



How can I use LANDFIRE?

What is LANDFIRE?

LANDFIRE (Landscape Fire and Resource Management Planning Tools Project) is an interagency Program producing consistent and comprehensive data describing landscape change, disturbance, vegetation, fuel, and fire regimes across the United States.

How can you use LANDFIRE products?

- Do you have landscape-scale assessment needs but lack consistent cross-boundary vegetation- and fire-related data?
- Do you need data to run fire behavior models at a landscape scale?
- Would you like to learn more about the historical disturbance regimes and vegetation patterns in your landscapes?
- Are you curious about which watersheds are closest to the historical range of variability in terms of vegetation composition and structure?
- Do you need to engage partners in discussions about disturbance regimes or landscape-scale conservation issues?
- Do you need spatial data layers to jump-start your local mapping program?
- Would you like to have ecological models to use as a foundation for testing management scenarios?

Because LANDFIRE is a national project, scale is important. Here are scale guidelines:

Although LANDFIRE products are delivered as 30-meter pixels, using them at individual or small groups of pixels is not recommended. LANDFIRE products were designed to support Landscape-scale analysis - national and regional strategic planning, strategic/tactical planning for large sub-regional landscapes, and Fire Management Units (FMUs) such as significant portions of states or multiple federal administrative entities.

The applicability of LANDFIRE products to support fire and land management planning on smaller areas will vary by product, location, and specific use. Further investigation by local experts will help inform decisions regarding appropriate use. It is your responsibility to use LANDFIRE metadata and local knowledge, to determine if and/or how LANDFIRE can be used for particular areas of interest.

Bottom line: check out the data to make sure it is suitable for your application.

What does LANDFIRE produce?

LANDFIRE produces a comprehensive, consistent, scientifically credible suite of more than 20 geo-spatial layers, a reference database, and a set of quantitative vegetation models at a national extent. The first version of data products, LANDFIRE National, was completed December 2009. Since then, the Program updates LANDFIRE data layers every two years to reflect change on the landscape over time. These data provide information for regional and national landscape strategic planning for fire and natural resource management activities. In addition to spatial data and ecological models, various partners of LANDFIRE have created helpful tools to assist users of LANDFIRE data. These include:

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| Wildland Fire Assessment Tool - Produces fire behavior and fire effects characteristics that could occur under specified conditions. | LANDFIRE Total Fuel Change Tool - Facilitates editing LANDFIRE rule sets to create customized surface and canopy fuel layers for local applications. |
| Multi-Raster Classification Tool - Synthesize multiple ArcGRIDs into a single classified output ArcGRID. | LANDFIRE Data Access Tool - Downloads LANDFIRE data directly from ArcMap. |
| Fire Regime Condition Class Mapping Tool - Calculates vegetation and fire regime departure from historical reference conditions. | Area Change Tool - Edits ArcGrids to characterize changes based on potential treatment. |



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LANDFIRE Sponsorship

LANDFIRE is an interagency vegetation, fire, and fuel characteristics mapping program, sponsored by the Wildland Fire Leadership Council. Principal partners are United States Department of the Interior (DOI), the United States Department of Agriculture-Forest Service, and The Nature Conservancy. Organizations that work *with* LANDFIRE products include researchers, land managing agencies, the Fire Program Analysis (FPA) project, and the Wildland Fire Decision Support System (WFDSS), to name a few.

LANDFIRE myths & facts

| Myth LANDFIRE is... | Fact |
|--|---|
| about the West | LANDFIRE provides national geo-spatial layers that are available to the public for the US and insular areas. |
| fire data | Fire and fuels are the main reasons the project was initiated; however, the sponsors envisioned its use for broader resource management. LANDFIRE produces a suite of vegetation layers. Many of the LANDFIRE products incorporate disturbances other than fire (such as weather, chemical and harvest) and include basic ecological and management information relevant to non-fire-adapted ecosystems. The Science and Application Library on landfire.gov highlights big horn ship viability, grizzly bear density, and bee pollination. |
| for folks in D.C. | The Forest Service and Department of the Interior fund LANDFIRE and products are used for national strategic initiatives. However, they can be applied regionally and be used by anyone who is interested, including forest, fire, & land managers, researchers, and conservationists. |
| about Fire Regime Condition Class (FRCC) | FRCC is only one layer derived from using LANDFIRE layers. Some others layers that can be derived using LANDFIRE layers include Flame Length, Rate of Spread, Minimum Travel Time, Crown Fire Activity, Solar Radiation, and 1 and 10 Hr. Fuel Moisture. |
| too big | The LANDFIRE Data Distribution Site – the Program’s dynamic map to view and download data – allows for user defined data extractions. |

What else do I need to know?

- The first version was completed in 2009, since then 3 updates were made to improve information and update for landscape change. Check the Delivery Schedule on landfire.gov for future releases.
- Data products are updated through an operations and maintenance plan. See Program Information on landfire.gov for details
- Visit the Science and Application Library on landfire.gov for LANDFIRE data case studies such as fire incident management, fire incidents, fuels planning and threatened species studies. Use the LANDFIRE Helpdesk on landfire.gov if you would like to share how you’ve used LANDFIRE products.
- While LANDFIRE provides geo-spatial layers for strategic planning, the data can be used for other natural resource management activities.

Please visit landfire.gov for more information