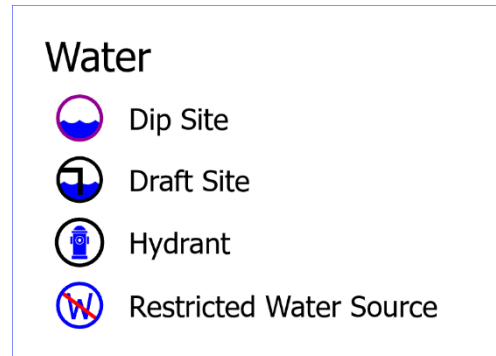


2024 Updates to the National Incident Feature Service and Event Geodatabase

Water Sources

The Water features have been restructured to provide more accurate tracking and information.

2 new features have been added, *Draft Site* and *Hydrant*, while the generic *Water Source* feature has been removed. Additionally, *Dip Site* has moved to Water section with no other changes.



All water sources stored in the NIFS should now reflect their specific usage by operations.

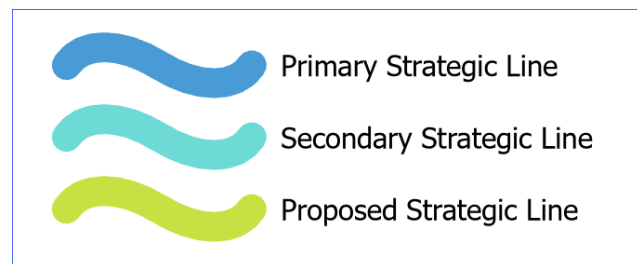
Continue to use *Restricted Water Source* to indicate any site that should not be utilized.



The *Water Development* or *Draft Site* under the Repair section has been removed. Use *Draft Site* for any draft sites and track any repair requirements in the standard repair fields.

Strategic Operations

Along with a new [Map Product Standard in GeoOps](#), the NIFS Event Line feature class now has an attribute called Strategic Line Type. Any line feature can be set as a *Primary*, *Secondary*, or *Proposed Strategic Line* (the default value is None).

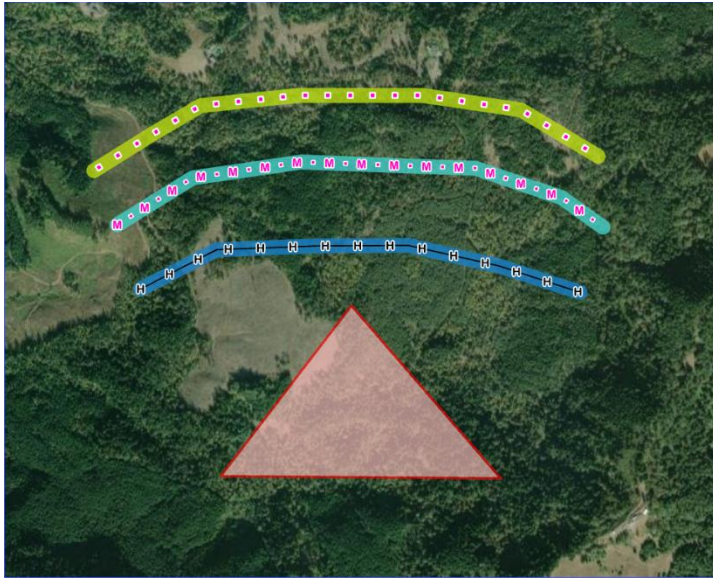


A new view of the NIFS called Strategic Lines is available and functions similarly to Repair Status. It can be added underneath the standard Event Symbology and provides a halo to the lines serving strategic planning.

A Strategic Line 2024 layer file is provided for print maps. Apply to the *EventLine* feature class.

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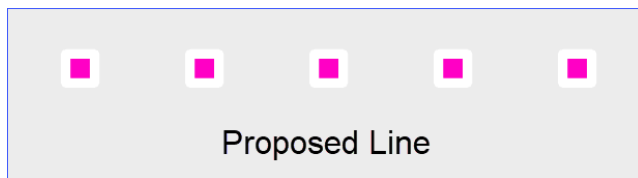
Strategic Line is filtered to only features that exist on the ground or are planned or proposed.



Planned Secondary Line is now *Proposed Line*, to bring the name more in line with the intended use and to integrate with Strategic Lines.

Proposed Line should be used for features that are being considered or evaluated as control features, but have not yet been planned in any way.

The symbol has been updated as well.



The character limit of the Event Line *Comments* field has been increased to 2000 to allow for Management Action Point, Strategic Line, and other descriptions to be fully captured.

