

## **LANDFIRE Dictionary**

# Contents

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<b>Section 1</b>	<b>Purpose</b> .....	<b>1</b>
<b>Section 2</b>	<b>Product Descriptions, Versions, and Auxiliary Data</b> .....	<b>2</b>
2.1	Product Descriptions.....	2
2.2	All LF Product Descriptions .....	2
2.2.1	Reference Product Theme .....	2
2.2.2	Disturbance and Transition Product Theme .....	3
2.2.3	Vegetation Product Theme.....	4
2.2.4	Fuels Product Theme .....	6
2.2.5	Fire Regime Product Theme .....	8
2.2.6	Topographic Product Theme .....	8
2.2.7	MoD-FIS Product Theme.....	9
2.2.8	Additional Information .....	10
2.3	Attribute Data Dictionaries.....	10
2.4	Data and Metadata Standards.....	10
2.5	Building a LF Version.....	10
2.6	Metadata.....	11
2.7	ADDs.....	11
<b>Section 3</b>	<b>LANDFIRE References</b> .....	<b>13</b>
3.1	Works Cited.....	13
<b>Section 4</b>	<b>LF 2023 Attribute Data Dictionaries Glossary</b> .....	<b>16</b>
4.1	Disturbance Products.....	16
4.1.1	Annual Disturbance (Dist) 2023 .....	16
4.1.2	Limited Annual Disturbance (LDist) 2023 .....	18
4.1.3	Preliminary Annual Disturbance (PDist) 2023 .....	20
4.1.4	Historical Disturbance (HDist) LF 2023 .....	23
4.2	Fire Regime Products .....	26
4.2.1	Fire Regime Groups (FRG) LF 2023 .....	26

4.2.2	Fire Return Interval (FRI) LF 2023 .....	27
4.2.3	Percent Fire Severity (PFS) LF 2023 .....	27
4.3	Fuel Products .....	29
4.3.1	Canopy Bulk Density (CBD) LF 2023.....	29
4.3.2	Canopy Base Height (CBH) LF 2023.....	29
4.3.3	Canopy Cover (CC) LF 2023 .....	30
4.3.4	Canadian Forest Fire Danger Rating System (CFFDRS) LF 2023.....	31
4.3.5	Canopy Height (CH) LF 2023 .....	36
4.3.6	Fuel Disturbance (FDist) LF 2023 .....	37
4.3.7	Fire Behavior Fuel Model 13 (FBFM13) LF 2023.....	38
4.3.8	Fire Behavior Fuel Model 40 (FBFM40) LF 2023.....	40
4.3.9	Fuel Characteristic Classification System Fuelbeds (FCCS) LF 2023 .....	43
4.3.10	Fuel Vegetation Cover (FVC) LF 2023.....	44
4.3.11	Fuel Vegetation Height (FVH) LF 2023 .....	48
4.3.12	Fuel Vegetation Type (FVT) LF 2023 .....	51
4.3.13	Operational Roads (Roads) LF 2023.....	52
4.4	Vegetation Products .....	53
4.4.1	Existing Vegetation Cover (EVC) LF 2023.....	53
4.4.2	Existing Vegetation Height (EVH) LF 2023 .....	67
4.4.3	Existing Vegetation Type (EVT) LF 2023.....	76
4.4.4	Biophysical Settings (BPS) LF 2023.....	76
4.4.5	Succession Class (SClass) LF 2023 .....	78
4.4.6	Vegetation Condition Class (VCC) LF 2023.....	79
4.4.7	Vegetation Departure (VDep) LF 2023 .....	80
<b>Section 5</b>	<b>Glossaries of Terms.....</b>	<b>81</b>
5.1	Agencies and Organizations.....	81
5.2	Terms, Information, and Systems.....	83

# List of Figures

Figure 2-1. Generalized LF production development flow ..... 12

# Section 1 Purpose

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This document serves as a guide to direct LANDFIRE (LF) users to locations to access information about products, Attribute Data Dictionaries (ADDs), data and metadata standards, and terms. This document is meant to supplement the [LF Definitions, Quality, and Standards Report](#).

If you are new to LF, learn more [here](#).

Contained within this document is a record of all ADDs within the LF 2023 version. This document also includes product descriptions and glossaries of LF references and terms. See [Glossaries of Terms](#).

## Section 2 Product Descriptions, Versions, and Auxiliary Data

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### 2.1 Product Descriptions

See the product pages on the LANDFIRE website for more detailed information about individual products. The product themes are listed below; on these pages you can access each product within the theme and learn more.

- Vegetation products [here](#)
- Fuels products [here](#)
- MoD-FIS products [here](#)
- Disturbance products [here](#)
- Fire Regime products [here](#)
- Reference products [here](#)
- Transportation product (Operational Roads) [here](#)
- Topographic products [here](#)

### 2.2 All LF Product Descriptions

All current and retired product descriptions are organized by product themes.

#### 2.2.1 Reference Product Theme

Reference products represent data collected from public, government, and proprietary sources to inform the LANDFIRE mapping processes and update LANDFIRE products. Public versions of LANDFIRE reference database, which exclude proprietary and/or sensitive data, are available for download.

##### 2.2.1.1 LF Reference Database (LFRDB)

The LFRDB includes information from geo-referenced sample points depicting vegetation and fuel information. Updated plot information are continually being compiled and used to inform existing vegetation mapping.

##### 2.2.1.2 LF Public Events Geodatabase (LF Events)

A collection of polygons depicting recent natural disturbance and land management activities used to update existing vegetation and fuel layers.

## **2.2.2 Disturbance and Transition Product Theme**

Disturbance products are developed to help inform updates to LANDFIRE data to reflect change on the landscape caused by management activities and natural disturbance. They are a compilation of data from multiple sources including time series Landsat imagery, fire mapping programs including Monitoring Trends in Burn Severity (MTBS), Burned Area Reflectance Classification (BARC), Rapid Assessment of Vegetation Condition after Wildfire (RAVG), the LANDFIRE Events Geodatabase and other sources.

### **2.2.2.1 Annual Disturbance (Dist) 1999-CurrentUpdateYEAR**

Depicts where change occurred on the landscape, both spatially and temporally, on an annual basis. Used to inform vegetation transitions and provide updates to LF vegetation, fuel, and fire regime products.

#### **2.2.2.1.1 Limited Annual Disturbance (LDist) 2023-CurrentUpdateYEAR**

LDist is designed to provide a first cut of landscape change information as soon as possible to support time-sensitive updates such as risk management efforts. This early release of Annual Disturbance does not include satellite change detection to capture additional disturbances and does not provide image-based severity for contributed events.

#### **2.2.2.1.2 Preliminary Annual Disturbance (PDist) 2023-CurrentUpdateYEAR**

PDist is another new product making its debut with the LF 2023 Update. PDist is designed to provide a second "draft" of landscape change information.

### **2.2.2.2 Forest Vegetation Simulator Disturbance Database (FVSDDB)**

FVS disturbance analysis outputs for fire, insect and disease, wind and mechanical disturbances modeled at a high, moderate, and low severity and represented at three timesteps post disturbance. This product was last created with the LF 2014 Update.

### **2.2.2.3 Forest Vegetation Simulator Ready Database (FVSRDB)**

Nationwide Forest Vegetation Simulator analysis ready plot data (StandInit and TreeInit tables).

### **2.2.2.4 Forest Vegetation Transitions Database (FVTDB)**

Provides forest vegetation transition rules in tabular format depicting relationship between disturbance type, severity, and time-since- disturbance and its effect on existing vegetation type, cover, and height through 2014.

### **2.2.2.5 Non-forest Vegetation Transitions Database (NFVTDB)**

Contains non-forest vegetation transition rules in tabular format depicting the relationship between disturbance type, severity, and time- since- disturbance and its effect on existing vegetation type, cover, and height through 2014.

### **2.2.2.6 Historical Disturbance (HDist)**

An aggregation of the latest 10 years of Annual Disturbance product developed to provide temporal and spatial information related to landscape change. Starting with LF 2016 Remap, HDist replaced VDist.

### **2.2.2.7 Vegetation Disturbance (VDist)**

Composites of Annual Disturbance products for the previous 10 years used in LF 1.x products to inform LF vegetation transitions and to update existing vegetation products (Type, Cover and Height) for disturbances on the landscape. This product was not developed after LF 2014, it was superseded by HDist.

### **2.2.2.8 Vegetation Transition Magnitude (VTM)**

A summary of the relationship between disturbance types and resulting effects on the vegetation in terms of changes in life-form and canopy cover through 2014.

## **2.2.3 Vegetation Product Theme**

### **2.2.3.1 Existing Vegetation**

LF existing vegetation products describe Existing Vegetation Type, Cover, and Height and are created using predictive landscape models based on extensive field referenced data, satellite imagery and biophysical gradient layers using classification and regression trees.

#### **2.2.3.1.1 Existing Vegetation Type (EVT) Ecological Systems (ES)**

Narrow sets of diagnostic plant species, including dominants and co- dominants, broadly similar composition, and diagnostic growth forms classified using the Ecological Systems Classification.

#### **2.2.3.1.2 Existing Vegetation Type (EVT) National Vegetation Classification (NVC)**

Narrow sets of diagnostic plant species, including dominants and co- dominants, broadly similar composition, and diagnostic growth forms classified using the group level of the National Vegetation Classification.

#### **2.2.3.1.3 Existing Vegetation Cover (EVC)**

Vertically projected percent cover of the dominant vegetation for a specific area.

#### **2.2.3.1.4 Existing Vegetation Height (EVH)**

Average height of the dominant vegetation.

### **2.2.3.2 Potential Vegetation**

LF potential vegetation products describe Biophysical Settings (BPS) and Environmental Site Potential (ESP) are created using predictive landscape models based on extensive field-referenced data and biophysical gradient layers using classification and regression trees.

#### **2.2.3.2.1 Biophysical Settings (BPS)**

Vegetation that may have been dominant on the landscape pre-European colonization.

After LF 2014, this product incorporated the products Fire Regime Groups (FRG), Fire Return Interval (FRI), and Percent Fire Severity (PFS). Therefore, beginning with LF 2016 Remap and onward these products were nested within BPS.

#### **2.2.3.2.2 Biophysical Settings Models and Descriptions (BpS)**

State-and-transition models representing pre-European colonization reference conditions for each biophysical setting.

#### **2.2.3.2.3 Environmental Site Potential (ESP)**

Vegetation that could be supported at a given site based on the biophysical environment utilizing the LF 1.x version of the Ecological Systems vegetation classification. This product was not developed after LF 2014.

### **2.2.3.3 Vegetation Classes**

#### **2.2.3.3.1 Vegetation Condition Class (VCC)**

A discrete classification that quantifies the amount that current vegetation has departed from the simulated historical vegetation reference conditions.

#### **2.2.3.3.2 Vegetation Departure (VDEP)**

Range from 0 - 100 depicting the amount that current vegetation has departed from simulated historical vegetation reference.

#### **2.2.3.3.3 Succession Classes (SClass)**

Current succession class with respect to the range of possible successional states within each biophysical setting, based on vegetation species composition, cover, and height ranges.

## **2.2.4 Fuels Product Theme**

Fuel data describe the composition and characteristics of surface and canopy fuel. Fuel products provide consistent fuel data to support fire planning, analysis, and budgeting to evaluate fire management alternatives, as well as supplement strategic and tactical planning for fire operations.

### **2.2.4.1 Surface Fuels**

#### **2.2.4.1.1 13 Anderson Fire Behavior Fuel Models (FBFM13)**

A set of fire behavior fuel models that represent distinct distributions of fuel loading found among surface fuel components (live and dead), size classes, and fuel types, based on grass, shrub, timber, and slash fuel types and categorized into 13 models to help users estimate fire behavior, including rate of fire spread and fire intensity, generally represents severe fire conditions. This product is one of two products offered in Landscape GeoTIFF, in addition to other formats.

#### **2.2.4.1.2 40 Scott & Burgan Fire Behavior Fuel Models (FBFM40)**

A set of fire behavior fuel models that increases prediction accuracy by providing more models in the fuel types (grass, shrub, timber, slash) than Anderson's 13, captures moisture variations and unique fuel differences, allows user to plan or illustrate the effects of multiple or varying fuel and fire scenarios beyond the severe fire season, such as prescribed fire and fire use applications. This product is one of two products offered in Landscape GeoTIFF, in addition to other formats.

#### **2.2.4.1.3 Canadian Forest Fire Danger Rating System (CFFDRS) \*Alaska only\***

Canadian system for rating the risk of forest fires, arranges fuel types into five major groups with 16 discrete fuel types that are qualitatively distinguished by variations in their forest floor and organic layer, their surface and ladder fuels, and their stand structure and composition.

#### **2.2.4.1.4 Fuel Characteristics Classification System (FCCS)**

Describes the physical characteristics of a relatively uniform unit on a landscape that represents a distinct fire environment; provides land managers, regulators, and scientists with a nationally consistent and durable procedure to characterize and classify fuelbed characteristics across strata to predict fuel consumption and smoke production.

#### **2.2.4.1.5 Fuel Loading Models (FLM)**

Characterizes wildland surface fuel and contains representative loading for each fuel component (e.g., woody and non-woody) for typical vegetation classification systems; characterizes fuel loading across all vegetation and ecological types through 2008.

## **2.2.4.2 Canopy Fuels**

### **2.2.4.2.1 Forest Canopy Cover (CC)**

Proportion of the forest floor covered by the vertical projection of the tree crowns.

### **2.2.4.2.2 Forest Canopy Base Height (CBH)**

Average height from the ground to a forest stand's canopy bottom at which there is enough forest canopy fuel to propagate fire vertically into the canopy, meters \* 10

### **2.2.4.2.3 Forest Canopy Bulk Density (CBD)**

Density of available canopy fuel in a stand, kg m<sup>-3</sup> \* 100

### **2.2.4.2.4 Forest Canopy Height (CH)**

Average height of the top of the vegetated canopy, meters \* 10

## **2.2.4.3 Fuel Vegetation**

### **2.2.4.3.1 Fuel Vegetation Cover (FVC)**

Represents a modified version of EVC and more accurately leverages fuel transition assignments related to disturbed areas to properly align with logic developed from Fuels Calibration Workshops.

### **2.2.4.3.2 Fuel Vegetation Height (FVH)**

Represents a modified version of EVH and more accurately leverages fuel transition assignments related to disturbed areas to properly align with logic developed from Fuels Calibration Workshops.

### **2.2.4.3.3 Fuel Vegetation Type (FVT)**

Represents a modified version of EVT that re- establishes pre-disturbance vegetation in disturbed areas, allowing the application of fuel model transitions to properly align with logic developed from Fuels Calibration Workshops.

## **2.2.4.4 Other Fuel Products**

### **2.2.4.4.1 Fuel Rulesets Database (FRDB)**

A standalone fuel rulesets database supporting the LF Total Fuel Change Toolbar (LFTFC).

### **2.2.4.4.2 Operational Roads (Roads)**

A roads layer consisting of all available primary, secondary, tertiary, and thinned roads.

## **2.2.5 Fire Regime Product Theme**

Historical fire regimes, intervals, and vegetation conditions were mapped using the Vegetation Dynamics Development Tool (VDDT). These data support fire and landscape management planning goals in the National Cohesive Wildland Fire Management Strategy, the Federal Wildland Fire Management Policy, and the Healthy Forests Restoration Act.

### **2.2.5.1 Historical Fire Frequency and Severity**

#### **2.2.5.1.1 Fire Regime Groups (FRG)**

Characterizes the presumed historical fire regimes within landscapes based on interactions between vegetation dynamics, fire spread, fire effects, and spatial context; definitions approximate those outlined in the Interagency Fire Regime Condition Class Guidebook and represent discrete, mutually exclusive criteria appropriate for use with LF's fire frequency and severity products.

This product was incorporated into the BPS product after LF 2014. Therefore, for LF 2016 Remap and LF 2020 this product was nested within BPS, then beginning with the LF 2023 Update it was once again made into a standalone product.

#### **2.2.5.1.2 Mean Fire Return Interval (FRI)**

Average period between fires under the presumed historical fire regime.

This product was incorporated into the BPS product after LF 2014. Therefore, for LF 2016 Remap and LF 2020 this product was nested within BPS, then beginning with the LF 2023 Update it was once again made into a standalone product.

#### **2.2.5.1.3 Percent Fire Severity (PFS)**

Percent low, mixed, or replacement fire severity under the presumed historical fire regime.

Low severity is defined as less than 25%, mixed severity is defined as between 25-75%, and replacement severity is defined as greater than 75% average top-kill within a typical fire perimeter for a given vegetation type.

This product was incorporated into the BPS product after LF 2014. Therefore, for LF 2016 Remap and LF 2020 this product was nested within BPS, then beginning with the LF 2023 Update it was once again made into a standalone product.

## **2.2.6 Topographic Product Theme**

Topographic products serve as independent variables in vegetation modeling as well as inputs to Landscape files which are used in wildland fire behavior models.

### **2.2.6.1 Aspect (ASP)**

Azimuth of the sloped surfaces across a landscape in degrees.

### **2.2.6.2 Elevation (ELEV)**

Land height above mean sea level, in meters.

### **2.2.6.3 Slope Degree (SLPD)**

Percent change of elevation over a specific area, in degrees.

### **2.2.6.4 Slope Percent Rise (SLPP)**

Percent change of elevation over a specific area, in percent.

## **2.2.7 MoD-FIS Product Theme**

Modeling Dynamic Fuel with an Index System (MoD-FIS) systematically adjusts the most recently released LANDFIRE 40 Scott & Burgan Fire Behavior Fuel Model (FBFM40) product, using indices, to better represent current fuel availability during drought or seasonable moisture conditions.

### **2.2.7.1 Seasonal MoD-FIS**

Seasonal MoD-FIS provides adjusted fuel model (Scott and Burgan 2005) map data in the Great Basin and Southwest regions based on season specific assessments of herbaceous cover acquired from a comparison of current year Normalized Difference Vegetation Index (NDVI) and Web-enabled Landsat Data (WELD).

#### **2.2.7.1.1 Early Spring (ES)**

Southwest region: Date range is February to April.

#### **2.2.7.1.2 Spring (SP)**

Southwest and Northern Great Basin regions: Date range is February to May.

#### **2.2.7.1.3 Summer (SU)**

Southwest, Northern, and Northern Great Basin regions: Data range is February to June.

#### **2.2.7.1.4 Fall (FA)**

Southwest region: Date range is February to September.

### 2.2.7.2 Daily MoD-FIS

In the Southeast U.S. and other humid summer regions Daily MoD-FIS systematically adjusts surface fuel models (Scott and Burgan 2005) based on daily soil moisture values determined by the Keetch-Byram Drought Index (KBDI, Res. Paper SE-38)

### 2.2.8 Additional Information

See the Technical Document and the LF Definitions, Quality, and Standards Report for additional reading about LF products and methods.

- [LF Technical Documentation](#)
- [LF Definitions, Quality, and Standards Report](#)

To see what LF products are available by version go [here](#)

To learn more about the various LF versions over time go [here](#)

## 2.3 Attribute Data Dictionaries

Attribute Data Dictionaries (ADDs) provide a more in-depth descriptions for the attribute tables of each product. ADDs are updated with each new version and are constantly being added to. LANDFIRE follows [USGS guidance](#) for the creation of ADDs. See all the ADDs on [landfire.gov](#), dating back to LF 2014. The record of ADDs demonstrated in this report are unique for the LF 2023 version.

## 2.4 Data and Metadata Standards

Metadata provides supplemental and technical information about the data that LF produces.

LANDFIRE follows USGS guidance for the [creation of metadata](#) within the [ISO 19115-1](#) and [FGDC-STD-001-1998](#) standards. LF also follows USGS guidance for the [review of metadata](#) before a new version is released.

## 2.5 Building a LF Version

Preparing a new version for release begins with updating LF Reference products (and sometimes the topographic products). Disturbance products are then produced from LF Reference products and other inputs. While Fuels, Vegetation, and Fire Regime products are being produced, metadata is simultaneously updated for each product included in the new version. Attribute tables and ADDs are also updated during this time, to include all relevant information for the version (see Figure 2-1).

## 2.6 Metadata

Updates include an internal review of metadata with the LF data manager, production leads, and the technical lead. External review of metadata includes checking for compliance with the FGDC standard as well as USGS Fundamental Science Practices (FSP). Once metadata is reviewed internally and externally, it is posted to [landfire.gov](https://landfire.gov) on each product page. Additionally, when products are downloaded, a metadata file is included in each download bundle.

Beginning with the LF 2022 update, the external review of metadata and data goes through USGS [Information Product Data System](#) (IPDS) review and [ScienceBase](#) data and metadata public posting requirements. The LF 2023 ScienceBase landing page, including all products featured in the update, can be found [here](#).

## 2.7 ADDs

Updates to ADDs include an internal review by the LF data manager and production leads to understand whether any attributes and data definitions have changed. Typically, if a pixel value has changed in meaning, Subject Matter Experts (SMEs) inform the data manager, or the SME and data manager work together to update the ADD as needed. Once ADDs are reviewed, they are posted with the first release of a new version onto each product page.

To read more about the details that go into LF production, read the LANDFIRE [Technical Documentation](#) or go to the applicable [version page](#).

Figure 2-1 is a generalized LF production development flow for the products and all ancillary files. Boxes in gray represent processes being implemented for the LF 2022 update and onward.

