	AREA	GROUP	PHONE	EMAIL
Mark Williams	Great Basin		801-419-3848	mawilliams@blm.gov

5. A popup box will appear.
6. Make the desired edits and click “Save”:

Edit Contact

Contact Name * Government Phone Ext.

Government Email Position Title

Contact Location

To Edit a Field Sample Group:

1. Select the **Edit link** to the right of the Field Sample Group name.

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there is a header with the FEMS logo, the text 'FIRE ENVIRONMENT MAPPING SYSTEM', the time '5:17:08 pm', the date '20 Sept 2025', and a user profile 'LW'. Below the header, the main content area is titled 'Field Samples'. There is a search bar 'Search All Sites...'. Below the search bar, there are three dropdown menus: 'Area' (Great Basin), 'Group Status' (All), and 'Groups' (All). To the right of these dropdowns are three buttons: 'ADD AN AREA', 'ADD A GROUP', and 'ADD A SITE'. Below these are three columns of data: 'GROUP NAME', 'GROUP EDITOR(S)', 'AREA NAME ↑', 'AREA EDITOR(S)', and 'GROUP STATUS'. The table contains six rows of data. The 'BOISE NORTH' row is highlighted with a red circle around its edit icon (a blue pencil icon).

GROUP NAME	GROUP EDITOR(S)	AREA NAME ↑	AREA EDITOR(S)	GROUP STATUS
> ARIZONA STRIP DISTRICT	Greta Hyland, Cody Show More...	Great Basin	Matt Ginder, Dave Show More...	Active
> ASHLEY NF	Mike Bertagnoli	Great Basin	Matt Ginder, Dave Show More...	Active
> BOISE FO	Chris Cromwell	Great Basin	Matt Ginder, Dave Show More...	Active
> BOISE NF	Ryan Jones, Andra Show More...	Great Basin	Matt Ginder, Dave Show More...	Active
> BOISE NORTH	Shelby Law	Great Basin	Matt Ginder, Dave Show More...	Active
> BRIDGER-TETON NF	Andy Norman, Paul Show More...	Great Basin	Matt Ginder, Dave Show More...	Active

2. A popup box will appear.

The screenshot shows the 'Edit Group' popup form. The 'Group Name *' field is highlighted with a blue border and contains the text 'Boise|North'. The 'Area Name *' field is a dropdown menu showing 'Great Basin'. The 'Primary Contact' section includes fields for 'Contact Name *', 'Government Phone', 'Ext.', 'Government Email', and 'Position Title'. The 'Contact Name' field contains 'Shelby Law'. There are 'Cancel' and 'Save' buttons at the bottom.

3. Edit the requested fields.
 - a. Select "Area Name" from the dropdown list.
4. Additional contacts may be added.
 - a. The Field Sample Database will not allow duplicate contacts to be entered.
 - b. If a duplicate is attempted a red error banner will appear at the top.



5. When finished, click on the Save Changes button to save the information to the database.
6. A banner will appear at the top to indicate that a Group has been saved.



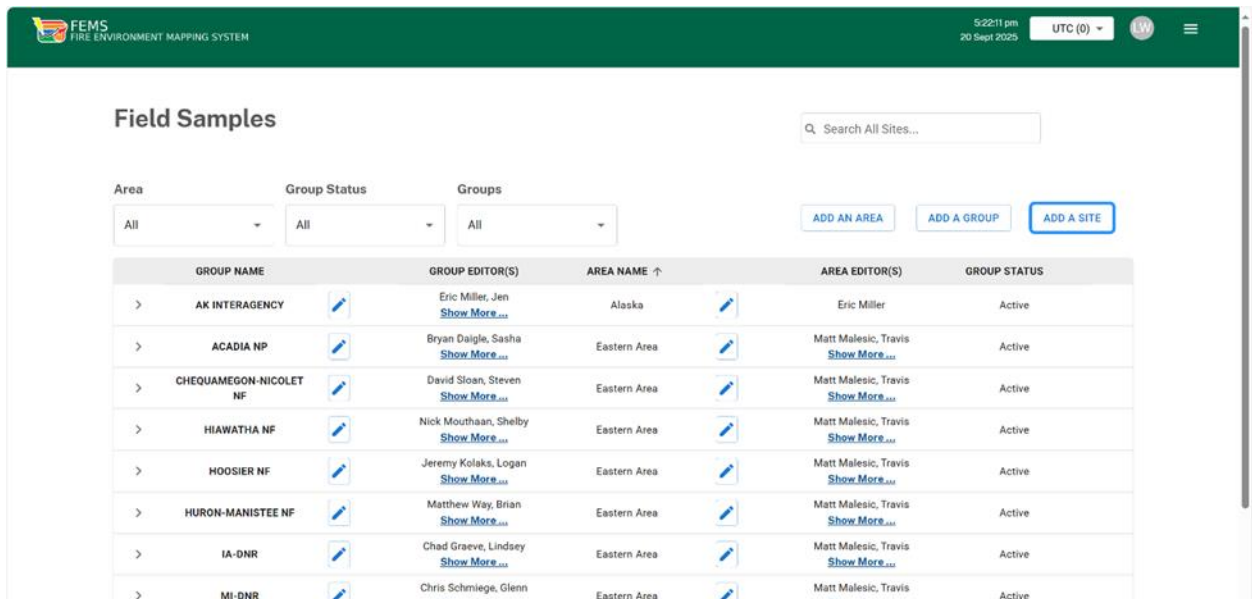
Field Sample Group Editor

Managing a Field Sample Site

Creating, Editing and Deleting Fields Sample Sites is a role that is assigned to the **Field Sample Group Editor**.

