LANDFIRE Fact Sheet

What is LANDFIRE?

LANDFIRE (also known as Landscape Fire and Resource Management Planning Tools) 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. LANDFIRE produces a comprehensive, consistent, scientifically credible suite of more than 20 geo-spatial layers for the United States.

The first version of data products, LANDFIRE National, represents a 2001 landscape and 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.

Why LANDFIRE?

LANDFIRE was initiated based on agencies' needs for mapped data that support prioritization of hazardous fuel reduction and ecological conservation activities and also support strategic resource management initiatives, such as the Healthy Forests Restoration Act, Community Wildfire Protection Plans, the National Fire Plan, fire management planning, stewardship of public and private lands, and natural resource management. Since LANDFIRE began in 2004, specific LANDFIRE data product application has expanded to wildlife habitat suitability, eco-regional assessments, and ongoing fire management planning initiatives.

LANDFIRE data are critical to multiple wildland fire management initiatives and decision support applications, including the National Cohesive Wildland Fire Management Strategy, Fire Program Analysis (FPA), Wildland Fire Decision Support System (WFDSS), Hazardous Fuels Prioritization and Allocation System (HFPAS), and a number of other key landscape conservation efforts.

What are LANDFIRE's data products and how are they developed?

LANDFIRE data products consist of over 20 geo-spatial layers and relational databases that support a range of land management analysis and modeling. Data product groups include: Reference, Disturbance, Vegetation, Fuel, Fire Regime and Topographic. This information is required to run fire simulation and behavior models like FARSITE and FlamMap, and can be implemented within models to predict wildland fire behavior and effects, and are useful for strategic fuel treatment prioritization and tactical assessment of fire behavior and effects.

The LANDFIRE *Project* was designed to use peer-reviewed, consistent, and repeatable scientific methods. Data products were developed through integrating a collection of advanced scientific procedures, including relational databases, geo-referenced land-based plots, treatments, satellite-enabled remote sensing, systems ecology, gradient analysis, predictive landscape modeling, and vegetation and disturbance dynamics.

The LANDFIRE *Program* continues that tradition of innovation through applied research and science, new developments in remote sensing of landscape change, leveraged data from companion geographic information system (GIS) data programs, and stakeholder expansion, both within and external to the wildland fire community.

How can I use LANDFIRE data products?

LANDFIRE products are designed to be used at a landscape-scale in support of strategic vegetation, fire, and fuels management planning to evaluate management alternatives across boundaries. LANDFIRE data products also facilitate national- and regional-level strategic planning and reporting of wildland fire and natural resource management activities.

LANDFIRE products are delivered at a 30-meter pixel resolution. The most effective use of the products is at the landscape scale. Using individual or small groups of pixels is not recommended. Landscape-scale analysis includes national and regional strategic planning and strategic/tactical planning for large sub-regional landscapes. Using LANDFIRE products to support analysis in smaller areas can result in outcomes that will vary in quality by product, location, and application. Familiarize yourself with LANDFIRE metadata and local area landscape characteristics to use LANDFIRE data effectively.

LANDFIRE products are not intended to replace local-scale data, but can serve as reference data by providing wall-to-wall cross-boundary products that span the United States.

For more information, current program status, or to contact the LANDFIRE team, please visit www.landfire.gov