APPROVED

NWCG Geospatial Data Layer Standard
Metadata Definition and Data Layer Specifications

Wildland Fire Event Line

Layer Name:	Wildland Fire Event Line
Layer Abbreviation:	FireLine
Layer Description:	The Wildland Fire Event Line data standard will define the minimum attributes necessary for collection, storage and dissemination of **incident based data on wildland fires (wildfires and prescribed fires)**. The standard is not intended for long term data storage, rather a standard to assist in the creation of incident based data management tools, minimum standards for data exchange, and to assist users in meeting GIS Standard Operating
Status:	Approved
Source Record:	N/A
System of Record:	N/A
Data Stewardship Group:	Geospatial Subcommittee
Data Steward:	Skip Edel
Additional Text:	This standard is for incident based data collection, storage and exchange.

Background:	Currently there are several methods to manage spatial data on wildland fires, where the Incident Command System (ICS) is used. Some use tools like the Fire Incident Mapping Tool (FIMT) to create and manage data. Others use geodatabase feature classes or shapefiles to store attribute information. The intent of this standard is to update existing data formats and provide a **common set of attributes for use on wildland fires**.
Abstract:	The standard will store information dealing with ICS data line features.
Purpose:	A data standard will provide a common platform for wildland fire event data development and sharing. It will allow for smoother transitions between teams on wildfire incidents. This will save time, money, and get products into the users hands more quickly. The standard will also help make ICS maps more consistent by working from a common attribute set.

Data Model: Line feature class

Other Notes: This feature class will use a specific symbol set. The symbol set is defined by the GIS Standard Operating Procedures for Incidents (GSTOP). For additional information follow this link: http://gis.nwcg.gov/gstop_about.html

Related Layers: This feature class will be part of a Incident Geodatabase that will contain Fire Point, Fire Line, and Fire Polygon feature classes.

Horizontal and/or Vertical   Standards for horizontal and vertical accuracies are detailed in Geospatial
Position Accuracy: Positioning Accuracy Standards; Part 3: National Standard for Spatial Data Accuracy (NSSDA), http://www.fgdc.gov/standards/projects/FGDC-standards-projects/accuracy/part3/chapter3. Accuracy is reported by feature in meters at the 95% confidence level listed in the HAccuracy and/or VAccuracy fields. Accuracy reported at the 95% confidence level means that 95% of the positions in the feature will have an error with respect to true ground position that is equal to or smaller than the reported accuracy value.

Horizontal and/or Vertical   Data layer projection parameters should be documented in a .prj file
Spatial Reference Information: (shapefile format) or in a geodatabase projection definition. Or, specify the projection parameters via an EPSG code (example EPSG code 4326 = WGS84), http://www.epsg-registry.org. Projection parameters file should include applicable attributes as specified in the FGDC Standards Reference Model, 4.1.2.1.23.

Questions or comments can be emailed to:
BLM_FA_NWCG_DATA@blm.gov

Information on the process of requesting a new Data Standard or a change to an existing Data Standard can be located at:
http://www.nwcg.gov/?q=data-standards

Information about the Data Standards & Terminology Subcommittee (DSTS) can be found at:
http://www.nwcg.gov/?q=committees/data-standards-and-terminology-subcommittee

Geospatial Data Layer Standard Attributes & Attribute Definitions							
Standard Name*	Alternate Name	Required?	Data Type	Size/ Width	Description	Values	Related NWCG Standard
Jurisdictional Unit Identifier	UnitID NWCG_UID NFIRSUntID	Yes	String	10	Code used in interagency wildland fire to uniquely identify the governmental entity having overall land and resource management responsibility for a specific geographical area as provided by law. NWCG Unit Identifier should be used. In cases where NWCG Unit Identifier is not available, a National Fire Incident Reporting System (NFIRS) ID may be used instead.	NWCG (PMS 931: Unit Identifiers) Example: CORMP NFIRS ID (FDID, State, Station) Example: 07434VA001	Unit Identifier
MapMethod	Map_Method MapMeth	Yes	String	25	Controlled vocabulary to define how the geospatial feature was derived. Map method may help define data quality.	GPS-Driven; GPS-Flight; GPS-Walked; GPS-Walked/ Driven; GPS-Unknown Travel Method; Hand Sketch; Digitized-Image; Digitized-Topo; Digitized-Other; Image Interpretation; Infrared Image; Modeled; Mixed Methods; Remote Sensing Derived; Survey/GCDB/Cadastral; Vector; Phone/Tablet; Other	
DateCurrent	DateCrnt EditDate	Yes	Date		The last edit, update, of this GIS record. Date should follow the assigned NWCG Date Time data standard, using 24 hour clock, YYYY-MM-DDhh.mm.ssZ, ISO8601 Standard.	Example: 2014-06-23-15.30Z	Date Time (Assigned)
Comments	Notes GIS_Note	No, but recommended	String	255	Additional information describing the feature.	Free text	
GeometryID	Geometry_ID GIS_ID Spa_ID	Yes	String	50	Primary key for linking geospatial objects with other database systems. **Required for every feature.** This field may be renamed for each standard to fit the feature.	Globally Unique Identifier (GUID). **	
IRWINID	FireOccurID, PtOriginLnk	Yes	String	50	Primary key for linking to the Wildland Fire Locations Point dataset. The origin of this GUID is the IRWIN application and must be sourced there. (This unique identifier may NOT replace the GeometryID core attribute)	Globally Unique Identifier (GUID) populated from wildland fire locations point data	
LocalIncidentID	FireNum, SOFireNum	Yes	String	10	Local incident identifier (dispatch number). A number or code that uniquely identifies an incident for a particular local fire management organization within a particular calendar year. Field is string to allow for leading zeros when the local incident identifier is less than 6 characters. (IRWIN required).	Example: 123456	Local Incident Identifier
IncidentName	FireName	Yes	Sting	50	The name assigned to an incident; assigned by responsible land management unit. (IRWIN required). Officially recorded name	Example: Big Fire	Incident Name
FeatureCategory	LineType	Yes	String	50	Type of wildland fire polygon or unburned areas.	Domain: Uncontrolled Fire Edge; Completed Dozer Line; Completed Line; Completed Hand Line; Road as Completed Line; Active Burnout; Aerial Foam Drop; Aerial Hazard; Aerial Ignition; Aerial Retardant Drop; Aerial Water Drop; Air Tanker Foam; Air Tanker Retardant; Completed Burnout; Edge of Imagery; Escape Route; Explosive Line; Fire Break Planned or Incomplete; Fire Spread Prediction; Helitanker Foam; Helitanker Water; Highlighted Manmade Feature; Line Break Completed; Management Action Point; Planned Fire Line, Planned Secondary Line, Completed Plow Line, Proposed Burnout, Proposed Dozer Line; Ridge/Geographic Feature; Unknown; Other	
Label	Label	No	String	100	The label applied to the feature in a GIS system.	Example: DP-5	
LineDateTime	LineDatTime, CollectDat	Yes	Date	12	The date and time that the fire perimeter was collected in the field. Date should follow the assigned NWCG Date Time data standard, using 24 hour clock, YYYY-MM-DDhh.mm.ssZ, ISO8601 Standard.	Example: 2014-06-23-15.30Z	Date Time (Assigned)
CreateName		Yes	String	50	Name of the person creating the feature.	Example: Joe Smith	

