Spatial Fire Planning Implementation Guide

Interagency, Wildland Fire Research, Development, and Application (WFM RD&A) Program
Last Update: 9/30/2025

Overview

This guide outlines the Spatial Fire Planning process and how it can be implemented successfully to assist with incident decision-making and reporting.

What is Spatial Fire Planning (SFP)

Spatial Fire Planning (SFP) is a geospatial-centric planning process that allows wildland fire community members to manage National Environmental Policy Act (NEPA) approved guidance from Land, Resource, and Fire Management Plans (LRMP/FMP) as well as other guidance related to local values of interest in a spatial context.

By visually depicting the spatial extent to which fire planning language and guidance applies, SFP simplifies the incident decision-making process and ensures that fire management decisions are anchored to Land, Resource, and Fire Management Plans.

SFP – Past Management

From its inception in 2009 to the decommissioning of the classic version of the application in 2025, the Wildland Fire Decision Support System (WFDSS) allowed users to manage fire planning language and associated shapes through one of two planning methods:

- The Fire Management Unit (FMU) Planning Process: Introduced in 2009 with the release of the WFDSS application.
- The Spatial Fire Planning (SFP) Process: Introduced in 2014.

Regardless of the planning process selected by the user, other unit shapes and management requirements were managed at the administrative or local unit level, and strategic objectives and Fire Management Units (FMU) were managed at a national scale. Updating strategic objectives and FMUs was a complex and time intensive process as data management responsibilities were split between the field, agency leads, the WFM RD&A data team, and the WFDSS development team. Managing fire planning language and shapes within the WFDSS application required custom code development and restricted data to use within the system.

SFP - New Management

Advances in technology over the past decade have opened up opportunities for the fire community to make major shifts in how fire planning data are stored, managed, and used. Through discussions with WFDSS users, fire planning subject matter experts, and geospatial data subject matter experts; and in collaboration with the NWCG Fire Planning Committee (IFPC), and the NWCG Geospatial Subcommittee (GSC); WFM RD&A staff have developed a collection of new SFP data services and a SFP data editing application within the NIFC ArcGIS Online Organization (NIFC AGOL Org) for use in the 2025 fire season and onward.

Processes such as entering and managing fire planning language, which had been previously done through WFDSS, are now to be completed through the data editing application hosted on the NIFC ArcGIS Online Organization. Agency fire planning and geospatial personnel will now own and manage the fire planning language and data in the new SFP data services, and WFDSS will consume the data needed for wildland fire decision support.

This shift in data management has major advantages in terms of efficiency, data usability, and maintenance. Advantages include:

- **Less Operations and Maintenance (O&M) -** The WFDSS application will not need to maintain a SFP module, leading to more rapid development of core decision support capability and reduced maintenance cost over time.
- **Improved Data Accessibility -** Fire planning shapes and language hosted within the SFP data services on the NIFC AGOL Org will be accessible to users outside of WFDSS, including those who need to view fire planning information in mobile applications, Story Maps, Spatial Fire Management Plans, wildland fire applications, and in desktop GIS software.
- **Direct User Access to Language and Data -** WFM RD&A staff will not be "between" users and their data, allowing users to make changes more quickly following shifts in land and resource management plan direction or agency policy.
- **Better Governance Options -** Decoupling the SFP data from the WFDSS application paves the way for the transfer of data stewardship to a larger enterprise entity if deemed advantageous in the future.
- **Improved Consistency -** The approach to managing fire planning data and shapes will be consistent across all types of fire planning shapes.

New SFP Management Process

Primary Shape Types

In the new Spatial Fire Planning process, fire planning language can be tied to one of four shape types.

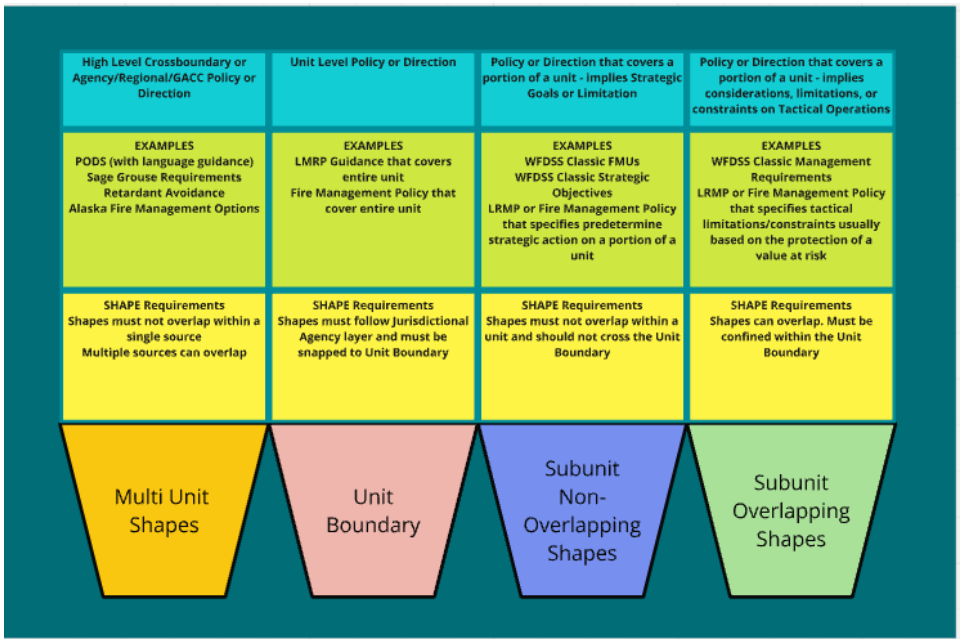
Unit Boundaries (UB): A set of shapes that reflect the administrative boundary of a jurisdictional unit such as a National Forest, National Park, or BLM District. Language tied to these shapes is intended to apply everywhere on the unit. WFDSS called these shapes the "Unit Outline" and applied fire planning language as "Unit Wide Objectives" to these polygons.

Sub-Unit, Non-Overlapping Shapes (SUNOS): A set of non-overlapping shapes contained within a jurisdictional unit boundary that represent land where fire planning language applies but does not overlap. Examples include situations where one set of language applies to WUI areas, and another set of language applies to backcountry areas. WFDSS called these shapes "FMU" or "Strategic Objective" shapes.

Sub-Unit, Overlapping Shapes (SUOS): A set of shapes that are within a jurisdictional unit boundary that can overlap each other and the other types of shapes (UB, SUNOS). Examples include fire planning language that applies to specific pieces of ground, such as a nesting habitat or a specific value at risk, but do not change the prevailing fire management language associated with

a sub-unit, non-overlapping shape or unit boundary shape. WFDSS called these shapes, management requirement shapes.

Multi-Unit Shapes (MUS): These shapes represent multi-unit management direction, where the boundaries in which the direction applies crosses jurisdictional unit boundaries. Examples include statewide fire management agreements like the Alaska Interagency Fire Management Plan, Potential Operation Delineations (PODs), or direction from multi-unit land/resource management plan amendments. WFDSS implemented this by adding specific layers like the Alaska Fire Management Options and BLM Sage Grouse Management Requirements layers. Rather than managing these as individual layers, this new SFP process will grant permissions to appropriate personnel who can manage these regional or multi-unit shapes to ensure that data is accurate and current.



Secondary Shape Types

Other Unit Shapes: Other Unit shapes are points, lines, or polygons that contain information about local values and are used to assist with incident management. Other Unit shapes uploaded into WFDSS prior to 01/06/2025 (as part of the old SFP process) were exported and are now hosted on the NIFC AGOL Org.

Misfit Shapes/Language: SFP data created and managed through the old management process (within WFDSS) were migrated over to the new SFP process in hopes of simplifying the transition for end-users. However, a collection of the data could not be migrated as it did not meet minimum transfer criteria. The data that failed to migrate over are classified as misfits and are now hosted in their own service within the NIFC AGOL Org. The misfit service includes:

- Shapes and language that were inactive or never activated in WFDSS
- Active shapes and language that had invalid Unit IDs
- Active shapes that had no associated language
- Active language that had no associated shapes

- Active language that exceeded 8000 characters

Roles and Responsibilities

There are four essential roles within the new SFP process:

SFP Viewers – A group of users that only need access to national-level, organizationally-shared, non-editable, sync-enabled views of SFP data to facilitate organizational web mapping needs. A NIFC AGOL account is needed for this role.

SFP Data Managers – A group of users that are responsible for adding and editing SFP language and shape attribution (categories, labels, descriptions) within the SFP Experience Builder application. They are also responsible for performing quality assurance and quality control (QA/QC) on the SFP language and shape attributions they added or manipulated. This role is equivalent to the Data Manager role within WFDSS. To obtain this role, a user must have a NIFC AGOL account with at least Data Editor access. Typically, a local fire planner would serve in this capacity.

SFP Shape Editors – A group of highly skilled GIS users that are responsible for adding, editing, and deactivating SFP shapes. They are also responsible for performing quality assurance and quality control (QA/QC) on the spatial data they added or manipulated. The QA/QC process includes identifying gaps, overlaps, and slivers in the SFP shapes. SFP Editors must have a NIFC AGOL account with at least Data Editor access and must have experience with ArcGIS Pro and editing services using an Offline Copy. Typically, a fire GIS person would serve in this role.

SFP Approvers – A group of users that are responsible for approving SFP shapes created, edited, or deactivated by SFP Shape Editors. SFP Approvers must have a NIFC AGOL account with at least Data Editor access. Typically, a national or regional fire planner would serve in this role.

Accessing the SFP Experience Builder and Services

Step 1: Sign into the NIFC ArcGIS Online Organization

The new Spatial Fire Planning data editing application and data services are hosted on the NIFC ArcGIS Online Organization (NIFC AGOL Org). To gain access, one must first login with their NIFC AGOL account credentials. If one does not have a NIFC AGOL account, one may be requested here: NIFC Org New Account Request Form.

- For information on filling out the NIFC AGOL Org Account Request form, visit the NIFC AGOL form topic.
- For questions regarding the NIFC AGOL Org, contact wildfireresponse@firenet.gov and allow 24 business hours for a response.
- If planning on serving as a SFP Data Manager, Shape Editor, or Approver, make sure you are assigned the Data Editor role within the NIFC AGOL Org at the very minimum. For more information on the available roles within the NIFC AGOL Org, read through the Rules of Behavior and Publishing Guidelines.

Step 2: Establish Correct SFP Group Access

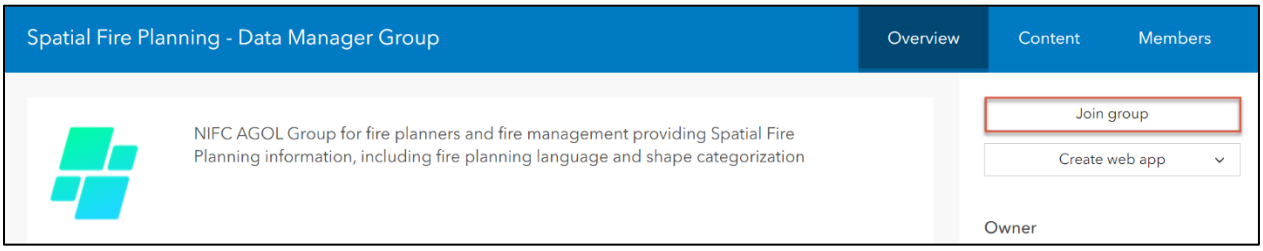
Once a NIFC AGOL Org account is established, additional group access might be required depending on one's role in the SFP process. If a user plans to only reference national SFP data, no

additional group access is needed (SFP Viewer). If a user plans to contribute to the development, management, and/or approval of SFP shapes and language, additional group access is needed (SFP Data Manager, SFP Editor, SFP Approver). The table below outlines the roles assigned to each AGOL group. Its important to understand the roles needed, before requesting access to a SFP AGOL group.

		NIFC AGOL Org - SFP Groups			
		SFP Viewer (Any NIFC AGOL Org Member)	Spatial Fire Planning - Data Manager Group	Spatial Fire Planning - Shape Editor Group	Spatial Fire Planning - Approver Group
Roles	View National SFP Data	x	x	x	x
	Add/Edit Language		x	x	x
	Activate/Deactivate Language		x	x	x
	Add/Edit Shape Categories (CO/SA)		x	x	x
	Add/Edit Shape Labels		x	x	x
	Add/Edit Shape Descriptions		x	x	x
	Create New Shapes			x	x
	Edit Existing Shapes			x	x
	Activate/Deactivate Shapes			x	x
	Approve Shapes				x

To request access to the correct SFP AGOL group(s), utilize the links in the table below. Groups exist for both the training and production versions of the SFP process. Once navigated to a particular group's home page, select 'Join Group' on the right side of the browser window. It is recommended that those requesting Data Manager, Shape Editor, or Approver privileges have experience with editing data in feature services. WFM RD&A or approved agency staff will review the access request and will approve if deemed appropriate. Please allow 24 business hours for a response.

