

## 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

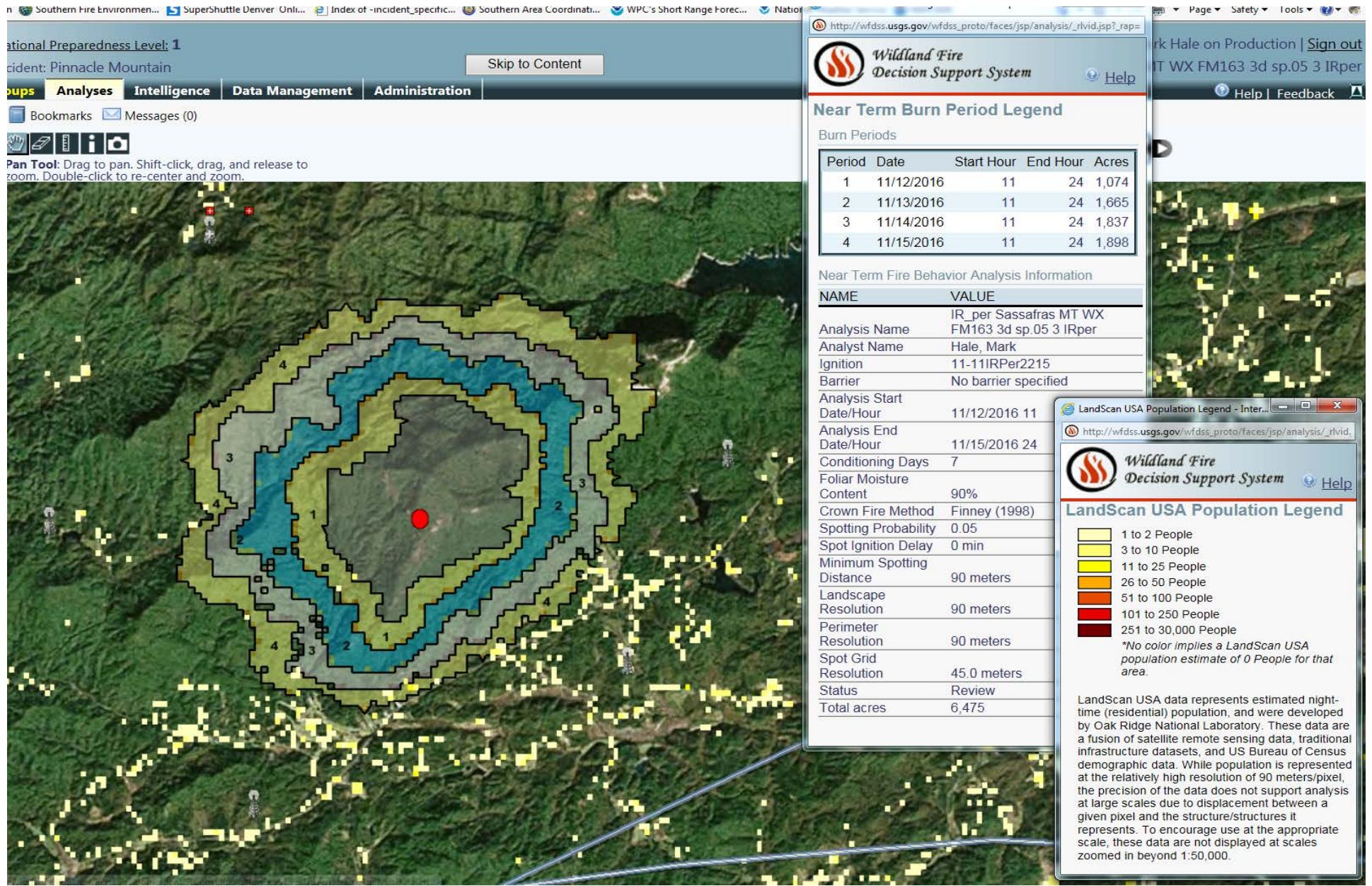
The Near Term Fire Behavior (NTFB) fire behavior model produces outputs that represent modeled growth in the form of a 'fire progression'. NTFB models fire behavior using inputs for weather and wind that change over the duration of the simulation. Though NTFB can model fire growth for up to seven days, 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](http://gacc.nifc.gov/sacc/fire_danger.php)) for reference.