To Add a Field Sample Site:

1. Sign into FEMS and select “Field Sample” from the menu.
2. Click on the “Add a Site” button.



3. A popup box will appear.

The screenshot shows a form titled "Add a Site" with the following fields:

- Site Name* (Input Site Name)
- Latitude* (Input Latitude)
- Longitude* (Input Longitude)
- Elevation* (Enter Elevation)
- Remarks (Enter Remarks)
- Site Start Date* (Site Start Date with a calendar icon)
- Agency Landowner*

At the bottom right, there are "Cancel" and "Add" buttons.

4. Fill in the required information.

- a) Site Name – Needs to be unique.
- b) Latitude and Longitude.
- c) Elevation
- d) Remarks should pertain to the site. **Remarks related to the sample will be available in a future release.**
- e) Site Start Date – available with a calendar option.

This screenshot shows the "Add a Site" form with a calendar popup open over the "Site Start Date" field. The calendar is for July 2025, and the date 30 is selected and circled in blue. The form fields visible are:

- Site Name* (Input Site Name)
- Latitude* (Input Latitude)
- Longitude* (Input Longitude)
- Elevation* (Enter Elevation)
- Remarks (Enter Remarks)
- Site Start Date* (Site Start Date with a calendar icon)
- Agency Landowner*

- f) Agency Landowner – Select from a dropdown – searchable field.
 - g) Group Name – Select from a dropdown – searchable field.
 - h) Area Name – Select from a dropdown – searchable field.
 - i) Status – Select from a dropdown.
 - j) State - Select from a dropdown – searchable field.
5. Be sure to scroll down for then additional fields.

To Edit a Field Sample Site:

A Field Sample Site can either be edited from the data entry table or when viewing the Site Metadata.

Edit from the Data Entry Table:

1. To edit a Field Sample Site, from the data entry table select the **icon** to the left of the Field Sample Group name.

GROUP NAME	GROUP EDITOR(S)	AREA NAME ↑	AREA EDITOR(S)	GROUP STATUS
> ARIZONA STRIP DISTRICT	Greta Hyland, Cody Show More...	Great Basin	Matt Ginder, Dave Show More...	Active
> ASHLEY NF	Mike Bertagnoli	Great Basin	Matt Ginder, Dave Show More...	Active
▼ BOISE FO	Chris Cromwell	Great Basin	Matt Ginder, Dave Show More...	Active

SITE NAME	LAT/LON	ELEVATION	REMARKS	STATUS	AGENCY LANDOWNER
Blackstone	42.4411, -115.8836	5000		Active	BLM - Bureau of Land Management
Kuna	43.4422, -116.4253	3060		Active	BLM - Bureau of Land Management
Wild West	43.8705, -116.7775	2593		Active	BLM - Bureau of Land Management
Hammatt	42.9672, -115.457	2706		Active	BLM - Bureau of Land Management
Simco	43.0883, -115.9664	3000	This site is Show More...	Active	BLM - Bureau of Land Management
Triangle	42.805, -116.6317	5186		Active	BLM - Bureau of Land Management

2. A popup will appear.

The screenshot shows a form titled "Edit Site" with the following fields and values:

- Site Name*: Wild West
- Latitude*: 43.8705
- Longitude*: -116.7775
- Elevation*: 2593
- Remarks: Enter Remarks
- Site Start Date*: 01/01/2006
- Agency Landowner*: (empty)

At the bottom right, there are "Cancel" and "Save" buttons.

3. Make the desired edits.

- a) Remarks should pertain to the site. **Remarks related to the sample will be available in a future release.**
- b) Start Date – available with a calendar option.
- c) Time – select the hour on the right of the calendar.
- d) Agency Landowner – Select from a dropdown – searchable field.
- e) Group Name – Select from a dropdown – searchable field.
- f) Area Name – Select from a dropdown – searchable field.
- g) Status – Select from a dropdown.
- h) State - Select from a dropdown – searchable field.

