

# Clackamas Fires Roadside Danger Tree Assessment (#61043) Draft EA Comments

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May 16, 2022

Please consider these comments for the Clackamas Fires Roadside Danger Tree Assessment (#61043) Draft EA:

## 1. Definition of Moderate / Severe Burn Severity

How did the Mt Hood National Forest decide on defining moderate to severe burn severity as being 25% or greater (EA page 30)? The Bureau of Land Management has defined this value as 60% or greater in their recent Archie Creek Fire Salvage project<sup>1</sup> and their purpose/need was identical in that they were working to restore safe public access. Like the Forest Service, the BLM also used RAVG data to inform and identify their project areas and so this is a huge step up from 25% to 60%. Finally, the Mt Hood National Forest's own White River Fire Salvage project from 2021<sup>2</sup> defined moderate to high burn severity (basal area mortality) as 50% or greater. To add to the inconsistency, the wildlife report for this project uses a 51% or greater threshold (page 7).

## 2. Areas of Consideration (AOC) Inconsistent with Purpose/Need

The Forest Service is using RAVG fire burn severity data to identify Areas of Consideration for this project. These datasets are developed using satellite imagery as their source. DellaSala & Hansen (2015)<sup>3</sup> found that these results can overestimate the actual burn severity found on the ground. Since the public is unable to visit any of the AOCs identified, and the Forest Service is unable to ground truth the AOCs they have proposed, the public has no recourse other than to also point to satellite imagery to dispute the selection of AOCs.

As described on page 30, the Forest Service has targeted stands for treatment where the burn severity resulted in basal area mortality of 25% or greater. I have compared the AOC boundaries (as provided in the published Draft EA map series) against two Sentinel-2 satellite images- one image from 9/24/2021 and a second image from 4/7/2022. Both satellite images were visualized using Bands 11 (Southwave Infrared), 8 (Visible & Near Infrared), and 4 (red) in order to highlight vegetation status. Bare ground / burnt areas will appear as brown / pink while living vegetation will appear as green / bright green (snow appears as cyan/blue). After reviewing all of the AOCs against the two satellite images, I believe that the following AOCs do not meet this threshold and should be dropped from the project. For each AOC area, I list the road number (or nearest road in some cases), and beginning/ending milepost locations. I am also including a satellite image from 8/25/2020 to show pre-fire conditions. The EA AOCs appear as a yellow outline and the specific AOC is highlighted with a bold black border.

**Road 4220000 (BMP: 9.734 EMP: 9.804): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



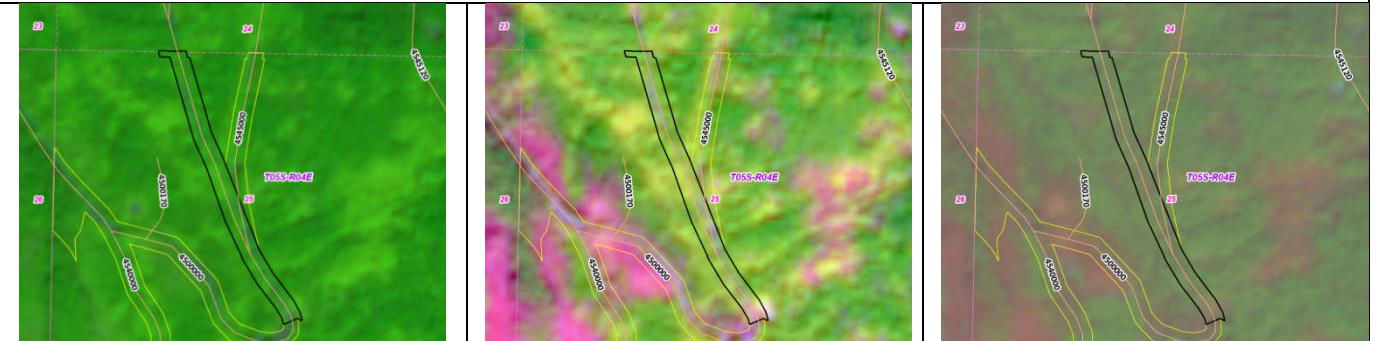
**Road 4220019 (BMP: 0.031 EMP: 0.207): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500000 (BMP: 10.375 EMP: 10.598): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

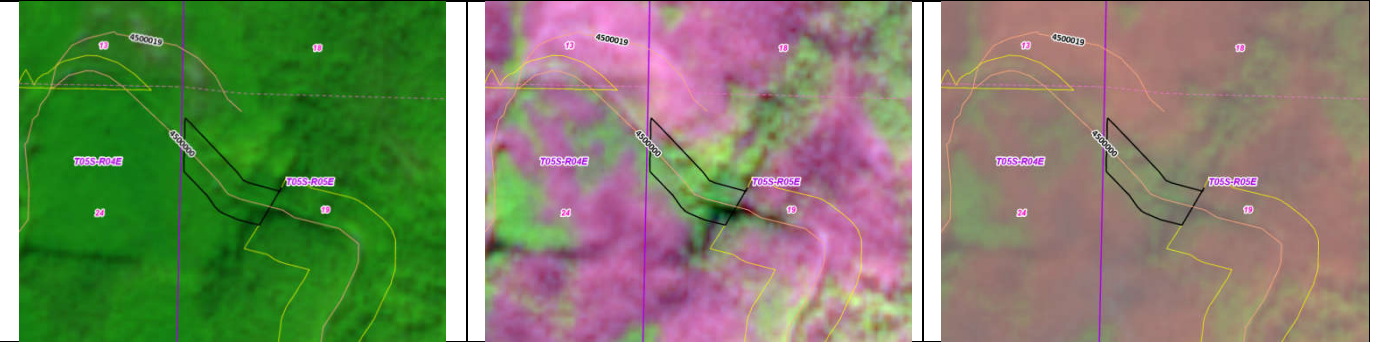


**Road 4500000 (BMP: 12.861 EMP: 13.403): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

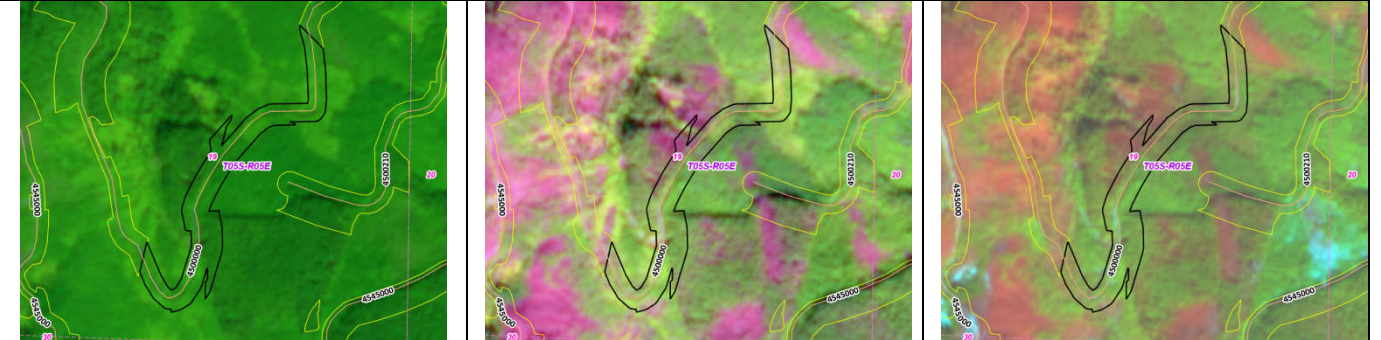




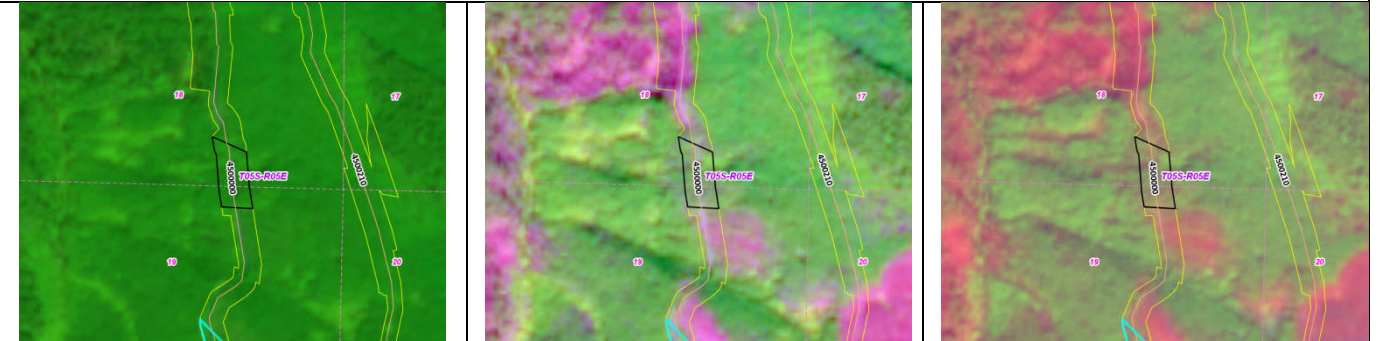
**Road 4500000 (BMP: 15.288 EMP: 15.487): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500000 (BMP: 16.25 EMP: 17.166): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500000 (BMP: 17.417 EMP: 17.535): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

