

Public LANDFIRE Reference Database

DATA DICTIONARY

SECTION I: DATA TABLES

Version 1.0
29 August 2012

Contact: Brenda Lundberg (406) 329-3405 email: blundberg@usgs.gov

Table of Contents

Data Tables	Page
tblCommunities.....	2
tblExotics	3
tblFBInputs	3
tblFEInputs.....	4
tblFuelCalcInputs	5
tblFuelCalcOutput.....	5
tblPoints	6
tblSiteChanges	6
tblSpecies	6
tblStands.....	7
tblVisits.....	8
tblvwPhotos.....	8

Section I: Data Tables

tblCommunities

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

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
SourceEcoSys	Ecological System assigned in the source dataset to describe existing vegetation within the sampled unit.
SourceAlliance	NVCS Alliance assigned in the source dataset to describe existing vegetation within the sampled unit.
SourceAssocn	NVCS Association assigned in the source dataset to describe existing vegetation within the sampled unit.
SourceCovType	Other cover type assigned in the source dataset to describe existing vegetation within the sampled unit.
SourceCTSys	System used in the source dataset to characterize existing vegetation within the sampled unit.
LFEVTCd	Code for LANDFIRE Existing Vegetation Type (EVT) within the sampled unit. See lutCommunitiesEVTESP for code definitions.
LFEVT	Name of LANDFIRE Existing Vegetation Type assigned to the sampled unit.
LFEVTMeth	Method by which LANDFIRE Existing Vegetation Type was assigned to the sampled unit.
LFEVTLifeform	Physiognomic (lifeform) label assigned to this sampled unit by the generic sequence table or via visual inspection of non-keyable records against the imagery.
LFEVTGroupCd	Code for LANDFIRE Existing Vegetation Type group assigned to the sampled unit.
LFEVTGroup	Name of LANDFIRE Existing Vegetation Type group assigned to the sampled unit.
AKEVTCd	Code for LANDFIRE Existing Vegetation Type, as Viereck/Fleming map unit. (Alaska only.) See lutCommunitiesAKEVT for code definitions.
AKEVT	Name of LANDFIRE Existing Vegetation Type, as Viereck/Fleming map unit. (Alaska only.)
DomLifeform	Lifeform from which the dominant and co-dominant taxa (DomSp and CoDomSp) were selected.
DomSp	Dominant taxon within the sampled unit, based on percentage cover.
DomSpLifeform	Lifeform of the dominant taxon within the sampled unit.
DomSpCov	Cover (%) of the dominant taxon within the sampled unit.
CoDomSp	Co-dominant taxon within the sampled unit, based on percentage cover.
CoDomSpLifeform	Lifeform of the co-dominant taxon within the sampled unit.
CoDomSpCov	Cover (%) of the co-dominant taxon within the sampled unit.
SourcePV	Label assigned in the source dataset to describe potential vegetation within the sampled unit.
SourcePVAlias	Alias for potential vegetation of the sampled unit, as assigned in the source dataset.
SourcePVCd	Code for potential vegetation of the sampled unit, as assigned in the source dataset.
SourcePVRefCode	Code for the reference (classification system) in which the SourcePVCd can be found.
SourcePVSys	Code for system used to categorize potential vegetation in the source dataset; "100" = classification of disturbance-maintained vegetation (e.g., into PNVGs), "200" = classification of climax community (e.g., into habitat types).
LFESPCd	Code for LANDFIRE Environmental Site Potential (ESP) within the sampled unit. See lutCommunitiesEVTESP for code definitions.
LFESP	Name for LANDFIRE Environmental Site Potential within the sampled unit.

tblCommunities (cont.)

