

# Metadata

Scroll down for maps of the study area.

| Data Category    | Variable Name          | Variable Description   | Resolution (m)   | Unit                | References                                    |
|------------------|------------------------|--|------------------|---------------------|---|
| Response         | RBR                    | Relativized burn ratio calculated in GEE   | 10               | Unitless            | (Howe et al. 2022)                            |
| Climate/Veg      | AET_1981_2010          | mean actual evapotranspiration across years 1981-2010. simultaneous availability of biologically usable energy and water in the environment, it reflects the magnitude and length of conditions favorable to plant growth. | 270              | mm                  | (Cansler et al. 2022), Appendix A             |
| Fire Weather     | T_max_bpd              | GRIDMET daily maximum temperature extracted to NIROPS-derived burn progression day maps  | 10 (4-km native) | Kelvin              | (Abatzoglou 2013) <a href="#">NIROPS 2022</a> |
| Forest Structure | pct_canopy_cover       | Percent canopy cover above 2m.   | 30               | percent             | <a href="#">FUSION</a> , 2018 LiDAR           |
| Forest Structure | Pct_1_tree_clumps      | Percent of individual trees  | 30               | percent             | FUSION, 2018 LiDAR                            |
| Forest Structure | Pct_2_4_tree_clumps    | Percent of clumps with 2-4 trees   | 30               | percent             | FUSION, 2018 LiDAR                            |
| Forest Structure | Pct_5_9_tree_clumps    | Percent of clumps with 5-9 trees   | 30               | percent             | FUSION, 2018 LiDAR                            |
| Forest Structure | Pct_gteq10_tree_clumps | Percent of clumps with 10 or more than 10 trees  | 30               | percent             | FUSION, 2018 LiDAR                            |
| Forest Structure | canopy_rumple          | Proxy of canopy complexity (vertical and horizontal heterogeneity)   | 30               | Continuous, numeric | FUSION, 2018 LiDAR                            |
| Forest Structure | pctl_25_canopy_height  | Proxy of canopy base height  | 30               | m                   | FUSION, 2018                                  |