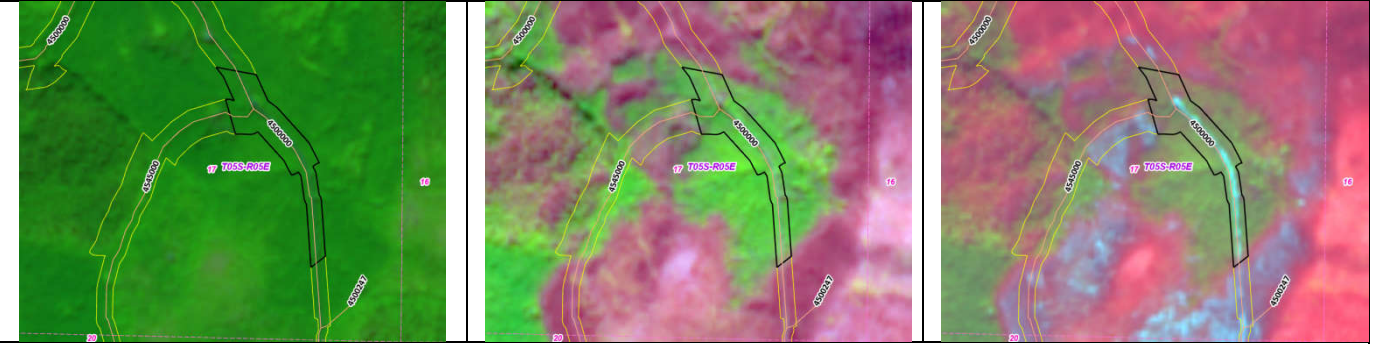


**Road 4500000 (BMP: 17.929 EMP: 18.232): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

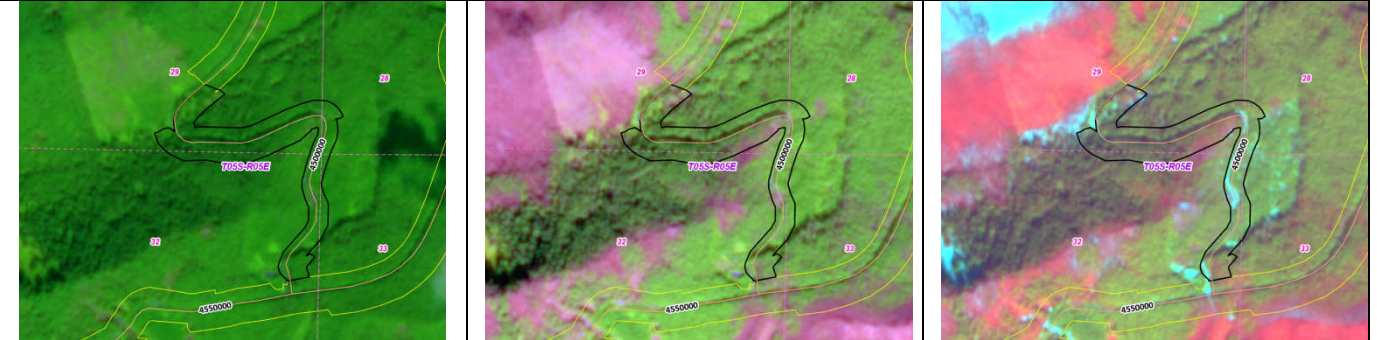




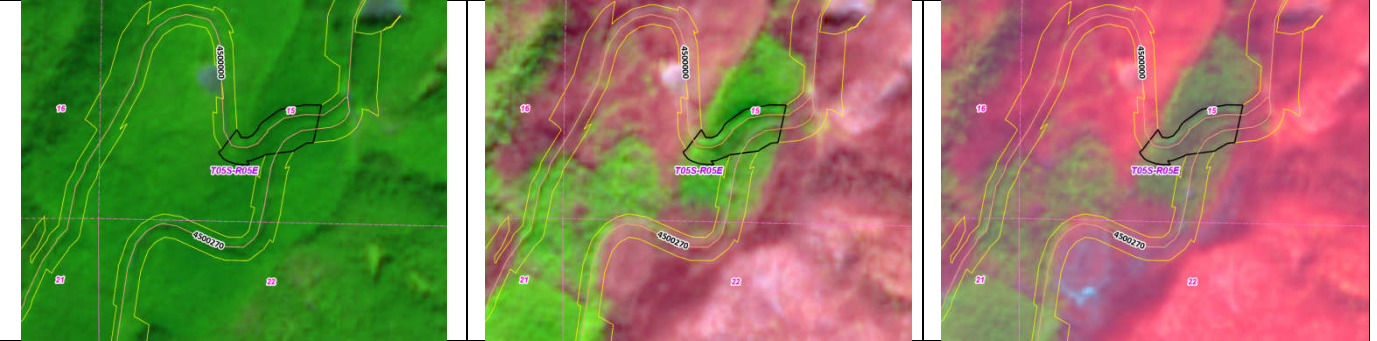
**Road 4500000 (BMP: 19.485 EMP: 19.759): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500000 (BMP: 21.441 EMP: 22.273): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500000 (BMP: 25.071 EMP: 25.217): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500210 (BMP: 0.156 EMP: 0.962): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

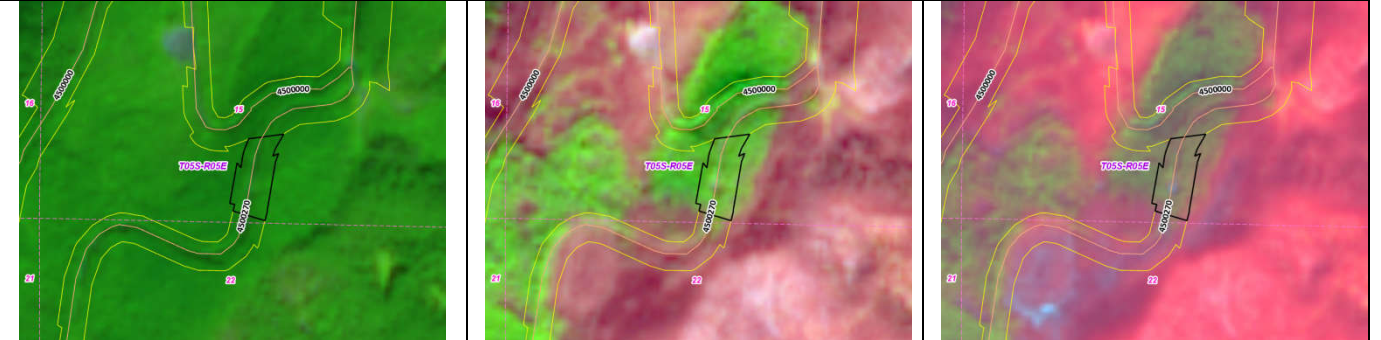




**Road 4500210 (BMP: 1.174 EMP: 1.626): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4500270 (BMP: 0.21 EMP: 0.368): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510000 (BMP: 25.071 EMP: 25.217): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510000 (BMP: 5.599 EMP: 5.738): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

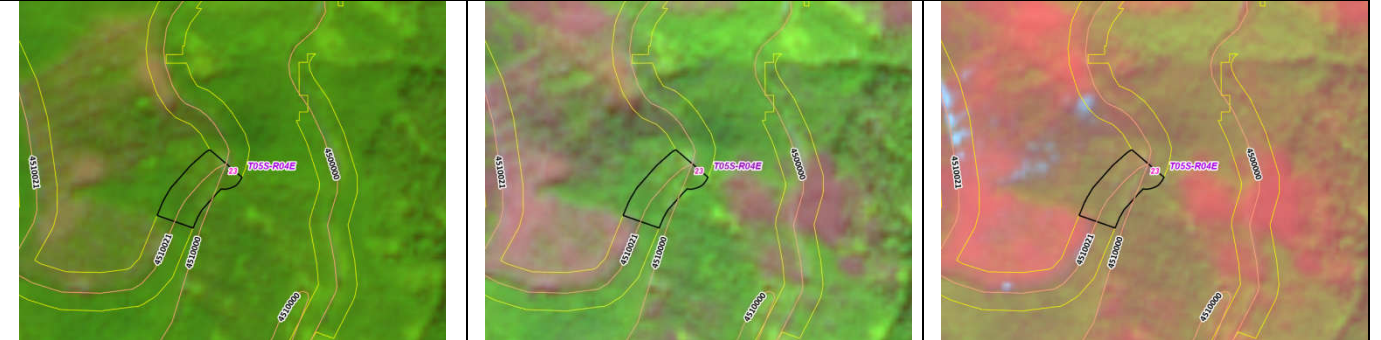




**Road 4510000 (BMP: 5.851 EMP: 5.986): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510021 (BMP: 0.0 EMP: 0.134): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510021 (BMP: 0.825 EMP: 0.984): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510021 (BMP: 1.032 EMP: 1.118): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





**Road 4510021 (BMP: 5.851 EMP: 5.986): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4510160 (BMP: 0.701 EMP: 0.737): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4520000 (BMP: 0.122 EMP: 0.227): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4530000 (BMP: 1.032 EMP: 1.118): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4540000 (BMP: 5.851 EMP: 5.986): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



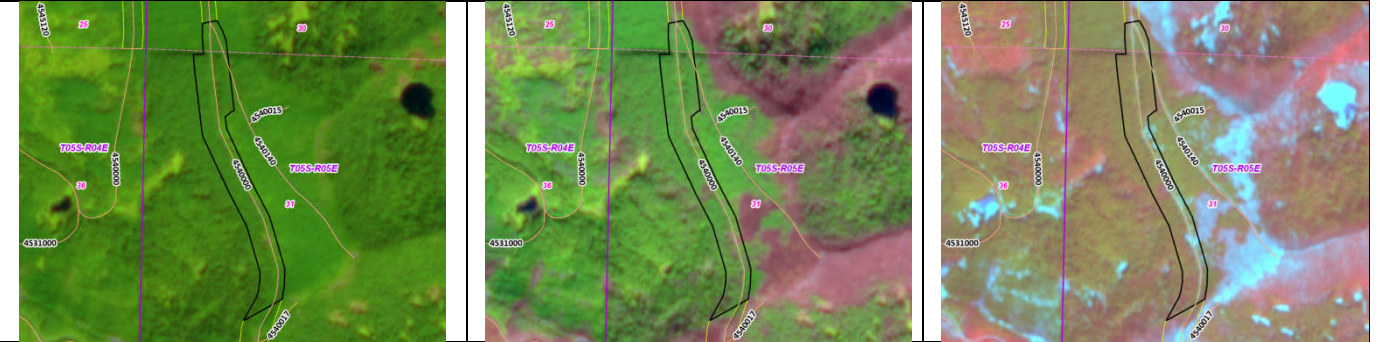
**Road 4540000 (BMP: 0.529 EMP: 0.789): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4540000 (BMP: 2.097 EMP: 2.523): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4540000 (BMP: 3.297 EMP: 3.793): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





