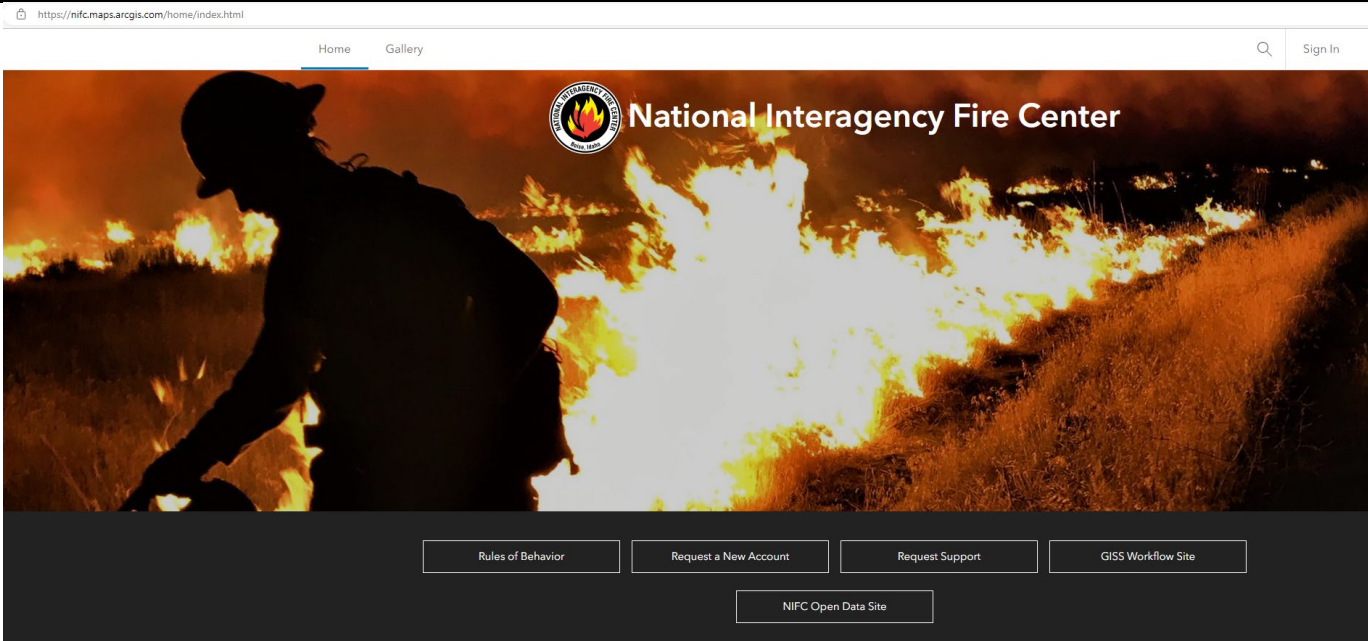


WFDSS NextGen

Focus Group Session 9 –
Spatial Fire Planning

WFDSS Next Gen – Spatial Fire Planning in AGOL - Fire Planners and GIS personnel will no longer need a WFDSS Login to create or update fire planning shapes and language. They will need AGOL access. Request an account at: <https://nifc.maps.arcgis.com/home/index.html>



Googling NIFC AGOL will Also help you find the link

Welcome to the NIFC ArcGIS Online Organization

The National Interagency Fire Center curates an ArcGIS Online Organization to provide a common online location for mapping during:

- Active and upcoming wildland fire incident response
- Planned and on-going prescribed fires
- Fuels treatment planning and data collection
- Fire planning and data sharing for wildfire response

This AGOL Organization also hosts InFORM Inspector and Wildfire Perimeter Certification Workflows:

- For all InFORM support and requests, please see the [InFORM Website](#) for direction
- Any additional questions should be directed to the appropriate [InFORM Agency Representative](#)

WFDSS Next Gen – Why pull SFP out of WFDSS Next Gen??

