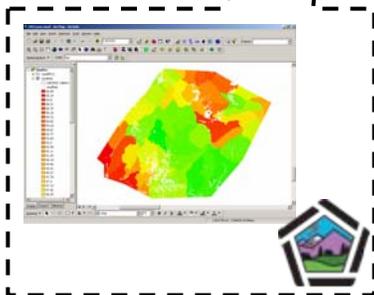
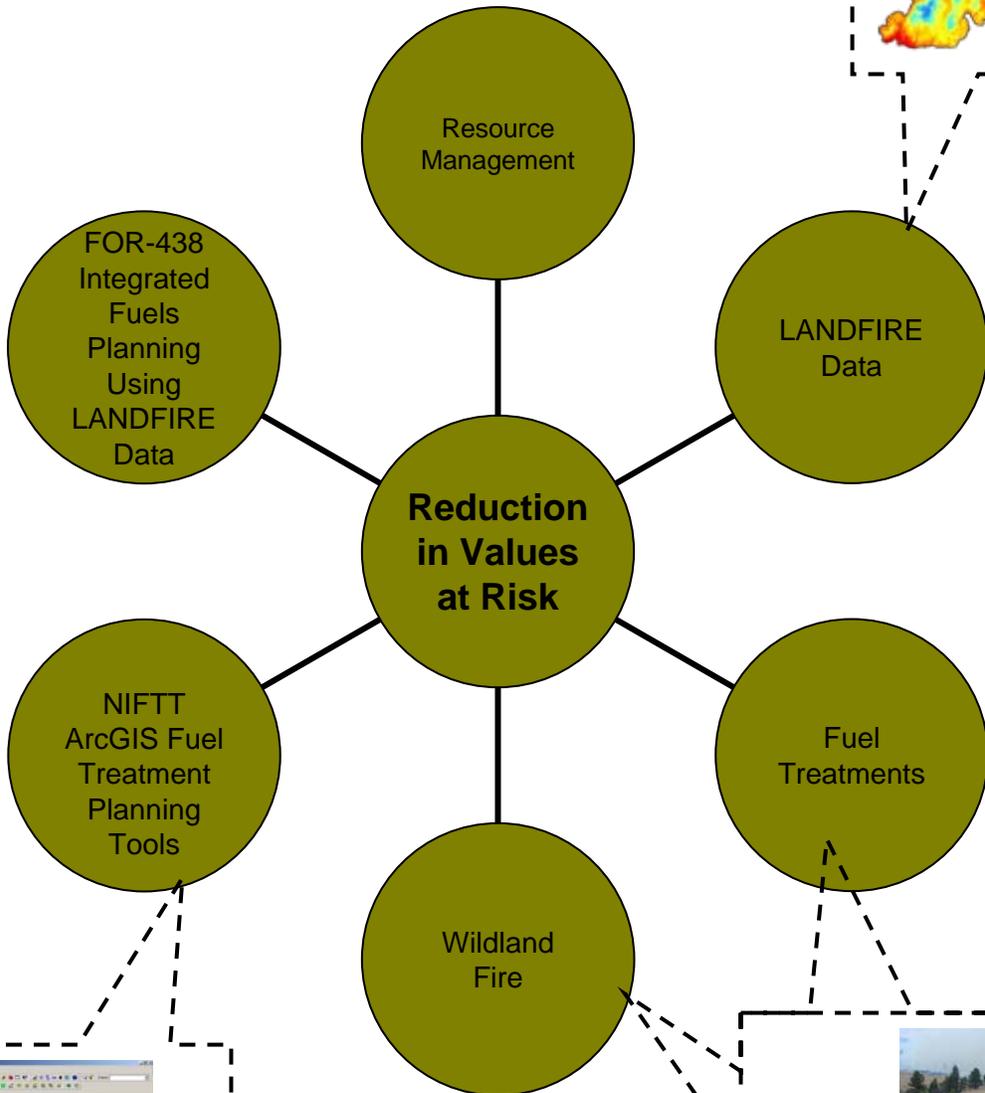
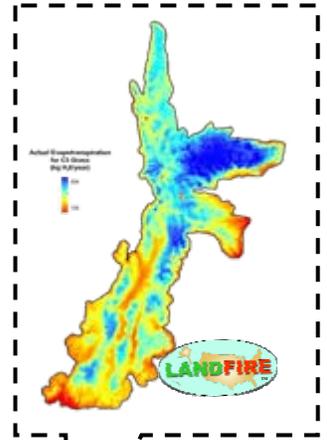


Integrated Fuels Planning Using LANDFIRE Data

National Interagency Fuels Technology Team



FOR - 438 Basic Integrated Fuels Planning Using LANDFIRE Data

Course and Guidebook to provide a framework and spatial tools for conducting integrated fire, fuels, and resource planning