**Road 4545000 (BMP: 0.73 EMP: 0.979): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



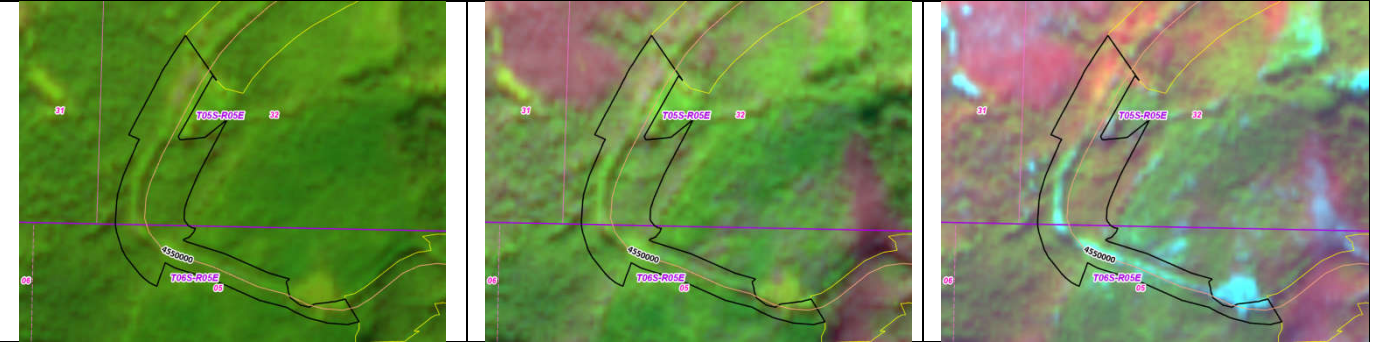
**Road 4545000 (BMP: 2.624 EMP: 4.577): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4545000 (BMP: 4.071 EMP: 4.13): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4550000 (BMP: 5.817 EMP: 6.014): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

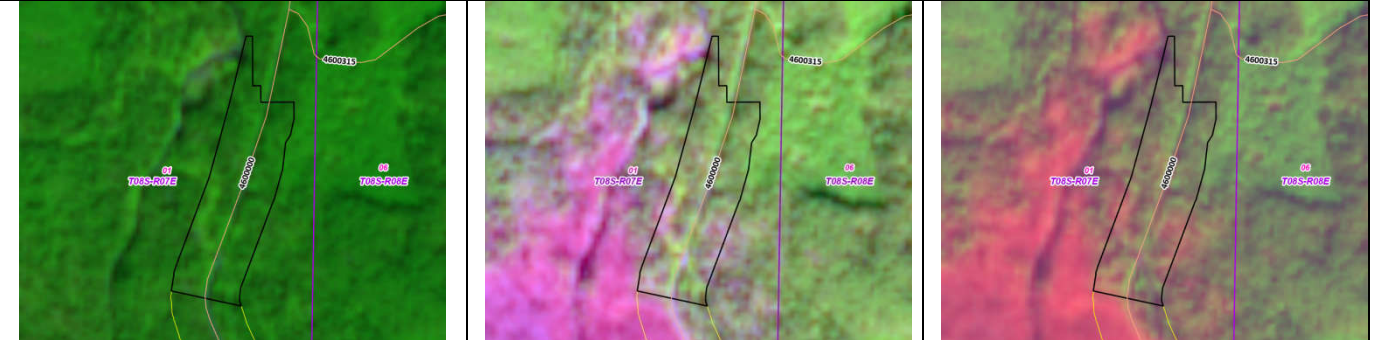




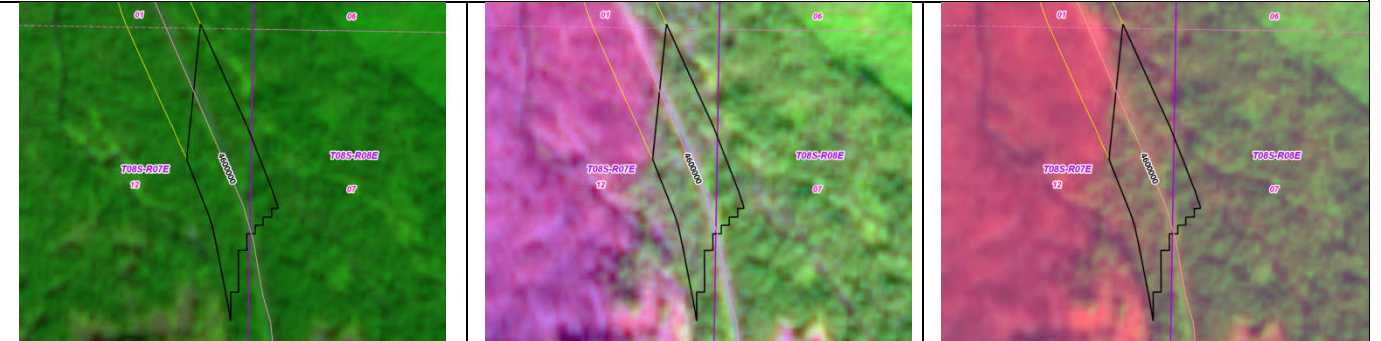
**Road 4550000 (BMP: 0.73 EMP: 0.979): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4600000 (BMP: 20.391 EMP: 20.796): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4600000 (BMP: 20.939 EMP: 21.312): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4600000 (BMP: 23.613 EMP: 23.65): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





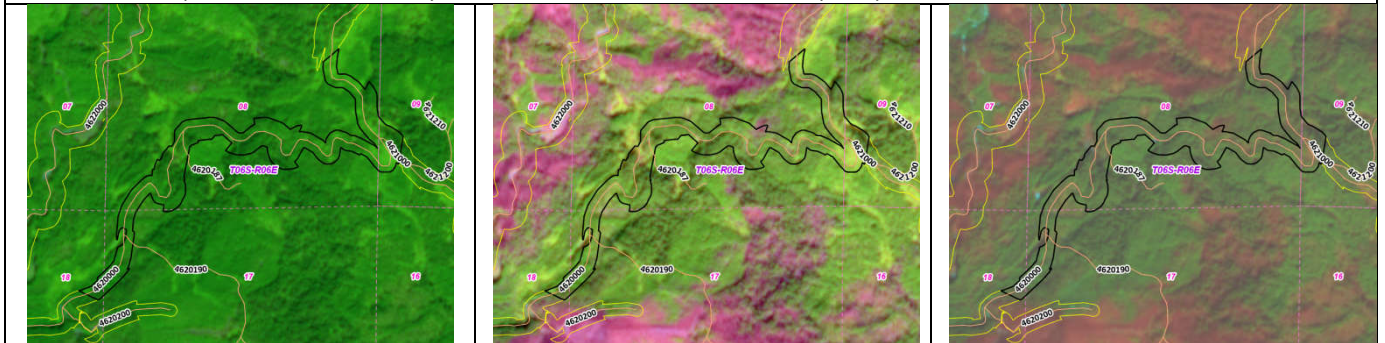
**Road 4610000 (BMP: 2.26 EMP: 3.11): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



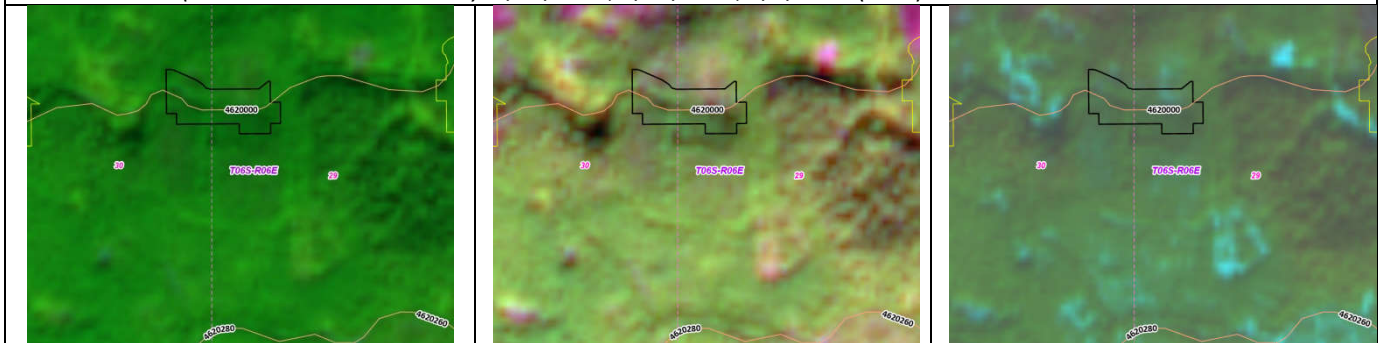
**Road 4610000 (BMP: 3.183 EMP: 3.435): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4620000 (BMP: 4.77 EMP: 6.898): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

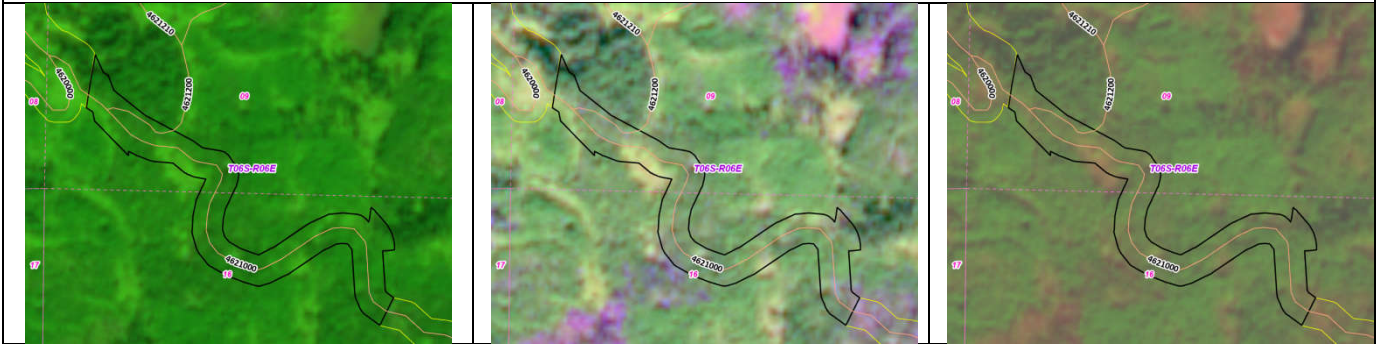


**Road 4620000 (BMP: 11.244 EMP: 11.363): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





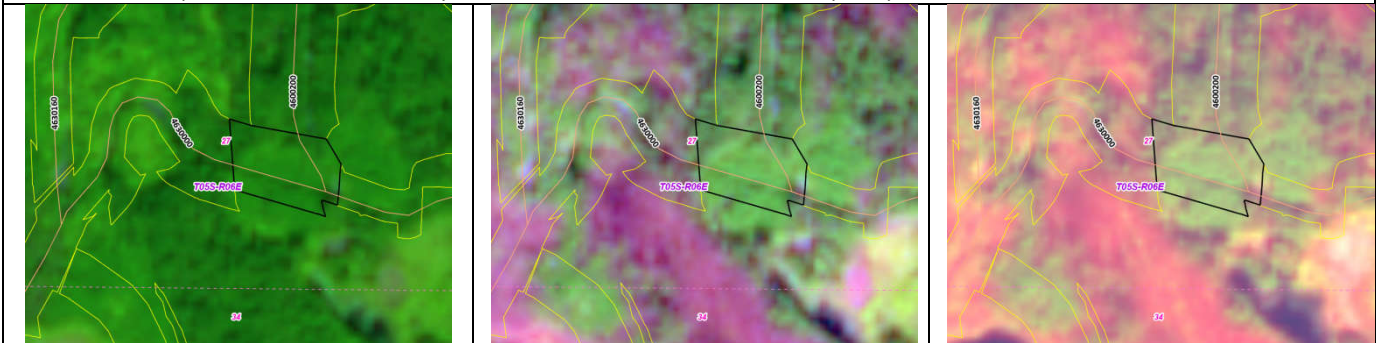
**Road 4621000 (BMP: 2.26 EMP: 3.11): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4621000 (BMP: 1.736 EMP: 2.04): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4630000 (BMP: 1.283 EMP: 1.416): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

