



# Navigating the Future of Prescribed Fire: Workshop Insights & the Essential Role of LANDFIRE

March, 2025

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**QUICK SUMMARY:** Given the current state of our forests, the planning and execution of prescribed burns are critically important. For five days in January 2025, nearly 150 US fire professionals met to prepare for the upcoming prescribed fire season and learn from some of the most skilled fire professionals in the country. This gathering provided a unique opportunity for both newly hired and experienced specialists to make progress on their burn plans, collaborate and learn, and gain invaluable insights from some of the most seasoned fire experts in the nation.

To restore forest ecosystems and reduce wildfire risk to communities, US land managers and scientists overwhelmingly agree on the need for an increased use of prescribed fire. While achieving these ecological improvements in fire-deficient ecosystems may seem straightforward on paper, the reality often demands months or even years of meticulous planning that includes the creation of thoughtful, comprehensive burn plans.

Creating a solid burn plan demonstrates that burn bosses have done their due diligence, but it also requires them to



Figure 1: Typical scene from a prescribed fire

demonstrate a multitude of skillsets, have experience with in-depth contingency planning and find resources to provide thorough, expert review. One critical resource that burn professionals rely on is LANDFIRE. To effectively simulate the scenarios within fire modeling programs, users need up-to-date, continuous geospatial data, especially as insect outbreaks, drought mortality and other disturbances become more common on the landscape.

LANDFIRE has consistently responded to this need by providing current, annually updated products. For example, LANDFIRE's fuels products include current information on surface and canopy fuels - key inputs that allow for the calculation of important metrics such as fire spread rates and flame lengths. Without this data, fire modeling programs could not run, and fire professionals would have fewer tools for prescribed (and wildfire) fire scenario testing.

**Making Progress on Burn Plans:** Because burn plans serve as the foundation for managing implementation from start to finish, creating a well-designed burn plan is crucial. Burn plans typically include simulations to model a variety of scenarios with inputs that describe key factors affecting burn conditions.

Scenarios can include:

- **Aviation planning:** How to manage risk and provide safety to personnel conducting a prescribed burn



Figure 2: Prescribed fire professional using driptorch

- **Contingency planning:** What to do if the public are encountered on a prescribed burn
- **Emergency planning:** Under what conditions should a prescribed fire be “declared” a wildfire?
- **Values at risk:** How to reduce potential impacts to human infrastructure
- **Smoke planning:** Challenges when managing public perceptions and concerns over smoke, including smoke from a fire that may have been burning for 4-5 weeks

Two commonly used fire modeling programs that were demonstrated at the workshop include:

**IFTDSS:** Interagency Fuels Treatment Decision Support System: Typically used in prescribed fire planning to model fire behavior under various conditions,



Figure 3: Prescribed fire in the pine

manage risk and evaluate fuel treatment effectiveness.

**Behave:** An aspatial modeling system used by prescribed fire professionals to predict fire behavior and effects under different conditions.

While each fire modeling program takes a different approach to simulating fire behavior, one common thread unifies them all: their reliance on LANDFIRE data and products. Perhaps National Park System (NPS) Employee and Course Coordinator, Jen Anderson said it best:

*“I couldn’t do my job without LANDFIRE, well. . . actually I could, it would just take me ten times as long.”*

**Time to Learn and Work:** Workshop organizer and Assistant Director of the National Interagency Prescribed Fire Training Center, Phil Graeve commented *“There’s a time for learning and a time for working.”* However, this workshop provided dedicated time for both.

One attendee, new to writing burn plans commented on the value of this workshop: *“This experience set the foundation for my*

*career as a future burn boss. I’m leaving the workshop feeling more experienced and ready to write my own burn plan.”* Another commented: *“This workshop allowed me the opportunity to learn about other people’s burn plans. Learning from their successes and challenges has been a real eye opener. After talking to some of the people here, I can pick the best tactics that have worked well for them and adapt them in my own way.”*

Opportunities like the Prescribed Fire Workshop provide a unique opportunity for in-person, cross-boundary collaboration, networking and technical support.

Building on its long history of supporting the fire community by providing high-quality geospatial products, LANDFIRE is looking toward the future with a renewed commitment to providing the best products that meet the evolving needs of our growing, diverse community.

**Don’t Miss It:**

- September 24: LANDFIRE Office Hour  
Topic: IFTDSS & LANDFIRE
- Have questions? [helpdesk@landfire.gov](mailto:helpdesk@landfire.gov)
- Check out our YouTube Fuels Playlist