

# Research synthesis shines light on several management options after fires in diverse ecosystems

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No single decision-support system exists for selecting alternatives for postfire management. That thesis is what a recently released report on management after fire hinges upon. The publication, *Effects of Timber Harvest Following Wildfire in Western North America*, tells us that the type of forest landscape determines the ways fire and logging may change an area after a wildfire. The authors, however, hope that public land managers will use the publication to evaluate postfire management options.

The publication's lead author, David Peterson, a biological scientist with the Forest Service's Pacific Northwest Research Station, says that after reading this report, managers will understand several principles pertaining to postfire [timber harvest](#).

"First," explains Peterson, "each [wildfire](#) and management situation is different, and should be evaluated with respect to local soils, vegetation, hydrology, and wildlife—there is no standard formula. Second, if postfire [logging](#) is conducted, the sooner it can be done after the [fire](#), the fewer the negative effects and the higher the value of the wood. And finally, it's critical to consider postfire logging in the context of the entire landscape of the wildfire to minimize the potential effects of logging."

The authors define several principles about the effects of postfire timber

harvest on most landscape:

- Logging can kill naturally regenerating [trees](#) if the soil is disturbed after the trees have been established.
- Crown fire reduces the probability of future fire for years to decades.
- Fire and logging—separately or combined—affect soil properties.
- Severe, large, fires reduce water uptakes by vegetation, causing streamflow to increase and water quality to decrease.
- Short-term effects of removing trees near aquatic systems are mostly negative.
- Most cavity-nesting birds and other animals that live in cavities are impacted by the harvesting of large standing dead trees.

"There has been a lot of controversy about salvage logging over the past decade," says Peterson. "We want to ensure that the most recent scientific information is available for making decisions and determining the value and effects of harvesting trees following wildfire."

Source: USDA Forest Service

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