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Fuels Planning: Science Synthesis and Integration

Economic Uses Fact Sheet: 3

Economic Impacts of Fuel Treatments

Fuel Treatments and Communities

With increased interest in reducing hazardous fuels in dry inland forests of the American West, agencies and the public will want to know the economic impacts of fuel reduction treatments. Fuel planners may find, however, that those impacts are difficult to predict. The costs of fuel treatments will vary depending on the type of treatment, climate, and local site conditions. The economic benefits from fuel treatments will vary depending on whether or not wood products will come from the treatments (and market conditions for those products), how many jobs the treatment will create, the income generated from the treatment activities, and the amount of local spending associated with treatment activities. Federal money for local fuel treatments infuses the local economy with outside support. Impacts to local economies also depend on the timeframe of activities—a sustained period of economically beneficial fuel reduction treatments would yield a sustained source of income for communities (Flora 2003). Because economic impacts are difficult to predict, managers may find economic forecasting tools helpful when making decisions in their particular forests.

A Tool for Evaluating Economic Impacts

Understanding how fuel reduction treatments may affect local jobs and incomes is often a challenge to field-level personnel focused on the resource management aspects of the treatments. Economists at the USDA Forest Service Inventory & Monitoring Institute (IMI) have developed a rapid assessment tool to estimate the job and income effects of fuel reduction projects.



Agency land managers faced with an over-abundance of hazardous fuels will want to know how treatments might affect the local economy (photo courtesy of USDA Forest Service).

The economic impact tool interacts with My Fuel Treatment Planner, an MS Excelbased treatment cost calculator (see fact sheet 4, RMRS-RN-20-4), prompting the user with simple forms for a minimal set of information about the project's location, the total cost and mix of the activities applied, and the products produced, if any. Estimates of the jobs and income that may result are provided for the standard, multicounty Component Economic Area (Johnson 1995) in which the project is located, anywhere in the United States. My Fuel Treatment Planner







Pacific Northwest Research Station



Synthesizing Scientific Information for Fire and Fuels Project Managers

The information about the economic impact tool was provided by Greg Alward, Mike Niccolucci, and Doug Smith, USDA Forest Inventory and Monitoring Institute, Fort Collins, Colorado.

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Fuels planning: Science synthesis and integration, an interagency research/management partnership to support the Ten-Year Fire Plan, led by Russell T. Graham, RMRS, and Sarah M. McCaffrey, NCRS.

was designed to address treatment costs, potential for offsetting costs with product utilization, the effect of treatment on surface fuel loads, and the economic impact at the time of fuel treatment. Longer term economic impacts could occur if fuel treatment affects other forest uses such as recreation. Current research on the effect of thinning and prescribed fire treatments on recreation and other forest uses is too limited to provide the basis for modeling these effects.

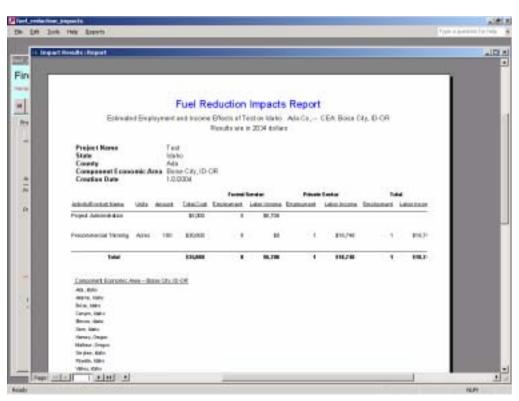
Information needed to make estimates of job and income effects for Component Economic Areas were assembled by IMI economists using standard IMPLAN economic analysis protocols (Alward and others 2003) and data about four of the most common fuel treatments and possible forest products produced by these activities.

References

Alward, G. S.; Arnold, R.; Niccolucci, M.; Winter, S. A. 2003. Economic significance of the USDA Forest Service Strategic Plan (2000 Revision): programmatic methods and evaluation. USDA Forest Service, Inventory and Monitoring Institute, Report No. 6, May, 2003.

Flora, D. F. 2003. Forest economics research at the Pacific Northwest Research Station, to 2000. Gen. Tech. Rep. PNW-GTR-562. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 207 p.

Johnson, K. P. 1995. Redefinition of the BEA Economic Areas. Survey of Current Business, Vol. 75, No. 2.



With the economic impact tool, a component of *My Fuel Treatment Planner*, you have the option of producing a standard Microsoft Word report displaying the estimated economic impacts that can be directly included in environmental analysis documents being prepared for a project.

Economics Team Fact Sheets

Look for fact sheet topics from the Economics Team including prescribed fire costs, harvesting, log hauling, NEPA and other regulations, wood utilization, economic impacts on communities, markets for wood, and harvest equipment requirements.

Fuels Planning: Synthesis and Integration

This fact sheet is one in a series being produced as part of a larger project supported by the USDA Forest Service to synthesize new knowledge and information relevant to fire and fuels management. Fact sheets address topics related to stand structure, environmental impacts, economics, and human responses to these factors. Information in the fact sheets is targeted for the dry forests of the Inland West, but is often applicable across broad regions of the country. For more information, please visit our Web site at: www.fs.fed.us/fire/tech_transfer/synthesis/synthesis_index