- **Aging software/hardware in WFDSS Classic**
 - WFDSS Classic was developed in 2007, when many units did not have spatial data. Enterprise and authoritative data sets did not exist. WFDSS built in the ability to house the necessary data.
- **AGOL provides easier access for GIS and Fire Planning personnel**
- **Data will be more accessible for use in other applications**
- **Eliminates the development, operation and maintenance costs of including in WFDSS Next Gen**
- **Eliminates need for third party maintenance, quality assurance and quality control of data**

WFDSS Next Gen – Spatial Fire Planning AGOL Benefits

- **Direct User Access to Language and Data**

The WFM RD&A 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.

- **Simpler Data Processing**

GIS personnel will be able to manage the geospatial components of fire planning data using standard desktop software, which is much more powerful than the tools available through web editing.

WFDSS Next Gen – Spatial Fire Planning AGOL Benefits

- **Better Governance Options**

It could be advantageous to have governance and/or maintenance of the data services and tools assumed by an interagency body other than the WFM RD&A and the WFDSS contractor, such as the NWCG GSC or a Wildland Fire Information and Technology (WFIT) effort like the Data Management Program. Separating the data services and app out from WFDSS makes this much easier to do than if the data services and tools were embedded within WFDSS.

- **Improved Consistency**

The approach to managing fire planning data and shapes will be consistent across all types of fire planning shapes. There will be fewer limitations on complex shapes, since the ArcGIS Online platform uses newer technology than the current generation of WFDSS, and gets regular updates to stay up to date with advances in technology.

WFDSS Next Gen – Spatial Fire Planning AGOL Benefits

- **Maximum Flexibility**

Agencies have differing levels of GIS staffing, skills, and capabilities for managing data. In some cases they have made different investments in software and tools. Separating the data services from the application allows agencies flexibility, and doesn't force agencies or units to adopt specific technologies or approaches. Both a web application or GIS software (such as ArcGIS Pro) can be used for managing data.

WFDSS Next Gen – Spatial Fire Planning will have 4 types of spatial data shapes

- **Unit Level** – Non-Overlapping shapes are synonymous with Unit Boundaries in WFDSS Classic
- **SubUnit-Non-Overlapping** – these shapes are synonymous with Fire Management Units (FMUs) and Strategic Objectives (SOs) in WFDSS Classic
- **SubUnit-Overlapping Multi-Unit Shapes** - these shapes are synonymous with Management Requirements (MRs) from WFDSS Classic
- **MultiUnit-Non-Overlapping – Semi New** – In WFDSS Classic these are shapes such as Alaska Fire Management Options, Retardant Avoidance Areas and PODs

WFDSS Next Gen – Spatial Fire Planning will have 4 types of spatial data shapes

NOTE: Unit Shapes

- Will be retained from WFDSS Classic
- Will be in a stand alone service
- Do not have fire planning language associated with them

WFDSS Next Gen – Spatial Fire Planning Data Clean-Up Needed for “Orphaned data”

NOTE: Orphaned Data Definition

Any data from WFDSS Classic that is missing a required element such as:

- Shape data with no associated language.
- Language with no associated shape.
- Errors in the Unit ID
- Deactivated Language or Shapes

WFDSS Next Gen – Spatial Fire Planning Language Storage





- A table in the data service will store fire planning language that can be tied to any shape, using what is known in GIS technology as a “**one to many**” relationship.
- A table in the Data Service will allow a single shape to be related to more than one piece of fire planning language.
- Instead of requiring the use of terminology such as “management requirement” and “strategic objective”, fire planning language can be described as directed by the providing agency, or in the manner designated within the policy document from which it originates.

WFDSS Next Gen – Spatial Fire Planning in AGOL – Where are we at???





- **Read-Only SFP available in the View Data Dashboard**
- **Establish 3 separate data views/applications**
 - View Only AGOL dashboard where users can view SFP shapes and associated language.
 - AGOL App where users can go in and associate a category to SFP shapes if they choose to
 - View Only AGOL dashboard for orphaned data that may need remedy actions taken in WFDSS Classic in order to ensure that the data transitions over to the SFPS once we move into production
- **In progress:**
 - Establish a data standard and schema
 - Establish best management practices to minimize these types of issue/errors moving into the future.

WFDSS Next Gen – Spatial Fire Planning in AGOL – Where are we at???