4. Be sure to scroll down for additional fields.

This screenshot shows the lower portion of the "Edit Site" form, with the following fields and values:

- Remarks: Enter Remarks
- Site Start Date*: 01/01/2006
- Agency Landowner*: BLM - Bureau of Land Management
- Group Name*: Boise FO
- Area Name*: Great Basin
- Status*: Active
- State*: Idaho

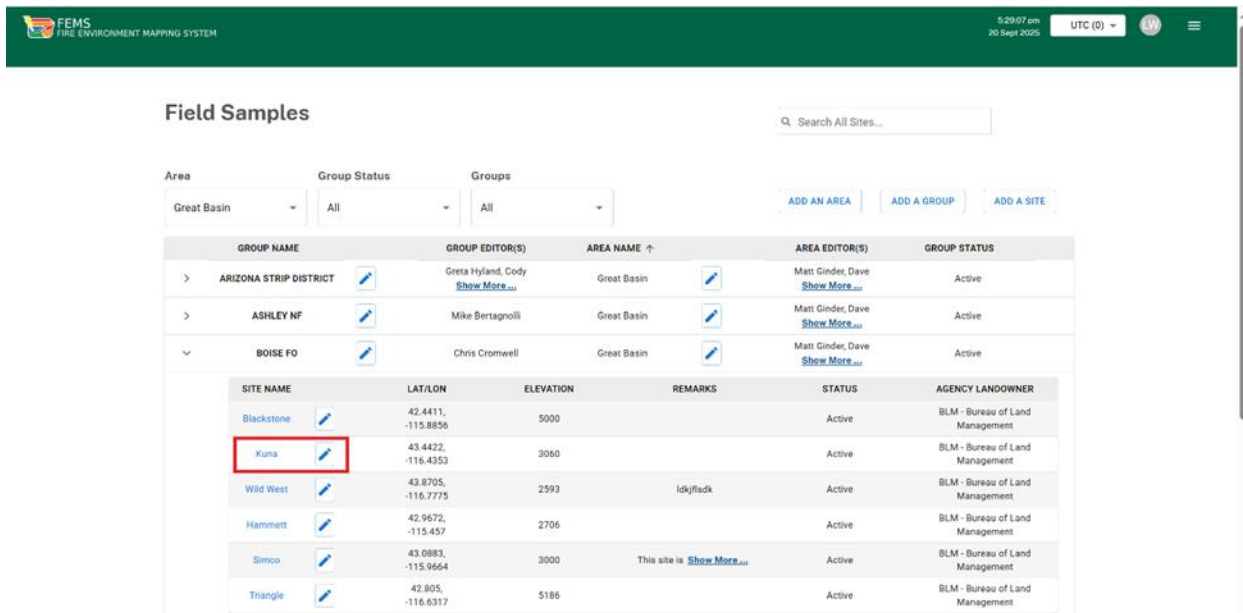
At the bottom right, there are "Cancel" and "Save" buttons.

5. Click on “Save”.
6. A banner will appear at the top to indicate that the Site has been edited.

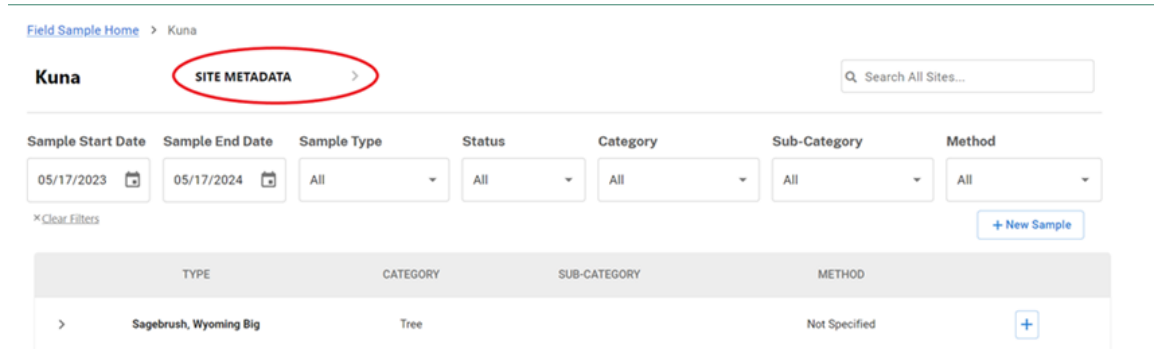


Edit from Site Metadata:

1. Open the Site by clicking on the site name.



2. The Site information will display.
3. Click on “Site Metadata”.



4. The Metadata will be displayed.
5. Click on the “Edit Site” button.

Kuna **SITE METADATA**

LATITUDE	LONGITUDE	ELEVATION	AGENCY LANDOWNER	REMARKS		
43.4422	-116.4353	3060 ft	BLM - Bureau of Land Management		Edit Site	
CREATED DATE	AREA NAME	GROUP NAME	STATE	STATUS	ASPECT	SLOPE
2006-01-01	Great Basin	Boise FO	Idaho	Active		

Sample Start Date: 05/17/2023 Sample End Date: 05/17/2024 Sample Type: All Status: All Category: All Sub-Category: All Method: All

[Clear Filters](#) [+ New Sample](#)

