Fuels Planning: Science Synthesis and Integration

Project Update

Synthesizing Scientific Information for Fire and Fuels Project Managers

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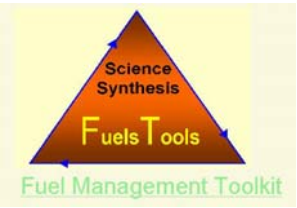
The **Fuels Tools** have been expanded and improved, and a number of new publications have been released this year. Our hope is that this information will further inform and assist you in the planning and evaluation of fuels projects to be conducted throughout the region. See more at our new integrated website: http://forest.moscowfsl.wsu.edu/fuels/.



Fuel Management Toolkit: Highlights

The **Science Synthesis Toolkit** offers a suite of resources relevant to planning and evaluating consequences of fuels treatments on our communities (social and economic), fire behavior, and the environment (air, water, soils, plants, weeds, wildlife habitat, and the likelihood of *Armillaria* disease). Two of the tools that have undergone major changes in the past year include the **Wildlife Habitat Response Model (WHRM)** and the **Understory Response Model (URM).** Both models are currently undergoing scientific peer review.

Wildlife Habitat Response Model

WHRM predicts qualitative change in wildlife habitat with fire and fuel treatments

- Multiple treatments can be compared at once
- Contains updated reports and research results on 250 wildlife species
  - Habitat associations
  - Annotated bibliography
  - Response to disturbance
- Updated User's Manual available on-line
- Future updates include range maps and photos for each species

The Understory Response Model

URM predicts qualitative change in understory plant biomass after fire and fuel treatments

- Models the response of hundreds of plant species, including 30 weed species
- Models multiple time series following treatment
- Contains links to additional information on plant species (FEIS database)

New publications!

Here's what's new from the Fuels Synthesis Project. A more complete list of publications can be found on-line at: http://forest.moscowfsl.wsu.edu/fuels/publications.html.

Biesecker, Robin L.; Fight, Roger D. January 2006. **My Fuel Treatment Planner: A user guide.** United States Department of Agriculture, Forest Service, Pacific Northwest Research Station. Gen. Tech. Rep. PNW-GTR-663. 39 p. Online at: **http://www.fs.fed.us/pnw/data/myftp/myftp_usersguide.pdf.**

Johnson, M.C.; Peterson, D.L.; Raymond, C.L. 2006. **Guide to Fuel Treatments in Dry Forest of the Western United States: Assessing Forest Structure and Fire Hazard**. Gen. Tech. Rep. PNW-GTR-686. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Monroe, Martha C.; Pennisi, Lisa; McCaffrey, Sarah; Mileti, Dennis. 2006. **Social science to improve fuels management: a synthesis of research relevant to communicating with homeowners about fuels management.** Gen. Tech. Rep. NC-GTR-267. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 42 p. Online at **http://www.ncrs.fs.fed.us/pubs/gtr/gtr_nc267.pdf.**

Pilliod, David S.; Bull, Evelyn L.; Hayes, Jane L.; Wales, Barbara C. 2006. **Wildlife and invertebrate response to fuel reduction treatments in dry coniferous forests of the Western United States: a synthesis.** Gen. Tech. Rep. RMRS-GTR-173. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 34 p. Online at **http://www.treesearch.fs.fed.us/pubs/24469.**

Ritter, Sharon A.; Sutherland, Elaine K.; McCaughey, Ward; Shick; Katharine; Scher, Jan. (in review). **Hazardous fuels reduction treatments in the Northern Rockies: an annotated bibliography.** Gen. Tech. Rep. RMRS-GTR-. Ogden, UT: Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Draft version available online at: **http://forest.moscowfsl.wsu.edu/fuels/documents/FuelsBibliographyDraft10_05_04b.pdf.**

Fact Sheets

Thirty-eight **fact sheets** related to fuels management, fire behavior, social issues, environmental effects, and economics are now available electronically, either individually or bundled by subject. Check these out online at: **http://forest.moscowfsl.wsu.edu/fuels/factsheets.html.**

What are the Fuels Tools?

The **Fuels Tools** are a set of computer models, links to additional web-resources, and a series of fact sheets and general technical reports intended to improve planning teams' access to existing research. They were developed by scientists from three Forest Service Research Stations and several universities, as well as participants from National Forest Systems, Fire, and DOI. These syntheses provide information on the current level of knowledge and knowledge gaps (uncertainties) relevant to key management questions underlying implementation of fire hazard reduction treatments. They represent the collective judgment of the most knowledgeable scientific experts in silviculture, fire behavior, fire ecology, social science, and other fields. See more online at **http://forest.moscowfsl.wsu.edu/fuels/.**