Limited Action Line is a management strategy being developed as part of Strategic Operations. It will display as a brown line, offset outside the Perimeter Line.

A *LimitedActionLine* feature class is provided in the *Other_Incident_Data* GDB in the [GeoOps Incident Folder Structure](#).

Copy or follow the geometry of Perimeter Line where Limited Action Line is being implemented, the Limited Action Line 2024 layer file will apply the standard symbol and offset it.



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Label Lines

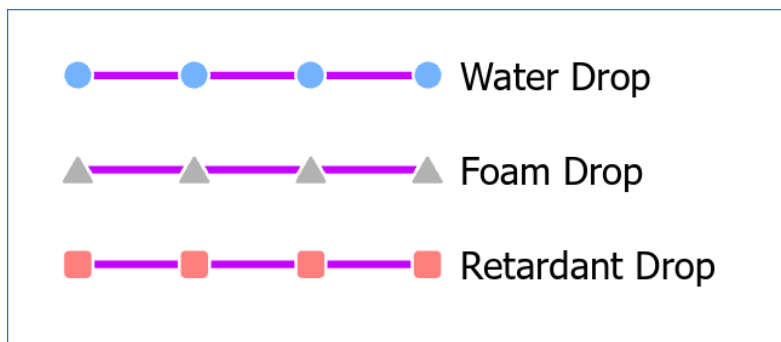
A *LabelLine* feature class is now provided in the *Other_Incident_Data* GDB in the [GeoOps Incident Folder Structure](#).

The Label Line 2024 layer file applies the same label classes as the NIFS Label Point.

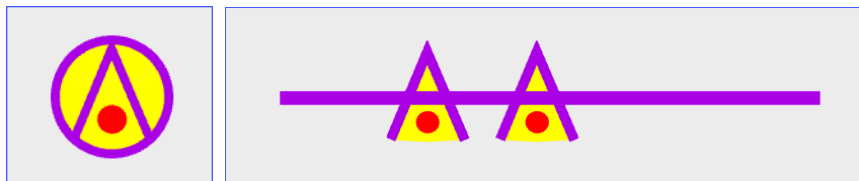
Label Lines are intended for use on Multipage (Tiled) Maps as an alternative to annotation. Guidance can be found on the [GISS Workflow Master Projects](#) page with specific instructions in the [Multipage Map Workflows job aid](#).

Changes for Improved Clarity and Visualization

The *Water*, *Foam*, and *Retardant Drop* line symbols now utilize a different symbol for each to allow for better differentiation by individuals with color vision deficiency.



Aerial Hazard (point and line) now incorporates the Safety color scheme for better visibility on maps and better differentiation for both individuals with color vision deficiency and those without.



UAS Launch and Recovery has changed from a line feature to a point feature.



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Planned and *Completed Burnout* symbols have been offset from their geometry to provide a more intuitive interpretation of the burnout's implementation.



In this screenshot, the *Planned Burnout* and the *Completed Road as Line* have coincident geometries. The *Planned Burnout* symbol is offset inwards so that the bulk of the symbol no longer fall outside the burnout area, which was visually confusing. Just like the Fire Edge symbol, the 'flat' side of the symbol indicates the direction of travel.

The Event Line feature Access or Improved Road has been updated to *Access Route*.

This name better reflects the intended use of the feature and allows it to be used for non-road access features as well.

Mobile Service Filters

The pre-applied filters on the Mobile Edit, Repair Status, and Mobile View services have been altered so that **they no longer filter out features where *IsVisible* = No.**

This expression can be re-applied once a Web Map Template is saved, but it was determined that the more common scenario was the need to hide features from print maps while still displaying them in Field Maps.

Only features where *DeleteThis* = Yes and *FeatureStatus* = Archive will be removed from mobile services by default now.

This allows the use of the *IsVisible* field to control the visibility of features in print map production without affecting the web maps.

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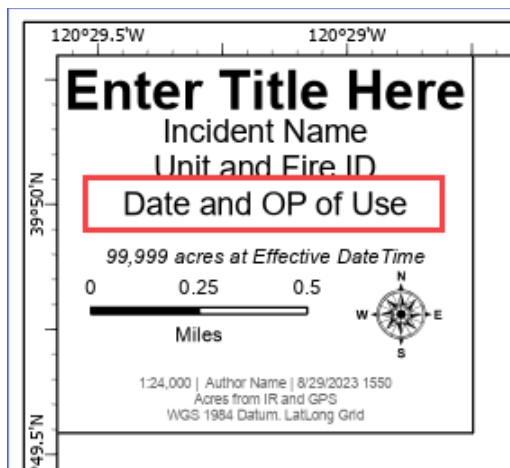
Layouts

“Sidebar” layouts are now included for all standard sizes.

