11-12-2016 Pinnacle Mountain Fire

## Near Term Fire Behavior Analysis inputs and output information

IR\_per Sassafras MT WX FM163 3d sp.05 3 IRper

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# NTFB

The Near Term Fire Behavior (NTFB) fire behavior model produces outputs that represent modeled growth in the form of a 'fire progression'. NTFB models fire behavior using inputs for weather and wind that change over the duration of the simulation. Though NTFB can model fire growth for up to seven days, it is generally most appropriate for the 'near term' of one to three days (due to unknowns in the forecast beyond that time frame). The model retrieves forecasted weather and winds for the selected time, using National Weather Service (NWS) Forecast Data for current simulations. For historic fires, the model can use historic weather.

The Sassafras Mountain RAWS was used for weather inputs. In general the 1-, 10-hour, and 100-hr fuels are trending below average for this time of year; the system-generated values for the dead fuel moistures were used for this analysis. Live fuel moisture inputs were adjusted using the daily ERC-G NFDRS forecast indices available on the SACC website, and comparing with Guion Farm WX (http://gacc.nifc.gov/sacc/fire\_danger.php) for reference.

Landscape adjustments were made based on information from other analysts in the regional WFDSS Support Group, local knowledge, and calibration runs to help better represent the observed fire behavior and spread. Fuel model 182 was adjusted to fuel model 163, fuel model 186 was adjusted to fuel model 163. 11-11 2115 IR was used as an ignition which estimates the current fire size at 1463 acres.

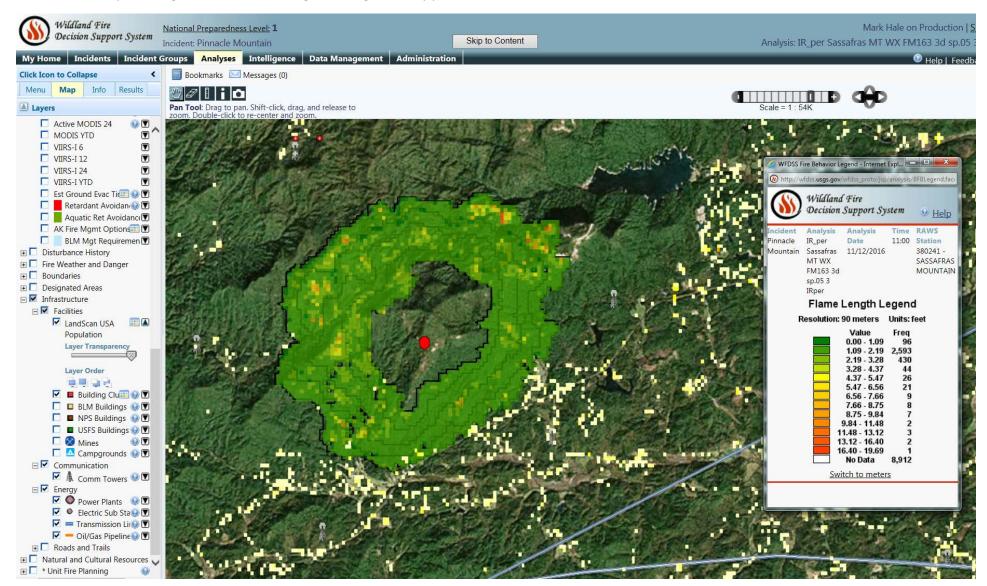
The purpose of this NTFB analysis is to approximate fire behavior and spread over the next 4 days starting on November 12th with predicted weather and assumes no suppression operations occur. Information derived from this analysis may be used to assist fire managers in making fire management decisions regarding the potential impact fire activity may have on identified values at risk. Estimated growth by day, in the absence of suppression were 1074 acres on 11/12, 1665 acres on 11/13, 1837 acres and 11/14 and 1898 acres on 11/15.

11-12-2016Pinnacle Mountain FireMap showing 4 days of growth in the absence of Suppression and proximity to values.

n 👹 Southern Fire Environmen 📘 SuperShuttle Denver: Onli 😢 Index of -incident_specific 👹 Southern Area Coordinati 🤡 WPC's Short Range Forec 🤜 Natio	
ational Preparedness Level: 1	http://wfdss.usgs.gov/wfdss_proto/faces/jsp/analysis/_rlvid.jsp?_rap=     rk Hale on Production   Sign ou
	Wildland Fire
	Decision Support System  Help IT WX FM163 3d sp.05 3 IRpe
oups Analyses Intelligence Data Management Administration	🛛 😳 Help   Feedback
Bookmarks 🖾 Messages (0)	Near Term Burn Period Legend
	Burn Periods
Pan Tool: Drag to pan. Shift-click, drag, and release to zoom. Double-click to re-center and zoom.	Period Date Start Hour End Hour Acres
zoom, Double-click to re-center and zoom.	1 11/12/2016 11 24 1,074
	2 11/13/2016 11 24 1,665
	3 11/14/2016 11 24 1,837
	4 11/15/2016 11 24 1.898
	Near Term Fire Behavior Analysis Information
	NAME VALUE
	Analysis Name FM163 3d sp.05 3 IRper
	Analyst Name Hale, Mark
	Ignition 11-11IRPer2215
	Barrier No barrier specified
	Analysis Start Date/Hour 11/12/2016 11
	Analysis End Date/Hour 11/15/2016 24
	Conditioning Days 7 Wildland Fire
	Foliar Moisture Decision Support System . Help
	Content 90%
	Crown Fire Method Finney (1998) Spotting Probability 0.05 LandScan USA Population Legend
	Cristian Dalay Onio
	Spot Ignition Delay     0 min       3 to 10 People       Minimum Spotting       11 to 25 People
	Distance 90 meters 26 to 50 People
	Landscape 51 to 100 People
	Resolution 90 meters 101 to 250 People
	Perimeter     251 to 30,000 People       Resolution     90 meters       *No color implies a LandScan USA
	Spot Grid population estimate of 0 People for that
	Resolution 45.0 meters area.
	Status Review LandScan USA data represents estimated night-
	Total acres 0,475 time (residential) population, and were developed
	by Oak Ridge National Laboratory. These data are a fusion of satellite remote sensing data, traditional
	infrastructure datasets, and US Bureau of Census
	demographic data. While population is represented at the relatively high resolution of 90 meters/pixel,
and the second of the second	the precision of the data does not support analysis
	at large scales due to displacement between a given pixel and the structure/structures it
	represents. To encourage use at the appropriate
	scale, these data are not displayed at scales zoomed in beyond 1:50,000.
	zoomed in beyond 1.50,000.

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Fire behavior map showing forecasted flame lengths during the 4 day period.



### 11-12-2016 Pinnacle Mountain Fire

Fire behavior map showing forecasted crown fire potential during the 4 day period.

