

Instructions for Workshop Leaders

Workshop description

Title: Defining Fuel Treatment Success: Workflows, Metrics, and Evaluation

Fuel treatments are a key strategy for managers to mitigate threats to firefighters and communities in ecosystems that have increasing amounts of wildland-urban interface and declining forest diversity and health from insect outbreaks, diseases, fire suppression, or climate change. Fuel treatment goals often focus on sustainability, desired future conditions, adaptive management, and ecosystem resiliency. However, these terms are difficult to define and complicate prioritization, planning, and evaluation of fuel treatments. Often it seems like objectives are clear, but when it comes time to assess if or how well objectives were met, the process becomes complicated and bewildering with no clear process or workflow to demonstrate success. This can leave managers vulnerable to litigation. In this interactive workshop, we will discuss current processes used in fuel treatment analysis. Building on the experience of our participants, we will come up with more clearly defined workflows, metrics, and concepts to help us evaluate fuel treatment success.

A mixture of managers and researchers is encouraged. Contacting registrants prior to the workshop to identify participants willing to share real-world case studies of fuel treatment projects is helpful.

Workshop instructions as provided are designed to be completed in four hours with 20-32 people: (5-8 people/4 groups). Total time required and number of facilitators needed will increase as the number of groups increases. A smaller event with only 2 or 3 groups may facilitate longer and more-in-depth discussion.

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Start: 1 pm

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Overview

This workshop is intended to be collaborative allowing participants and leaders to learn from each other's varying experiences and expertise. Exercises are intended to serve as a structured brainstorming session to solve the very difficult problem of assessing fuel treatment success. Workshop leaders should not limit discussion and encourage sharing from a diversity of viewpoints. Workshop structure is intended to foster open constructive conversation. Facilitation should be with a light hand by clarifying terms and objectives where helpful and focusing the groups when necessary. Facilitators need to keep the activities on track with time points specified in this document.

Necessary materials:

- Projector
- Laptop(s)
- SD card reader

- Step stool (to take photos of workflows from overhead perspective)
- Digital camera(s) w SD card
- Small dry erase boards - one for each group
- Dry erase markers
- Labeled workflow cards (Each group needs at least one of the *Start: goal, Compare, Target values, Evaluate success, Define treatment, Define metrics, Calculate metrics, Current conditions, Future conditions, Alternate, and Evaluate* cards; Each group needs at least three of the *Data and Analysis* cards)
- Blank workflow cards
- Post-it notes (Multiple colors to keep track of various pieces of workflow brainstorming sessions)
- Yarn – 2 colors (1 for connections, the other for highlighting)
- Scissors
- Tape
- Thick Sharpies
- Timer(s)
- Empty box (to collect self-rating cards)
- Packets of materials for each participant (good to make extras)
 - Packets include: workshop leaders/facilitators biographies and contact information, brief workshop schedule, scenario descriptions, workshop terminology definitions, and workshop evaluations

Part 1: Getting started -- 25 minutes

1) Introductory powerpoint (10 minutes)

2) Ice breaker exercise (5 minutes)

3) Scenario selection (10 minutes)

Filling the room

Directions to be displayed on a powerpoint slide as people come in:

Welcome, please fill out a name tag and a self-rating card, your self-rating card put card in box.

Workshop team should:

- Number name tags prior to the workshop, randomize the order of the name tags available to participants
- Make sure participants also fill out a rating card and put it in the designated box (these will help with group assignments)
- Lead a brief introduction of the workshop leader, facilitators, and other helpers (tell participants that leader and facilitator biographies and contact information are provided in their packet of materials)

Introductory Powerpoint (10 minutes) -- Workshop leader

During this introduction (slides 1-7 in the powerpoint), workshop team sorts through self-rating cards grouping them into a mixture of managers, researchers, and students.

Ice breaker exercise (5 minutes) -- Workshop team

Facilitators should:

- Organize group in a u-shape around the end of the table
- Lead introductions (include yourself), have each participant introduce themselves and share one interesting thing about themselves
- Keep a list of participant names and interesting facts (will be used later)

Scenario selection (10 minutes) -- Workshop team

Workshop leader advance the Powerpoint to the scenarios slide.

Groups read scenario descriptions (available in the material packet) and decide their choice

Facilitators should:

- Keep out of the discussion but encourage an answer
- Give participants 5 minutes to read, 5 minutes to discuss; alert participants at 8 minutes that there is only 1 minute remaining

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Time: 1:30 pm

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Begin Exercises

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Each group goes through all three exercises using their chosen scenario. The process is additive; detail is added in each exercise.

Exercise 1 -- 60 minutes

1) Task (15 minutes)

2) Group presentations (30 minutes)

3) Wrap up (15 minutes)

Task (15 minutes) -- Workshop team

Each group constructs a workflow by ordering the labeled workflow cards and using string or arrows to connect workflow actions.

Facilitators should:

- Help the group with the process -- try to keep them on task, encourage broad thinking about the process without worrying about details
- Identify the participant with the lowest odd number on their name tag, this person will present to the larger group what the small group has come up with; alert the presenter early on in the workflow process so they can prepare (take notes, etc.)
- Keep track of time -- give a 3 minute warning at 10 minutes into the process
- Take an overhead view photo of the workflow cards and connections (use the step stool)

- Load image on to the computer hooked up to the projector

Group presentations (30 minutes, 7 minutes/group) -- Workshop team

Participant with the lowest odd number on their name tag presents the small group workflow to the large group.