TYPE	CATEGORY	SUB-CATEGORY	METHOD
> Sagebrush, Wyoming Big	Tree		Not Specified +

6. The popup to edit site information will appear.

Edit Site

Site Name*

Latitude* Longitude*

Elevation*

Remarks

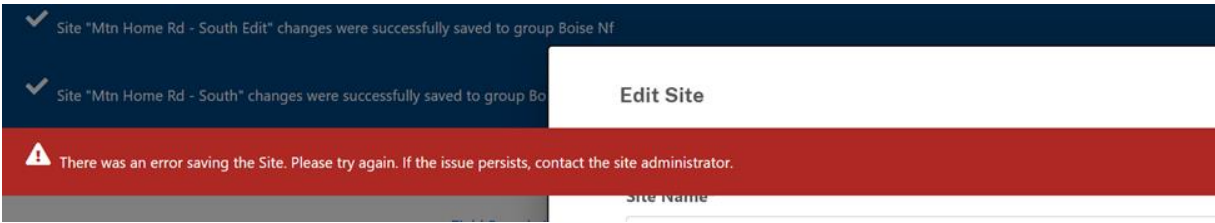
Site Start Date*

Agency Landowner*

Group Name*

7. After making the desired edits, click “Save”.
 - a) Remarks should pertain to the site. **Remarks related to the sample will be available in a future release.**
 - b) Start Date – available with a calendar option.
 - c) Time – select the hour on the right of the calendar.
 - d) Agency Landowner – Select from a dropdown – searchable field.
 - e) Group Name – Select from a dropdown – searchable field.
 - f) Area Name – Select from a dropdown – searchable field.
 - g) Status – Select from a dropdown.
 - h) State - Select from a dropdown – searchable field.
8. After making the desired edits, click “Save”.
9. A banner will appear at the top to indicate that the site has been edited.

Error Banner



A red banner across the top may appear to indicate an error when creating or editing a site.

If this occurs – contact the IIA HelpDesk (866-224-7677)

Field Sample Collector

Entering and editing Fuel Moistures is the role of the **Field Sample Area Editor**, Group Editor and Sample Site Collector.

1. Sign into FEMS and select “Field Sample” from the menu.
2. Use dynamic filters to locate the desired Group.

Area	Group Status	Groups	GROUP NAME	GROU	NAME ↑	AREA EDITOR(S)	GROUP STATUS
Great Basin	All	Boise	> ARIZONA STRIP DISTRICT	Greta	at Basin	Matt Ginder, Dave	Active
			> ASHLEY NF	Mike Bertagnoli	Great Basin	Matt Ginder, Dave	Active
			> BOISE FO	Chris Cromwell	Great Basin	Matt Ginder, Dave	Active
			> BOISE NF	Ryan Jones, Andra	Great Basin	Matt Ginder, Dave	Active

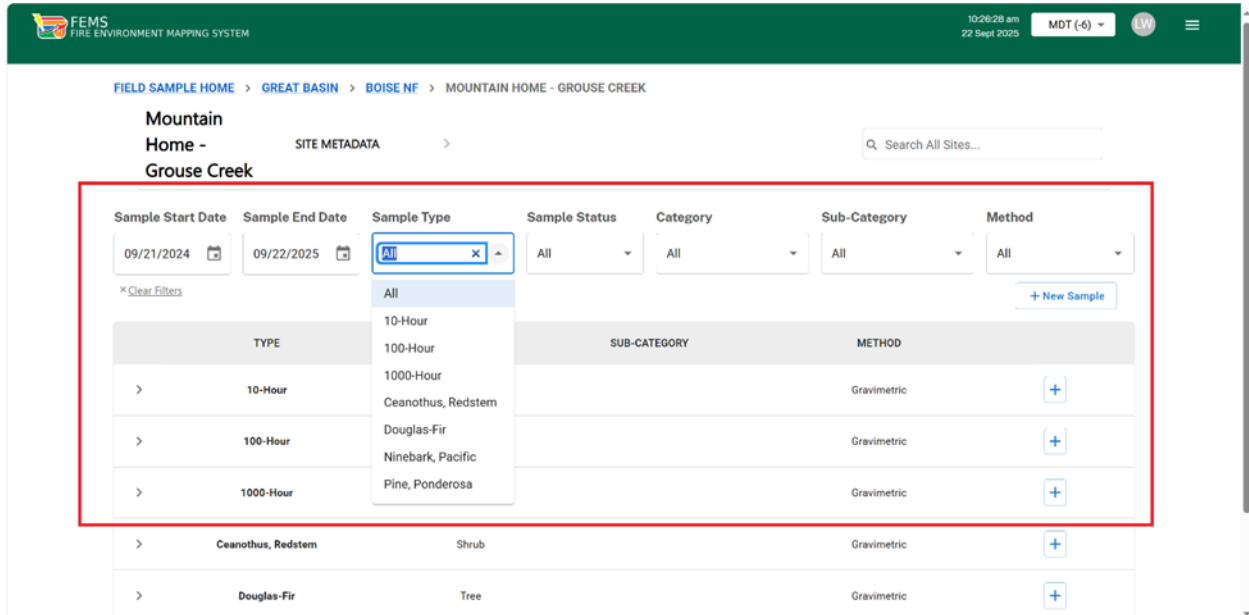
3. To edit access Field Sample Site, select the “**carrot**” to the left of the Field Sample Group name.

4. A dropdown of Field Sample Sites will appear.
5. Click on the name of the Field Sample Site to edit.
6. A new screen will appear listing all the fuel types currently being monitored.