SFP AGOL Group	Training Access Links	Production Access Links
SFP Viewer	No Access Request Needed Once NIFC Org Account Established	
Spatial Fire Planning - Data Manager Group	https://nifc.maps.arcgis.com/home/group.html?id=475acae405ab4ba49352f7c96e6823b4	https://nifc.maps.arcgis.com/home/group.html?id=1002df3ef04a4e11b3a23c2dbb0a535f
Spatial Fire Planning - Shape Editor Group	https://nifc.maps.arcgis.com/home/group.html?id=1e9bf27e2ada4351a1fc1446f9fe8ba3	https://nifc.maps.arcgis.com/home/group.html?id=cb3f8a75c87040e48cf8de3c5826a1f6
Spatial Fire Planning - Approver Group	https://nifc.maps.arcgis.com/home/group.html?id=fe1976e098e141369b5ce64cf72e7dc4	https://nifc.maps.arcgis.com/home/group.html?id=41cf07868234418585eeb366f517cd7f



Step 3: Access the SFPS Applications and Data Services

Once proper group access is granted, one can navigate to the training and production SFP data services and editing applications using the table below:

Item Name	Item Type	Item Description	NIFC Sharing	SFP Group Access	Item Description URL	Rest Endpoint	Service Settings	Service View Filters
ISFPS Hub	Hub Site	A landing page for all SFP content.	Organization	Viewer, Data Manager, Shape Editor, Approver	https://isfps-nifc.hub.arcgis.com/			
SFPS Training App	Experience Builder	An experience builder application used to view SFP language and shapes; edit SFP language; edit SFP shape categories, labels, and descriptions; and approve SFP shapes in the training environment.	Organization	Viewer, Data Manager, Shape Editor, Approver	https://experience.arcgis.com/experience/fd5ba5e9d8144747b8dec6b475027c9a			
Training_WFMRDA_SFP_ReadOnly	Feature Service View	A read only feature service that depicts SFP shapes and language available in the training environment.	Organization	Viewer, Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=a690e358ad0342338aba501db0d81892	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Training_WFMRDA_SFP_ReadOnly/FeatureServer	***Edit Disabled*** ***Sync Enabled***	
Training_WFMRDA_SFP_EditLanguage	Feature Service View	An edit feature service that allows users to edit SFP language available in the training environment. It is referenced within the SFP Training App via the 'Edit Language' tab.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=833b3dc72d3341cebca10c2ee4dda96c	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Training_WFMRDA_SFP_EditLanguage/FeatureServer	***Edit Enabled*** (Add, Update – Attributes and Geometry) ***Sync Disabled***	
Training_WFMRDA_SFP_EditShapeAttributes	Feature Service View	An edit feature service that allows users to edit SFP shape categories, labels, and descriptions available in the training environment. It is referenced within the SFP Training App via the 'Edit Categories' tab.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=ec9d1d6d985d47f184688874e1775441	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Training_WFMRDA_SFP_EditShapeAttributes/FeatureServer	***Edit Enabled*** (Add, Update – Attributes Only) ***Sync Disabled***	
Training_WFMRDA_SFP_EditShapeGeometry	Feature Service View	An edit feature service that allows users to edit SFP shape geometry available in the training environment. It should be referenced within ArcGIS Pro.	Groups	Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=28efb3a7aef94c53998e6ab51ca307a3	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Training_WFMRDA_SFP_EditShapeGeometry/FeatureServer	***Edit Enabled*** (Add, Delete, Update – Attributes and Geometry) ***Sync Enabled***	
Training_WFMRDA_SFP_ShapeApproval	Feature Service View	An edit feature service that allows users to approve SFP shapes referenced within the SFP Training App via the 'Shape Approval' tab.	Groups	Approver	https://nifc.maps.arcgis.com/home/item.html?id=c490dfeecc694fcd884fd369450d9cc9	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/Training_WFMRDA_SFP_ShapeApproval/FeatureServer	***Edit Enabled*** (Update – Attributes Only) ***Sync Disabled***	
SFPS Production App	Experience Builder	An experience builder application used to view SFP language and shapes; edit SFP language; edit SFP shape categories, labels, and descriptions; and approve SFP shapes in the production environment.	Organizaiton	Viewer, Data Manager, Shape Editor, Approver	https://experience.arcgis.com/experience/f2b1a5d2e12d42638ed1198cfd5d0352			
WFMRDA_SpatialFirePlanning_ReadOnly	Feature Service View	A read only feature service that depicts SFP shapes and language available in the	Organization	Viewer, Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=134d1f69f8bb41ba97d80d05d1ccac2c	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SpatialFire	***Edit Disabled***	***Fire Planning Shapes*** 'Deactivation Date' is Null

		production environment.				Planning_ReadOnly/FeatureServer	***Sync Enabled***	AND 'Activation Date' is Not Null AND 'Approved' is Yes **Fire Planning Language** 'Deactivation Date' is Null AND 'Activation Date' is Not Null
WFMRDA_SpatialFirePlanning_EditLanguage	Feature Service View	An edit feature service that allows users to edit SFP language available in the production environment. It is referenced within the SFP Production App via the 'Edit Language' tab.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=e00261518181477fa087a7610d403898	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SpatialFirePlanning_EditLanguage/FeatureServer	***Edit Enabled*** (Add, Update – Attributes Only) ***Sync Enabled***	
WFMRDA_SpatialFirePlanning_EditShapeAttributes	Feature Service View	An edit feature service that allows users to edit SFP shape categories, labels, and descriptions available in the production environment. It is referenced within the SFP Production App via the 'Edit Categories' tab.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=1bced192a3264257b2a54e0ba50cdba3	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SpatialFirePlanning_EditShapeAttributes/FeatureServer	***Edit Enabled*** (Update – Attributes Only) ***Sync Disabled***	
WFMRDA_SFP_EditShapeGeometry	Feature Service View	An edit feature service that allows users to edit SFP shape geometry available in the production environment. It should be referenced within ArcGIS Pro.	Groups	Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=8a73d92b2b974cf496e2c139d89ed6f7	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SpatialFirePlanning_EditShapeGeometry/FeatureServer	***Edit Enabled*** (Add, Update – Attributes and Geometry) ***Sync Enabled***	
WFMRDA_SpatialFirePlanning_ShapeApproval	Feature Service View	An edit feature service that allows users to approve SFP shapes referenced within the SFP Production App via the 'Shape Approval' tab.	Groups	Approver	https://nifc.maps.arcgis.com/home/item.html?id=ac5c533e5a554faeaa59da8169a05feb	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SpatialFirePlanning_ShapeApproval/FeatureServer	***Edit Enabled*** (Add, Update – Attributes and Geometry) ***Sync Disabled***	
WFMRDA_SpatialFirePlanning_Misfits_ReadOnly	Feature Service View	A read only feature service that depicts planning language and shapes collected through the old planning method in WFDSS that were not transferred over to the new SFP Services because they did not meet the minimum transfer criteria.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=43b8771d8182436eb09afcc62509d00d	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SFP_Misfits_ReadOnly/FeatureServer	***Edit Disabled*** ***Sync Disabled***	
WFMRDA_SFP_Misfits_Edit	Feature Service View	An edit feature services that allows users to flag when misfit shapes and language have been manually transferred over to the new SFP Services.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=af301b6688da422b973f3d390ff9486e	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SFP_Misfits_Edit/FeatureServer	***Edit Enabled*** (Add, Update – Attributes Only) ***Sync Disabled***	
WFMRDA_SFP_OtherUnitShapes_ReadOnly	Feature Service View	A read only feature service that depicts Other Unit shapes exported from WFDSS Classic.	Organization	Viewer, Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=476a33903b374f7f934a423c7d1199f5	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SFP_OtherUnitShapes_ReadOnly/FeatureServer	***Edit Disabled*** ***Sync Disabled***	**OtherUnitShapes_point/line/poly** DeactivationDate is blank
WFMRDA_SFP_OtherUnitShapes_Edit	Feature Service View	An edit feature service that allows a user to make edits to Other Unit shapes exported from WFDSS Classic.	Groups	Data Manager, Shape Editor, Approver	https://nifc.maps.arcgis.com/home/item.html?id=92839e4e795a434899c6146cfe08d40f	https://services3.arcgis.com/T4QMspbfLg3qTGWY/arcgis/rest/services/WFMRDA_SFP_OtherUnitShapes_Edit/FeatureServer	***Edit Enabled*** (Add, Delete, Update – Attributes Only)	

							Sync Disabled	

Training and Production Interfaces

In the new SFP process, two application environments are available to users:

- ***The training environment*** which serves as a place in which users can familiarize themselves with SFP data and the editing process. SFP data stored within the training environment is not operational and is for training purposes only.
- ***The production environment*** which serves as the fully functional system in which live SFP data is stored, managed, and shared with end-users and wildland fire applications for operational use.

Data Service Components

The four main categories of SFP views (ReadOnly, EditLanguage, EditShapeAttributes, and EditShapeGeometry) have the same underlying data components, a polygon layer titled FirePlanningShapes, and a one-to-many relationship table titled FirePlanningLanguage.

The FirePlanningShapes layer includes the spatial extents in which fire planning language/guidance apply. The dataset includes the four primary SFP shape types.

- Unit Boundaries (Unit)
- Sub-Unit, Non-Overlapping Shapes (SNOS)
- Sub-Unit, Overlapping Shapes (SOS)
- Multi-Unit Shapes (Multi)

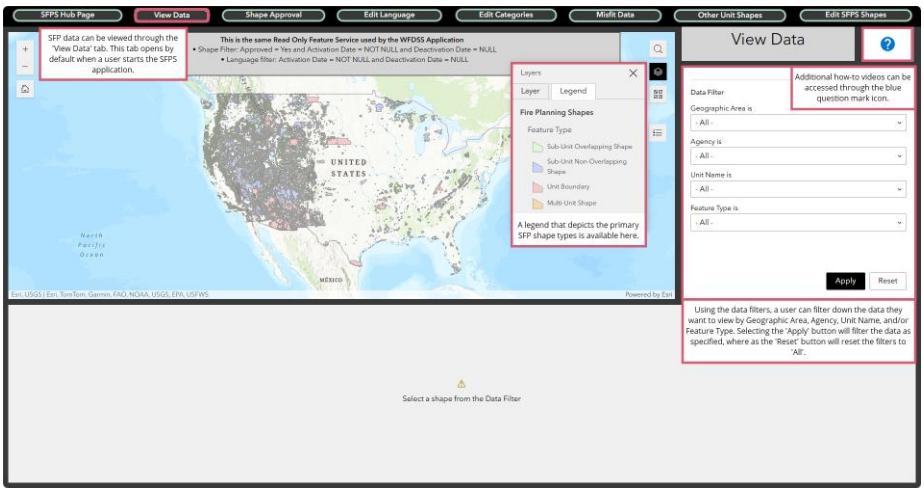
The FirePlanningLanguage table includes approved guidance from Land, Resource, and Fire Management Plans as well as other guidance related to local values of interest. This table is a one-to-many relationship table, which allows for the depiction of complex spatial relationships. In this case, this one-to-many relationship allows users to track when many pieces of language are assigned to a single SFP shape. The shapes available within the FirePlanningShapes layer are linked to language records in the FirePlanningLanguage table through the GlobalID and fsglobalid fields.

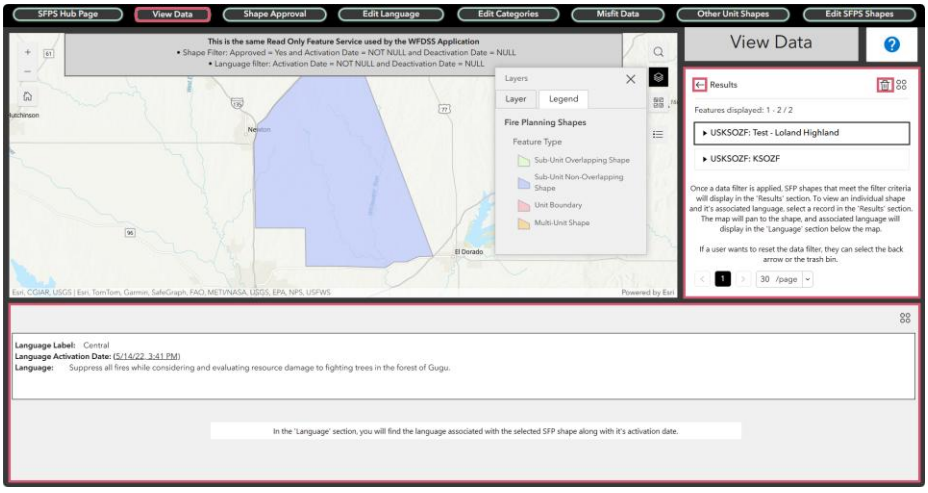
Viewing Spatial Fire Planning Data

SFP data can be viewed using GIS desktop software (like ArcGIS Pro), cloud-based mapping solutions (like ArcGIS Online), or within the SFPS App. The read-only SFP feature services include the following subset of shapes and language:

- SFP Shapes where 'Approved' = Yes, 'Deactivation Date' is null, and 'Activation Date' is not null
- SFP language where 'Activation Date' is not null and 'Deactivation Date' is null

Viewing SFP Data in the SFPS App





Editing Spatial Fire Planning Data

Utilizing the Esri software suite, users can edit SFP shapes and languages. The editing process is different depending on a users SFP role and the data component in need of edits. The table below outlines the appropriate editing platform to use depending on ones assigned role in SFP and the edits that need to occur. The table includes links to instructional videos and documentation that guide users through the appropriate editing processes.

Instructional Videos		SFP Group		
		Spatial Fire Planning - Data Manager Group	**Spatial Fire Planning - Shape Editor Group**	**Spatial Fire Planning - Approver Group**
Role	**Add** Language	SFPS App (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)
	Edit Language	SFPS App (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)

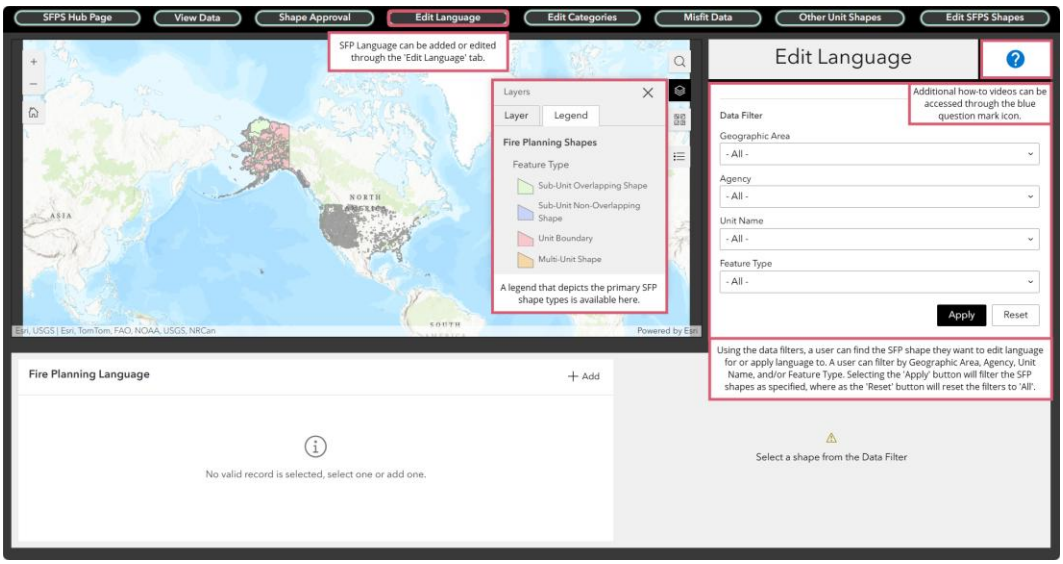
	Edit Shape Categories Shape Labels Shape Descriptions	SFPS App (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)	SFPS App (Video/Document) ArcGIS Pro (Video/Document)
	Create/Edit Shapes		ArcGIS Pro (Video 1, Video 2 /Document)	ArcGIS Pro (Video 1, Video 2 /Document)
	Approve Shapes			SFPS App (Video/Documentation) ArcGIS Pro (Video/Document)

