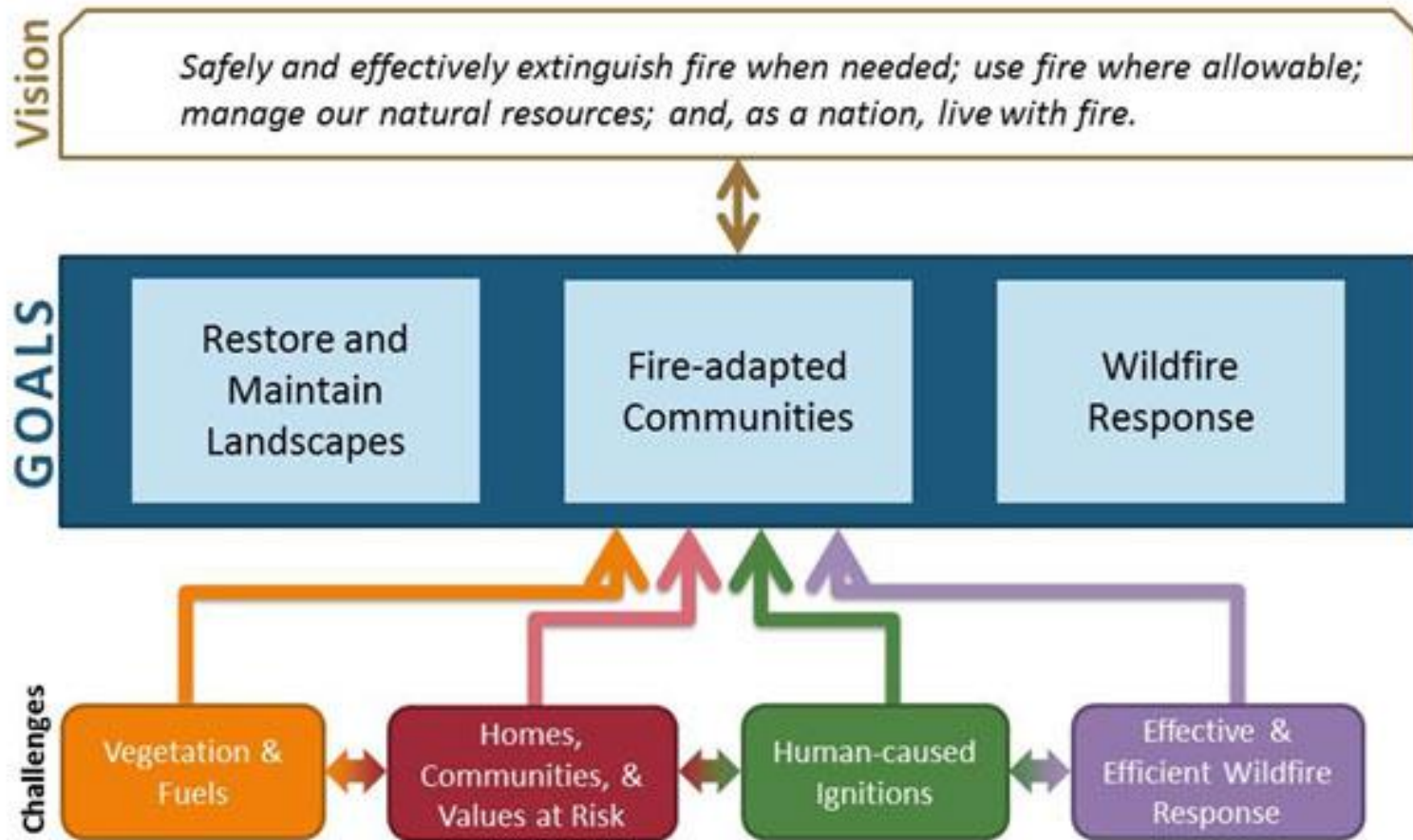# Introduction: The National Cohesive Strategy and the purpose of the workshop series

National Cohesive Wildland Fire Management Strategy

Science Analysis Report: Application to the Southeast Region

January, 2014

The National Cohesive Strategy (Three Goals)

- **Restore and maintain landscapes**: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.

- **Fire-adapted communities**: Human populations and infrastructure can withstand a wildfire without loss of life and property.

- **Wildfire response**: All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

Vision, Goals, Challenges

Vision: Safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and, as a nation, live with fire.

