

US Forest Service
Bureau of Land Management
Bureau of Indian Affairs
National Park Service
Fish and Wildlife Service

Fire Environment Mapping System (FEMS) Field Sample Database User Guide Version 3.5

January 22, 2026

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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.

What's New in V3.5

- The primary focus of this release is to add Catalog Management functionality for FEMS Admin users.

- A limited number of Mesonet stations have been added to FEMS for both Weather and Fire Danger.

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.

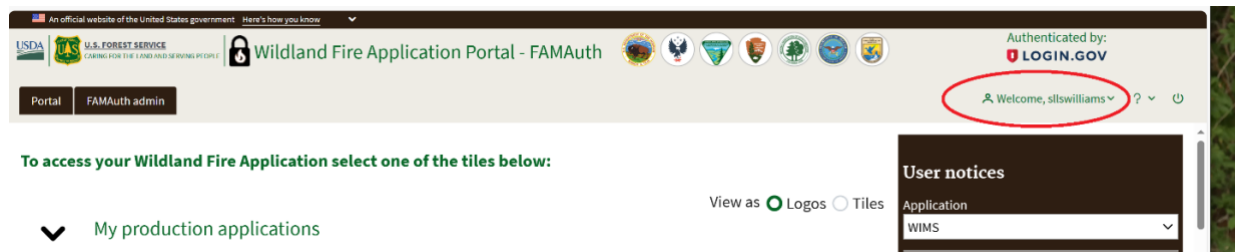
Requesting Access

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

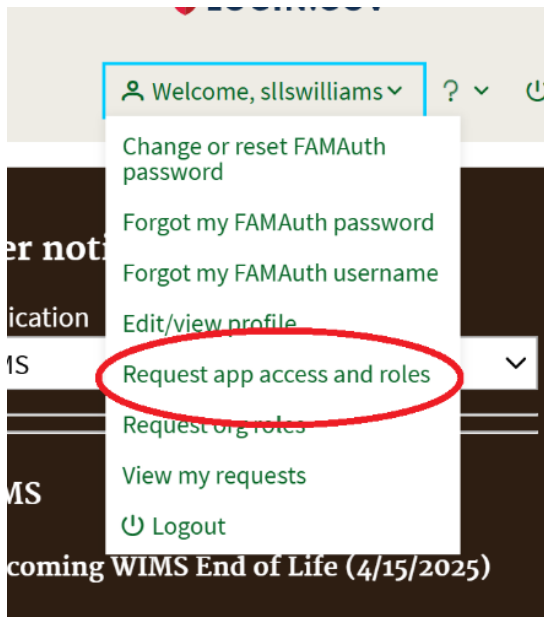
See the [FAMAuth User Guide](#) for assistance in creating a FAMAuth account.

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

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

Application access

FEMS-Fire Environment Mapping System

DATAWH-Data Warehouse

EGP-Enterprise Geospatial Portal

EIS-e-ISuite Enterprise

F&AM-F&AM

FEMS-Fire Environment Mapping System

FEPP-FEPP FEPMIS

Instance(s)

PROD

⊖ ⊕

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**.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD **FIELD SAMPLE** 11:18:18 am 22 Jul 2025 MDT (-6) LW Lani Williams

Field Samples

Search All Sites...

Area

All

Alaska

Eastern Area

Great Basin

National

Northern California

Northern Rockies

Northwest

Rocky Mountain

Group Status

All

All

Groups

All

All

ADD AN AREA

ADD A GROUP

ADD A SITE

GROUP EDITOR(S)	AREA NAME	AREA EDITOR(S)	GROUP STATUS
Greta Hyland, Cody Show More...	Great Basin	Matt Ginder, Dave Firmage, Dylan Rader, Mark Williams, Geoff Wallin, Jeremy Sisneros, Dustin Doane, Dea Funka, Basil Newmerzhysky, Shelby Law, Gina McGuire Collapse	Active
Mike Bertagnoli	Great Basin	Matt Ginder, Dave Show More...	Active
Chris Cromwell	Great Basin	Matt Ginder, Dave Show More...	Active
Ryan Jones, Andrea Show More...	Great Basin	Matt Ginder, Dave Show More...	Active
Andy Norman, Paul Show More...	Great Basin	Matt Ginder, Dave Show More...	Active

Area Editor information is available on the Field Sample tab in FEMS.

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

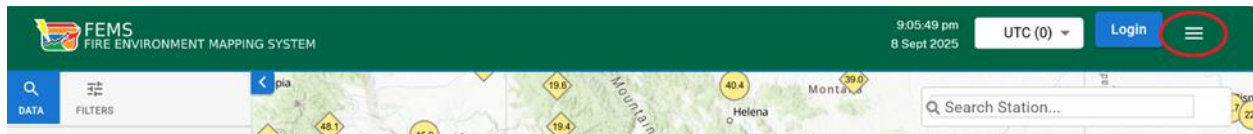
Roles and Definitions

- 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

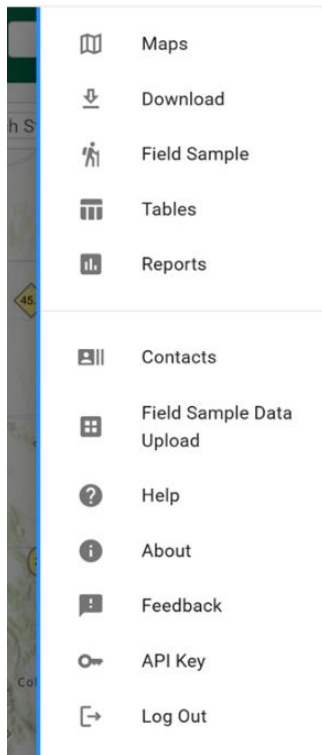
1. Click on the “Hamburger” icon in the upper right:



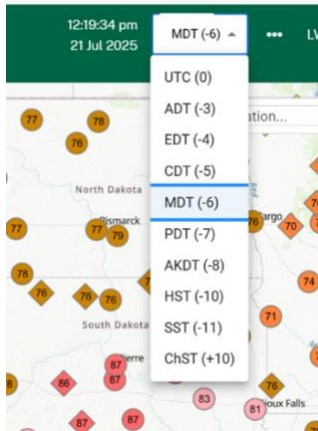
2. Click on the “LOGIN” button.