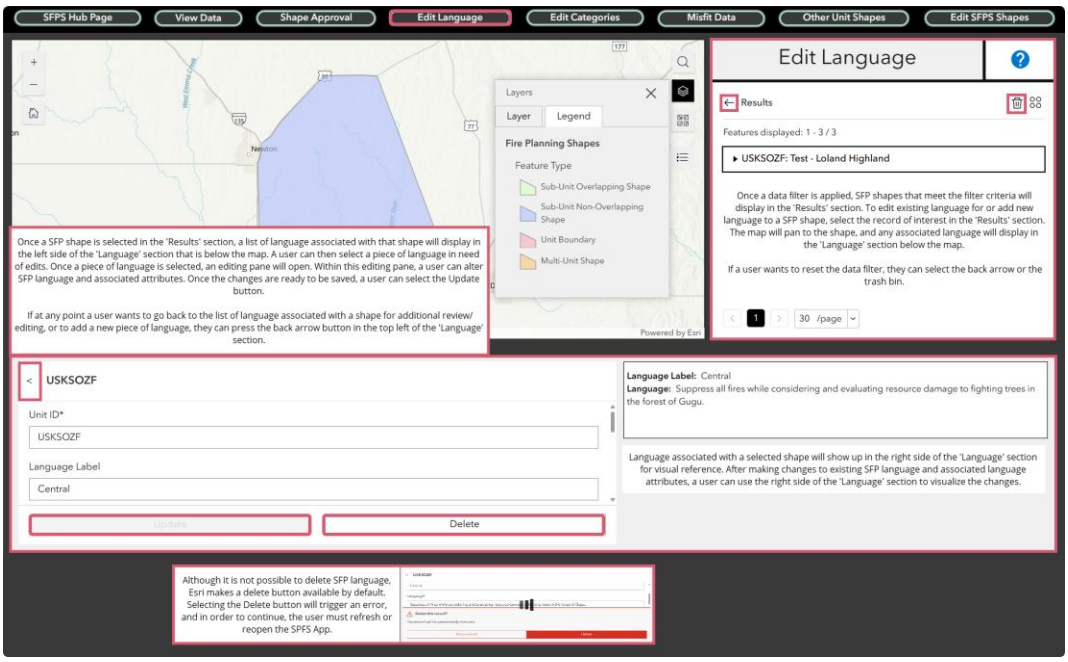
Adding and Editing Spatial Fire Planning Language

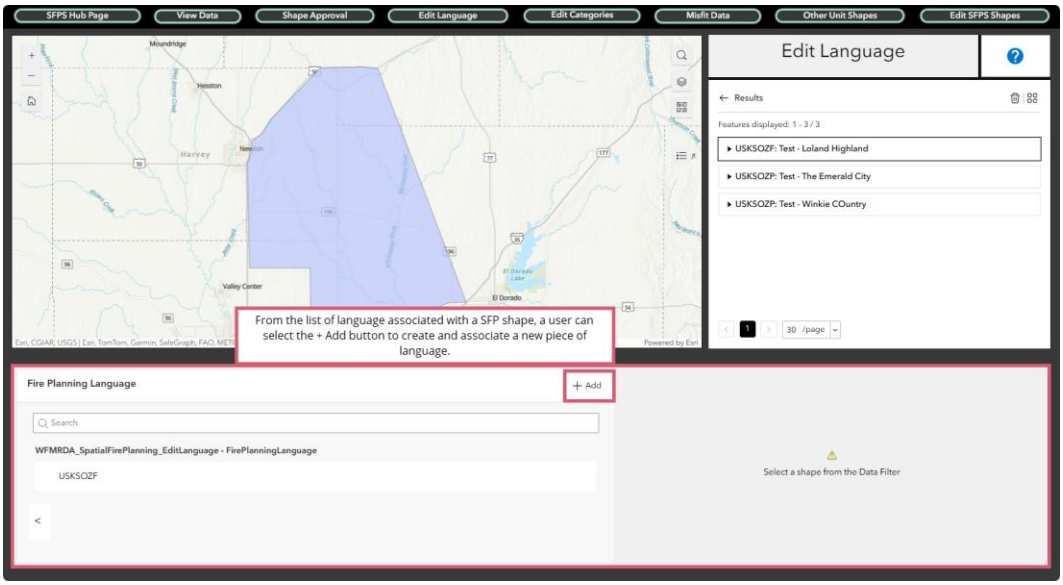
New SFP language can be added and existing SFP language can be edited through either the SFPS App or through ArcGIS Pro for those assigned the Shape Editor or Approver role. This section outlines:

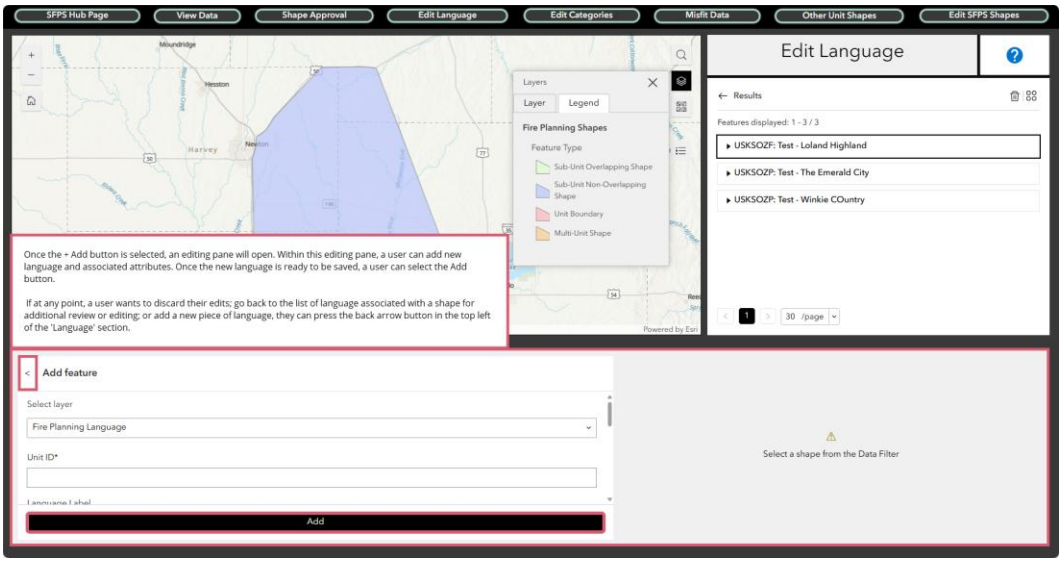
- How to add and edit SFP language in both platforms
- The data fields in need of update
- Useful tips for formatting SFP language

How to Add or Edit Language Through the SFPS App




SFPS Hub Page
View Data
Shape Approval
Edit Language
Edit Categories
Misfit Data
Other Unit Shapes
Edit SFPS Shapes
Edit Language
Results
Features displayed: 1 - 3 / 3
USKSOZF: Test - Loland Highland
Once a data filter is applied, SFP shapes that meet the filter criteria will display in the 'Results' section. To edit existing language for or add new language to a SFP shape, select the record of interest in the 'Results' section. The map will pan to the shape, and any associated language will display in the 'Language' section below the map.
If a user wants to reset the data filter, they can select the back arrow or the trash bin.
Layers
Layer
Legend
Fire Planning Shapes
Feature Type
Sub-Unit Overlapping Shape
Sub-Unit Non-Overlapping Shape
Unit Boundary
Multi-Unit Shape
Once a SFP shape is selected in the 'Results' section, a list of language associated with that shape will display in the left side of the 'Language' section that is below the map. A user can then select a piece of language in need of edits. Once a piece of language is selected, an editing pane will open. Within this editing pane, a user can alter SFP language and associated attributes. Once the changes are ready to be saved, a user can select the Update button.
If at any point a user wants to go back to the list of language associated with a shape for additional review/ editing, or to add a new piece of language, they can press the back arrow button in the top left of the 'Language' section.
USKSOZF
Unit ID*
USKSOZF
Language Label
Central
Update
Delete
Language Label: Central
Language: Suppress all fires while considering and evaluating resource damage to fighting trees in the forest of Gugu.
Language associated with a selected shape will show up in the right side of the 'Language' section for visual reference. After making changes to existing SFP language and associated language attributes, a user can use the right side of the 'Language' section to visualize the changes.
Although it is not possible to delete SFP language, Esri makes a delete button available by default. Selecting the Delete button will trigger an error, and in order to continue, the user must refresh or reopen the SPFS App.


SFPS Hub Page
View Data
Shape Approval
Edit Language
Edit Categories
Misfit Data
Other Unit Shapes
Edit SFPS Shapes
Edit Language
Results
Features displayed: 1 - 3 / 3
USKSOZF: Test - Loland Highland
USKSOZP: Test - The Emerald City
USKSOZP: Test - Winkie COuntry
From the list of language associated with a SFP shape, a user can select the + Add button to create and associate a new piece of language.
Fire Planning Language
+ Add
Search
WFMRDA_SpatialFirePlanning_EditLanguage - FirePlanningLanguage
USKSOZF
Select a shape from the Data Filter



Important Note(s):

- Adding SFP Language through the SFPS App is not possible at this time due to a bug within the Experience Builder product. WFM RD&A is working with Esri to resolve this issue. In the meantime, if adding SFP language, it must be done through ArcGIS Pro.
- When editing or adding language in the SFPS App, a user will have access to a subset of fields from the Fire Planning Language table. Please reference the Fields to Update When Adding or Editing SFP Language section to learn more about the fields that should be populated for each piece of SFP language.
- If a user wants to add formatting to a new or existing piece of language, they must include the HTML formatting in the 'Language' field. Esri's Experience Builder product does not allow for rich text editing at this time. Please reference the Formatting SFP Language section for more information on how to incorporate HTML formatting in SFP Language.
- Language can be added or edited but never deleted. To disassociate a piece of language from a SFP Shape, it must be deactivated. To do this, populate a deactivation date within the Fire Planning Language table. Deactivated language will be hidden from the WFMRDA_SFP_ReadOnly views made available for use within Wildland Fire applications. For more information on when to populate Activation Date and Deactivation Date fields, please see Appendix D.

How to Add or Edit Language Through ArcGIS Pro

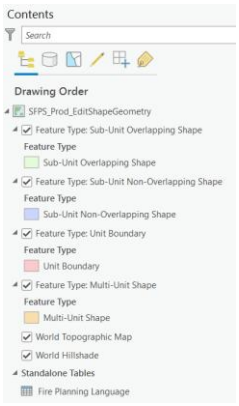
The overall workflow for adding and editing SFP language in ArcGIS Pro is as follows:

Step 1:

Connect to the Appropriate SFPS_EditShapeGeometry Web Map in ArcGIS Pro

If working in the training environment, the appropriate web map will have 'Train' in the name (i.e. SFPS_Train_EditShapeGeometry). If working in the production environment, the appropriate web map will have 'Prod' in the name (i.e. SFPS_Prod_EditShapeGeometry). For instructions on connecting to a web map in ArcGIS Pro, see Appendix A.

Once the appropriate SFPS_EditShapeGeometry Web Map is opened in ArcGIS Pro, verify that the primary SFP feature types are broken out into four feature layers (using definition queries), and the Fire Planning Language table is included as a Standalone Table.



Important Note(s):

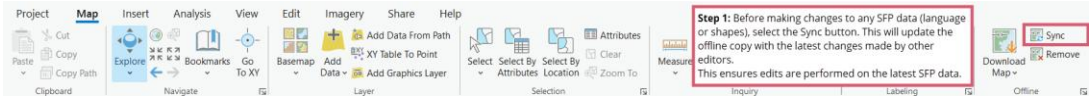
- Edits performed on the SFPS_Prod_EditShapeGeometry Web Map will be available in WFDSS NextGen's training and production environments.

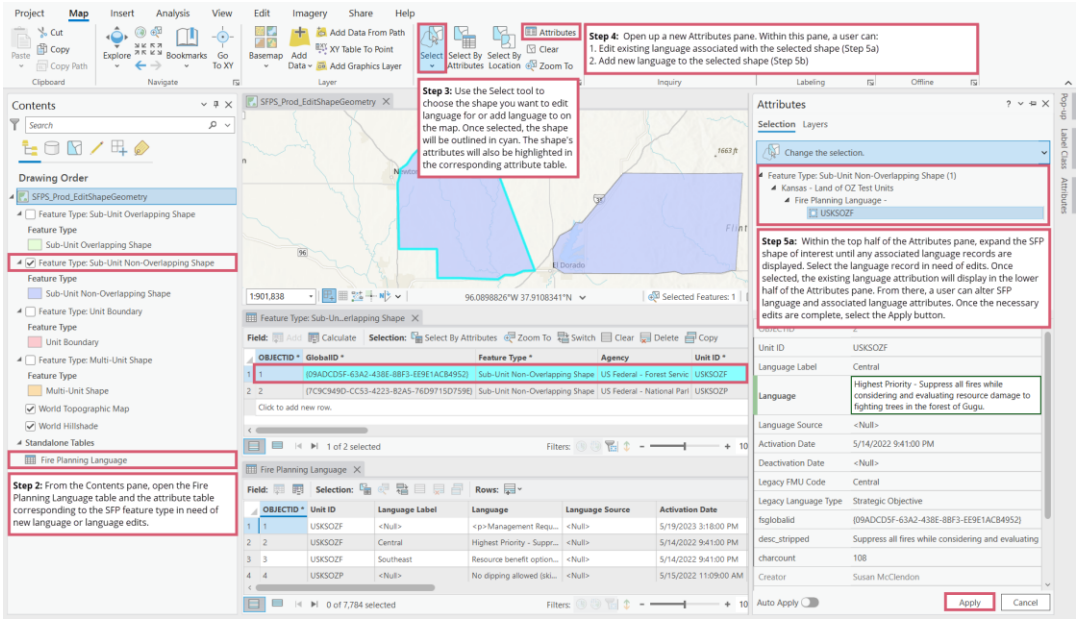
Step 2: Create an Offline Copy of the SFPS_EditShapeGeometry Web Map in ArcGIS Pro

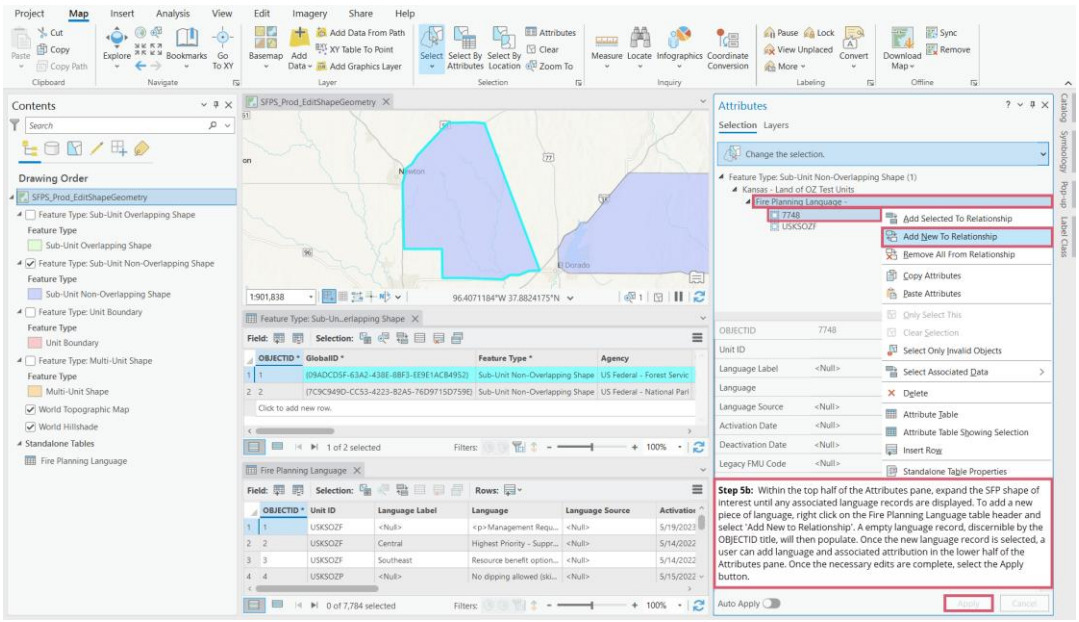
To edit or add SFP language within ArcGIS Pro, a user must create an Offline Copy of the appropriate SFPS_EditShapeGeometry Web Map. **Edits should never be performed live against SFPS Web Maps or their underlying SFP feature services.** For instructions on how to create an offline copy in ArcGIS Pro, see Appendix B.

