

Frequently Asked Questions about LANDFIRE's Data Draw (Fall 2016)

Q: Isn't LANDFIRE just a fire centric program?

A: The official name of LANDFIRE (LF) is Landscape Fire and Resource Management Planning Tools. Fire is a main component of the program however the sponsors (Wildland Fire Leadership Council (WFLC)) envisioned its use for broader resource management. LF distributed data products consist of over 20 spatial data layers in the form of maps and other data that support a range of land management analysis and modeling. Specific data products include: Existing Vegetation Type, Cover, and Height; Biophysical Settings; Environmental Site Potential; Fire Behavior Fuel Models; Fire Regime Classes; and Fire Effects layers. LF products are designed to be used at a landscape-scale in support of strategic vegetation, fire, and fuels resource management planning.

Q: Is there still time to submit plot data for remap?

A: The official LF 2015 remap plot data submission deadline passed. However, LF will incorporate additional data as time and production schedules allow or they will be archived for future evaluation. For more information on LF's plot data needs visit http://www.landfire.gov/participate_plot.php.

Q: Will LANDFIRE continue to updates as in previous years?

A: The LF program plans to do parallel production work in order to meet the user community needs by producing updates (LF 2014, LF 2016, etc.) while working on the remap. If you had any wildfires, weather events, or if you conducted any harvest, chemical or other silvicultural treatments in 2015 or 2016, LF needs this data.

Q: What is the purpose of LANDFIRE updates?

A: An update program is vital to support the full spectrum of fire and natural resource management programs with timely and quality products that reflect recent changes in landscape conditions. The LF updates focus on landscape changes to vegetation and fuels resulting from disturbance and treatment activities such as wildland fire, fuel and vegetation treatments, mortality from insects and disease, storm damage, invasive plants, and other natural or anthropogenic events. Areas of concern will be improved through the LF update process, and the existing layers will be updated to reflect more current conditions.

Q: What has changed since the last data request?

A: There have been a few changes since the last data request.

- One of the primary focuses for this data call is to collect disturbance and treatment data from 2015 and 2016. LF uses recent disturbance and treatment data to inform biennial updates to existing vegetation and fuel layers. For more information visit: http://www.landfire.gov/participate_contribute.php.
- Another primary focus is to collect lidar data. The LF remap effort will be utilizing airborne lidar data collections for the first time to develop models of vegetation

structure for the LF2015 remap. If you manage a Lidar data sets or know someone who does please contact Brenda Lundberg (brenda.lundberg.ctr@usgs.gov).

- LF has a new LF Data Product Review website <https://landfire.nkn.uidaho.edu/> that can be used to submit feedback on current products.

Q: Why should we contribute data to LANDFIRE?

A: The Wildland Fire Leadership Council (WFLC) envisioned LF be used for broader resource management applications and this is your opportunity to provide data to improve and update LF products. LF is structured to be part of a National Landscape Conservation Information Framework, where authoritative data sources and coordinated agency data are tapped for updating LF deliverables. LF produces products that serve as key data sets in many decision support applications. Since fire is a natural ecological process, LF data products start with soil and vegetation data, the value and utility of LF deliverables are significant for natural resources management, as well as fire management applications. Your assistance in improving the data products is needed because the continual updating of LF relies heavily on land-management professionals at agency field locations to supply the data needed for mapping improvements and updates. Without this data, LF data products including, existing vegetation and wildland fuels layers would not be as current.

Q: What are some of the fire applications that use LANDFIRE data products?

A: LF data products are important foundational data sets for many fire management decision support applications. A few of these include: The National Wildland Fire Cohesive Strategy, Wildland Fire Decision Support System (WFDSS), Fire Program Analysis (FPA), and Hazardous Fuels Prioritization and Allocation System (HFPAS). For more information on how the LF products are being applied, please visit http://www.landfire.gov/documents_dataproducts.php.

Q: Are there any funds available to cover the time and cost of organizing our data for submission?

A: LF recognizes that it takes some time and cost to organize and submit data. It is also recognized that some agencies/organizations do not have a centralized data structure where their data are linked from the local (field, park, refuge, forest) area up through the states and regions in a standardized electronic format. LF has been able to access many regional and national databases which save time and money because of the structured process (many organizations are moving in this direction). Although LF would like to have resources to be able to support this, ultimately it is up to the organizations to have good data and records management in place. With this type of data management in place, opportunities for sharing data and linking data to efforts like LF do not require a lot of resources. LF does not have funds available for organizing data, however we do accept data in many different formats and we have staff available that can work with the provided data to interpret and convert the information into the LF format. We can likely work with data you currently have available as long as it meets our data needs and minimum requirements (see question, **What types of data are needed for LANDFIRE?**). Supporting information, including definitions of the fields and any codes in the data tables, should accompany the data to ensure that they can be interpreted correctly. For more information on data format please see question, **In what format do you need the data?**

Q: How can we better facilitate data collection and submission efforts for our region of the country?