## LF Production Development Sequence For Each New Version

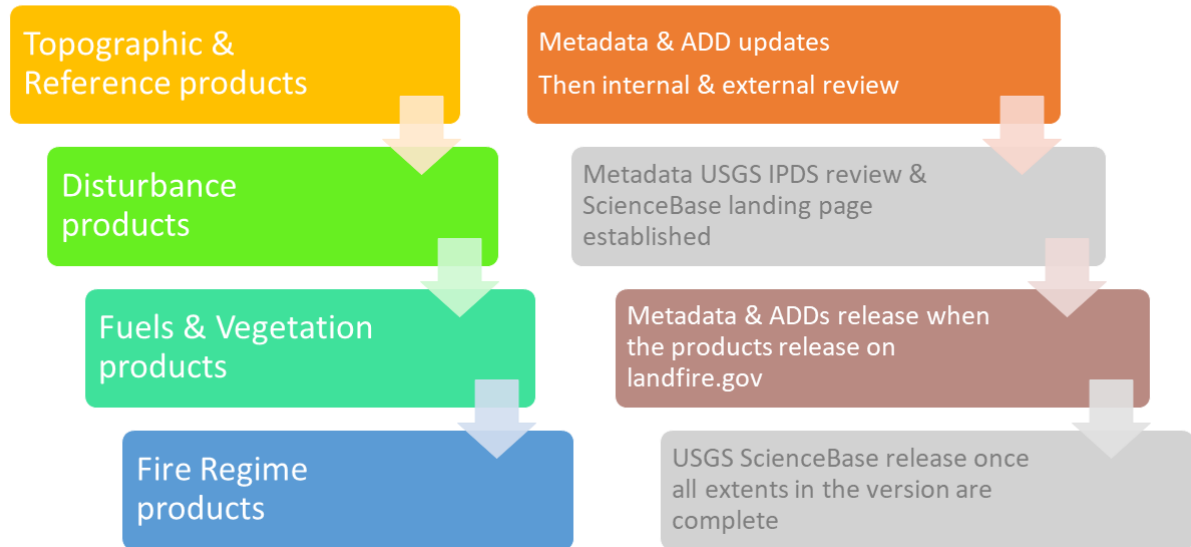


Figure 2-1. Generalized LF production development flow.

## Section 3 LANDFIRE References

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LANDFIRE references include but are not limited to the below list. See the metadata and the version pages for more specific details pertaining to inputs and references for each LF Update.

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## Section 4 LF 2023 Attribute Data Dictionaries Glossary

### 4.1 Disturbance Products

#### 4.1.1 Annual Disturbance (Dist) 2023

LANDFIRE Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	2-4 digit code representing the general category of the disturbance (combination of disturbance type and confidence information based on data sources), disturbance type, and severity.
11 - 1133	For example, 472 is identified by LANDFIRE Events Geodatabase polygon (4) with type of wildfire (7) , severity is assigned from image based change detection, medium severity (2).
-9999	Fill - NoData
-1111	Fill - Not Mapped
0	Background
<b>DIST_YEAR</b>	Approximate (due to LANDFIRE Events Geodatabase year or image timing) year in which the disturbance occurred.
Year	Year disturbance occurred based upon the best information available.
<b>DIST_TYPE</b>	A general category of disturbance derived from the dist_type attribute in the disturbance grids.
No Disturbance	No disturbance detected or reported.
Biological	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Chemical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Clearcut	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Development	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Harvest	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Herbicide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insecticide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects/Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.

LANDFIRE Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
Mastication	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Non Disturbed	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Other Mechanical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Prescribed Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Thinning	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Unknown	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Water	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Weather	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildfire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire Use	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
<b>TYPE_CONFI</b>	Classification level of confidence in the assignment of disturbance type.
Low (1)	Low confidence for causality based upon source information.
Medium (2)	Medium confidence for causality based upon source information.
High (3)	High confidence for causality based upon source information.
<b>SEVERITY</b>	Classification level of disturbance associated with effect on landcover.
Low (1)	General classification level associated with low effect on landcover.
Medium (2)	General classification level associated with medium effect on landcover.
High (3)	General classification level associated with high effect on landcover.
Unburned/Low	Areas that were not affected by fire. May include areas that were not in the fire's path, areas that were suppressed, or areas that were too wet to burn.
Increased Green	Areas that burned as a low intensity surface fire and have since resprouted. The vegetation in these areas may be different from the vegetation that was there before the fire.
<b>SEV_SOURCE</b>	Severity Source
Source	Event attribute
Source	MTBS
Source	RAVG
Source	BARC
Source	dNBR (Std Dev Breaks)

LANDFIRE Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
<b>SEV_CONFID</b>	Confidence is evaluated based on the input data sources. For example, a mapped wildfire disturbance identified in the LANDFIRE Events Geodatabase and Landsat image change detection would have a higher confidence than a disturbance identified by Landsat image change detection only since the cause is unknown.
Low	General confidence in the mapped disturbance is low due to lack of information relative to assignment of causality and/or severity.
Medium	General confidence in the mapped disturbance is medium due to the availability of some information relative to assignment of causality and/or severity, but more information is warranted in order to have increased confidence.
High	General confidence in the mapped disturbance is high due to the availability of specific information relative to assignment of causality and/or severity.
<b>SOURCE1-SOURCE4</b>	A combination of one to four of the following: 1) Fire data source (MTBS, BAER, or RAVG), 2) LANDFIRE Events Geodatabase polygons, 3) Landsat change detection, 4) PAD GAP Status polygons, 5) dNBR (differenced NBR), 6) Burned Area Essential Climate Variable (BAECV).
<b>DESCRIPTION</b>	Description of the classification method.
<b>R</b>	Red color value range/255
<b>G</b>	Green color value range/255
<b>B</b>	Blue color value range/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

#### 4.1.2 Limited Annual Disturbance (LDist) 2023

LANDFIRE Limited Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	2-4 digit code representing the general category of the disturbance (combination of disturbance type and confidence information based on data sources), disturbance type, and severity.
11 - 1681	For example, 472 is identified by LANDFIRE Events Geodatabase polygon (4) with type of wildfire (7), severity is assigned from image-based change detection, medium severity (2).
-9999	Fill - NoData
0	Background
<b>DIST_YEAR</b>	Approximate (due to LANDFIRE Events Geodatabase year or image timing) year in which the disturbance occurred.
Year	Year disturbance occurred based upon the best information available.
<b>DIST_TYPE</b>	A general category of disturbance derived from the dist_type attribute in the disturbance grids.
No Disturbance	No disturbance detected or reported.
Biological	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Chemical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.

LANDFIRE Limited Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
Clearcut	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Development	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Harvest	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Herbicide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insecticide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects/Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Mastication	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Other Mechanical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Prescribed Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Thinning	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Water	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Weather	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildfire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire Use	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
<b>TYPE_CONFI</b>	Classification level of confidence in the assignment of disturbance type.
Medium (2)	Medium confidence for causality based upon source information.
High (3)	High confidence for causality based upon source information.
<b>SEVERITY</b>	Classification level of disturbance associated with effect on landcover.
Low (1)	General classification level associated with low effect on landcover.
Medium (2)	General classification level associated with medium effect on landcover.
High (3)	General classification level associated with high effect on landcover.
Unburned/Low	Areas that were not affected by fire. May include areas that were not in the fire's path, areas that were suppressed, or areas that were too wet to burn.

LANDFIRE Limited Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
Increased Green	Areas that burned as a low intensity surface fire and have since resprouted. The vegetation in these areas may be different from the vegetation that was there before the fire.
<b>SEV_SOURCE</b>	Severity Source
Source	Event attribute
Source	MTBS
Source	RAVG
Source	BARC
<b>SEV_CONFID</b>	Confidence is evaluated based on the input data sources. For example, a mapped wildfire disturbance identified in the LANDFIRE Events Geodatabase and Landsat image change detection would have a higher confidence than a disturbance identified by Landsat image change detection only since the cause is unknown.
Low	General confidence in the mapped disturbance is low due to lack of information relative to assignment of causality and/or severity.
Medium	General confidence in the mapped disturbance is medium due to the availability of some information relative to assignment of causality and/or severity, but more information is warranted in order to have increased confidence.
High	General confidence in the mapped disturbance is high due to the availability of specific information relative to assignment of causality and/or severity.
<b>SOURCE</b>	A combination of one to four of the following: 1) Fire data source (MTBS, BAER, or RAVG), 2) LANDFIRE Public Events Geodatabase polygons, 3) Landsat change detection, 4) PAD GAP Status polygons, 5) dNBR (differenced NBR), 6) Burned Area Essential Climate Variable (BAECV).
<b>DESCRIPTION</b>	Description of the classification method.
<b>R</b>	Red color value range/255
<b>G</b>	Green color value range/255
<b>B</b>	Blue color value range/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.1.3 Preliminary Annual Disturbance (PDist) 2023

LANDFIRE Preliminary Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	2-4 digit code representing the general category of the disturbance (combination of disturbance type and confidence information based on data sources), disturbance type, and severity.
11 - 1133	For example, 472 is identified by LANDFIRE Events Geodatabase polygon (4) with type of wildfire (7), severity is assigned from image-based change detection, medium severity (2).
-9999	Fill - NoData
0	Background
<b>DIST_YEAR</b>	Approximate (due to LANDFIRE Events Geodatabase year or image timing) year in which the disturbance occurred.

LANDFIRE Preliminary Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
Year	Year disturbance occurred based upon the best information available.
<b>DIST_TYPE</b>	A general category of disturbance derived from the dist_type attribute in the disturbance grids.
No Disturbance	No disturbance detected or reported.
Biological	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Chemical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Clearcut	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Development	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Harvest	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Herbicide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insecticide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects/Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Mastication	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Non Disturbed	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Other Mechanical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Prescribed Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Thinning	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Unknown	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Water	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Weather	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildfire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.

LANDFIRE Preliminary Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
Wildland Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire Use	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
<b>TYPE_CONFI</b>	Classification level of confidence in the assignment of disturbance type.
Low (1)	Low confidence for causality based upon source information.
Medium (2)	Medium confidence for causality based upon source information.
High (3)	High confidence for causality based upon source information.
<b>SEVERITY</b>	Classification level of disturbance associated with effect on landcover.
Low (1)	General classification level associated with low effect on landcover.
Medium (2)	General classification level associated with medium effect on landcover.
High (3)	General classification level associated with high effect on landcover.
Unburned/Low	Areas that were not affected by fire. May include areas that were not in the fire's path, areas that were suppressed, or areas that were too wet to burn.
Increased Green	Areas that burned as a low intensity surface fire and have since resprouted. The vegetation in these areas may be different from the vegetation that was there before the fire.
<b>SEV_SOURCE</b>	Severity Source
Source	Event attribute
Source	MTBS
Source	RAVG
Source	BARC
Source	dNBR
<b>SEV_CONFID</b>	Confidence is evaluated based on the input data sources. For example, a mapped wildfire disturbance identified in the LANDFIRE Events Geodatabase and Landsat image change detection would have a higher confidence than a disturbance identified by Landsat image change detection only since the cause is unknown.
Low	General confidence in the mapped disturbance is low due to lack of information relative to assignment of causality and/or severity.
Medium	General confidence in the mapped disturbance is medium due to the availability of some information relative to assignment of causality and/or severity, but more information is warranted in order to have increased confidence.
High	General confidence in the mapped disturbance is high due to the availability of specific information relative to assignment of causality and/or severity.
<b>SOURCE</b>	A combination of one to four of the following: 1) Fire data source (MTBS, BAER, or RAVG), 2) LANDFIRE Public Events Geodatabase polygons, 3) Landsat change detection, 4) PAD GAP Status polygons, 5) dNBR (differenced NBR), 6) Burned Area Essential Climate Variable (BAECV).
<b>DESCRIPTION</b>	Description of the classification method.
<b>R</b>	Red color value range/255
<b>G</b>	Green color value range/255
<b>B</b>	Blue color value range/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1

LANDFIRE Preliminary Annual Disturbance YEAR Attribute Data Dictionary	
Attribute	Description
BLUE	Blue color value range 0 - 1

#### 4.1.4 Historical Disturbance (HDist) LF 2023

LANDFIRE Historical Disturbance Attribute Data Dictionary	
Attribute	Description
<b>DISTCODE_V</b>	HDist is a composite of the Annual Disturbance products. Disturbances are identified by year, disturbance type, and disturbance severity.
11 - 1133	The code value is a concatenation of disturbance year and annual disturbance code which identifies disturbance type and severity.
-9999	Fill - NoData.
-1111	Fill - Not Mapped.
0	Non-disturbed.
<b>VALUE</b>	Value.
<b>HDIST_ID</b>	ID.
<b>DIST_TYPE</b>	A general category of disturbance derived from the dist_type attribute in the disturbance grids.
No Disturbance	No disturbance detected or reported.
Biological	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Chemical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Clearcut	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Development	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Harvest	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insecticide	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Insects/Disease	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Mastication	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Non Disturbed	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Other Mechanical	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.

LANDFIRE Historical Disturbance Attribute Data Dictionary	
Attribute	Description
Prescribed Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Thinning	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Unknown	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Water	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Weather	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildfire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
Wildland Fire Use	Visit <a href="https://landfire.gov/disturbance">https://landfire.gov/disturbance</a> and <a href="https://landfire.gov/reference/publicevents">https://landfire.gov/reference/publicevents</a> or the LANDFIRE Library for more information.
<b>TYPE_CONFI</b>	Classification level of confidence in the assignment of disturbance type.
Low (1)	Low confidence for causality based upon source information.
Medium (2)	Medium confidence for causality based upon source information.
High (3)	High confidence for causality based upon source information.
<b>SEVERITY</b>	Classification level of disturbance associated with effect on landcover.
Low (1)	General classification level associated with low effect on landcover.
Medium (2)	General classification level associated with medium effect on landcover.
High (3)	General classification level associated with high effect on landcover.
Unburned/Low	Areas that were not affected by fire. May include areas that were not in the fire's path, areas that were suppressed, or areas that were too wet to burn.
Increased Green	Areas that burned as a low intensity surface fire and have since resprouted. The vegetation in these areas may be different from the vegetation that was there before the fire.
<b>SEV_CONFID</b>	Confidence is evaluated based on the input data sources. For example, a mapped wildfire disturbance identified in th LANDFIRE Events Geodatabase and Landsat image change detection would have a higher confidence than a disturbance identified by Landsat image change detection only since the cause is unknown.
Low (1)	General confidence in the mapped disturbance is low due to lack of information relative to assignment of causality and/or severity.
Medium (2)	General confidence in the mapped disturbance is medium due to the availability of some information relative to assignment of causality and/or severity, but more information is warranted in order to have increased confidence.
High (3)	General confidence in the mapped disturbance is high due to the availability of specific information relative to assignment of causality and/or severity.
<b>HDIST_CAT</b>	HDist category.
<b>HDIST_YR</b>	HDist year.
<b>FDist</b>	FDist value.
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255

<b>LANDFIRE Historical Disturbance Attribute Data Dictionary</b>	
<b>Attribute</b>	<b>Description</b>
<b>B</b>	Blue color value range /255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

## 4.2 Fire Regime Products

### 4.2.1 Fire Regime Groups (FRG) LF 2023

LANDFIRE Fire Regime Groups Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	The LANDFIRE Fire Regime Groups (FRG) product characterizes the presumed historical fire regimes within landscapes based on interactions between vegetation dynamics, fire spread, fire effects, and spatial context. FRG definitions have been altered to best approximate the definitions outlined in the Interagency Fire Regime Condition Class Guidebook.
-1111	Fill – Not Mapped
-9999	Fill - NoData
11	Open Water
12	Perennial Ice/Snow
31	Barren-Rock/Sand/Clay
<b>BPS_CODE</b>	
4406 to 17220	Map units are based on NatureServe's Ecological Systems classification and represent the natural plant communities that may have been present during the reference period.
<b>BPS_NAME</b>	BPS name.
<b>FRG_NEW</b>	Fire Regime Group.
I-A	Percent replacement fire less than 66.7%, fire return interval 0-5 years
I-B	Percent replacement fire less than 66.7%, fire return interval 6-15 years
I-C	Percent replacement fire less than 66.7%, fire return interval 16-35 years
II-A	Percent replacement fire greater than 66.7%, fire return interval 0-5 years
II-B	Percent replacement fire greater than 66.7%, fire return interval 6-15 years
II-C	Percent replacement fire greater than 66.7%, fire return interval 16-35 years
III-A	Percent replacement fire less than 80%, fire return interval 36-100 years
III-B	Percent replacement fire less than 66.7%, fire return interval 101-200 years
IV-A	Percent replacement fire greater than 80%, fire return interval 36-100 years
IV-B	Percent replacement fire greater than 66.7%, fire return interval 101-200 years
V-A	Any severity, fire return interval 201-500 years
V-B	Any severity, fire return interval 501 or more years
<b>FRG_DESC</b>	FRG Description.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value 0 - 1
<b>GREEN</b>	Green color value 0 - 1
<b>BLUE</b>	Blue color value 0 - 1

## 4.2.2 Fire Return Interval (FRI) LF 2023

LANDFIRE Fire Return Interval Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	The Fire Return Interval (FRI) product quantifies the average period between fires under the presumed historical fire regime. FRI is intended to describe one component of historical fire regime characteristics in the context of the broader historical time period represented by the LANDFIRE Biophysical Settings (BpS) product and BpS Model documentation.
-1111	Fill – Not Mapped
-9999	Fill - NoData
11	Open Water
12	Perennial Ice/Snow
31	Barren-Rock/Sand/Clay
<b>BPS_CODE</b>	
4406 to 17220	Map units are based on NatureServe's Ecological Systems classification and represent the natural plant communities that may have been present during the reference period.
<b>BPS_NAME</b>	BPS name
<b>FRI_REPLAC</b>	Fire Return Interval (FRI) replacement fire
-9999	Fill-NoData/ NA
<b>FRI_MIXED</b>	Fire Return Interval (FRI) mixed fire
-9999	Fill-NoData/ NA
<b>FRI_ALLFIR</b>	Fire Return Interval all fire. Quantifies the average period between fires under the presumed historical fire regime. Previously Mean Fire Return Interval (MFRI).
-9999	Fill-NoData/ NA
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value 0 - 1
<b>GREEN</b>	Green color value 0 - 1
<b>BLUE</b>	Blue color value 0 - 1

## 4.2.3 Percent Fire Severity (PFS) LF 2023

LANDFIRE Percent Fire Severity Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Percent Fire Severity (PFS) is three products merged into one. It is a combination product of what was previously (LF 2014 and earlier) known as Percent of Low-severity Fire (PRC_SURFAC), Percent of Mixed severity Fire (PRC_MIXED), and Percent of Replacement-severity Fire (PRC_REPLAC). Low severity is defined as less than 25 percent average top-kill within a typical fire perimeter for a given vegetation type. Mixed severity is defined as between 25 and 75 percent average top-kill within a typical fire perimeter for a given vegetation type. Replacement severity is defined as greater than 75 percent average top-kill within a typical fire perimeter for a given vegetation type.
-1111	Fill – Not Mapped

<b>LANDFIRE Percent Fire Severity Attribute Data Dictionary</b>	
<b>Attribute</b>	<b>Description</b>
-9999	Fill - NoData
11	Open Water
12	Perennial Ice/Snow
31	Barren-Rock/Sand/Clay
4406 to 17220	The BPS value is a unique identifier for a unique combination of the BPS_Code and Zone.
<b>BPS_CODE</b>	
11 to 17220	Map units are based on NatureServe's Ecological Systems classification and represent the natural plant communities that may have been present during the reference period.
<b>BPS_NAME</b>	BPS name.
<b>PRC_REPLAC</b>	Percent replacement fire.
-9999	Fill-NoData/ NA
<b>PRC_MIXED</b>	Percent mixed fire.
-9999	Fill-NoData/ NA
<b>PRC_SURFAC</b>	Percent surface fire.
-9999	Fill-NoData/ NA
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value 0 - 1
<b>GREEN</b>	Green color value 0 - 1
<b>BLUE</b>	Blue color value 0 - 1

## 4.3 Fuel Products

### 4.3.1 Canopy Bulk Density (CBD) LF 2023

LANDFIRE Forest Canopy Bulk Density Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Forest Canopy Bulk Density (CBD) is the mass of available canopy fuel per unit canopy volume that would burn in a crown fire and values range 0 to 45. Units are kg m <sup>-3</sup> * 100. To retrieve the real data value, divide the values by 100. The conversion from kg m <sup>-3</sup> to lb ft <sup>-3</sup> is 0.061728 (multiply kg m <sup>-3</sup> by 0.061728).
-9999	Fill - NoData
0	All non-forest values, including herbaceous and most shrub systems and non-burnable types such as urban, barren, snow and ice, and agriculture.
1 to 44	0.01 - 0.44 kg / m <sup>3</sup> .
45	0.45 = thematic class of all values >= 0.45 meters
<b>KGM3_X_100</b>	Display attribute, CBD is kilograms per meter cubed multiplied by 100.
Non-forested	Value is 0.
CBD >= 45	Value is greater than or equal to 45.
<b>KGM3</b>	Kilograms per meter cubed.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value 0 - 1
<b>GREEN</b>	Green color value 0 - 1
<b>BLUE</b>	Blue color value 0 - 1