Complete and place holder data views

 <p>View Data Dashboard</p> <p>View Spatial Fire Planning Service map shape and language text associations as exported from WFDSS</p> <p>Last Updated: 1/5/22</p> <p>Go To...</p>	 <p>View Orphaned Spatial Data</p> <p>View orphaned swp shapes/spatial data that was excluded from WFDSS export</p> <p>Coming Soon...</p> <p>Not Available</p>	 <p>View Orphaned Tabular Data</p> <p>View orphaned language/tabular data that was excluded from WFDSS export</p> <p>Coming Soon...</p> <p>Not Available</p>	 <p>View Other Unit Shapes</p> <p>View Other Unit Shapes as exported from WFDSS</p> <p>Coming Soon...</p> <p>Not Available</p>
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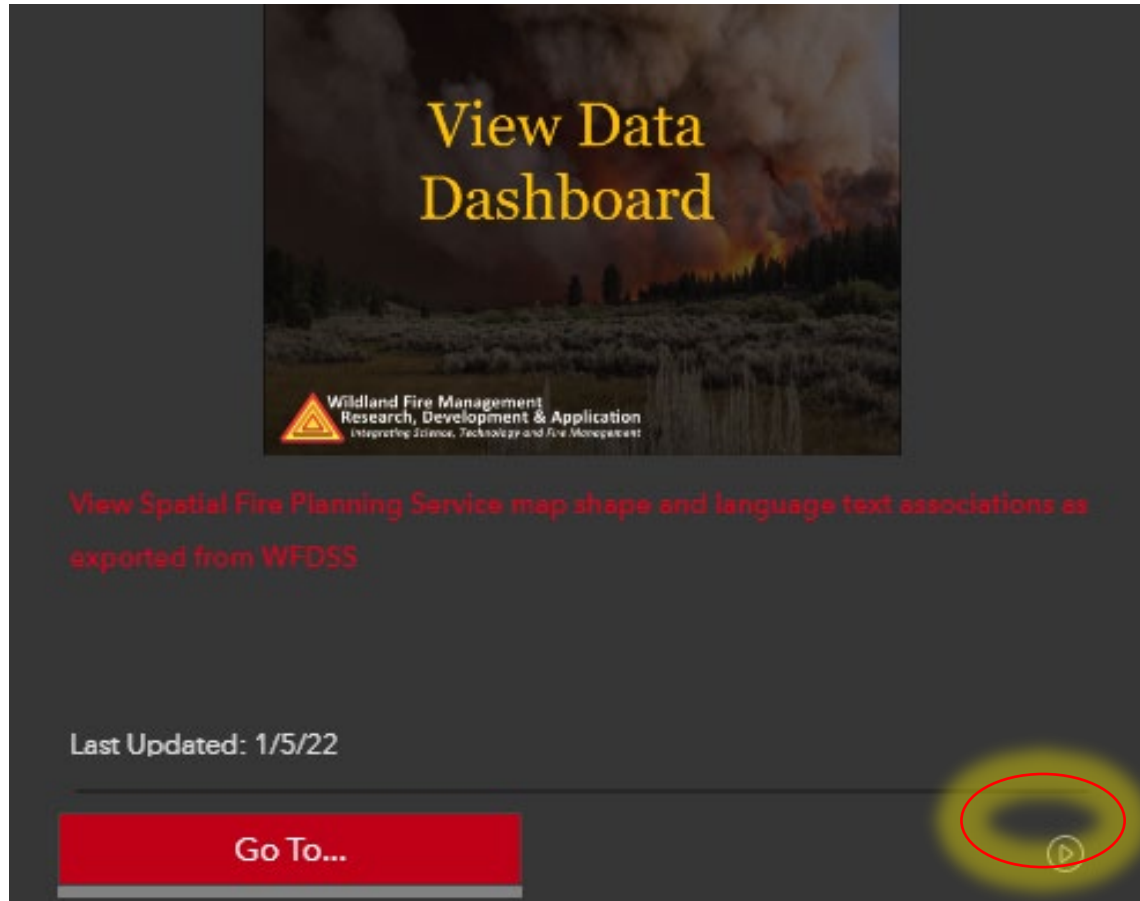
Published Data Edit Views