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

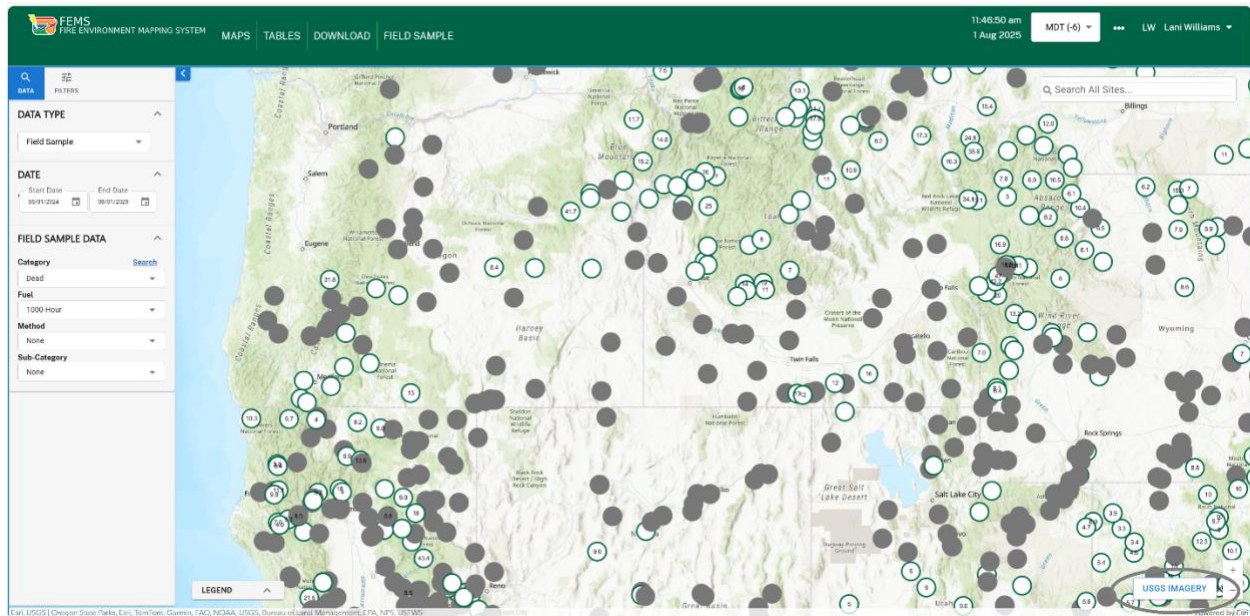
The Field Sample Tables can be accessed by either the Map or Tables Menu.

Map Option

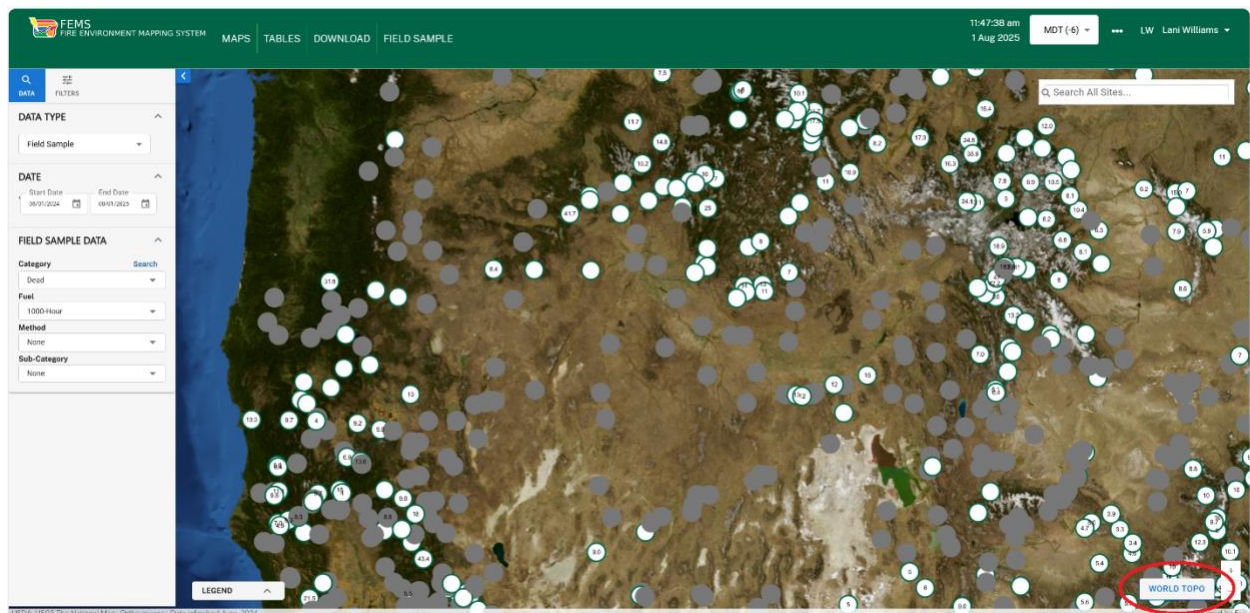
Navigating Maps

Two options are available for viewing the map.

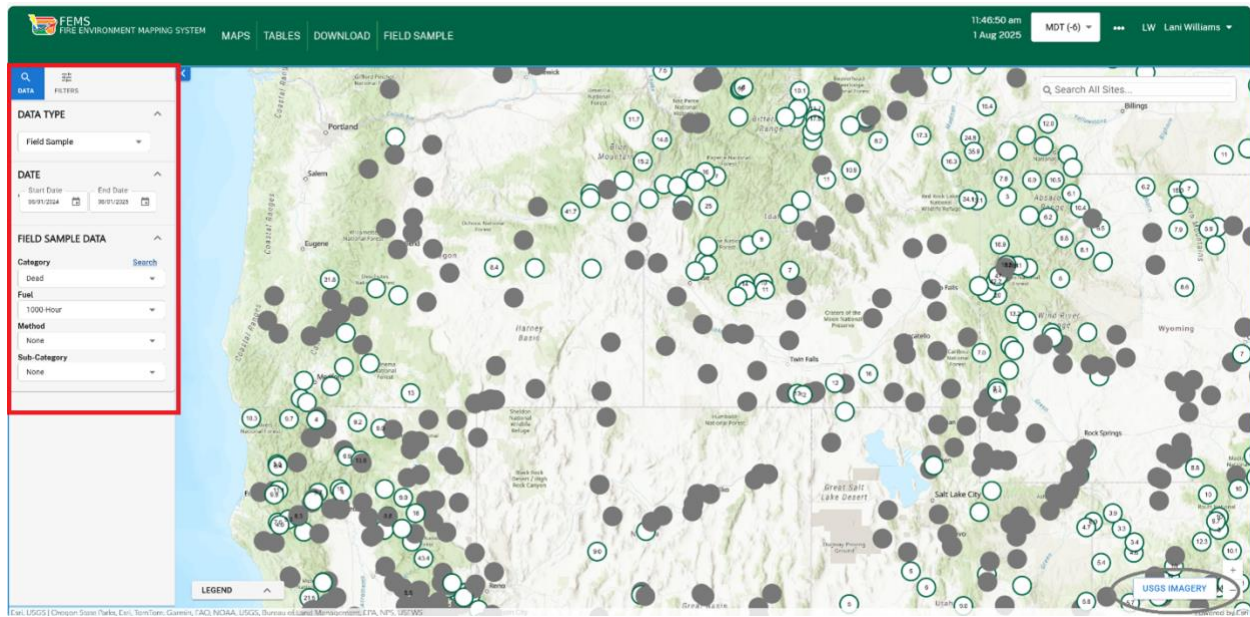
World Topo is the default.