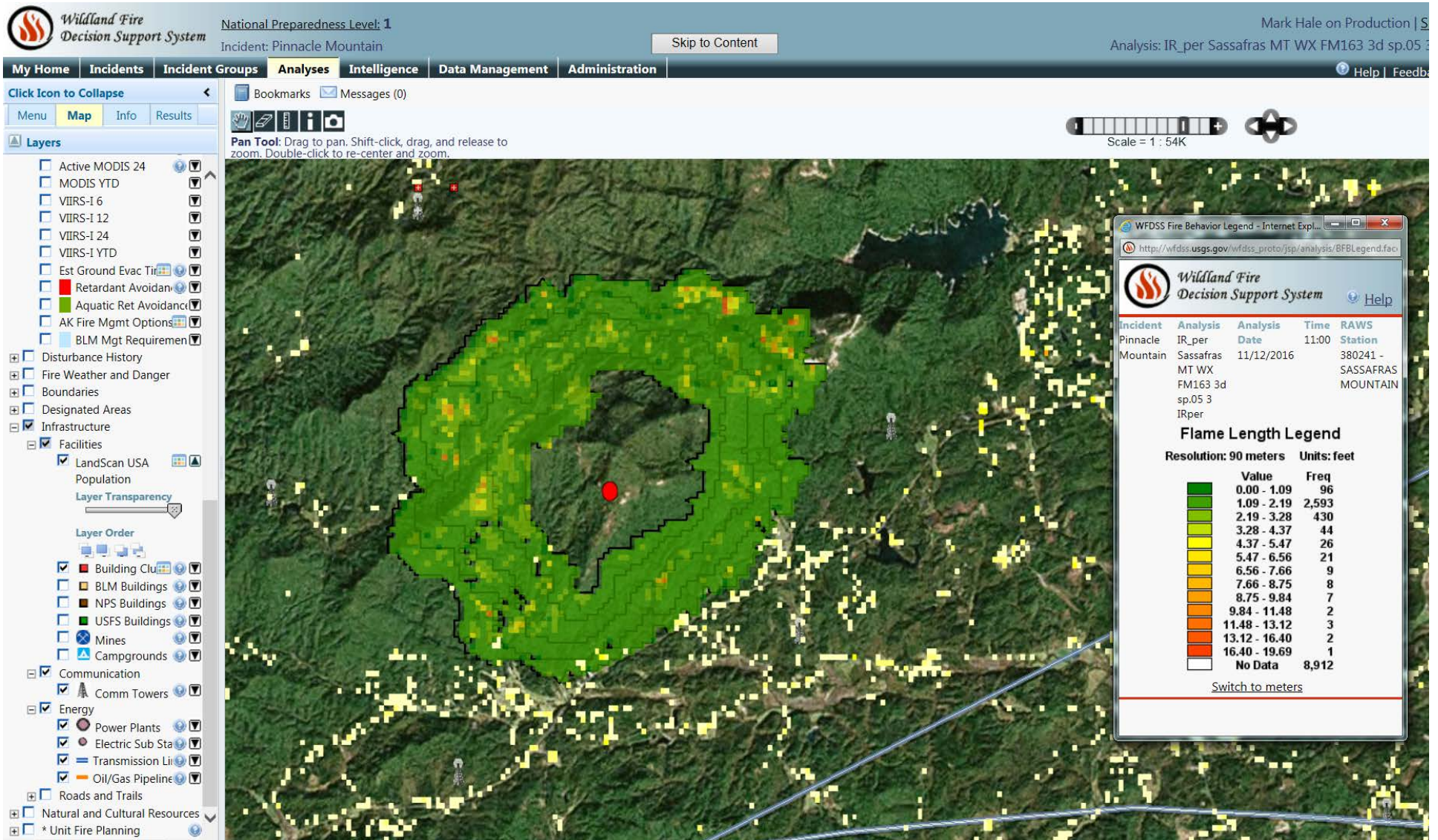
Landscape adjustments were made based on information from other analysts in the regional WFDSS Support Group, local knowledge, and calibration runs to help better represent the observed fire behavior and spread. Fuel model 182 was adjusted to fuel model 163, fuel model 186 was adjusted to fuel model 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.

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



11-12-2016 Pinnacle Mountain Fire  
 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.

