APPROVED

NWCG Geospatial Data Layer Standard
Metadata Definition and Data Layer Specifications

Wildland Urban Interface (polygon)

Layer Name:	Wildland Urban Interface (polygon)
Layer Abbreviation:	WUI
Layer Description:	The wildland urban interface (WUI) geospatial data standard defines minimum attribution for interagency collaboration and data sharing.
Status:	Approved
Source Record:	N/A
System of Record:	N/A
Data Stewardship Group:	Geospatial Subcommittee
Data Steward:	Joe Kafka
Additional Text:	The standard will define the geospatial data "container" for WUI areas, but not address how WUI is defined. The wildland urban interface (WUI) geospatial data standard defines minimum attribution for interagency collaboration and data sharing. Data transfer/exchange.
Discussion Papers File:	Discussion Paper - Wildland Urban Interface.doc, NWCG Wildland Urban Interface GIS Data Layer Standard - Draft.doc

Background:	In May of 2008, the NWCG Wildland Urban Interface Working Team performed a review and evaluation of the National Fire Protection Association (NFPA) 114 3.3.28, NWCG, and Healthy Forest Restoration Act (HFRA) definitions of the Wildland Urban Interface (WUI). And Federal Register 66: 751, Urban Wildland Interface Community Definition, https://www.federalregister.gov/articles/2001/01/04/01-52/urban-wildland-interface-communities-within-the-vicinity-of-federal-lands-that-are-at-high-risk-from#p-15. The working team identified that, "designation of communities at risk should be the responsibility of the local authority having jurisdiction who are aware of the local factors affecting the wildland urban interface, changing topographical factors, weather, community use, etc." It was the consensus of the team working on this GIS data layer standard that it may not be possible or necessary to capture all of the characteristics that may be used to define the WUI in locales across the country. However, it is important to provide a basic shared structure for storing WUI features, understanding that the WUI features may overlap and may be determined using different and sometimes conflicting methods.
Abstract:	The WUI geospatial data layer standard defines a single layer that may represent the extent of the WUI and document the method used by the responsible unit to delineate the WUI. **The standard will define how WUI is attributed, but not address how WUI is defined.** The wildland urban interface (WUI) geospatial data standard defines minimum attribution for interagency collaboration and data sharing.
Purpose:	A basic structure with minimum attribution for interagency collaboration and data sharing of WUI features, understanding that the WUI features may overlap and may be determined using different and sometimes conflicting methods.
Data Model:	WUI areas would be depicted as polygon shapefile or polygon feature class in a geodatabase.
Other Notes:	The standard will define how WUI is attributed, but not address how WUI is defined.
Related Layers:	Fuels Treatment Polygons, Ownership Boundaries & Facilities/Structures (agency), Communities, Urban Areas, Infrastructure, Fire Protection Responsibility

Horizontal and/or Vertical Position Accuracy:	Standards for horizontal and vertical accuracies are detailed in Geospatial 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 Spatial Reference Information:	Data layer projection parameters should be documented in a .prj file (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
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

NWCG Geospatial Data Layer Standard Attributes
Wildland Urban Interface (polygon)

Geospatial Data Layer Standard Attributes & Attribute Definitions

Standard Name*	Alternate Name	Required?	Data Type	Size/ Width	Description	Values	Related NWCG Standard
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 (include seconds if available)	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). **	
SourceAgency	DataAgency	Yes	String	7	Land management agency with responsibility for creating and administering the data.	BIA; BLM; BOR; DOD; DOE; NPS; USFS; USFWS; Foreign; Tribal; City; County; State; Private	Land Owner Category
Source	DefinitionSource DelineationSource	Yes	String	255	Supporting documentation on process used to map the WUI	Example: 2001 Federal Register definition, 2003 GAO report definition GAO-03-805, SILVIS Lab data	
SourceHyperlink	SOURCE_HYPERLINK	Yes	String	255	A link to documentation about the mapping effort	Example: http://silvis.forest.wisc.edu/research/houses-and-wui	
GISAcres	GIS_ACRES GISAcrCalc	Yes	Double	8	GIS calculated total WUI acres, based on the geometry area. Total should include 1 decimal place. (ArcGIS: Precision=10; Scale=1).	Example: 23.9	

*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.