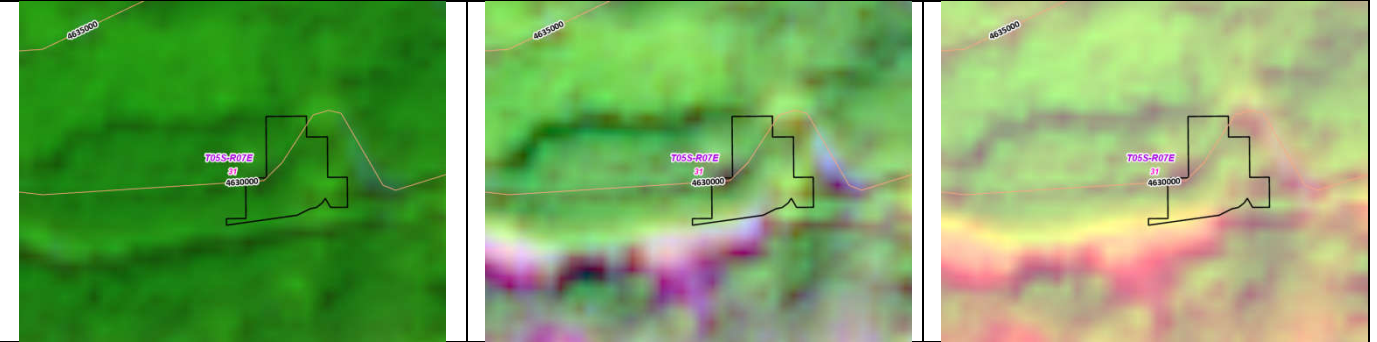


**Road 4630000 (BMP: 1.416 EMP: 1.485): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





**Road 4630000 (BMP: 5.32 EMP: 5.432): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



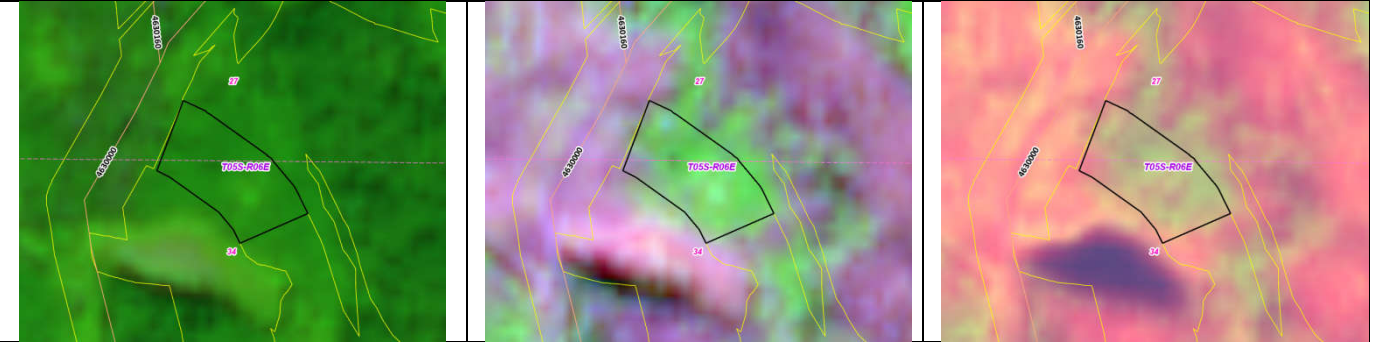
**Road 4630000 (BMP: 5.865 EMP: 6.142): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4630020 (BMP: 0.271 EMP: 0.371): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4630150 (BMP: 0.375 EMP: 0.44): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

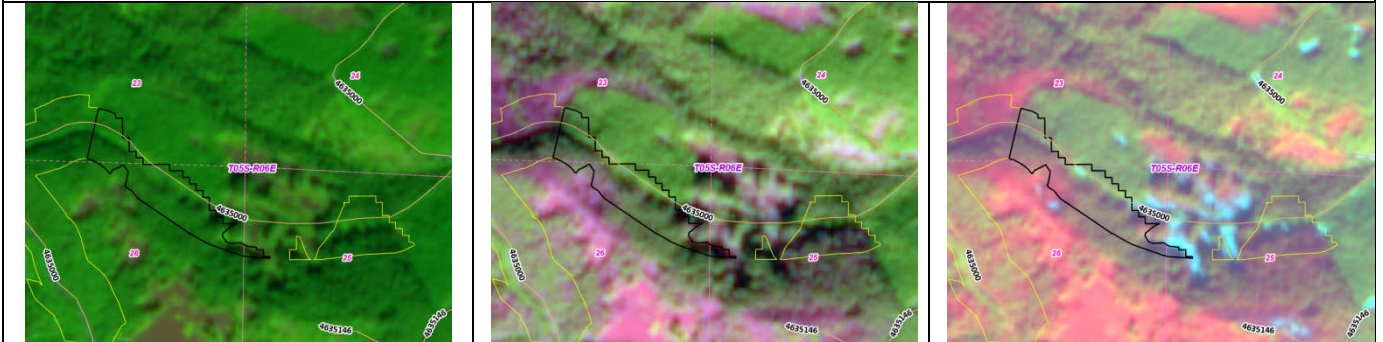




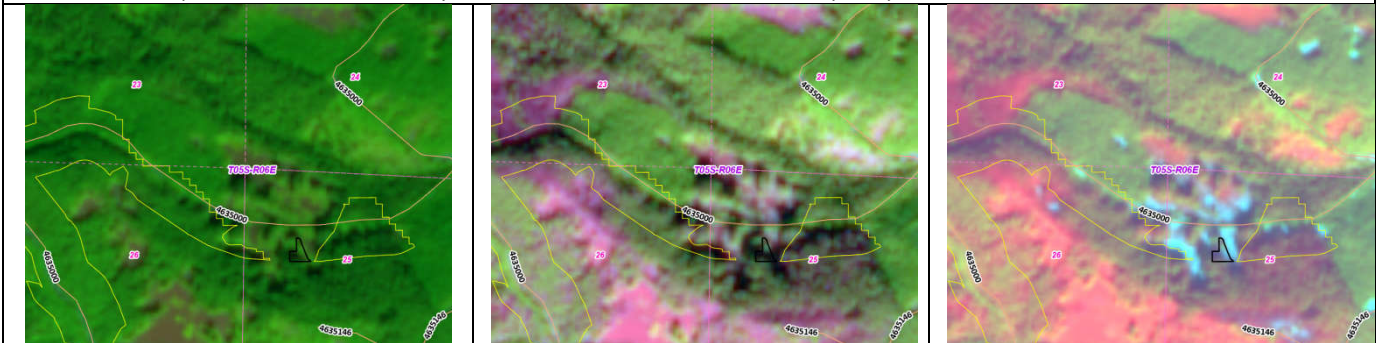
**Road 4635000 (BMP: 3.807 EMP: 5.327): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



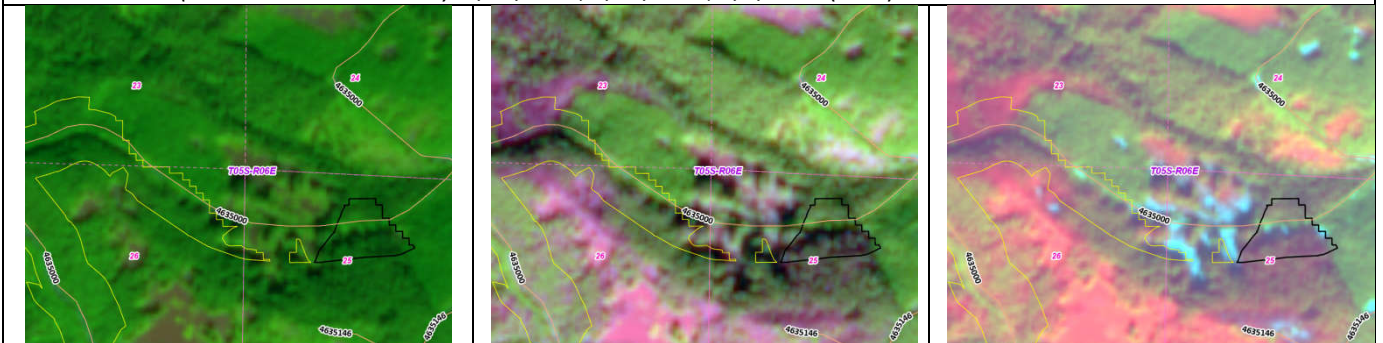
**Road 4635000 (BMP: 5.469 EMP: 5.834): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4635000 (BMP: 5.863 EMP: 5.904): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