Name	Description
LFESPMeth	Method by which LANDFIRE Environmental Site Potential was assigned to the sampled unit.

tblExotics

This table contains cover estimates or presence data for exotic plants on plots not included in the tblSpecies.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
Item <i>Required</i>	Symbol Key from the NRCS Plants Database ca. January 2004.
SciName	Scientific Name from the NRCS Plants Database ca. January 2004.
Lifeform	Lifeform of item. F= forb, G = graminoid, S = shrub, T = tree.
Duration	Duration of item, if herbaceous. A = annual, P = perennial.
NativityFlag	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.
CovAbs	Absolute cover (%) of item. If no cover reported, the following categories indicate level of infestation: P = present, L = low, M = moderate, H = high.

tblFBInputs

This table contains fuel data relevant to fire-behavior modeling. Additional data relevant to both fire-behavior and fire-effects modeling are included in the tblFEInputs table.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
LwdyCov	Cover (%) of live trees and shrubs in sampling plane (i.e., below 6 feet).
DwdyCov	Cover (%) of dead trees and shrubs in sampling plane (i.e., below 6 feet).
WdyHgt	Average height (feet) of trees and shrubs in sampling plane (i.e., below 6 feet).
LherbCov	Cover (%) of live herbaceous vegetation.
DherbCov	Cover (%) of dead herbaceous vegetation.
HerbHgt	Average height (feet) of herbaceous vegetation.
IntegFbedDpth	Average shrub/herb heights (feet).
StandHgt	Typical height (feet) of vegetation taller than 6 feet; "999" is reported when there is no vegetation taller than 6 feet.
CanBaseHgt	Typical lowest point above the ground (feet) at which there is sufficient amount of live and/or dead woody vegetation to spread a fire vertically into the overstory vegetation; "999" is reported when there is no woody vegetation.
CanCov	Cover (%) of woody vegetation taller than 6.5 feet; "999" is reported when there is no woody vegetation taller than 6.5 feet.
FBFM13	Fire Behavior Fuel Model (Anderson 1982). See lutFBInputsFBFM13 for code definitions.
FBFM40	Fire Behavior Fuel Model (Scott and Burgan 2005). See lutFBInputsFBFM40 for code definitions.
FBFMGrassBulkD	Grass bulk density (lbs/cubic feet).
FBFMHerbBulkD	Herbaceous bulk density (lbs/cubic feet).
FBFMLowShrubBulkD	Low shrub bulk density (lbs/cubic feet).
FBFMHighShrubBulkD	High shrub bulk density (lbs/cubic feet).
FBFMLittBulkD	Litter bulk density (lbs/cubic feet).

tblFBInputs (cont.)

Name	Description
FBFM1hLGrass	Loading of live grass in 1-hour class (tons/acre).
FBFM1hDGrass	Loading of dead grass in 1-hour class (tons/acre).
FBFM1hLHerb	Loading of live herbaceous vegetation in 1-hour class (tons/acre).
FBFM1hDHerb	Loading of dead herbaceous vegetation in 1-hour class (tons/acre).
FBFM1hLLoShrub	Loading of live low shrubs in 1-hour class (tons/acre).
FBFM1hDLoShrub	Loading of dead low shrubs in 1-hour class (tons/acre).
FBFM10hDLoShrub	Loading of dead low shrubs in 10-hour class (tons/acre).
FBFM100hDLoShrub	Loading of dead low shrubs in 100-hour class (tons/acre).
FBFM1hLHiShrub	Loading of live high shrubs in 1-hour class (tons/acre).
FBFM1hDHiShrub	Loading of dead high shrubs in 1-hour class (tons/acre).
FBFM10hDHiShrub	Loading of dead high shrubs in 10-hour class (tons/acre).
FBFM100hDHiShrub	Loading of dead high shrubs in 100-hour class (tons/acre).
FBFM1hLitt	Loading of litter in 1-hour class (tons/acre).
FBFM10hLitt	Loading of litter in 10-hour class (tons/acre).
FBFM100hLitt	Loading of litter in 100-hour class (tons/acre).
FBFM1hTotLive	Total loading of live fuel in 1-hour class (tons/acre).
FBFM1hTotDead	Total loading of dead fuel in 1-hour class (tons/acre).
FBFM10hTotDead	Total loading of dead fuel in 10-hour class (tons/acre).
FBFM100hTotDead	Total loading of dead fuel in 100-hour class (tons/acre).
FBFMHerbCompnt	Herb load component.
FBFMShrubCompnt	Shrub load component.
FBFMLitterCompnt	Litter load component.
FBFMHerbFbedDpth	Herb fuelbed depth (feet).
FBFMShrubFbedDpth	Shrub fuelbed depth (feet).
FBFMLittFbedDpth	Litter fuelbed depth (feet).

