

Predicting Public Acceptance of Fuels Management in Fire-Prone Areas



“Natural Environments for Urban Populations”

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In fire-prone areas of the U.S., land managers face varying levels of public support for fuels management approaches (FMAs). In some cases, support for a manager's preferred FMA is so low that it forestalls prudent risk reduction actions. **Understanding why people do or do not support specific fuels management strategies can help land management agencies develop meaningful public partnerships and participation.**

This study examined beliefs, attitudes, and intent to support three fuel management approaches (prescribed burning, mechanical fuel reduction, and defensible space ordinances) in areas with a significant fire hazard in Michigan, California, and Florida. Study results can guide resource managers and community groups working to mitigate the negative effects of wildland fire on quality of life, personal property, and government budgets.

Homeowners in all three states generally supported the three fuel management approaches studied, though rankings varied between states. Michigan had the lowest approval rates for all three FMAs while homeowners from Florida favored prescribed burning and Californians preferred mechanical treatments and defensible space ordinances. **Notably, homeowners in all three states believed that each of the FMAs can lead to reduced firefighting costs.** Where such cost savings are achievable, managers should integrate this economic message into the rationale for reducing fuel loading in the WUI.



Results indicate that for all three sites, personal importance and agency trust are strong predictors of attitudes toward each fuel treatment, and attitudes are, in turn, strong predictors of intentions to support the use of fuel treatments. Interestingly, past experience was not a significant predictor of attitudes toward fuels management.

Personal importance of an FMA was consistently found to be significantly related to attitude toward that approach. That is, homeowners who personalize or make these FMAs central to their living in the WUI are likely to have more positive attitudes. **The findings for defensible space ordinances, an approach that requires active homeowner participation, are compelling in terms of the strong positive relationship between personal relevance and positive attitudes.**

Trust in an agency's implementation of an FMA was consistently found to be significantly related to intent to approve the use of that approach. Trust in FMA implementation centers on homeowners' thinking that the government makes good decisions when selecting FMAs.

Related Publications

Winter, G., C.A. Vogt, and S. McCaffrey. 2004. "Examining social trust in fuels management strategies." *Journal of Forestry* 102(6): 8-15.

Vogt, C.A., G. Winter, and J.S. Fried. 2003. Predicting Homeowners' Approval of Fuel Management at the Wildland-urban Interface Using Theory of Reasoned Action. Submitted to *Society and Natural Resources*.

Winter, G., C.A. Vogt, and J.S. Fried. 2002. Fuel treatments at the wildland-urban interface: Common concerns in diverse regions. *Journal of Forestry* 100(1): 15-21.

Vogt, C., G. Winter, & J. Fried. 2005. "Homeowners' Support for Various Wildland Fire and Fuel Management Approaches." *Society & Natural Resources* 18(5) (May/June), in press.