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

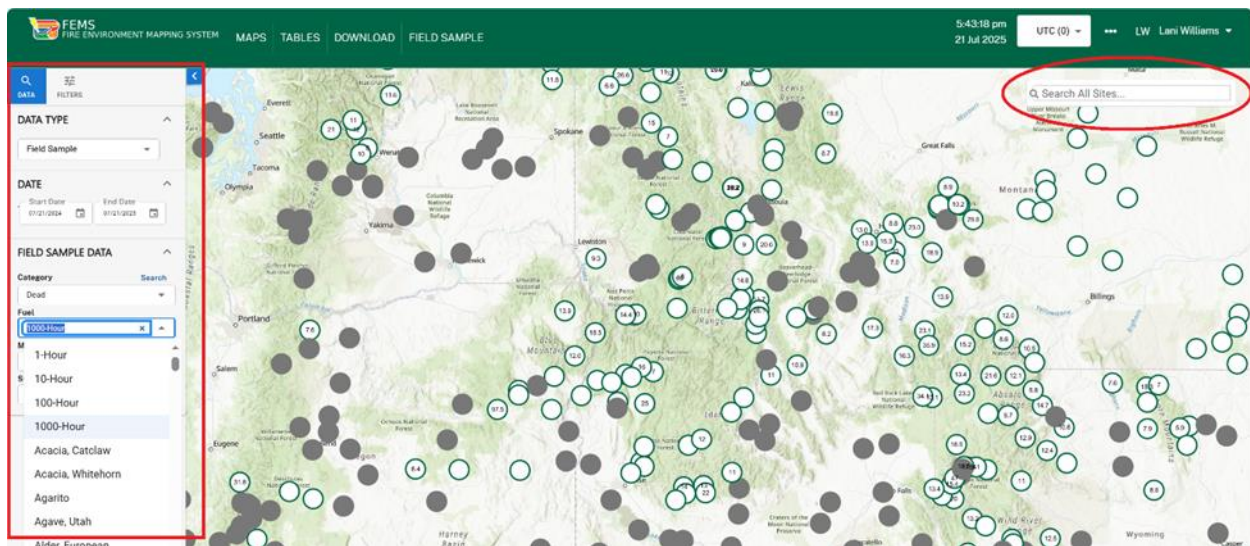


Selections on the left side will determine the map data displayed:

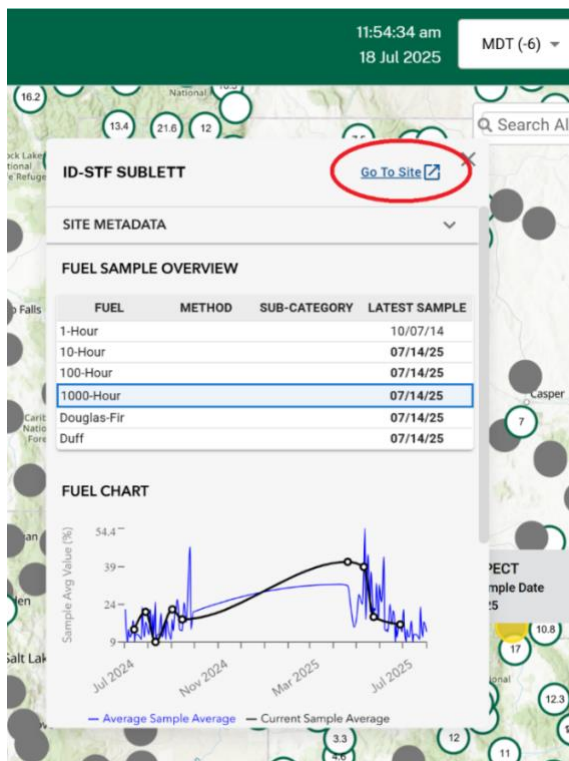


Viewing Field Sample Data

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



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



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

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 11:59:41 am 21 Jul 2025 MDT (-6)

[FIELD SAMPLE HOME](#) > [GREAT BASIN](#) > [SAWTOOTH SOUTH](#) > ID-STF SUBLETT

ID-STF Sublett SITE METADATA

Search All Sites...

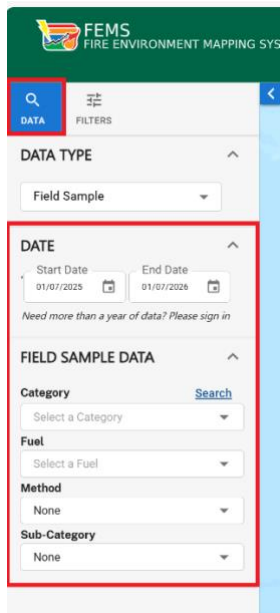
Sample Start Date: 07/20/2024 Sample End Date: 07/21/2025 Sample Type: All Sample Status: All Category: All Sub-Category: All Method: All

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

	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”.



Filter Tab:

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

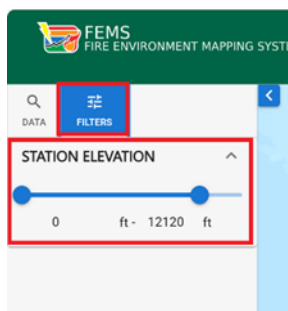


Table Option

Navigating Field Sample Tables

To View Field Sample Tables:

1. Select the “Tables” tab in the banner.

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 the “View Table” button.

DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
07/02/2025	86.00%	DOUGLAS FIR		
07/02/2025	195.00%	FEDERAL ROAD		
07/02/2025	236.00%	SAWTOOTH MOUNTAIN DC		
07/02/2025	93.00%	FIR, SUBALPINE		
07/01/2025	22.00%	1000 HOUR		
06/19/2025	92.00%	FIR, SUBALPINE		
06/19/2025	217.00%	SAWTOOTH MOUNTAIN DC		
06/19/2025	83.00%	DOUGLAS FIR		
06/19/2025	16.00%	1000 HOUR		

- The table will display the data for the current year.
- Use of the calendar feature to display additional data.
- The use of additional filters will provide views of specific data.

DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
06/05/2024	118.00%	FIR, SUBALPINE		
06/05/2024	7.00%	1000 HOUR		
06/05/2024	120.00%	DOUGLAS-FIR		
06/05/2024	114.00%	SAUGBRUSH, MOUNTAIN BIG		
07/16/2024	181.00%	SAUGBRUSH, MOUNTAIN BIG		
07/16/2024	8.00%	1000 HOUR		
07/16/2024	121.00%	FESCUE, IDAHO		
07/16/2024	94.00%	FIR, SUBALPINE		
07/16/2024	91.00%	DOUGLAS-FIR		
07/11/2024	9.00%	1000 HOUR		

To View Field Sample Site Metadata

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

DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
07/02/2025	86.00%	DOUGLAS-FIR		
07/02/2025	195.00%	FESCUE, IDAHO		

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

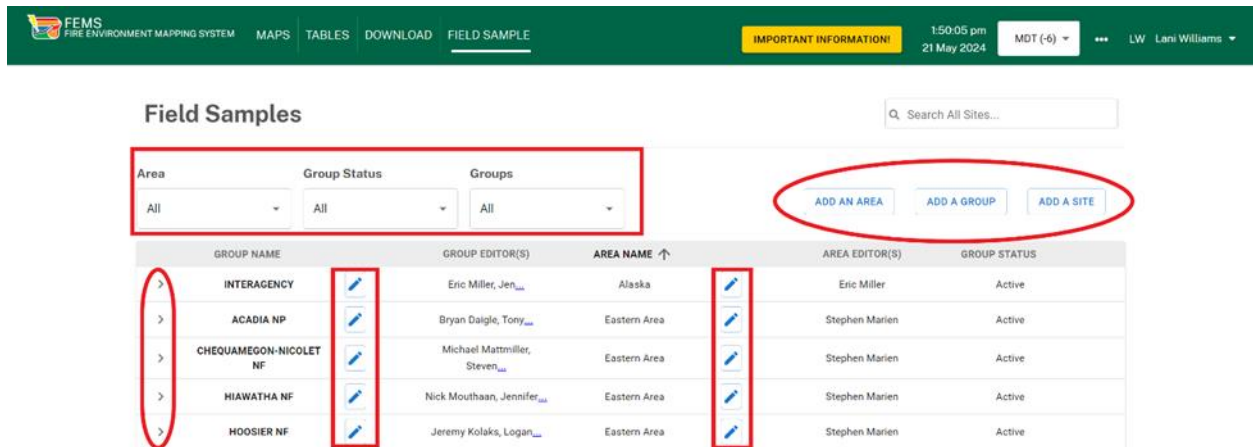
DATE	SAMPLE AVG VALUE	TYPE	SUB-CATEGORY	METHOD
07/02/2025	86.00%	DOUGLAS-FIR		
07/02/2025	195.00%	FESCUE, IDAHO		

Program Administration

1. Sign into FEMS and Proceed to the Field Sample tab.
2. Click on the “Field Sample” tab.



3. Field Sample 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:

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


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[IMPORTANT INFORMATION!](#)

1:10:54 pm
 4 Mar 2024

MST (-7)

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[LW](#)
[Lani Williams](#)

Area
 All

Group Status
 All

Groups
 All

ADD AN AREA

ADD A GROUP

ADD A SITE

5. A popup box will appear.

Add a Group

Group Name *

Area Name *

Primary Contact
 Contact Name *

Contact Phone

Ext.

Contact Email

Position Title


[Create New Contact](#)

Cancel

Add

6. Complete the required fields.

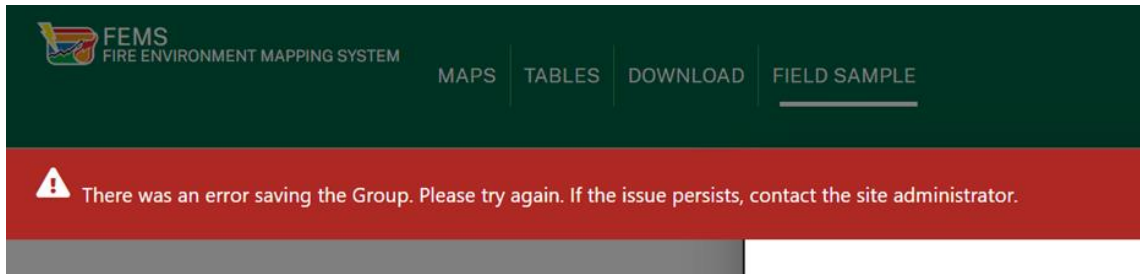
- Select “Area Name” from the dropdown list.
 - The “Primary Contact” field is a searchable field to avoid duplicate entries in the database.
 - More than one contact may be listed.
 - See “Add a New Contact” below to add a new contact.
7. When all information has been entered, click on the “Add” button.
8. A banner will appear at the top to indicate that a Group has been created.


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 The new group, Cc Test, was saved.

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



- To add another group, click on "Add a Group" again and begin a new group.

To Add a New Contact:

- Select "Add New Contact":

A screenshot of the "Add a Group" form. The form has a title "Add a Group" and a subtitle "Add a Group". It contains several input fields: "Group Name *" with the value "SW Idaho", "Area Name *" with the value "Great Basin", "Contact Name *" with a search icon and the text "Search Names", "Government Phone" with a search icon and the text "Government Phone", "Ext." with a search icon and the text "Ext.", "Government Email" with a search icon and the text "Government Email", and "Position Title" with a search icon and the text "Position Title". A red circle highlights the "Create New Contact" link in the "Contact Name *" field. At the bottom of the form is a "+ Add Contact" button. At the bottom right of the page are "Cancel" and "Add" buttons.

- You will be redirected to the "Contacts" Table.
- Click on the "ADD CONTACT" button:

Contacts

[ADD CONTACT](#)

Search Directory

Area

All

Group

All

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

Rows Per Page: 10

1-10 of 602

4. A popup will appear:

Add New Contact

Contact Name *

Government Phone

Ext.

Government Email

Position Title

Contact Location

Cancel

Add

- Fill in the requested information and select “Add”.
- The individual should now be available to add as a contact.