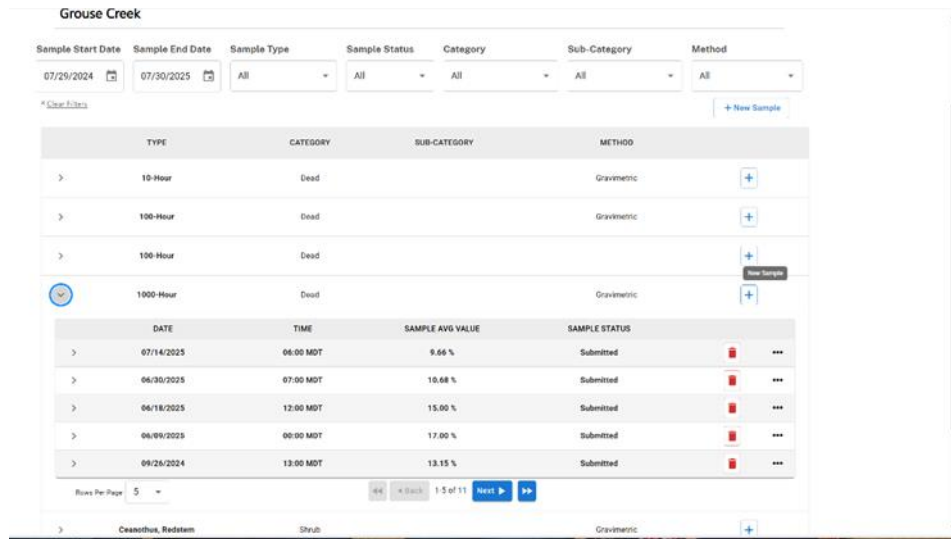
Adding Fuel Moistures for Fuel Types being Monitored:

1. Select the fuel type being sampled.
 - a. Fuel types may also be filtered by: Date, Sample Type, Status, Category, Sub-Category (New Field) Method.

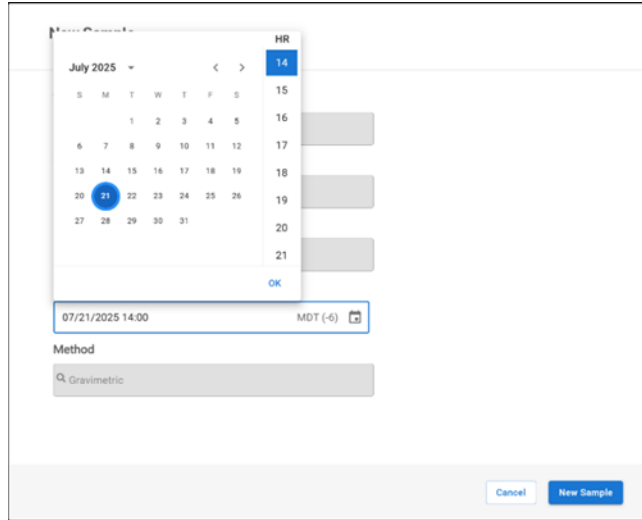
b. The “Sample Type” dropdown will only include fuel types with sample data.



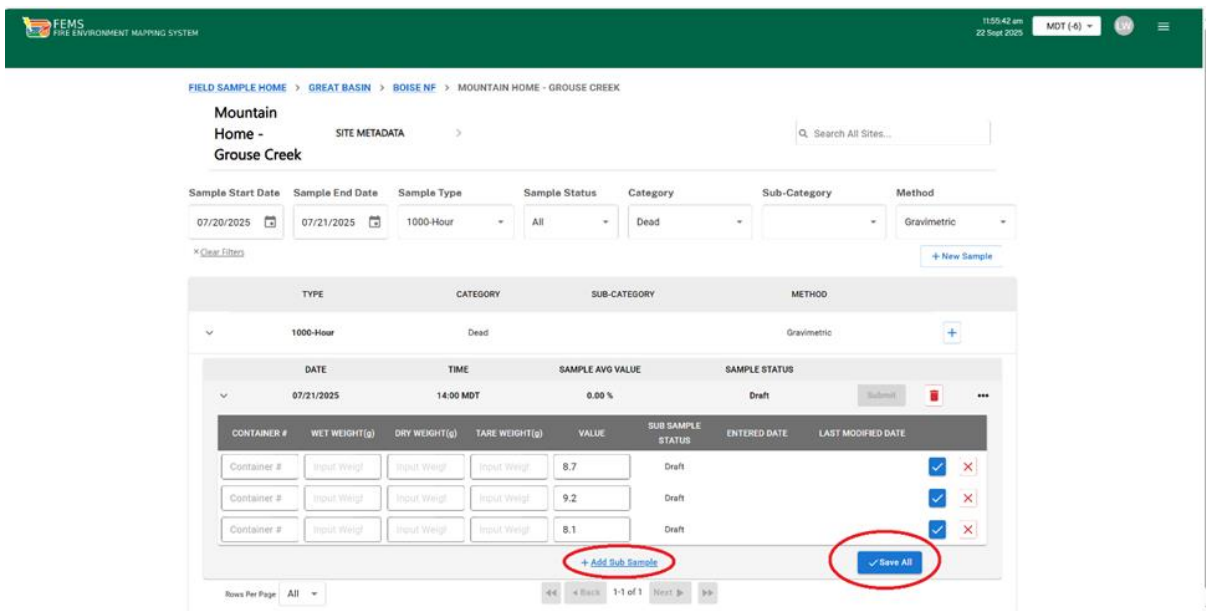
2. A table will populate.



