Answers to Frequently Asked Questions about LANDFIRE's Refresh Data Needs

Q: What is LANDFIRE Refresh?
A: The Refresh is an improvement approach designed to update LANDFIRE product layers. Refresh will focus on landscape changes to vegetation 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 Refresh project, and we will update the existing layers to reflect more current conditions.

Q: We received a similar request for plot data from LANDFIRE not very long ago. Why are you requesting data again?
A: Any plot data that you contributed to date were likely used to create the existing LANDFIRE data layers, which characterize vegetation and fuel conditions circa 2001. Wildland fires, insects, diseases, wind storms, and management activities have substantially altered many landscapes since that time. We are now requesting information to help us update the existing vegetation and fuel layers to reflect more current conditions.

Q: What data do you need for Refresh?
A: We need data that can be used to update LANDFIRE data layers, as well as data that could be used to remedy known concerns with the LANDFIRE National layers. In a nutshell, we are asking for data on any recent disturbances or treatments that would have altered the composition or structure of vegetation and/or fuel. These data must be from 1999 or later and may include the following:

1. *GIS polygon layers* depicting any disturbances or treatments that would have altered the composition and structure of vegetation and/or fuel (including, but not limited to: wildland fires, mechanical treatments, silvicultural treatments, insect and disease infestations, and storm damage).
2. *GIS polygon layers* that could be used to correct areas of concern in existing LANDFIRE layers (for example, evidence of exotic plant infestations in areas mapped as native vegetation, burnable agricultural lands mis-characterized as non-burnable, or vegetated areas labeled as barren);
3. *Geo-referenced plot data* that could be used to characterize the post-disturbance or post-treatment conditions of vegetation and/or fuel.

The polygon layers should contain the following information (i.e., attributes), at minimum:

- type of event (e.g., management treatments, wildland fire, insect and disease infestation, wind damage) or general theme (e.g., burnable agricultural lands, exotic plants)
- year of event (or assessment date, if map of burnable ag. or exotic plants)
- severity of event (amount of change within the polygon)
- defined spatial coordinate system

The geo-referenced plot data should afford some combination of the following from each sampling unit (for example, plot or transect):

- a cover type and/or potential vegetation type label,
- a full or partial list of plant taxa present with canopy cover estimates for each,
- height estimates for plant taxa and/or individual trees,
- diameters of individual trees,
- crown ratios and crown classes of individual trees,
- tree densities, and
- year and type of disturbance or treatment.

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), 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 LANDFIRE's remote-sensing applications.

The fuel-loading data should include the following:

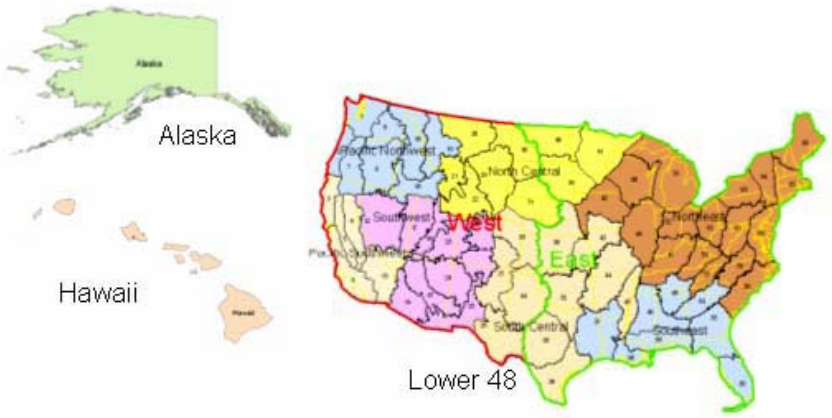
- counts or biomass estimates of fine and coarse woody material,
- depths or biomass estimates of litter and duff layers,
- year and type of disturbance.

Photos of the georeferenced sampling units are useful as well, and records of exotic plant taxa, ideally with cover estimates, are useful regardless of what additional vegetation or fuel information may accompany them.

