Wildfire Risk Assessment

Under Development in IFTDSS

Wildfire Risk Assessment is coming soon to IFTDSS!
*Interagency Fuels Treatment Decision Support System*
http://iftdss.firenet.gov

Under development

A workflow and tools to perform a Quantitative Risk Assessment (QRA) from the project to the unit scale is under development in IFTDSS. The process follows the steps outlined in GTR-315, "A wildfire risk assessment framework for land and resource management." IFTDSS is unique in that it will contain a comparison functionality allowing users to complete a QRA and then compare treatment alternatives to understand the potential impacts on risk.

A Wildfire Risk Assessment Framework for Land and Resource Management

Joe H. Scott
Matthew P. Thompson
David E. Calkin
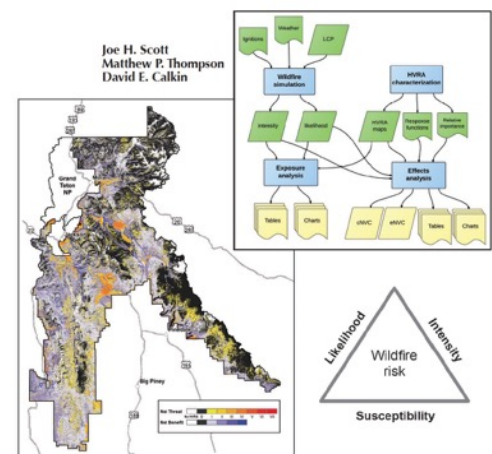
USDA United States Department of Agriculture / Forest Service
Rocky Mountain Research Station
General Technical Report RMRS-GTR-315
October 2013

- Create and edit Landscapes directly in IFTDSS
- IFTDSS guides users through the characterization of Highly Valued Resources and Assets (HVRAs)
- Users choose from the National HVRAs or upload their own HVRA shapefiles.
- Landscape Burn Probability is completed with a customized version of FlamMap developed specifically for use in IFTDSS
- Automated wildfire exposure and risk calculations. Map products, reports containing summary tables and charts, and downloadable data to be used in further analysis outside of IFTDSS if needed
- Use IFTDSS to compare different fuel treatment alternatives to evaluate impacts to the risk assessment after completion of QRA.

General Timeline for Wildfire Risk Assessment Development in IFTDSS

The IFTDSS development team and technical advisors have already been working on the technical details of the Quantitative Risk Assessment through the summer of 2018. Continued work on integrating the Landscape burn probability model will continue through the Fall and Winter of 2018. Throughout 2019 the team will develop the user interface, workflow and data specifications within IFTDSS with portions of the workflow being incrementally available throughout the year.

Release	1 February 2019	2	3	4
		T h r o u g h o u t 2 0 1 9		
Goal	Run 'Landscape Burn Probability' in the Playground to model fire likelihood and intensity	Complete an integrated hazard assessment for a single landscape to assess fire likelihood and intensity where HVRAs are present	Complete a quantitative risk assessment for a single landscape	Compare integrated hazard and/or risk assessments for multiple landscapes to test treatment effectiveness

High Level Features included in the Release	• Run 'Landscape Burn Probability' Model
	  • User specified landscape
	  • User Specified model inputs
	• Download model outputs
	• Map model outputs
	• Generate model report
		Release 1 plus:
		• Map HVRAs
		  • National set
		  • User uploaded
		• Generate integrated hazard report
			Release 2 plus:
			• Define HVRA response functions
			• Define HVRA relative importance
			• Map risk outputs
			• Generate risk report
			• Download risk/HVRA outputs
				Release 2 & 3 plus:
				• Complete integrated hazard and/or risk assessments for related landscapes
				• Generate comparison grids
				• Generate comparison reports

For More Information

For more information about Wildfire Risk Assessment in IFTDSS contact the IFTDSS Team.

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