

Department of the Interior



# **LANDFIRE Reference Database**

LF 2016 REMAP (LF 2.0.0) PUBLIC DATA DICTIONARY

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## Data Tables

Data tables (dt) characterize vegetation and fuels that are present within the sampled unit. LANDFIRE has compiled data from many different sources and sampling designs. Not all sampling units will have all the attributes listed in the data tables.

### dtCommunities

This table contains data describing the plant community present within the sampled unit.

**Table 1: The plant community present within sampled unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
SourceEcoSys	Ecological System assigned from the source dataset to describe existing vegetation within the sampled unit.
SourceAlliance	NVCS Alliance assigned from the source dataset to describe existing vegetation within the sampled unit.
SourceAssocn	NVCS Association assigned from the source dataset to describe existing vegetation within the sampled unit.
SourceCovType	Other cover type assigned from the source dataset to describe existing vegetation within the sampled unit.
SourceCTSys	System used from the source dataset to characterize the cover type within the sampled unit.
EcoSysLifeformPrimary	Primary physiognomic (lifeform) label associated with the Ecological System assigned by LANDFIRE to the sampled unit.
EcoSysLifeformAll	All physiognomic (lifeform) label(s) associated with the Ecological System assigned by LANDFIRE to the sampled unit.
EcoSysCd	Code for the Ecological System assigned by LANDFIRE to the sampled unit. See <a href="#">lutdtCommunitiesEcoSys</a> for code definitions.
EcoSys	Name of Ecological System assigned by LANDFIRE to the sampled unit.
EVTMeth	Method by which Ecological System and/or National Vegetation Classification Standard (NVCS) group were assigned by LANDFIRE to the sampled unit. Methods include: AutoKey – Automated program that assigns EVT based on species cover data; Crosswalk – Crosswalked by experts from existing vegetation type labels assigned from the source dataset; Expert Opinion – Plots identified by experts in underrepresented vegetation types.
NVCSGroupCd	Code for National Vegetation Classification Standard (NVCS) Group assigned by LANDFIRE to the sampled unit. See <a href="#">lutdtCommunitiesNVCSGroup</a> for code definitions.
NVCSGroup	Name of National Vegetation Classification Standard (NVCS) Group assigned by LANDFIRE to the sampled unit.
DomLifeform	Lifeform from which the dominant and co-dominant taxa (DomSp and CoDomSp) were selected during the application of the LANDFIRE Ecological System Auto-Key.

Name	Description
DomSp	Dominant taxon within the sampled unit, based on percentage cover, as derived from the LANDFIRE Ecological System Auto-Key.
DomSpLifeform	Lifeform of the dominant taxon within the sampled unit, as derived from the LANDFIRE Ecological System Auto-Key.
DomSpCov	Cover (%) of the dominant taxon within the sampled unit, as derived from the LANDFIRE Ecological System Auto-Key.
CoDomSp	Co-dominant taxon within the sampled unit, based on percentage cover, as derived from the LANDFIRE Ecological System Auto-Key.
CoDomSpLifeform	Lifeform of the co-dominant taxon within the sampled unit, as derived from the LANDFIRE Ecological System Auto-Key.
CoDomSpCov	Cover (%) of the co-dominant taxon within the sampled unit, as derived from the LANDFIRE Ecological System Auto-Key.
SourcePV	Label assigned from the source dataset to describe potential vegetation within the sampled unit.
SourcePVCd	Code for potential vegetation of the sampled unit assigned from the source dataset.
SourcePVSys	Code for system used to categorize potential vegetation from the source dataset; "100" = classification of disturbance-maintained climax community or "200" = classification of climax community.
AdjEcoSysCd	LF2016 Remap adjusted Ecological System code that reflects removal of problematic plots or reclassification of plot codes based on initial model results and expert review. Only populated for plots that were adjusted.
AdjEcoSys	LF2016 Remap adjusted Ecological System name that reflects removal of problematic plots or reclassification of plot names based on initial model results and expert review. Only populated for plots that were adjusted.

