



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUN 27 2011

Memorandum

To: Director, Bureau of Indian Affairs
Director, Bureau of Land Management
Director, Fish and Wildlife Service
Director, National Park Service
Director, United States Geological Survey
Director, Bureau of Reclamation

From: Kim A. Thorsen 
Deputy Assistant Secretary
Law Enforcement, Security and Emergency Management

Subject: LANDFIRE Data Contribution

The Department of the Interior (DOI), in concert with the USDA Forest Service, is providing the bureaus with an opportunity to contribute data to the LANDFIRE Program, or link bureau databases directly to LANDFIRE. Beginning this year, data that is received by *November 15*, of each year will be incorporated into subsequent releases of the updated LANDFIRE data set. This will enable both Departments to provide up-to-date, consistent, and accurate data on a regular basis.

LANDFIRE data is used as part of an information framework, where nationally consistent data sets are accessed by numerous parties operating at multiple scales, to support a wide variety of business needs and practices. LANDFIRE data is not just for wildland fire applications; some of the initiatives and applications that currently use LANDFIRE data include: natural resources planning and associated National Environmental Policy Act (NEPA) analysis and compliance, habitat assessments and management evaluations.

Data are central to our planning, decision making, implementation, monitoring and evaluation for the stewardship of natural and cultural resources, and it is important that we collaborate with our partners in coordinating and sharing our data. LANDFIRE is coordinated across the Departmental enterprise applications and models that use these data. Authoritative data sources are an important part of this coordination as well as Bureau data that may be managed at the local, regional, or national level. These data sources assist in providing up-to-date information that is used in consistent and balanced efforts. Continued partnerships with communities, State governments, tribes, and other stakeholders are a priority for the Department as we take an all lands, all data approach.

The Department has made significant progress over the years improving our collection, management, sharing, and archival of data. The *DOI Strategic Plan for Fiscal Years 2011 – 2016* affirms the Department's support for quality science and data that provides for understanding the earth in support of sustainable resource management. Acquiring and incorporating data across the

Department's programs is fundamental to the continual enhancements of DOI data assets and resources. This is an opportunity for the bureaus to improve data sets and strengthen our decision support capability. I strongly encourage the bureaus to provide current data to help our DOI managers make better informed, science-based decisions.

The attached White Paper provides additional detail regarding the purpose and types of data needed, who should be involved and how best to contribute. Please direct any questions to Kirk Rowdabaugh, Director, Office of Wildland Fire Coordination, at 202-606-3447 or Henry Bastian, LANDFIRE Business Lead, Office of Wildland Fire Coordination at 202-606-3206.

Attachment (1)

LANDFIRE Program Data Contributions

cc: Assistant Secretary, Indian Affairs
Assistant Secretary, Land and Minerals Management
Assistant Secretary, Fish, Wildlife, and Parks
Assistant Secretary, Water and Science
Director, Office of Wildland Fire Coordination



LANDFIRE is a cooperative program between the United States Department of the Interior (DOI) and the United States Department of Agriculture (USDA) Forest Service. LANDFIRE supports and informs natural resource and wildland fire program managers. Some of the applications dependant on LANDFIRE include: the Cohesive Strategy, National Environmental Policy Act (NEPA) analysis and compliance, Wildland Fire Decision Support System (WFDSS), natural resources planning, Fire Program Analysis (FPA), management evaluations, Hazardous Fuels Prioritization and Allocation System (HFPAS), and habitat assessments.

Isn't LANDFIRE focused on wildland fire?

While fire is a main component of the LANDFIRE program, program sponsors (Wildland Fire Leadership Council-WFLC) envisions its use for broader resource management applications. In fact, the official name is Landscape Fire and Resource Management Planning Tools, also known as LANDFIRE. For more information on how data are applied or could be used to enhance land, natural resources, and fire management within your organization, visit the LANDFIRE website.

LANDFIRE has produced consistent, comprehensive maps and data describing vegetation, fire, and fuel characteristics across the nation. However, to further enhance and improve the LANDFIRE data products, continued support by the bureaus is needed to acquire current geospatial or point data. The LANDFIRE program is updating data products to reflect recent changes from a variety of disturbances and vegetation management activities. This is an opportunity to contribute updated data to improve the LANDFIRE products which serve as a key data set in many decision support applications.

What has changed?