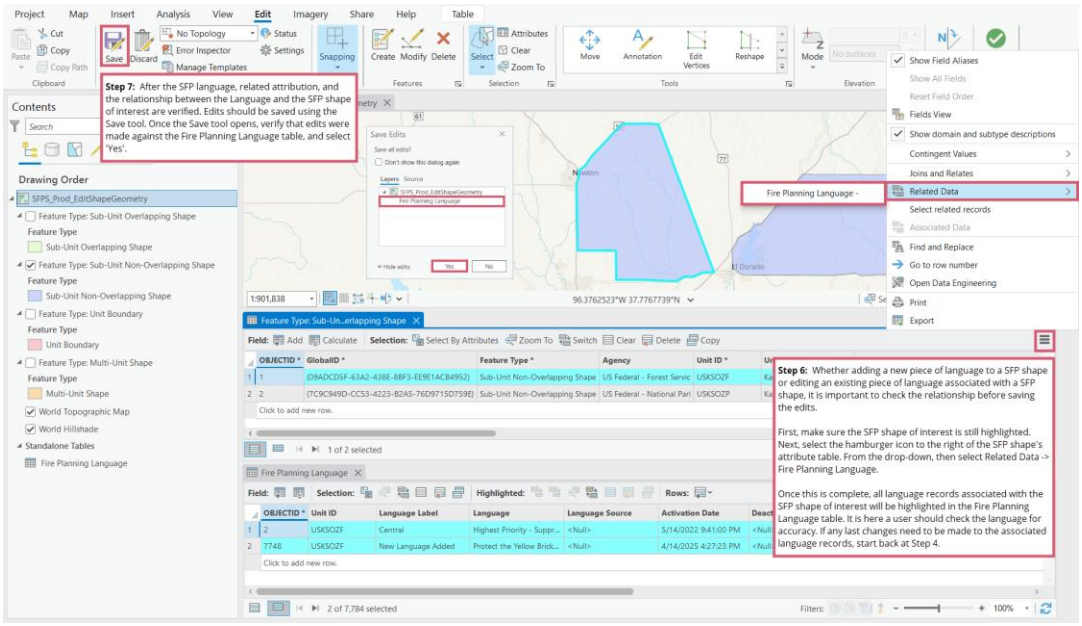
Step 3: Add or Edit Language in the Offline Copy

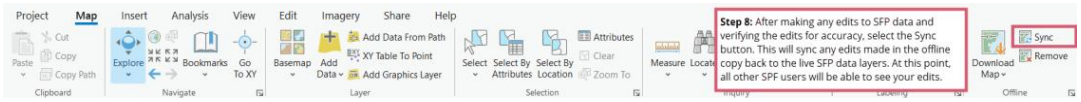
To edit or add SFP language within ArcGIS Pro, a user must perform the following steps:




Step 2: From the Contents pane, open the Fire Planning Language table and the attribute table corresponding to the SFP feature type in need of new language or language edits.
Step 3: Use the Select tool to choose the shape you want to edit language for or add language to on the map. Once selected, the shape will be outlined in cyan. The shape's attributes will also be highlighted in the corresponding attribute table.
Step 4: Open up a new Attributes pane. Within this pane, a user can:
1. Edit existing language associated with the selected shape (Step 5a)
2. Add new language to the selected shape (Step 5b)
Step 5a: Within the top half of the Attributes pane, expand the SFP shape of interest until any associated language records are displayed. Select the language record in need of edits. Once selected, the existing language attribution will display in the lower half of the Attributes pane. From there, a user can alter SFP language and associated language attributes. Once the necessary edits are complete, select the Apply button.


Step 5b: Within the top half of the Attributes pane, expand the SFP shape of interest until any associated language records are displayed. To add a new piece of language, right click on the Fire Planning Language table header and select 'Add New to Relationship'. A empty language record, discernible by the OBJECTID title, will then populate. Once the new language record is selected, a user can add language and associated attribution in the lower half of the Attributes pane. Once the necessary edits are complete, select the Apply button.





Important Note(s):

- When editing or adding language through the SFPS App, a user will have access to a small subset of fields in the Fire Planning Language table. In ArcGIS Pro, a user will have access to a much larger subset of fields. Please reference the Fields to Update table for the list of fields that should be populated for each piece of SFP language.
- If a user wants to add formatting to a new or existing piece of language, they must include the HTML formatting in the Language field. ArcGIS Pro does not allow for rich text editing at this time. Please reference the Formatting SFP Language section for more information on how to incorporate HTML formatting in SFP Language.
- When editing or adding language in ArcGIS Pro, a user has access to the fsglobalid field. Use extreme caution with this field as it is the primary key in the relationship between the SFP Language and SFP shapes. Any changes to this field could break a relationship. Before saving language edits or additions, always ensure the relationship between the language and SFP shape of interests is intact.
- Language can be added or edited but never deleted. To disassociate a piece of language from a SFP Shape, it must be deactivated. To do this, populate a deactivation date within the Fire Planning Language table. Deactivated language will be hidden from the ReadOnly views made available for use within Wildland Fire applications. For more information on when to populate Activation Date and Deactivation Date fields, please see Appendix D.
- Sync before and after each editing session. Sync can also be performed any time during editing session.

Step 4: Remove the Offline Copy

To complete the editing process within ArcGIS Pro, a user must remove the offline copy of the SFPS_EditShapeGeometry Web Map that was created to add or edit SFP language. For instructions on how to remove an offline copy in ArcGIS Pro, see Appendix C.

Important Note(s):

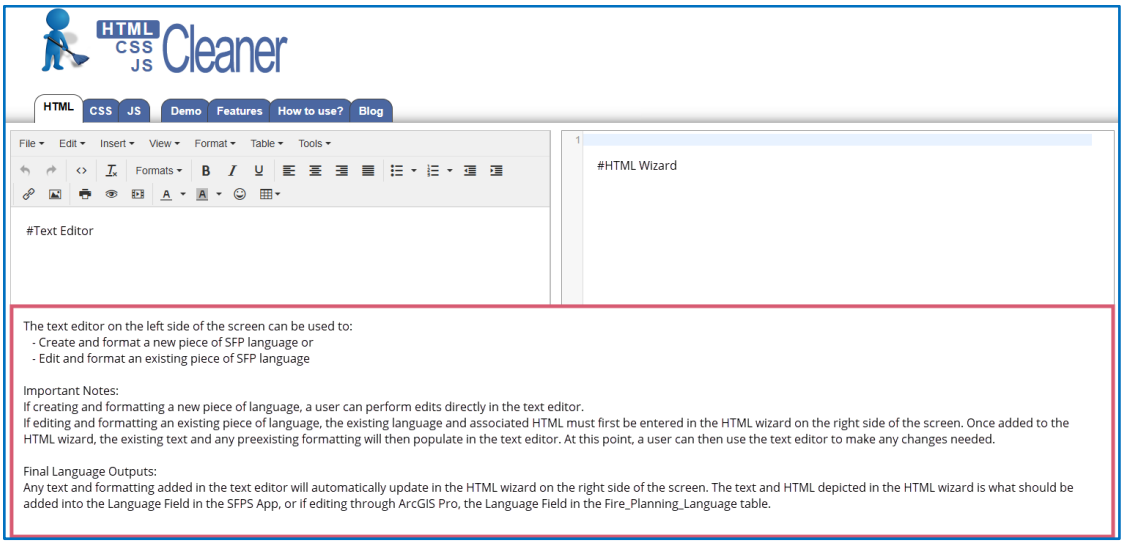
- Removing the Offline Copy of the SFPS_EditShapeGeometry Web Map without properly syncing first will eliminate all edits, even if the edits were saved in an editing session.
- Closing the SFPS_EditShapeGeometry Web Map incorrectly can sometimes result in an orphaned replica of the SFP data. If an orphaned replica was created.
  1. Re-open the ArcGIS Pro Project in which the Offline Copy of the SFP Web Map was created.
  2. Go to Project -> Databases in the Catalog pane.
  3. Right click on the mobile geodatabase and select Delete.

Fields to Update When Adding or Editing SFP Language

Field Name/Alias	Field Data Type	Description	Domain Values	Optional/Required
Unit ID	Text (10)	The NWCG Unit Identifier that reflects the unit in which SFP language applies.	Active UnitID Values	**Required**
Language Label	Text (48)	Short label applied to a language record for data visualization purposes.		Optional – However, if not populated, it will be harder to search for language records in the SPFS App.
Language	Text (8000)	Fire planning language with HTML formatting and styles preserved.		**Required**
Language Source	Text (128)	The source in which fire planning language is derived.	Unit (NEPA), Multiunit (NEPA), Project (NEPA), Fire Management Plan, Formal Agreements, Memorandum of Understanding, Other Policy Document	Optional
Activation Date	Date	Date language became authoritative for use in wildland fire systems.		Optional - However, if not populated, language will not show up in SFP Read Only feature services. See Appendix D for more information on when to activate SFP language.
Deactivation Date	Date	Date language was no longer considered authoritative for use in wildland fire systems.		Optional - However, if not populated, language will continue to show up as active language in the SFP Read Only feature services. See Appendix D for more information on when to deactivate SFP language.
Language Stripped	Text (8000)	Fire planning language without HTML formatting and styles.		Optional
fsglobalid	GUID	An identifier used to link fire planning language to a a SFP shape.		Optional – However, if left blank, language cannot be visualized in a spatial context. This field will auto populate in the SFPS App and is not editable. See Add or Edit Language in the Offline Copy for more information on how to relate SFP language and shapes.

Formatting SFP Language

The Esri platform does not allow for rich text editing at this time. Because of this, if a user wants to add formatting to new or existing SFP language they must a third-party rich text editing tool. There are many publicly available tools, but this guide will cover using the HTML Cleaner to format SFP language.

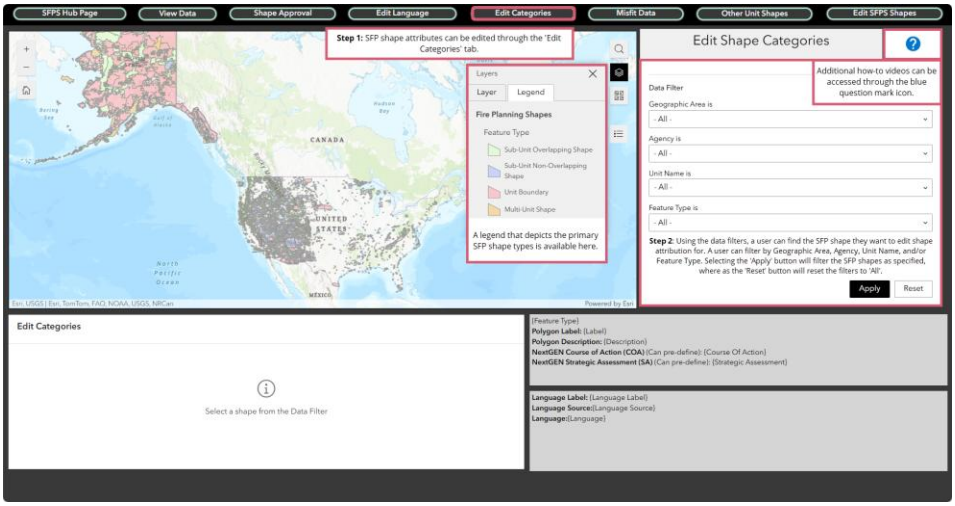


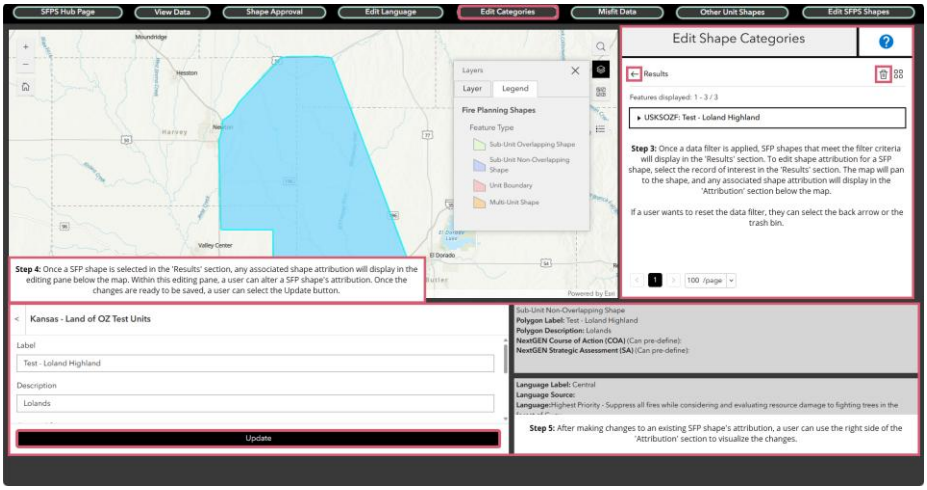
Editing Spatial Fire Planning Shape Attributes (Categories, Labels, and Descriptions)

SFP shape attributes (categories, labels, and descriptions) can be edited through either the SFPS App or through ArcGIS Pro for those assigned the Shape Editor or Approver role. This section outlines:

- How to edit SFP shape attributes in both platforms
- The data fields available for editing

How to Edit Shape Attributes Through the SFPS App





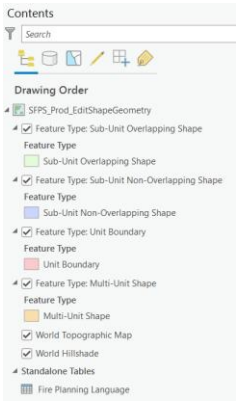
How to Edit Shape Attributes Through ArcGIS Pro

The overall workflow for editing SFP Shape attribution in ArcGIS Pro is as follows:

Step 1: Connect to the Appropriate SFPS_EditShapeGeometry Web Map in ArcGIS Pro

If working in the training environment, the appropriate web map will have 'Train' in the name (i.e. SFPS_Train_EditShapeGeometry). If working in the production environment, the appropriate web map will have 'Prod' in the name (i.e. SFPS_Prod_EditShapeGeometry). For instructions on connecting to a web map in ArcGIS Pro, see Appendix A.