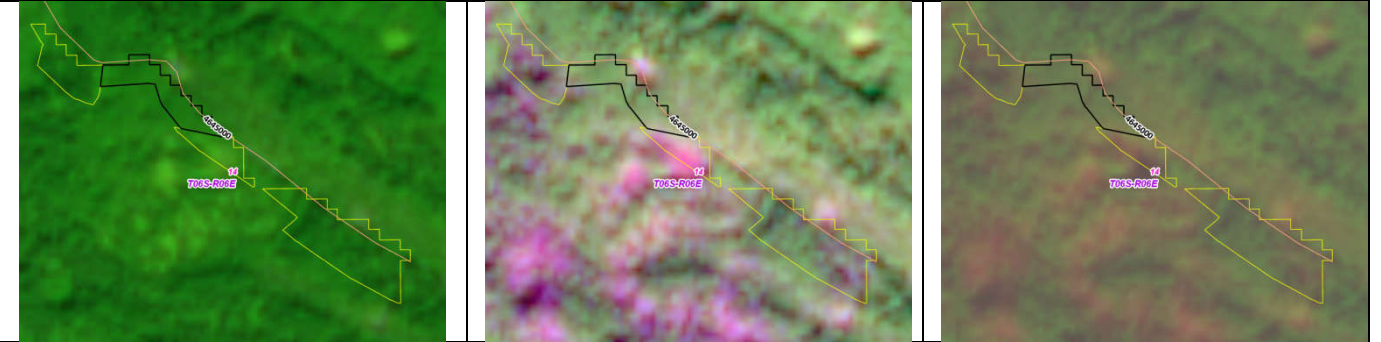


**Road 4635000 (BMP: 5.913 EMP: 6.061): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





**Road 4645000 (BMP: 0.708 EMP: 0.883): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



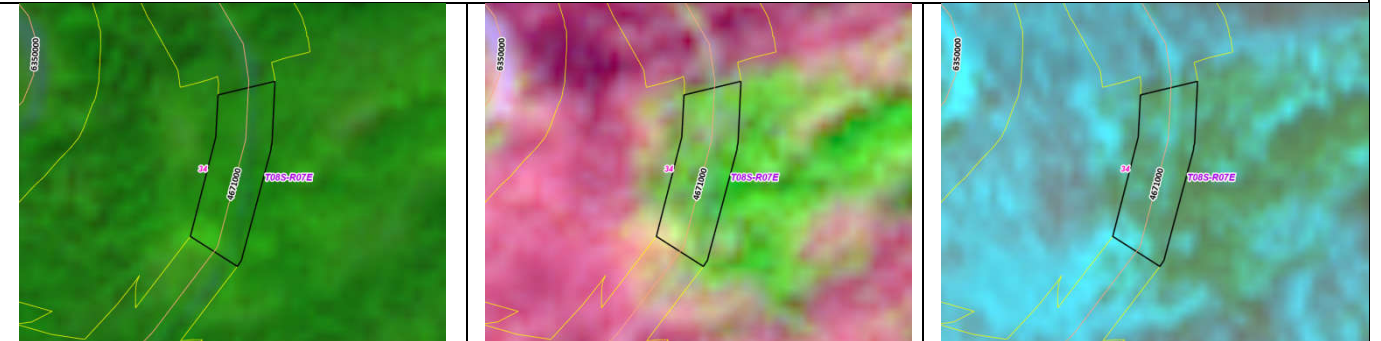
**Road 4645000 (BMP: 0.964 EMP: 1.068): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4671000 (BMP: 9.00 EMP: 9.126): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 4671000 (BMP: 10.709 EMP: 10.839): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



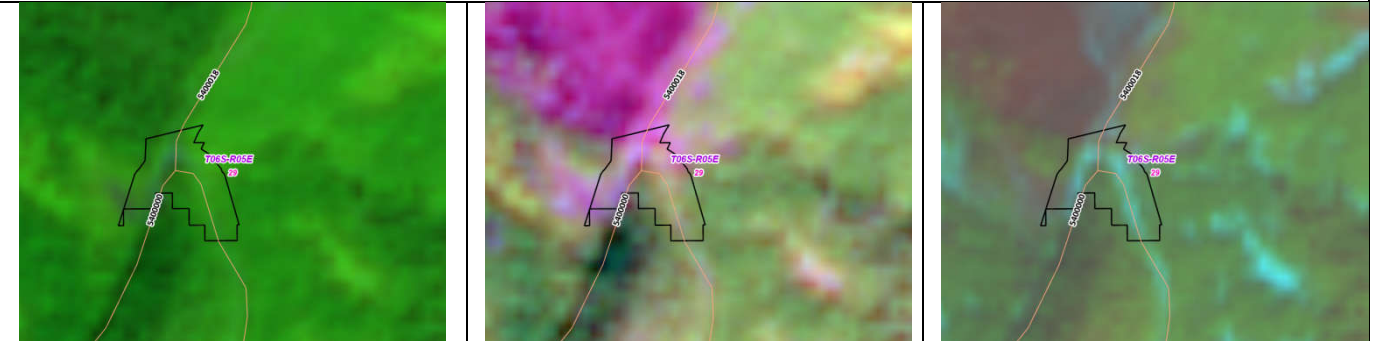
**Road 4671220 (BMP: 0.518 EMP: 0.618): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



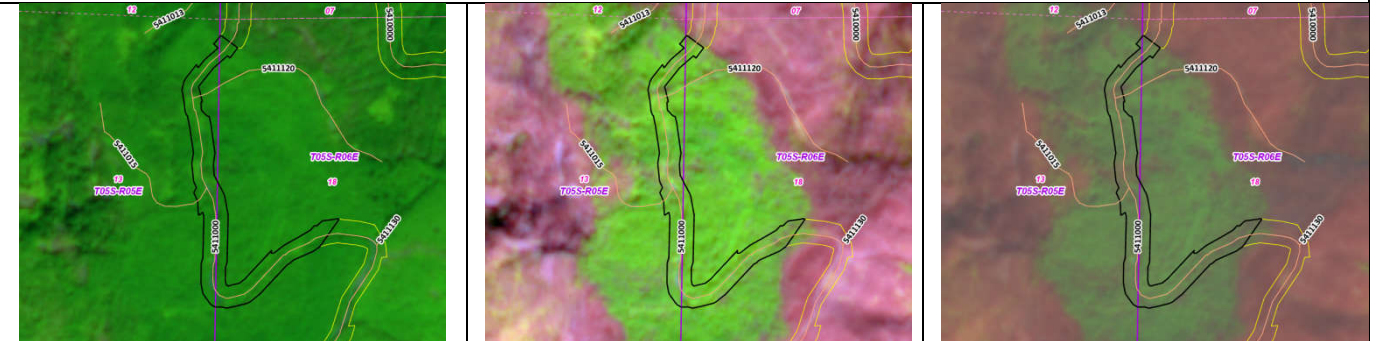
**Road 4691000 (BMP: 1.578 EMP: 1.75): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 5400000 (BMP: 13.883 EMP: 14.65): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 5411000 (BMP: 0.954 EMP: 1.861): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





**Road 5411000 (BMP: 3.87 EMP: 4.423): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 5412000 (BMP: 0.58 EMP: 1.098): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



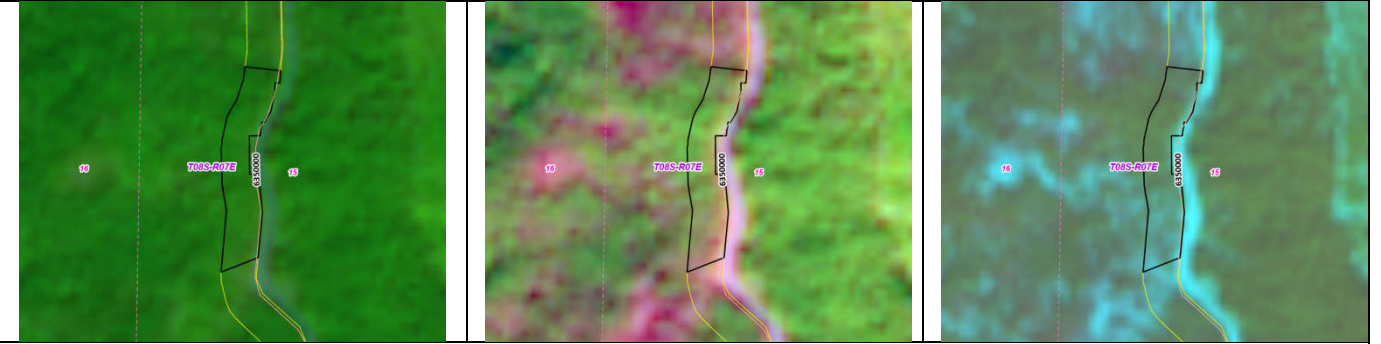
**Road 5700012 (BMP: 0.026 EMP: 0.082): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6350000 (BMP: 8.25 EMP: 9.095): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



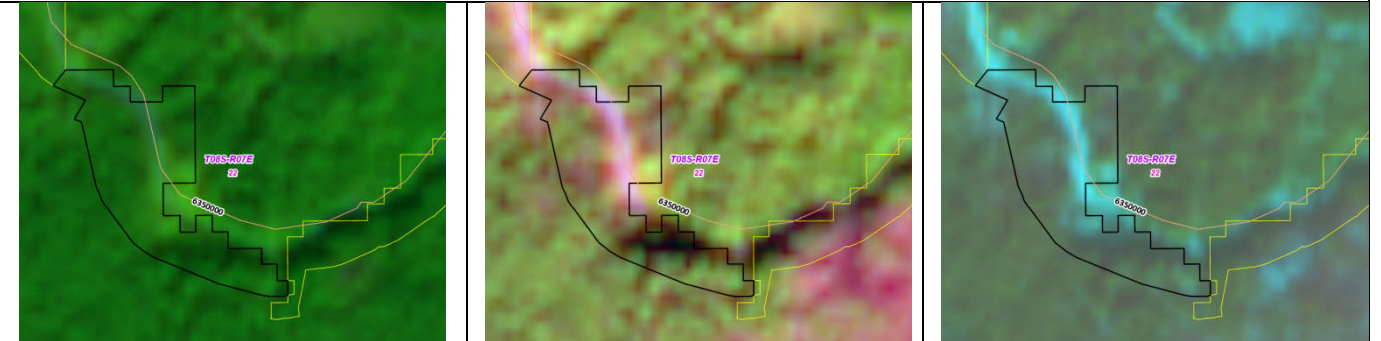
**Road 6350000 (BMP: 9.698 EMP: 9.884): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