A: In some regions of the country like-minded individuals have coordinated together to share information and facilitate regional data composites. Spearheading a regional data collection effort within or across agencies can help ensure that all available data for your region is submitted to LF. Because the United States is large and diverse, being able to know and work with all of the organizations that manage land is extremely difficult. We do the best that we can but a regional data collection effort can get partners involved who may not otherwise be aware of LF and the benefits that contributing data can provide for their local area. Data contributions will help improve the LF data products for your area of the country and ensure that the data products are as current as possible.

Q: We received a similar request for data from LANDFIRE not very long ago. Why are you requesting data again?

A: Any data that you contributed to date were likely used to support LF c2001 (LF 1.0.0) mapping effort and LF 2008 (LF 1.0.5 & LF 1.1.0), LF 2010 (LF 1.2.0), LF 2012 (LF 1.3.0), and LF 2014 (LF 1.4.0) updating efforts. LF is in the process of remapping data products with new imagery (Landsat 8) and new plot data to reflect contemporary conditions. LF is also planning on doing a parallel LF 2016 update and the priority for this data call is to collect data for that update. Wildland fires, insects, diseases, wind storms, and vegetation/fuel treatment activities continue to alter many landscapes. LF needs disturbance and vegetation/fuel treatment data from 2015 and 2016 to update the existing vegetation and wildland fuel layers to reflect current conditions. In addition to data for updates, LF is also looking for lidar data to help model vegetation structure for the LF2015 remap.

Q: How often will LANDFIRE update their data products?

A: LF update cycles are presently being reviewed based upon user needs, budgetary limitations, and other considerations. However, as listed in the business case and plan LF update cycle is every two years for landscape changes and every 10 years for a complete remap.

Q: Now that there are multiple versions of LANDFIRE data products what naming convention will LANDFIRE use to distinguish between the different data products?

A: As we continue to periodically update our data products LF will no longer be referring to these updates with a name such as Refresh. Since the purpose of updating LF products is to maintain the currency of data layers, LF is switching the naming convention to reflect the year that a particular data product represents. For example data products labeled LF c2001 reflect landscape conditions from 2001 and data products labeled LF 2008 will reflect landscape conditions from 2008. In addition to that naming convention we will still maintain a versioning code with LF 1.0.5 type versioning nomenclature as an example.

Version Name	Version Code	Version Year
LF National	LF 1.0.0	LF c2001
LF 2008	LF 1.1.0	LF 2008

LF 2010	LF 1.2.0	LF 2010
LF 2012	LF 1.3.0	LF 2012
LF 2014	LF 1.4.0	LF 2014

Q: What types of data are needed for LANDFIRE?

A: LF primary focus is Event data from 2015 and 2016 and lidar data. Event data on recent disturbances or vegetation/fuel treatments can be used for the next LF update. Lidar data will be used to develop models for vegetation structure for the upcoming LF 2015 remap. Our secondary focus is vegetation/fuel plot data. The official LF2015 Remap data submission deadline has passed, but please feel free to submit your plot data. LF may try to incorporate additional data sets as time and production schedules allow or data submissions will be archived for future use. LF also benefits from feedback on current data products.

Q: What type of Event (disturbance and vegetation/fuel treatment) data are need for LANDFIRE?

A: LF also needs disturbance and vegetation/fuel treatment data or Event data for 2015 and 2016. This data will be evaluated for incorporation into a LF Events geodatabase depicting disturbance and vegetation/fuel treatment activities. Events data are first priority for periodic updates (LF 2008, LF 2010, LF 2012, and LF 2014). The information in the Events geodatabase is used to update existing vegetation and wildland fuel layers to reflect changes in landscape conditions. If your organization possesses older or newer Event data LF will archive the data for evaluation and potential use in future mapping updates or comprehensive remaps.

Event data needs include spatial polygon layers of 1) wildland fires, 2) harvest/thinning activities, 3) mechanical vegetation/fuel treatments, 4) seeding/planting, 5) chemical treatments, 6) storm damage, 7) insect and disease infestations, 8) and exotic plant infestations. The polygon layers should contain the following information (attributes), at minimum:

- The event must be represented by a polygon on the landscape and have a defined spatial coordinate system.
- The event must have an event type needed for LF updates. If exotics perimeter data there must be exotics plant species listed.
- The event must be attributed with the year of occurrence.