In the past, LANDFIRE requested data in a sequential fashion, working systematically across the country in geographic blocks. The sequential approach involved "due dates" for data submission by geographic area. This approach lead to some scheduling conflicts and some field units were split into multiple geographic areas, requiring data submissions at different times from the same office. To address users concerns, LANDFIRE is changing the way data will be collected in the future. Rather than a "rolling data call", changing from year to year and region to region across the country, LANDFIRE will collect data annually. **Data can now be submitted at any time of the year, at the convenience of the contributor.** LANDFIRE will draw all available data on **November 15 of each year.** Data submitted before November 15 will be evaluated for incorporation into the next appropriate LANDFIRE update, which is currently a biennial update. Data submitted after November 15 will be evaluated for subsequent LANDFIRE updates.

What types of data are needed?

Point and polygon data are needed to improve and update LANDFIRE spatial layers depicting vegetation and fuels (e.g., improved mapping of exotic vegetation and burnable fuel classes). LANDFIRE uses recent natural disturbances and management treatments to update layers in areas where vegetation and fuel have changed. Examples of these data, along with relevant attributes, are listed in Table 1. At a minimum, the disturbance / management treatment polygons must be attributed by disturbance type and year of occurrence. *The primary focus for this data update is disturbance and treatment activity data that occurred during 2008-2010.* However, if data are contributed outside of this time frame, LANDFIRE will archive the data for potential use in future mapping improvements, updates, or comprehensive remaps. In addition to spatial polygon data, LANDFIRE also benefits from contributions of any point or polygon vegetation or fuel plot data along with any associated digital photos, project descriptions, or final reports. Examples of the types of vegetation and fuels data needed for LANDFIRE can be found in Table 2.





Table 1. Categories of spatial data & attributes needed.

| Category | Theme (polygon features only) | Attributes * (required) |
|--------------------|--|--|
| Fire | Wildfires Prescribed Fires | Event ID Event type * |
| Disturbances | Insects & Disease Weather Damage | Event name Year of event * |
| Treatments | Harvest/Thinning Seeding/Planting Other Mechanical Chemical | Start date End date Event severity Reporting entity (e.g., FS, NPS, BLM, FWS) |
| Data / Information | Burnable Agricultural Lands Exotic Plants | Notes (e.g., effects on veg. or fuel) |

Table 2. Examples of vegetation and fuel data useful for LANDFIRE.

| Attribute |
|---|
| Geo-reference location |
| Sampling date |
| Vegetation community cover type |
| Estimates of canopy cover and/or height per plant taxon |
| Measurements of individual trees (may include diameters, height, crown base height, crown ratio, crown class, and/or density) |
| Counts of biomass of fine / coarse material |
| Depth or biomass of litter / duff layers |

How can you verify LANDFIRE has your data?

To aid contributors in determining if LANDFIRE has already collected data for your area and to provide an understanding of the extent of data already attained through national sources, LANDFIRE has created a "Data Contributor" spreadsheet available at www.landfire.gov, under "How to Participate". LANDFIRE obtains data from several web-based data clearing houses including the National Park Service (NPS) Data Store, U. S. Geological Service (USGS)/NPS Vegetation Characterization Website, and USDA Forest Service (USFS) Regional Data Clearing houses. LANDFIRE also acquires data from agency/corporate data base systems such as the USDA Forest Service, Forest Activity Tracking System (FACTS) and Natural Resource Information System (NRIS). If your data are currently stored in one of these systems, then there may be no need to resubmit the data directly to LANDFIRE. A complete list of websites or agency databases from which LANDFIRE collects data can be found in "Website_Agency" spreadsheet (Available at www.landfire.gov, under "How to Participate") which contains information from websites, data portals, and agency data bases. If you store data on one of the websites or agency data bases listed, please take the time to verify that a current version of your data are posted to insure your data are included for the next LANDFIRE update.

Who should be involved?

Ultimately, it is the local staffs' responsibility to provide data if there is an interest in having your information represented accurately in the suite of data products supported by LANDFIRE. This is an opportunity to participate in updating information which supports decision support applications with wall-to-wall data. In some regions of the country, organizations have collaborated to jointly develop and share information and facilitate regional data composites. Please share this opportunity with others who work with, or manage data or vegetation.

How should data be contributed and who should you contact if you have questions?

The data draw date is **November 15** of each year for all areas of the United States. Please verify that LANDFIRE has your data. If not, submit your data at your earliest convenience, but no later than November 15. If your organization manages data consistent with the requirements of LANDFIRE as detailed in this paper, please contact Brenda Lundberg, the LANDFIRE Reference Data Administrator, at blundberg@usgs.gov or at (406) 329-3405. For general information about LANDFIRE, please visit www.landfire.gov or email the help desk at helpdesk@landfire.gov. Additional information regarding LANDFIRE data needs and detailed instructions for data preparation and transfer are available from Brenda Lundberg, or from the LANDFIRE website.