Once the appropriate SFPS_EditShapeGeometry Web Map is opened in ArcGIS Pro, verify that the primary SFP feature types are broken out into four feature layers (using definition queries), and the Fire Planning Language table is included as a Standalone Table.



Important Note(s):

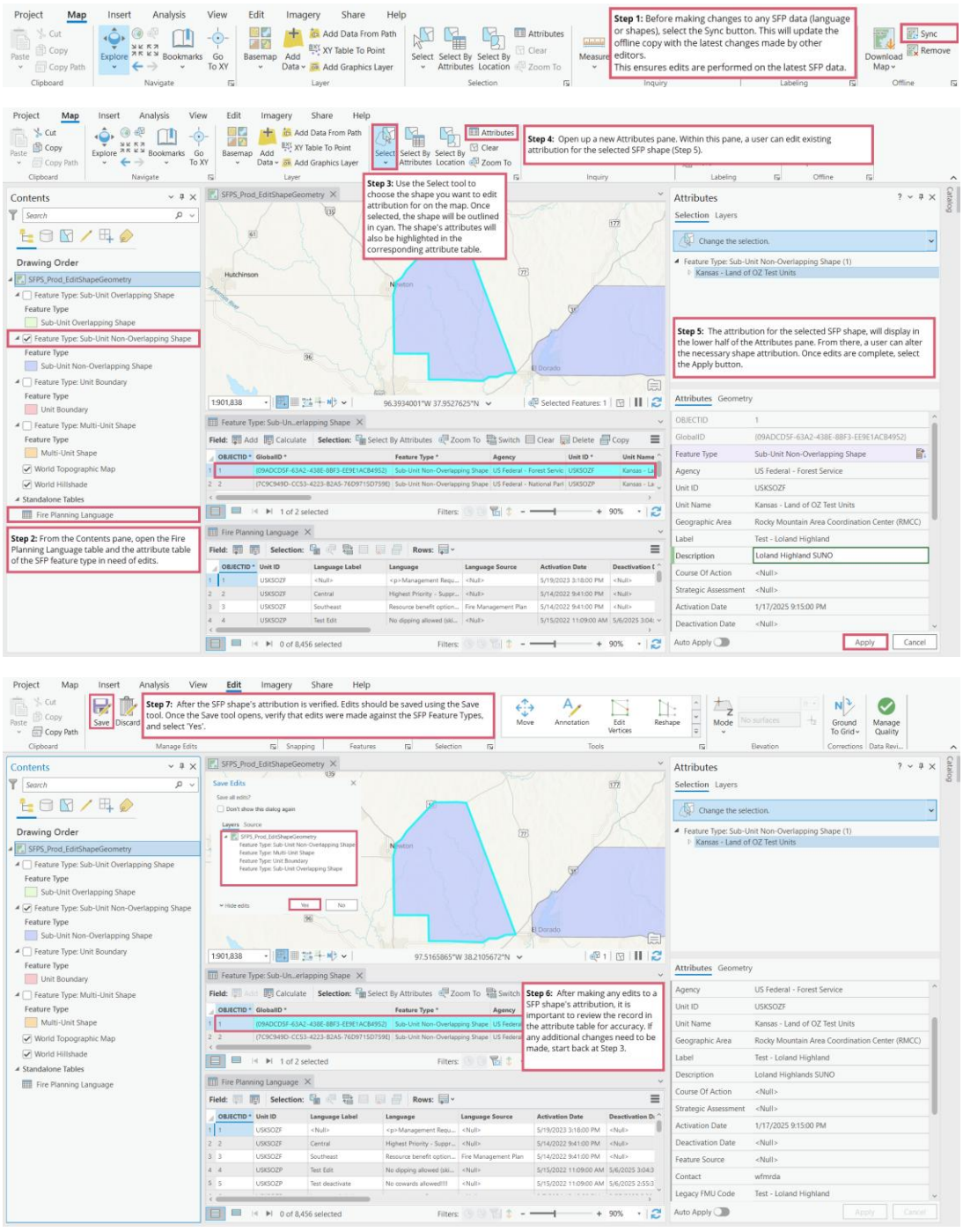
- Edits performed on the SFPS_Prod_EditShapeGeometry Web Map will be available in WFDSS NextGen's training and production environments.

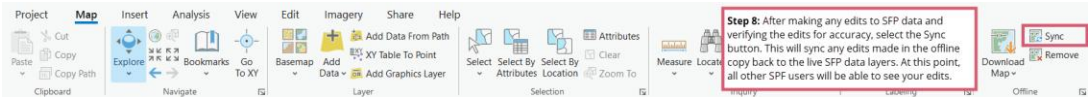
Step 2: Create an Offline Copy of the SFPS_EditShapeGeometry Web Map in ArcGIS Pro

To edit SFP shape attribution within ArcGIS Pro, a user must create an Offline Copy of the appropriate SFPS_EditShapeGeometry Web Map. **Edits should never be performed live against SFPS Web Maps or their underlying SFP feature services.** For instructions on how to create an offline copy in ArcGIS Pro, see Appendix B.

Step 3: Edit Shape Attributes in the Offline Copy

To edit SFP shape attribution within ArcGIS Pro, a user must perform the following steps:





Important Note(s):

- When editing SFP shape attribution through the SFPS App, a user will have access to a smaller subset of shape fields. In ArcGIS Pro, a user will have access to a much larger subset of fields. Please reference the Fields to Update table for the list of fields that should be populated for each SFP shape.
- Sync before and after each editing session. Sync can also be performed any time during editing session.

Step 4: Remove the Offline Copy

To complete the editing process within ArcGIS Pro, a user must remove the offline copy of the SFPS_EditShapeGeometry Web Map that was created to edit SFP shape attribution. For instructions on how to remove an offline copy in ArcGIS Pro, see Appendix C.

Important Note(s):

- Removing the Offline Copy of the SFPS_EditShapeGeometry Web Map without properly syncing first will eliminate all edits, even if the edits were saved in an editing session.
- Closing the SFPS_EditShapeGeometry Web Map incorrectly can sometimes result in an orphaned replica of the SFP data. If an orphaned replica was created.
  1. Re-open the ArcGIS Pro Project in which the Offline Copy of the SFP Web Map was created.
  2. Go to Project -> Databases in the Catalog pane.
  3. Right click on the mobile geodatabase and select Delete.

Fields to Update When Adding or Editing Shape Attributes

Field Name/Alias	Field Data Type	Description	Legal Values	Optional/Required
Label	Text(128)	Short label applied to shape record for data visualization purposes. User defined.		Optional
Description	Text(254)	Description of shape.	User defined, legacy field from classic WFDSS application.	Optional
Strategic Assessment	Text(50)	Type of incident objective, requirement, or concern.	Strategic Goal, Protection Objective, Incident Requirement, Incident Objective, Management Area or Zone, Responder or Public Safety Concern, Infrastructure Concern, Natural Resource Concern, Cultural Concern, Threat of Fire to Values, Social or Economic Concern, Other or Unknown	Optional
Course of Action	Text(50)	The overall plan that describes the selected strategies and management actions intended to achieve incident objectives, comply with incident requirements, and address other concerns.	Full Suppression, Point Zone Protection, Confine, Monitor, Not Defined	Optional
Feature Source	Text(128)	The source in which a shape record is derived.	Examples: NATL Hydro Dataset, NIROPS, LRMP	Optional

Creating, Adding, and Editing the Geometry of Spatial Fire Planning Shapes

New SFP shapes can be created or added and the geometry of existing SFP shapes can be edited through ArcGIS Pro for those assigned the Shape Editor or Approver role. This section outlines:

- How to create a new SFP shape in ArcGIS Pro using the Edit Toolset
- How to add in a shape from an outside service as a SFP shape in ArcGIS Pro
- How to edit the geometry of an existing SFP shape in ArcGIS Pro
- The data fields in need of updates when creating or adding a new SFP shape

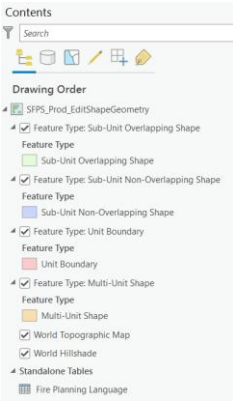
How to Create, Add, or Edit the Geometry of a SFP Shape Through ArcGIS Pro

The overall workflow for creating, adding, or editing the geometry of a SFP shape in ArcGIS Pro is as follows:

Step 1: Connect to the Appropriate SFPS_EditShapeGeometry Web Map in ArcGIS Pro

If working in the training environment, the appropriate web map will have 'Train' in the name (i.e. SFPS_Train_EditShapeGeometry). If working in the production environment, the appropriate web map will have 'Prod' in the name (i.e. SFPS_Prod_EditShapeGeometry). For instructions on connecting to a web map in ArcGIS Pro, see Appendix A.

Once the appropriate SFPS_EditShapeGeometry Web Map is opened in ArcGIS Pro, verify that the primary SFP feature types are broken out into four feature layers (using definition queries), and the Fire Planning Language table is included as a Standalone Table.



Step 2: Create an Offline Copy of the SFPS_EditShapeGeometry Web Map in ArcGIS Pro

To create or add a new SFP shape or to edit the geometry of an existing SFP shape within ArcGIS Pro, a user must create an Offline Copy of the appropriate SFPS_EditShapeGeometry Web Map. **Edits should never be performed live against SFPS Web Maps or their underlying SFP feature services.** For instructions on how to create an offline copy in ArcGIS Pro, see Appendix B.

Step 3: Create or Add a New SFP Shape or Edit the Geometry of an Existing SFP Shape in the Offline Copy

There are three different processing workflows a user can follow in this step:

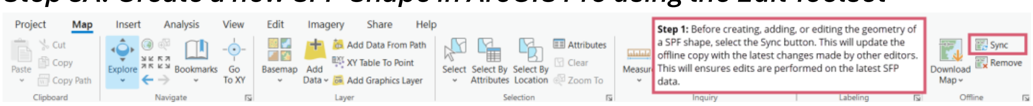
- To create a new SFP Shape using the Edit Toolset, see Step 3A.
- To add in a shape from an outside service as a SFP shape, see Step 3B.

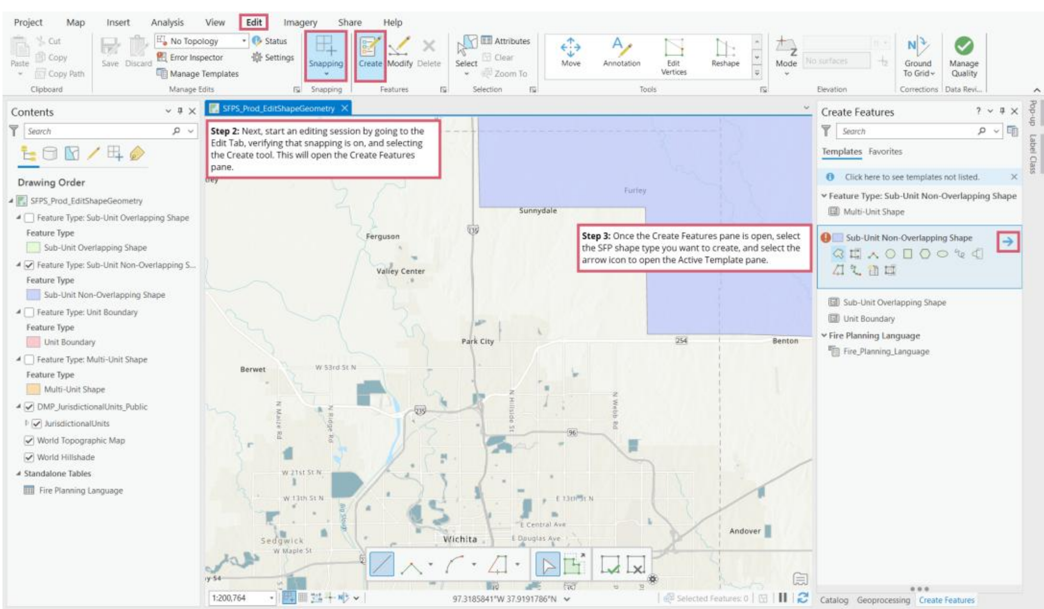
- To edit the geometry of an existing SFP shape, see Step 3C.