## dtExotics

This table contains cover estimates or presence data for exotic plants on sampling units not included in the dtSpecies table. These are sampling units that only contain information on exotic plant species, non-exotic species were not inventoried.

**Table 2: Exotic plant species estimates or presence data**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Item <i>Required</i>	Accepted Symbol from the NRCS Plants Database ca. December 2013.
SciName	Scientific Name from the NRCS Plants Database ca. December 2013.
Lifeform	Lifeform of item. F = forb, G = graminoid, S = shrub, T = tree, V = vine. Assigned by LANDFIRE based on NatureServe's lifeform assignments.
Duration	Duration of item, if herbaceous. A = annual, P = perennial. Assigned by LANDFIRE based on NatureServe's duration assignments.
NativityFlag	Assigned by LANDFIRE. Coded as "1" if identified as "Introduced to U.S." or "Cultivated, or not in the U.S." in NRCS Plants DB but does not meet criterion for "3" or "3" if in LANDFIRE list of exotics of concern. For a complete list of LANDFIRE exotics see lutdtExoticsLANDFIRE.

Name	Description
CovAbs	Absolute cover (%) of item from the source dataset. If no cover reported, the following categories indicate level of infestation: P = present, L = low, M = moderate, H = high.

## dtFBInputs

This table contains fuel data relevant to fire-behavior modeling within the sampled unit.

**Table 3: Fuel data relevant to fire-behavior modeling**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
LwdyCov	Cover (%) of live trees and shrubs from the source dataset.
DwdyCov	Cover (%) of dead trees and shrubs from the source dataset.
WdyHgt	Average height (feet) of trees and shrubs from the source dataset.
LherbCov	Cover (%) of live herbaceous vegetation from the source dataset.
DherbCov	Cover (%) of dead herbaceous vegetation from the source dataset.
HerbHgt	Average height (feet) of herbaceous vegetation from the source dataset.
IntegFbedDpth	Average shrub/herb heights (feet) from the source dataset.
StandHgt	Typical height (feet) of vegetation taller than 6 feet from the source dataset.
CanBaseHgt	Typical lowest point above the ground (feet) at which there is enough live and/or dead woody vegetation to spread a fire vertically into the overstory vegetation, from the source dataset.
CanCov	Cover (%) of woody vegetation taller than 6.5 feet from the source dataset.
FBFM13	Fire Behavior Fuel Model (Anderson 1982) from the source dataset. See lutdtFBInputsFBFM13 for code definitions.
FBFM40	Fire Behavior Fuel Model (Scott and Burgan 2005) from the source dataset. See lutdtFBInputsFBFM40 for code definitions.

## dtFEInputs

This table contains fuel data relevant to fire-effects modeling within the sampled unit.

**Table 4: Fuel data relevant to fire-effects modeling**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
FWD1hBmass	1-hour fuel (small Fine Woody Debris [FWD]; 0.00-0.24 inches diameter) biomass (tons/acre) from the source dataset.
FWD10hBmass	10-hour fuel (medium FWD; 0.25-0.99 inches diameter) biomass (tons/acre) from the source dataset.
FWD100hBmass	100-hour fuel (large FWD; 1.00-2.99 inches diameter) biomass (tons/acre) from the source dataset.
FWDTotBmass	1 to 100-hour fuel (total FWD) biomass (tons/acre) from the source dataset.
CWDSndBmass	1000-hour sound fuel biomass (tons/acre) from the source dataset.
CWDRotBmass	1000-hour rotten fuel biomass (tons/acre) from the source dataset.