GOALS:
- Restore and Maintain Landscapes
- Fire-adapted Communities
- Wildfire Response

Challenges:
- Vegetation & Fuels
- Homes, Communities, & Values at Risk
- Human-caused Ignitions
- Effective & Efficient Wildfire Response

Report and Resources

- Overview and Background: http://forestsandrangelands.gov

- National Cohesive Wildland Fire Management Strategy and Risk Analysis Report (National Strategy)
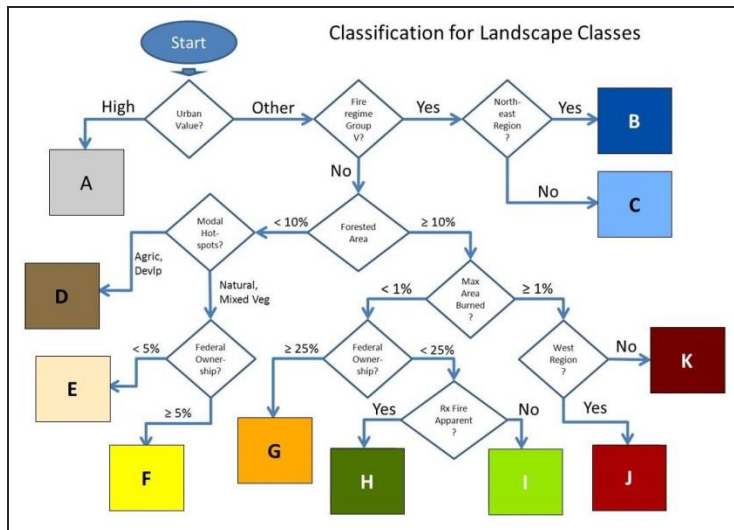
- Southeast RSC
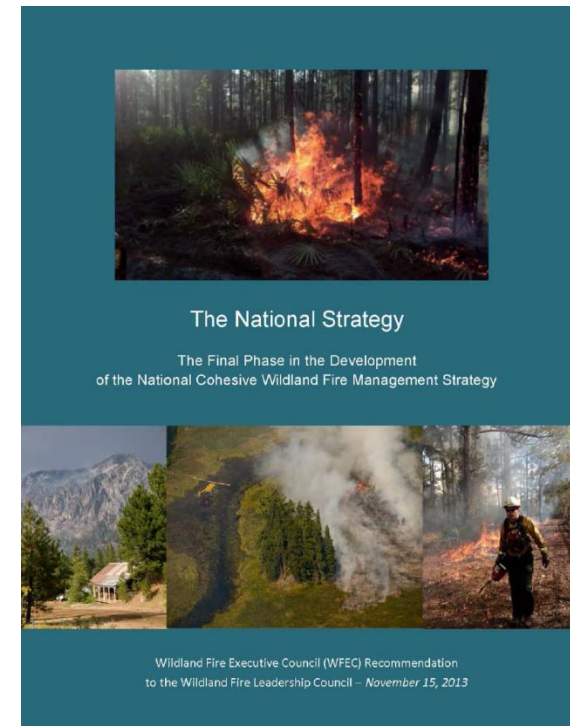
The National Science and Analysis Team (NSAT)

Phase III Contributors

- Led by Danny C. Lee (USDA Forest Service) and Thomas M. Quigley (METI Corporation)
- Included over 60 individuals from various agencies, organizations and universities.

The National Analysis

- Structured scientific analysis
- Included over 100 different data sources to thoroughly examine wildland fire issues across the Nation
- Interactions with Regional Strategy Committees (RSCs)
- Allowed science-based insights and recommendations from a national perspective.

The Southeast Workshop Series

To provide an **overview of the analytical methods and tools** used in the National Analysis and an introduction to **interacting with the information**

Workshop 1: Broad overview of process, data and methods

- Provide transparency in the data and science products
- Explore data in the Southeast using different methods
- Learn about tools and methods for regional application

Workshop 2: Regional application of data and tools

- Using tools to use products from National Analysis with regional knowledge and datasets
- Focus on questions related to issues in the Southeast

The Southeast Workshop Series

To provide an **overview of the analytical methods and tools** used in the National Analysis and an introduction to **interacting with the information**

Workshop 1: Broad overview of process, data and methods

- Provide transparency in the data and science products
- Explore data in the Southeast using different methods
- Learn about tools and methods for regional application

Workshop 2: Regional application of data and tools

- Using tools to use products from National Analysis with regional knowledge and datasets
- Focus on questions related to issues in the Southeast

# Workshop 1

What it is

- Broad overview and big picture
- Exposure to *some* of the data used in science analysis
- Some hands-on experience

What it isn't

- In-depth class on statistical methods (Bayesian Statistics, cluster analysis, etc.).
- Detailed training on every dataset used in analysis

Exploring Relationships

Exploring data may inform a current understanding or reveal new relationships or interactions