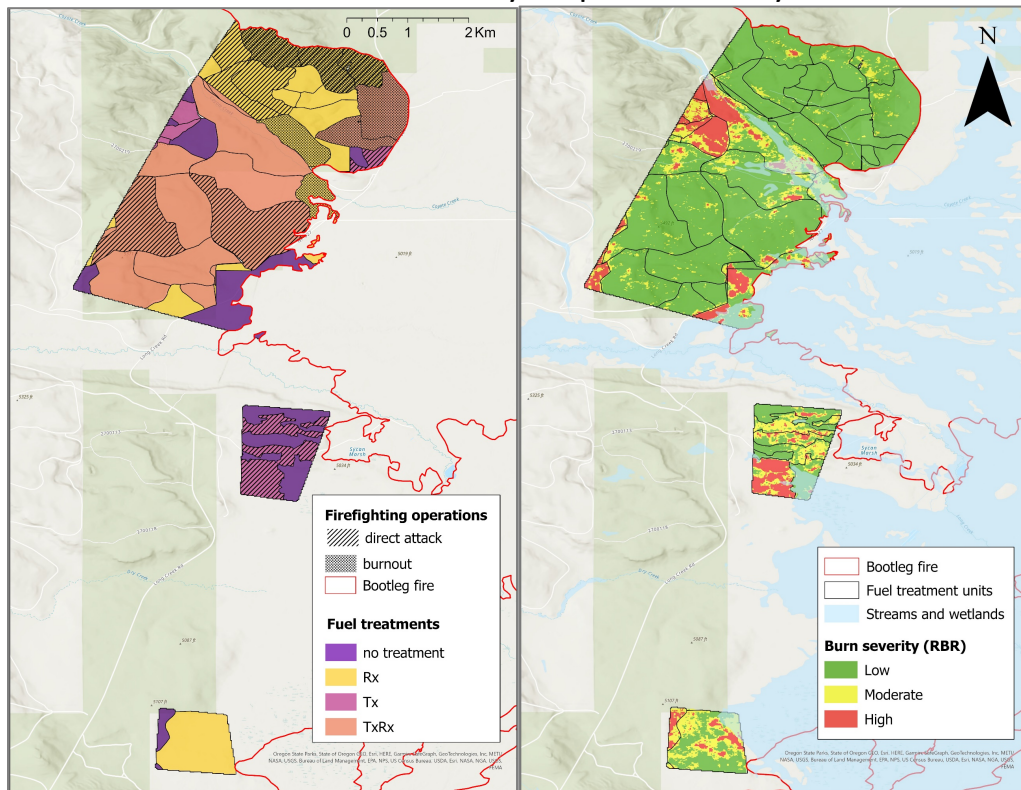
|                  |                              |   |    |                            |   |
|------------------|------------------------------|---|----|----------------------------|---|
|                  |                              |   |    |                            | LiDAR   |
| Forest Structure | pctl_95_canopy_height        | Proxy of dominant canopy height   | 30 | m                          | FUSION, 2018 LiDAR  |
| Topographic      | topo_aspect                  | Aspect  | 15 | degrees                    | FUSION, <a href="#">2021 LiDAR</a>                          |
| Topographic      | topo_plane_curvature         | Plane curvature (across the slope)  | 15 | -                          | FUSION, 2021 LiDAR  |
| Topographic      | topo_SRI                     | Solar radiation index   | 15 | -                          | FUSION, 2021 LiDAR  |
| Topographic      | topo_TPI_4000                | Topographic position index (w=4000m)  | 15 | -                          | FUSION, 2021 LiDAR  |
| Topographic      | topo_curvature_45m           | Curvature (along the slope)   | 15 | -                          | FUSION, 2021 LiDAR  |
| Topographic      | topo_slope_135m              | Slope   | 15 | degrees                    | FUSION, 2021 LiDAR  |
| Topographic      | topo_SRI_270                 | Solar radiation index (w = 270m)  | 15 | -                          | FUSION, 2021 LiDAR  |
| Topographic      | topo_TPI_500                 | Topographic position index (w=500m)   | 15 | -                          | FUSION, 2021 LiDAR  |
| Fire Weather     | wind_northsouthness          | cosine of WindNinja derived maximum wind speed direction; values closer to 1 represent winds from the north, while values closer to -1 represent winds coming from the south. Maximum daily wind speed derived from WindNinja and extracted to NIROPS-derived burn progression maps | 90 | cosine transformed radians | (Wagenbrener et al. 2016); <a href="#">NIROPS 2022</a>      |
| Management       | distance_to_streams_wetlands | distance in meters to stream and wetlands layers  | 10 | m                          | OR <a href="#">DFW 2022</a> ; OR <a href="#">DSL 2022</a> ; |

|             |        |   |     |              |                                      |
|-------------|--------|---|-----|--------------|--------------------------------------|
| Management  | Rx     | Fuel treatment layer including presence/absence of prescribed fire. Layers were provided by The Nature Conservancy and USFS. Data is not open source. | 10  | Binary (0,1) | TNC; USFS                            |
| Climate/Veg | ESI    | ECOSTRESS Evaporative Stress Index data from just before the fire started (Bootleg: 07/05/2021). 0 = no water stress, 1 = high water stress.          | 70  | W/m2         | (Cawse-Nicholson and Anderson, n.d.) |
| Climate/Veg | SCF    | snow cover frequency measured as number of days with snow divided by 365 days   | 500 | percent      | (Crumley et al. 2020)                |
| Climate/Veg | FRS    | Community fire resistance score   | 250 | -            | (Stevens et al. 2020)                |
| Climate/Veg | EVT_PP | 2020 LANDFIRE Dominant Existing Vegetation Type   | 60  | Binary (0,1) | <a href="#">LANDFIRE EVT</a> , 2020  |

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## Fuel treatments and burn severity map of the study area



## Bootleg Fire location (South-central Oregon)