Name	Description
CWDTotBmass	1000-hour fuel (total Coarse Woody Debris [CWD]; 3.00 inches in diameter and greater) biomass (tons/acre) from source dataset.
CWD9plusSndBmass	10,000-hour sound fuel biomass (tons/acre) from the source dataset.
CWD9plusRotBmass	10,000-hour rotten fuel biomass (tons/acre) from the source dataset.
CWD9plusTotBmass	10,000-hour fuel (total Coarse Woody Debris [CWD]; 9.00 inches in diameter and greater) biomass (tons/acre) from the source dataset.
DuffLittDpth	Combined duff and litter depth (inches) from the source dataset.
DuffDpth	Duff depth (inches) from source dataset.
DuffBmass	Duff biomass (tons/acre) from the source dataset.
LittDpth	Litter depth (inches) from the source dataset.
LittBmass	Litter biomass (tons/acre) from the source dataset.
TotFuelBmass	Combined biomass of FWD, CWD, duff, and litter (tons/acre) from the source dataset.
LWdyBmass	Biomass (tons/acre) of live trees and shrubs (i.e., below 6 feet) from the source dataset.
DWdyBmass	Biomass (tons/acre) of dead trees and shrubs (i.e., below 6 feet) from the source dataset.
TotWdyBmass	Biomass (tons/acre) of live and dead trees and shrubs (i.e., below 6 feet) from the source dataset.
LHerbBmass	Biomass (tons/acre) of live herbaceous vegetation from the source dataset.
DHerbBmass	Biomass (tons/acre) of dead herbaceous vegetation from the source dataset.
TotHerbBmass	Biomass (tons/acre) of live and dead herbaceous vegetation from the source dataset.
FCCSProtoFuelbed	Fire behavior fuel model selected from 113 options in the FCCS Prototype Fuelbed set from the source dataset.
FLM	Fuel-loading model from the source dataset.

## dtPoints

This table contains location information for each sampled unit.

**Table 5: Sample unit location information**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Lat	Latitude, WGS 84, in decimal degrees to the nearest 100 seconds.
Long	Longitude, WGS 84, in decimal degrees to the nearest 100 seconds.
LFX	Albers x coordinate, as used in LANDFIRE production.
LFY	Albers y coordinate, as used in LANDFIRE production.
LFCoordSys	Code for well-known text defining full coordinate system to which LFX and LFY are referenced. See lutdtPointsLFCoordSys for code definitions.
LFZone	LANDFIRE Mapping Zone in which this sampling unit is located. See lutdtPointsLFZone for code definitions.
AKRID	Numerical ID for LANDFIRE Auto-Key Region in which this sampling unit is located. See lutdtPointsAKRID for code definitions.

Name	Description
VPU	LANDFIRE Vegetation Production Unit in which this sampling unit is located. See lutdtPointsVPU for code definitions
GeoArea	LANDFIRE Geographic Area in which the sampling unit is located.
LocMeth	Method by which this point or original polygon was located. G = captured with a GPS unit in the field, M = digitized or otherwise derived in office, X = unknown.

## dtSeedlings

This table contains data from the source dataset on tree seedlings within the sampled unit.

**Table 6: Tree seedlings within sampled unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Subplot <i>Required</i>	Subplot on which this tree seedling was measured.
Spe <i>Required</i>	Accepted Symbol from the NRCS Plants Database ca. December 2013.
Count	Number of individual seedlings of this species on the sampling unit subplot, from the source dataset.

## dtSiteChanges

This table contains data describing disturbances and treatments within the sampled unit as reported in the source dataset.

**Table 7: Disturbances and treatments within sampled unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Disturb1	Type of disturbance 1 from the source dataset.
Disturb1Sev	Severity of disturbance 1 from the source dataset.
Disturb1Yr	Year of disturbance 1 from the source dataset.
Disturb2	Type of disturbance 2 from the source dataset.
Disturb2Sev	Severity of disturbance 2 from the source dataset.
Disturb2Yr	Year of disturbance 2 from the source dataset.
Disturb3	Type of disturbance 3 from the source dataset.
Disturb3Sev	Severity of disturbance 3 from the source dataset.
Disturb3Yr	Year of disturbance 3 from the source dataset.
Trtmnt1	Type of treatment 1 from the source dataset.
Trtmnt1Yr	Year of treatment 1 from the source dataset.
Trtmnt2	Type of treatment 2 from the source dataset.
Trtmnt2Yr	Year of treatment 2 from the source dataset.
Trtmnt3	Type of treatment 3 from the source dataset.
Trtmnt3Yr	Year of treatment 3 from the source dataset.
SourceComments	Comments pertaining to disturbance from field personnel from the source dataset.