3. Click on the “+” icon to add new fuel moistures for the same fuel type.
4. A popup will appear preloaded to the selected sample type.
5. Enter the Sample Date & Time and click on the “New Sample” button.
 - a. Notice the time selection to the right of the calendar.
 - b. Select the desired time.



6. A table will open.
7. Click on “**Add Sub-Sample**”.
8. Enter the sample data.
 - a. Enter weights or value, you cannot enter both.
 - b. Weights are limited to two (2) decimal places.
 - i. The Sample Average Value will be rounded where necessary.
 - ii. The system will not allow a negative entry.
 - c. When a value has been entered, a “check box” will appear.
 - d. Click on the “check box” to save your sample.
 - e. The “check box” will change to a pencil to for editing icon.
 - f. Multiple entries can be added at the same time by clicking on the “Add Sub-Sample” multiple times.



- g. An “X” will reset the sub-sample.
- h. The “trash can” will delete the record, if in “Draft”.
 - i. The ability to view archive data will be available in a future release.
- i. If you are finished entering values, click on “Save” or “Save All” and the status will change from “Draft” to “Complete”.

The screenshot shows the FEMS Fire Environment Mapping System interface. The breadcrumb trail is: FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK. The site name is Mountain Home - Grouse Creek. The filters are: Sample Start Date: 09/21/2024, Sample End Date: 09/22/2025, Sample Type: 1000-Hour, Sample Status: All, Category: All, Sub-Category: All, Method: All. The main table shows sample data with columns: TYPE, CATEGORY, SUB-CATEGORY, METHOD, DATE, TIME, SAMPLE AVG VALUE, and SAMPLE STATUS. A sample from 07/21/2025 at 14:00 MDT with a value of 8.67% is highlighted with a red circle around its 'Draft' status. Below this, a detailed table shows container weights and values.

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
09/08/2025	15:00 MDT	8.95 %	Archived
07/21/2025	14:00 MDT	8.67 %	Draft

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
0	0	0	0	8.70%	Complete	09/22/2025	09/22/2025
0	0	0	0	9.20%	Complete	09/22/2025	09/22/2025
0	0	0	0	8.10%	Complete	09/22/2025	09/22/2025

- j. Click on “Submit” to change the status from “Draft” to “Submitted”.
- k. There will be a pop-up box to confirm that the data is to be submitted.

The screenshot shows the same FEMS Fire Environment Mapping System interface as the previous one. The filters are identical. The sample from 07/21/2025 at 14:00 MDT with a value of 8.67% now has a status of 'Submitted', which is circled in red. The detailed table below it remains the same.

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
09/08/2025	15:00 MDT	8.95 %	Archived
07/21/2025	14:00 MDT	8.67 %	Submitted

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
0	0	0	0	8.70%	Complete	09/22/2025	09/22/2025
0	0	0	0	9.20%	Complete	09/22/2025	09/22/2025
0	0	0	0	8.10%	Complete	09/22/2025	09/22/2025

Adding Fuel Moistures for a new Fuel Type:

1. Click on the “+ New Sample” at the top of the table.

The screenshot shows the FEMS Fire Environment Mapping System interface. At the top, there is a navigation bar with the FEMS logo and the text 'FIRE ENVIRONMENT MAPPING SYSTEM'. The current location is 'Mountain Home - Grouse Creek'. Below the navigation bar, there is a search bar and a table of fuel types. The table has columns for 'TYPE', 'CATEGORY', 'SUB-CATEGORY', and 'METHOD'. The 'TYPE' column contains values like '10-Hour', '100-Hour', '1000-Hour', 'Ceanothus, Redstem', 'Douglas-Fir', and 'Ninebark, Pacific'. The 'CATEGORY' column contains 'Dead', 'Shrub', and 'Tree'. The 'SUB-CATEGORY' column is empty. The 'METHOD' column contains 'Gravimetric'. A '+ New Sample' button is circled in red at the top right of the table.

TYPE	CATEGORY	SUB-CATEGORY	METHOD
> 10-Hour	Dead		Gravimetric +
> 100-Hour	Dead		Gravimetric +
> 1000-Hour	Dead		Gravimetric +
> Ceanothus, Redstem	Shrub		Gravimetric +
> Douglas-Fir	Tree		Gravimetric +
> Ninebark, Pacific	Shrub		Gravimetric +