Average County Area Burned by Large Fires
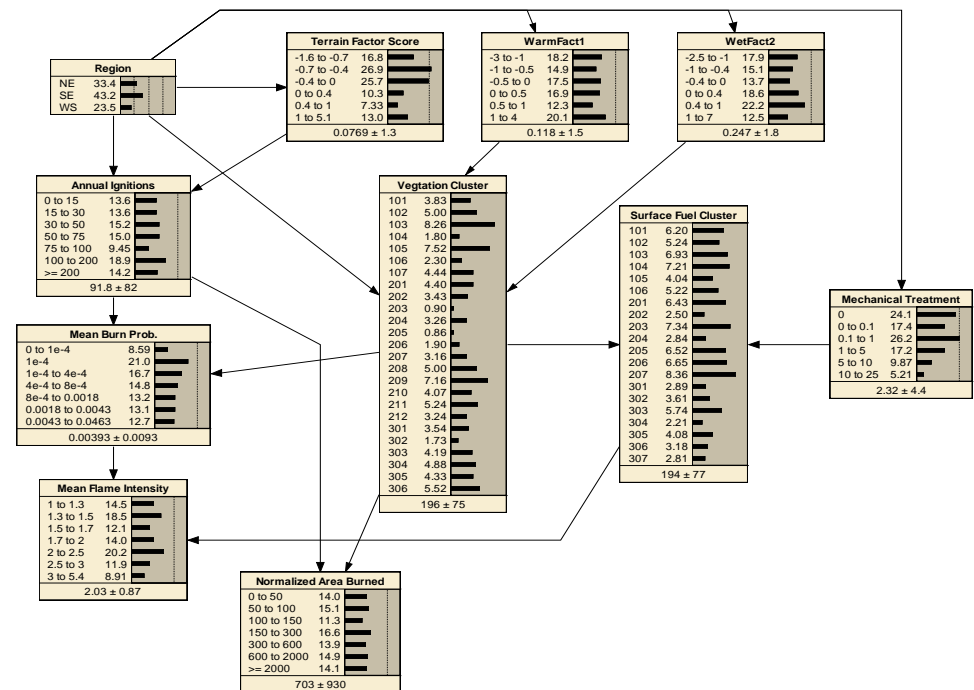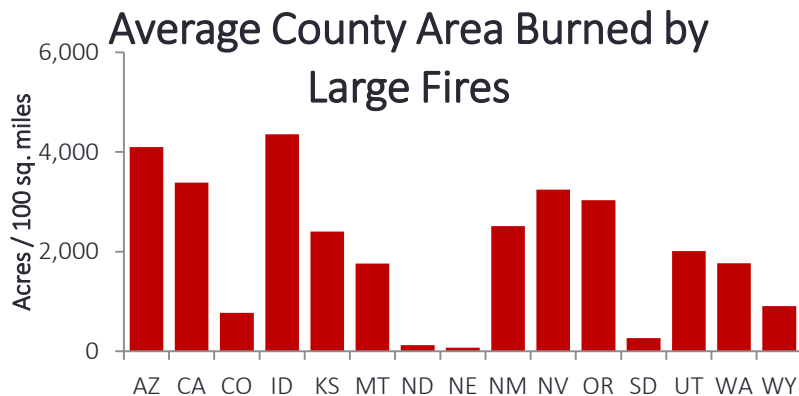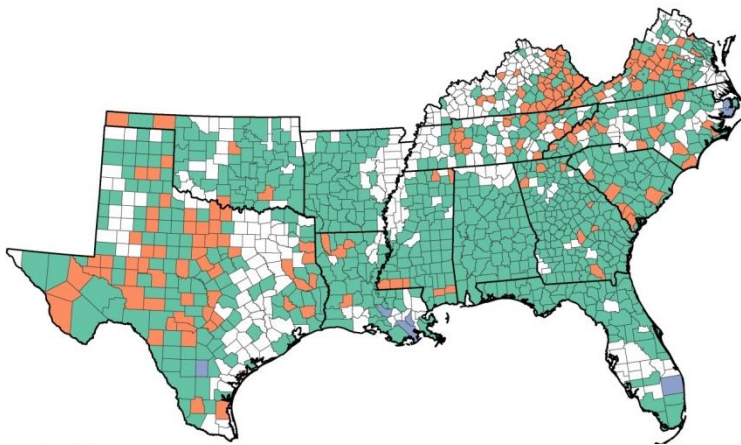
Addressing Questions in the Southeast

- After an introduction to the methods and tools we will focus on more specific questions related to issues in the Southeast

- Using information and tools from the National Analysis to address concerns within Regional, State, and Local agencies

- Incorporating other regional or organizational information, expertise, and data

Agenda

- Today:
  - The National Science Analysis
  - Preparing Data for Analysis
  - Application of Products
  - Basics of Belief Nets
- Tomorrow:
  - Exercise #1: Pivot Tables
  - Exercise #2: Naïve Networks
  - Exercise #3: Bayes Networks
  - Wrap-up