

Christie, William M -FS

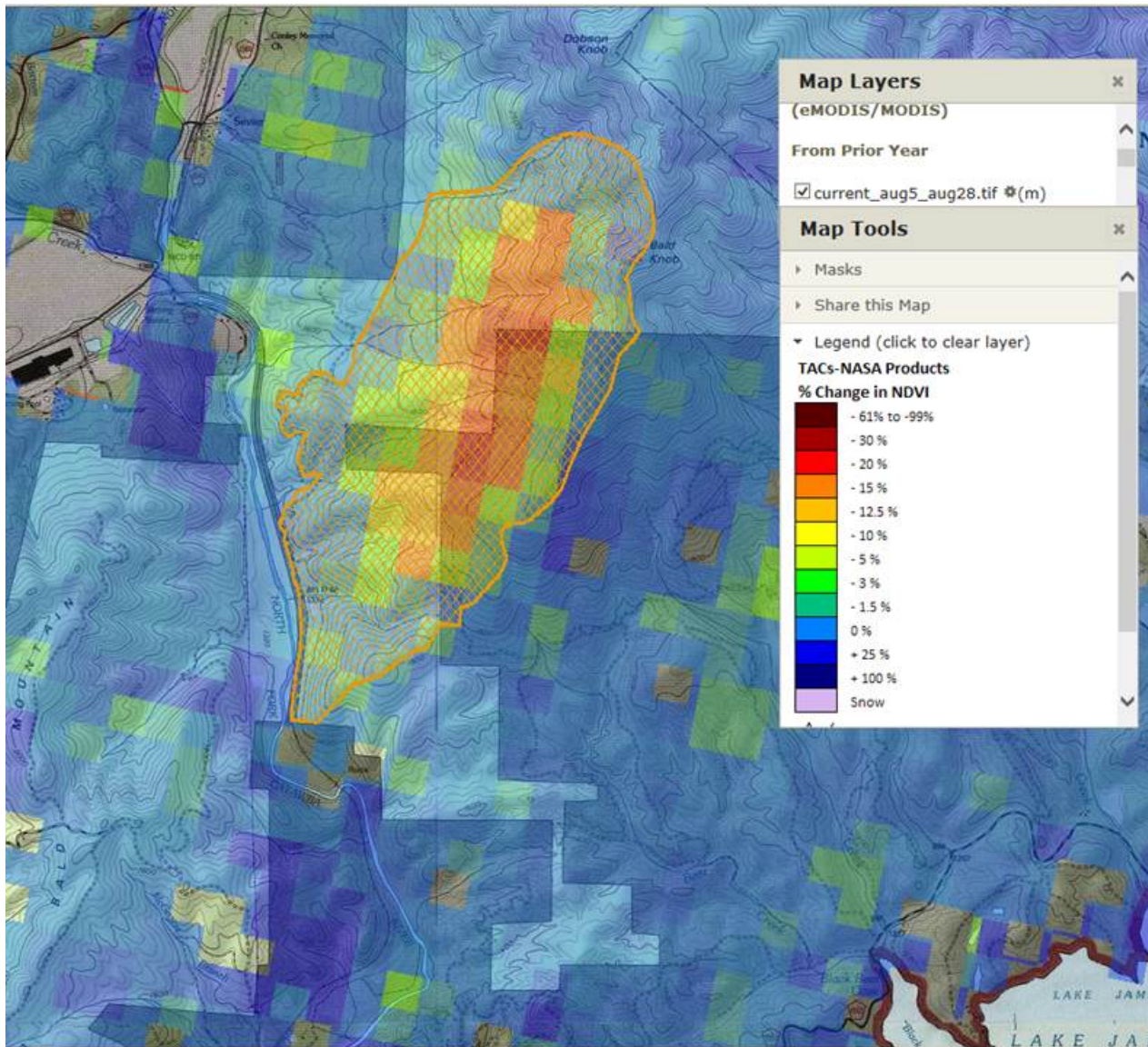
From: Norman, Steve -FS
Sent: Monday, August 31, 2015 3:22 PM
To: Kauffman, Gary -FS
Cc: Christie, William M -FS; hnw@geobabble.org
Subject: Bald Knob fire analysis in ForWarn