Sidebar layouts are recommended for Multipage Map products.

The “Date and OP of Use” text element has been moved from the Map Metadata to the *DynamicTextUpdate* Table. This allows the text to be updated for all projects at once, applying a single Date and OP across all maps.

When a different Date or OP is needed for an individual map, this can be set to static text (for one-offs) or to the Map Metadata to apply to multiple layouts using the same Map View (as it was in previous years).



GeoOps Naming Conventions

Updated naming standards are now available on the GeoOps website.

Some file names have been simplified to remove outdated conventions.

[File Naming | NWCG](#)

All changes are incorporated into the 2024 GeoOps File Namer xlsx tool.

Changes include but are not limited to:

- AGOL Group and Content naming
- Zoned Fire naming
- Strategic Operations Map naming
- VTPK Basemap naming
- SIT Update Map (Markup Map) naming for file retention
- Distinctions have been made in file names to indicate whether the date and time a file was created/collected or the current date and time should be used

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See below for previous-year updates.**

2023 Updates to the National Incident Feature Service and Event Geodatabase

For 2023, there are no schema updates and no major changes to GeoOps or the GISS Workflow!

This is a conscious choice and is intended to provide a needed break for both users and administrators. Over the last 5 years, nearly every aspect of the GISS position has seen a major overhaul and while the advancements have been overwhelmingly positive, many of us are experiencing change fatigue.

This is not to say there is no room for improvement. Many great suggestions were received throughout the season and in the GISS Survey, and they will be considered for inclusion in 2024. That there are no critical updates necessary also indicates that we have reached a level of maturity with the current state, and that is good news for everyone.

Please continue to submit your ideas; they are appreciated and valuable insight, even if the change is not implemented.

The 2022 Updates can be found on the next page for reference; all changes listed have been retained.

For information on 2023 AGOL updates please see the [Create and Share Web Maps | NWCG](#) page.

There are three smaller changes worth noting this year:

- **Standard Symbolology is now the default on the NIFS**

For most workflows, the update will be seamless. All the Event Standard symbols are now supported in Field Maps and Map Viewer. Most users will now see the same symbols in all print and digital products.

However, in AGOL some web apps do not support the complex line symbols. The simplified lines will still be present in the official Editing Apps (Operations, SITL, and GISS), and any custom apps built with the Web App Builder (WAB) interface.

Experience Builder can be used for any new app creation. If you must use WAB or another app that cannot display the complex line symbolology in the NIFS, please contact wildfirerresponse@firenet.gov for guidance.

- **Event Line now has Preconfigured Labels**

Labels on Event Line have historically been uncommon, but to speed their implementation when necessary, color-coded labels classes have been added to the NIFS and the lyrx files provided in the GIS Folder Structure.

They can be disabled or modified as needed, should they interfere with any of your workflows.

- **"Restricted" Folder added to GeoOps Folder Structure**

At the base level within the *2023_Template*, a 'restricted' folder is now included.

This folder should be used for all data and products that contain sensitive, restricted, or [controlled-unclassified information](#). This will aid the DOCL and any future FOIA liaisons in protecting this information.

When using OneDrive, this folder can optionally be password protected.

Reminder: [Sensitive Data](#) is not allowed to be hosted within the NIFC Org.

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2022 Updates to the National Incident Feature Service and Event Geodatabase

- **NIFS Views**

The Mobile and Repair Status views and Web Map Templates are now filtered by default to exclude features with *FeatureStatus* 'Archive,' *DeleteThis* 'Yes,' and *IsVisible* 'No' values. This can be adjusted as necessary after a copy of the Web Map Template has been saved.

For more information on the available NIFS services, please see the [GeoOps Service List page](#) or the layer's item details.

- **GISS Edit**

Restricted to qualified GISS and approved trainees. Delete enabled.

- **Mobile Edit**

For use in web maps for mobile data collection.

- **Repair Status**

Displays Accountable Property, Event Point, and Event Line by *RepairStatus* attribute.

- **Internal View**

View only layer with all features and attributes exposed. Not Sync enabled.

- **Mobile View**

View only layer with Sync enabled for use as reference in mobile apps.

- **IRIN Edit**

Restricted to IRIN. Contains only IR layers. Delete enabled.