Supporting information, including definitions of the fields and any codes in the data tables, should accompany the data to ensure that they can be interpreted correctly.

Q: Why is LF asking for Lidar data?

A: The LF remap effort will use airborne lidar data collections to develop vegetation structure models. Lidar data contributions should greatly improve the vegetation structure map quality where available.

- Please provide links and contact information to obtain data that are available to the public.
- If data are not publically accessible, please contact the LF Reference Data Administrator, Brenda Lundberg (brenda.lundberg.ctr@usgs.gov) to determine the best method for transfer.

Q: What types of LANDFIRE Reference Database (vegetation or fuel plot) data are needed for LANDFIRE?

A: LF benefits from contributions of any geo-referenced point or polygon vegetation or fuel plot data along with any associated digital photos, project descriptions, or final reports. These data are incorporated into the LF Reference Database (LFRDB) and are first priority for mapping and remapping updates (LF c2001, LF 2015, etc.) The geo-referenced vegetation and/or fuel plot data should afford some combination of the following from each sampling unit (for example, plot or transect):

- geo-reference with defined coordinate system – required for all sampling units,
- sampling date,
- cover type and/or potential vegetation type label,
- full or partial list of plant taxa with estimates of canopy cover and height (if available),
- measurements of individual trees (may include diameters, height, crown base height, crown ratio, crown class, and/or density),
- counts or biomass estimates of fine and coarse woody material,
- depths or biomass estimates of litter and duff layers,
- biomass of live and dead shrub or herbaceous material

In the event that individual trees have been mapped within the sampling unit (i.e. if data were collected following a protocol similar to that of the USFS Forest Inventory and Analysis Program (FIA)), we ask that you include the coordinates (or distance and azimuth from mapped plot center) for each of the trees, as those data would enable us to model tree canopy cover ideally suited for LF's remote-sensing applications.

Supporting information, including definitions of the fields and any codes in the data tables, should accompany the data to ensure that they can be interpreted correctly. Any associated digital photos, project descriptions, or final reports are also appreciated.

Q: In what format do you need the data?

A: We will accept Event data (disturbance and vegetation/fuel treatment data) in various formats, including ESRI shapefiles, geodatabases, and ArcInfo coverages. Supporting information, including definitions of the fields and any codes in the data tables, should accompany the data to ensure that they can be interpreted correctly.

If you have LFRDB data (vegetation and/or fuel plot data) to share, we're even more flexible in terms of data format. We will gladly accept digital data in text files, spreadsheets, relational databases, ESRI shapefiles or geodatabases, and ArcInfo coverages – whichever is most convenient. Coordinate information, including map datum, can be bundled with the other attribute information or in a separate, linked file, or data form. Supporting information, including definitions of the fields and any codes in the data tables or data-entry forms, should accompany the data to ensure that they are accurately represented in the LF reference database.

Q: We have some of the types of data you have requested, but not all of them. Can you use our subset of the data?

A: Yes, we likely can. Your data need not contain the full suite of vegetation/fuel or disturbance/treatment activity information that we have listed as examples in order to be useful. Any subset of those data likely can be used to support some aspect of LF. The primary requirement is that the information be reliably geo-referenced with the coordinate system (including map datum and projection parameters) fully defined.

Q: How big must a fire or other event be for LANDFIRE to take into account when making changes to the vegetation and fuel layers? Is there a lower size limit to the perimeters we should submit?

A: We are not putting a lower size limit on the disturbances or vegetation/fuel treatments for which we're seeking data. Please submit all data. This type of coordinated national effort has not been done before so potential uses for a database of this type may be extremely valuable for other applications. While we can lean on MTBS (<http://mtbs.gov/>) for remotely sensed data on large fire events (>500 acres in the East), smaller treatments and disturbances are apt to be accounted for in LF if we receive information directly from the various administrative units. Newer Landsat image data mining processes such as Vegetation Change Tracker (VCT) and Remote Sensed Landscape Change (RSLC) will potentially allow us to detect smaller treatments and disturbances. Data contributed on all sized events are critical in labeling the type of disturbance or treatment associated with changes in the Landsat images.

Q: You ask for "information that can be used to improve the existing maps of vegetation and fuel." Will you provide some examples of the information you're requesting? Does it need to be in a particular format?

