ArcFuels Publications and Case Studies

Recent Publications

- Oliveira, T.M.; Barros, A.M.G.; Ager, A.A.; Fernandes, P.M. 2016. Assessing the effect of a fuel break network to reduce burnt area and wildfire risk transmission. International Journal of Wildland Fire. 25(6): 619-632 **(PDF, 1.0MB)**

- Ager, A.A.; Day, M.; Finney, M.A.; Vance-Borland, K.; Vaillant, N.M. 2014. Analyzing the transmission of wildfire exposure on a fire-prone landscape in Oregon, USA. Forest Ecology and Management. 334: 337-390. **(PDF, 2.9MB)**
- Thompson, M.P., Vaillant, N.M., Haas, J.R., Gebert, K.M., Stockmann, K.D. 2013. Quantifying the potential impacts of fuel treatments on wildfire suppression costs. Journal of Forestry. 111(1): 49-58. **(PDF, 406KB)**
- Ager, A.A., Buonopane, M., Reger, A., Finney, M.A. 2012. Wildfire exposure to analysis on the national forests in the Pacific Northwest, USA. Society for Risk Analysis. 33(6):1000-1020. **(PDF, 2.9MB)**

ArcFuels Publications

- Vaillant, N.M., Ager, A.A. 2014. ArcFuels: an ArcMap toolbar for fuel treatment planning and wildfire risk assessment. Fire Management Today. 74(1): 21-23. **(PDF, 302KB)**
- Vaillant, N.M., Ager, A.A., Anderson, J. 2013. ArcFuels10 system overview. Gen. Tech. Rep. PNW-GTR-875. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 65 p. **(PDF, 2.8MB)**
- Vaillant, N.M., Ager, A.A., Anderson, J., Miller, L. 2013. ArcFuels user guide and tutorial: for use with ArcGIS 9. Gen. Tech. Rep. PNWGTR-877. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 256 p. **(PDF, 15.6MB)**
- Ager, A.A., Vaillant, N.M., Finney, M.A. 2011. Integrating fire behavior models and geospatial analysis for wildland fire risk assessment and fuel management planning. Journal of Combustion. Article ID 572452, 19 p. **(PDF, 1.8MB)**

Case Study Publications

- Joint Fire Science Brief - ArcFuels **(PDF, 715KB)**
- PNW Science Findings - Forests at risk: Integrating risk science into fuel management strategies **(PDF, 1.2MB)**
- New risk tools: The emergence and potential of new wildfire risk assessment tools **(PDF, 753KB)**
- Quantifying the potential impacts of fuel treatments on wildfire suppression costs **(PDF, 406KB)**
- Wildfire exposure to analysis on the national forests in the Pacific Northwest, USA **(PDF, 2.9MB)**
- Assessing exposure of human and ecological values to wildfire in Sardinia, Italy **(PDF, 2.3MB)**
- Analyzing wildfire exposure and source–sink relationships on a fire prone forest landscape **(PDF, 1.9MB)**

- Challenges and approaches in planning fuel treatments across fire-excluded forested landscapes **(PDF, 6.0MB)**
- A comparison of landscape fuel treatment strategies to mitigate wildland fire risk in the urban interface and preserve old forest structure **(PDF, 1.6MB)**
- Modeling wildfire risk to northern spotted owl (*Strix occidentalis caurina*) habitat in Central Oregon, USA **(PDF, 2MB)**
- A simulation study of thinning and fuel treatments on a wildland–urban interface in eastern Oregon, USA **(PDF, 1.4MB)**
- Modeling the effects of thinning on bark beetle impacts and wildfire potential in the Blue Mountains of eastern Oregon **(PDF, 1MB)**

Presentations

- ArcFuels Overview Webinar **(YouTube web link)**
- Poster from 2013 IAWF Conference - 4th Fire Behavior and Fuels Conference, Raleigh, NC **(PDF, 2.1MB)**
- Dry Forest Workshop at Eagle Crest, October 2009 in Redmond, OR **(PDF, 4.2MB)**
- Interagency Fuels Coordination Group (NIFCG), August 2007 **(PDF, 29.9MB)**
- National RapidSpot Workshop on Landscape Fuel Treatment Design using ArcFuels, Portland, OR, November 6-8, 2007 **(Web site)**
- 2006 IAWF Conference Portland OR—How to Measure Success **(PDF, 1MB)**
- The 26th Annual ESRI International User Conference, August 7-11, 2006 in San Diego, CA **(PDF, 217KB)**
- The 25th Annual ESRI International User Conference, July 25-29, 2005 in San Diego, CA **(PDF, 28KB)**