Each view has a Training equivalent that is linked to from the item details and available in the [Training Resources Group](#).

- **Schema Changes**

- **Feature Class Updates**

- IR Line – *Removed*
- Perimeter Line - *Added*

- **Field Updates**

Added

Removed

Accountable Property	Event Point	Event Line	Event Polygon	IR Polygon
RepairsNeeded	RepairsNeeded	RepairsNeeded	ComplexName	ComplexName
RepairPriority	RepairPriority	RepairPriority	Acres_AutoCalc*	
	GISS_Misc2	GISS_Misc2	GISS_Misc2	

*Acres_AutoCalc will remain an attribute in the WFIGS Perimeter services

- **Domain Updates**
 - FeatureCategory_PerimLine - *Added*
 - Contained, Uncontained
 - RepairPriority - *Added*
 - Unknown, Low, Medium, High
 - FeatureCategory_Line
 - Route --> Aviation Route
 - Fire Edge --> Fire Edge (Field Collection)
 - Contained Line - *Removed*
 - FeatureCategory_Point
 - Check Point --> Aviation Check Point
 - ArchClearance
 - Cleared for Repair --> Cleared for Mechanical Repair
 - RepairStatus
 - Unknown --> Needs Assessment
 - Map Method
 - Infrared Image --> IR Image Interpretation
- **Utilizing New Fields**
 - RepairsNeeded
 - Use for defining repair work necessary for features that *differs from or goes beyond* the repair standards set in the Incident Suppression Repair Plan.
 - RepairPriority
 - Use to designate the priority of repairing certain features over others based on potential impacts and the guidance of the Incident Suppression Repair Plan.
 - Domain uses coded integers for potential “Repair Score” calculations of designated areas.
 - 0 – Unknown
 - 1 – Low
 - 2 – Medium
 - 3 – High
 - ComplexName
 - Returned to the NIFS by popular demand, the ComplexName will be available in the Event Polygon layer for use in queries and display.
 - Does not change that the *Incident* IRWIN ID must be used for perimeters to properly display in the public services.
 - Attributes of an incident’s parent Complex will be displayed for perimeters in the public services directly from IRWIN.

- **Using the New Perimeter Line Feature Class**

- Features in this layer represent the Contained/Uncontained status of the perimeter. It is essentially the previously used *Fire Edge* and *Contained Line* feature categories split out from Event Line for ease of use and containment calculations.
- Use of the *Contained* and *Uncontained* feature categories in this layer remains the same as the previous workflow.
 - The entire fire perimeter should be covered by either *Uncontained* or *Contained* features (i.e. there should be Perimeter Line features coincident with the entire fire polygon).
 - Different types of completed line (dozer, hand, etc) should be tracked where they exist using the appropriate Event Line features. They should be placed coincident with a Contained Line feature when they are the containment line.
- An optional Containment Strategy text field is provided for teams that wish to track different containment strategies being implemented for different sections of the perimeter.
- A *Fire Edge (Field Collection)* feature category remains in the Event Line layer to allow perimeter changes to be captured by field personnel. These features should be incorporated into the Perimeter Line and Event Polygon layers upon review and approval.

- **Lat/Long .CAL Files**

New .cal files are provided that will now automatically account for different coordinate reference systems to calculate WGS84 Lat/Long in DDM.

There is no longer a need to determine the CRS of the data. One file for Latitude, one for Longitude.

- **Symbology Updates**

Efforts to reach parity between the desktop and web service symbology continue. Additional improvements based on feedback from the annual GISS Survey include:

- Planned Lines are now pink and dashed/broken.
- Hazard symbol is now a yellow triangle with red boarder and exclamation mark.
- Repair Status symbols updated to follow the color wheel and allow better differentiation in colorblind individuals.

	Planned Burnout
	Planned Dozer Line
	Planned Fuel Break
	Planned Hand Line
	Planned Mixed Construction Line
	Planned Plow Line
	Planned Road as Line
	Planned Secondary Line

	Completed Burnout
	Completed Dozer Line
	Completed Fuel Break
	Completed Hand Line
	Completed Mixed Construction Line
	Completed Plow Line
	Completed Road as Line



Repair Status	
	In Use - Fire Management
	Needs Assessment
	Repair Needed
	In Progress
	Completed - Ready for Inspection
	Completed - Inspected
	No Repair Needed
	Other - See Comments

Repair Status	
	In Use - Fire Management
	Needs Assessment
	Repair Needed
	In Progress
	Completed - Ready for Inspection
	Completed - Inspected
	No Repair Needed
	Other - See Comments