### 4.3.2 Canopy Base Height (CBH) LF 2023

LANDFIRE Forest Canopy Base Height Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Forest canopy base height (CBH) describes the lowest point in a stand where there is sufficient available fuel (=> .25 in dia.) to propagate fire vertically through the canopy. Specifically, CBH is defined as the lowest point at which the canopy bulk density is >= 0.012 kg m <sup>-3</sup> .
-9999	Fill - NoData
0	All non - forest values, including herbaceous and most shrub systems and non-burnable types such as urban, barren, snow and ice, and agriculture.
1 - 99	0 - 9.9 meters
100	values >= 10 meters and some stands dominated by broadleaf species.
<b>METERSX10</b>	Display attribute, CBH is m*10
<b>METERS</b>	Meters.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value 0 - 1
<b>GREEN</b>	Green color value 0 - 1
<b>BLUE</b>	Blue color value 0 - 1

### 4.3.3 Canopy Cover (CC) LF 2023

LANDFIRE Forest Canopy Cover Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Forest Canopy Cover (CC) describes percent cover of tree canopy in a stand. Where there are tree canopies, i.e. existing vegetation types that are forest and woodland, the grid is attributed with canopy characteristics with some exceptions. There will be no canopy characteristics in fuel types where the tree canopy is considered a part of the surface fuel and the surface fire behavior fuel model is chosen as such. This is because LANDFIRE assumes the potential burnable biomass in the tree canopy has been accounted for in the surface fuel model parameters.
-9999	Fill - NoData
0	All non - forest values, including herbaceous and most shrub systems and non-burnable types such as urban, barren, snow and ice, and agriculture.
15	Tree Cover >= 10 and < 20%
25	Tree Cover >= 20 and < 30%
35	Tree Cover >= 30 and < 40%
45	Tree Cover >= 40 and < 50%
55	Tree Cover >= 50 and < 60%
65	Tree Cover >= 60 and < 70%
75	Tree Cover >= 70 and < 80%
85	Tree Cover >= 80 and < 90%
95	Tree Cover >= 90 and <= 100%
<b>CC_PERCENT</b>	display attribute, canopy height meters * 10 (midpoints)
Tree Cover >= 10 and < 20%	15%
Tree Cover >= 20 and < 30%	25%
Tree Cover >= 30 and < 40%	35%
Tree Cover >= 40 and < 50%	45%
Tree Cover >= 50 and < 60%	55%
Tree Cover >= 60 and < 70%	65%
Tree Cover >= 70 and < 80%	75%
Tree Cover >= 80 and < 90%	85%
Tree Cover >= 90 and <= 100%	95%
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1

LANDFIRE Forest Canopy Cover Attribute Data Dictionary	
Attribute	Description
BLUE	Blue color value range 0 - 1

#### 4.3.4 Canadian Forest Fire Danger Rating System (CFFDRS) LF 2023

LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary	
Attribute	Description
VALUE	
1-995	GRID value
EXPORT_VAL	Export value. Selected based on fire site conditions if the fuel type has choices, such as D1/D2, O-1a/O-1b, M1/M2, and M3/M4. Once the appropriate fuel type is chosen by the user it can be exported to a new GRID or to the fire behavior software.
DESCRIPTIV	Short description of predominate vegetation and what would have an impact on the fire site.
Spruce-Lichen Woodland C1	This fuel type is characterized by open, parklike black spruce ( <i>Picea mariana</i> (Mill.) B.S.P.) stands occupying well-drained uplands in the subarctic zone of western and northern Canada. Jack pine ( <i>Pinus banksiana</i> Lamb.) and white birch ( <i>Betula papyrifera</i> Marsh.) are minor associates in the overstory. Forest cover occurs as widely spaced individuals and dense clumps. Tree heights vary considerably, but bole branches (live and dead) uniformly extend to the forest floor and layering development is extensive. Accumulation of woody surface fuel is very light and scattered. Shrub cover is exceedingly sparse. The ground surface is fully exposed to the sun and covered by a nearly continuous mat of reindeer lichens ( <i>Cladonia</i> spp.), averaging 3-4 cm in depth above mineral soil.
Boreal Spruce C2	This fuel type is characterized by pure, moderately well-stocked black spruce ( <i>Picea mariana</i> (Mill.) B.S.P.) stands on lowland (excluding Sphagnum bogs) and upland sites. Tree crowns extend to or near the ground, and dead branches are typically draped with bearded lichens ( <i>Usnea</i> spp.). The flaky nature of the bark on the lower portion of stem boles is pronounced. Low to moderate volumes of down woody material are present. Labrador tea ( <i>Ledum groenlandicum</i> Oeder) is often the major shrub component. The forest floor is dominated by a carpet of feather mosses and/or ground-dwelling lichens (chiefly <i>Cladonia</i> ). Sphagnum mosses may occasionally be present, but they are of little hindrance to surface fire spread. A compacted organic layer commonly exceeds a depth of 20–30 cm.
Mature Jack or Lodgepole Pine C3	This fuel type is characterized by pure, fully stocked (1000–2000 stems/ha) jack pine ( <i>Pinus banksiana</i> Lamb.) or lodgepole pine ( <i>Pinus contorta</i> Dougl. ex Loud.) stands that have matured at least to the stage of complete crown closure. The base of live crown is well above the ground. Dead surface fuels are light and scattered. Ground cover is feather moss ( <i>Pleurozium schreberi</i> ) over a moderately deep (approximately 10 cm), compacted organic layer. A sparse conifer understory may be present.
Immature Jack or Lodgepole Pine C4	This fuel type is characterized by pure, dense jack pine ( <i>Pinus banksiana</i> Lamb.) or lodgepole pine ( <i>Pinus contorta</i> Dougl. ex Loud.) stands (10,000–30,000 stems/ha) in which natural thinning mortality results in a large quantity of standing dead stems and dead downed woody fuel. Vertical and horizontal fuel continuity is characteristic of this fuel type. Surface fuel loadings are greater than in fuel type C3, and organic layers are shallower and less compact. Ground cover is mainly needle litter suspended within a low shrub layer ( <i>Vaccinium</i> spp.).

LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary	
Attribute	Description
Red and White Pine C5	This fuel type is characterized by mature stands of red pine ( <i>Pinus resinosa</i> Ait.) and eastern white pine ( <i>Pinus strobus</i> L.) in various proportions, sometimes with small components of white spruce ( <i>Picea glauca</i> (Moench) Voss) and old white birch ( <i>Betula papyrifera</i> Marsh.) or aspen ( <i>Populus</i> spp.). The understory is of moderate density, usually red maple ( <i>Acer rubrum</i> L.) or balsam fir ( <i>Abies balsamea</i> (L.) Mill.). A shrub layer, usually beaked hazel ( <i>Corylus cornuta</i> Marsh.), may be present in moderate proportions. The ground surface cover is a combination of herbs and pine litter. The organic layer is usually 5–10 cm deep.
Conifer Plantation C6	This fuel type is characterized by pure, fully stocked conifer plantations with closed crowns and no understory or shrub layer. The forest floor is covered by needle litter with an underlying duff layer up to 10 cm deep. The crown base height is taken into account in predicting fire spread rate and crowning.
Ponderosa Pine-Douglas-Fir C7	This fuel type is characterized by uneven-aged stands of ponderosa pine ( <i>Pinus ponderosa</i> Laws.) and Douglasfir ( <i>Pseudotsuga menziesii</i> (Mirb.) Franco) in various proportions. Western larch ( <i>Larix occidentalis</i> Nutt.) and lodgepole pine ( <i>Pinus contorta</i> Dougl. ex Loud.) may be significant stand components on some sites and at some elevations. Stands are open, with occasional clumpy thickets of multi-aged Douglas-fir and/or larch as a discontinuous understory. Canopy closure is less than 50% overall, although thickets are closed and often dense. Woody surface fuel accumulations are light and scattered. Except within Douglas-fir thickets, the forest floor is dominated by perennial grasses, herbs, and scattered shrubs. Within tree thickets, needle litter is the predominant surface fuel. Duff layers are nonexistent to shallow (<3 cm).
Leafless Aspen D1	This fuel type is characterized by pure, semimature trembling aspen ( <i>Populus tremuloides</i> Michx.) stands before bud break in the spring or following leaf fall and curing of the lesser vegetation in the autumn. A conifer understory is noticeably absent, but a well-developed medium to tall shrub layer is typically present. Dead and down roundwood fuels are a minor component of the fuel complex. The principal fire carrying surface fuel consists chiefly of deciduous leaf litter and cured herbaceous material that is directly exposed to wind and solar radiation. In the spring the duff mantle (F and H horizons) seldom contributes to the available combustion fuel because of its high moisture content.
Green Aspen D2	This fuel type is characterized by the Build Up Index (BUI) at a level (70) where fire spread does not occur. In other words, there needs to be a BUI of at least 70 for fire spread to occur in Green Aspen (D2). Below this point and a fuel type won't carry a fire. The Canadian Forest Fire Weather Index (FWI) System consists of six components that account for the effects of fuel moisture and weather conditions on fire behavior. BUI is a measure of fuel loading and availability, a numeric rating of the total amount of fuel available for combustion. BUI sets thresholds to describe the severity of the fuel situation based on fuel type, loading, and dryness.
Aspen	D1/D2
Jack or Lodgepole Pine Slash S1	This fuel type is characterized by slash resulting from tractor or skidder clear-cut logging of mature jack pine ( <i>Pinus banksiana</i> Lamb.) or lodgepole pine ( <i>Pinus contorta</i> Dougl. ex Loud.) stands. The slash is typically one or two seasons old, retaining up to 50% of the foliage, particularly on branches closest to the ground. No post-logging treatment has been applied, and slash fuels are continuous. Tops and branches left on site result in moderate fuel loads and depths. Ground cover is continuous feather moss mixed with discontinuous fallen needle litter. Organic layers are moderately deep and fairly compact.

**LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary**

Attribute	Description
White Spruce-Balsam Slash S2	This fuel type is characterized by slash resulting from tractor or skidder clear-cut logging of mature to overmature stands of white spruce ( <i>Picea glauca</i> (Moench) Voss) and sub-alpine fir ( <i>Abies lasiocarpa</i> (Hook.) Nutt.) or balsam fir ( <i>Abies balsamea</i> (L.) Mill.). Slash is typically one or two seasons old, retaining from 10% to 50% of the foliage on the branches. No post logging treatment has been applied. Fuel continuity may be broken by skid trails unless the site was logged in winter. Tops have been left on site, and most branch fuels have broken off during skidding of logs to landings, which results in moderate fuel loads and depths. Quantities of shattered large and rotten woody fuels may be significant. Ground cover is feather moss with considerable needle litter fallen from the slash. Organic layers are moderately deep and compact.
Coastal Cedar-Hemlock-Douglas-Fir Slash S3	This fuel type is characterized by slash resulting from high lead clear cut logging of mature to overmature coastal British Columbia mixed conifer stands. Predominant species are western redcedar ( <i>Thuja plicata</i> Donn.), western hemlock ( <i>Tsuga heterophylla</i> (Raf.) Sarg.), and Douglas-fir ( <i>Pseudotsuga menziesii</i> (Mirb.) Franco). Slash is typically one season old, with the cedar component retaining all its foliage in a cured condition on the branches, whereas the hemlock and Douglas-fir components will have dropped up to 50% of their foliage. Slash fuels tend to be continuous and uncompacted. Very large loadings of broken and rotten unmerchantable material may be present, depending on degree of stand decadence. Slash fuel depths may range from 0.5 to 2.0 m. Ground cover may be feather moss or just compact old needle litter under significant quantities of recent needle litter fallen from the slash. Organic layers are moderately deep to deep and compact. Minor to moderate shrub and herbaceous understory components may be present. This fuel type designation may also be applied to wet belt cedar-hemlock slash of coastal and interior British Columbia where the Douglas-fir component is absent.
Matted Grass O1a	This fuel type is characterized by continuous grass cover, with no more than occasional trees or shrub clumps that do not appreciably affect fire behavior. Two subtype designations are available for grasslands; one for the matted grass condition common after snowmelt or in the spring (O1-a) and the other for standing dead grass common in late summer to early fall (O1-b). The proportion of cured or dead material in grasslands has a pronounced effect on fire spread there and must be estimated with care.
Standing Grass O1b	This fuel type is characterized by continuous grass cover, with no more than occasional trees or shrub clumps that do not appreciably affect fire behavior. Two subtype designations are available for grasslands; one for the matted grass condition common after snowmelt or in the spring (O1-a) and the other for standing dead grass common in late summer to early fall (O1-b). The proportion of cured or dead material in grasslands has a pronounced effect on fire spread there and must be estimated with care.
Grass	O1a/O1b
Boreal Mixedwood-Leafless M1	This fuel type (and its "green" counterpart, M2) is characterized by stand mixtures consisting of the following coniferous and deciduous tree species in varying proportions: black spruce ( <i>Picea mariana</i> (Mill.) B.S.P.), white spruce ( <i>Picea glauca</i> (Moench) Voss), balsam fir ( <i>Abies balsamea</i> (L.) Mill.), subalpine fir ( <i>Abies lasiocarpa</i> (Hook.) Nutt.), trembling aspen ( <i>Populus tremuloides</i> Michx.), and white birch ( <i>Betula papyrifera</i> Marsh.). On any specific site, individual species can be present or absent from the mixture. In addition to the diversity in species composition, stands exhibit wide variability in structure and development, but are generally confined to moderately well drained upland sites. M1, the first phase of seasonal variation in flammability, occurs during the spring and fall. The rate of spread is weighted according to the proportion (expressed as a percentage) of softwood and hardwood components.

LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary	
Attribute	Description
Boreal Mixedwood Green M2	This fuel type (and its "leafless" counterpart, M1) is characterized by stand mixtures consisting of the following coniferous and deciduous tree species in varying proportions: black spruce ( <i>Picea mariana</i> (Mill.) B.S.P.), white spruce ( <i>Picea glauca</i> (Moench) Voss), balsam fir ( <i>Abies balsamea</i> (L.) Mill.), subalpine fir ( <i>Abies lasiocarpa</i> (Hook.) Nutt.), trembling aspen ( <i>Populus tremuloides</i> Michx.), and white birch ( <i>Betula papyrifera</i> Marsh.). On any specific site, individual species can be present or absent from the mixture. In addition to the diversity in species composition, stands exhibit wide variability in structure and development, but are generally confined to moderately well drained upland sites. M2, the second phase of seasonal variation in flammability, occurs during the summer. The rate of spread is weighted according to the proportion (expressed as a percentage) of softwood and hardwood components. In the summer, when the deciduous overstory and understory are in leaf, fire spread is greatly reduced, with maximum spread rates only one-fifth that of spring or fall fires under similar burning conditions. For purposes of refining fire behavior calculation this fuel type has been separated into three distinct classes based on the amount of softwood and/or hardwood that exists within the site. M2A denotes sites that are Boreal Mixwood that are green and < 25% conifer and ≥75% hardwood. M2B characterizes sites that are Boreal Mixwood that are green and 50/50 conifer/hardwood. M-2C depicts sites that are < 25% hardwood and ≥75% conifer.
Boreal Mixedwood	M1/M2
Dead Balsam Fir Mixedwood- Leafless M3	This fuel type (and its "green" counterpart, M4) is characterized by mixedwood stands in which balsamfir ( <i>Abies balsamea</i> (L.) Mill.) grows, often as an understory species, in a heterogeneous mix with spruce ( <i>Picea</i> spp.), pine ( <i>Pinus</i> spp.), and birch ( <i>Betula</i> spp.). These stands are found in the Great Lakes – St. Lawrence and Boreal Forest regions of Canada and are not to be confused with the pure balsam fir stands typical of Nova Scotia and New Brunswick. Repeated annual defoliation (due to spruce budworm ( <i>Choristoneura fumiferana</i> Clemens) attack) causes balsam fir mortality, followed by peeling bark, draped lichen (Spanish moss or old man's beard, <i>Usnea</i> spp.) development, top breakage, and windthrow, peaking 5–8 years after mortality. The volume of down woody material is initially low but increases substantially with progressive stand decomposition following mortality. The forest floor is a mixture of feather mosses, conifer needles, and hardwood leaves. The organic layer is moderately compacted and 8–10 cm deep. After mortality, spring fires in this fuel type behave extremely vigorously, with continuous crowning and downwind spotting.

LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary	
Attribute	Description
Dead Balsam Fir Mixedwood-Green M4	This fuel type (and its "leafless" counterpart, M3) is characterized by mixedwood stands in which balsam fir ( <i>Abies balsamea</i> (L.) Mill.) grows, often as an understory species, in a heterogeneous mix with spruce ( <i>Picea</i> spp.), pine ( <i>Pinus</i> spp.), and birch ( <i>Betula</i> spp.). These stands are found in the Great Lakes – St. Lawrence and Boreal Forest regions of Canada and are not to be confused with the pure balsam fir stands typical of Nova Scotia and New Brunswick. Repeated annual defoliation (due to spruce budworm ( <i>Choristoneura fumiferana</i> Clemens) attack) causes balsam fir mortality, followed by peeling bark, draped lichen (Spanish moss or old man's beard, <i>Usnea</i> spp.) development, top breakage, and windthrow, peaking 5–8 years after mortality. The volume of down woody material is initially low but increases substantially with progressive stand decomposition following mortality. The forest floor is a mixture of feather mosses, conifer needles, and hardwood leaves. The organic layer is moderately compacted and 8–10 cm deep. Summer fires are hampered by the proliferation of green understory vegetation resulting from the opening of stand canopy. As sufficient surface fuel accumulates through stand decomposition (usually after 4–5 years), fires will spread through the fuel complex, although not as vigorously as in spring. Forest fire behavior potential is greatest 5–8 years after mortality, decreasing gradually as the surface fuels decompose and the understory vegetation continues to proliferate. For purposes of refining fire behavior calculation this fuel type has been separated into three distinct classes based on the amount of softwood and/or hardwood that exists within the site. M-4A denotes sites that are Boreal Mixwood that are green and < 25% conifer and ≥75% hardwood. M-4B characterizes sites that are Boreal Mixwood that are green and 50% conifer and 50% hardwood. M-4C depicts sites that are < 25% hardwood and ≥75% conifer.
Dead Balsam Fir Mixedwood	M3/M4
Not Available	Non-fuel
Non-fuel	Non-fuel
Water	Non-fuel
Unknown	Non-fuel
Unclassified	Non-fuel
Vegetated Non-Fuel	Non-fuel
<b>FUEL_TYPE</b>	Canadian Forest Fire Danger Rating System fuel type designator. These fuel types have been defined "as an identifiable association of fuel elements of distinctive species, form, size, arrangement, and continuity that will exhibit characteristic fire behavior under defined burning conditions" (Pyne, Andrews and Laven, 1996). The Canadian Fire Behavior Protection System arranges fuel types into five major groups with 16 discrete fuel types which are qualitatively distinguished by variations in their forest floor and organic layer, their surface and ladder fuels, and their stand structure and composition.
<b>C</b>	Spruce-Lichen Woodland, Boreal Spruce, Mature Jack or Lodgepole Pine, Immature Jack or Lodgepole Pine, Red and White Pine, Conifer Plantation, and Ponderosa Pine-Douglas-Fir. See the attribute table for more specific details and values.
<b>D</b>	Leafless Aspen, Green Aspen, and Aspen. See the attribute table for more specific details and values.
<b>S</b>	Jack or Lodgepole Pine Slash, White Spruce-Balsam Slash, or Coastal Cedar-Hemlock-Douglas-Fire Slash. See the attribute table for more specific details and values.

LANDFIRE Canadian Forest Fire Danger Rating System Attribute Data Dictionary	
Attribute	Description
<b>O</b>	Matted Grass, Standing Grass, or Grass. See the attribute table for more specific details and values.
<b>M</b>	Boreal Mixedwood or Dead Balsam Fir Mixedwood. See the attribute table for more specific details and values.
Non-fuel	Not available, Non-fuel, Unknown, Unclassified, Water, and Vegetated Non-Fuel. See the attribute table for more specific details and values.
<b>HUE</b>	Hue is the color of a point, as found along the spectrum or around a color wheel.
<b>SATURATION</b>	Saturation is an indicator of the intensity of a hue. Higher saturation hues appear 'stronger', for example being 'more red' or 'more blue'.
<b>LIGHTNESS</b>	Lightness is a measure of how bright or dark a hue is. Physically, this is found in the amplitude and consequent energy of the electromagnetic waves of light.
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255
<b>B</b>	Blue color value range /255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.3.5 Canopy Height (CH) LF 2023

LANDFIRE Forest Canopy Height Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Forest Canopy Height (CH) describes the average height of the top of the canopy for a stand, and is described as class midpoints of canopy height meters * 10.
-9999	Fill - NoData
0	All non - forest values, including herbaceous and most shrub systems and non-burnable types such as urban, barren, snow and ice, and agriculture.
30	Forest Height 1.8 - <5 meters
70	Forest Height 5 - <9 meters
110	Forest Height 9 - <13 meters
150	Forest Height 13 - <17 meters
190	Forest Height 17 - <21 meters
230	Forest Height 21 - <25 meters
270	Forest Height 25 - <29 meters
310	Forest Height 29 - <33 meters
350	Forest Height 33 - <37 meters
390	Forest Height 37 - <41 meters
430	Forest Height 41 - <45 meters
470	Forest Height 45 - <49 meters
510	Forest Height ≥50 meters
<b>MetersX10</b>	Display attribute, canopy height meters * 10 midpoints.
Forest Height 018 - <050 meters X 10	Midpoint of forest canopy 1.8 - <5 meters

LANDFIRE Forest Canopy Height Attribute Data Dictionary	
Attribute	Description
Forest Height 050 - <090 meters X 10	Midpoint of forest canopy 5 - <9 meters
Forest Height 090 - <130 meters X 10	Midpoint of forest canopy 9 - <13 meters
Forest Height 130 - <170 meters x 10	Midpoint of forest canopy 13 - <17 meters
Forest Height 170 - <210 meters X 10	Midpoint of forest canopy 17 - <21 meters
Forest Height 210 - <250 meters X 10	Midpoint of forest canopy 21 - <25 meters
Forest Height 250 - <290 meters X 10	Midpoint of forest canopy 25 - <29 meters
Forest Height 290 - <330 meters X 10	Midpoint of forest canopy 29 - <33 meters
Forest Height 330 - <370 meters X 10	Midpoint of forest canopy 33 - <37 meters
Forest Height 370 - <410 meters X 10	Midpoint of forest canopy 37 - <41 meters
Forest Height 410 - <450 meters X 10	Midpoint of forest canopy 41 - <45 meters
Forest Height 450 - ≤490 meters X 10	Midpoint of forest canopy 45 - <49 meters
Forest Height ≥500 meters X 10	Midpoint of forest canopy ≥ 50 meters
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>Red</b>	Red color value range 0 - 1
<b>Green</b>	Green color value range 0 - 1
<b>Blue</b>	Blue color value range 0 - 1

### 4.3.6 Fuel Disturbance (FDist) LF 2023

LANDFIRE Fuel Disturbance Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	FDistYEAR grids are a composite of the disturbance grids recoded by disturbance type, disturbance severity, and time since disturbance to meet LANDFIRE fuel assignment needs, with the latest disturbance taking precedence. Value is represented by a 3 digit code.
111 - 733	Code denotes disturbance type, severity, and time since disturbance.
-1111	Fill - Not Mapped
-9999	Fill - NoData
0	No disturbance.
<b>Count</b>	Number of pixels for the corresponding value.