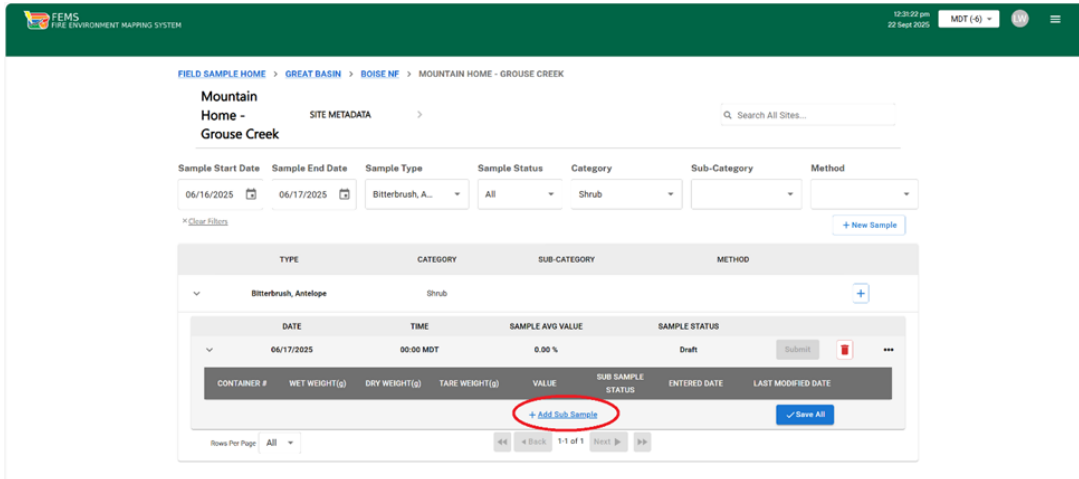
2. A popup will appear.

The screenshot shows a 'New Sample' popup form. It has the following fields:

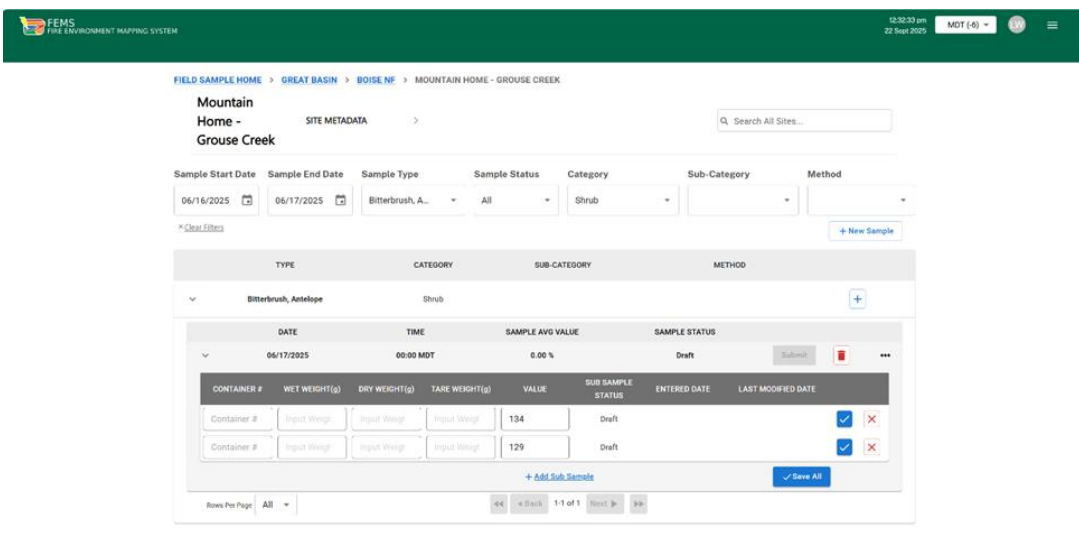
- Type ***: A search input field with the placeholder text 'Select Type'.
- Category ***: A search input field with the placeholder text 'Select Category'.
- Sub-Category**: A search input field with the placeholder text 'Select Sub-Category'.
- Sample Date & Time ***: A date and time picker field with the placeholder text 'Select Date & Time' and a time zone dropdown set to 'MDT (-6)'.
- Method**: A search input field with the placeholder text 'Select Method'.

At the bottom of the form, there are two buttons: 'Cancel' and 'New Sample'.

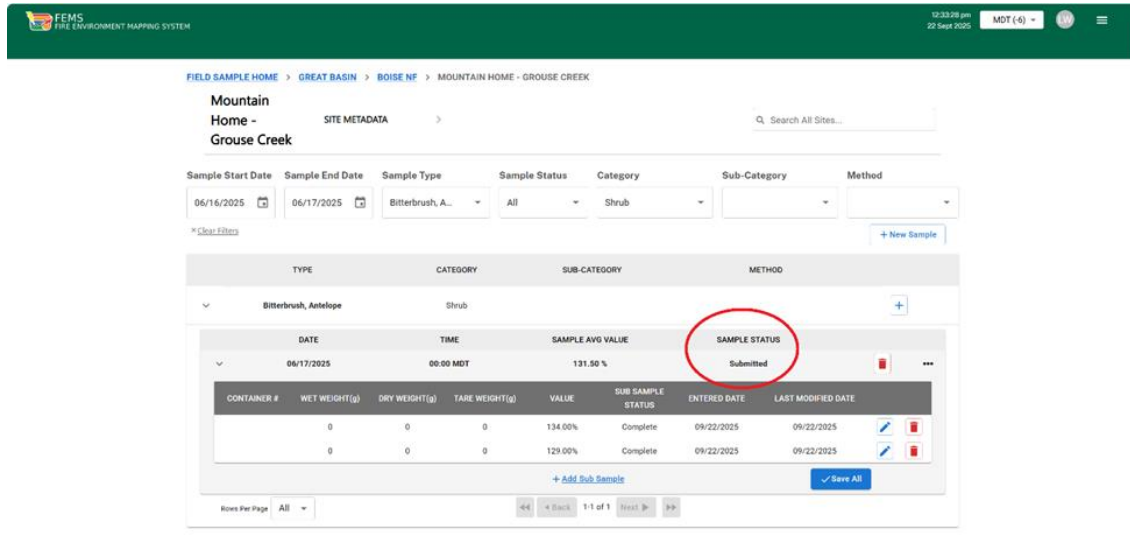
3. Fill in the required items.
4. Click on the “New Sample” box.
5. The table will appear showing the new sample type.
6. Click on the “+ Add Sub-Sample”.
7. The table will expand to enter the new sample data.
 - a. Multiple Sub-Samples” may be added at the same time.