tblFEInputs

This table contains fuel data relevant to fire-effects modeling.

Name	Description
EventID	Unique identifier for this sampling event.
<i>Required</i>	
FWD1hBmass	1-hour fuel (small Fine Woody Debris [FWD]; 0.00-0.24 inches diameter) biomass (tons/acre).
FWD10hBmass	10-hour fuel (medium FWD; 0.25-0.99 inches diameter) biomass (tons/acre).
FWD100hBmass	100-hour fuel (large FWD; 1.00-2.99 inches diameter) biomass (tons/acre).
FWDTotBmass	1 to 100-hour fuel (total FWD) biomass (tons/acre).
CWDSndBmass	1000-hour sound fuel biomass (tons/acre).
CWDRotBmass	1000-hour rotten fuel biomass (tons/acre).
CWDTotBmass	1000-hour fuel (total Coarse Woody Debris [CWD]; 3.00 inches in diameter and greater) biomass (tons/acre).
CWD3to9SndBmass	3"-8.9" sound fuel biomass (tons/acre).
CWD3to9RotBmass	3"-8.9" rotten fuel biomass (tons/acre).
CWD9to20SndBmass	9"-19.9" sound fuel biomass (tons/acre).
CWD9to20RotBmass	9"-19.9" rotten fuel biomass (tons/acre).
CWD20plusSndBmass	20" and larger sound fuel biomass (tons/acre).
CWD20plusRotBmass	20" and larger rotten fuel biomass (tons/acre).
LgsDec1Bmass	Biomass (tons/acre) of CWD in decay class 1 (sound).
LgsDec2Bmass	Biomass (tons/acre) of CWD in decay class 2 (sound).
LgsDec3Bmass	Biomass (tons/acre) of CWD in decay class 3 (sound).
LgsDec4Bmass	Biomass (tons/acre) of CWD in decay class 4 (rotten).
LgsDec5Bmass	Biomass (tons/acre) of CWD in decay class 5 (rotten).

tblFEInputs (cont.)

Name	Description
DuffLittDpth	Combined duff and litter depth (inches).
DuffDpth	Duff depth (inches).
DuffBmass	Duff biomass (tons/acre).
LittDpth	Litter depth (inches).
LittBmass	Litter biomass (tons/acre).
SlshBmass	Slash biomass (tons/acre).
TotFuelBmass	Combined biomass of FWD, CWD, duff, and litter (tons/acre).
LWdyBmass	Biomass (tons/acre) of live trees and shrubs in sampling plane (i.e., below 6 feet).
DWdyBmass	Biomass (tons/acre) of dead trees and shrubs in sampling plane (i.e., below 6 feet).
TotWdyBmass	Biomass (tons/acre) of live and dead trees and shrubs in sampling plane (i.e., below 6 feet).
LHerbBmass	Biomass (tons/acre) of live herbaceous vegetation.
DHerbBmass	Biomass (tons/acre) of dead herbaceous vegetation.
TotHerbBmass	Biomass (tons/acre) of live and dead herbaceous vegetation.
FCCSProtoFuelbed	Fire behavior fuel model selected from 113 options in the FCCS Prototype Fuelbed set.

tblFuelCalcInputs

This table contains tree-level inputs needed to run FuelCalc Version 0.22.