LANDFIRE Fuel Disturbance Attribute Data Dictionary	
Attribute	Description
<b>D_TYPE</b>	A general category of disturbance derived from the dist_type attribute in the disturbance grids.
No Disturbance (0)	No disturbance detected or reported.
Fire (1)	Any non-structure fire that occurs in the wildland. Three distinct types of wildland fire have been defined: wildfire, wildland fire use, and prescribed fire.
Mechanical Add (2)	A means by which vegetation is mechanically "mowed" or "chipped" into small pieces and changed from a vertical to horizontal arrangement of fuel.
Mechanical Remove (3)	A general term for the cutting, felling, and gathering of forest timber.
Windthrow (4)	A weather related event that results in loss of vegetation such as blowdown, hurricane, or tornado.
Insects-Disease (5)	Any Infestations of insects and/or disease that can affect vegetative health.
Mechanical Unknown (6)	A code to indicate unknown disturbance type.
Mastication (7)	Mechanical chipping of vegetation at low, moderate, or high severity, to reduce fuel bed orientation and fuel bed depth.
<b>D_SEVERITY</b>	Classification level of disturbance associated with effect on landcover.
Low (1)	General classification level associated with low effect on landcover.
Medium (2)	General classification level associated with medium effect on landcover.
High (3)	General classification level associated with high effect on landcover.
<b>D_TIME</b>	Time from YEAR since disturbance.
one year (1)	One year from YEAR since disturbance.
two - five years (2)	Two to five years from YEAR since disturbance.
six - ten years (3)	Six to ten years from YEAR since disturbance.
<b>R</b>	Red color value/255
<b>G</b>	Red color value/255
<b>B</b>	Red color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.3.7 Fire Behavior Fuel Model 13 (FBFM13) LF 2023

LANDFIRE Fire Behavior Fuel Model 13 Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Thirteen typical surface fuel arrangements or "collections of fuel properties" (Anderson 1982) were described to serve as input for Rothermel's mathematical surface fire behavior and spread model (Rothermel 1972). These fire behavior fuel models represent distinct distributions of fuel loadings found among surface fuel components (live and dead), size classes and fuel types. The fuel models are described by the most common fire carrying fuel type (grass, brush, timber litter or slash), loading and surface area-to-volume ratio by size class and component, fuelbed depth and moisture of extinction.
-9999	Fill - NoData
1	FBFM1
2	FBFM2

LANDFIRE Fire Behavior Fuel Model 13 Attribute Data Dictionary	
Attribute	Description
3	FBFM3
4	FBFM4
5	FBFM5
6	FBFM6
7	FBFM7
8	FBFM8
9	FBFM9
10	FBFM10
11	FBFM11
12	FBFM12
13	FBFM13
91	Urban
92	Snow/Ice
93	Agriculture
98	Water
99	Barren
<b>FBFM13</b>	Display attribute, fire behavior 13 fuel model.
FBFM1	Surface fires that burn fine herbaceous fuels, cured and curing fuels, little shrub or timber present, primarily grasslands and savanna.
FBFM2	Burns fine, herbaceous fuels, stand is curing or dead, may produce fire brands on oak or pine stands.
FBFM3	Most intense fire of grass group, spreads quickly with wind, one third of stand dead or cured, stands average 3 ft tall.
FBFM4	Fast spreading fire, continuous overstory, flammable foliage and dead woody material, deep litter layer can inhibit suppression.
FBFM5	Low intensity fires, young, green shrubs with little dead material, fuels consist of litter from understory.
FBFM6	Broad range of shrubs, fire requires moderate winds to maintain flame at shrub height, or will drop to the ground with low winds.
FBFM7	Foliage highly flammable, allowing fire to reach shrub strata levels, shrubs generally 2 to 6 feet high.
FBFM8	Slow, ground burning fires, closed canopy stands with short needle conifers or hardwoods, litter consist mainly of needles and leaves, with little undergrowth, occasional flares with concentrated fuels.
FBFM9	Longer flames, quicker surface fires, closed canopy stands of long-needles or hardwoods, rolling leaves in fall can cause spotting, dead-down material can cause occasional crowning.
FBFM10	Surface and ground fire more intense, dead-down fuels more abundant, frequent crowning and spotting causing fire control to be more difficult.
FBFM11	Fairly active fire, fuels consist of slash and herbaceous materials, slash originates from light partial cuts or thinning projects, fire is limited by spacing of fuel load and shade from overstory
FBFM12	Rapid spreading and high intensity fires, dominated by slash resulting from heavy thinning projects and clearcuts, slash is mostly 3 inches or less.

LANDFIRE Fire Behavior Fuel Model 13 Attribute Data Dictionary	
Attribute	Description
FBFM13	Fire spreads quickly through smaller material and intensity builds slowly as large material ignites, continuous layer of slash larger than 3 inches in diameter predominates, resulting from clearcuts and heavy partial cuts, active flames sustained for long periods of time, fire is susceptible to spotting and weather conditions.
Urban	Urban
Snow/Ice	Snow/Ice
Agriculture	Agriculture
Water	Water
Barren	Barren
<b>R</b>	Red color range/255
<b>G</b>	Green color range/255
<b>B</b>	Blue color range/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

#### 4.3.8 Fire Behavior Fuel Model 40 (FBFM40) LF 2023

LANDFIRE Fire Behavior Fuel Model 40 Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	These fire behavior fuel models represent distinct distributions of fuel loadings found among surface fuel components (live and dead), size classes and fuel types. The fuel models are described by the most common fire carrying fuel type (grass, brush, timber litter or slash), loading and surface area-to-volume ratio by size class and component, fuelbed depth and moisture of extinction. Further detail can be found in Scott and Burgan (2005) and Rothermel (1983).
-9999	Fill - NoData
91	NB1
92	NB2
93	NB3
98	NB8
99	NB9
101	GR1
102	GR2
103	GR3
104	GR4
105	GR5
106	GR6
107	GR7
108	GR8
109	GR9
121	GS1
122	GS2
123	GS3

LANDFIRE Fire Behavior Fuel Model 40 Attribute Data Dictionary	
Attribute	Description
124	GS4
141	SH1
142	SH2
143	SH3
144	SH4
145	SH5
146	SH6
147	SH7
148	SH8
149	SH9
161	TU1
162	TU2
163	TU3
164	TU4
165	TU5
181	TL1
182	TL2
183	TL3
184	TL4
185	TL5
186	TL6
187	TL7
188	TL8
189	TL9
201	SB1
202	SB2
203	SB3
204	SB4
<b>FBFM</b>	Display attribute. FBFM Description.
NB1	Urban/Developed
NB2	Snow/Ice
NB3	Agricultural
NB8	Open Water
NB9	Barren
GR1	Short, sparse dry climate grass is short, naturally or heavy grazing, predicted rate of fire spread and flame length low.
GR2	Low load, dry climate grass primarily grass with some small amounts of fine, dead fuel, any shrubs do not affect fire behavior.
GR3	Low load, very coarse, humid climate grass continuous, coarse humid climate grass, any shrubs do not affect fire behavior.
GR4	Moderate load, dry climate grass, continuous, dry climate grass, fuelbed depth about 2 feet.
GR5	Low load, humid climate grass, fuelbed depth is about 1-2 feet.
GR6	Moderate load, continuous humid climate grass, not so coarse as GR5.

LANDFIRE Fire Behavior Fuel Model 40 Attribute Data Dictionary	
Attribute	Description
GR7	High load, continuous dry climate grass, grass is about 3 feet high.
GR8	High load, very coarse, continuous, humid climate grass, spread rate and flame length may be extreme if grass is fully cured.
GR9	Very high load, dense, tall, humid climate grass, about 6 feet tall, spread rate and flame length can be extreme if grass is fully cured.
GS1	Low load, dry climate grass-shrub shrub about 1 foot high, grass load low, spread rate moderate and flame length low.
GS2	Moderate load, dry climate grass-shrub, shrubs are 1-3 feet high, grass load moderate, spread rate high, and flame length is moderate.
GS3	Moderate load, humid climate grass-shrub, moderate grass/shrub load, grass/shrub depth is less than 2 feet, spread rate is high and flame length is moderate.
GS4	High load, humid climate grass-shrub, heavy grass/shrub load, depth is greater than 2 feet, spread rate is high and flame length very high.
SH1	Low load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, may be some grass, spread rate and flame low.
SH2	Moderate load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, no grass, spread rate and flame low.
SH3	Moderate load, humid climate shrub, woody shrubs and shrub litter, possible pine overstory, fuelbed depth 2-3 feet, spread rate and flame low.
SH4	Low load, humid climate timber shrub, woody shrubs and shrub litter, low to moderate load, possible pine overstory, fuelbed depth about 3 feet, spread rate high and flame moderate.
SH5	High load, dry climate shrub litter and woody shrubs, heavy load with depth 4-6 feet, spread rate and flame very high, moisture extinction high.
SH6	Low load, humid climate shrub, woody shrubs and shrub litter, dense shrubs, little or no herbaceous fuel, depth about 2 feet, spread rate and flame high.
SH7	Very high load, dry climate shrub, woody shrubs and shrub litter, very heavy shrub load, depth 4-6 feet, spread rate somewhat lower than SH6 and flame very high.
SH8	High load, humid climate shrub, woody shrubs and shrub litter, dense shrubs, little or no herbaceous fuel, depth about 3 feet, spread rate and flame high.
SH9	Very high load, humid climate shrub, woody shrubs and shrub litter, dense finely branched shrubs with fine dead fuel, 4-6 feet tall, herbaceous may be present, spread rate and flame high.
TU1	Low load dry climate timber grass shrub, low load of grass and/or shrub with litter, spread rate and flame low.
TU2	Moderate load, humid climate timber-shrub, moderate litter load with some shrub, spread rate moderate and flame low.
TU3	Moderate load, humid climate timber grass shrub, moderate forest litter with some grass and shrub, spread rate high and flame moderate.
TU4	Dwarf conifer with understory, short conifer trees with grass or moss understory, spread rate and flame moderate.
TU5	Very high load, dry climate timber shrub, heavy forest litter with shrub or small tree understory, spread rate and flame moderate.
TL1	Low load compact conifer litter, compact forest litter, light to moderate load, 1-2 inches deep, may represent a recent burn, spread rate and flame low.
TL2	Low load broadleaf litter, broadleaf, hardwood litter, spread rate and flame low.

LANDFIRE Fire Behavior Fuel Model 40 Attribute Data Dictionary	
Attribute	Description
TL3	Moderate load conifer litter, moderate load conifer litter, light load of coarse fuels, spread rate is very low and flame low.
TL4	Small downed logs moderate load of fine litter and coarse fuels, small diameter downed logs, spread rate and flame low.
TL5	High load conifer litter, light slash or dead fuel, spread rate and flame low.
TL6	Moderate load broadleaf litter, spread rate and flame moderate.
TL7	Large downed logs, heavy load forest litter, larger diameter downed logs, spread rate and flame low.
TL8	Long needle litter, moderate load long needle pine litter, may have small amounts of herbaceous fuel, spread rate moderate and flame low.
TL9	Very high load broadleaf litter, may be heavy needle drape, spread rate and flame moderate.
SB1	Low load activity fuel, light dead and down activity fuel, fine fuel is 10-20 t/ac, 1-3 inches in diameter, depth < 1 foot, spread rate moderate and flame low.
SB2	Moderate load activity fuel or low load blowdown, 7-12 t/ac, 0-3 inch diameter class, depth about 1 foot, blowdown scattered with many still standing, spread rate moderate and flame low.
SB3	High load activity fuel or moderate load blowdown, heavy dead down activity fuel or moderate blowdown, 7-12 t/ac, 0-.25 inch diameter class, depth > 1 foot, blowdown moderate trees compacted to near the ground, spread rate and flame high.
SB4	High load blowdown, heavy blowdown fuel, blowdown is total fuelbed not compacted, foliage and fine fuel still attached to blowdown, spread rate and flame very high.
R	Red color value range 0 - 255
G	Green color value range 0 - 255
B	Blue color value range 0 - 255
RED	Red color value range 0 - 1
GREEN	Green color value range 0 - 1
BLUE	Blue color value range 0 - 1

### 4.3.9 Fuel Characteristic Classification System Fuelbeds (FCCS) LF 2023

LANDFIRE Fuel Characteristic Classification System Fuelbeds Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	
0-12990133	Value
-1111	Fill – NotMapped
-9999	Fill - NoData
<b>FCCS</b>	
0-12990133	FCCS
<b>FCCSID</b>	
0-12990133	FCCS ID is a fuelbed classification identifier which can be used to crosswalk fuelbed data in the CONSUME and FOFEM tables.
<b>FCCS_REG</b>	FCCS Region.
<b>FUELBED</b>	

LANDFIRE Fuel Characteristic Classification System Fuelbeds Attribute Data Dictionary	
Attribute	Description
Fuelbed Name	LANDFIRE (LF) 2023 Fuel Characteristic Classification System (FCCS) provides a fuelbed classification ID (FCCSID) which when crosswalked with the CONSUME and FOFEM tables can be used for predicting surface fire behavior, crown fire potential, and fuel availability. LF defines fuelbed as: the inherent physical characteristics of fuel that contribute to fire behavior and effects (Riccardi et al. 2007). FCCS represents the composition of fuels, and features six horizontal fuel layers called stratum (canopy, shrubs, herbs, downed wood, litter and duff). LF collaborated with the Fire and Environmental Research Applications (FERA) team of the USFS Pacific Northwest Research Station for creation of the FCCS product. Rulebased methods for crosswalks and mapping FCCS fuelbeds are constructed from the LF 2023 Existing Vegetation Type (EVT) product. The EVT-to-fuelbed crosswalk rules often allow for several possibilities for fuelbeds; expert opinion is used to assign the most representative fuelbed and to determine where additional fuelbed development is necessary. FCCS fuelbeds are included preloaded in the US Forest Service (USFS) Fuel and Fire Tools (FFT) application. FCCS fuelbed mapping should be considered a starting point and customized to represent sampled fuels within a project area.
R	Red color value range /255
G	Green color value range /255
B	Blue color value range /255
RED	Red color value range 0 - 1
GREEN	Green color value range 0 - 1
BLUE	Blue color value range 0 - 1

#### 4.3.10 Fuel Vegetation Cover (FVC) LF 2023

LANDFIRE Fuel Vegetation Cover Attribute Data Dictionary	
Attribute	Description
VALUE	2-3 digit code representing the land cover type or depicts percent canopy cover by life form. FVC has a potential range of 0 - 100 percent canopy cover. Values are binned into discrete classes (up to 10 bins at 10 percent intervals for tree, shrub and herbaceous canopy cover).
-9999	Fill - NoData
11	Open Water
12	Snow/Ice
13	Developed-Upland Deciduous Forest
14	Developed-Upland Evergreen Forest
15	Developed-Upland Mixed Forest
16	Developed-Upland Herbaceous
17	Developed-Upland Shrubland
18	Developed-Herbaceous Wetland Vegetation

LANDFIRE Fuel Vegetation Cover Attribute Data Dictionary	
Attribute	Description
19	Developed-Woody Wetland Vegetation
20	Developed - General
21	Developed - Open Space
22	Developed - Low Intensity
23	Developed - Medium Intensity
24	Developed - High Intensity
25	Developed-Roads
31	Barren
32	Quarries-Strip Mines-Gravel Pits
60	NASS-Orchard
61	NASS-Vineyard
62	NASS-Bush fruit and berries
63	NASS-Row Crop-Close Grown Crop
64	NASS-Row Crop
65	NASS-Close Grown Crop
66	NASS-Fallow/Idle Cropland
67	NASS-Pasture and Hayland
68	NASS-Wheat
69	NASS-Aquaculture
75	Herbaceous Semi-dry
76	Herbaceous Semi-wet
78	Recently Disturbed Forest
80	Agriculture
81	Pasture/Hay
82	Cultivated Crops
83	Small Grains
84	Fallow
85	Urban-Recreational Grasses
95	Herbaceous Wetlands
100	Sparse Vegetation Canopy
101	Tree Cover >= 10 and < 20%
102	Tree Cover >= 20 and < 30%
103	Tree Cover >= 30 and < 40%
104	Tree Cover >= 40 and < 50%
105	Tree Cover >= 50 and < 60%
106	Tree Cover >= 60 and < 70%
107	Tree Cover >= 70 and < 80%
108	Tree Cover >= 80 and < 90%
109	Tree Cover >= 90 and <= 100%
111	Shrub Cover >= 10 and < 20%
112	Shrub Cover >= 20 and < 30%
113	Shrub Cover >= 30 and < 40%

LANDFIRE Fuel Vegetation Cover Attribute Data Dictionary	
Attribute	Description
114	Shrub Cover >= 40 and < 50%
115	Shrub Cover >= 50 and < 60%
116	Shrub Cover >= 60 and < 70%
117	Shrub Cover >= 70 and < 80%
118	Shrub Cover >= 80 and < 90%
119	Shrub Cover >= 90 and <= 100%
121	Herb Cover >= 10 and < 20%
122	Herb Cover >= 20 and < 30%
123	Herb Cover >= 30 and < 40%
124	Herb Cover >= 40 and < 50%
125	Herb Cover >= 50 and < 60%
126	Herb Cover >= 60 and < 70%
127	Herb Cover >= 70 and < 80%
128	Herb Cover >= 80 and < 90%
129	Herb Cover >= 90 and <= 100%
150	Sparse Vegetation Canopy
151	Tree Canopy >= 10 and < 25%
152	Tree Canopy >= 25 and < 60%
153	Tree Canopy >= 60 and <= 100%
161	Shrub Canopy >= 10 and < 25%
162	Shrub Canopy >= 25 and < 60%
163	Shrub Canopy >= 60 and <= 100%
171	Herb Canopy >= 10 and < 60%
172	Herb Canopy >= 60 and <= 100%
<b>CLASSNAMES</b>	Display attribute. FVC is EVC that has been binned to facilitate fuel rule assignment.
NoData	No data background value.
Open Water	LANDFIRE Mapped.
Snow/Ice	NLCD 2011 Snow/Ice
Developed-Upland Deciduous Forest	LANDFIRE Mapped.
Developed-Upland Evergreen Forest	LANDFIRE Mapped.
Developed-Upland Mixed Forest	LANDFIRE Mapped.
Developed-Upland Herbaceous	LANDFIRE Mapped.
Developed-Upland Shrubland	LANDFIRE Mapped.
Developed-Herbaceous Wetland Vegetation	LANDFIRE Mapped.
Developed-Woody Wetland Vegetation	LANDFIRE Mapped.
Developed - General	LANDFIRE Mapped.
Developed - Open Space	LANDFIRE Mapped.
Developed - Low Intensity	LANDFIRE Mapped.
Developed - Medium Intensity	LANDFIRE Mapped.
Developed - High Intensity	LANDFIRE Mapped.