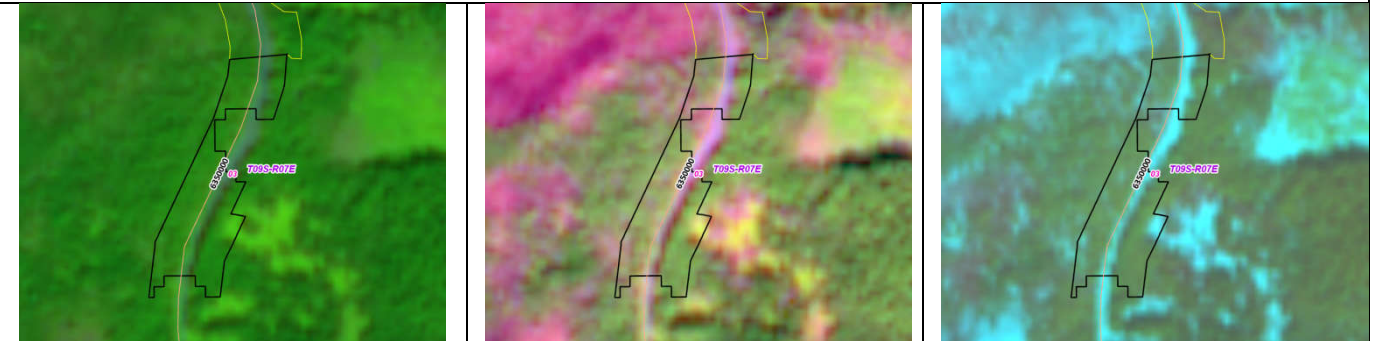
**Road 6350000 (BMP: 9.916 EMP: 10.189): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6350000 (BMP: 10.976 EMP: 11.216): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

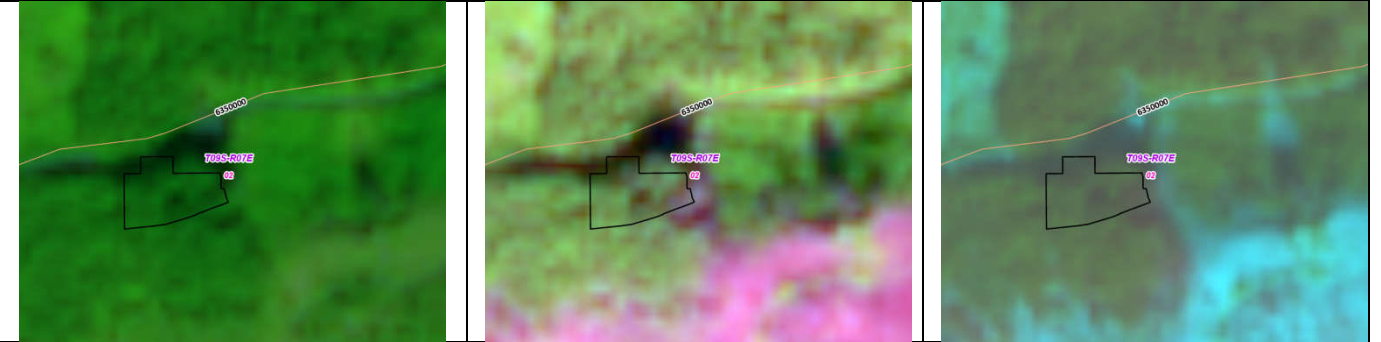


**Road 6350000 (BMP: 14.875 EMP: 15.172): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

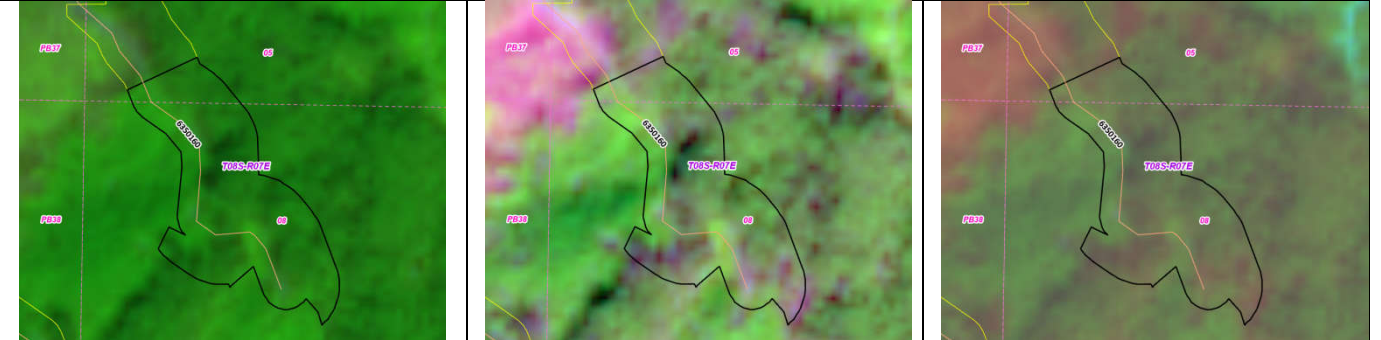




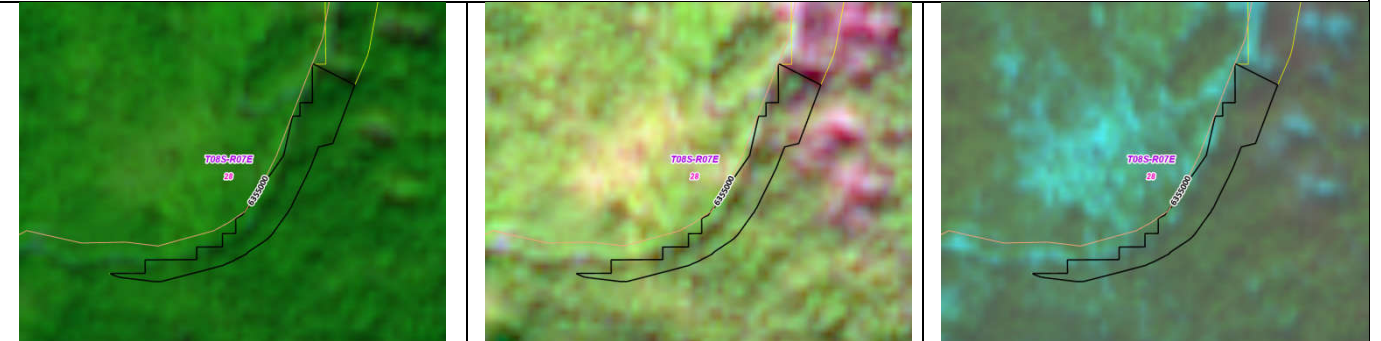
**Road 6350000 (BMP: 16.234 EMP: 16.305): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



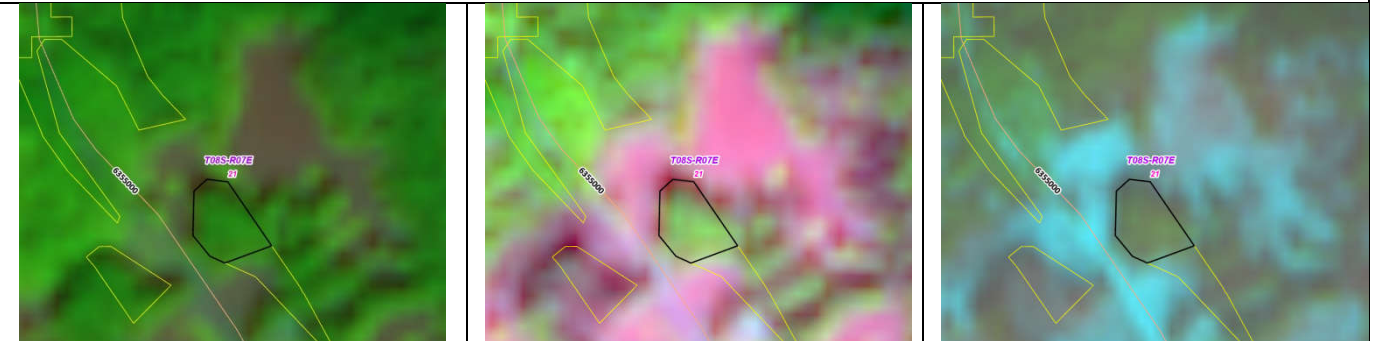
**Road 6350160 (BMP: 3.62 EMP: 3.88): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6355000 (BMP: 1.719 EMP: 1.984): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



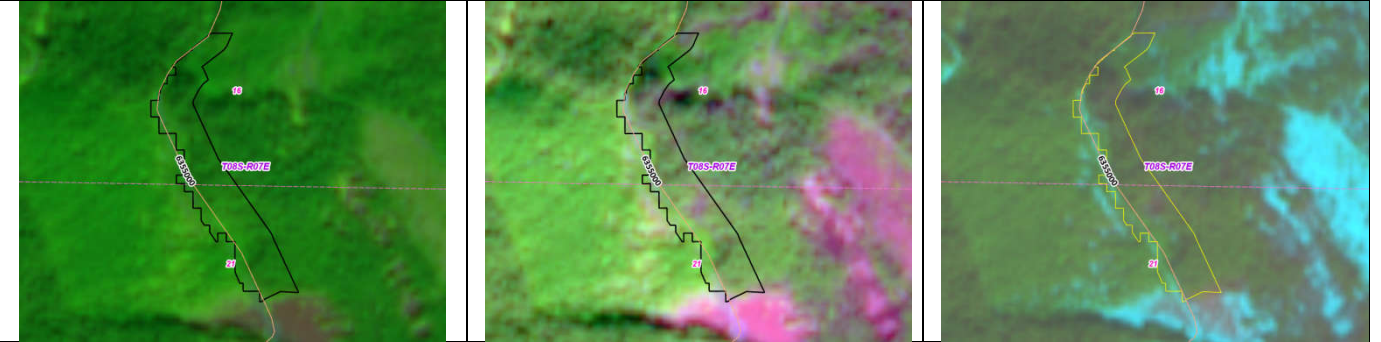
**Road 6355000 (BMP: 2.384 EMP: 2.425): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