Name	Description
standnum	Unique identifier for this sampling event.
tag	Tag number for this tree.
spe	Code for the taxon represented by this tree. See lutFuelCalcInputsSpe for code definitions
dia	Diameter (inches) taken either at breast height (DBH) or root collar (DRC).
hgt	Actual height (feet) of this tree.
c-hbc	Height (feet) to the base of the live crown of this tree.
cc	Crown class code for this tree.
tpa	Number of trees per acre that this tree represents.
c-hbcSource	Code for the method used to derive canopy base height from the source data. See lutFuelCalcInputsC-hbcSource for code definitions.
hgtSource	Code for the source of the tree height estimate. If "C", then height was predicted from stem diameter using the model afforded by the relevant FVS variant.

tblFuelCalcOutput

This table contains plot-level data derived from tree-level inputs using FuelCalc Version 0.22.

Name	Description
EventID	Unique identifier for this sampling event.
canbulkden	Canopy bulk density (kilograms per cubic meter).
avcanfuel	Available canopy fuel (tons per acre).
totcanwt	Total canopy weight (tons per acre).
canbaseht	Canopy base height (feet); "-1" indicates that no foliage-twigg biomass layer exceeded 0.012 kg/m3.
standht	Stand height (feet); "-1" indicates that no foliage-twigg biomass layer exceeded 0.012 kg/m3.
cancov	Tree canopy cover (percent).

tblFuelCalcOutput (cont.)

Name	Description
standBA	Stand basal area (square feet per acre).
treesPA	Trees per acre.
treesPA_cbd	Trees per acre contributing canopy fuel to bulk density.

tblPoints

This table includes the geo-reference for each sampled unit and keys to additional data tables.

Name	Description
PointID <i>Required</i>	Unique identifier for this sampling location.
Lat	Latitude, WGS 84, in decimal degrees to the nearest 100 seconds for this point.
Long	Longitude, WGS 84, in decimal degrees to the nearest 100 seconds for this point.
LFX	Albers x coordinate, as used in LANDFIRE production, for this point.
LFY	Albers y coordinate, as used in LANDFIRE production, for this point.
LFCoordSys	Code for well-known text defining full coordinate system to which LFX and LFY are referenced. See lutPointsLFCoordSys for code definitions.
LFZone	LANDFIRE mapping zone in which this point is located. See lutPointsLFZone for zone names.

tblSiteChanges

This table contains data, where available, describing disturbances, treatments, or other events likely to have affected the vegetation or fuel characteristics of the sampling unit.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
Disturb1	Type of disturbance 1.
Disturb1Sev	Severity of disturbance 1.
Disturb1Yr	Year of disturbance 1.
Disturb2	Type of disturbance 2.
Disturb2Sev	Severity of disturbance 2.
Disturb2Yr	Year of disturbance 2.
Disturb3	Type of disturbance 3.
Disturb3Sev	Severity of disturbance 3.
Disturb3Yr	Year of disturbance 3.
Trtmnt1	Type of treatment 1.
Trtmnt1Yr	Year of treatment 1.
Trtmnt2	Type of treatment 2.
Trtmnt2Yr	Year of treatment 2.
Trtmnt3	Type of treatment 3.
Trtmnt3Yr	Year of treatment 3.

tblSpecies

This table lists and characterizes the plants reported from each sampling unit.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.

tblSpecies (cont.)