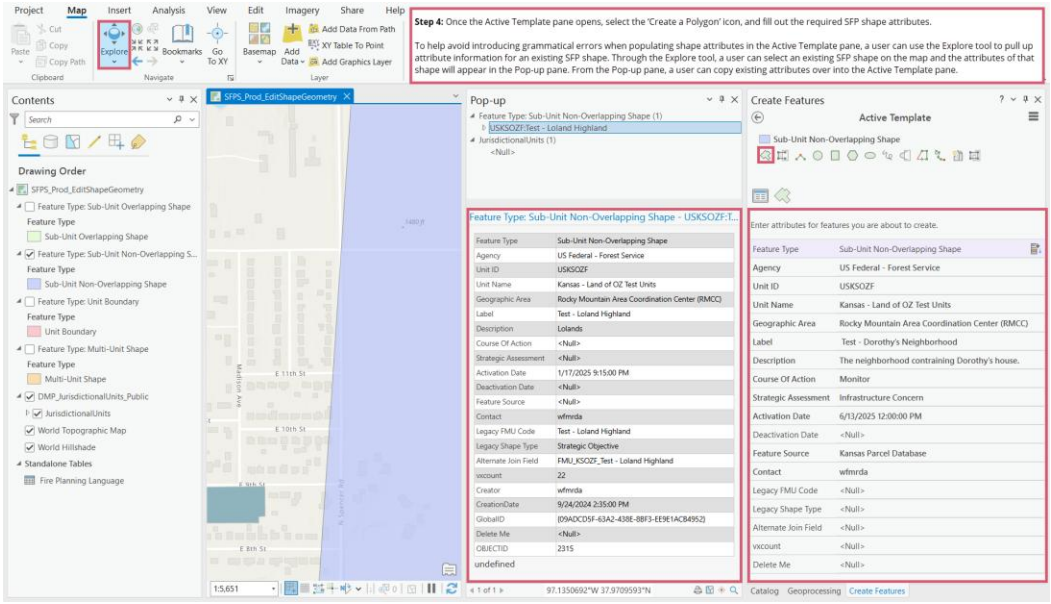
Important Note(s):

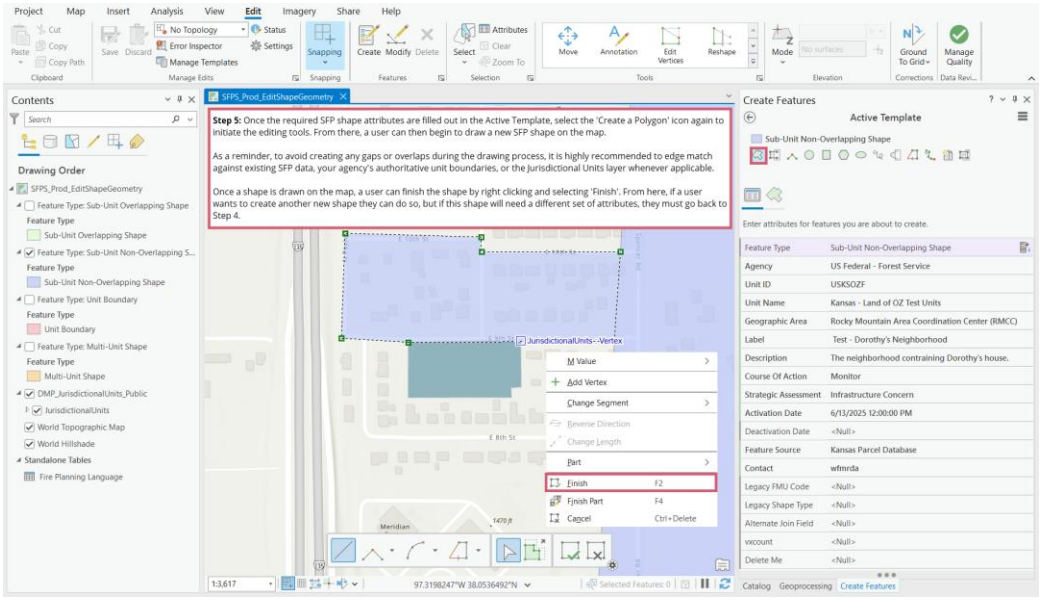
- If creating or editing the geometry of a Unit Boundary, Sub-Unit Non-Overlapping Shape, or Sub-Unit Overlapping Shape (as outlined in Steps 3A and 3C), it is highly recommended to load your agency's authoritative unit boundaries into the map as an additional layer. This additional dataset can be used during the editing process to avoid overlaps and gaps with other authoritative unit boundaries.
  Along with agency specific datasets, the Jurisdictional Units feature service can also be utilized. The Jurisdictional Units (JU) feature service is interagency endorsed dataset that outlines wildland fire jurisdictional boundaries for federal, state, and local government entities on a national scale.
  To add one of these datasets mentioned above into ArcGIS Pro, a user can use the "Add Data" button on the Map tab, which allows a user to browse local files or connect to online sources like ArcGIS Online. See Esri documentation for more information on how to add data to a Map within ArcGIS Pro.

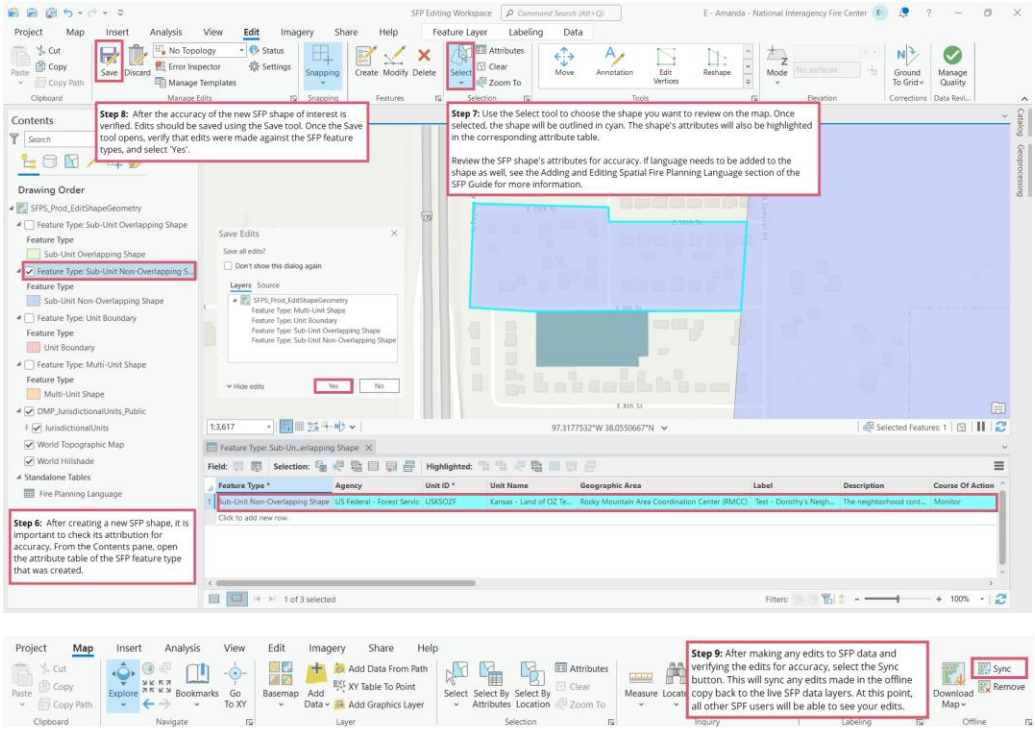
Step 3A: Create a new SFP Shape in ArcGIS Pro using the Edit Toolset






Step 4: Once the Active Template pane opens, select the 'Create a Polygon' icon, and fill out the required SFP shape attributes.
To help avoid introducing grammatical errors when populating shape attributes in the Active Template pane, a user can use the Explore tool to pull up attribute information for an existing SFP shape. Through the Explore tool, a user can select an existing SFP shape on the map and the attributes of that shape will appear in the Pop-up pane. From the Pop-up pane, a user can copy existing attributes over into the Active Template pane.
Contents
Drawing Order
Pop-up
Create Features
Active Template
Sub-Unit Non-Overlapping Shape
Enter attributes for features you are about to create.


Step 5: Once the required SFP shape attributes are filled out in the Active Template, select the 'Create a Polygon' icon again to initiate the editing tools. From there, a user can then begin to draw a new SFP shape on the map.
As a reminder, to avoid creating any gaps or overlaps during the drawing process, it is highly recommended to edge match against existing SFP data, your agency's authoritative unit boundaries, or the Jurisdictional Units layer whenever applicable.
Once a shape is drawn on the map, a user can finish the shape by right clicking and selecting 'Finish'. From here, if a user wants to create another new shape they can do so, but if this shape will need a different set of attributes, they must go back to Step 4.
Contents
Drawing Order
Create Features
Active Template
Sub-Unit Non-Overlapping Shape
Enter attributes for features you are about to create.



Step 3B: Add in a Shape from an Outside Service as a SFP shape

Step 1: Add in SFP_Mistfits_ReadOnly

- Load the service you want to add data from in to the web map.
- Select all parts of the shape you want to copy past into the service and export the features into a local gdb
    - Local copy is not needed if data is clean.
- In the new local copy, open the attribute table.
- Run QA/QC
    - perform any geoprocessing steps – needed.
        - Dissolve tool to combine features into one multipart feature.

        - NG accepts others
    - Run repair geometry Esri and OGC methods until both a green.
    - Add a field for vertex count – if shape is over 500,000 vertex run generalize tool (1 to 2 meters)
        - AGOL will optimize features over 400,000 vertices and has an upper limit of 1m.
    - Verify data is in same projection as SFP service – right click on data in layer list and go to properties. Under Source WKID 3857.
- Download an offline map (keep new shape on and only turn on SFP shape you want to add this new shape too).
    - Make sure local copy is created (gdb extension guid in it)
- Use selection tool to select the shape you want to copy
- From map->clipboard copy it.
- From map->paste special. Add it to the SFPS feature layer of interest.Do not keep source attributes. Paste into template.
- Open attributes pane for new added shape.
- To make populating attributes in an active template easier you can use the identfy tool to select similar shape and copy attributes in to the tempalte.
- Save edits and make sure you are editing against the service.
- Sync and remove. Verify it made it into the service (turn it off and on and use pop up to verify attributes.

Append Multiple Shapes (Misfits)

- Add in WFMRDA_SpatialFirePlanning_Misfits_ReadOnly service.
    - Already QA/QC'd so no need to run vertext check or repair geometry tool.
- Use shift key to select misfit featured we want added into the SFP service.
- Open attribute table of misfits and look at reason field to see why there were never added.
- Download offline gdb (Misfits turned on)
    - NEED TO ASK SUSAN DOES SFP SERVICE NEED TO BE ON TOO
- Geoprocessing tool -> Append
    - Source – selected misfits
    - Target – SFPS shape type
    - Field Matching = Us the field map to reconside field differences (verify everything looks good)
- Sync
- Verify sfp shape attributes (add activation date as today, clear deactivation date)
- Open shape and language attribute tables
    - Add new language record (seen in earlier section)
- Save Edits
- Verify that data is linked propery before checking data in.
    - Hamburger realted data.
- Select shape you want to add language to
- From language table, select the piece of language you want to associate with shape.

- Open attributes pane and right click on SFP shape and select “Add Selected to Relationship”
- Save Edits
- Verify that data is linked propery before checking data in.
    - Hamburger realted data.

Adding in Language from a Misfits Services

- Make sure offline copy is created (Misfit and SFP Edit Geometry On)
- Open attribute table for misfit language, and select a record
- Then open geoprocessing append tool
    - Input data - SPF_Invalid_Language
    - Target Dataset – Training_WFMRDA_SFP_EditShapeGeometry – Fire Planning
    - Fire Matching Type – Use the field map to reconcile field diferences
- Hamburger tool to check relation (kind of glossed over that)
- Sync edits and remove offline gdb
- Verify language was added and associated.

1. Edit shape
    a. Select the boundary of interest
    b. Edit tab, use Edit Verticies tool
2. QA/QC the shape before adding to SFP service (Vertex Count, Geometry Check, Projection)

Important Notes:

- When creating and editing shapes please edge match to your authoritative agency data or the jurisdictional units boundaries.
- To make populating attributes in an active template easier you can use the identfy tool to select similar shape and copy attributes in to the tempalte.
-

Fields to Update When Creating or Adding a SFP Shape

Field Name/Alias	Field Data Type	Description	Domain Values	Optional/Required
Feature Type				
Agency				**Video Required**
Unit ID	Text (10)	The NWCG Unit Identifier that reflects the unit in which SFP language applies.	Active UnitID Values	**Required, Video Required**

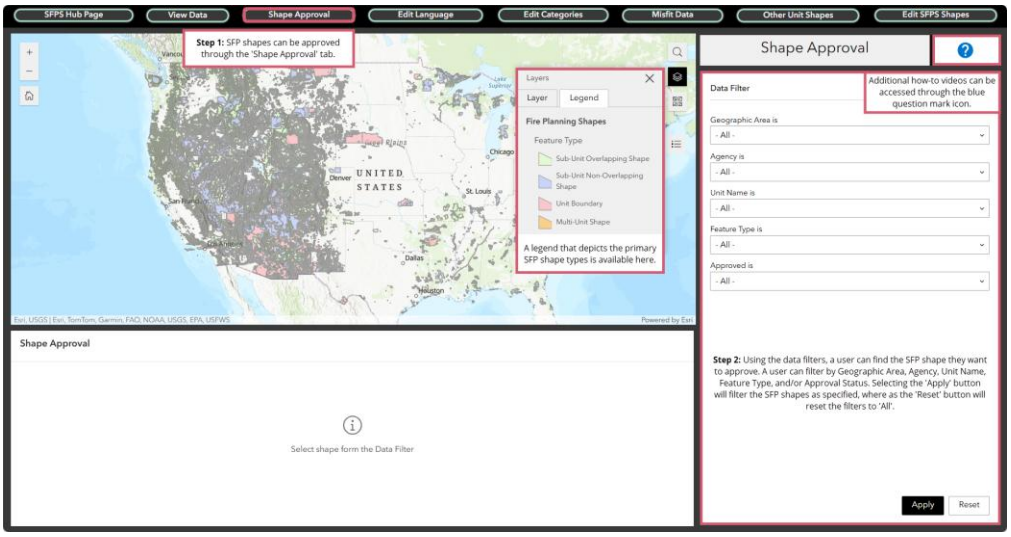
Unit Name				**Video Required**
Geographic Area				**Video Required**
Label	Text(128)	Short label applied to shape record for data visualization purposes. User defined.		Optional
Description	Text(254)	Description of shape.	User defined, legacy field from classic WFDSS application.	Optional
Strategic Assessment	Text(50)	Type of incident objective, requirement, or concern.	Strategic Goal, Protection Objective, Incident Requirement, Incident Objective, Management Area or Zone, Responder or Public Safety Concern, Infrastructure Concern, Natural Resource Concern, Cultural Concern, Threat of Fire to Values, Social or Economic Concern, Other or Unknown	Optional
Course of Action	Text(50)	The overall plan that describes the selected strategies and management actions intended to achieve incident objectives, comply with incident requirements, and address other concerns.	Full Suppression, Point Zone Protection, Confine, Monitor, Not Defined	Optional
Activation Date	Date	Date language became authoritative for use in wildland fire systems.		Optional - However, if not populated, language will not show up in SFP Read Only feature services. See Appendix D for more information on when to activate SFP language.
Deactivation Date	Date	Date language was no longer considered authoritative for use in wildland fire systems.		Optional - However, if not populated, language will continue to show up as active language in the SFP Read Only feature services. See Appendix D for more information on when to deactivate SFP language.
Feature Source	Text(128)	The source in which a shape record is derived.	Examples: NATL Hydro Dataset, NIROPS, LRMP	Optional
Contact				**Video Required**
Legacy FMU Code				
Legacy Shape Type				
vxcount				

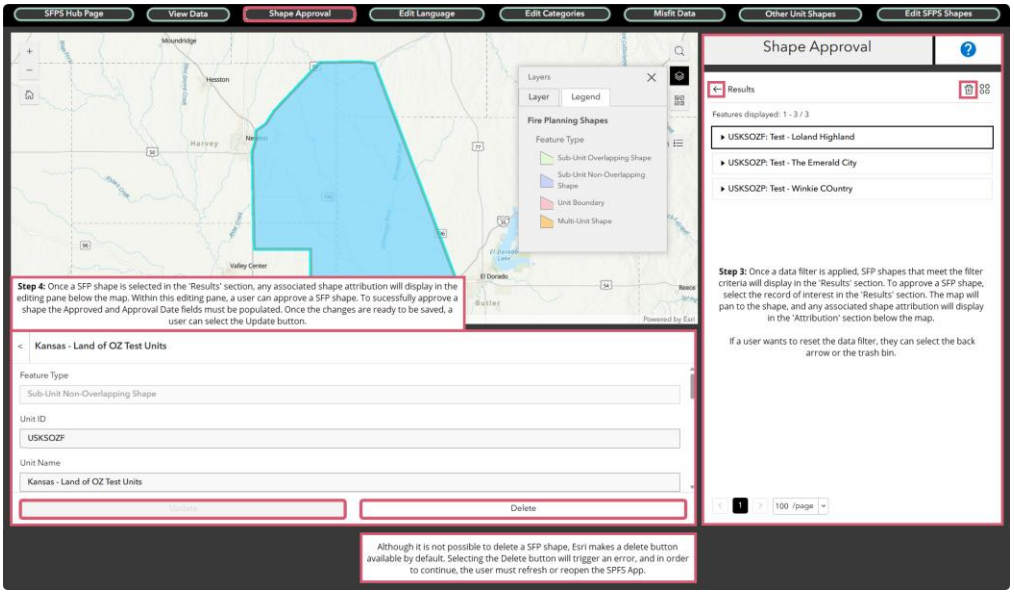
WORKING Approving Spatial Fire Planning Data

SFP Shapes need to be approved before becoming active in the Read Only SFP feature services that are ingested within wildland fire systems like WFDSS. SFP Shapes can be approved through either the SFPS App or through ArcGIS Pro for those assigned the Approver role. This section outlines:

- How to approve SFP Shapes in both platforms
- The data fields in need of update

How to Approve SFP Shapes Through the SFPS App





How to Approve SFP Shapes Through ArcGIS Pro

Checklist

As a SFP Approver it is important to review your unit's SFP shapes before approving them for use in wildland fire systems. The checklist below outlines the check to perform and provides instructions on how to perform each check.