To Edit an Existing Contact:

- Navigate to the “Contacts” table by using the “Add A Group” icon.
- Click on the “Add A Contact” link.
- Use the dynamic search feature on the “Contacts” table:

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 10:47:57 am 29 Jul 2025 MDT (4) LW Lari Williams

Contacts

ADD CONTACT

Search Directory: Williams X Area: All Group: All

NAME	AREA	GROUP	PHONE	EMAIL
Jennifer Williams-000-000-0000- jennifer.williams@usda.gov		Colorado State Forest	303-271-4953	ambethen@co.jefferson.co.us
Kate Williams-360-890-0882-Kate.Williams@Dnr.Wa.Gov		PSICC	719-553-1634	aaron.ortega@usda.gov
Mark Williams-Mawilliams@blm.gov		NW2 MRP	253-370-3769	aaron.woodham@nps.gov
Nate Williamson-970-586-1434- Nathan_Williamson@Nps.Gov		Rancho Santa Fe	900-900-0000	Martinez@RSF-Fire.Org
Abel Martinez			900-900-0000	Martinez@RSF-Fire.Org
Abel Martinez-Firefighter	Southwest	Undefined		
Abie Carabajal				
Adam Zaharris		Whiskeytown NHA	530-524-7250	adam_zaharris@nps.gov
Adrian Padilla		BLM - Albuquerque	505-630-6393	apadilla@blm.gov
Alan Taylor			760-647-3034	ataylor@agfs.fed.us
Alex Babcock		Santa Barbara County	Undefined	ababcock@countyofsb.org

Items per Page: 10 1-10 of 607 Next

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

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 10:48:52 am 29 Jul 2025 MDT (4) LW Lari Williams

Contacts

ADD CONTACT

Search Directory: Mark Williams-mawilliams@blm.gov X Area: All Group: All

NAME	AREA	GROUP	PHONE	EMAIL
Mark Williams	Great Basin	Undefined		mawilliams@blm.gov

Items per Page: 10 1-1 of 1 Next

5. A popup box will appear.

6. Make the desired edits and click “Save”:

Edit Contact

Contact Name *

Mark Williams

Government Phone

555-555-1212

Ext.

Ext.

Government Email

mawilliams@blm.gov

Position Title

Enter Position Title

Contact Location

Enter Contact Location

Cancel Save

To Edit a Field Sample Group:

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

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MAPS TABLES DOWNLOAD FIELD SAMPLE

IMPORTANT INFORMATION! 1:31:46 pm 4 Mar 2024 MST (-7) ? Feedback About

Field Samples

Search All Sites...

Area: All Group Status: All Groups: All

ADD AN AREA ADD A GROUP ADD A SITE

GROUP NAME	AREA NAME	GROUP OWNER(S)	GROUP STATUS
> INTERAGENCY	Alaska	Eric Miller	Active
> ACADIA NP	Eastern Area	Stephen Marien	Active
> CHEQUAMEGON-NICOLET NF	Eastern Area	Stephen Marien	Active
> CHIPPEWA-SUPERIOR NF	Eastern Area	Stephen Marien	Active
> HIAWATHA NF	Eastern Area	Stephen Marien	Active
> HURON-MANISTEE NF	Eastern Area	Stephen Marien	Active
> IA-DNR	Eastern Area	Stephen Marien	Active
> MI-DNR	Eastern Area	Stephen Marien	Active
> NJ-FWS	Eastern Area	Stephen Marien	Active

2. A popup box will appear.

Edit Group

Group Name *

Acadia NP

Area Name *

Eastern Area

Primary Contact

Contact Name *

Stephen Marien

[Create New Contact](#)

Contact Phone

651-293-8446

Ext.

Ext.

Contact Email

Stephen_Marien@nps.gov

Position Title

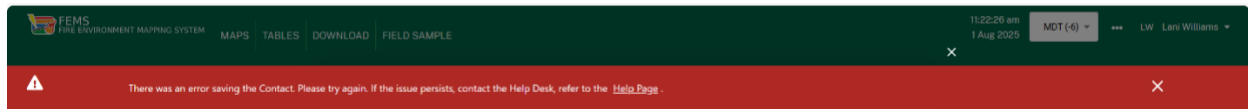
Position Title

+ Add Contact

Cancel Save

3. Edit the requested fields.
 - a. Select "Area Name" from the dropdown list.
4. Additional contacts may be added.

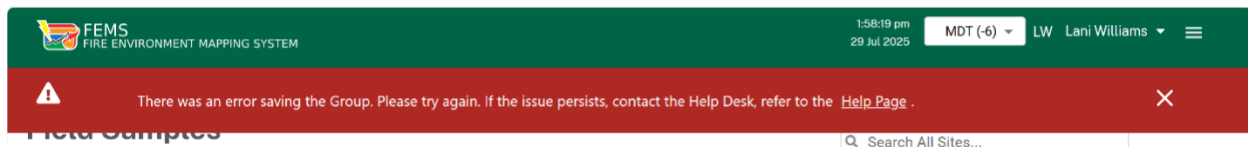
- a. The Field Sample Database will not allow duplicate contacts to be entered.
- b. If a duplicate is attempted a red error banner will appear at the top.



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.



7. Each Group must have a unique name.
 - a) If a duplicate group is entered an error message will be displayed:



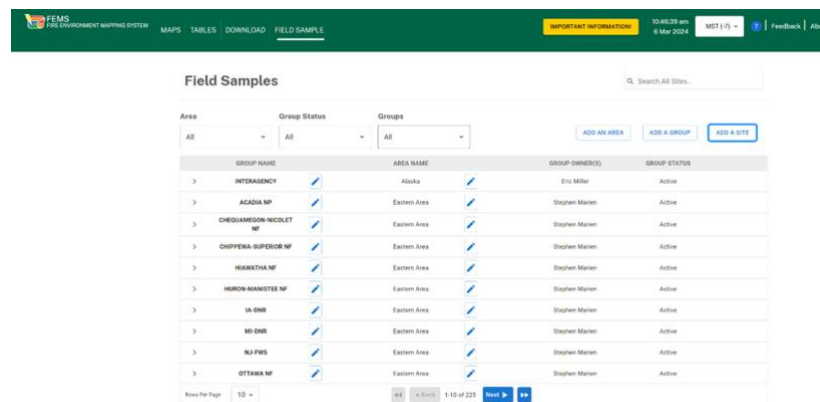
Field Sample Group Editor

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 Proceed to the Field Sample tab.
2. Click on the “Add a Site” button.



3. A popup box will appear.

The screenshot shows a web form titled "Add a Site". It contains several input fields: "Site Name*" with a placeholder "Input Site Name"; "Latitude*" and "Longitude*" each with a placeholder "Input Latitude" and "Input Longitude" respectively; "Elevation*" with a placeholder "Enter Elevation"; "Remarks" with a placeholder "Enter Remarks"; "Site Start Date*" with a placeholder "Site Start Date" and a calendar icon; and "Agency Landowner*". At the bottom right, there are two buttons: "Cancel" and "Add". A vertical scrollbar is visible on the right side of the form.

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 same "Add a Site" form, but with a calendar popup open over the "Site Start Date*" field. The calendar is for July 2025, showing days from 1 to 31. The date 30 is circled in blue. The "Site Start Date" input field has a blue border and a calendar icon. The "Agency Landowner*" field is visible below the date field.

- 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.