LANDFIRE Fuel Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Developed-Roads	LANDFIRE Mapped.
Barren	LANDFIRE Mapped.
Quarries-Strip Mines-Gravel Pits	LANDFIRE Mapped using information from multiple sources.
NASS-Orchard	Agricultural mapping from NASS and local sources if available.
NASS-Vineyard	Agricultural mapping from NASS and local sources if available.
NASS-Bush fruit and berries	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop	Agricultural mapping from NASS and local sources if available.
NASS-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
NASS-Fallow/Idle Cropland	Agricultural mapping from NASS and local sources if available.
NASS-Pasture and Hayland	Agricultural mapping from NASS and local sources if available.
NASS-Wheat	Agricultural mapping from NASS and local sources if available.
NASS-Aquaculture	Agricultural mapping from NASS and local sources if available.
Herbaceous Semi-dry	LANDFIRE Mapped.
Herbaceous Semi-wet	LANDFIRE Mapped.
Recently Disturbed Forest	LANDFIRE Mapped.
Agriculture - General	Agricultural mapping from NASS and local sources if available.
Pasture/Hay	Agricultural mapping from NASS and local sources if available.
Cultivated Crops	Agricultural mapping from NASS and local sources if available.
Small Grains	Agricultural mapping from NASS and local sources if available.
Fallow	Agricultural mapping from NASS and local sources if available.
Urban-Recreational Grasses	LANDFIRE Mapped.
Herbaceous Wetlands	LANDFIRE Mapped.
Sparse Vegetation Canopy	LANDFIRE continuous EVC < 10%
Tree Cover >= 10 and < 20%	LANDFIRE continuous EVC binned to Tree Cover >= 10 and < 20%
Tree Cover >= 20 and < 30%	LANDFIRE continuous EVC binned to Tree Cover >= 20 and < 30%
Tree Cover >= 30 and < 40%	LANDFIRE continuous EVC binned to Tree Cover >= 30 and < 40%
Tree Cover >= 40 and < 50%	LANDFIRE continuous EVC binned to Tree Cover >= 40 and < 50%
Tree Cover >= 50 and < 60%	LANDFIRE continuous EVC binned to Tree Cover >= 50 and < 60%
Tree Cover >= 60 and < 70%	LANDFIRE continuous EVC binned to Tree Cover >= 60 and < 70%
Tree Cover >= 70 and < 80%	LANDFIRE continuous EVC binned to Tree Cover >= 70 and < 80%
Tree Cover >= 80 and < 90%	LANDFIRE continuous EVC binned to Tree Cover >= 80 and < 90%
Tree Cover >= 90 and <= 100%	LANDFIRE continuous EVC binned to Tree Cover >= 90 and <= 100%
Shrub Cover >= 10 and < 20%	LANDFIRE continuous EVC binned to Shrub Cover >= 10 and < 20%
Shrub Cover >= 20 and < 30%	LANDFIRE continuous EVC binned to Shrub Cover >= 20 and < 30%
Shrub Cover >= 30 and < 40%	LANDFIRE continuous EVC binned to Shrub Cover >= 30 and < 40%
Shrub Cover >= 40 and < 50%	LANDFIRE continuous EVC binned to Shrub Cover >= 40 and < 50%
Shrub Cover >= 50 and < 60%	LANDFIRE continuous EVC binned to Shrub Cover >= 50 and < 60%
Shrub Cover >= 60 and < 70%	LANDFIRE continuous EVC binned to Shrub Cover >= 60 and < 70%
Shrub Cover >= 70 and < 80%	LANDFIRE continuous EVC binned to Shrub Cover >= 70 and < 80%
Shrub Cover >= 80 and < 90%	LANDFIRE continuous EVC binned to Shrub Cover >= 80 and < 90%

LANDFIRE Fuel Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Shrub Cover >= 90 and <= 100%	LANDFIRE continuous EVC binned to Shrub Cover >= 90 and <= 100%
Herb Cover >= 10 and < 20%	LANDFIRE continuous EVC binned to Herb Cover >= 10 and < 20%
Herb Cover >= 20 and < 30%	LANDFIRE continuous EVC binned to Herb Cover >= 20 and < 30%
Herb Cover >= 30 and < 40%	LANDFIRE continuous EVC binned to Herb Cover >= 30 and < 40%
Herb Cover >= 40 and < 50%	LANDFIRE continuous EVC binned to Herb Cover >= 40 and < 50%
Herb Cover >= 50 and < 60%	LANDFIRE continuous EVC binned to Herb Cover >= 50 and < 60%
Herb Cover >= 60 and < 70%	LANDFIRE continuous EVC binned to Herb Cover >= 60 and < 70%
Herb Cover >= 70 and < 80%	LANDFIRE continuous EVC binned to Herb Cover >= 70 and < 80%
Herb Cover >= 80 and < 90%	LANDFIRE continuous EVC binned to Herb Cover >= 80 and < 90%
Herb Cover >= 90 and <= 100%	LANDFIRE continuous EVC binned to Herb Cover >= 90 and <= 100%
Sparse Vegetation Canopy	LANDFIRE continuous EVC < 10%
Tree Canopy >= 10 and < 25%	LANDFIRE continuous EVC binned to Tree Canopy >= 10 and < 25%
Tree Canopy >= 25 and < 60%	LANDFIRE continuous EVC binned to Tree Canopy >= 25 and < 60%
Tree Canopy >= 60 and <= 100%	LANDFIRE continuous EVC binned to Tree Canopy >= 60 and <= 100%
Shrub Canopy >= 10 and < 25%	LANDFIRE continuous EVC binned to Shrub Canopy >= 10 and < 25%
Shrub Canopy >= 25 and < 60%	LANDFIRE continuous EVC binned to Shrub Canopy >= 25 and < 60%
Shrub Canopy >= 60 and <= 100%	LANDFIRE continuous EVC binned to Shrub Canopy >= 60 and <= 100%
Herb Canopy >= 10 and < 60%	LANDFIRE continuous EVC binned to Herb Canopy >= 10 and < 60%
Herb Canopy >= 60 and <= 100%	LANDFIRE continuous EVC binned to Herb Canopy >= 60 and <= 100%
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255
<b>B</b>	Blue color value range /255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.3.11 Fuel Vegetation Height (FVH) LF 2023

LANDFIRE Fuel Vegetation Height Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	2-3 digit code representing the land cover type or depicts canopy height by life form. FVH product represents the average height of the dominant vegetation for a 30-m grid cell and is binned separately for each life form.
-9999	Fill - NoData
11	Open Water
12	Snow/Ice
13	Developed-Upland Deciduous Forest
14	Developed-Upland Evergreen Forest

LANDFIRE Fuel Vegetation Height Attribute Data Dictionary	
Attribute	Description
15	Developed-Upland Mixed Forest
16	Developed-Upland Herbaceous
17	Developed-Upland Shrubland
18	Developed-Herbaceous Wetland Vegetation
19	Developed-Woody Wetland Vegetation
20	Developed-General
21	Developed-Open
22	Developed - Low Intensity
23	Developed - Medium Intensity
24	Developed - High Intensity
25	Developed-Roads
31	Barren
32	Quarries-Strip Mines-Gravel Pits
60	Orchard
61	NASS-Vineyard
62	Bush fruit
63	NASS-Row Crop-Close Grown Crop
64	NASS-Row Crop
65	NASS-Close Grown Crop
66	Fallow/Idle
68	NASS-Wheat
69	NASS-Aquaculture
75	Herbaceous Semi-dry
76	Herbaceous Semi-wet
80	Agriculture
81	Pasture/Hay
82	Cultivated Crops
83	Small Grains
84	Fallow Idle Crop
95	Herbaceous Wetlands
100	Sparse Vegetation Height
425	Herb Height 0 - <0.5 meters
475	Herb Height 0.5 - <1.0 meters
499	Herb Height ≥ 1.0 meter
502	Shrub Height 0 - <0.5 meters
507	Shrub Height 0.5 - <1.0 meter
520	Shrub Height 1.0 - <3.0 meters
530	Shrub Height ≥3.0 meters
603	Forest Height 1.8 - <5 meters
607	Forest Height 5 - <9 meters
611	Forest Height 9 - <13 meters
615	Forest Height 13 - <17 meters

LANDFIRE Fuel Vegetation Height Attribute Data Dictionary	
Attribute	Description
619	Forest Height 17 - <21 meters
623	Forest Height 21 - <25 meters
627	Forest Height 25 - <29 meters
631	Forest Height 29 - <33 meters
635	Forest Height 33 - <37 meters
639	Forest Height 37 - <41 meters
643	Forest Height 41 - <45 meters
647	Forest Height 45 - <49 meters
651	Forest Height ≥49 meters
<b>EVH</b>	Existing Vegetation Height (EVH) value.
<b>CLASSNAMES</b>	Detail Attribute. FVH is EVH that has been binned to facilitate fuel rule assignment.
NoData	No data background value.
Open Water	LANDFIRE Mapped.
Snow/Ice	NLCD 2011 Snow/Ice.
Developed-Upland Deciduous Forest	LANDFIRE Mapped.
Developed-Upland Evergreen Forest	LANDFIRE Mapped.
Developed-Upland Mixed Forest	LANDFIRE Mapped.
Developed-Upland Herbaceous	LANDFIRE Mapped.
Developed-Upland Shrubland	LANDFIRE Mapped.
Developed-Herbaceous Wetland Vegetation	LANDFIRE Mapped.
Developed-Woody Wetland Vegetation	LANDFIRE Mapped.
Developed-General	LANDFIRE Mapped.
Developed-Open	LANDFIRE Mapped.
Developed - Low Intensity	LANDFIRE Mapped.
Developed - Medium Intensity	LANDFIRE Mapped.
Developed - High Intensity	LANDFIRE Mapped.
Developed-Roads	LANDFIRE Mapped.
Barren	LANDFIRE Mapped.
Quarries-Strip Mines-Gravel Pits	LANDFIRE Mapped using information from multiple sources.
Orchard	Agricultural mapping from NASS and local sources if available.
NASS-Vineyard	Agricultural mapping from NASS and local sources if available.
Bush fruit	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop	Agricultural mapping from NASS and local sources if available.
NASS-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
Fallow/Idle	Agricultural mapping from NASS and local sources if available.
NASS-Wheat	Agricultural mapping from NASS and local sources if available.
NASS-Aquaculture	Agricultural mapping from NASS and local sources if available.
Herbaceous Semi-dry	Agricultural mapping from NASS and local sources if available.
Herbaceous Semi-wet	LANDFIRE Mapped.

LANDFIRE Fuel Vegetation Height Attribute Data Dictionary	
Attribute	Description
Agriculture-General	LANDFIRE Mapped.
Pasture/Hay	LANDFIRE Mapped.
Cultivated Crops	Agricultural mapping from NASS and local sources if available.
Small Grains	Agricultural mapping from NASS and local sources if available.
Fallow Idle Crop	Agricultural mapping from NASS and local sources if available.
Herbaceous Wetlands	LANDFIRE Mapped.
Sparse Vegetation Height	Height class for sparse vegetation.
Herb Height 0 to 0.5 meters	LANDFIRE continuous EVH binned to Herb Height 0 to 0.5 meters
Herb Height 0.5 to 1.0 meters	LANDFIRE continuous EVH binned to Herb Height 0.5 to 1.0 meters
Herb Height > 1.0 meter	LANDFIRE continuous EVH binned to Herb Height > 1.0 meter
Shrub Height 0 to 0.5 meters	LANDFIRE continuous EVH binned to Shrub Height 0 to 0.5 meters
Shrub Height 0.5 to 1.0 meter	LANDFIRE continuous EVH binned to Shrub Height 0.5 to 1.0 meter
Shrub Height 1.0 to 3.0 meters	LANDFIRE continuous EVH binned to Shrub Height 1.0 to 3.0 meters
Shrub Height > 3.0 meters	LANDFIRE continuous EVH binned to Shrub Height > 3.0 meters
Forest Height 1.8 to 5 meters	LANDFIRE continuous EVH binned to Forest Height 1.8 to 5 meters
Forest Height 5 to 9 meters	LANDFIRE continuous EVH binned to Forest Height 5 to 9 meters
Forest Height 9 to 13 meters	LANDFIRE continuous EVH binned to Forest Height 9 to 13 meters
Forest Height 13 to 17 meters	LANDFIRE continuous EVH binned to Forest Height 13 to 17 meters
Forest Height 17 to 21 meters	LANDFIRE continuous EVH binned to Forest Height 17 to 21 meters
Forest Height 21 to 25 meters	LANDFIRE continuous EVH binned to Forest Height 21 to 25 meters
Forest Height 25 to 29 meters	LANDFIRE continuous EVH binned to Forest Height 25 to 29 meters
Forest Height 29 to 33 meters	LANDFIRE continuous EVH binned to Forest Height 29 to 33 meters
Forest Height 33 to 37 meters	LANDFIRE continuous EVH binned to Forest Height 33 to 37 meters
Forest Height 37 to 41 meters	LANDFIRE continuous EVH binned to Forest Height 37 to 41 meters
Forest Height 41 to 45 meters	LANDFIRE continuous EVH binned to Forest Height 41 to 45 meters
Forest Height 45 to 49 meters	LANDFIRE continuous EVH binned to Forest Height 45 to 49 meters
Forest Height > 50 meters	LANDFIRE continuous EVH binned to Forest Height > 50 meters
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255
<b>B</b>	Blue color value range /255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

#### 4.3.12 Fuel Vegetation Type (FVT) LF 2023

LANDFIRE Fuel Vegetation Type Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	The LANDFIRE (LF) assigned code identifying fuel vegetation and land cover types.
11 to 4802	Numerical code for FVT.
-9999	Fill - NoData
<b>EVT_FUEL</b>	The LF assigned code identifying fuel vegetation and land cover types.

LANDFIRE Fuel Vegetation Type Attribute Data Dictionary	
Attribute	Description
<b>EVT_FUEL_N</b>	Fuels Vegetation Type (FVT) represents the name of the terrestrial ecological systems classification developed by NatureServe for the western hemisphere and is an important input to LF fuel mapping.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.3.13 Operational Roads (Roads) LF 2023

LANDFIRE Operational Roads Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	LF 2023 Conterminous United States (CONUS) Operational Roads includes all pixels from the four roads classes within the NLCD 2021 Developed Imperviousness Descriptor product for CONUS. The impervious descriptor layer categorizes developed pixels according to source and type.
-9999	Fill - NoData
-1111	Fill – Not Mapped
0	Background value.
20	Primary road.
21	Secondary road.
22	Tertiary road.
23	Thinned road.
<b>Class_Name</b>	The LF assigned code identifying fuel vegetation and land cover types.
<b>Background value</b>	Background value.
Primary road	Interstates and other major roads. Pixels were derived from the 2018 NavStreets Street Data.
Secondary road	Non-interstate highways. Pixels were derived from the 2018 NavStreets Street Data.
Tertiary road	Any two-lane road. Pixels were derived from the 2018 NavStreets Street Data.
Thinner road	Small tertiary roads that generally are not paved and have been removed from the landcover but remain as part of the impervious surface product. Pixels were derived from the 2018 NavStreets Street Data.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

## 4.4 Vegetation Products

### 4.4.1 Existing Vegetation Cover (EVC) LF 2023

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Existing Vegetation Cover (EVC) depicts percent canopy cover by life form. EVC has a potential range of 10 - 100 percent canopy cover.
-9999	Fill - NoData
11	Open Water
12	Snow/Ice
13	Developed-Upland Deciduous Forest
14	Developed-Upland Evergreen Forest
15	Developed-Upland Mixed Forest
16	Developed-Upland Herbaceous
17	Developed-Upland Shrubland
22	Developed - Low Intensity
23	Developed - Medium Intensity
24	Developed - High Intensity
25	Developed-Roads
31	Barren
32	Quarries-Strip Mines-Gravel Pits-Well and Wind Pads
61	NASS-Vineyard
63	NASS-Row Crop-Close Grown Crop
64	NASS-Row Crop
65	NASS-Close Grown Crop
68	NASS-Wheat
69	NASS-Aquaculture
82	Cultivated Crops
100	Sparse Vegetation Canopy
110	Tree Cover = 10%
111	Tree Cover = 11%
112	Tree Cover = 12%
113	Tree Cover = 13%
114	Tree Cover = 14%
115	Tree Cover = 15%
116	Tree Cover = 16%
117	Tree Cover = 17%
118	Tree Cover = 18%
119	Tree Cover = 19%
120	Tree Cover = 20%
121	Tree Cover = 21%
122	Tree Cover = 22%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
123	Tree Cover = 23%
124	Tree Cover = 24%
125	Tree Cover = 25%
126	Tree Cover = 26%
127	Tree Cover = 27%
128	Tree Cover = 28%
129	Tree Cover = 29%
130	Tree Cover = 30%
131	Tree Cover = 31%
132	Tree Cover = 32%
133	Tree Cover = 33%
134	Tree Cover = 34%
135	Tree Cover = 35%
136	Tree Cover = 36%
137	Tree Cover = 37%
138	Tree Cover = 38%
139	Tree Cover = 39%
140	Tree Cover = 40%
141	Tree Cover = 41%
142	Tree Cover = 42%
143	Tree Cover = 43%
144	Tree Cover = 44%
145	Tree Cover = 45%
146	Tree Cover = 46%
147	Tree Cover = 47%
148	Tree Cover = 48%
149	Tree Cover = 49%
150	Tree Cover = 50%
151	Tree Cover = 51%
152	Tree Cover = 52%
153	Tree Cover = 53%
154	Tree Cover = 54%
155	Tree Cover = 55%
156	Tree Cover = 56%
157	Tree Cover = 57%
158	Tree Cover = 58%
159	Tree Cover = 59%
160	Tree Cover = 60%
161	Tree Cover = 61%
162	Tree Cover = 62%
163	Tree Cover = 63%
164	Tree Cover = 64%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
165	Tree Cover = 65%
166	Tree Cover = 66%
167	Tree Cover = 67%
168	Tree Cover = 68%
169	Tree Cover = 69%
170	Tree Cover = 70%
171	Tree Cover = 71%
172	Tree Cover = 72%
173	Tree Cover = 73%
174	Tree Cover = 74%
175	Tree Cover = 75%
176	Tree Cover = 76%
177	Tree Cover = 77%
178	Tree Cover = 78%
179	Tree Cover = 79%
180	Tree Cover = 80%
181	Tree Cover = 81%
182	Tree Cover = 82%
183	Tree Cover = 83%
184	Tree Cover = 84%
185	Tree Cover = 85%
186	Tree Cover = 86%
187	Tree Cover = 87%
188	Tree Cover = 88%
189	Tree Cover = 89%
190	Tree Cover = 90%
191	Tree Cover = 91%
192	Tree Cover = 92%
193	Tree Cover = 93%
194	Tree Cover = 94%
195	Tree Cover = 95%
196	Tree Cover = 96%
197	Tree Cover = 97%
198	Tree Cover = 98%
199	Tree Cover >= 99%
210	Shrub Cover = 10%
211	Shrub Cover = 11%
212	Shrub Cover = 12%
213	Shrub Cover = 13%
214	Shrub Cover = 14%
215	Shrub Cover = 15%
216	Shrub Cover = 16%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
217	Shrub Cover = 17%
218	Shrub Cover = 18%
219	Shrub Cover = 19%
220	Shrub Cover = 20%
221	Shrub Cover = 21%
222	Shrub Cover = 22%
223	Shrub Cover = 23%
224	Shrub Cover = 24%
225	Shrub Cover = 25%
226	Shrub Cover = 26%
227	Shrub Cover = 27%
228	Shrub Cover = 28%
229	Shrub Cover = 29%
230	Shrub Cover = 30%
231	Shrub Cover = 31%
232	Shrub Cover = 32%
233	Shrub Cover = 33%
234	Shrub Cover = 34%
235	Shrub Cover = 35%
236	Shrub Cover = 36%
237	Shrub Cover = 37%
238	Shrub Cover = 38%
239	Shrub Cover = 39%
240	Shrub Cover = 40%
241	Shrub Cover = 41%
242	Shrub Cover = 42%
243	Shrub Cover = 43%
244	Shrub Cover = 44%
245	Shrub Cover = 45%
246	Shrub Cover = 46%
247	Shrub Cover = 47%
248	Shrub Cover = 48%
249	Shrub Cover = 49%
250	Shrub Cover = 50%
251	Shrub Cover = 51%
252	Shrub Cover = 52%
253	Shrub Cover = 53%
254	Shrub Cover = 54%
255	Shrub Cover = 55%
256	Shrub Cover = 56%
257	Shrub Cover = 57%
258	Shrub Cover = 58%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
259	Shrub Cover = 59%
260	Shrub Cover = 60%
261	Shrub Cover = 61%
262	Shrub Cover = 62%
263	Shrub Cover = 63%
264	Shrub Cover = 64%
265	Shrub Cover = 65%
266	Shrub Cover = 66%
267	Shrub Cover = 67%
268	Shrub Cover = 68%
269	Shrub Cover = 69%
270	Shrub Cover = 70%
271	Shrub Cover = 71%
272	Shrub Cover = 72%
273	Shrub Cover = 73%
274	Shrub Cover = 74%
275	Shrub Cover = 75%
276	Shrub Cover = 76%
277	Shrub Cover = 77%
278	Shrub Cover = 78%
279	Shrub Cover = 79%
280	Shrub Cover = 80%
281	Shrub Cover = 81%
282	Shrub Cover = 82%
283	Shrub Cover = 83%
284	Shrub Cover = 84%
285	Shrub Cover = 85%
286	Shrub Cover = 86%
287	Shrub Cover = 87%
288	Shrub Cover = 88%
289	Shrub Cover = 89%
290	Shrub Cover = 90%
291	Shrub Cover = 91%
292	Shrub Cover = 92%
293	Shrub Cover = 93%
294	Shrub Cover = 94%
295	Shrub Cover = 95%
296	Shrub Cover = 96%
297	Shrub Cover = 97%
298	Shrub Cover = 98%
299	Shrub Cover >= 99%
310	Herb Cover = 10%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
311	Herb Cover = 11%
312	Herb Cover = 12%
313	Herb Cover = 13%
314	Herb Cover = 14%
315	Herb Cover = 15%
316	Herb Cover = 16%
317	Herb Cover = 17%
318	Herb Cover = 18%
319	Herb Cover = 19%
320	Herb Cover = 20%
321	Herb Cover = 21%
322	Herb Cover = 22%
323	Herb Cover = 23%
324	Herb Cover = 24%
325	Herb Cover = 25%
326	Herb Cover = 26%
327	Herb Cover = 27%
328	Herb Cover = 28%
329	Herb Cover = 29%
330	Herb Cover = 30%
331	Herb Cover = 31%
332	Herb Cover = 32%
333	Herb Cover = 33%
334	Herb Cover = 34%
335	Herb Cover = 35%
336	Herb Cover = 36%
337	Herb Cover = 37%
338	Herb Cover = 38%
339	Herb Cover = 39%
340	Herb Cover = 40%
341	Herb Cover = 41%
342	Herb Cover = 42%
343	Herb Cover = 43%
344	Herb Cover = 44%
345	Herb Cover = 45%
346	Herb Cover = 46%
347	Herb Cover = 47%
348	Herb Cover = 48%
349	Herb Cover = 49%
350	Herb Cover = 50%
351	Herb Cover = 51%
352	Herb Cover = 52%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
353	Herb Cover = 53%
354	Herb Cover = 54%
355	Herb Cover = 55%
356	Herb Cover = 56%
357	Herb Cover = 57%
358	Herb Cover = 58%
359	Herb Cover = 59%
360	Herb Cover = 60%
361	Herb Cover = 61%
362	Herb Cover = 62%
363	Herb Cover = 63%
364	Herb Cover = 64%
365	Herb Cover = 65%
366	Herb Cover = 66%
367	Herb Cover = 67%
368	Herb Cover = 68%
369	Herb Cover = 69%
370	Herb Cover = 70%
371	Herb Cover = 71%
372	Herb Cover = 72%
373	Herb Cover = 73%
374	Herb Cover = 74%
375	Herb Cover = 75%
376	Herb Cover = 76%
377	Herb Cover = 77%
378	Herb Cover = 78%
379	Herb Cover = 79%
380	Herb Cover = 80%
381	Herb Cover = 81%
382	Herb Cover = 82%
383	Herb Cover = 83%
384	Herb Cover = 84%
385	Herb Cover = 85%
386	Herb Cover = 86%
387	Herb Cover = 87%
388	Herb Cover = 88%
389	Herb Cover = 89%
390	Herb Cover = 90%
391	Herb Cover = 91%
392	Herb Cover = 92%
393	Herb Cover = 93%
394	Herb Cover = 94%