## dtSpecies

This table lists and characterizes the plant species reported on the sampled unit.

**Table 8: Plant species characterization in sample unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Item <i>Required</i>	Accepted Symbol from the NRCS Plants Database ca. December 2013.
SciName	Scientific Name from the NRCS Plants Database ca. December 2013.
Lifform	Lifform of item. F = forb, G = graminoid, H = herb, N = nonvascular, S = shrub, T = tree, V = vine. Assigned by LANDFIRE based on NatureServe's lifform assignments.
Duration	Duration of item, if herbaceous. A = annual, P = perennial. Assigned by LANDFIRE based on NatureServe's duration assignments.
NativityFlag	Assigned by LANDFIRE. Coded as "1" if identified as "Introduced to U.S." or "Cultivated, or not in the U.S." in NRCS Plants DB but does not meet criterion for "3" or "3" if in LANDFIRE list of exotics of concern. For a complete list of LANDFIRE exotics see lutdtExoticsLANDFIRE.
LFAbsCov	Absolute cover (%) of item pulled or derived from the source dataset. In some cases, absolute cover was averaged across subplots or calculated from transect data.
LFRelCov	Relative lifform cover (%) of item. Calculated by LANDFIRE based on NatureServe's lifform assignments.
LFHgt	Height (meters) of item from the source dataset.

## dtStands

This table contains lifform cover and height data within the sampled unit.

**Table 9: Lifform cover and height data within sample unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
SourceTreeCov	Tree cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.
SourceShrubCov	Shrub cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.
SourceForbCov	Forb cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.
SourceGramCov	Graminoid cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.
SourceHerbCov	Herbaceous cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.
SourceNvasCov	Nonvascular plant cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifform assignments from the source dataset.



Name	Description
LFTreeCov	Tree cover (%) calculated by LANDFIRE (based on NatureServe's lifeform assignments). Tree species from dtSpecies were summed and overlap was not accounted for, values may exceed 100%.
LFTreeCovAdj	Tree cover (%) adjusted for overlap and calculated by LANDFIRE (based on NatureServe's lifeform assignments). All values will be between 0% and 100%.
LFConiferTreeCov	Conifer tree cover (%) calculated by LANDFIRE (based on NatureServe's lifeform assignments). Conifer tree species from dtSpecies were summed and overlap was not accounted for, values may exceed 100%.
LFShrubCov	Shrub cover (%) calculated by LANDFIRE (based on NatureServe's lifeform assignments). Shrub species from dtSpecies were summed and overlap was not accounted for, values may exceed 100%.
LFShrubCovAdj	Shrub cover (%) adjusted for overlap and calculated by LANDFIRE (based on NatureServe's lifeform assignments). All values will be between 0% and 100%.
LFHerbCov	Herbaceous cover (%) calculated by LANDFIRE (based on NatureServe's lifeform assignments). Herb species from dtSpecies were summed and overlap was not accounted for, values may exceed 100%.
LFHerbCovAdj	Herbaceous cover (%) adjusted for overlap and calculated by LANDFIRE (based on NatureServe's lifeform assignments). All values will be between 0% and 100%.
LFNvasCov	Nonvascular plant cover (%) calculated by LANDFIRE (based on NatureServe's lifeform assignments). Nonvascular species from dtSpecies were summed and overlap was not accounted for, values may exceed 100%.
SourceTreeHgt	Tree height (meters) from original field call(s), based on lifeform assignments in the source dataset.
SourceShrubHgt	Shrub height (meters) from original field call(s), based on lifeform assignments in the source dataset.
SourceHerbHgt	Herbaceous height (meters) from original field call(s), based on lifeform assignments in the source dataset.
LFTreeHgt	Tree height (meters), cover weighted average from dtSpecies calculated by LANDFIRE (based on NatureServe's lifeform assignments).
LFShrubHgt	Shrub height (meters), cover weighted average from dtSpecies calculated by LANDFIRE (based on NatureServe's lifeform assignments).
LFHerbHgt	Herbaceous height (meters), cover weighted average from dtSpecies calculated by LANDFIRE (based on NatureServe's lifeform assignments).

