

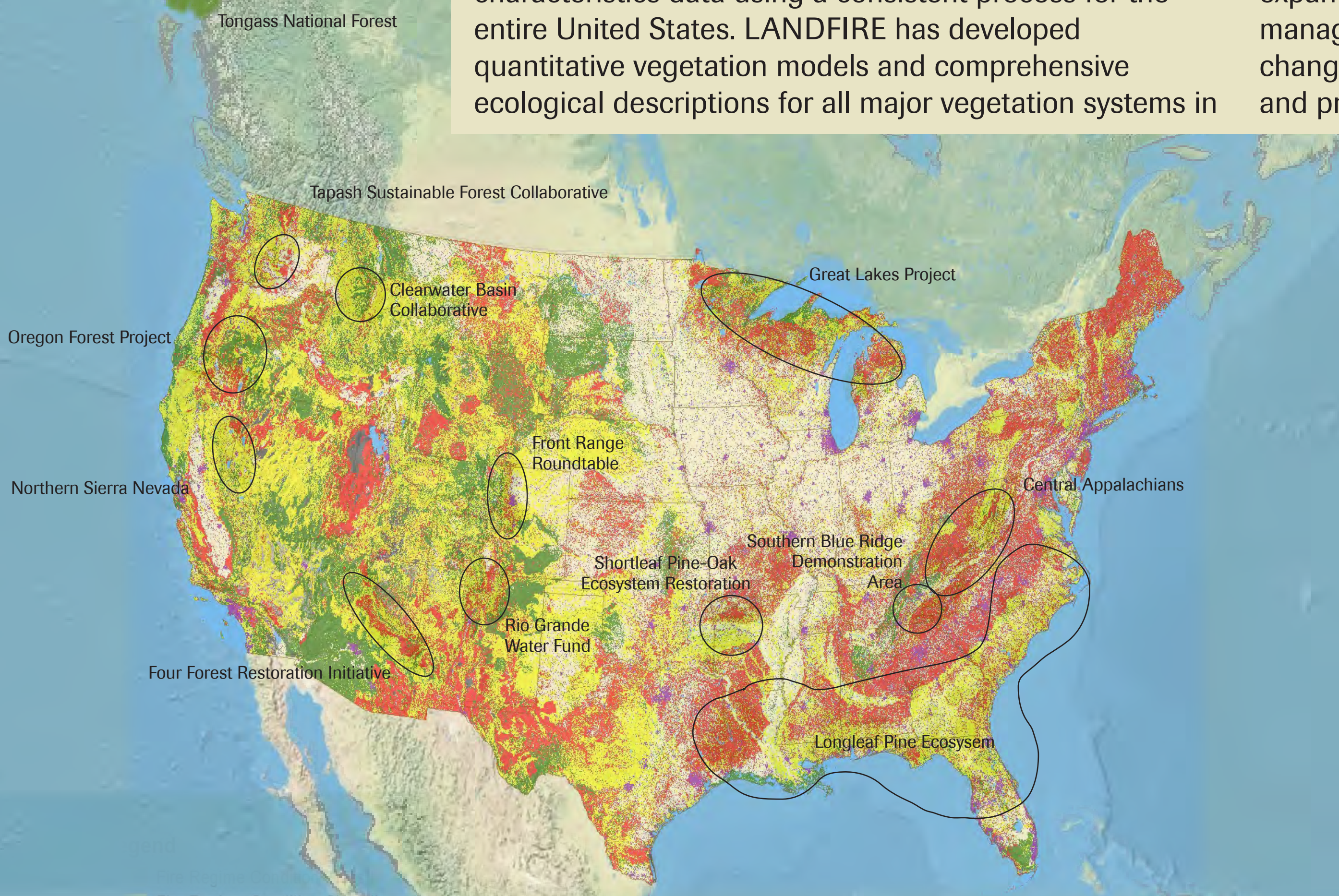
LANDFIRE

A Tool for Restoring America's Forests



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 has developed quantitative vegetation models and comprehensive ecological descriptions for all major vegetation systems in

the country, and a suite of GIS tools that help managers make the most of these powerful products. The suite of tools continually evolves and the scope of the project has expanded to uses beyond natural resources and fire management—to carbon sequestration planning, climate change research, 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; therefore it can support the Fire Learning Network landscapes, make the case for restoration across boundaries and ownership, and support the Restoring America's Forests goal of being "the go-to forest restoration organization."

Why LANDFIRE?

In 2002, two General Accounting Office (GAO) reports found that adequate evidence was not available to make informed decisions regarding fuels reductions and stated that "...on the basis of 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." In response, in the past decade LANDFIRE has mapped more things fire and vegetation and probably has a stronger set of support tools than any other US-centric program. Perhaps more importantly, LANDFIRE helps set the stage for collaboration

by providing science-based information upon which to develop land management plans.

Looking Ahead

LANDFIRE is unique among large ecological datasets in that it continually refreshes and remaps data—we will deliver data representing vegetation/fire/fuels characteristics current to 2012 this year. All indications are that the program is delivering the country's first "Encyclopedia of Ecosystems" with its models and descriptions. The first major rewrite of Biophysical Settings is underway; LANDFIRE will deliver those data during the program's next phase.

Challenges

Our greatest challenge is our name. 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. 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. It needs prescribed fire, invasives treatments and tree planting. Ecosystem restoration is important here. 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.