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
395	Herb Cover = 95%
396	Herb Cover = 96%
397	Herb Cover = 97%
398	Herb Cover = 98%
399	Herb Cover >= 99%
<b>Count</b>	Number of pixels for the corresponding value.
<b>CLASSNAMES</b>	Display attribute. EVC has a potential range of 0 - 100 percent canopy cover.
NoData	No data background value.
Open Water	LANDFIRE Mapped.
Snow/Ice	NLCD 2011 Snow/Ice
Developed-Upland Deciduous Forest	LANDFIRE Mapped.
Developed-Upland Evergreen Forest	LANDFIRE Mapped.
Developed-Upland Mixed Forest	LANDFIRE Mapped.
Developed-Upland Herbaceous	LANDFIRE Mapped.
Developed-Upland Shrubland	LANDFIRE Mapped.
Developed-Herbaceous Wetland Vegetation	LANDFIRE Mapped.
Developed-Woody Wetland Vegetation	LANDFIRE Mapped.
Developed - General	LANDFIRE Mapped.
Developed - Open Space	LANDFIRE Mapped.
Developed - Low Intensity	LANDFIRE Mapped.
Developed - Medium Intensity	LANDFIRE Mapped.
Developed - High Intensity	LANDFIRE Mapped.
Developed-Roads	LANDFIRE Mapped.
Barren	LANDFIRE Mapped.
Quarries-Strip Mines-Gravel Pits-Well and Wind Pads	LANDFIRE Mapped using information from multiple sources.
NASS-Orchard	Agricultural mapping from NASS and local sources if available.
NASS-Vineyard	Agricultural mapping from NASS and local sources if available.
NASS-Bush fruit and berries	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
NASS-Row Crop	Agricultural mapping from NASS and local sources if available.
NASS-Close Grown Crop	Agricultural mapping from NASS and local sources if available.
NASS-Fallow/Idle Cropland	Agricultural mapping from NASS and local sources if available.
NASS-Pasture and Hayland	Agricultural mapping from NASS and local sources if available.
NASS-Wheat	Agricultural mapping from NASS and local sources if available.
NASS-Aquaculture	Agricultural mapping from NASS and local sources if available.
Herbaceous Semi-dry	LANDFIRE Mapped.
Herbaceous Semi-wet	LANDFIRE Mapped.
Recently Disturbed Forest	LANDFIRE Mapped.
Agriculture - General	Agricultural mapping from NASS and local sources if available.
Pasture/Hay	Agricultural mapping from NASS and local sources if available.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Cultivated Crops	Agricultural mapping from NASS and local sources if available.
Small Grains	Agricultural mapping from NASS and local sources if available.
Fallow	Agricultural mapping from NASS and local sources if available.
Urban-Recreational Grasses	LANDFIRE Mapped.
Herbaceous Wetlands	LANDFIRE Mapped.
Sparse Vegetation Canopy	LANDFIRE Mapped.
Tree Cover = 10%	LANDFIRE Mapped.
Tree Cover = 11%	LANDFIRE Mapped.
Tree Cover = 12%	LANDFIRE Mapped.
Tree Cover = 13%	LANDFIRE Mapped.
Tree Cover = 14%	LANDFIRE Mapped.
Tree Cover = 15%	LANDFIRE Mapped.
Tree Cover = 16%	LANDFIRE Mapped.
Tree Cover = 17%	LANDFIRE Mapped.
Tree Cover = 18%	LANDFIRE Mapped.
Tree Cover = 19%	LANDFIRE Mapped.
Tree Cover = 20%	LANDFIRE Mapped.
Tree Cover = 21%	LANDFIRE Mapped.
Tree Cover = 22%	LANDFIRE Mapped.
Tree Cover = 23%	LANDFIRE Mapped.
Tree Cover = 24%	LANDFIRE Mapped.
Tree Cover = 25%	LANDFIRE Mapped.
Tree Cover = 26%	LANDFIRE Mapped.
Tree Cover = 27%	LANDFIRE Mapped.
Tree Cover = 28%	LANDFIRE Mapped.
Tree Cover = 29%	LANDFIRE Mapped.
Tree Cover = 30%	LANDFIRE Mapped.
Tree Cover = 31%	LANDFIRE Mapped.
Tree Cover = 32%	LANDFIRE Mapped.
Tree Cover = 33%	LANDFIRE Mapped.
Tree Cover = 34%	LANDFIRE Mapped.
Tree Cover = 35%	LANDFIRE Mapped.
Tree Cover = 36%	LANDFIRE Mapped.
Tree Cover = 37%	LANDFIRE Mapped.
Tree Cover = 38%	LANDFIRE Mapped.
Tree Cover = 39%	LANDFIRE Mapped.
Tree Cover = 40%	LANDFIRE Mapped.
Tree Cover = 41%	LANDFIRE Mapped.
Tree Cover = 42%	LANDFIRE Mapped.
Tree Cover = 43%	LANDFIRE Mapped.
Tree Cover = 44%	LANDFIRE Mapped.
Tree Cover = 45%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Tree Cover = 46%	LANDFIRE Mapped.
Tree Cover = 47%	LANDFIRE Mapped.
Tree Cover = 48%	LANDFIRE Mapped.
Tree Cover = 49%	LANDFIRE Mapped.
Tree Cover = 50%	LANDFIRE Mapped.
Tree Cover = 51%	LANDFIRE Mapped.
Tree Cover = 52%	LANDFIRE Mapped.
Tree Cover = 53%	LANDFIRE Mapped.
Tree Cover = 54%	LANDFIRE Mapped.
Tree Cover = 55%	LANDFIRE Mapped.
Tree Cover = 56%	LANDFIRE Mapped.
Tree Cover = 57%	LANDFIRE Mapped.
Tree Cover = 58%	LANDFIRE Mapped.
Tree Cover = 59%	LANDFIRE Mapped.
Tree Cover = 60%	LANDFIRE Mapped.
Tree Cover = 61%	LANDFIRE Mapped.
Tree Cover = 62%	LANDFIRE Mapped.
Tree Cover = 63%	LANDFIRE Mapped.
Tree Cover = 64%	LANDFIRE Mapped.
Tree Cover = 65%	LANDFIRE Mapped.
Tree Cover = 66%	LANDFIRE Mapped.
Tree Cover = 67%	LANDFIRE Mapped.
Tree Cover = 68%	LANDFIRE Mapped.
Tree Cover = 69%	LANDFIRE Mapped.
Tree Cover = 70%	LANDFIRE Mapped.
Tree Cover = 71%	LANDFIRE Mapped.
Tree Cover = 72%	LANDFIRE Mapped.
Tree Cover = 73%	LANDFIRE Mapped.
Tree Cover = 74%	LANDFIRE Mapped.
Tree Cover = 75%	LANDFIRE Mapped.
Tree Cover = 76%	LANDFIRE Mapped.
Tree Cover = 77%	LANDFIRE Mapped.
Tree Cover = 78%	LANDFIRE Mapped.
Tree Cover = 79%	LANDFIRE Mapped.
Tree Cover = 80%	LANDFIRE Mapped.
Tree Cover = 81%	LANDFIRE Mapped.
Tree Cover = 82%	LANDFIRE Mapped.
Tree Cover = 83%	LANDFIRE Mapped.
Tree Cover = 84%	LANDFIRE Mapped.
Tree Cover = 85%	LANDFIRE Mapped.
Tree Cover = 86%	LANDFIRE Mapped.
Tree Cover = 87%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Tree Cover = 88%	LANDFIRE Mapped.
Tree Cover = 89%	LANDFIRE Mapped.
Tree Cover = 90%	LANDFIRE Mapped.
Tree Cover = 91%	LANDFIRE Mapped.
Tree Cover = 92%	LANDFIRE Mapped.
Tree Cover = 93%	LANDFIRE Mapped.
Tree Cover = 94%	LANDFIRE Mapped.
Tree Cover = 95%	LANDFIRE Mapped.
Tree Cover = 96%	LANDFIRE Mapped.
Tree Cover = 97%	LANDFIRE Mapped.
Tree Cover = 98%	LANDFIRE Mapped.
Tree Cover >= 99%	LANDFIRE Mapped.
Shrub Cover = 10%	LANDFIRE Mapped.
Shrub Cover = 11%	LANDFIRE Mapped.
Shrub Cover = 12%	LANDFIRE Mapped.
Shrub Cover = 13%	LANDFIRE Mapped.
Shrub Cover = 14%	LANDFIRE Mapped.
Shrub Cover = 15%	LANDFIRE Mapped.
Shrub Cover = 16%	LANDFIRE Mapped.
Shrub Cover = 17%	LANDFIRE Mapped.
Shrub Cover = 18%	LANDFIRE Mapped.
Shrub Cover = 19%	LANDFIRE Mapped.
Shrub Cover = 20%	LANDFIRE Mapped.
Shrub Cover = 21%	LANDFIRE Mapped.
Shrub Cover = 22%	LANDFIRE Mapped.
Shrub Cover = 23%	LANDFIRE Mapped.
Shrub Cover = 24%	LANDFIRE Mapped.
Shrub Cover = 25%	LANDFIRE Mapped.
Shrub Cover = 26%	LANDFIRE Mapped.
Shrub Cover = 27%	LANDFIRE Mapped.
Shrub Cover = 28%	LANDFIRE Mapped.
Shrub Cover = 29%	LANDFIRE Mapped.
Shrub Cover = 30%	LANDFIRE Mapped.
Shrub Cover = 31%	LANDFIRE Mapped.
Shrub Cover = 32%	LANDFIRE Mapped.
Shrub Cover = 33%	LANDFIRE Mapped.
Shrub Cover = 34%	LANDFIRE Mapped.
Shrub Cover = 35%	LANDFIRE Mapped.
Shrub Cover = 36%	LANDFIRE Mapped.
Shrub Cover = 37%	LANDFIRE Mapped.
Shrub Cover = 38%	LANDFIRE Mapped.
Shrub Cover = 39%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Shrub Cover = 40%	LANDFIRE Mapped.
Shrub Cover = 41%	LANDFIRE Mapped.
Shrub Cover = 42%	LANDFIRE Mapped.
Shrub Cover = 43%	LANDFIRE Mapped.
Shrub Cover = 44%	LANDFIRE Mapped.
Shrub Cover = 45%	LANDFIRE Mapped.
Shrub Cover = 46%	LANDFIRE Mapped.
Shrub Cover = 47%	LANDFIRE Mapped.
Shrub Cover = 48%	LANDFIRE Mapped.
Shrub Cover = 49%	LANDFIRE Mapped.
Shrub Cover = 50%	LANDFIRE Mapped.
Shrub Cover = 51%	LANDFIRE Mapped.
Shrub Cover = 52%	LANDFIRE Mapped.
Shrub Cover = 53%	LANDFIRE Mapped.
Shrub Cover = 54%	LANDFIRE Mapped.
Shrub Cover = 55%	LANDFIRE Mapped.
Shrub Cover = 56%	LANDFIRE Mapped.
Shrub Cover = 57%	LANDFIRE Mapped.
Shrub Cover = 58%	LANDFIRE Mapped.
Shrub Cover = 59%	LANDFIRE Mapped.
Shrub Cover = 60%	LANDFIRE Mapped.
Shrub Cover = 61%	LANDFIRE Mapped.
Shrub Cover = 62%	LANDFIRE Mapped.
Shrub Cover = 63%	LANDFIRE Mapped.
Shrub Cover = 64%	LANDFIRE Mapped.
Shrub Cover = 65%	LANDFIRE Mapped.
Shrub Cover = 66%	LANDFIRE Mapped.
Shrub Cover = 67%	LANDFIRE Mapped.
Shrub Cover = 68%	LANDFIRE Mapped.
Shrub Cover = 69%	LANDFIRE Mapped.
Shrub Cover = 70%	LANDFIRE Mapped.
Shrub Cover = 71%	LANDFIRE Mapped.
Shrub Cover = 72%	LANDFIRE Mapped.
Shrub Cover = 73%	LANDFIRE Mapped.
Shrub Cover = 74%	LANDFIRE Mapped.
Shrub Cover = 75%	LANDFIRE Mapped.
Shrub Cover = 76%	LANDFIRE Mapped.
Shrub Cover = 77%	LANDFIRE Mapped.
Shrub Cover = 78%	LANDFIRE Mapped.
Shrub Cover = 79%	LANDFIRE Mapped.
Shrub Cover = 80%	LANDFIRE Mapped.
Shrub Cover = 81%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Shrub Cover = 82%	LANDFIRE Mapped.
Shrub Cover = 83%	LANDFIRE Mapped.
Shrub Cover = 84%	LANDFIRE Mapped.
Shrub Cover = 85%	LANDFIRE Mapped.
Shrub Cover = 86%	LANDFIRE Mapped.
Shrub Cover = 87%	LANDFIRE Mapped.
Shrub Cover = 88%	LANDFIRE Mapped.
Shrub Cover = 89%	LANDFIRE Mapped.
Shrub Cover = 90%	LANDFIRE Mapped.
Shrub Cover = 91%	LANDFIRE Mapped.
Shrub Cover = 92%	LANDFIRE Mapped.
Shrub Cover = 93%	LANDFIRE Mapped.
Shrub Cover = 94%	LANDFIRE Mapped.
Shrub Cover = 95%	LANDFIRE Mapped.
Shrub Cover = 96%	LANDFIRE Mapped.
Shrub Cover = 97%	LANDFIRE Mapped.
Shrub Cover = 98%	LANDFIRE Mapped.
Shrub Cover >= 99%	LANDFIRE Mapped.
Herb Cover = 10%	LANDFIRE Mapped.
Herb Cover = 11%	LANDFIRE Mapped.
Herb Cover = 12%	LANDFIRE Mapped.
Herb Cover = 13%	LANDFIRE Mapped.
Herb Cover = 14%	LANDFIRE Mapped.
Herb Cover = 15%	LANDFIRE Mapped.
Herb Cover = 16%	LANDFIRE Mapped.
Herb Cover = 17%	LANDFIRE Mapped.
Herb Cover = 18%	LANDFIRE Mapped.
Herb Cover = 19%	LANDFIRE Mapped.
Herb Cover = 20%	LANDFIRE Mapped.
Herb Cover = 21%	LANDFIRE Mapped.
Herb Cover = 22%	LANDFIRE Mapped.
Herb Cover = 23%	LANDFIRE Mapped.
Herb Cover = 24%	LANDFIRE Mapped.
Herb Cover = 25%	LANDFIRE Mapped.
Herb Cover = 26%	LANDFIRE Mapped.
Herb Cover = 27%	LANDFIRE Mapped.
Herb Cover = 28%	LANDFIRE Mapped.
Herb Cover = 29%	LANDFIRE Mapped.
Herb Cover = 30%	LANDFIRE Mapped.
Herb Cover = 31%	LANDFIRE Mapped.
Herb Cover = 32%	LANDFIRE Mapped.
Herb Cover = 33%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Herb Cover = 34%	LANDFIRE Mapped.
Herb Cover = 35%	LANDFIRE Mapped.
Herb Cover = 36%	LANDFIRE Mapped.
Herb Cover = 37%	LANDFIRE Mapped.
Herb Cover = 38%	LANDFIRE Mapped.
Herb Cover = 39%	LANDFIRE Mapped.
Herb Cover = 40%	LANDFIRE Mapped.
Herb Cover = 41%	LANDFIRE Mapped.
Herb Cover = 42%	LANDFIRE Mapped.
Herb Cover = 43%	LANDFIRE Mapped.
Herb Cover = 44%	LANDFIRE Mapped.
Herb Cover = 45%	LANDFIRE Mapped.
Herb Cover = 46%	LANDFIRE Mapped.
Herb Cover = 47%	LANDFIRE Mapped.
Herb Cover = 48%	LANDFIRE Mapped.
Herb Cover = 49%	LANDFIRE Mapped.
Herb Cover = 50%	LANDFIRE Mapped.
Herb Cover = 51%	LANDFIRE Mapped.
Herb Cover = 52%	LANDFIRE Mapped.
Herb Cover = 53%	LANDFIRE Mapped.
Herb Cover = 54%	LANDFIRE Mapped.
Herb Cover = 55%	LANDFIRE Mapped.
Herb Cover = 56%	LANDFIRE Mapped.
Herb Cover = 57%	LANDFIRE Mapped.
Herb Cover = 58%	LANDFIRE Mapped.
Herb Cover = 59%	LANDFIRE Mapped.
Herb Cover = 60%	LANDFIRE Mapped.
Herb Cover = 61%	LANDFIRE Mapped.
Herb Cover = 62%	LANDFIRE Mapped.
Herb Cover = 63%	LANDFIRE Mapped.
Herb Cover = 64%	LANDFIRE Mapped.
Herb Cover = 65%	LANDFIRE Mapped.
Herb Cover = 66%	LANDFIRE Mapped.
Herb Cover = 67%	LANDFIRE Mapped.
Herb Cover = 68%	LANDFIRE Mapped.
Herb Cover = 69%	LANDFIRE Mapped.
Herb Cover = 70%	LANDFIRE Mapped.
Herb Cover = 71%	LANDFIRE Mapped.
Herb Cover = 72%	LANDFIRE Mapped.
Herb Cover = 73%	LANDFIRE Mapped.
Herb Cover = 74%	LANDFIRE Mapped.
Herb Cover = 75%	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Cover Attribute Data Dictionary	
Attribute	Description
Herb Cover = 76%	LANDFIRE Mapped.
Herb Cover = 77%	LANDFIRE Mapped.
Herb Cover = 78%	LANDFIRE Mapped.
Herb Cover = 79%	LANDFIRE Mapped.
Herb Cover = 80%	LANDFIRE Mapped.
Herb Cover = 81%	LANDFIRE Mapped.
Herb Cover = 82%	LANDFIRE Mapped.
Herb Cover = 83%	LANDFIRE Mapped.
Herb Cover = 84%	LANDFIRE Mapped.
Herb Cover = 85%	LANDFIRE Mapped.
Herb Cover = 86%	LANDFIRE Mapped.
Herb Cover = 87%	LANDFIRE Mapped.
Herb Cover = 88%	LANDFIRE Mapped.
Herb Cover = 89%	LANDFIRE Mapped.
Herb Cover = 90%	LANDFIRE Mapped.
Herb Cover = 91%	LANDFIRE Mapped.
Herb Cover = 92%	LANDFIRE Mapped.
Herb Cover = 93%	LANDFIRE Mapped.
Herb Cover = 94%	LANDFIRE Mapped.
Herb Cover = 95%	LANDFIRE Mapped.
Herb Cover = 96%	LANDFIRE Mapped.
Herb Cover = 97%	LANDFIRE Mapped.
Herb Cover = 98%	LANDFIRE Mapped.
Herb Cover >= 99%	LANDFIRE Mapped.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>Red</b>	Red color value range 0 - 1
<b>Green</b>	Green color value range 0 - 1
<b>Blue</b>	Blue color value range 0 - 1

#### 4.4.2 Existing Vegetation Height (EVH) LF 2023

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Existing Vegetation Height (EVH) product represents the average height of the dominant vegetation for a 30-m grid cell and is binned separately for each life form.
-9999	Fill - NoData
11	Open Water
12	Snow/Ice
13	Developed-Upland Deciduous Forest
14	Developed-Upland Evergreen Forest