Q: We have already submitted similar information to NFPORS or FS-FACTS. Why don't you simply download the information you need from those existing databases?
A: Although NFPORS contains treatment information that we are looking for, very little of the information is available as spatial polygons, and we need those polygons for LANDFIRE. Similarly, some of the information that we need may not be available yet via FS-FACTS (e.g., the forest stand layer clearly linked to all tabular data). However, if FS-FACTS is fully operational for your administrative unit, please let us know, as we should be able to extract the information ourselves.

Q: We have some of the types of data you've 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 and fuel or treatment and disturbance information that we've listed as examples in order to be useful to us. Any subset of those data likely can be used to support some aspect of LANDFIRE Refresh. The primary requirement is that the information be reliably geo-referenced, ideally determined with a Global Positioning System (GPS) device in the field, with the coordinate system (including map datum and projection parameters) fully defined.

Q: When do you need the data?
A: We will accept your data as soon as you can get it to us, however, the Refresh project will incorporate data by geographic regions, as delineated here:



Your data need to be submitted within the target periods listed below to be incorporated into this Refresh update. Those data that are submitted after these data submission dates will be used in future program updates.

Processing Unit	Data Submission Period
Southeast	October – January 2009
Pacific Northwest	October 2008 – March 2009
Pacific Southwest	January – June 2009
Southwest	January – September 2009
South Central	April – December 2009
North Central	April – December 2009
Northeast	July 2009 – March 2010
Alaska & Hawaii	July 2009 – March 2010

We understand that we are asking for information that may require a substantial amount of time and effort to gather, prepare, and submit for use in LANDFIRE Refresh. We have timed the initial call for data with the hope that the stewards of relevant data will be able to budget in the additional work before the occurrence of a hard deadline. If, however, you have data that could meet LANDFIRE needs, but you simply cannot provide the data within LANDFIRE's timeframe, please contact Karen Short, the LANDFIRE National Data Administrator, at (406)549-7478 or kshort@landfire.org to advise her of the situation. We will gladly accept data contributed earlier or later than the target periods indicated in the table above, and we will work them into the Refresh or future program updates as best we can.

Q: In what format do you need the data?
A: We prefer that, when possible, the disturbance and treatment polygon layers are transferred using the geodatabase created for this purpose. By loading your data into the LANDFIRE Refresh geodatabase, you can ensure that all necessary elements are included. Moreover, datasets contributed in this format will be prioritized for use in LANDFIRE Refresh.

However, if you have disturbance or treatment layers that could meet Refresh needs but are unable to transfer the information data via the LANDFIRE geodatabase, we will certainly accept those data in another format, including ESRI shapefiles and ArcInfo coverages.

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 can be interpreted correctly for Refresh. We prefer these supporting documents, or metadata, in digital format, but will take hard copies if no electronic files are available.

Please visit http://www.landfire.gov/participate_refreshevent.php for full instructions on sharing your event data and to download the LANDFIRE Refresh Geodatabase.

If you have vegetation and/or fuel plot data to share, we're even more flexible in terms of data format. We'll gladly accept digital data in, for example, text files, spreadsheets, relational databases, ESRI shapefiles or geodatabases, and ArcInfo coverages – whichever is most convenient for the contributor.

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 LANDFIRE reference database. These supporting documents, or metadata, can also be in digital or hard-copy format.

Please visit http://www.landfire.gov/participate_otherdata.php for additional guidance on sharing your plot data.

Q: What if my data are proprietary?
All data that we receive for LANDFIRE and that are not already in the public domain are considered to have been provided to us for internal use only, unless we receive explicit written permission from the source(s) of the data stating that we can share certain components with parties outside the project. In other words, we assure you that any proprietary data that you share with us will be used only to develop LANDFIRE products and not further distributed. We will gladly enter into formal agreements to this end. Please contact Karen Short, the LANDFIRE Reference Data Administrator, if you wish to share proprietary or otherwise sensitive information and/or would like to enter into a formal agreement with LANDFIRE before sending the data.

Q: To whom do we send the data?
A: To Karen Short, the LANDFIRE Reference Data Administrator. You may email data sets to Karen at kshort@landfire.org. If the data are too large to send via email or if they are in hardcopy form only, you can post them to Karen at:

Systems for Environmental Management
315 S. 4th St. E.
Missoula, MT 59801

Alternatively you can ftp large electronic data files. Please contact Karen at (406) 549-7478 or kshort@landfire.org for more information.