Course objectives

Upon completion of this course the student will be able to:

1. Identify reports, policy, law, and plans that provide context for integrated fuel planning and accomplishments on federal lands and implications to state and private.
2. Apply a five-step Integrated Fuels Planning Process using LANDFIRE and other data in conjunction with spatial planning tools to identify, evaluate, prioritize, and change landscape conditions to achieve desired fire behavior and fire effects or to reduce ecological departure.
3. Conduct and interpret landscape analyses of fire behavior and effects, fire regime condition class (FRCC), wildland urban interface (WUI), and resource values within the framework of the five-step process

Guidebook Contents

Unit 0: Introduction

- Course Objectives.
- Expectations of Students and how they will be evaluated.
- Discuss the National Interagency Fuels Coordination Group's (NIFCG; www.nifc/nifcg) relationship to The National Interagency Fuels Technology Team (NIFTT), the LANDFIRE Project and the history of course development.
- Describe policies and guidelines for integrated fuels planning relative to the role of science, collaboration, and LANDFIRE data.

Unit 1: Policy and Law

- Discuss National policy and interagency direction for hazardous fuel planning and restoring ecosystem health in fire adapted ecosystems.
- Describe the qualifying criteria for applying the Healthy Forest Initiative and the Healthy Forest Restoration Act.

Unit 2: Integrated Fuels Planning Process

- Discuss the need for Integrated Fuels Planning.
- Describe the Integrated Fuels Planning process.

Unit 3: LANDFIRE Data Update & NIFTT Spatial Tools

- Discuss the current status of LANDFIRE data.
- Describe the LANDFIRE Data Access Tool and the four NIFTT spatial tools and their relationship to the Integrated Fuels Planning process.
- Prepare for course exercises.

Unit 4: Identify - Analysis Area and Spatial Data

- Interpret line officer direction for the Color Country.
- Identify issues, collaborators, project boundary, and available data.
- Prepare data for analysis (localize, reporting units).

Unit 5: Analysis - FRCC Mapping Tool

- Understand the basic functionality of the FRCC Mapping Tool, how to operate it, and how to interpret data inputs and outputs. Unit 5 will also provide an introduction to conducting data interpretation for stand- to landscape size analysis areas, which will be useful for learning the 5-step fuels planning process taught in the *FOR438* workshop.

Unit 6: Analyze Step – Fire Behavior and Effects

- Describe Relationship of fire behavior and effects in relation to communities, the environment and FRCC.
- Discuss scale of spatial fire behavior and effects, measures for use in analysis, and models for predicting outcomes.
- List and describe inputs and outputs of the Fire Behavior Assessment Tool (FBAT).
- Describe and apply the Fire Behavior Assessment Tool (FBAT) in an ArcGIS exercise to predict fire behavior and effects and check results.
- Interpret the management implications of inputs and outputs.

Unit 7: Prioritize – Composition, Percent Composition, Area Weighted Average, Integration

- Describe the functions, products and benefits of the Multi-scale Resource Integration Tool (MRIT).
- Design Composition, Percent Composition, Areas Weighted Average and Integration scenarios for prioritizing landscapes.
- Apply the Composition, Percent Composition, Areas Weighted Average and Integration command.
- Interpret Composition, Percent Composition, Areas Weighted Average and Integration analysis results.

Unit 8: Change Step – Uniform Change

- Define Change and determine when to use Uniform Change versus Variable change.
- Identify and describe how the Change step in the Integrated Fuels Planning Process applies a uniform change to an area for one or more attributes.
- Develop rules for change of attributes to achieve objectives (ground check, management treatment, and update).
- Describe and apply the Area Change Tool (ACT) in ArcGIS to change data and verify the outcomes.

Unit 9: Change Step – Variable Change

- Identify and describe the Variable Change step in the Integrated Fuels Planning Process, when applying a variable change to an area for one or more attributes.
- Select methods for simplification of combinations and for rule assignment.
- Develop rules for change of attributes to achieve objectives (upgrade, update, and management).
- Describe and apply the Area Change Tool (ACT) in ArcGIS to change data and verify the outcomes.
- Interpret management implications of inputs, changes, and outputs.

Unit 10: Evaluate step - Pre- and Post-Change Evaluation

- Identify and describe the Evaluate step and applications for evaluation.
- Apply FRCCMT, FBAT, and MRIT in determining post-change outcomes and verify results.
- Evaluate if changes reflecting treatments to achieve objectives were effective (after completion of this objective students will take final).

Summary Diagram of 5-step integrated Fuels planning process

