



Post Fire Salvage Logging - The Debate

Activity Summary:

The question of whether or not to remove trees after a wildfire is among the most contentious issues related to wildfire management on public lands. This activity:

- Informs participants about the pros and cons of post fire salvage logging.
- Encourages participants to develop fact-based understandings of this complex issue.
- Familiarizes participants with the Forest Service's management process and the important role of public comment.
- Requires basic familiarity with wildfires.
- Can be scaffolded off of the knowledge established during the Forest Systems and Fire Web of Life activities.

Objectives:

By the end of this activity, your group will be able to:

- Define salvage logging.
- Critically assess the pros and cons of salvage logging through examination of seven economic and ecological considerations.
- Use systems-level thinking to recognize the direct (i.e. tree removal limits wildlife habitat) and indirect (i.e. carbon sequestration and climate change) implications of public lands management decisions.

Methods:

Analyzing, comparing, reading, inferring, discussing

Materials:

Print out the seven "management considerations" cards.

Audience:

16 years and older, small to medium group size. If needed, print multiple sets of management considerations cards and divide your group into smaller circles.

Time Considerations:

45 minutes - 1 hour



Background:

Large wildfires are increasingly common in the western United States. In the Pacific Northwest, the size, duration, and number of wildfires are increasing in large part due to climate change. There is a great deal of discussion after major fires about how to best restore the landscape. Post-fire logging (or "salvage" logging) has been a common practice for decades. Yet, few issues in forestry have been as contentious as logging after a wildfire.

Forests that have experienced wildfires are commonly considered "devastated" or at least "damaged." However, in most forest types, wildfires serve important roles such as reducing stand density, increasing biological diversity and increasing soil nutrients. Despite the threats to human life and structures posed by wildfire, not all fires are catastrophes. Disturbances like wildfire are an important characteristic of many ecosystems. However, climate change and a legacy of fire suppression and logging have altered the scale and impact of wildfires. The **CES Forests & Climate Talking Points** provides more relevant climate change and forest fire content on these topics.

The question of whether or not to remove trees after a wildfire is among the most contentious issues related to wildfire management on public lands. This management decision is of particular importance as wildfires become more frequent and cover a higher percentage of public lands.

What does the process normally look like within the Forest Service when deciding whether to proceed with salvage logging? The Forest Supervisor determines the potential net benefits of salvage logging to the national economy as well as the potential net impacts on the sustainability of local and regional economies. This decision must incorporate the best available science and implement best management practices and mitigation measures designed to minimize the negative effects on natural resources. The agency must gather public comments as they determine whether to implement the proposed action, or another action alternative. The Forest Supervisor then selects the alternative that will maximize the net benefits and inform the public of the findings.

Background Reading:

Postfire Logging: Is It Beneficial To A Forest?:

<https://www.fs.fed.us/pnw/science/scifi47.pdf>



Doing the Activity:

1. Ask your group a few open-ended questions to gauge their familiarity with the topic.
 - What are the group's attitudes towards wildfire in general—have they had personal experience with the impacts of wildfires? Smoke? Are they aware of fire's ecological importance? How climate change is altering the role of wildfires on the landscape? If needed, offer a very brief explanation of these trends to establish a shared baseline knowledge among your group.
 - What happens on public lands after a wildfire? Has anyone heard of salvage logging?
 - Group discussion: Salvage logging is the removal of trees from a forested area after a wildfire. Depending on the specifics of the timber sale, salvage logging may remove both live and dead trees or dead trees only. Logging may be a complete clear-cut (as seen in **Post Fire Logging Photo**) or partial, leaving some remnant trees behind. Generally, salvage logging is followed by replanting of seedlings.
1. Citizens Panel intro: Ask the group to imagine they have been invited to sit on a Citizens Panel for the National Forest that surrounds their community. In reality, this type of decision is made by the Forest Supervisor alongside an interdisciplinary team of experts, who asks for public comment. But today, we are imagining that we, as a Citizens Panel, have been given the authority to weigh in on this decision: after a recent wildfire, should salvage logging take place on National Forest public lands?
 - Depending on your location, you may choose to customize this prompt in a variety of ways in order to ground the activity in a local, meaningful example. There may be a recent, nearby wildfire that you can focus your discussion on, or propose a hypothetical wildfire in a nearby National Forest.
2. Explain that the group will be offered a series of considerations and facts from researchers, then asked to discuss and vote on their management decision.