## dtTrees

This table contains data describing individual trees measurements within the sampled unit.

**Table 10: Individual tree measurements within sample unit**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Tag <i>Required</i>	Number used to uniquely identify this tree on this sampling unit.
Subplot	Subplot on which this tree was measured, if applicable.
Spe	Accepted Symbol from the NRCS Plants Database ca. December 2013.
Status	Status of this tree. L = live, D = dead.

Name	Description
Dia	Diameter (centimeters), taken either at breast height (DBH) or root collar (DRC) from the source dataset.
Hgt	Height (meters) of this tree from the source dataset.
CR	Compacted crown ratio from the source dataset.
UCR	Uncompacted crown ratio from the source dataset.
CHBC	Height (meters) to the base of the live crown.
CHBCSource	Means by which height to the base of the live crown was determined. See lutdtTreesCHBCSource for code definitions.
CCCd	Crown class code from the source dataset. See lutdtTreesCCCd for code definitions.
TPH	Number of trees per hectare that this individual represents.

## dtVisits

This table includes basic information about each sampling unit.

**Table 11: Basic information about sample units**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
YYYY	Year this unit was sampled from the source dataset.
MM	Month this unit was sampled from the source dataset.
DD	Day this unit was sampled from the source dataset.
DDD	Day of year this unit was sampled, calculated by LANDFIRE.
Type	Type of assessment (e.g., field visit, aerial survey, photo interpreted). Assigned by LANDFIRE.
Purpose	Purpose of assessment (e.g., inventory, monitoring, research, mapping). Assigned by LANDFIRE.
SourceID	Code for data source, assigned by LANDFIRE. See lutdtVisitsSourceID for code definitions.
SourceEventID	Unique identifier of this sampling unit from the source dataset.
Protocol	Sampling protocol. Assigned by LANDFIRE.
Photo1	Photo 1 of sampling unit from the source dataset.
Photo2	Photo 2 of sampling unit from the source dataset.
Photo3	Photo 3 of sampling unit from the source dataset.
Photo4	Photo 4 of sampling unit from the source dataset.
LFVersion	Indicates which version of LANDFIRE the data were acquired. LF National (LF 1.0.0) and LF Remap (LF 2.0.0) data were both used to develop LF Remap products.

## Predictor Tables

Predictor tables (pt) contain data that were extracted from ancillary layers and used as predictor data for mapping. As such, different sets of predictor data were used for different regions. Not all sampling units will have all the attributes listed in the predictor tables. Note: LANDFIRE is supplying the extracted values but is not set up to distribute the individual predictor data layers.

### ptEcoregions

This table contains data extracted from relevant ecoregional coverages and other geographical information.

**Table 12: Ecoregional coverages and geographical information**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
EPAEcoreg3	Environmental Protection Agency (EPA) Ecoregion level 3, as described in U.S. Environmental Protection Agency, 2011, Level III and IV ecoregions of the Conterminous United States. See lutptEcoregionsEPAEcoreg3 for code definitions.
EPAEcoreg4	Environmental Protection Agency (EPA) Ecoregion level 4, as described in U.S. Environmental Protection Agency, 2011, Level III and IV ecoregions of the Conterminous United States. See lutptEcoregionsEPAEcoreg4 for code definitions.
Subsection	Ecological subsection, as described in McNab et al. (2005). Description of ecological subregions: sections of the Conterminous United States. See lutptEcoregionsSubsection for code definitions.
Isobioclimate	Isobioclimate class as described in Cress et al. (2009). Terrestrial Ecosystems - Isobioclimates of the Conterminous United States. See lutptEcoregionsIsobioclimate for code definitions.
Landform	Land Surface form as described in Cress et al. (2009). Terrestrial Ecosystems Land Surface Forms of the Conterminous United States. See lutptEcoregionsLandform for code definitions.
NowackiEcoreg3	Nowacki Ecoregion 3, as described in Nowacki and Brock (1995). Ecoregions and subregions of Alaska, EcoMap Version 2.0. map. See lutptEcoregionsNowackiEcoreg3 for code definitions.

