A discussion of policy issues with respect to mechanical fuel treatments

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The strategies used for managing wildfire by federal and state land management agencies are changing. Even as these agencies continue to maintain a high level of preparedness to fight wildfires and suppress most unplanned ignitions, they increasingly expend effort on proactively altering the composition, structure, and amount of both live and dead vegetation to change potential fire behavior. To a large extent these efforts are focused on changing forest and rangeland vegetation in hopes of changing the behavior of those fires that do start so that they do not grow uncharacteristically large or do damage to valued natural resources or human infrastructure (Western Governors' Association, 2001). Although it is not explicitly stated as such, the goal these agencies are trying to attain seems to be that one day we will manage vegetative conditions and design human infrastructure in ways that make it safe for many, perhaps even most, fires to burn without triggering massive fire suppression efforts because those fires will be smaller and more predictable. Some groups, especially environmental advocacy groups refer to this as, "restoring fire adapted ecosystems" (Hardestry, et al. 2001) and the Forest Service has developed a draft policy describing ecological restoration.

Achieving the objective of allowing fires to burn more feely or at least reducing the unwanted results from unplanned wildfires calls for altering vegetative conditions on a grand scale throughout the western United States (Vissage and Miles 2003). The

National Fire Plan[1] and related Congressional direction e.g., the Healthy Forest Restoration Act of 2003 seek to draw attention to this need for vegetation manipulation and focus federal and state forestry resources on addressing the problem.

The three basic categories of tools available to forest managers for altering vegetative conditions are prescribed fire, mastication or mowing[2], and thinning. The effectiveness of each of these methods in altering the structure of or reducing the amount of ground fuels, ladder fuels, and crown bulk density is different. Consequently, each of these leaves residual stands with different vegetative characteristics and a different set of environmental effects. Each type of treatment also has a different set of financial costs and in times of tight budgets the choice of which method to use is important in achieving the best combination of risk reduction and environmental effects with the available budget.

Some federal agencies are more likely to use thinning as a means to alter vegetative conditions that create fire hazard than others. The land management policies of the various federal agencies that manage timberlands reflect these differences in agency culture and enabling legislation. Thinning is not a preferred method for reducing fire hazard on lands managed by The National Park Service under current policy (National Park Service, 2001). Under certain circumstances thinning is an acceptable practice on

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[1] Managing the impacts of wildfires on communities and the environment: a report to the President of the United States in response to the wildfires of 2000. Signed by the Secretaries of Agriculture and the Interior September 8, 2000.

National Wildlife Refuges managed by the US Fish and Wildlife Service, and each Indian Reservation has its own set of policies regarding forest management but thinning is generally an acceptable practice on lands managed in partnership with the Bureau of Indian Affairs. Thinning is an accepted practice on lands administered by the USDA Forest Service and USDI Bureau of Land Management. Policies regarding fire hazard reduction activities of the Forest Service and BLM are largely described under National Fire Plan and the Healthy Forest Initiative which are embodied in law under the Healthy Forest Restoration Act (HFRA) of 2003.

In August 2001 the Secretaries of Agriculture and the Interior joined the Western Governor's Association, National Association of State Foresters, National Association of Counties, and the Intertribal Timber Council to endorse a document known as, "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: A 10-Year Comprehensive Strategy (Western Governor's Association, 2001). This document was a cornerstone of the Healthy Forest Initiative which laid the groundwork for the HFRA. The Comprehensive Strategy stipulated that "active forest and rangeland management, including thinning that produces commercial or pre-commercial products, biomass removal and utilization, prescribed fire and other fuels reduction tools to simultaneously meet long-term ecological, economic and community objectives.

HFRA continued these themes. Section 102(f) of the HRFA "requires that covered projects outside of old growth stands focus largely on small diameter trees, thinning,

strategic fuel breaks, and prescribed fire to modify fire behavior, as measured by the projected reduction of uncharacteristically severe wildfire effects for the forest type; and, maximize the retention of large trees, as appropriate for the forest type, to the extent that the large trees promote fire-resilient stands" (MacCleery, 2003).