A: One of the objectives of the LF updates is to address discrepancies between map products and known field conditions. To that end, we are asking for feedback information from you to let us know where these discrepancies or issues exist and to provide information that will help us improve the data with actual conditions on the ground. Visit http://www.landfire.gov/participate_feedback.php for examples of how you can communicate feedback information to us or submit feedback through the new LF Data Product Review website <https://landfire.nkn.uidaho.edu/>.

Q: How do you intend to use the feedback information that we submit "to improve the existing maps of vegetation and fuel?" Will it be "stamped" or otherwise incorporated directly into the LANDFIRE layers?

A: We will use the narratives and supporting GIS data that you submit as reference materials to (1) understand the issue(s) that you raise, (2) develop a systematic approach for potentially making the desired changes, and (3) evaluate our efforts to improve the products. We will NOT simply substitute or "stamp in" the ancillary data in place of LF data. Please understand that while we will evaluate all contributed information and make a concerted effort to address the issue(s) raised, we anticipate that some requested changes will fall outside the scope of LF updates or may be otherwise impossible to make due to limitations of the information provided and/or other resources at our disposal.

Q: When do you need the data?

A: While data can be submitted at any time throughout the year, LF will draw all available and usable data by **March 31 of 2017**. Data submitted before March 31 will be evaluated for potential inclusion into the next LF update cycle. Data submitted after March 31 will be considered in subsequent LF update cycles.

Q: We have submitted data to LANDFIRE in the past, how can I verify LANDFIRE has my data?

A: To date, LF has acquired many data sets including, disturbance and vegetation/fuel treatment perimeters (Events data), vegetation and fuel plot data (LFRDB) and feedback information (Feedback data), which were used to support LF mapping and updating efforts.

By referencing the Compiled Data table you can determine if LF has already collected your data. For a copy of the Compiled Data Table please visit http://www.landfire.gov/participate_refdata_sub.php. Please note the *Time Span* field in the table to determine if the most recent data for your area has been contributed.

In addition, LF obtains data from several web-based data clearing houses and agency/corporate database systems. The Website Agency DB Table provides a complete list of websites or agency database systems from which LF draws data. For a copy of the Website Agency DB Table please visit http://www.landfire.gov/participate_refdata_sub.php. If you store data on one of the websites or agency data bases listed in this table, please verify that a current version of your data are posted to ensure that this data will be evaluated for use in the next LF update cycle.

Q: We have submitted similar information to a web-based data clearing house such as the NPS Data Store or an agency/corporate database system such as USFS-FACTS (Forest Service ACTivity Tracking System). Why don't you simply download the information you need from those existing websites or agency databases?

A: LF does draw data from several web based data clearing houses including the NPS Data Store, USGS/NPS Vegetation Characterization Website, and USFS Regional Data Clearing houses. LF also acquires data from agency/corporate database systems such as USFS FACTS (Forest Service ACTivity Tracking System) and USFS NRIS (Natural Resource Information System). The Website Agency DB Table provides a complete list of websites or agency database systems from which LF draws data. For a copy of the Website Agency DB Table please visit http://www.landfire.gov/participate_refdata_sub.php. If you store data on one of the websites or agency databases listed in this table, please verify that a current version of your data are posted to ensure that this data will be evaluated for use in the next LF update cycle.

Q: Will LANDIFRE accept data in hard copy and digitize it?

A: Although this was an offer that we made during the initial development of LF c2001, the complexity of adding in polygon data has precluded us from being able to continue with this offer. We do not have the time or resources at this time to digitize data.

Q: What if my data are proprietary?

A: All data that we receive for LF that are not already in the public domain are considered to have been provided to us for internal use only. We will send an official information request to all data contributors asking their permission to share their data before incorporating the information into a public version of the Events or LFRDB. We will gladly enter into formal data sharing agreements if you are concerned about sharing proprietary data. Please contact Brenda Lundberg, the LF Reference Data Administrator, at (406) 329-3405 or brenda.lundberg.ctr@usgs.gov if you wish to share proprietary or otherwise sensitive information and/or would like to enter into a formal agreement with LF before sending the data. For more information on the public version of the LFRDB or Events data please visit <http://www.landfire.gov/reference.php>.

Q: How do we submit data to LANDFIRE and who should we contact if we have questions?

A: If you have questions or would like to submit data please contact Brenda Lundberg, LF Reference Data Administrator. You may email datasets smaller than 25 MB to Brenda Lundberg at brenda.lundberg.ctr@usgs.gov. If the files are too large to send via email contact Brenda Lundberg for alternative file transfer options. Please contact Brenda Lundberg at (406) 329-3405 or brenda.lundberg.ctr@usgs.gov for more information.