 <p>Publish Data Shape Category</p> <p>Publish Data Category</p> <p>Coming Soon...</p> <p>Not Available</p>	 <p>Publish Language Update</p> <p>Publish Language Update</p> <p>Coming Soon...</p> <p>Not Available</p>	 <p>Publish Shape Update</p> <p>Publish Shape Update</p> <p>Coming Soon...</p> <p>Not Available</p>	 <p>View Other Unit Shapes</p> <p>Publish Other Unit Shape</p> <p>Coming Soon...</p> <p>Not Available</p>
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WFDSS Next Gen – Spatial Fire Planning in AGOL – Where

are we at???

Completed data views/applications will have a Red GO TO button. Users can click the button or the dashboard image. NOTE the circled arrow in the lower right. The arrow will lead you to a video tutorial for each data view/application portal. Link to current video: [Spatial Fire Planning Service: View Data Dashboard - YouTube](#)



The screenshot shows a dark-themed interface for the 'View Data Dashboard'. At the top, the text 'View Data Dashboard' is displayed in a large, yellow, serif font. Below this, there is a smaller image of a landscape with a fire in the background. Underneath the image is the logo for 'Wildland Fire Management Research, Development & Application' with the tagline 'Integrating Science, Technology and Fire Management'. Below the logo, the text 'View Spatial Fire Planning Service map shape and language text associations as exported from WFDSS' is written in a red, sans-serif font. At the bottom left, the text 'Last Updated: 1/5/22' is displayed in a light gray font. At the bottom center, there is a red rectangular button with the text 'Go To...'. At the bottom right, there is a small, circular icon with a play button symbol, which is circled in red.

WFDSS Next Gen – Spatial Fire Planning in AGOL – Next Steps???

- **Complete the remaining modules**
- **Create “How To” steps for each module**
- **Data Clean up** – Users can clean up incorrect and mismatched data in WFDSS Classic
- **Establish editing and approval privileges and process**
- **Complete schema and data standards**
 - Metadata
 - Category attributes
 - Layer nomenclature
- **Create and house all module videos on the WFDSS NextGen help page**

WFDSS Next Gen – Spatial Fire Planning – View Data Module


Interagency Spatial Fire Planning Service - View Only

Zoom to GACC SWCC | Select a Unit NMLNF - Lincoln National Forest | Select Shape Category Management Requirement...

Unit/Language Selector

Search...

- Unit ID: NMLNF - Lincoln National Forest
Shape Label: RNA
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Spruce Fire
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Wilderness
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Riparian and Water
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Forest Wide
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Mixed Conifer
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Pinyon Juniper
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Ponderosa Pine
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: ES
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: MO
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: IS
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: NMLNF
SFPS Shape Type: Unit-Level Non-Overlapping Shape



Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community | Powered by Esri

Active Date | Fire Planning Language

Active Date	Fire Planning Language
January 29 2020	<p>Pinyon and Juniper</p> <ul style="list-style-type: none"> In order to maximize benefits of using such unplanned ignitions as a management tool, while avoiding unwanted fire effects on the landscape, the following parameters would be utilized to determine whether or not the fire would produce desired environmental effects: <ul style="list-style-type: none"> Based on actual and predicted fire weather and fire behavior modeling, unplanned ignitions for resource benefit would be considered if less than 60 percent of the burned area would experience complete overstory mortality. This objective allows for sustained crown fires as long as 40 percent of the area will survive the associated fire behavior. Replacement Page 49 Amendment 16, September 3, 2009
January 30 2020	<p>Wilderness</p> <ul style="list-style-type: none"> Allow fire to play a natural role Replacement Page 11 Correction Notice 4, June 5, 1996 Use unplanned ignitions, where feasible and appropriate, to accomplish resource management objectives. Replacement page 70 Amendment 16, September 3, 2009 Manage air quality in conformance with the Clean Air Act and consistent with wilderness values Replacement Page 11 Correction Notice 4, June 5, 1996 The use of dozers or other machinery to construct fire lines within wilderness would be prohibited, as would the construction of temporary or permanent roads. Appendix - H Amendment 16, September 3, 2009
January 30 2020	<p>Spruce Fir</p> <ul style="list-style-type: none"> Retain all snags 18" or greater within the spruce-fir, mixed-conifer, or ponderosa pine habitat types unless removal is necessary for safety. Replacement Page 32 Amendment 9, June 5, 1996
January 30 2020	<p>Aquatic Species</p> <ul style="list-style-type: none"> During the WFDSS planning processes, potential fire effects to headwater streams (ephemeral and intermittent) that feed fish-bearing coldwater perennial streams would be addressed.