8. Enter the sample data.
 - a. Enter weights or value, you cannot enter both.
 - b. Weights are limited to two (2) decimal places.
 - i. The Sample Average Value will be rounded where necessary.
 - ii. The system will not allow a negative entry.
 - c. When a value has been entered, a “check box” will appear.
 - d. Click on the “check box” to save your sample.
 - e. The “check box” will change to a pencil to for editing icon.
 - f. Multiple entries can be added at the same time by clicking on the “Add Sub-Sample” multiple times.



- g. If you are finished entering values, click on “Save” or Save All” and the status will change from “Draft” to “Complete”.
- h. The “X” will reset the sub-sample.’
- i. The “trash can” will delete the record, if in “Draft”.

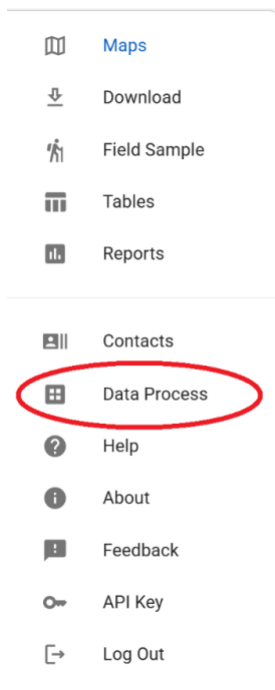


Field Sample Data Upload

Users with FEMS Admin role have the ability to upload Field Sample data.

To upload Field Sample Data:

1. Select the “Data Process” option on the Menu.



2. Select the “Field Sample” tab.
3. Click on the “Upload File” button.

Field Sample Data Import

Stations Recalculate

Field Sample Data Upload

Search All Files:

Upload Start Date:

Upload End Date:

File Format:

Data Type:

Status:

[↑ UPLOAD DATA](#)

FILE NAME	UPLOADED DATE	PROCESSED DATE	DATA TYPE	SIZE	STATUS	UPLOADED BY
fieldSample.csv	03/20/2026	03/20/2026	Field Sample	4.8 KB	Complete	Trudi Allison
BatchUploadfieldSampleTest_202160316.csv	03/16/2026	03/16/2026	Field Sample	121.9 KB	Complete	Trudi Allison

Rows Per Page:

Navigation: << Back 1-2 of 2 Next >>

4. A popup will appear.

Field Sample Data Import

Uploaded CSV data needs to be correctly formatted. [Download CSV Template](#)

Upload File

Max file size: 1 MB

5. Review the CSV Template:

IMPORTANT:

- Note Date-Time Format
- Site Name must be exact, or a new site will be created.

Field-Sample-Template

File Home Insert Draw Page Layout Formulas Data Review View Automate Help

Clipboard Font Alignment Number Styles

G11

Sample Id	Date-Time (ex. 2024-01-26T00:00:00+00:00)	Site Name	SiteId	Fuel Type	Category	Sub-Category	Method	Sample Avg Value	Sample Status

6. Click the “Select File” button
7. Navigate to the selected file.
8. Click on the “Upload” button.
9. The file status will display in the table.

The screenshot displays the FEMS Fire Environment Mapping System interface. At the top, the header shows the FEMS logo and the text 'FIRE ENVIRONMENT MAPPING SYSTEM'. The navigation bar includes 'Field Sample Data Import' (active) and 'Stations Recalculate'. The main content area is titled 'Field Sample Data Upload'. Below the title, there are search filters for 'Search All Files', 'Upload Start Date' (03/16/2026), 'Upload End Date' (04/15/2026), 'File Format' (All), 'Data Type' (All), and 'Status' (All). There are buttons for 'UPLOAD DATA' and a refresh icon. Below the filters is a table with the following data:

FILE NAME	UPLOADED DATE	PROCESSED DATE	DATA TYPE	SIZE	STATUS	UPLOADED BY
fieldSample.csv	03/20/2026	03/20/2026	Field Sample	4.8 KB	Complete	Trudi Allison
BatchUploadfieldSampleTest_202160316.csv	03/16/2026	03/16/2026	Field Sample	121.9 KB	Complete	Trudi Allison

At the bottom of the table, there is a 'Rows Per Page' dropdown set to 10 and pagination controls showing '1-2 of 2' with 'Back' and 'Next' buttons.

10. Search options are available to locate specific files.