3. Ask your group what kinds of concerns they have, as a community, regarding their public forest after a wildfire has occurred? Consider writing down a few key-words on a whiteboard or your own facilitation notes for reference later. If your group is unsure, provide prompts such as: How might your community depend upon the National Forest? What impact could this burned forest have on your community? What impacts to the forest's health are you anticipating? Guide and prompt your group to include the below considerations that members of your community would likely express:
 - Public health and safety concerns such as removing hazardous trees from trails and communities
 - Erosion from unstable soils and effects on aquatic ecosystems (especially the flow of sediment into streams and its effects on aquatic organisms such as salmon)
 - Retaining a healthy forest structure (snags, logs and remnant trees for wildlife species that require these structures as essential habitat, such as cavity nesting birds and some amphibians)
 - Capturing the economic value of the wood before significant decomposition diminishes its value (Logs lose approximately 20% of their economic value per year)
 - Minimize probability of insect outbreaks among fire stressed trees (bark beetles and wood borers may attack fire damaged trees)
 - Reduce potential for future fire (i.e., a severe re-burn)
 - Ensure rapid forest re-growth (for aesthetic, ecological or economic reasons)
 - Reduce establishment of invasive species (grasses, shrubs, insects, etc.)
4. Group discussion: What role does post-fire logging plays in addressing these concerns? Explain that this type of logging is often considered one of the more controversial forest fire management policies. Remind your group that The Citizen Panel will weigh the pros and cons of this management approach, then vote to decide on the validity of allowing salvage logging in the neighboring National Forest public lands.
5. Ask the group for seven volunteers to present the data to the group.
6. Pass out the seven management considerations cards and as group members to read the considerations aloud to the group.



7. Discuss: There are a variety of ways that you can facilitate the discussion process. Invite the group to break down the arguments further, or share their thoughts with a neighbor. Some participants may have preconceived notions or information that contradicts these facts, in which case you might offer to share the academic studies cited and pivot to invite other participants to share. Before voting, offer a few open-ended questions for your group to reflect on as they digest these considerations: was there one consideration that had the strongest impact on their thinking about the management decision? Was there one that surprised them, that they had not considered, or contradicted their assumptions? Did anyone experience any unexpected emotions or reactions as they heard these facts?
8. Vote: Invite everyone to offer a sentence explanation with their vote. If you think the group will be swayed heavily by one another's opinions or may be more comfortable voting anonymously, have the group vote on slips of paper that you tally. The simplest approach to the voting process would be to only offer "Yes to salvage logging" or "no to salvage logging" alternatives. To incorporate a "management alternative" approach, see the Modifications section below.
 - Your group may draw a variety of conclusions from the information provided. A critical connection to make, regardless of the vote's outcome, is that although the "Citizens Panel" concept was fictional, the value and ability of citizens to participate in these decisions is not. Public comment is, in fact, very powerful.



9. Concluding thoughts:

- There is much at stake in the decisions that are made concerning post-fire management—future fire risk, sustainability of forest ecosystems, local economies, timber-related jobs, stream conditions, etc. Invite the group to reflect on which of these management considerations ultimately weighed the most on their vote. Was there information that was missing or that they would want to explore more deeply? What if the group could have made site visits? Been able to study site-specific data? Knew the exact type of forest and topography of the landscape they were managing? Were there specific stakeholders who are missing from this group that would be critical to forming a meaningful Citizens Panel such as Indigenous groups or underrepresented communities?
- The science informing forest management is never “complete,” it is ever-evolving. However, the scientific basis for making decisions concerning post-fire management has improved dramatically in the past decade. Wildfires are complex and a one-size-fits-all solution to wildfire management is almost certainly unattainable.
- Ultimately, the decision to salvage log or not is closely tied to both public land management goals, ecosystems, and our own communities. There may be particular circumstances when salvage logging may be justified for economic or social reasons, such as if the community is heavily dependent upon revenue tied to timber sales or if there is a particularly high probability of high-consequence re-burn in a given area.
- Bring this exercise into reality: Do we know where these kinds of forest management practices are taking place currently in the region? As wildfires sweep across increasingly large areas of public forests, we will be asked to weigh in on these management decisions more often. We can become more engaged with our national forests by building relationships with U.S. Forest Service representatives and finding our seat at the table. This is a great opportunity to segue into upcoming Broadband engagements, such as a hike, stewardship event, or a call for public comment.

Facilitation Guidelines:

During these types of scenario-based activities, some folks can go down rabbit holes, or overcomplicate the scenario. Consider establishing ground rules at the beginning of the activity:

- Patient, active listening when someone is speaking and respect for differing opinions
- The activity can be paused when necessary to revisit the objective of the activity and refocus
- No personal attacks or judgement statements

**Modifications:**

When the Forest Supervisor considers whether to implement the proposed action or another action alternative. If your group is engaged in a discussion of an imagined alternative, they may be interested in crafting an "action alternative" as a group. Consider incorporating this alternative into the voting process in order to make the activity more closely aligned to the Forest Service's actual decision process.

Curriculum Source Credit:

This activity is adapted from the *NCSR Education for Sustainable Future Curriculum Fire Ecology and Management Series*.