### ptGradients

This table contains scaled integer data extracted from the LANDFIRE biophysical gradient layers and soils data extracted from various soil layers.

**Table 13: Scaled integer data**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.

Name	Description
peti	Average annual potential evapotranspiration index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
ppti	Average annual precipitation index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
tavei	Average daily temperature index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
tdayi	Average daytime temperature index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
tmaxi	Average daily maximum temperature index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
tmini	Average daily minimum temperature index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
tnighti	Average nighttime temperature index created using spatially interpolated weather information in addition to mapped soils and terrain data with WXBGC representing circa 2001 conditions.
pppt	PRISM Spatial Climate Dataset: total precipitation (rain + melted snow) 30yr normal annual 30m.
ptmax	PRISM Spatial Climate Dataset: maximum temperature 30yr normal annual 30m.
ptmean	PRISM Spatial Climate Dataset: mean temperature 30yr normal annual 30m.
ptmin	PRISM Spatial Climate Dataset: minimum temperature 30yr normal annual 30m.
Sand	gSSURGO Soil Survey Geographic Database percent sand. Fraction (percent) of < 3-inch soil that is between 0.074 and 2 millimeters in diameter.
Silt	gSSURGO Soil Survey Geographic Database percent silt. Relative proportion (percent) of the siltotal_r compared to the claytotal_r, sand, and coarse variables.
Clay	gSSURGO Soil Survey Geographic Database percent clay. Relative proportion (percent) of the claytotal_r compared to the siltotal_r, sand, and coarse variables.
pH	gSSURGO Soil Survey Geographic Database pH. The negative logarithm to the base 10, of the hydrogen ion activity in the soil using the 1:1 soil-water ratio method. A numerical expression of the relative acidity or alkalinity of a soil sample.
SOM	gSSURGO Soil Survey Geographic Database Soil Organic Matter content.
pSand_30_60	POLARIS soil data percent sand 30cm to 60cm.
pSilt_30_60	POLARIS soil data percent silt 30cm to 60cm.
pClay_30_60	POLARIS soil data percent clay 30cm to 60cm.
pPh_30_60	POLARIS soil data pH 30cm to 60cm.
pSOM_30_60	POLARIS soil data organic matter content 30cm to 60cm.
pAWC_30_60	POLARIS soil data available water content 30cm to 60cm. The amount of water that an increment of soil depth, inclusive of fragments, can store that is available to plants. AWC is expressed as a volume fraction and is commonly estimated as the

Name	Description
	difference between the water contents at 1/10 or 1/3 bar (field capacity) and 15 bars (permanent wilting point) tension and adjusted for salinity, and fragments.
PFProb	Probabilistic estimates of the distribution of near-surface (within 1m) permafrost in Alaska as described in Pastick et al 2015. Probabilistic estimates of the distribution of near-surface (within 1m) permafrost in Alaska.
mint	Annual minimum temperature averaged from Daymet daily data for the years 1980-2019, resampled using bilinear interpolation to 30m.
maxt	Annual maximum temperature averaged from Daymet daily data for the years 1980-2019, resampled using bilinear interpolation to 30m.
prcp	Annual precipitation averaged from Daymet daily data for the years 1980-2019, resampled using bilinear interpolation to 30m.