	Check	SFP Shapes to Check	How to Check
❑	***All SFP Shapes Have Attribution Populated Correctly***	All Shapes	
❑	***All SFP Shapes Are Free of Geometry Errors*** (self intersections, null geometries, etc.)	All Shapes	Run the Check Geometry Tool in ArcGIS Pro
❑	***All SFP Shapes Are Free of Slivers and Gaps***	All Shapes	
❑	***All SFP Shapes Have Less than 400,000 Vertices***	All Shapes	
❑	***All SFP Shapes Are Multipart When Possible*** An example of an exception would be when creating a multipart feature would result in a shape with more than 400,000 vertices	All Shapes	
❑	***Certain SFP Shapes Are Clipped to the Proper Extent*** Unit Boundaries; Sub-Unit, Non-Overlapping Shapes; and Sub-Unit, Overlapping Shapes are clipped to either an agency authoritative source or the Jurisdictional Units dataset	Unit Boundaries (UB) Sub-Unit, Non-Overlapping Shapes (SUNOS) Sub-Unit, Overlapping Shapes (SUOS)	
❑	**Certain SFP Shapes Are None Overlapping** A Unit Boundary should not overlap another Unit Boundary, and Sub-Unit, Non-Overlapping Shapes should not overlap each other.	Unit Boundaries (UB) Sub-Unit, Non-Overlapping Shapes (SUNOS)	

If a SFP shape fails checks above, the Approver has the option to:

1. Alert the creator of the shape and have them resolve the issues.
    a. Note: Shape creator information is stored in the 'Contact' field.
2. Resolve the issues themselves using the following guidance:
    a. Editing Spatial Fire Planning Shape Attributes (Categories, Labels, and Descriptions)
    b. Creating, Adding, and Editing the Geometry of Spatial Fire Planning Shapes

If a SFP shape passes all of the QA/QC check, the Approver can proceed to update the necessary approval fields.

Fields to Update When Approving a SFP Shape

Field Name/Alias	Field Data Type	Description	Legal Values	Optional/Required
Approved	Text(3)	A flag indicating if a SFP shape is approved for use in wildland fire systems.	Yes, No	**Required -** If not populated as 'Yes', shape will not show up in SFP Read Only feature services.
Approval Date	Date	Date shape and associated attribution were approved for use in wildland fire systems.		Optional

Help and Training Resources

There are a number of avenues to obtain help with the new Spatial Fire Planning process.

Agency Contacts

For questions related to the Spatial Fire Planning policies within your agency please reach out to your respective GAE or Agency Lead.

For access to the Spatial Fire Planning Services, please reference the Accessing the SFP Experience Building and Services section of this guide for more information. WFM RD&A or approved agency staff will review the access request and will approve if deemed appropriate. Please allow 24 business hours for a response.

WFM RD&A Contacts

If technical support is needed for the SFP editing services, contact the WFM RD&A Data Team at wfmrda.datasupport@firenet.gov.

Help Content

Up-to-date information on accessing, viewing, creating and updating Spatial Fire Planning information can be found on:

- The WFDSS NextGen Landing Page
- The Interagency Spatial Fire Planning Hub Site

Recordings

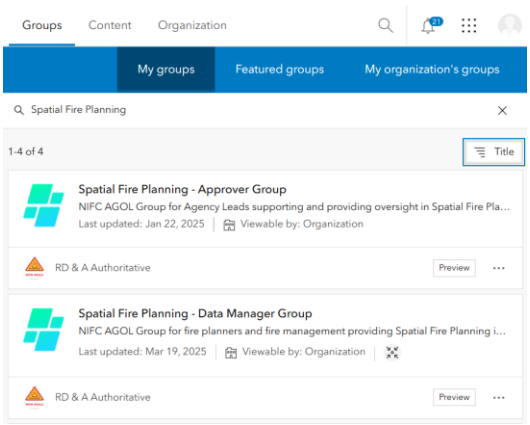
Recorded SFP demos and instructional videos can be found on the Spatial Fire Planning Playlist

Appendicies

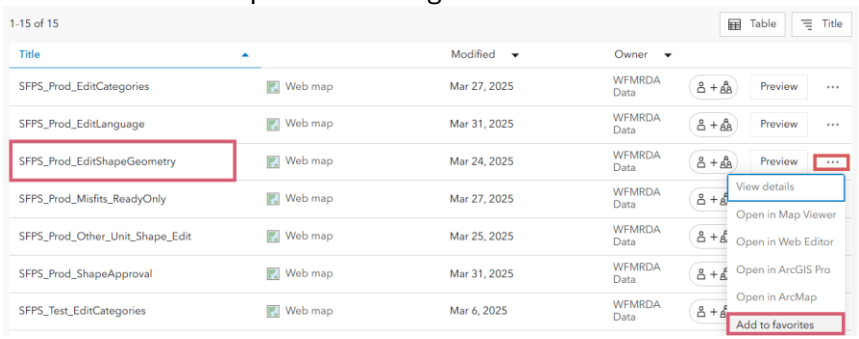
Appendix A – Connecting to a Spatial Fire Planning Web Map for Editing in ArcGIS Pro

To connect to a Spatial Fire Planning Web Map for editing in ArcGIS Pro:

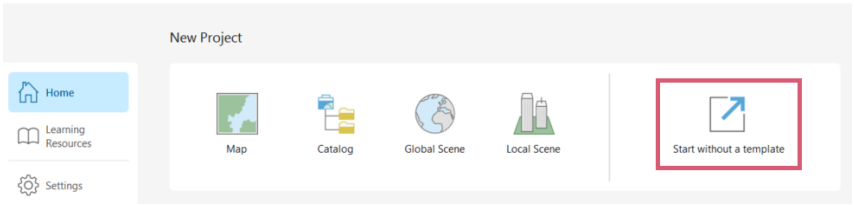
1. Sign into your NIFC AGOL Org account.
2. Confirm you have access to the appropriate SFP AGOL group needed for the level of editing being performed by navigating to Groups -> My groups -> and searching for 'Spatial Fire Planning'. If not assigned to the appropriate SFP AGOL group, instructions on how to get access can be found here: Establishing Correct SFP Group Access.



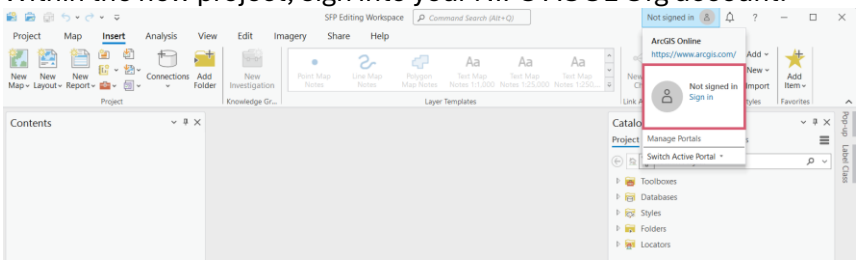
3. Locate the appropriate web map needed for the level of editing being performed by navigating to Content -> My groups.
4. Add the appropriate web map to your 'Favorites' by clicking on the ellipsis icon to the right of the desired web map and selecting 'Add to Favorites'.



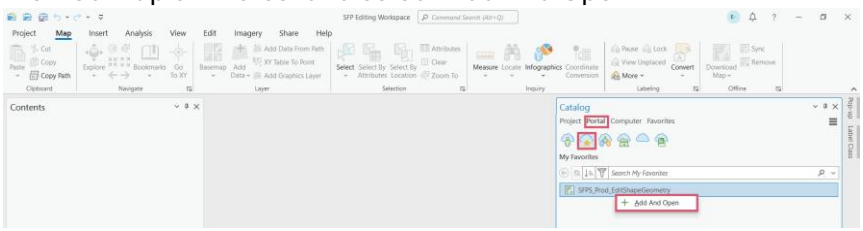
5. Open ArcGIS Pro and start a new project without a template.



6. Within the new project, sign into your NIFC AGOL Org account.



7. From the Catalog pane in ArcGIS Pro, select Portal then the 'My Favorites' icon. Right-click the web map of interest and select 'Add And Open'.



8. Verify that all web map components are in the ArcGIS Pro project.

Appendix B – Creating an Offline Copy of a Spatial Fire Planning Web Map for Editing in ArcGIS Pro

Overview

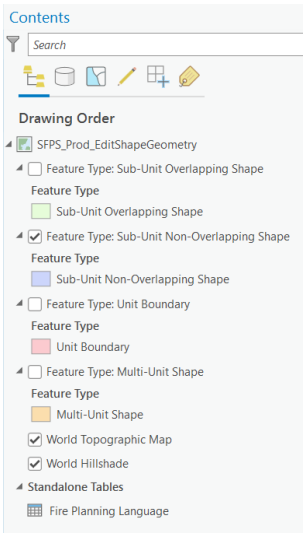
To edit SFP data within ArcGIS Pro, a user must create an Offline Copy of a SFP Web Map. An Offline Copy is a downloaded subset of a web map's underlying data layers, which can be edited through a mobile geodatabase and then synced back to the web map's live data layers to apply the changes.

The offline editing method is advantageous as it allows multiple editors to edit against a web map and its underlying data layers simultaneously. However, this method has none of the conflict protection or resolution capabilities of a truly versioned environment. Offline editing in ArcGIS Pro employs a "last in, wins" policy for conflict resolution at the feature level. Meaning if two users edit the same feature, even if they each edit different attributes, it is considered a conflict, and the feature from the user who syncs second (last) will completely overwrite the first (essentially deleting the first user's edit). Because of this, great care must be taken to not overwrite other user's data. Communication is key when multiple editors are making edits to the same unit in a singular data layer.

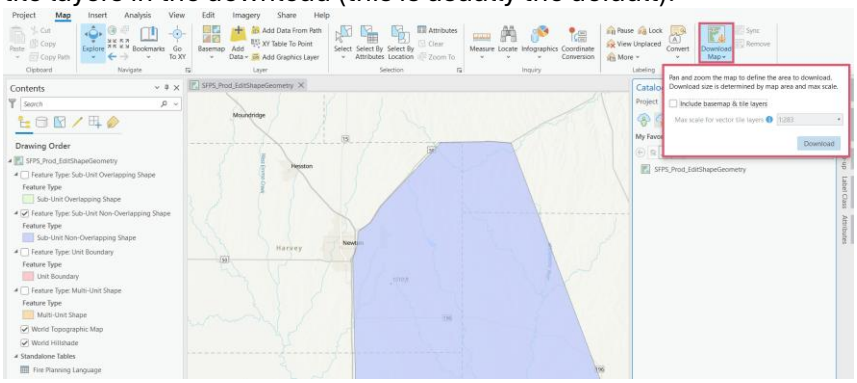
Its also important to note that features that are included but not edited in an Offline Copy will not overwrite anything during a sync.

To Create an Offline Copy of a SFP Web Map for Editing in ArcGIS Pro:

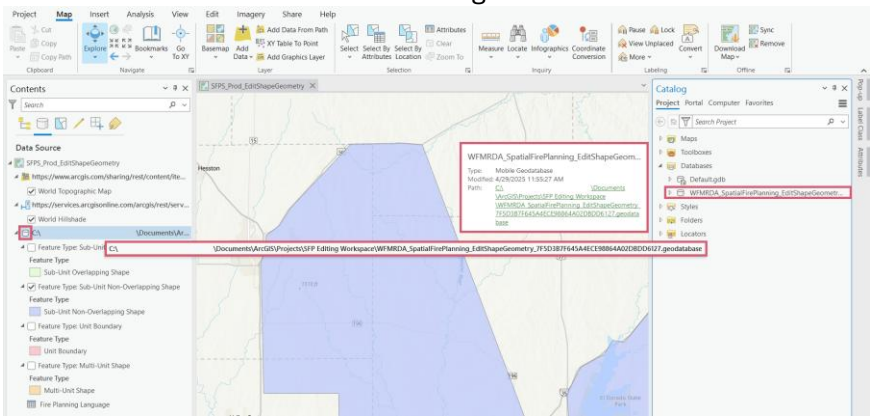
1. Load the SFP Web Map of interest into your ArcGIS Pro Project (see Appendix A).
2. Zoom into the area in need of edits on the map.
    a. Important Notes
        i. Ensure the area is large enough to meet your needs but not so large that you could accidentally overwrite another unit's data.
        ii. Edits performed outside of the area downloaded in the Offline Copy will not sync back to the live dataset(s).
3. In the layer list, turn off any SFP feature types you do not plan to edit. Feature types that are turned off will not be included in your offline copy. This is a best practice to avoid mistakenly editing the wrong SFP data.



4. Click ‘Download Map’ on the Map Tab to create an offline copy. Do not include basemaps & tile layers in the download (this is usually the default).