Name	Description
Item <i>Required</i>	Symbol Key from the NRCS Plants Database ca. January 2004.
SciName	Scientific Name from the NRCS Plants Database ca. January 2004.
Lifeform	Lifeform of item. F= forb, G = graminoid, H = herb, N = nonvascular, S = shrub, T = tree.
Duration	Duration of item, if herbaceous. A = annual, P = perennial.
NativityFlag	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.
LFAbsCov	Absolute cover (%) of item.
LFRelCov	Relative cover (%) of item.
LFHgt	Height (meters) of item.

tblStands

This table contains data characterizing the origin and structure of the stand in which the sampled unit falls.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
StOrigin	Method of stand regeneration, where 1 = clear evidence of artificial regeneration. An artificially regenerated stand is established by planting or artificial seeding.
OtherStAge	Other data source estimate of average age, in years, of the canopy trees. May be categorical or a range of dates.
SourceTreeCov	Tree cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifeform assignments in the source dataset.
SourceShrubCov	Shrub cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifeform assignments in the source dataset.
SourceForbCov	Forb cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifeform assignments in the source dataset.
SourceGramCov	Graminoid cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifeform assignments in the source dataset.
SourceHerbCov	Herbaceous cover (%) from original field call(s), i.e., accounting for most overlap, but based on lifeform assignments in the source dataset.
LFTreeCov	Tree cover (%) calculated as sum of cover of all tree taxa according NatureServe's lifeform assignments.
LFTreeCovClass	Tree cover class. See lutStandsLFCovClass for definitions.
LFShrubCov	Shrub cover (%) calculated as sum of cover of all shrub taxa according NatureServe's lifeform assignments.
LFShrubCovClass	Shrub cover class. See lutStandsLFCovClass for definitions.
LFHerbCov	Herbaceous cover (%) calculated as sum of cover of all herbaceous taxa according NatureServe's lifeform assignments.
LFHerbCovClass	Herbaceous cover class. See lutStandsLFCovClass for definitions. derived for LANDFIRE.
SourceTreeHgt	Tree height (meters) from original field call(s), based on lifeform assignments in the source dataset.
SourceMaxTreeHgt	Height (meters) of tallest tree (based on lifeform assignments in the source dataset) within the sampling unit.
SourceShrubHgt	Shrub height (meters) from original field call(s), based on lifeform assignments in the source dataset.
SourceHerbHgt	Height (meters) of herbaceous vegetation from original field call(s), based on lifeform assignments in the source dataset.

tblStands (cont.)

Name	Description
LFTreeHgt	Tree height (meters) weighted by species cover and based on NatureServe's lifeform assignments.
LFTreeHgtClass	Tree height class. See lutStandsLFHgtClass for definitions.
LFShrubHgt	Shrub height (meters) weighted by species cover and based on NatureServe's lifeform assignments.
LFShrubHgtClass	Shrub height class. See lutStandsLFHgtClass for definitions.
LFHerbHgt	Height (meters) of herbaceous vegetation weighted by species cover and based on NatureServe's lifeform assignments.
LFHerbHgtClass	Herb height class. See lutStandsLFHgtClass for definitions.

tblVisits

This table includes basic information about each sampling event.

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
PointID	Unique identifier for this sampling location.
YYYY	Year of this sampling event.
MM	Month of this sampling event.
DD	Day of month sampled.
DDD	Day of year sampled.
RecordNo	Record number, in chronological order (by date), for this point.
SourceID	Code for data source. See lutVisitsSourceID for code definitions.
SourceEventID	Unique identifier of this sampling event from the source dataset.
Photo1	Photo 1 of sampling unit.
Photo2	Photo 2 of sampling unit.
Photo3	Photo 3 of sampling unit.
Photo4	Photo 4 of sampling unit.

tblvwPhotos

This table links with Link2Photos form which can be used to view sampling unit photos

Name	Description
EventID <i>Required</i>	Unique identifier for this sampling event.
LFEVTCd	Code for LANDFIRE Existing Vegetation Type currently assigned to the sampled unit. See lutCommunitiesEVTESP for code definitions.
LFEVT	Name of LANDFIRE Existing Vegetation Type currently assigned to the sampled unit.
Photo1	Photo 1 of sampling unit.
Photo2	Photo 2 of sampling unit.
Photo3	Photo 3 of sampling unit.
Photo4	Photo 4 of sampling unit.