Geospatial Data Layer Standard Attributes & Attribute Definitions							
CreateDate		Yes	Date		Date the feature was created. Date should follow the assigned NWCG Date Time data standard, using 24 hour clock, YYYY-MM-DDhh.mm.ssZ, ISO8601 Standard (include seconds if available).	Example: 2014-06-23-15.30Z	Date Time (Assigned)
EditName		Yes	String	50	Name of the person editing the feature.	Example: Joe Smith	
ContactName		Yes	String	50	Name of the incident based contact responsible for data creation.	Example: Joe Smith	
ContactEmail		Yes	String	50	Email of the incident based contact responsible for data creation.	Example: joe@nps.gov	
ContactPhone		Yes	String	15	Phone number for the incident based contact responsible for data creation.	Example: 303-555-1212	
DeleteThis		No	String	3	For managing data during mobile data collection. An attribute flag to tell editors to remove a feature added in error.	Example: Yes, No	
ComplexName		No	String	50	The name of the complex that the fire is assigned. If there is no complex it will be blank.	Example: Track Fire	Complex Glossary Term
ComplexID		No	String	50	The IRWINID of the complex.	Globally Unique Identifier (GUID). Example: {BE8A2C46-0B00-418F-9FBF-ED8E6625F430}	
RepairStatus		No	String	50	Status of the Suppression Repair project for each feature.	Domain: No Repair Needed, Not Applicable, Repair Needed, In Progress, Completed - Ready for Inspection, Completed - Inspected, Other - See Comments	
RepairComments		No	String	200	Comments on the Suppression Repair for each feature.		
GACC		Yes	String	5	Geographic Area Coordination Center where the fire is located.	Domain: AICC; EACC; GBCC; ONCC; NRCC; NWCC; RMCC; SACC; OSCC; SWCC.	
IMTName		No	String	25	Name of the Incident Management Team in charge of the fire.	Example: Southern Area Blue Team	
IsVisible		Yes	String	5	Provides a flag for mapping display.	Domain: Yes, No	
FeatureAccess		Yes	String	20	Determines who or what groups can view a particular feature.	Domain: Public (available for Public maps or web sites); Cooperators (shared only with wildland fire agencies); Incident (only for use for incident staff); Restricted (sharing or viewing by a specific group).	

*Standard field names should be used for the core attributes when possible. Alternate field name suggestions are given to accommodate database conflicts and legacy datasets. Alternate name use should be documented in the Other Notes section above.

** GUIDs are unique specially formatted numeric strings generated by a "GUID generation tool." GUIDs can be generated at http://www.guidgenerator.com/. The purpose of the GeometryID is to ensure that every unique object has a unique ID. This is important in an enterprise implementation where data is coming from many sources to determine if an object is unique or if it has been duplicated. Between the GlobalID and the FireOccurID (IRWINID) the unique geometry may be determined.

Users should generate a GeometryID for each unique record they create (spatial or non-spatial) for NWCG datasets. It is the data creators responsibility to create and maintain this ID for the life of that particular record. It is the responsibility of the person doing the data aggregation at a regional or national level to maintain this GUID as well. A GUID can be created in multiple ways - on a cell by cell basis using a website or script to generate a unique GUID, on a group of records using a script, or it can be automatically generated by the users GIS software or tools.