Enter Remarks

Site Start Date*

Site Start Date

Agency Landowner*

Search Agency Landowner

Group Name*

Search Group

Area Name*

Search Area

Status*

Active

State *

Search States

Cancel Add

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.

FEMS

FIRE ENVIRONMENT MAPPING SYSTEM

MAPS

TABLES

DOWNLOAD

FIELD SAMPLE

IMPORTANT INFORMATION

10:59:27 am
6 Mar 2024

MST (-7) -

?

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Field Samples

Q Search All Sites...

Area

Group Status

Groups

Eastern Great Ba...

All

All

ADD AN AREA

ADD A GROUP

ADD A SITE

GROUP NAME	AREA NAME	GROUP OWNER(S)	GROUP STATUS		
> ARIZONA STRIP DISTRICT	Eastern Great Basin	Shelby Law	Active		
> ASHLEY NF	Eastern Great Basin	Shelby Law	Active		
< BOISE FO	Eastern Great Basin	Shelby Law	Active		
SITE NAME	LAT/LON	ELEVATION	REMARKS	STATUS	AGENCY LANDOWNER
Blackstone	42.4411111111111105, 115.88555555555556	5000		Inactive	BLM
Hammett	42.967222222222226, 115.45694444444445	2706		Inactive	BLM
Kuna	43.442222222222222, 116.43527777777778	3060		Inactive	BLM
Simco	43.088333333333334, 115.96638888888889	3000	This site is ...	Inactive	BLM
Triangle	42.805, 116.63166666666666	5186		Inactive	BLM
Wild West	43.870555555555555, 116.7775	2593		Inactive	BLM
> BOISE NF	Eastern Great Basin	Shelby Law	Active		
> BRIDGER-TETON NF	Eastern Great Basin	Shelby Law	Active		

2. A popup will appear.

The 'Edit Site' form contains 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)

Buttons: Cancel, Save

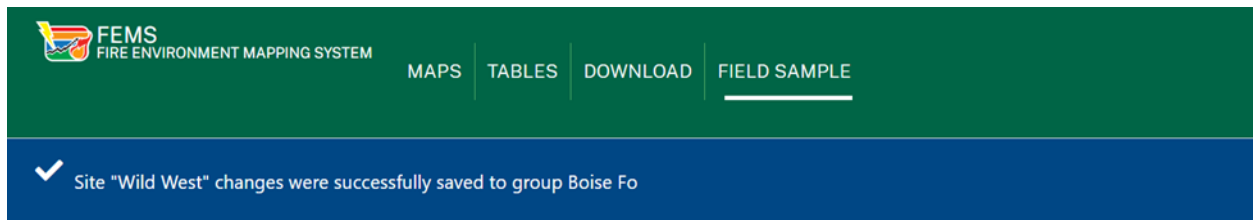
3. Make the desired edits.
- a) Remarks should pertain to the site. **Remarks related to the sample will be available in a future release.**
 - b) Start Date – available with a calendar option.
 - c) Time – select the hour on the right of the calendar.
 - d) Agency Landowner – Select from a dropdown – 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.

The 'Edit Site' form contains 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

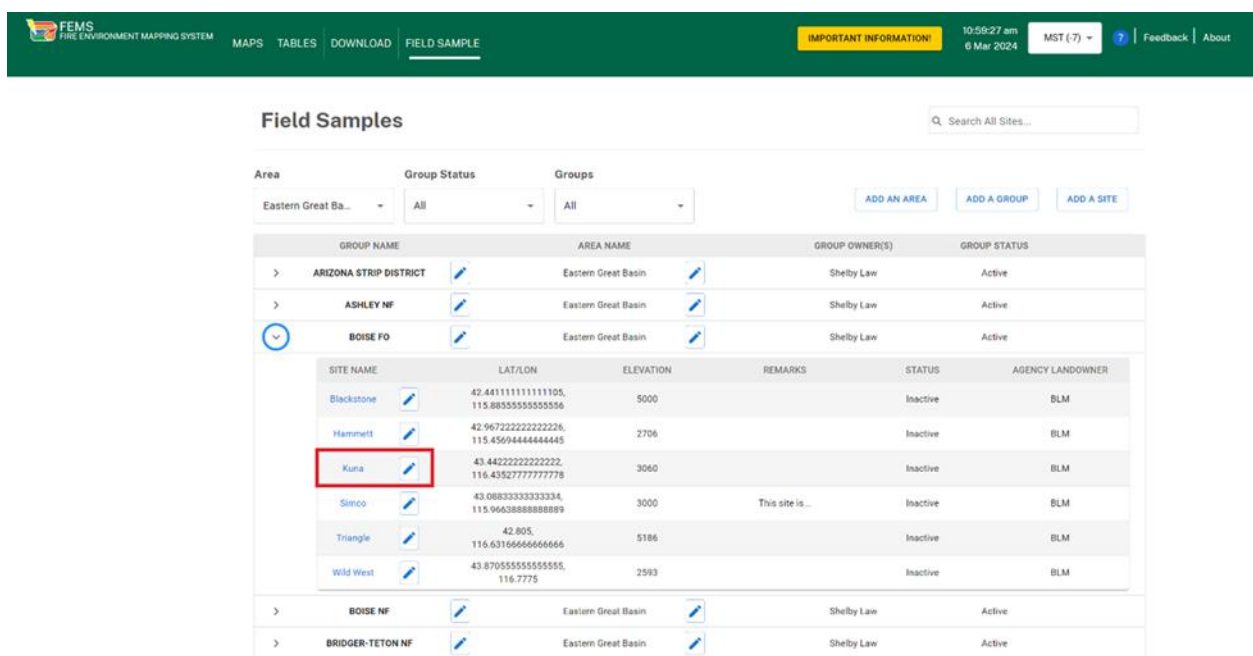
Buttons: Cancel, Save

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

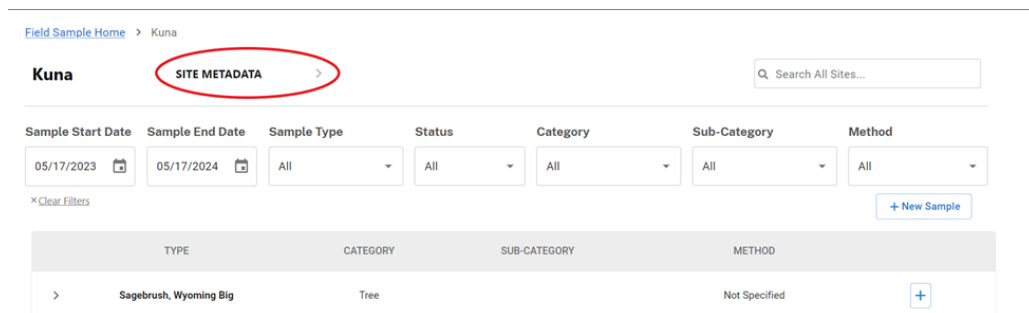


Edit from Site Metadata:

- Open the Site by clicking on the site name.