## ptImagery

This table contains scaled integer data extracted from imagery relevant to the characterization of existing vegetation for LANDFIRE 2016 Remap (LF 2.0.0). Five years of imagery were used from 2013-2017. Priority was given to imagery from 2016, then equal priority was given to imagery from 2015 and 2017, followed by 2014 and finally 2013. Landsat 8 Operational Land Imager (OLI) was the primary dataset used. Landsat 7 Enhanced Thematic Mapper Plus (ETM+) data were used when Landsat 8 data were not available. Synthetic data derived from Landsat 8 OLI were used for the east coast. For Alaska and Insular areas, only Landsat 8 OLI data were used.

**Table 14: Scaled integer data relevant to LF 2016 Remap Existing Vegetation**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
SprB1	Landsat Spring reflectance – band 1.
SprB2	Landsat Spring reflectance – band 2.
SprB3	Landsat Spring reflectance – band 3.
SprB4	Landsat Spring reflectance – band 4.
SprB5	Landsat Spring reflectance – band 5.
SprB6	Landsat Spring reflectance – band 6.
SprTCb	Landsat Spring tassell-cap – brightness.
SprTCg	Landsat Spring tassell-cap – greenness.
SprTCw	Landsat Spring tassell-cap – wetness.
SumB1	Landsat Summer reflectance – band 1.
SumB2	Landsat Summer reflectance – band 2.
SumB3	Landsat Summer reflectance – band 3.
SumB4	Landsat Summer reflectance – band 4.
SumB5	Landsat Summer reflectance – band 5.
SumB6	Landsat Summer reflectance – band 6.
SumTCb	Landsat Summer tassell-cap – brightness.
SumTCg	Landsat Summer tassell-cap – greenness.
SumTCw	Landsat Summer tassell-cap – wetness.
FalB1	Landsat Fall reflectance – band 1.

Name	Description
FalB2	Landsat Fall reflectance – band 2.
FalB3	Landsat Fall reflectance – band 3.
FalB4	Landsat Fall reflectance – band 4.
FalB5	Landsat Fall reflectance – band 5.
FalB6	Landsat Fall reflectance – band 6.
FalTCb	Landsat Fall tassel-cap – brightness.
FalTCg	Landsat Fall tassel-cap – greenness.
FalTCw	Landsat Fall tassel-cap – wetness.
WinAB1	Landsat Winter A reflectance – band 1.
WinAB2	Landsat Winter A reflectance – band 2.
WinAB3	Landsat Winter A reflectance – band 3.
WinAB4	Landsat Winter A reflectance – band 4.
WinAB5	Landsat Winter A reflectance – band 5.
WinAB6	Landsat Winter A reflectance – band 6.
WinATCb	Landsat Winter A tassel-cap – brightness.
WinATCg	Landsat Winter A tassel-cap – greenness.
WinATCw	Landsat Winter A tassel-cap – wetness.
WinBB1	Landsat Winter B reflectance – band 1.
WinBB2	Landsat Winter B reflectance – band 2.
WinBB3	Landsat Winter B reflectance – band 3.
WinBB4	Landsat Winter B reflectance – band 4.
WinBB5	Landsat Winter B reflectance – band 5.
WinBB6	Landsat Winter B reflectance – band 6.
WinBTCb	Landsat Winter B tassel-cap – brightness.
WinBTCg	Landsat Winter B tassel-cap – greenness.
WinBTCw	Landsat Winter B tassel-cap – wetness.
NDVIMin	Landsat minimum of normalized difference vegetation index.
NDVIMax	Landsat maximum of normalized difference vegetation index.
NDVIMedian	Landsat median of normalized difference vegetation index.
NDVIDiff	Landsat difference (max-median) of normalized difference vegetation index.
DryB1	Landsat Dry Season reflectance – band 1.
DryB2	Landsat Dry Season reflectance – band 2.
DryB3	Landsat Dry Season reflectance – band 3.
DryB4	Landsat Dry Season reflectance – band 4.
DryB5	Landsat Dry Season reflectance – band 5.
DryB6	Landsat Dry Season reflectance – band 6.
DryTCb	Landsat Dry Season tassel-cap – brightness.
DryTCg	Landsat Dry Season tassel-cap – greenness.
DryTCw	Landsat Dry Season tassel-cap – wetness.
RainyB1	Landsat Rainy Season reflectance – band 1.
RainyB2	Landsat Rainy Season reflectance – band 2.
RainyB3	Landsat Rainy Season reflectance – band 3.