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
15	Developed-Upland Mixed Forest
16	Developed-Upland Herbaceous
17	Developed-Upland Shrubland
22	Developed - Low Intensity
23	Developed - Medium Intensity
24	Developed - High Intensity
25	Developed-Roads
31	Barren
32	Quarries-Strip Mines-Gravel Pits-Well and Wind Pads
61	NASS-Vineyard
63	NASS-Row Crop-Close Grown Crop
64	NASS-Row Crop
65	NASS-Close Grown Crop
68	NASS-Wheat
69	NASS-Aquaculture
100	Sparse Vegetation Canopy
101	Tree Height = 1 meter
102	Tree Height = 2 meters
103	Tree Height = 3 meters
104	Tree Height = 4 meters
105	Tree Height = 5 meters
106	Tree Height = 6 meters
107	Tree Height = 7 meters
108	Tree Height = 8 meters
109	Tree Height = 9 meters
110	Tree Height = 10 meters
111	Tree Height = 11 meters
112	Tree Height = 12 meters
113	Tree Height = 13 meters
114	Tree Height = 14 meters
115	Tree Height = 15 meters
116	Tree Height = 16 meters
117	Tree Height = 17 meters
118	Tree Height = 18 meters
119	Tree Height = 19 meters
120	Tree Height = 20 meters
121	Tree Height = 21 meters
122	Tree Height = 22 meters
123	Tree Height = 23 meters
124	Tree Height = 24 meters
125	Tree Height = 25 meters
126	Tree Height = 26 meters

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
127	Tree Height = 27 meters
128	Tree Height = 28 meters
129	Tree Height = 29 meters
130	Tree Height = 30 meters
131	Tree Height = 31 meters
132	Tree Height = 32 meters
133	Tree Height = 33 meters
134	Tree Height = 34 meters
135	Tree Height = 35 meters
136	Tree Height = 36 meters
137	Tree Height = 37 meters
138	Tree Height = 38 meters
139	Tree Height = 39 meters
140	Tree Height = 40 meters
141	Tree Height = 41 meters
142	Tree Height = 42 meters
143	Tree Height = 43 meters
144	Tree Height = 44 meters
145	Tree Height = 45 meters
146	Tree Height = 46 meters
147	Tree Height = 47 meters
148	Tree Height = 48 meters
149	Tree Height = 49 meters
150	Tree Height = 50 meters
151	Tree Height = 51 meters
152	Tree Height = 52 meters
153	Tree Height = 53 meters
154	Tree Height = 54 meters
155	Tree Height = 55 meters
156	Tree Height = 56 meters
157	Tree Height = 57 meters
158	Tree Height = 58 meters
159	Tree Height = 59 meters
160	Tree Height = 60 meters
161	Tree Height = 61 meters
162	Tree Height = 62 meters
163	Tree Height = 63 meters
164	Tree Height = 64 meters
165	Tree Height = 65 meters
166	Tree Height = 66 meters
167	Tree Height = 67 meters
168	Tree Height = 68 meters

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
169	Tree Height = 69 meters
170	Tree Height = 70 meters
171	Tree Height = 71 meters
172	Tree Height = 72 meters
173	Tree Height = 73 meters
174	Tree Height = 74 meters
175	Tree Height = 75 meters
176	Tree Height = 76 meters
177	Tree Height = 77 meters
178	Tree Height = 78 meters
179	Tree Height = 79 meters
180	Tree Height = 80 meters
181	Tree Height = 81 meters
182	Tree Height = 82 meters
183	Tree Height = 83 meters
184	Tree Height = 84 meters
185	Tree Height = 85 meters
186	Tree Height = 86 meters
187	Tree Height = 87 meters
188	Tree Height = 88 meters
189	Tree Height = 89 meters
190	Tree Height = 90 meters
191	Tree Height = 91 meters
192	Tree Height = 92 meters
193	Tree Height = 93 meters
194	Tree Height = 94 meters
195	Tree Height = 95 meters
196	Tree Height = 96 meters
197	Tree Height = 97 meters
198	Tree Height = 98 meters
199	Tree Height >= 99 meters
201	Shrub Height = 0.1 meter
202	Shrub Height = 0.2 meter
203	Shrub Height = 0.3 meter
204	Shrub Height = 0.4 meter
205	Shrub Height = 0.5 meter
206	Shrub Height = 0.6 meter
207	Shrub Height = 0.7 meter
208	Shrub Height = 0.8 meter
209	Shrub Height = 0.9 meter
210	Shrub Height = 1 meter
211	Shrub Height = 1.1 meters

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
212	Shrub Height = 1.2 meters
213	Shrub Height = 1.3 meters
214	Shrub Height = 1.4 meters
215	Shrub Height = 1.5 meters
216	Shrub Height = 1.6 meters
217	Shrub Height = 1.7 meters
218	Shrub Height = 1.8 meters
219	Shrub Height = 1.9 meters
220	Shrub Height = 2.0 meters
221	Shrub Height = 2.1 meters
222	Shrub Height = 2.2 meters
223	Shrub Height = 2.3 meters
224	Shrub Height = 2.4 meters
225	Shrub Height = 2.5 meters
226	Shrub Height = 2.6 meters
227	Shrub Height = 2.7 meters
228	Shrub Height = 2.8 meters
229	Shrub Height = 2.9 meters
230	Shrub Height >= 3.0 meters
301	Herb Height = 0.1 meter
302	Herb Height = 0.2 meter
303	Herb Height = 0.3 meter
304	Herb Height = 0.4 meter
305	Herb Height = 0.5 meter
306	Herb Height = 0.6 meter
307	Herb Height = 0.7 meter
308	Herb Height = 0.8 meter
309	Herb Height = 0.9 meter
310	Herb Height >= 1 meter
<b>CLASSNAMES</b>	Display attribute, EVH is represented in meters and life forms are binned separately.
NoData	NoData
Open Water	Open Water
Snow/Ice	Snow/Ice
Developed-Upland Deciduous Forest	Developed-Upland Deciduous Forest
Developed-Upland Evergreen Forest	Developed-Upland Evergreen Forest
Developed-Upland Mixed Forest	Developed-Upland Mixed Forest
Developed-Upland Herbaceous	Developed-Upland Herbaceous
Developed-Upland Shrubland	Developed-Upland Shrubland
Developed-Herbaceous Wetland Vegetation	Developed-Herbaceous Wetland Vegetation
Developed-Woody Wetland Vegetation	Developed-Woody Wetland Vegetation
Developed - General	Developed - General

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
Developed - Open Space	Developed - Open Space
Developed - Low Intensity	Developed - Low Intensity
Developed - Medium Intensity	Developed - Medium Intensity
Developed - High Intensity	Developed - High Intensity
Developed-Roads	Developed-Roads
Barren	Barren
Quarries-Strip Mines-Gravel Pits-Well and Wind Pads	Quarries-Strip Mines-Gravel Pits-Well and Wind Pads
NASS-Orchard	NASS-Orchard
NASS-Vineyard	NASS-Vineyard
NASS-Row Crop-Close Grown Crop	NASS-Row Crop-Close Grown Crop
NASS-Row Crop	NASS-Row Crop
NASS-Close Grown Crop	NASS-Close Grown Crop
NASS-Wheat	NASS-Wheat
NASS-Aquaculture	NASS-Aquaculture
Cultivated Crops	Cultivated Crops
Sparse Vegetation Canopy	Sparse Vegetation Canopy
Tree Height = 1 meter	LANDFIRE Mapped.
Tree Height = 2 meters	LANDFIRE Mapped.
Tree Height = 3 meters	LANDFIRE Mapped.
Tree Height = 4 meters	LANDFIRE Mapped.
Tree Height = 5 meters	LANDFIRE Mapped.
Tree Height = 6 meters	LANDFIRE Mapped.
Tree Height = 7 meters	LANDFIRE Mapped.
Tree Height = 8 meters	LANDFIRE Mapped.
Tree Height = 9 meters	LANDFIRE Mapped.
Tree Height = 10 meters	LANDFIRE Mapped.
Tree Height = 11 meters	LANDFIRE Mapped.
Tree Height = 12 meters	LANDFIRE Mapped.
Tree Height = 13 meters	LANDFIRE Mapped.
Tree Height = 14 meters	LANDFIRE Mapped.
Tree Height = 15 meters	LANDFIRE Mapped.
Tree Height = 16 meters	LANDFIRE Mapped.
Tree Height = 17 meters	LANDFIRE Mapped.
Tree Height = 18 meters	LANDFIRE Mapped.
Tree Height = 19 meters	LANDFIRE Mapped.
Tree Height = 20 meters	LANDFIRE Mapped.
Tree Height = 21 meters	LANDFIRE Mapped.
Tree Height = 22 meters	LANDFIRE Mapped.
Tree Height = 23 meters	LANDFIRE Mapped.
Tree Height = 24 meters	LANDFIRE Mapped.
Tree Height = 25 meters	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
Tree Height = 26 meters	LANDFIRE Mapped.
Tree Height = 27 meters	LANDFIRE Mapped.
Tree Height = 28 meters	LANDFIRE Mapped.
Tree Height = 29 meters	LANDFIRE Mapped.
Tree Height = 30 meters	LANDFIRE Mapped.
Tree Height = 31 meters	LANDFIRE Mapped.
Tree Height = 32 meters	LANDFIRE Mapped.
Tree Height = 33 meters	LANDFIRE Mapped.
Tree Height = 34 meters	LANDFIRE Mapped.
Tree Height = 35 meters	LANDFIRE Mapped.
Tree Height = 36 meters	LANDFIRE Mapped.
Tree Height = 37 meters	LANDFIRE Mapped.
Tree Height = 38 meters	LANDFIRE Mapped.
Tree Height = 39 meters	LANDFIRE Mapped.
Tree Height = 40 meters	LANDFIRE Mapped.
Tree Height = 41 meters	LANDFIRE Mapped.
Tree Height = 42 meters	LANDFIRE Mapped.
Tree Height = 43 meters	LANDFIRE Mapped.
Tree Height = 44 meters	LANDFIRE Mapped.
Tree Height = 45 meters	LANDFIRE Mapped.
Tree Height = 46 meters	LANDFIRE Mapped.
Tree Height = 47 meters	LANDFIRE Mapped.
Tree Height = 48 meters	LANDFIRE Mapped.
Tree Height = 49 meters	LANDFIRE Mapped.
Tree Height = 50 meters	LANDFIRE Mapped.
Tree Height = 51 meters	LANDFIRE Mapped.
Tree Height = 52 meters	LANDFIRE Mapped.
Tree Height = 53 meters	LANDFIRE Mapped.
Tree Height = 54 meters	LANDFIRE Mapped.
Tree Height = 55 meters	LANDFIRE Mapped.
Tree Height = 56 meters	LANDFIRE Mapped.
Tree Height = 57 meters	LANDFIRE Mapped.
Tree Height = 58 meters	LANDFIRE Mapped.
Tree Height = 59 meters	LANDFIRE Mapped.
Tree Height = 60 meters	LANDFIRE Mapped.
Tree Height = 61 meters	LANDFIRE Mapped.
Tree Height = 62 meters	LANDFIRE Mapped.
Tree Height = 63 meters	LANDFIRE Mapped.
Tree Height = 64 meters	LANDFIRE Mapped.
Tree Height = 65 meters	LANDFIRE Mapped.
Tree Height = 66 meters	LANDFIRE Mapped.
Tree Height = 67 meters	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
Tree Height = 68 meters	LANDFIRE Mapped.
Tree Height = 69 meters	LANDFIRE Mapped.
Tree Height = 70 meters	LANDFIRE Mapped.
Tree Height = 71 meters	LANDFIRE Mapped.
Tree Height = 72 meters	LANDFIRE Mapped.
Tree Height = 73 meters	LANDFIRE Mapped.
Tree Height = 74 meters	LANDFIRE Mapped.
Tree Height = 75 meters	LANDFIRE Mapped.
Tree Height = 76 meters	LANDFIRE Mapped.
Tree Height = 77 meters	LANDFIRE Mapped.
Tree Height = 78 meters	LANDFIRE Mapped.
Tree Height = 79 meters	LANDFIRE Mapped.
Tree Height = 80 meters	LANDFIRE Mapped.
Tree Height = 81 meters	LANDFIRE Mapped.
Tree Height = 82 meters	LANDFIRE Mapped.
Tree Height = 83 meters	LANDFIRE Mapped.
Tree Height = 84 meters	LANDFIRE Mapped.
Tree Height = 85 meters	LANDFIRE Mapped.
Tree Height = 86 meters	LANDFIRE Mapped.
Tree Height = 87 meters	LANDFIRE Mapped.
Tree Height = 88 meters	LANDFIRE Mapped.
Tree Height = 89 meters	LANDFIRE Mapped.
Tree Height = 90 meters	LANDFIRE Mapped.
Tree Height = 91 meters	LANDFIRE Mapped.
Tree Height = 92 meters	LANDFIRE Mapped.
Tree Height = 93 meters	LANDFIRE Mapped.
Tree Height = 94 meters	LANDFIRE Mapped.
Tree Height = 95 meters	LANDFIRE Mapped.
Tree Height = 96 meters	LANDFIRE Mapped.
Tree Height = 97 meters	LANDFIRE Mapped.
Tree Height = 98 meters	LANDFIRE Mapped.
Tree Height >= 99 meters	LANDFIRE Mapped.
Shrub Height = 0.1 meter	LANDFIRE Mapped.
Shrub Height = 0.2 meter	LANDFIRE Mapped.
Shrub Height = 0.3 meter	LANDFIRE Mapped.
Shrub Height = 0.4 meter	LANDFIRE Mapped.
Shrub Height = 0.5 meter	LANDFIRE Mapped.
Shrub Height = 0.6 meter	LANDFIRE Mapped.
Shrub Height = 0.7 meter	LANDFIRE Mapped.
Shrub Height = 0.8 meter	LANDFIRE Mapped.
Shrub Height = 0.9 meter	LANDFIRE Mapped.
Shrub Height = 1 meter	LANDFIRE Mapped.

LANDFIRE Existing Vegetation Height Attribute Data Dictionary	
Attribute	Description
Shrub Height = 1.1 meters	LANDFIRE Mapped.
Shrub Height = 1.2 meters	LANDFIRE Mapped.
Shrub Height = 1.3 meters	LANDFIRE Mapped.
Shrub Height = 1.4 meters	LANDFIRE Mapped.
Shrub Height = 1.5 meters	LANDFIRE Mapped.
Shrub Height = 1.6 meters	LANDFIRE Mapped.
Shrub Height = 1.7 meters	LANDFIRE Mapped.
Shrub Height = 1.8 meters	LANDFIRE Mapped.
Shrub Height = 1.9 meters	LANDFIRE Mapped.
Shrub Height = 2.0 meters	LANDFIRE Mapped.
Shrub Height = 2.1 meters	LANDFIRE Mapped.
Shrub Height = 2.2 meters	LANDFIRE Mapped.
Shrub Height = 2.3 meters	LANDFIRE Mapped.
Shrub Height = 2.4 meters	LANDFIRE Mapped.
Shrub Height = 2.5 meters	LANDFIRE Mapped.
Shrub Height = 2.6 meters	LANDFIRE Mapped.
Shrub Height = 2.7 meters	LANDFIRE Mapped.
Shrub Height = 2.8 meters	LANDFIRE Mapped.
Shrub Height = 2.9 meters	LANDFIRE Mapped.
Shrub Height >= 3.0 meters	LANDFIRE Mapped.
Herb Height = 0.1 meter	LANDFIRE Mapped.
Herb Height = 0.2 meter	LANDFIRE Mapped.
Herb Height = 0.3 meter	LANDFIRE Mapped.
Herb Height = 0.4 meter	LANDFIRE Mapped.
Herb Height = 0.5 meter	LANDFIRE Mapped.
Herb Height = 0.6 meter	LANDFIRE Mapped.
Herb Height = 0.7 meter	LANDFIRE Mapped.
Herb Height = 0.8 meter	LANDFIRE Mapped.
Herb Height = 0.9 meter	LANDFIRE Mapped.
Herb Height >= 1 meter	LANDFIRE Mapped.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.4.3 Existing Vegetation Type (EVT) LF 2023

LANDFIRE Existing Vegetation Type Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	The LF assigned code identifying vegetation and land cover types.
-9999	Fill - NoData
4401 - 9994	The code identifies the vegetation and land cover types.
<b>EVT_NAME</b>	Class name in the LANDFIRE EVT legend.
<b>LFRDB</b>	Code stored in the LFRDB.
4401 - 9994	The code identifies the EVT value stored in the LFRDB. Some LFRDB codes have been split into more than one value, this field provides the codes lineage.
<b>EVT_FUEL</b>	Fuels EVT code. The code identifies the vegetation and land cover types used for fuels mapping.
<b>EVT_Fuel_N</b>	Fuels EVT class name.
<b>EVT_LF</b>	EVT Lifeform.
<b>EVT_GP</b>	EVT Group code.
<b>EVT_PHYS</b>	EVT Physiognomy.
<b>EVT_GP_N</b>	EVT Group name.
<b>SAF_SRM</b>	Crosswalk to Society of American Foresters and Society for Range Management cover type.
<b>EVT_ORDER</b>	EVT Physiognomic Order from Federal Geographic Data Committee classification system.
<b>EVT_CLASS</b>	EVT Physiognomic Class from Federal Geographic Data Committee classification system.
<b>EVT_SBCLS</b>	EVT Physiognomic Subclass from Federal Geographic Data Committee classification system.
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

### 4.4.4 Biophysical Settings (BPS) LF 2023

LANDFIRE Biophysical Settings Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	LANDFIRE's (LF) Biophysical Settings (BPS) product represents the vegetation that may have been dominant on the landscape prior to Euro-American settlement. BPS is based on both the current biophysical environment and an approximation of the historical disturbance regime. Map units are based on NatureServe's Ecological Systems classification and represent the natural plant communities that may have been present during the reference period.
-9999	Fill-NoData
-1111	Fill-Not Mapped
11	Open Water
12	Perennial Ice/Snow
31	Barren-Rock/Sand/Clay

LANDFIRE Biophysical Settings Attribute Data Dictionary	
Attribute	Description
4406 to 17220	The BPS value is a unique identifier for a unique combination of the BPS_Code and Zone.
<b>BPS_CODE</b> 11 to 17220	Map units are based on NatureServe's Ecological Systems classification and represent the natural plant communities that may have been present during the reference period.
<b>BPS_MODEL</b>	The BPS_CODE followed by the MAP_ZONE.
<b>BPS_NAME</b>	BPS name.
<b>GROUPVEG</b>	Coarse categorization of BpS grouping.
<b>FRI_REPLAC</b>	Fire Return Interval (FRI) replacement fire.
<b>FRI_MIXED</b>	Fire Return Interval mixed fire.
<b>FRI_SURFAC</b>	Fire Return Interval surface fire.
<b>FRI_ALLFIR</b>	Fire Return Interval all fire. Quantifies the average period between fires under the presumed historical fire regime. Previously Mean Fire Return Interval (MFRI).
<b>PRC_REPLAC</b>	Percent replacement fire. Previously Percent of Replacement-severity Fire (PRS). Quantifies the amount of replacement-severity fires relative to low- and mixed-severity fires under the presumed historical fire regime. Replacement severity is defined as greater than 75 percent average top-kill within a typical fire perimeter for a given vegetation type.
<b>PRC_MIXED</b>	Percent mixed fire. Previously the Percent of Mixed-severity Fire (PMS). Quantifies the amount of mixedseverity fires relative to low- and replacement-severity fires under the presumed historical fire regime. Mixed severity is defined as between 25 and 75 percent average top-kill within a typical fire perimeter for a given vegetation type.
<b>PRC_SURFAC</b>	Percent of surface fire. Previously the Percent of Low-severity Fire (PLS). Quantifies the amount of lowseverity fires relative to mixed- and replacement-severity fires under the presumed historical fire regime. Low severity is defined as less than 25 percent average top-kill within a typical fire perimeter for a given vegetation type.
<b>FRG_NEW</b>	Fire Regime Group.
I-A	Percent replacement fire less than 66.7%, fire return interval 0-5 years
I-B	Percent replacement fire less than 66.7%, fire return interval 6-15 years
I-C	Percent replacement fire less than 66.7%, fire return interval 16-35 years
II-A	Percent replacement fire greater than 66.7%, fire return interval 0-5 years
II-B	Percent replacement fire greater than 66.7%, fire return interval 6-15 years
II-C	Percent replacement fire greater than 66.7%, fire return interval 16-35 years
III-A	Percent replacement fire less than 80%, fire return interval 36-100 years
III-B	Percent replacement fire less than 66.7%, fire return interval 101-200 years
IV-A	Percent replacement fire greater than 80%, fire return interval 36-100 years
IV-B	Percent replacement fire greater than 66.7%, fire return interval 101-200 years
V-A	Any severity, fire return interval 201-500 years
V-B	Any severity, fire return interval 501 or more years
<b>R</b>	Red color value/255
<b>G</b>	Green color value/255
<b>B</b>	Blue color value/255
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1

