LANDFIRE

The Landscape Fire and Resource Management Planning Tools Project—LANDFIRE—creates and periodically updates comprehensive vegetation, fire and fuel characteristics data using a consistent process for the entire United States. LANDFIRE's quantitative vegetation models, comprehensive ecological descriptions for all major vegetation systems, and suite of GIS tools are continually evolving, and the scope of the program has expanded to uses beyond natural resources and fire management to applications regarding carbon sequestration planning, climate change research, state and regional assessments, habitat analysis and protection, state forest assessments and more.

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Most large-scale restoration efforts span multiple jurisdictions. LANDFIRE data and tools cover all lands, enabling restoration across boundaries and ownership. LANDFIRE supports the National Cohesive Wildland Fire Management Strategy mission to restore and maintain landscapes, fire-adapted communities, and response to fire by providing the tools and data that inform management decisions.

Why LANDFIRE?

In 2002, General Accounting Office reports found that adequate evidence was not available to make informed decisions regarding fuels reductions and fire management. In fact, "... based on our review, LANDFIRE is the only proposed research project so far that appears capable of producing consistent national inventory data for improving the prioritization of fuel projects and communities."

Since then, LANDFIRE has become a cornerstone of a fully integrated national data information framework, developing and improving vegetation and fuels data products based on the best available authoritative science that is supported by interagency and interorganizational collaboration and cooperation. Sixteen years after being chartered, LANDFIRE's tools and data provide the foundation upon which land managers and others, can develop plans and test scenarios with confidence.

Updating & Improving

LANDFIRE is unique among large ecological datasets in that it continually refreshes and remaps data. Vegetation, fire, and fuels characteristics data are current to 2014, with Remap updates scheduled for delivery in early 2019. LANDFIRE models & descriptions offer country's first "Encyclopedia of Ecosystems."

Vegetation Conditions

LANDFIRE is much more than fire, but people think that fire-related science is all we do. LANDFIRE's suite of tools, models and digital map layers—the first complete, nationally consistent collection of resources with an ecological foundation—are valuable resources for those working on land management issues, scenario planning and budgeting, whether fire-related or not. Our models and spatial layers have been used in numerous conservation applications as varied as analyzing the impact of habitat fragmentation on bobcat populations to developing state-wide forest assessments.

Success Story

The Cherokee National Forest needs active management, prescribed fire, invasives treatments, and tree planting. Ecosystem restoration is important, but contentious issues about where and how much had stalled planning and action for nearly a decade. It was gridlocked, no one was talking to anyone else, and all parties were desperately frustrated.

Katherine Medlock, The Nature Conservancy
East Tennessee Program Director

To break this gridlock, Medlock joined Forest Supervisor Tom Speaks and his staff to convene the Cherokee National Forest Landscape Restoration Initiative. A steering committee representing dramatically diverse interests spent months working to find a process that would break the stalemate. LANDFIRE was part of the solution they found.

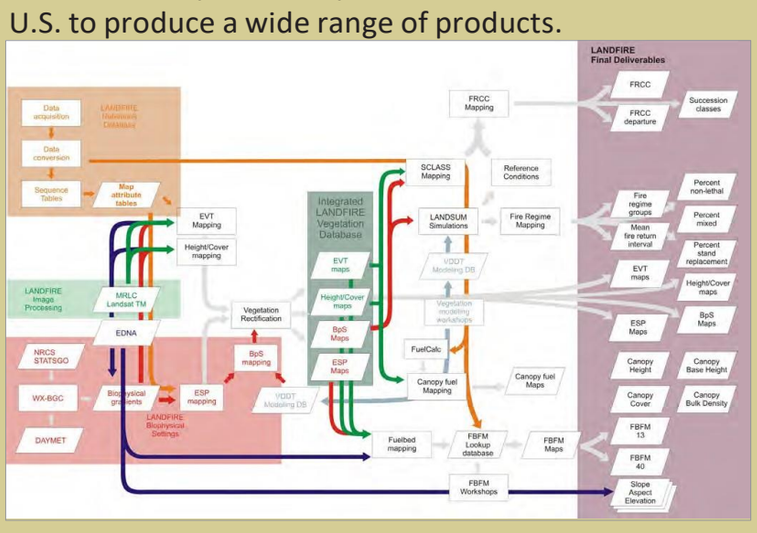
They took LANDFIRE's national datasets and customized them for local use. The analysis software, working in real time, enabled the group to ask questions and run scenarios with results in under a minute. Each proposed management option was tested, allowing all stakeholders' ideas to b e considered equally and openly—the committee both envisioned the future and dispelled the mistrust that had built over many years. The combination of science and a dynamic evaluation/planning process created the foundation for developing common language and nomenclature, testing scenarios, reaching consensus and designing an action plan.

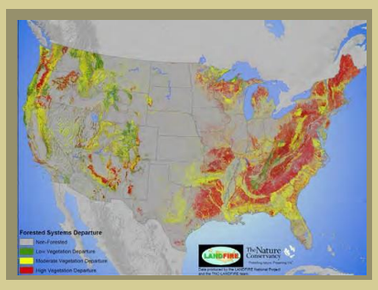
Working with the Forest Service, the committee identified and prioritized restoration needs, and designed a robust public participation component. The resulting recommendations are in the Initiative's report Recommendations to the Forest Service for the North Zone (Watauga and Unaka Districts) of the Cherokee National Forest, delivered in February 2012.

This report is available at http://www.communityplan.net/cherokee/report/CNFLRI_Report_2_10_2012_Final.pdf

LANDFIRE Products & Tools

LANDFIRE acquires and processes data from the entire U.S. to produce a wide range of products.





In addition to maps and data layers, LANDFIRE provides a wide range of tools, many of which are customizable. Among the most popular are the GIS data access tool, state-and-transition modeling, vegetation departure calculator and the Biophysical Settings model search.

More about LANDFIRE

For data, tools, case studies, videos and more, visit LANDFIRE on the Conservation Gateway (http://nature.ly.landfire) or at the official LANDFIRE site (http://www.landfire.gov)