- The Site information will display.
- Click on “Site Metadata”.



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

Field Sample Home > Kuna

Kuna SITE METADATA

Search All Sites...

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

Kuna

Latitude* Longitude*

43.4422 -116.4353

Elevation*

3060

Remarks

Enter Remarks

Site Start Date*

12/31/2005

Agency Landowner*

BLM - Bureau of Land Management

Group Name*

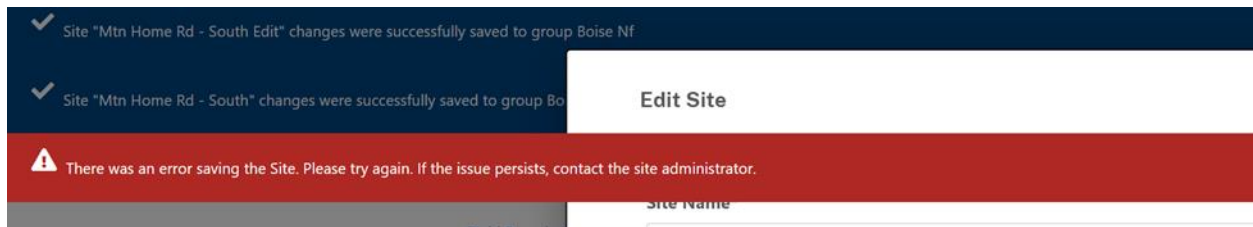
Boise FO

Cancel Save

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



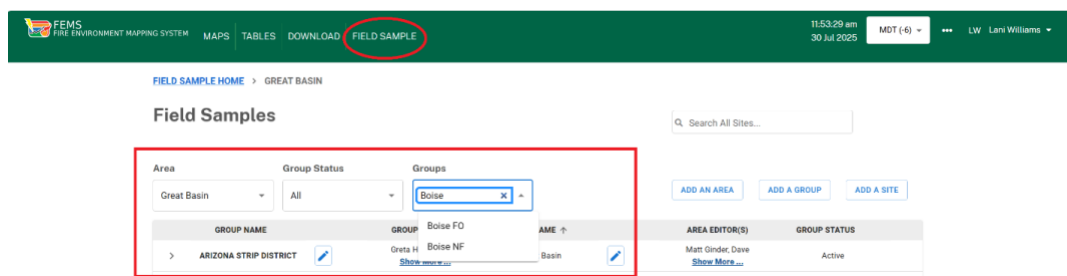
A red banner across the top may appear to indicate an error when creating or editing a site.

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

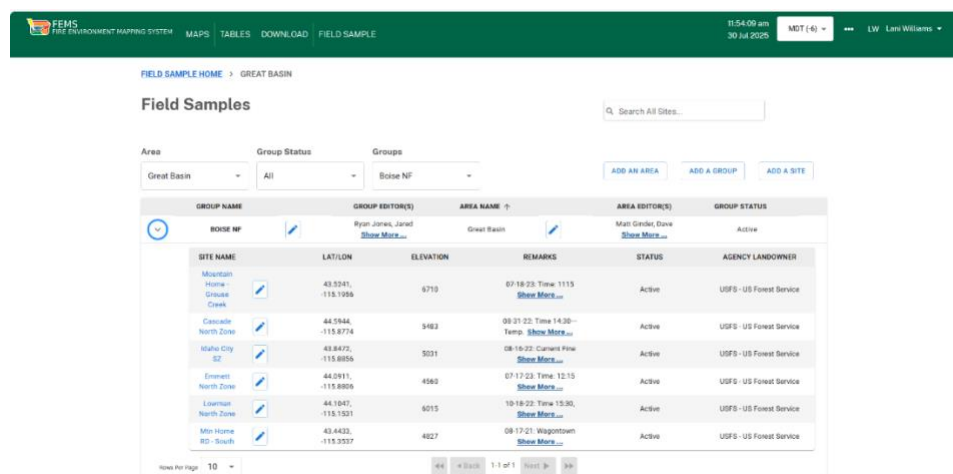
Field Sample Collector

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 the Field Sample tab.
2. Use dynamic filters to locate the desired Group.



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.

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek SITE METADATA

Search All Sites...

Sample Start Date: 07/29/2024 Sample End Date: 07/30/2025 Sample Type: All Sample Status: All Category: All Sub-Category: All Method: All

+ Clear Filters + New Sample

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 +

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.

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek SITE METADATA

Search All Sites...

Sample Start Date: 07/29/2024 Sample End Date: 07/30/2025 Sample Type: All Sample Status: All Category: All Sub-Category: All Method: All

+ Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
> 10-Hour			Gravimetric +
> 100-Hour			Gravimetric +
> 1000-Hour			Gravimetric +

2. A table will populate.

Grouse Creek

Sample Start Date: 07/29/2024 Sample End Date: 07/30/2025 Sample Type: All Sample Status: All Category: All Sub-Category: All Method: All

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

TYPE	CATEGORY	SUB-CATEGORY	METHOD
> 10-Hour	Dead		Gravimetric +
> 100-Hour	Dead		Gravimetric +
> 100-Hour	Dead		Gravimetric +
> 1000-Hour	Dead		Gravimetric +

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
> 07/14/2025	06:00 MDT	9.66 %	Submitted
> 06/30/2025	07:00 MDT	10.68 %	Submitted
> 06/18/2025	12:00 MDT	15.00 %	Submitted
> 06/09/2025	08:00 MDT	17.00 %	Submitted
> 09/26/2024	13:00 MDT	13.15 %	Submitted

Rows Per Page: 5 [Back](#) 15 of 11 [Next](#) [Forward](#)

> Ceasanthus, Redstem Shrub Gravimetric +

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.

New Sample

July 2025

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

HR: 00, 01, 02, 03, 04, 05, 06, 07

OK

Select Date & Time: MDT (-6)

Method: Gravimetric

[Cancel](#) [New Sample](#)

6. A table will open.
7. Click on “**Add Sub-Sample**”.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 12:16:13 pm 30 Jul 2025 MDT (-6) LW Lani Williams

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek SITE METADATA Search All Sites...

Sample Start Date: 07/28/2025 Sample End Date: 07/29/2025 Sample Type: 1000-Hour Sample Status: All Category: Dead Sub-Category: Method: Gravimetric

+ Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
07/29/2025	15:00 MDT	0.00 %	Draft

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE

+ Add Sub Sample Save All

Rows Per Page: All << < Back 1 of 1 Next >>

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.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 12:24:27 pm 30 Jul 2025 MDT (-6) LW Lani Williams

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek SITE METADATA Search All Sites...