#### 4.4.5 Succession Class (SClass) LF 2023

LANDFIRE Succession Class Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	Value 1-7 or 111-180
-9999	Fill-NoData
-1111	Fill-Not Mapped
<b>LABEL</b>	
1 to 5	A-E
6	UN
7	UE
111	Water
112	Snow / Ice
120	Urban
132	Barren or Sparse
180	Agriculture
<b>DESCRIPTION</b>	LANDFIRE's (LF) Succession Class (SClass) categorizes current vegetation composition and structure into up to five successional classes, with successional classes defined in the appropriate Biophysical Settings (BpS) Model. There are two additional categories for uncharacteristic species (exotic or invasive vegetation), and uncharacteristic native vegetation cover, structure, or composition. See <a href="https://landfire.gov/vegetation/sclass">https://landfire.gov/vegetation/sclass</a> for more information, such as the SClass mapping rules and mapping rules spreadsheet.
A	Succession Class A
B	Succession Class B
C	Succession Class C
D	Succession Class D
E	Succession Class E
UN	Uncharacteristic Native Vegetation Cover / Structure / Composition
UE	Uncharacteristic Exotic Vegetation
111	Water
112	Snow / Ice
120	Developed
132	Barren or Sparse
180	Agriculture
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1
<b>R</b>	Red color value range/255
<b>G</b>	Green color value range/255
<b>B</b>	Blue color value range/255

#### 4.4.6 Vegetation Condition Class (VCC) LF 2023

LANDFIRE Vegetation Condition Class Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	
-1111	Fill-Not Mapped
-9999	Fill-NoData
1 to 6	Vegetation Condition Class
111	Water
112	Snow
120	Non burnable urban
121	Burnable urban
131	Barren
132	Sparsely vegetated
180	Non burnable agriculture
181	Burnable agriculture
<b>CLASS</b>	
1	Vegetation Condition Class I.A
2	Vegetation Condition Class I.B
3	Vegetation Condition Class II.A
4	Vegetation Condition Class II.B
5	Vegetation Condition Class III.A
6	Vegetation Condition Class III.B
<b>DESCRIPTION</b>	The Vegetation Condition Class (VCC) data layer categorizes departure between current vegetation conditions and reference vegetation conditions similar to the methods outlined in the Interagency Fire Regime Condition Class Guidebook. See <a href="https://landfire.gov/vegetation/vcc">https://landfire.gov/vegetation/vcc</a> and the FRCC Guidebook for more information.
Vegetation Condition Class I.A	Very Low, Vegetation Departure 0-16%
Vegetation Condition Class I.B	Low to Moderate, Vegetation Departure 17-33%
Vegetation Condition Class II.A	Moderate to Low, Vegetation Departure 34-50%
Vegetation Condition Class II.B	Moderate to High, Vegetation Departure 51-66%
Vegetation Condition Class III.A	High, Vegetation Departure 67-83%
Vegetation Condition Class III.B	Very High, Vegetation Departure 84-100%
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255
<b>B</b>	Blue color value range /255

## 4.4.7 Vegetation Departure (VDep) LF 2023

LANDFIRE Vegetation Departure Attribute Data Dictionary	
Attribute	Description
<b>VALUE</b>	
-1111	Fill-Not Mapped
-9999	Fill-NoData
1 to 100	Percent Vegetation Departure
101	Vegetation Departure not calculated
111	Water
112	Snow/Ice
120	Developed
121	Burnable urban
131	Barren
132	Barren or sparsely vegetated
180	Agriculture
181	Burnable agriculture
<b>LABEL</b>	
0 to 100	Percent departure
<b>DESCRIPTION</b>	The Vegetation Departure (VDep) data layer categorizes departure between current vegetation conditions and reference vegetation conditions similar to methods outlined in the Interagency Fire Regime Condition Class (FRCC) Guidebook. VDep is the percent that vegetation has departed from simulated historical vegetation reference conditions. VDep is based only on departure of current vegetation conditions from reference vegetation conditions, whereas the Guidebook approach includes departure of current fire regimes from those of the reference period. See <a href="https://landfire.gov/vegetation/vdep">https://landfire.gov/vegetation/vdep</a> and the FRCC Guidebook for more information.
Vegetation Condition Class I.A	Very Low, Vegetation Departure 0-16%
Vegetation Condition Class I.B	Low, Vegetation Departure 17-33
Vegetation Condition Class II.A	Moderate to Low, Vegetation Departure 34-50%
Vegetation Condition Class II.B	Moderate to High, Vegetation Departure 51-66%
Vegetation Condition Class III.A	High, Vegetation Departure 67-83%
Vegetation Condition Class III.B	Very High, Vegetation Departure 84-100%
<b>RED</b>	Red color value range 0 - 1
<b>GREEN</b>	Green color value range 0 - 1
<b>BLUE</b>	Blue color value range 0 - 1
<b>R</b>	Red color value range /255
<b>G</b>	Green color value range /255
<b>B</b>	Blue color value range /255

## Section 5 Glossaries of Terms

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### 5.1 Agencies and Organizations

Acronym	Definition
AAIC	Alaska Avalanche Information Center
AFE	Association for Fire Ecology
BIA	[US] Bureau of Indian Affairs
BLM	[US] Bureau of Land Management
CALMIT	Center for Advanced Land Management Information Technologies
C-CAP	[NOAA] Coastal Change Analysis Program
CSC	Climate Science Center
DMID	Data Management and Information Delivery (an EDC group)
DNR	Department of Natural Resources
DOD	Department Of Defense
DOI	[US] Department Of the Interior
EPA	Environmental Protection Agency
EROS	[USGS] Earth Resources Observation and Science Center
ESPG	Environment, Society and Policy Group
FEMA	Federal Emergency Management Agency
FERA	Fire and Environmental Research Applications
FFS	Fire, Fuel, and Smoke Science Program
FGDC	Federal Geographic Data Committee
FIA	[FS] Forest Inventory and Analysis
FMI	Federal Modelling Institute
FS	[USDA] Forest Service
GAO	Government Accountability Office
GAP	[USGS] Gap Analysis Program
GTAC	[FS] Geospatial Technology and Applications Center
ISRO	Indian Space Research Organization
JFSP	Joint Fire Science Program
LAG	LANDFIRE Advisory Group
LPDAAC	Land Processes Distributed Active Archive Center
LSRD	[EROS] LSDS Science Research and Development
MACGA	MesoAmerican & Caribbean Geospatial Alliance
MFSL	[USFS] [MFRS] Missoula Fire Sciences Lab
MRLC	Landsat Multi-Resolution Land Characteristics Consortium

Acronym	Definition
NAC	National Association of Counties
NAIP	National Agriculture Imagery Program
NASA	National Aeronautics and Space Administration
NASF	National Association of State Foresters
NASS	[USDA] National Agricultural Statistics Service
NCCWSC	National Climate Change and Wildlife Science Center
NGA	National Geospatial-Intelligence Agency
NIFC	National Interagency Fire Center
NIFCG	National Interagency Fuels Coordination Group
NIFTT	[NIFCG] National Interagency Fuels, Fire, and Vegetation Technology Transfer Team
NPS	National Park Service
NRCS	[USDA] Natural Resources Conservation Service
NS	NatureServe
NWCG	National Wildfire Coordinating Group
ODF	Oregon Department of Forestry
OGC	Open Geospatial Consortium
OWF	[DOI] Office of Wildland Fire
PMBOK	Project Management Body Of Knowledge
PMI	Project Management Institute
PWFSL	Pacific Wildland Fire Sciences Laboratory
RMRS	[FS] Rocky Mountain Research Station
RSAC	[USDA] [FS] Remote Sensing Applications Center
SAF	Society of American Foresters
SGT	Stinger Ghaffarian Technologies
TNC	The Nature Conservatory
TSSC	[EROS] Technical Services Support Contract
US	United States
USDA	US Department of Agriculture
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WFIT	Wildland Fire Information and Technology

## 5.2 Terms, Information, and Systems

Acronym	Definition
3DEP	USGS 3D Elevation Program
AAR	After Action Review
AG	Agriculture
AIM	[BLM] Assessment, Inventory, and Monitoring
AK	Alaska
AML	Arc Meta Language
AOI	Area Of Interest
ARD	[Landsat] Analysis Ready Data
ASP	Aspect
BA	Burned Area
BAECV	Burned Area Essential Climate Variable
BAER	[USDA] [FS] Burned Area Emergency Response
BARC	[USDA] [FS] Burned Area Reflectance Classification
BehavePlus	BehavePlus fire behavior model (Andrews and others 2005)
BFB	Basic Fire Behavior
BpS	Biophysical Settings Models and Descriptions (non-spatial)
BPS	Biophysical Settings
BUG	Biomass Utilization Group
C-CAP	[NOAA] Coastal Change Analysis Program
CART	Classification And Regression Trees (modelling)
CDL	Crop Data Layer
CBD	(Forest) Canopy Bulk Density
CBH	(Forest) Canopy Base Height
CC	(Forest) Canopy Cover
CCO	California Contract Counties
CDF	California Department of Forestry
CDL	Cropland Data Layer
CE	Categorical Exclusions
CFFDRS	Canadian Forest Fire Danger Rating System
CFI	[BIA] Continuous Forest Inventory
CH	(Forest) Canopy Height
CLU	Climate and Land Use
CNMI	Commonwealth of the Northern Mariana Islands
CONUS	Conterminous United States
CONSUME	Software program - predicts fuel consumption and emissions
CSG	Communications Strategy Group
CSV	Comma Separated Value

Acronym	Definition
CTI	Compound Topographic Index
CWD	Coarse woody debris
CY	Calendar Year
dNBR	differenced Normalized Burn Ratio
dNDMI	differenced Normalized Difference Moisture Index
dNDVI	differenced Normalized Difference Vegetation Index
DBA	Database Administrator
DBFD	Drought Based Fuel Dynamic
DDS	(LANDFIRE) Data Distribution Site
DEM	Digital Elevation Model
Dist	Final Annual Disturbance
DSWE	Dynamic Surface Water Extent
DWD	Dead and downed Woody Debris
DWM	Downed woody Material
DYEAR	Disturbance (year)
dyn	dynamic
EA	[IFTDSS] Exposure Analysis
ECS	Ecological Classification System
EDNA	Elevation Derivatives for National Applications
EHD	External Hard Drive
EMDS	Ecosystem Management Decision Support
ES	Ecological System
ESF	Emergency Support Functions
ESP	Environmental Site Potential
ESPA	EROS Science Processing Architecture
ESRI	Environmental Systems Research Institute
ESSA	Environmental and Social Systems Analysts (ESSA Technologies, Inc.)
ETM	[Landsat 7] Enhanced Thematic Mapper
EVC	Existing Vegetation Cover
EVG	from the Fuel Rules Database Existing Vegetation Groups
EVH	Existing Vegetation Height
EVS	from the Fuel Rules Database Existing Vegetation Systems
EVT	Existing Vegetation Type
FACTS	Forest Atmosphere Carbon Transfer and Storage
FACTS	Forest Service Activity Tracking System
FAQs	Frequently Asked Questions
FARSITE	FARSITE fire growth simulation model (Finney 1998)
FBAN	[Tech Plan] Fire Behavior Analysts
FBAT	[NIFTT] Fire Behavior Assessment Tool

Acronym	Definition
FBFM	Fire Behavior Fuel Model
FBFM10	Fire Behavior Fuel Models (10 Albini)
FBFM13	Fire Behavior Fuel Models 13 (Anderson)
FBFM40	Fire Behavior Fuel Models 40 (Scott and Burgan)
FBP	Fire Behavior Prediction
FCC	Forest Canopy Cover
FCCS	Fuel Characteristics Classification System
FCH	Forest Canopy Height
FDist	Fuel Disturbance
FDistYEAR	Fuel Disturbance (year)
FEAT	Fire Ecology Assessment Tool
FEIS	USFS] Fire Effects Information System
FETM	Fire Emissions Tradeoff Model
FFE	Fire and Fuels Extension
FFI	FEAT-FIREMON Integrated/Integration
FFT	Fuel and Fire Tools
FHTET	Forest Health Technology Enterprise Team
FIREMON	Fire Effects Monitoring and Inventory Protocol
FL	Flame Length
FLAME	Federal Land Assistance, Management and Enhancement Act of 2009
FlamMap	FlamMap fire potential simulator (Stratton 2004)
FLM	Fuel Loading Models
FMC	Fuels Management Committee
FOD	Fire Occurrence Database
FOFEM	First Order Fire Effects Model (Reinhart and others 1997)
FOIA	Freedom of Information Act
FPA	Fire Program Analysis
FPI	Fire Potential Index
FPU	Fire Planning Unit
FRAMES	Fire Research and Management Exchange System
FRCC	Fire Regime Condition Class
FRCCMT	FRCC Mapping Tool
FRG	Fire Regime Groups
FRID	[USDA] [FS] Fire Return Interval Departure
FSM	Federated States of Micronesia
FSPro	Fire Spread Probability
FSVeg	[USDA] [FS] Field Sampled Vegetation

Acronym	Definition
FuelCalc	[USDA] [FS] [RMRS] Fire, Fuel, Smoke Science Program a desktop software application for determining changes in surface and crown fuel loading after thinning, pruning, piling and/or prescribed fire
FVC	Fuel Vegetation Cover
FVC	Fuel Vegetation Height
FVH	Fuel Vegetation Type
FVTDB	[USDA] [FS] Forest Vegetation Simulator
FBFM40	Fire Behavior Fuel Models 40 (Scott and Burgan)
FVSSDB	[USDA] [FS] Forest Vegetation Simulator Disturbance Database
FVSRDB	[USDA] [FS] Forest Vegetation Simulator Ready Database
FVTDB	Forest Vegetation Transitions Database
FWD	Fine Woody Debris
FWS	[US] Fish & Wildlife Service
FY	Fiscal Year
GA	[LANDFIRE] Geographic Area(s)
GDAL	Geospatial Data Abstraction Library
GIS	Geographic Information System
GLAS	Geoscience Laser Altimeter System
GLM	General Linear Model
gNEXUS	NASA Engineering Extendible United Software System
GNG	Go, NoGo
GNIS	Geographic Names Information System
GOES	Geostationary Operational Environment Satellite
GPS	Global Positioning System
GTG	Geospatial Task Group
HDist	Historical Disturbance
HFPAS	Hazardous Fuels Prioritization and Allocation System
HI	Hawaii
HLS	Harmonized Landsat and Sentinel-2
HMS	Hazard Mapping System
HUC	Hydrologic Unit Code
IA	Insular Area(s)
IFTDSS	Interagency Fuels Treatment Decision Support System
IIS	Microsoft (.NET Framework) Internet Information Services
IMS	Information Management Systems
IRM	Information Resource Management
KBDI	Keetch-Byram Drought Index
LANDFIRE	Landscape Fire and Resource Management Planning Tools
LANDSAT	LAND SATellite

Acronym	Definition
LANDSUM	LANDscape SUccession Model
LBG	LANDFIRE Business Group
LCMAP	Land Cover Map
LCMAP	Land Change Monitoring, Assessment, and Projection
LCMS	Landscape Change Monitoring System
LCP	[FARSITE] Landscape (.LCP) file
LDist	Limited Annual Disturbance
LF	LANDFIRE
LFCSG	LANDFIRE Communications Strategy Group
LFDAT	LANDFIRE Data Access Tool
LFRDB	LANDFIRE Reference Database
LFTFC	LANDFIRE Total Fuel Change
LFTFCT	LANDFIRE Total Fuel Change Tool
LFWG	LANDFIRE Website Group
lidar	Light Detection and Ranging
LOE	Level Of Effort
LSDS	Land Satellite Data Systems
LTAN	[Tech Plan] Long-Term Analysts
LTG	LANDFIRE Technical Group
LTSS	Landsat Time Series Stacks
LUT	LookUp Table
MFRI	Mean Fire Return Interval
MIICA	Multi Index Integrated Change Analysis
MNDWI	Modified Normalized Difference Water Index
MoD-FIS	Modeling Dynamic-Fuels with an Index System
MODIS	MODerate resolution Imaging Spectrometer
MOU	Memorandum of Understanding
MRLC	Multiresolution Land Characteristics
MSAVI	Modified Soil-Adjusted Vegetation Index
MTBS	Monitoring Trends in Burn Severity
MTDB	ModelTracker Database
MXT	Moisture of eXTinction
MZ	[LANDFIRE] Map Zone(s)
NAD	North American Datum
NALCMS	North American Land Change Monitoring System
NBCD	National Biomass and Carbon Dataset
NBR	Normalized Burn Ratio
NC	North Central
NDMI	Normalized Difference Moisture Index

Acronym	Definition
NDVI	Normalized Difference Vegetation Index
NE	Northeast
NED	National Elevation Dataset
NEPA	National Environmental Policy Act
NEXUS	NEXUS crown fire potential model (Scott 2003)
NFDRS	National Fire Danger Rating System
NFPORS	[BLM] National Fire Plan Reporting and Operations System
NFRDRS88	National Fire Danger Rating System-Revision of 1988
NFS	National Forest System
NFVTDB	Non-Forest Vegetation Transitions Database
NGO	Non-Government Organization
NHD	National Hydrography Dataset
NIR	Near InfraRed
NLCD	[MRLC] National Land Cover Database
NRCS	National Resource Conservation Services
NRF	National Response Framework
NRI	National Resources Inventory {from Technical Plan}
NRI	[NRCS] Natural Resources Inventory
NRIS	Natural Resource Information System
NTFB	[Tech Plan] Near-Term Fire Behavior
NVC	National Vegetation Classification
NVCS	National Vegetation Classification Standard
NW	Northwest
NWCG	National Wildfire Coordinating Group
NWI	National Wetlands Inventory {from Technical Plan}
O&M	Operations and Maintenance
OLI	[Landsat 8/9] Operational Land Imager
OVR	Overlay Maker (.OVR) File
PAD	[USGS] Protected Areas Database
PADUS	[USGS] Protected Areas Database of the United States
PCR	Project Close-out Report
PCS	Projected Coordinate System
PDist	Preliminary Disturbance
PFS	Percent Fire Severity
PLS	Percent Low-Severity Fire
PMS	Percent Mixed-Severity Fire
PNVG	Potentially Natural Vegetation Groups
PODs	Potential Operations Delineations
PQCA	Product Quality Control and Assessment

Acronym	Definition
PQWT	Product Quality Working Team
PRS	Percent Replacement-Severity Fire
PVT	Potential Vegetation Type
PYR	Python Repository (.PYR) File
QA	Quality Assurance
QC	Quality Control
QFR	Quadrennial Fire Review
RAVG	[USDA] [FS] Rapid Assessment of Vegetation Condition after Wildfire
RAWS	Remote Automated Weather Station
RD&A	[WFM] Research Development & Application
REST	REpresentational State Transfer
RMI	Republic of Marshall Islands
RMT	Refresh Model Tracker
Roads	Operational Roads
ROS	Rate Of Spread
RSLC	Remote Sensing of Landscape Change
RST	Remap Strategy Team
RTA	Regression Tree Analysis
SAF	Society of American Foresters {LANDFIRE Technical Plan}
SAP	Stewardship Spatial Analysis
SATVI	Soil-Adjusted Total Vegetation Index
SC	South Central
SC	Species Composition
SCA	Sensor Chip Assembly
SClass	Succession Class
SDC	Science Data Catalog
SDE	Spatial Data Engine
SDW	Spatial Data Warehouse
SDWCLUA	Spatial Data Warehouse Cluster A
SE	Southeast
SEM	System for Environmental Management
SIMPPLLE	SIMulating vegetative Patterns and Processes at Landscape scaLES
SLA	Service Level Agreement
SLC	Scan Line Corrector (Landsat 7)
SLP	Slope
SlpD	Slope Degrees
SlpP	Slope Percent Rise
SME	Subject Matter Expert
SOW	Statement Of Work

Acronym	Definition
SRM	Society for Range Management
SRTM	Shuttle Radar Topography Mission
SSG	Spectral Similarity Grouping
SSURGO	Soil Survey Geographic Database
STARFM	Spatial and Temporal Adaptive Reflectance Fusion Model
STATSGO	STATe Soil GeOgraphic
stc	static
STFB	[Tech Plan] Short-Term Fire Behavior
SW	Southwest
SWI	Shared Web Infrastructure
SWIR	Short Wave InfraRed
TC	Tasseled Cap
TCC	[RSAC] Tree Canopy Cover
TGZ	GZIP Compressed Tar Archive (.TGZ) file
TM	[Landsat] Thematic Mapper
TNM	The National Map
TSD	Time Since Disturbance
USNG	US National Grid
USVI	US Virgin Islands
VBZ	Valley Bottom Zone
VCC	Vegetation Condition Class (formerly known as LF FRCC)
VCT	Vegetation Change Tracker
VDDT	Vegetation Dynamics Development Tool
VDep	Vegetation Departure Index (formerly known as LF FRCC Departure Index)
VDistYEAR	Vegetation Disturbance (year)
VIIRS	Visible and Infrared Imager Radiometer Suite
VNIR	Visual + Near InfraRed
VPU	Vegetation Production Unit
VTDB	Vegetation Transition Database
VTM	Vegetation Transition Magnitude
WAF	Web Application Firewall
WBS	Work Breakdown Structure
WCS	Web Coverage Service
WELD	[EROS] Web Enabled Landsat Data
WFAS	Wildland Fire Assessment System
WFAT	Wildland Fire Assessment Tool
WFDS	Wildland-Urban Interface Fire Dynamics Simulator
WFDSS	Wildland Fire Decision Support System
WFIPS	Wildland Fire Investment Planning System

Acronym	Definition
WFIT	Wildland Fire Information and Technology
WFLC	Wildland Fire Leadership Council
WFM	Wildland Fire Management
WFMRD&A	Wildland Fire Management RD&A
WFMRD&A-FFE	[WFMRD&A] Fuels and Fire Ecology
WIMS	Weather Information Management System
WMS	Web Mapping Service
WUI	Wildland Urban Interface