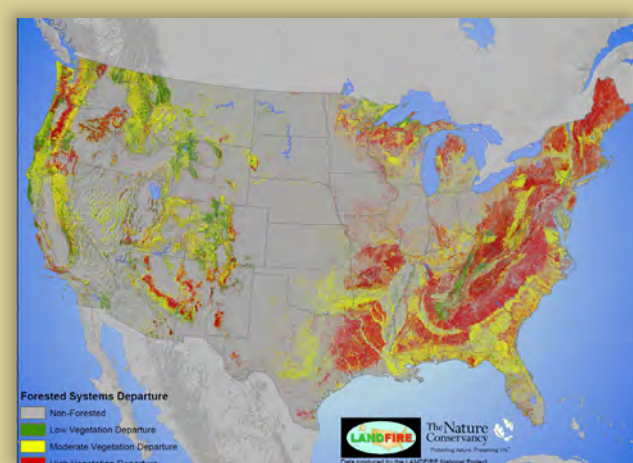
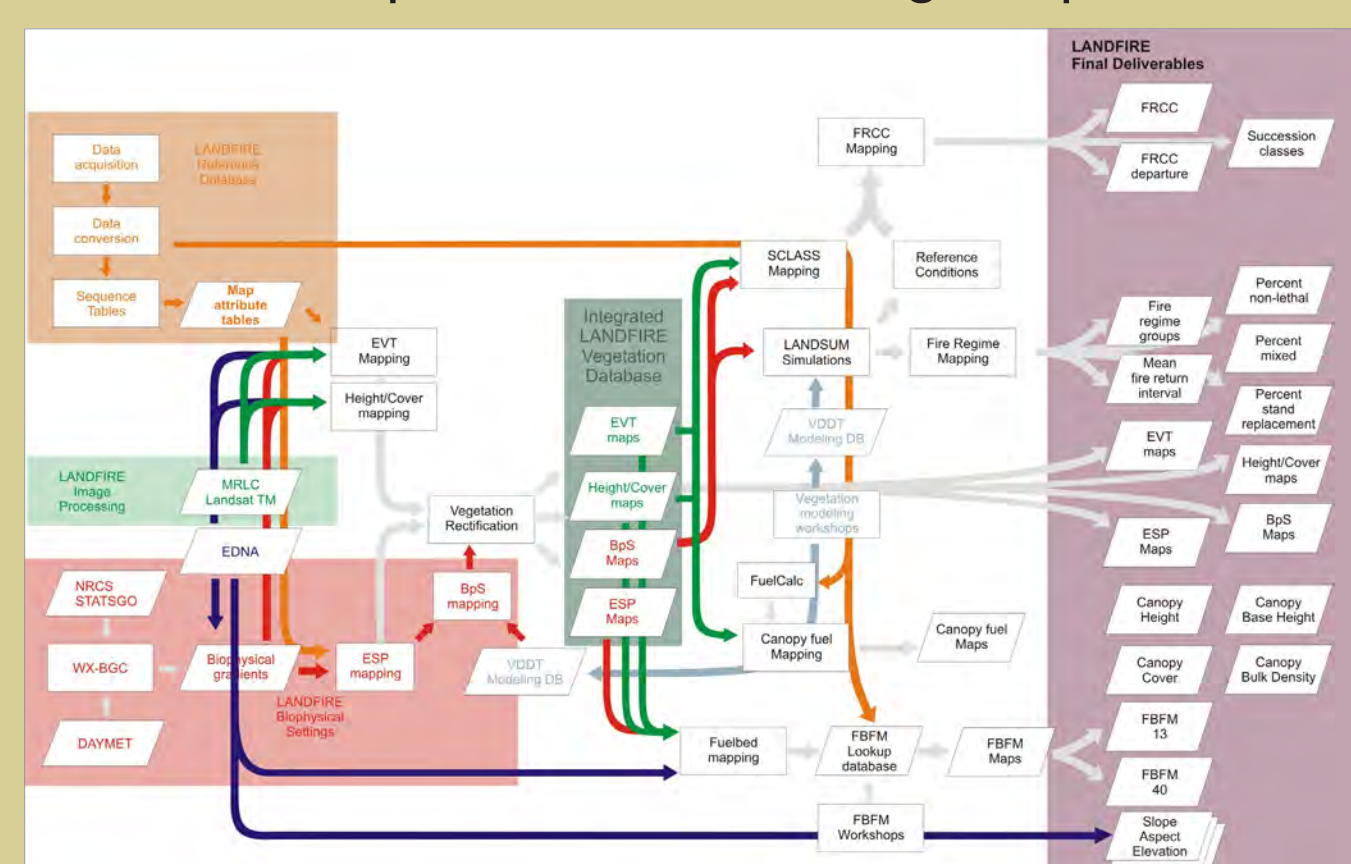
They took LANDFIRE's national datasets and customized them for local use. The analysis software, working in real time, enabled the group to ask questions and run scenarios with results in under a minute. Each proposed management option was tested, allowing all stakeholders' ideas to be considered equally 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/chokeokee/report/CNFLRI_Report_2_10_2012_Final.pdf

LANDFIRE Products & Tools

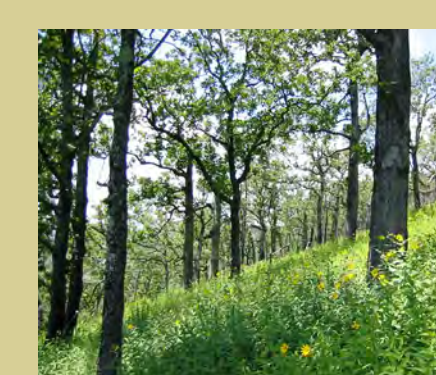
LANDFIRE acquires and processes data from the entire U.S. to produce a wide range of products.



In addition to maps and data layers, LANDFIRE provides a wide range of tools, many of which are customizable. Among the most popular tools are a GIS data access tool, fire regime condition class mapping tool, state-and-transition modeling, vegetation departure calculator and the biophysical settings (BpS) 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>)



USFS/John Andre



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