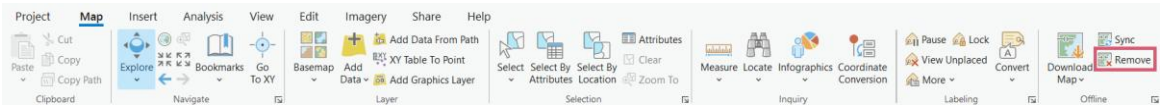


5. Once the download is complete, verify that your offline copy has been created by:
    a. Changing the Contents pane to ‘List by Data Source’ and confirming that the source of the SFP data ends with ‘.geodatabase’
    b. Going to Project -> Databases in the Catalog pane and seeing a new Mobile Geodatabase that ends with ‘.geodatabase’



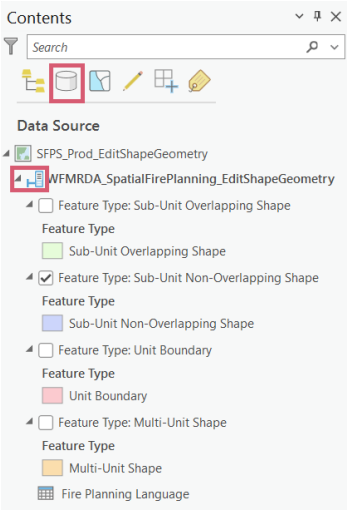
Appendix C – Removing an Offline Copy of a Spatial Fire Planning Web Map in ArcGIS Pro

After SFP Shape and Language edits performed in an Offline Copy are completed, verified for accuracy, and properly synced, it is critical to remove the Offline Copy of the SFP Web Map. To remove an Offline Copy of a SFP Web Map in ArcGIS Pro, select the 'Remove' button on the Map tab.



Removing the Offline Copy of the SFP Web Map changes the underlying SFP data layers from offline back to online in the layer list, and also deletes the mobile geodatabase containing the offline SFP data. Once the 'Remove' button has been selected, verify that the Offline Copy has been removed by:

1. Changing the Contents pane to 'List by Data Source' and confirming that the SFP data source is now a feature service through the service symbol.



2. Going to Project -> Databases in the Catalog pane and making sure the mobile geodatabase that ended with '.geodatabase' is no longer present.

Removing an Offline Copy of a SFP Web Map without properly syncing will eliminate all edits, even if the edits were saved in an editing session. Additionally, closing a SFP Web Map that has been taken offline incorrectly can sometimes result in an orphaned replica of the SFP data. If an orphaned replica was created:

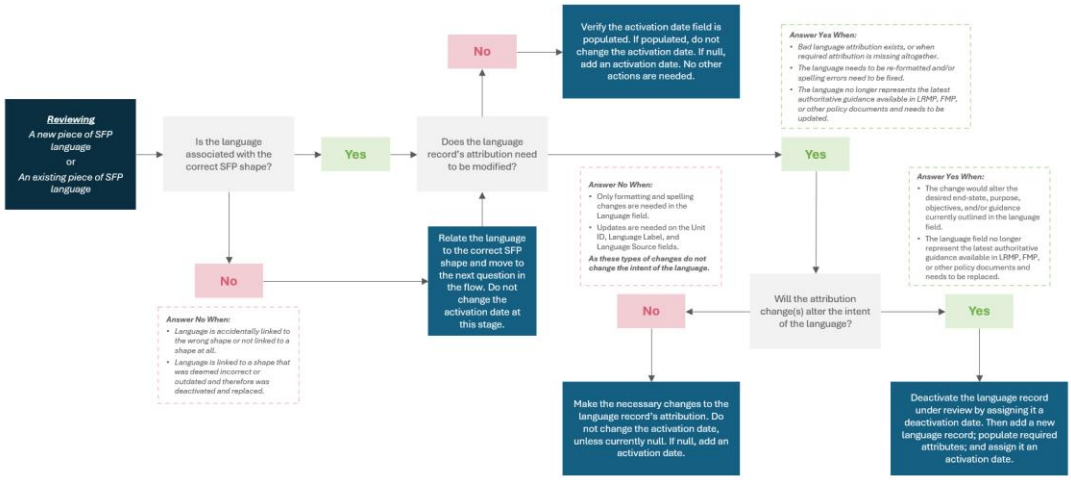
4. Re-open the ArcGIS Pro Project in which the Offline Copy of the SFP Web Map was created.
5. Go to Project -> Databases in the Catalog pane.
6. Right click on the mobile geodatabase and select Delete.

Appendix D – When to Activate or Deactivate SFP Language and Shapes

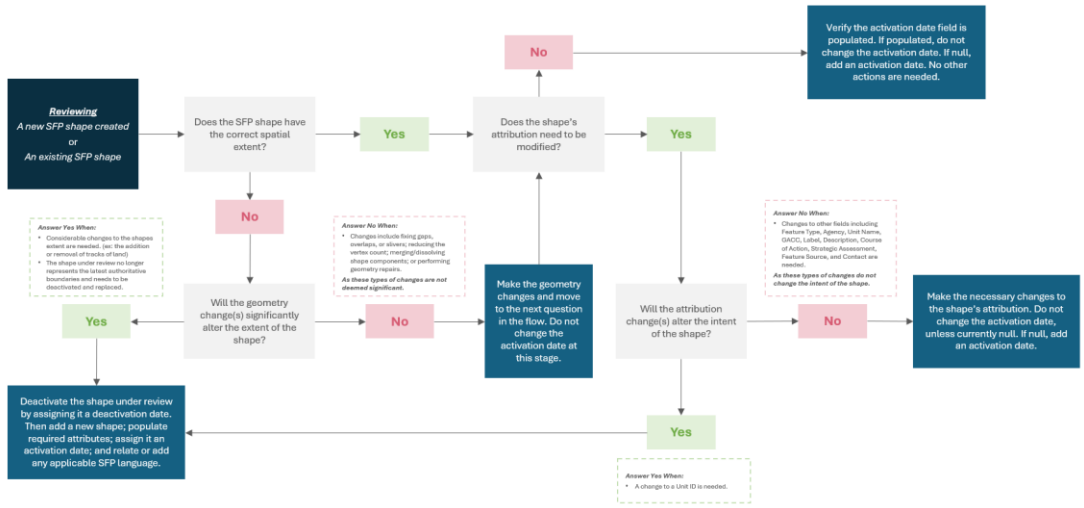
When to...	Activate Language	1. When a new piece of language is added. 2. When a piece of language is missing an activation date erroneously.

	Deactivate Language	1. When a piece of language no longer represents the latest authoritative guidance available in LRMP, FMP or other policy documents and needs to be replaced with a newer piece of language. 2. When a change to the language is needed that alters the desired end-state, purpose, objectives, and/or guidance currently outlined in the language record.
	Activate a Shape	1. When a new shape is created. 2. When a shape is missing an activation date erroneously.
	Deactivate a Shape	1. When considerable changes to the shape extent are needed (ex: the addition or removal of tracts of land). 2. When the shape no longer represents the latest authoritative boundaries and needs to be deactivated and replaced.

Activating and Deactivating SFP Language



Activating and Deactivating SFP Shapes



Appendix E – Definitions

Fire Management Plan (FMP)

Guidance for Implementation of Federal Wildland Fire Management Policy (Feb 2009) Definition: A plan that identifies and integrates all wildland fire management and related activities within the context of

approved land/resource management plans. It defines a program to manage wildland fires (wildfire and prescribed fire). The plan is supplemented by operational plans, including but not limited to preparedness plans, preplanned dispatch plans, prescribed fire burn plans and prevention plans. Fire Management Plans assure that wildland fire management goals and components are coordinated.

Land/Resource Management Plan (L/RMP)

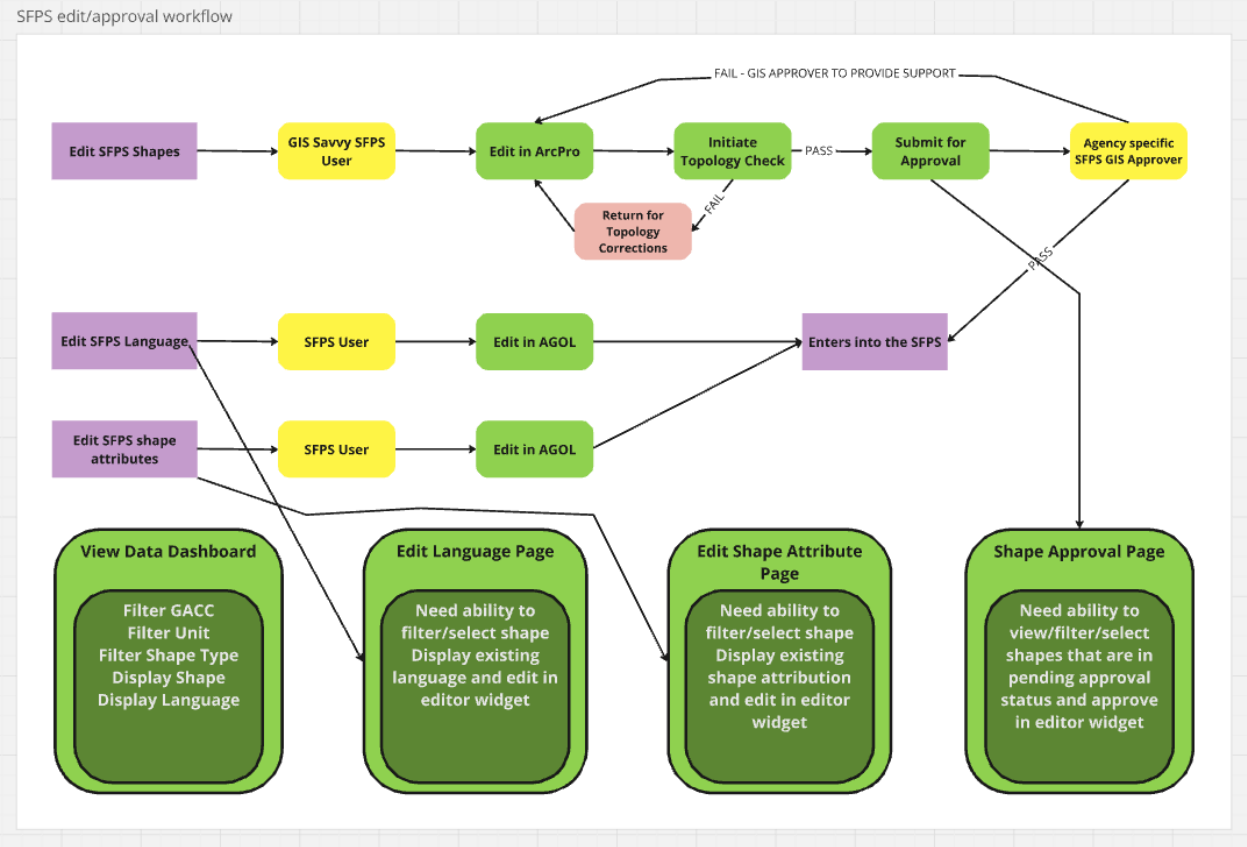
Guidance for Implementation of Federal Wildland Fire Management Policy (Feb 2009) Definition: A document prepared with public participation and approved by an agency administrator that provides general guidance and direction for land and resource management activities for an administrative area. The L/RMP identifies the need for fires role in a particular area and for a specific benefit. The objectives in the L/RMP provide the basis for the development of fire management objectives and the fire management program in the designated area.

Strategic Objectives

WFDSS Definition: These are broad statements, specified in land and resource management and fire management plans that identify changes in water, soil, air, or vegetation from the present to proposed conditions but can also describe an existing resource condition on that should be maintained. Objectives deal with large areas over long me periods and project intended outcomes of management actvities that contribute to the maintenance or achievement of desired conditions.

Any shapes created must be free of topological errors and fully attributed.

Editing SFP Shapes



Editing Best Practices

Archival

Migration to the New SFP Services

To support a smooth transition, SFP data created and managed within WFDSS was transferred to the new SFP services as follows:

Dates of WFDSS Data acquisition to the SFPS

Fire Managment Units (FMUs)	Shapes: 09/05/2024 Language 01/06/2025
Strategic Objectives (SOs)	Shapes: 09/05/2024 Language 01/06/2025
Management Requirements (MR)	Shapes: 01/06/2025 Language 01/06/2025
Other Unit Shapes	Shapes: 01/06/2025 No Language

All information entered into the WFDSS Application prior to these dates have been incorporated into the Spatial Fire Planning Service.

If they were Unit Wide they should have gone to Unit Boundaries, if they were shapes, then they went to Sub-Unit

- ~~***Fire Managment Units (FMUs) and Strategic Objectives (SOs)***~~
  - ~~***Shapes:*** All FMU and SO shapes added to WFDSS prior to 9/5/25 were incorporated as Sub-Unit, Non-Overlapping Shapes (SUNOS)~~
  - ~~***Language:*** All FMU and SO language created in WFDSS prior to 1/6/26 were incorporated.~~
- ~~***Management Requirements (MR)***~~
  - ~~***Shapes:*** All MR shapes added to WFDSS prior to 1/6/25 were incorporated as Sub-Unit, Overlapping Shapes (SUNOS)~~
  - ~~***Language:*** All MR language created in WFDSS prior to 1/6/26 were incorporated.~~

Transition Strategy - New to Spatial Fire Planning

1. Establish a working group to guide the SFP process.
2. Setting timelines for planning, review and implementation. This will be important to ensure the proper spatial data is loaded and ready for fire season.
3. Locate and review NEPA-compliant planning documents to guide creation of SFP shapes and associated text.
4.

Transition Strategy - Migrating Shapes in WFDSS to SFP Services

1. Locate NEPA-compliant planning documents to guide creation of SFP shapes and associated text.
2.

Data Managment Timeframes/Considerations

Once a plan has been developed it will be important to ensure team members stay engaged throughout the entire process. Spatial Fire Planning allows monitoring so revision can be made to Strategic Objectives and Management Requirements so they remain valid and reflect current management direction and planning documents

When to...	**Activate Language**	3. When a new piece of language is added. 4. When a piece of language is missing an activation date by accident. 5. When the intent of existing language changes. ***Notes**: A change in language intent is defined as a change to the desired end-state, purpose, key tasks, objectives, and/or guidance outlined in the Language field. Changes to the Language field such as resolving grammatical errors or re-formatting do not constitute as a change to language intent. Edits to other fields including Unit ID, Language Label, and Language Source also do not constitute as a change to language intent.*
	Deactivate Language	3. When a piece of language no longer represents the latest authoritative guidance available in LRMP, FMP or other policy documents and needs to be replaced with a newer piece of language. 4. When a piece of language is associated with the incorrect SFP shape.

	Activate a Shape	When a new shape is created or an existing shape's geometry changes.
	Deactivate a Shape	When a shape is no longer pertinent and should no longer be associated with SFP language, or with the shape is erroneous.

Note: New unit with no data at all - help desk ticket/WFM RD&A Email List

Section: Diagram on how WFDSS NG and SFP service environment interact.