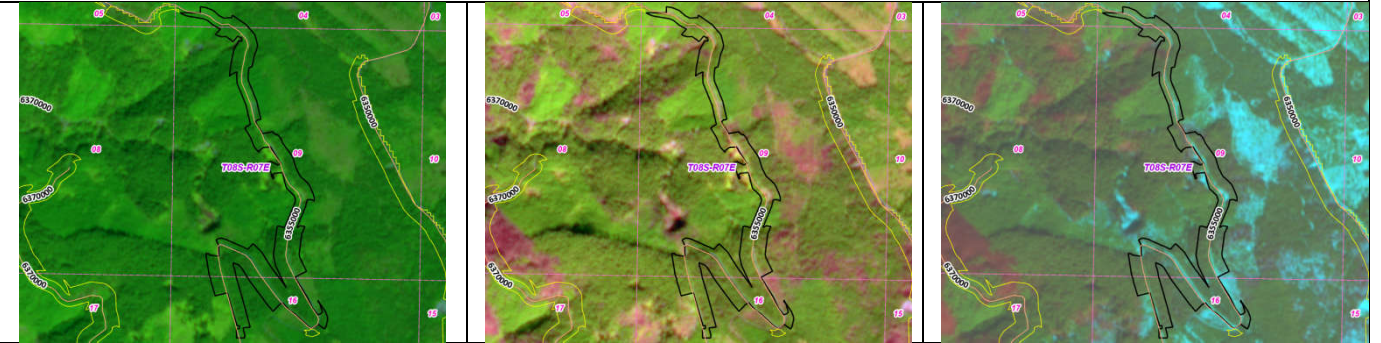
**Road 6355000 (BMP: 2.443 EMP: 2.802): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6355000 (BMP: 3.212 EMP: 3.667): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6355000 (BMP: 4.337 EMP: 7.0): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**

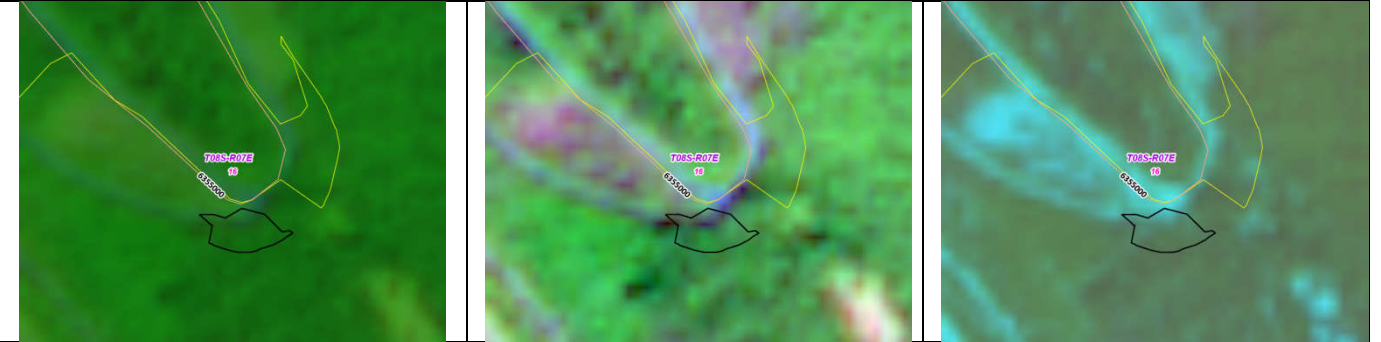


**Road 6355000 (BMP: 7.136 EMP: 7.375): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**





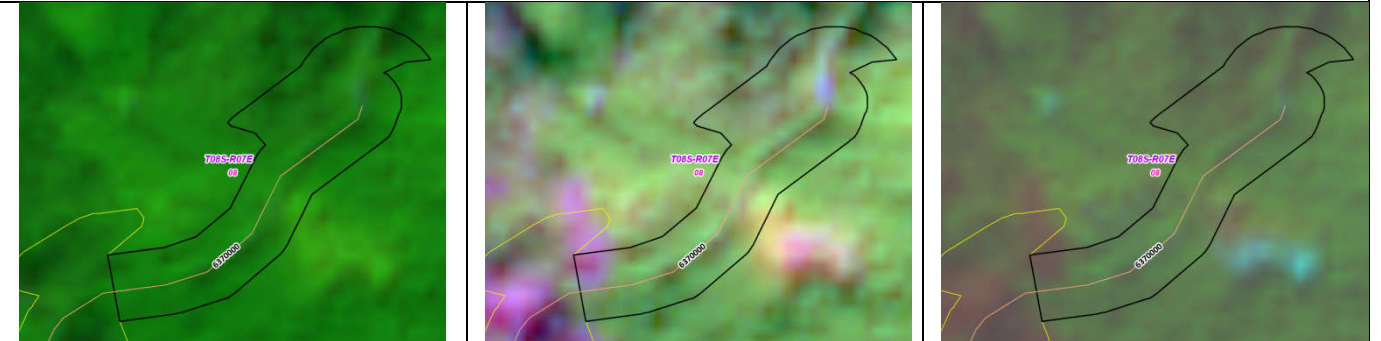
**Road 6355120 (BMP: 0.0 EMP: 0.038): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6370000 (BMP: 2.631 EMP: 3.074): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6370000 (BMP: 4.031 EMP: 4.312): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



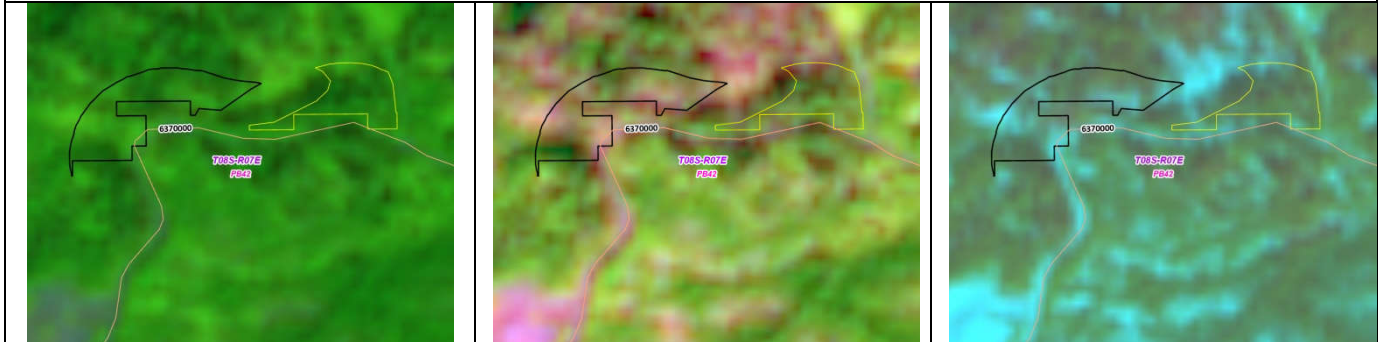
**Road 6370000 (BMP: 5.214 EMP: 5.844): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6370000 (BMP: 12.295 EMP: 12.431): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6370000 (BMP: 12.431 EMP: 12.556): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6370220 (BMP: 0.03 EMP: 0.413): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



**Road 6380000 (BMP: 2.413 EMP: 2.92): 8/25/2020, 9/24/2021, 4/7/2022 (l to r)**



### 3 Treatment of Non-MVUM Roads

The Forest Service has included with this project a number of AOCs of road segments that are not part of the current Motor Vehicle Use Map (MVUM) and which the public cannot drive:



Road Number	BMP	EMP	Already Maintained Under Special Use Authorization?
4500220	0.54	0.661	No
4500240	0.00	0.955	No
4500240	0.955	1.782	No
4500245	0.00	0.496	No
4500246	0.00	0.157	No
4500340	0.00	1.137	Yes
4500350	0.00	0.647	Yes
4510130	2.285	2.68	No
4600021	0.027	0.448	Yes
4600023	0.08	0.12	Yes
4600030	0.00	0.637	Yes
4600076	0.248	0.496	Yes
4600076	0.558	0.598	Yes
4600076	0.625	0.775	Yes
4600076	0.816	0.85	Yes
4600076	1.089	1.238	Yes
4600076	1.273	1.384	Yes
4600076	1.778	1.822	Yes
4600076	1.918	2.445	Yes
4600076	2.64	3.08	Yes
4600076	3.095	3.373	Yes
4600076	3.529	4.079	Yes
4600076	4.112	4.162	Yes
4600076	4.188	4.335	Yes
4600076	4.362	5.071	Yes
4600200	0.00	0.138	Yes
4600200	0.263	0.441	Yes
4630012	0.697	0.82	Yes

The list of roads above is documented in Appendix B of the EA and the reason for inclusion in the project is so that they remain open for “administrative use.” 22 of the 28 road segments (bold emphasis in the table above) are road segments that serving as access roads to utilities / infrastructure that are already covered under a special use authorization which includes hazard tree felling. Why is it necessary to include these roads in this project? The entries in Appendix B even state that hazard tree clearing may have already occurred along the given road segment.

#### 4 Northern Spotted Owl Habitat

For the reasons that have been previously listed in my comments regarding the AOC justification / determination (comment points 1 & 2), I am concerned that the Forest Service will be taking actions in critical habitat that, in fact, are not degraded. Through previous conversation with Region 6 Forest Service staff, I was told that the Mount Hood National Forest does not maintain a stand age dataset for the forest (VEGIS, which was a database in the 80s / 90s has since been retired). I was additionally told that Forest Service staff now use GNN Data<sup>4</sup> produced by the LEMMA at Oregon State University as a starting point along with field verification. The latest version of the GNN dataset is from 2017 and so I have clipped that information based on the AOCs in the EA and a second time based on the AOC portions I questioned in my earlier comment point 2. The results are as follows:

All EA AOC Areas (7,479.44 Acres)			Suspect AOC Areas (1,421.72 Acres)		
Stand Age	Acres	Percent of Total	Stand Age	Acres	Percent of Total
<b>0 - 40</b>	500.47	6.69	<b>0 - 40</b>	70.17	4.94
<b>40 - 80</b>	1,321.88	17.67	<b>40 - 80</b>	283.58	19.95
<b>80 - 120</b>	1,329.96	17.78	<b>80 - 120</b>	294.08	20.68
<b>120 - 160</b>	1,423.83	19.04	<b>120 - 160</b>	231.22	16.26
<b>160 - 200</b>	945.76	12.64	<b>160 - 200</b>	220.96	15.54
<b>&gt; 200</b>	1,957.53	26.17	<b>&gt; 200</b>	321.71	22.63

75% of all EA AOC areas have a stand age of 80 years or greater and over 1/3 is 160 years or older. The numbers are similar if you focus on the AOC portions I identified in Comment #2 which don't appear to align with the assessment of moderate to high burn severity. In recent years, Derek Lee has published articles in 2018<sup>5</sup> and again in 2020<sup>6</sup> on the topic of Spotted Owls and wildfire response. In both articles, Lee found that that mixed-severity fire including large patches of high-severity fire were not an immediate threat to Spotted Owl populations. This project may well be authorizing the removal of quality habitat trees in stands where their removal would be far more significant due to the overestimation of burn severity. I would urge the Forest Service to review the AOCs against previous Survey & Manage records and field verify conditions within the NSO core areas to ensure needless removal of habitat does not occur.