Facilitators should: give a 1 minute warning after 5 minutes

Wrap up (15 minutes) -- Workshop team

Leader conducts a wrap up discussion with the large group using the following questions as a discussion guide:

- How easy was it to achieve consensus?
- What challenges did your group have?
- What are the key similarities between groups?
- What are the key differences between groups?
- Does your agency's current process for fuel treatment analysis work well?
- Is it important to be able to define a workflow process?

Facilitators should: give a 3 minute warning after 10 minutes

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Time Check 2:30 pm
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BREAK -- 10 minutes

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Time Check 2:40 pm
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Exercise 2 -- 90 minutes

- 1) Task (30 minutes)**
- 2) Group presentations (40 minutes)**
- 3) Wrap up (20 minutes)**

Task (30 minutes) -- Workshop team

Each group continues working on their workflow by rearranging, adding, and/or swapping labeled workflow cards and arrows or string; groups may build on existing workflows or scrap and redesign workflows.

Facilitators should:

- Help the group with the process -- try to keep them on task, encourage the group to pick a small set of metrics that are essential
- Encourage the group to add metrics first then target values, emphasizing that ballpark target values are fine
- Identify the participant with the lowest even number on their name tag, this person will present to the larger group what the small group has come up with, alert the presenter early on in the workflow process so they can prepare (take notes, etc.)
- Give the group a pop quiz on interesting facts about group members
- Keep track of time -- give a 3 minute warning at 25 minutes into the process
- Take an overhead view photo of the workflow cards and connections (use the step stool)
- Load image on to the computer hooked up to the projector

Group presentations (40 minutes, 8 minutes/group) -- Workshop team

Participant with the lowest odd number on their name tag presents the small group workflow to the large group.

Facilitators should: give a 2 minute warning after 5 minutes

Wrap up (15 minutes) -- Workshop team

Leader conducts a wrap up discussion with the large group using the following questions as a discussion guide:

- Do we currently have the tools we need?
- Do we need target values for metrics to evaluate fuel treatment success?
- Do you need a metric for each objective?
- Can you evaluate success without a metric?
- Are the metrics that are currently used the best ones?
- Are there metrics we need, but don't currently have?
- What aspects of fuel treatment assessments do these metrics address well?
- Are there aspects that we do not currently address?
- What are the challenges that we encounter at this step?

Facilitators should: give a 3 minute warning after 12 minutes

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 Time Check 4:05 pm
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BREAK -- 10 minutes

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 Time Check 4:15 pm

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Exercise 3

1) Task (10 minutes)

2) Group presentations (20 minutes)

3) Wrap up (10 minutes)

Task (10 minutes) -- Workshop team

Each group adds sources of uncertainty that might affect workflow (with one color of Post-it), and then the group adds possible solutions to quantify or mitigate uncertainties (with another color of Post-it).

Facilitators should:

- Help the group with the process -- try to keep them on task, remind the group that broad sources of uncertainty and broad solutions are fine
- Identify the participant with the highest odd number on their name tag, this person will present to the larger group what the small group has come up with, alert the presenter early on in the workflow process so they can prepare (take notes, etc.)
- Keep track of time -- give a 3 minute warning at 6 minutes into the process
- Take an overhead view photo of the workflow cards and connections (use the step stool)
- Load image on to the computer hooked up to the projector

Group presentations (40 minutes, 5 minutes/group) -- Workshop team

Participant with the highest odd number on their name tag presents the small group workflow to the large group.

Facilitators should: give a 1 minute warning after 3 minutes

Wrap up (10 minutes) -- Workshop team

Leader conducts a wrap up discussion with the large group using the following questions as a discussion guide:

- Does your agency's current process for fuel treatment analysis adequately address uncertainties?
- Which sources of uncertainty are best addressed by current workflows?
- Which sources of uncertainty are least addressed by current workflows?
- Is this uncertainty communicated well?
- How could we better communicate about uncertainty?
- What sort of approaches could be used to better mitigate uncertainties?
- What are the biggest constraints to successful fuel treatment analysis?

Facilitators should: give a 3 minute warning after 15 minutes

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Time Check 4:55 pm

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Concluding remarks (5 minutes) -- Workshop leader

Wrap up will be the best remembered portion of the workshop. Think carefully and organize your thoughts before you speak and be positive! Focus on the great stuff observed in the workshop and how it represents an important step forward. A few helpful final topics and points are given below.

- Thank everyone for their participation
- Remind participants that fuel is the only side of the fire behavior triangle we can change
- Thinking about and evaluating fuel management strategies is critical to
 - long term safety of the wildland fire community
 - long term sustainability of our ecosystems
- Highlight that the diversity of approaches presented in the workshop illustrates the complexity of the fuels and fuels treatment issue
- Envisioning and measuring success can be done in many different ways

- There is a critical take home message: many aspects of fuel treatment evaluation are still in the “drawing board stage”
- Managers, researchers, and stakeholders need access to that drawing board -- and to be able to work together toward effective solutions

- Today we saw dynamic, thoughtful engagement between managers, researchers, policy makers, and students
- People with diverse backgrounds and responsibilities worked together toward a common goal
- We didn't get bogged down by details or software or data formats
- We thought broadly about what we are trying to achieve and how to get there

- Ultimately, the long-term solutions we are looking for are bigger than any single agency, institution, or group can accomplish alone
- Long-term fuel management and sustainability requires an engaged society -- not just agencies
- The process we participated in today should help us understand each other better and continue to work together creatively toward long-term solutions.

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Time Check 5 pm

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Facilitators should: ask the group to fill out the workshop evaluation form and leave it on the table.

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