Name	Description
RainyB4	Landsat Rainy Season reflectance – band 4.
RainyB5	Landsat Rainy Season reflectance – band 5.
RainyB6	Landsat Rainy Season reflectance – band 6.
RainyTCb	Landsat Rainy Season tassell-cap – brightness.
RainyTCg	Landsat Rainy Season tassell-cap – greenness.
RainyTCw	Landsat Rainy Season tassell-cap – wetness.

## ptLFProducts

This table includes data extracted from the LANDFIRE Disturbance products 1999-2016 and LANDFIRE 2016 Remap (LF 2.0.0) Existing Vegetation Type (EVT) and National Vegetation Classification (NVC) products.

**Table 15: LF Disturbance, Remap EVT, and NVC**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Dist99	Code for Disturbance that occurred in 1999, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist00	Code for Disturbance that occurred in 2000, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist01	Code for Disturbance that occurred in 2001, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist02	Code for Disturbance that occurred in 2002, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist03	Code for Disturbance that occurred in 2003, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist04	Code for Disturbance that occurred in 2004, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist05	Code for Disturbance that occurred in 2005, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist06	Code for Disturbance that occurred in 2006, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist07	Code for Disturbance that occurred in 2007, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist9907 for code definitions.
Dist08	Code for Disturbance that occurred in 2008, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist0810 for code definitions.
Dist09	Code for Disturbance that occurred in 2009, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist0810 for code definitions.
Dist10	Code for Disturbance that occurred in 2010, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist0810 for code definitions.
Dist11	Code for Disturbance that occurred in 2011, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1112 for code definitions.
Dist12	Code for Disturbance that occurred in 2012, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1112 for code definitions.

Name	Description
Dist13	Code for Disturbance that occurred in 2013, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1314 for code definitions.
Dist14	Code for Disturbance that occurred in 2014, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1314 for code definitions.
Dist15	Code for Disturbance that occurred in 2015, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1516 for code definitions.
Dist16	Code for Disturbance that occurred in 2016, extracted from LANDFIRE Disturbance products. See lutptLFProductsDist1516 for code definitions.
EVTRemap	EVT code from the LF 2016 Remap Existing Vegetation Type (EVT) product. See lutptLFProductsEVTRemap for code definitions.
NVCRemap	NVC code from the LF 2016 Remap National Vegetation Classification (NVC) product. See lutptLFProductsNVCRemap for code definitions.

## ptTerrain

This table contains data extracted from the DEM, its derivatives, and other terrain or topographic position layers.

**Table 16: Terrain and topographic position layers**

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling unit. Assigned by LANDFIRE.
Elev	Elevation above mean sea level (meters). Generated from U.S. Geological Survey, 2017, 1/3rd arc-second Digital Elevation Models (DEMs).
Asp	Aspect (degrees). Generated from U.S. Geological Survey, 2017, 1/3rd arc-second Digital Elevation Models (DEMs).
Slpp	Average slope (percent). Generated from U.S. Geological Survey, 2017, 1/3rd arc-second Digital Elevation Models (DEMs).
NLCD16Cd	The National Land Cover Database (NLCD) 2016 code from the Multi-Resolution Land Characteristics (MRLC) Consortium. See lutptTerrainNLCD16Cd for code definitions.
NLCDw	The National Land Cover Database (NLCD) wetland potential index from the Multi-Resolution Land Characteristics (MRLC) Consortium. See lutptTerrainNLCDw for code definitions.
LAE	Latitude Adjusted Elevation.
TPI150	Topographic position index, with 150-meter outer focal neighborhood radius.
TPI300	Topographic position index, with 300-meter outer focal neighborhood radius.
TPI2000	Topographic position index, with 2000-meter outer focal neighborhood radius.