Sample Start Date: 07/28/2025 Sample End Date: 07/29/2025 Sample Type: 1000-Hour Sample Status: All Category: Dead Sub-Category: Method: Gravimetric

+ Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
07/29/2025	13:00 MDT	0.00 %	Draft

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
Container #	Input Weight	Input Weight	Input Weight	8.7	Draft		
Container #	Input Weight	Input Weight	Input Weight	9.2	Draft		
Container #	Input Weight	Input Weight	Input Weight	8.9	Draft		

+ Add Sub Samples Save All

Rows Per Page: All << < Back 1 of 1 Next >>

- 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”.

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek

SITE METADATA

Search All Sites...

Sample Start Date: 07/28/2025 Sample End Date: 07/29/2025 Sample Type: 1000-Hour Sample Status: All Category: Dead Sub-Category: Method: Gravimetric

* Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE: 07/28/2025 TIME: 13:00 MDT SAMPLE AVG VALUE: 8.93 % SAMPLE STATUS: Draft Submit

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	07/30/2025	07/30/2025
0	0	0	0	9.20%	Complete	07/30/2025	07/30/2025
0	0	0	0	8.90%	Complete	07/30/2025	07/30/2025

+ Add Sub Sample + Save All

Rows Per Page: All

- 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.

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MOUNTAIN HOME - GROUSE CREEK

Mountain Home - Grouse Creek

SITE METADATA

Search All Sites...

Sample Start Date: 07/28/2025 Sample End Date: 07/29/2025 Sample Type: 1000-Hour Sample Status: All Category: Dead Sub-Category: Method: Gravimetric

* Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
1000-Hour	Dead		Gravimetric

DATE: 07/28/2025 TIME: 13:00 MDT SAMPLE AVG VALUE: 8.93 % SAMPLE STATUS: 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	07/30/2025	07/30/2025
0	0	0	0	9.20%	Complete	07/30/2025	07/30/2025
0	0	0	0	8.90%	Complete	07/30/2025	07/30/2025

+ Add Sub Sample + Save All

Rows Per Page: All

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. The top navigation bar includes links for MAPS, TABLES, DOWNLOAD, and FIELD SAMPLE. The current page is titled 'Mtn Home RD - South' under the 'SITE METADATA' section. Below this, there are filters for Sample Start Date (07/29/2024), Sample End Date (07/30/2025), Sample Type (All), Sample Status (All), Category (All), Sub-Category (All), and Method (All). A red circle highlights the '+ New Sample' button in the top right corner of the table. The table itself has columns for TYPE, CATEGORY, SUB-CATEGORY, and METHOD, with three rows of data: Douglas-Fir (Tree, Gravimetric), Ninebark, Pacific (Shrub, Gravimetric), and Pine, Ponderosa (Tree, Gravimetric).

2. A popup will appear.

The screenshot shows the 'New Sample' popup form. The form is titled 'New Sample' and contains the following fields:

- Type * (Search icon, placeholder: Select Type)
- Category * (Search icon, placeholder: Select Category)
- Sub-Category (Search icon, placeholder: Select Sub-Category)
- Sample Date & Time * (Search icon, placeholder: Select Date & Time, MDT (-6) calendar icon)
- Method (Search icon, placeholder: Select Method)

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

- Fill in the required items.

New Sample

Type *

Category *

Sub-Category

Sample Date & Time *

Method

Cancel New Sample

- Click on the “New Sample” box.
- The table will appear showing the new sample type.
- Click on the “+ Add Sub-Sample”.
- The table will expand to enter the new sample data.
 - Multiple Sub-Samples” may be added at the same time.

FEMS FIRE ENVIRONMENT MAPPING SYSTEM MAPS TABLES DOWNLOAD FIELD SAMPLE 12:48:14 pm 30 Jul 2025 MDT (-6) LW Lani Williams

FIELD SAMPLE HOME > GREAT BASIN > BOISE NF > MTN HOME RD - SOUTH

Mtn Home RD - South SITE METADATA

Search All Sites...

Sample Start Date Sample End Date Sample Type Sample Status Category Sub-Category Method

07/27/2025 07/28/2025 Aspen, Quaking All Tree

+ Clear Filters + New Sample

TYPE	CATEGORY	SUB-CATEGORY	METHOD
Aspen, Quaking	Tree		

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
07/28/2025	15:00 MDT	0.00 %	Draft

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
Container #	Input Weight	Input Weight	Input Weight	Input Value	Draft		

+ Add Sub Sample Save All

Rows Per Page: All

- Enter the sample data.
 - Enter weights or value, you cannot enter both.
 - Weights are limited to two (2) decimal places.
 - The Sample Average Value will be rounded where necessary.
 - 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.

The screenshot shows the FEMS Fire Environment Mapping System interface. The top navigation bar includes 'FEMS FIRE ENVIRONMENT MAPPING SYSTEM', 'MAPS', 'TABLES', 'DOWNLOAD', and 'FIELD SAMPLE'. The user is logged in as 'LW Lani Williams' on '30 Jul 2025' at '12:52:33 pm'. The site is 'Mtn Home RD - South'. The sample data table shows a sample with a status of 'Draft'.

TYPE	CATEGORY	SUB-CATEGORY	METHOD
Aspen, Quaking	Tree		

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
07/28/2025	15:00 MDT	19.90 %	Draft

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
0	0	0	0	17.60%	Complete	07/30/2025	07/30/2025
0	0	0	0	21.20%	Complete	07/30/2025	07/30/2025
0	0	0	0	20.90%	Complete	07/30/2025	07/30/2025

- 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”.

The screenshot shows the FEMS Fire Environment Mapping System interface. The top navigation bar includes 'FEMS FIRE ENVIRONMENT MAPPING SYSTEM', 'MAPS', 'TABLES', 'DOWNLOAD', and 'FIELD SAMPLE'. The user is logged in as 'LW Lani Williams' on '30 Jul 2025' at '12:53:17 pm'. The site is 'Mtn Home RD - South'. The sample data table shows a sample with a status of 'Submitted'.

TYPE	CATEGORY	SUB-CATEGORY	METHOD
Aspen, Quaking	Tree		

DATE	TIME	SAMPLE AVG VALUE	SAMPLE STATUS
07/28/2025	15:00 MDT	19.90 %	Submitted

CONTAINER #	WET WEIGHT(g)	DRY WEIGHT(g)	TARE WEIGHT(g)	VALUE	SUB SAMPLE STATUS	ENTERED DATE	LAST MODIFIED DATE
0	0	0	0	17.60%	Complete	07/30/2025	07/30/2025
0	0	0	0	21.20%	Complete	07/30/2025	07/30/2025
0	0	0	0	20.90%	Complete	07/30/2025	07/30/2025