Download Language | Last update: 12 seconds ago

WFDSS Next Gen – Spatial Fire Planning in AGOL – Users can select the GACC, Unit and Shape Category in the upper right. Users will see a complete list of the Unit language. If they Click on one shape, they will see the language for that shape.

Interagency Spatial Fire Planning Service - View Only

Zoom to GACC SWCC

Select a Unit NMLNF - Lincoln National Forest

Select Shape Category Management Requiremen... 3

Unit/Language Selector

Search...

- Unit ID: NMLNF - Lincoln National Forest
Shape Label: RNA
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Spruce Fire
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Wilderness
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Riparian and Water
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Forest Wide
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Mixed Conifer
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Pinyon Juniper
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: Ponderosa Pine
SFPS Shape Type: Sub-Unit Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: ES
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: MO
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: IS
SFPS Shape Type: Sub-Unit Non-Overlapping Shape
- Unit ID: NMLNF - Lincoln National Forest
Shape Label: NMLNF
SFPS Shape Type: Unit-Level Non-Overlapping Shape

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

Powered by Esri

Legend

FirePlanningShapes

- Multi-Unit Non-Overlapping Shape
- Sub-Unit Non-Overlapping Shape
- Sub-Unit Overlapping Shape
- Unit-Level Non-Overlapping Shape

Active Date	Fire Planning Language
January 30 2020	<p>Wilderness</p> <ul style="list-style-type: none"> Allow fire to play a natural role <i>Replacement Page 11 Correction Notice 4, June 5, 1996</i> Use unplanned ignitions, where feasible and appropriate, to accomplish resource management objectives. <i>Replacement page 70 Amendment 16, September 3, 2009</i> Manage air quality in conformance with the Clean Air Act and consistent with wilderness values <i>Replacement Page 11 Correction Notice 4, June 5, 1996</i> The use of dozers or other machinery to construct fire lines within wilderness would be prohibited, as would the construction of temporary or permanent roads. <i>Appendix - H Amendment 16, September 3, 2009</i>

WFDSS Next Gen – Spatial Fire Planning in AGOL – Users can download the language from a single shape or an entire unity. There will be HTML formatting included with the Lang_Desc column.

AutoSave Off WFDSS_NG_SpatialFirePlanning_AllFeatures_8533328180876156093 Search (Alt+Q)

File Home Insert Page Layout Formulas Data Review View Help Acrobat

Clipboard Font Alignment Number Styles Cells Editing Sensitivity Box

POSSIBLE DATA LOSS Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format. Don't show again Save As...