Gary,

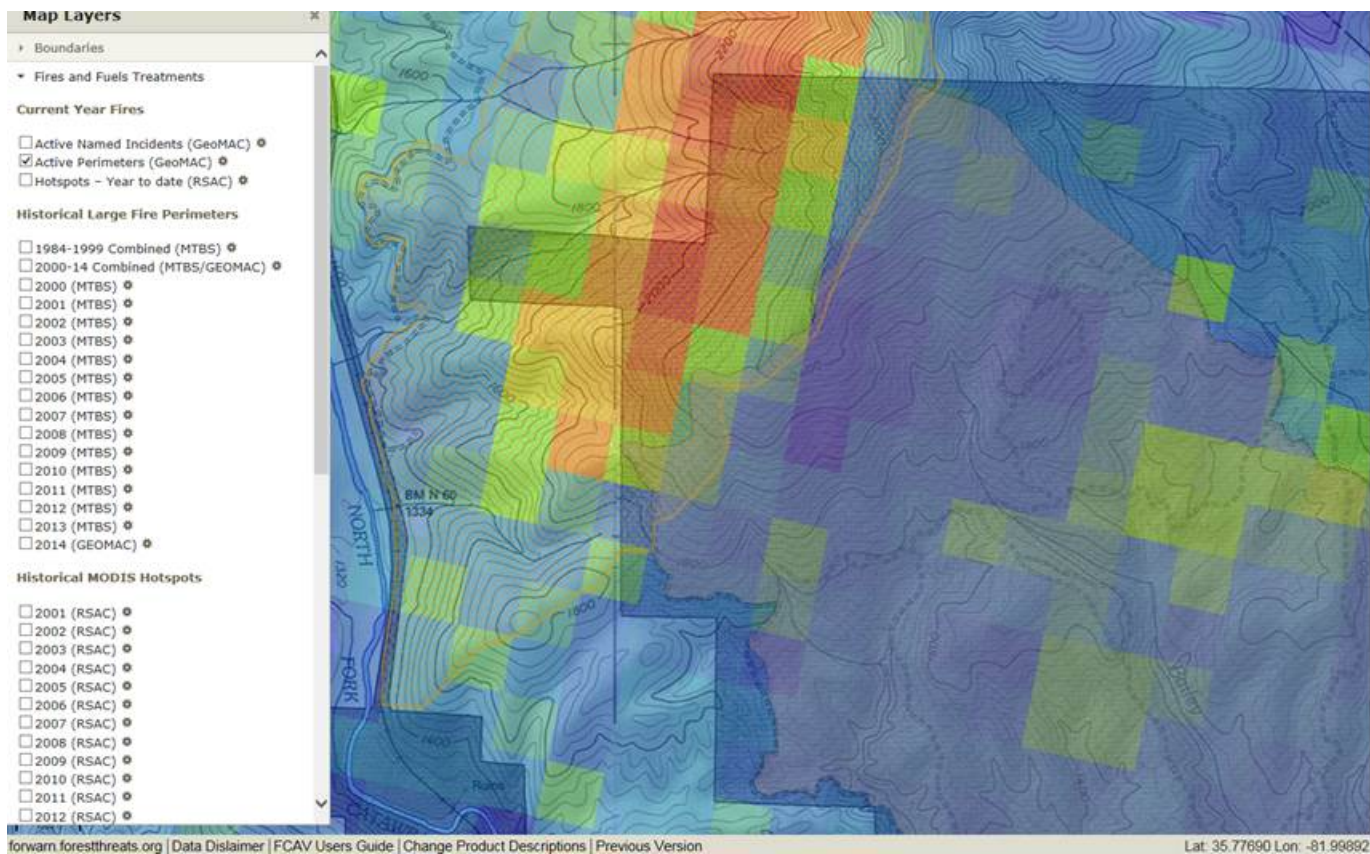
Note the mixed severity across areas of similar elevation. Looks like by Bald Knob we walked to the edge of the perimeter that is on the divide, before dropped downslope (consistent with the Inciweb aerial photo). We must have passed through the area that burned twice this year (Rx, then Wf). Note in the second map that we now have FS fuels treatments from FACTS in the viewer (past and scheduled), and that the Rx to the east of this perimeter shows up on that database along with the portion of the two fires that overlap. Following the link below, using the I (identity) tool on the top bar, I see that this broadcast burn was completed 2015-01-31, which if the wildfire perimeter is accurate, would mean a 5-6 month fire return interval for an area about 230m x 500m area, based on the 232m grid size of MODIS. It would be useful to know from the FMO if this wildfire perimeter and the Rx fire perimeter is accurately drawn....that is, is such a rapid reburn really possible.

Looking at Landsat 7, there may be an image from August that though there's some data fall out, does seem to have few clouds. Mostly, it's been cloudy since May here though—something that challenges Landsat more than daily MODIS.

Forwarn severity using the 1 year baseline as of Aug 28, 2015. Note the variable severity along contour lines. The Lidar elevation might show more cliff effects here that shown by this topo map.



Bald Knob fire (orange line) left and partially overlapping Rx burn from Jan 2015 (shaded) relative to 1 year ForWarn severity for late August 2015. Note there is little to no legacy anomaly in the Rx burn with the possible exception of the section at right center.



http://forwarn.forestthreats.org/fcav2?theme=CONUS_Vegetation_Monitoring_Tools&layers=AIK,AD,FIREAAA,AAB,FTA AQ&mask=Forest&alphas=0.11,0.40,1,1,0.54&accgp=G04&basemap=USA_Topo&extent=-9134459.2607884,4265876.9598304,-9120863.0243822,4274351.9153416

This is a zoom in of an undated aerial from a few years ago (from ESRI as shown in ForWarn) showing dead hemlocks from adelgid. Could these be eastern hemlock? This area subsequently burned pretty hot based on ForWarn. From this growing season photo, it's possible to pull out the much darker green (hemlock?) canopies. I don't think pine would mass this strongly, would they? We know there's some hemlock because of the mortality. Deciduous are always in lime green. Darker green is pine or hemlock and I think the pine will almost always be browner green (see 3:00 hillock), not blue green like hemlock. The hemlock area at 10:00 of the middle of the photo is a spur ridge much like we observed from the overlooks. Shadows make this a bit hard to interpret.



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Lat: 35.79469 Lon: -81.93571

http://forwarn.forestthreats.org/fcav2?theme=CONUS_Vegetation_Monitoring_Tools&layers=AAB&mask=&alphas=1&ccgp=G04&basemap=Imagery&extent=-9127704.0147784,4272326.1984159,-9126559.8480111,4272864.8405997



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