## 5. Red Tree Vole

The Wildlife Report has only one reference to Red Tree Voles and it is a passing reference at that. The Mt Hood National Forest has published a Red Tree Vole GIS dataset in the past<sup>7</sup> and that dataset shows that portions of the project area, particularly in the greater Ripplebrook vicinity possessed high quality habitat (see included Figure 1). The wildlife report does state that the Forest Service will not be performing any new Survey & Manage surveys but why is the Forest Service not reviewing the AOCs against previous Survey & Manage species occurrences to see if the AOCs interact with any previously identified RTV protection buffers? There are a number of timber sale activities that have occurred since 1995 that intersect with the AOCs that have been identified:

Timber Sale Name	Treatment Type	FY Planned	FY Completed
THRASHER	Commercial Thinning	1990	1997
FANTASIA	Commercial Thinning	1994	1996
FORK	Commercial Thinning	1994	1995
FANTASIA	Commercial Thinning	1994	1996
PARDNER	Commercial Thinning	1994	1995
FANTASIA	Commercial Thinning	1994	1997
FANTASIA	Commercial Thinning	1994	1996
FORK	Commercial Thinning	1994	1995
CLEAR	Shelterwood cut (EA/	1995	1999
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	1999
CLEAR	Shelterwood cut (EA/	1995	1999
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	2000
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	2001
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	1999
CLEAR	Commercial Thinning	1995	2000
CLEAR	Group selection cut	1995	2001
FOIL SAMURAI SSF	Salvage cut (interme	1996	1997
GEORGE II SSF	Salvage cut (interme	1996	1997
SAND	Commercial Thinning	1996	1998
GEORGE II SSF	Salvage cut (interme	1996	1998
BUGS SSF	Salvage cut (interme	1997	1997
BUGS SSF	Salvage cut (interme	1997	1997
BUGS SSF	Salvage cut (interme	1997	1997
BUGS SSF	Salvage cut (interme	1997	1997
BUGS SSF	Salvage cut (interme	1997	1997
BUGS SSF	Salvage cut (interme	1997	1997
PARDNER II	Commercial Thinning	1998	1998
LUNCH SSF	Salvage cut (interme	1998	1998
PARDNER II	Commercial Thinning	1998	1998
COWPOKE II	Commercial Thinning	1999	2000
CUB	Commercial Thinning	2003	2003



BEAR II	Shelterwood cut (EA/	2004	2004
SLIP	Commercial Thinning	2005	
SLIP	Commercial Thinning	2005	
COLD THIN	Commercial Thinning	2006	
COLD THIN	Commercial Thinning	2006	
COLD THIN	Commercial Thinning	2006	
1929 THIN	Commercial Thinning	2006	2010
COLD THIN	Commercial Thinning	2006	
B	Commercial Thinning	2006	
1929 THIN	Commercial Thinning	2006	2013
1929 THIN	Commercial Thinning	2006	2007
1929 THIN	Commercial Thinning	2006	2013
COLD THIN	Commercial Thinning	2006	
1929 THIN	Commercial Thinning	2006	2013
ELBOW THIN STEWARDSHIP	Commercial Thinning	2007	
SPOON THIN STEWARDSHIP	Commercial Thinning	2007	
SPOON THIN STEWARDSHIP	Commercial Thinning	2007	2011
SPOON THIN STEWARDSHIP	Commercial Thinning	2007	2010
ELBOW THIN STEWARDSHIP	Commercial Thinning	2007	2009
ELBOW THIN STEWARDSHIP	Commercial Thinning	2007	
ELBOW THIN STEWARDSHIP	Commercial Thinning	2007	
MISTAKE	Commercial Thinning	2008	2014
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2010
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2010
MISTAKE	Commercial Thinning	2008	2014
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2010
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
MISTAKE	Commercial Thinning	2008	2014
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
MISTAKE	Commercial Thinning	2008	2014
MISTAKE	Commercial Thinning	2008	2014
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2010
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015
K-9 THIN STEWARDSHIP	Commercial Thinning	2008	2009
QUARRY THIN STEWARDSHIP	Commercial Thinning	2008	2015

I have also included a map example (attached Figure 2) showing the overlap between these sales and the Red Tree Vole habitat. There is more than just a casual overlap between the project AOCs and previous timber harvests. Given the stand age of the forests and the distribution of RTV habitat, it seems negligent to not review the historical records of RTV presence and how that may interact with the AOCs.

## 6. Treating Roads that are to be Decommissioned

As indicated on page 21 of the EA, the Forest Service still proposes to treat several roads prior to be decommissioned. While the EA states that “...Danger trees would only be cut along roads proposed for closure and decommissioning to the extent necessary to safely implement the action.” How, specifically, would this be different? The Transportation Report provides absolutely no detail as to how these roads will be decommissioned and with what techniques. This lack of detail regarding techniques applied is important because those techniques will ultimately decide the level of exposure any given worker will

encounter. How much of the road surface is to be decommissioned? Will there be 100% ripping of the surface or will the Forest Service use an alternating checkerboard pothole method that has been used previously? Can the Forest Service just selectively mark trees within the decommission portions where workers are anticipated to spend the most time working?

Worker safety is absolutely a priority and OSHA regulations already exist to keep workers safe. The regulations would already be in effect in during any decommissioning project scenario. Again, dead trees provide opportunity for wildlife habitat so cutting them down and then decommissioning the road seems like a self defeating process.

## 7. Danger-Tree Selection

Finally, I would like to remind the Forest Service that the 2016 Field Guide for Danger-Tree Identification<sup>8</sup> on page 27 indicates that recent dead Douglas-Fir >20" and Cedar with no failure indicators have a low likelihood of failure within 5 years. These features should be left standing as they would greatly benefit the forest as habitat features.

Thank you,

Stephen Cole







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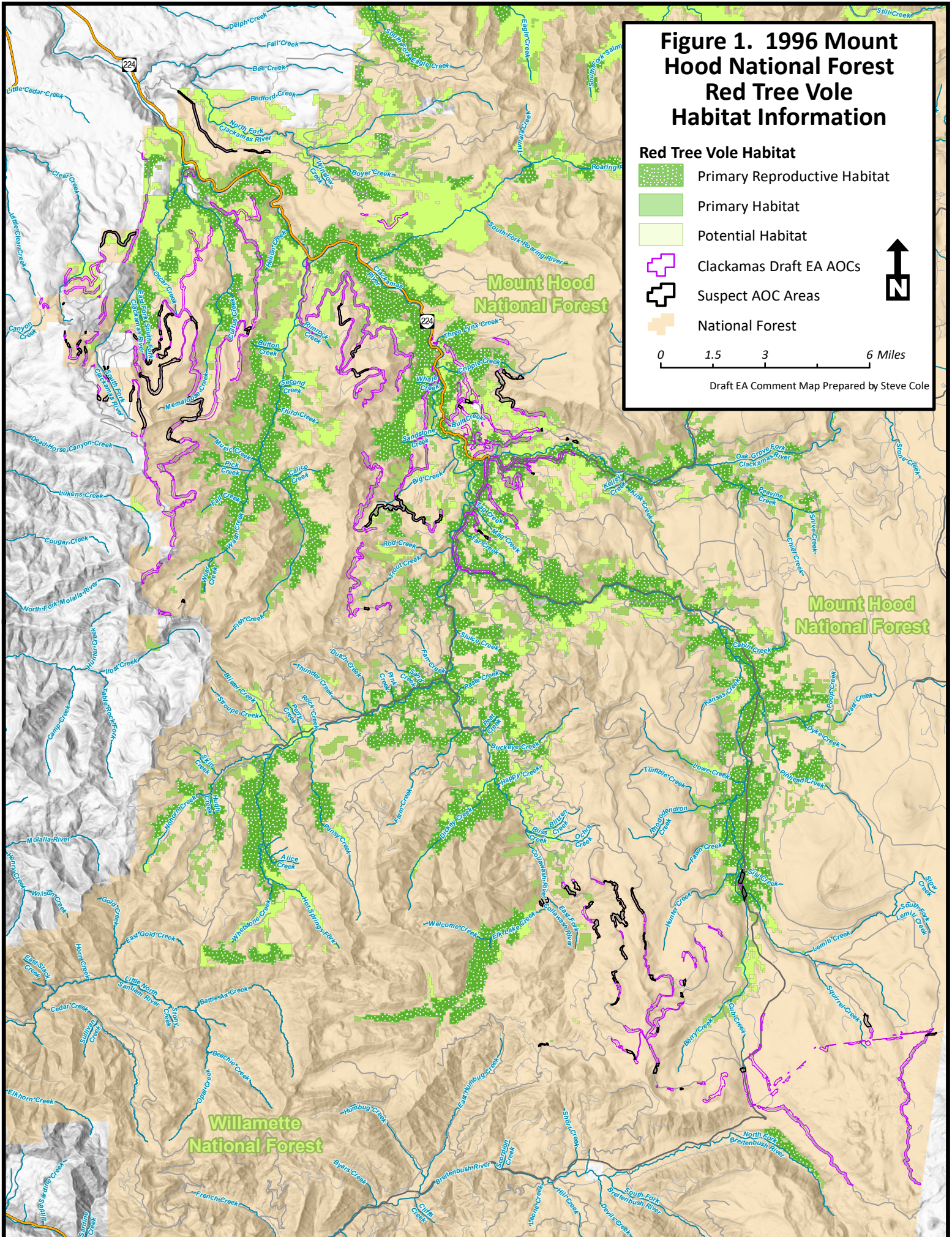
**Figure 1. 1996 Mount Hood National Forest Red Tree Vole Habitat Information**

**Red Tree Vole Habitat**

-  Primary Reproductive Habitat
-  Primary Habitat
-  Potential Habitat
-  Clackamas Draft EA AOCs
-  Suspect AOC Areas
-  National Forest

0 1.5 3 6 Miles




Draft EA Comment Map Prepared by Steve Cole







**Figure 2. Post 1995  
Timber Sales, Red Tree  
Voles & Project AOCs**


**Red Tree Vole Habitat**

-  Primary Reproductive Habitat
-  Primary Habitat
-  Potential Habitat

 Previous Timber Sale

 Clackamas Draft EA AOCs

 Suspect AOC Areas

 National Forest

0 1.5 3 Miles

Draft EA Comment Map Prepared by Steve Cole