OBJECTID	Lang_Desc	LangActD1	LangDeact	LangUNIT	Lang_FMU	LFeatType	Type_ID	Editor_Id	Objective	FSGlobalID	LangJoinID	GlobalID	Creator	CreationDate	Editor	EditDate
3971	<p>Pinyon and Juniper</p>In order to maximize benefits of using such unplanned ignitions as a management tool, while avoiding un	2020-01-29	T14:32:40	NMLNF		Managem	4	wahall	4016521	967c6817-	GISID_401	7743719e-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3972	<p>Wilderness</p>Allow fire to play a natural role <u>Replacement Page 11 Correction Notice 4, June 5, 1996</u>	2020-01-30	T15:13:38	NMLNF		Managem	4	wahall	4016773	5c9d8b16-	GISID_401	c1d4a643-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3973	<p>Spruce Fir</p>Retain all snags 18" or greater within the spruce-fir, mixed-conifer, or ponderosa pine habitat types unless removal	2020-01-30	T14:46:06	NMLNF		Managem	4	wahall	4016755	f49b69ec-	GISID_401	b369c813-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3974	<p>Aquatic Species</p>During the WFDSS planning processes, potential fire effects to headwater streams (ephemeral and intermitte	2020-01-30	T14:40:33	NMLNF		Managem	4	wahall	4016732	8f4bcc57-	GISID_401	500ae2fd-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3975	<p>Research Natural Areas</p>Suppress all fires at 10 acres or less unless research purposes require other suppression objectives. <e	2020-01-29	T13:45:31	NMLNF		Managem	4	wahall	4016505	2c33ca2f-	GISID_401	f496b391-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3976	<p>Air Quality</p>Air quality impacts would be considered during all stages of the WFDSS process. <u>Amendment 16, Septem	2020-01-29	T13:20:15	NMLNF		Managem	4	wahall	4016486	1bfefb60-	GISID_401	275bab30-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3977	<p>Ponderosa Pine</p>Retain all snags 18" or greater within the spruce-fir, mixed-conifer, or ponderosa pine habitat types unless re	2020-01-30	T10:01:45	NMLNF		Managem	4	wahall	4016646	47e06953-	GISID_401	d7966649-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3978	<p>Mixed Conifer</p>Retain all snags 18" or greater within the spruce-fir, mixed-conifer, or ponderosa pine habitat types unless ren	2020-01-29	T13:56:35	NMLNF		Managem	4	wahall	4016514	2fa0c6eb-	GISID_401	7a4a45b0-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3979	<p>Soil and Water</p>Rehabilitation will be applied when needed to minimize loss of site productivity following activities or wildfi	2020-01-29	T13:21:08	NMLNF		Managem	4	wahall	4016491	1bfefb60-	GISID_401	12602475-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3980	<p>Recreation</p>Timing of recreational holidays/impacts will be taken into consideration in the WFDSS planning process. <u>	2020-01-29	T13:20:59	NMLNF		Managem	4	wahall	4016490	1bfefb60-	GISID_401	411ec496-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3981	<p>Human Health and Safety</p>All safety measures outlined in the National Interagency Fire Center's (NIFC) Interagency Standards	2020-01-29	T13:20:51	NMLNF		Managem	4	wahall	4016489	1bfefb60-	GISID_401	3ab743a8-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3982	<p>Heritage Resources</p>All known fire-sensitive sites would be protected. <u>Appendix - H Amendment 16, September 3, 2	2020-01-29	T13:20:40	NMLNF		Managem	4	wahall	4016488	1bfefb60-	GISID_401	83d94f2b-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3983	<p>Fire</p>All unplanned ignitions will receive an appropriate management response <u>Replacement Page 48 Amendment 1	2020-01-29	T13:20:30	NMLNF		Managem	4	wahall	4016487	1bfefb60-	GISID_401	7a6e1a08-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3984	<p>Multiple Objective Option</p><p>Option to use unplanned ignitions for resource benefit. Unplanned ignit	2020-01-29	T11:51:36	NMLNF	MO	Strategic	3	wahall	4016472	f74b9893-	FMU_NML	1e9d7ea8-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3985	<p>Immediate Suppression</p><p>Suppression Objective--10 acres or less: This category applies to the suppre	2020-01-29	T11:33:33	NMLNF	IS	Strategic	3	wahall	4016468	ef6bf257-	FMU_NML	747293c0-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27
3986	<p>Expanded Suppression<br data-mce-bogus="1"></p><p>Suppression Objective--1,000 acres or less: A calcula	2020-01-29	T11:29:39	NMLNF	ES	Strategic	3	wahall	4016466	1a92352a-	FMU_NML	73054021-	SMCCLENI	2022-11-0	SMCCLENI	2022-11-02T16:59:27

WFDSS Next Gen – Helpful Links

- [WFMRDA Spatial Fire Planning Service \(arcgis.com\)](#) – Link to SFPService
- [Spatial Fire Planning Service – YouTube](#) – Link to current video
- <https://wfmrda.nwccg.gov/news/next-generation-wfdss> - Link to WFDSS Next Gen User Group site

WFDSS Next Gen – Survey

- Please complete the user survey!!
- Survey Link:
<https://forms.office.com/g/U5KGJ4v66Y>
- Your input is important!!