



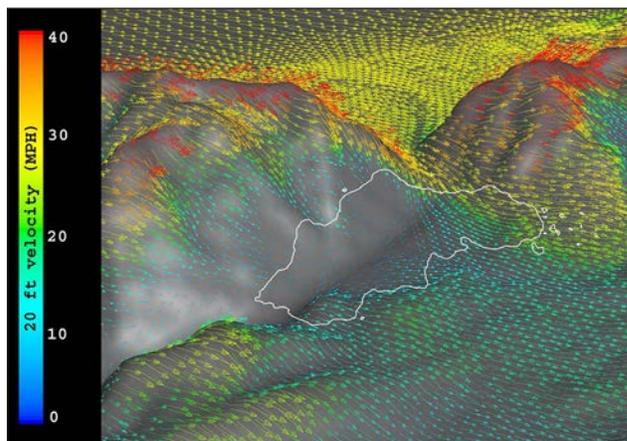
Fire and Fuels Research *Science Delivery*

The results of Forest Service fire research help society address the on-going challenges of living with wildland fire.

Background

“Science Serving Society” is the motto for USDA Forest Service Research & Development. Forest Service fire scientists, analysts, and technology transfer specialists work to put science in the hands of managers, decision makers, policy makers, homeowners, and communities.

The results of Forest Service fire research come in many forms, from user-friendly software and data to real-time support of trained analysts on active wildfires to educational materials for school children.



Sample output from WindNinja, a program that models wind effects on fire behavior.
Credit: Jason Forthofer, USDA Forest Service

Research Highlights:

- **Smoke forecasting systems:** Even low-intensity prescribed fires can have adverse effects on air quality and human health. Smoke modeling tools integrate meteorological data, cutting edge smoke science, and fire behavior predictions to help fire managers schedule essential prescribed burns to minimize these health impacts.
- **Decision support for treating wildland fuels:** Forest Service research provides methods to answer questions such as:
 - Which communities are most at risk to fire?
 - What fuel treatments will be most effective at reducing the risk of severe fire?
 - How can forests be restored to a healthier condition where fire plays a positive role?
 - How and where should scarce funds be best invested to reduce the negative consequences of fire?
- Fire and fuels research provides the scientific foundations to a *National Cohesive Wildland Fire Management Strategy*, a cross-jurisdictional strategy to restore resilient landscapes, create fire-adapted communities, and respond to wildfire

