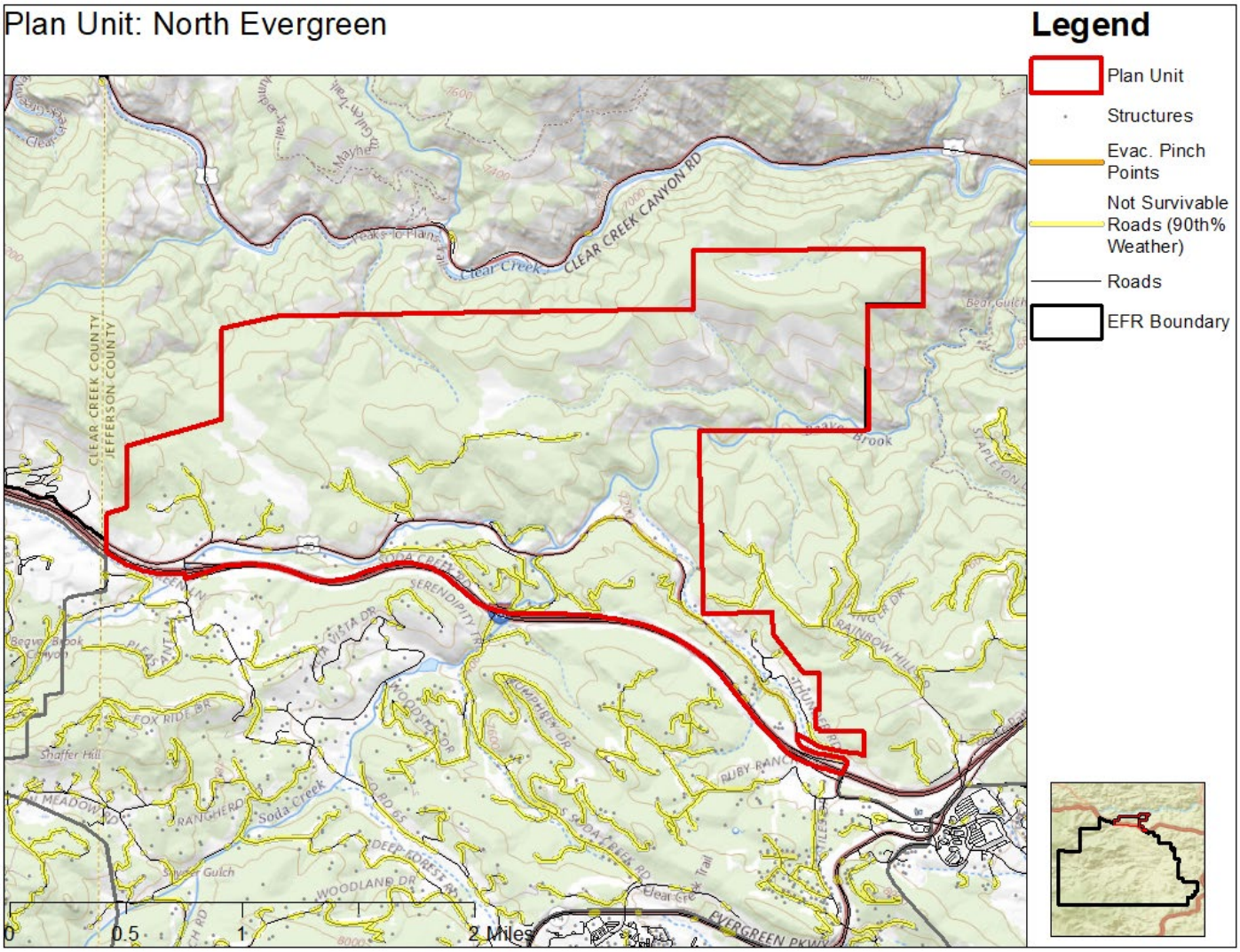
North Evergreen – Plan Unit 9

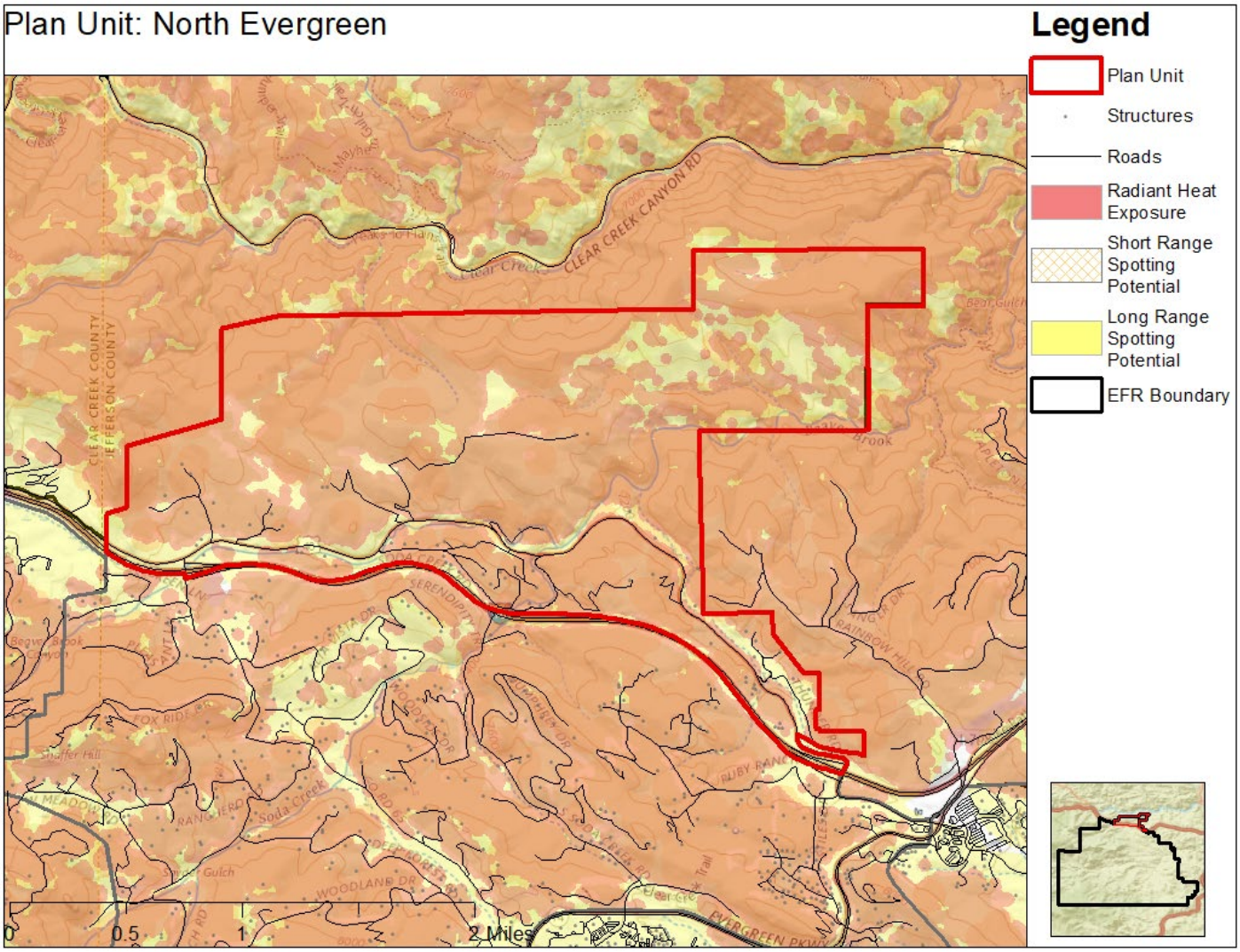
Rating: High

Evacuation Data Summary					
Number of Structures	Number of Cars	Average Time to Evacuate (min)	Median Time to Evacuate (min)	Minimum Time to Evacuate (min)	Maximum Time to Evacuate (min)
60	120	38	38	32	44

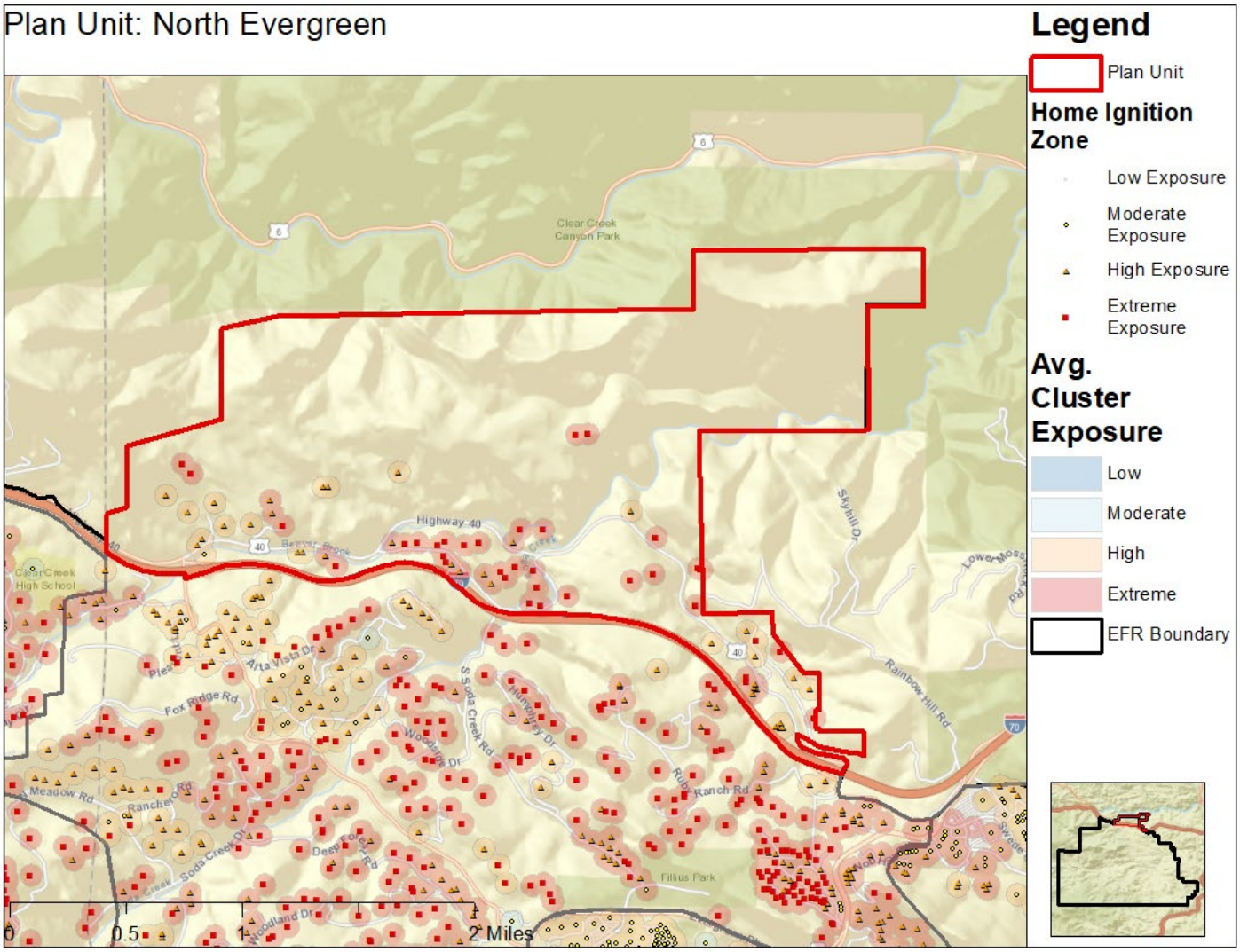
Structures in North Evergreen include a combination of a few ranches and luxury homes. Overall defensible space was adequate and construction materials appears new. Roadways have good access but need significant fuel reduction in right of ways to increase evacuation safety. Wildland fuels do not appear to have been treated anywhere other than in immediate proximity to homes. Treatments north of most residences would assist firefighter response.



North Evergreen has no modeled Evacuation Pinch Points. Some roadways are not survivable during a 90th percentile fire weather day and can be mitigated to make evacuation safer. Highway 40 is the most important evacuation corridor, which has a non-survivable section on the east side.



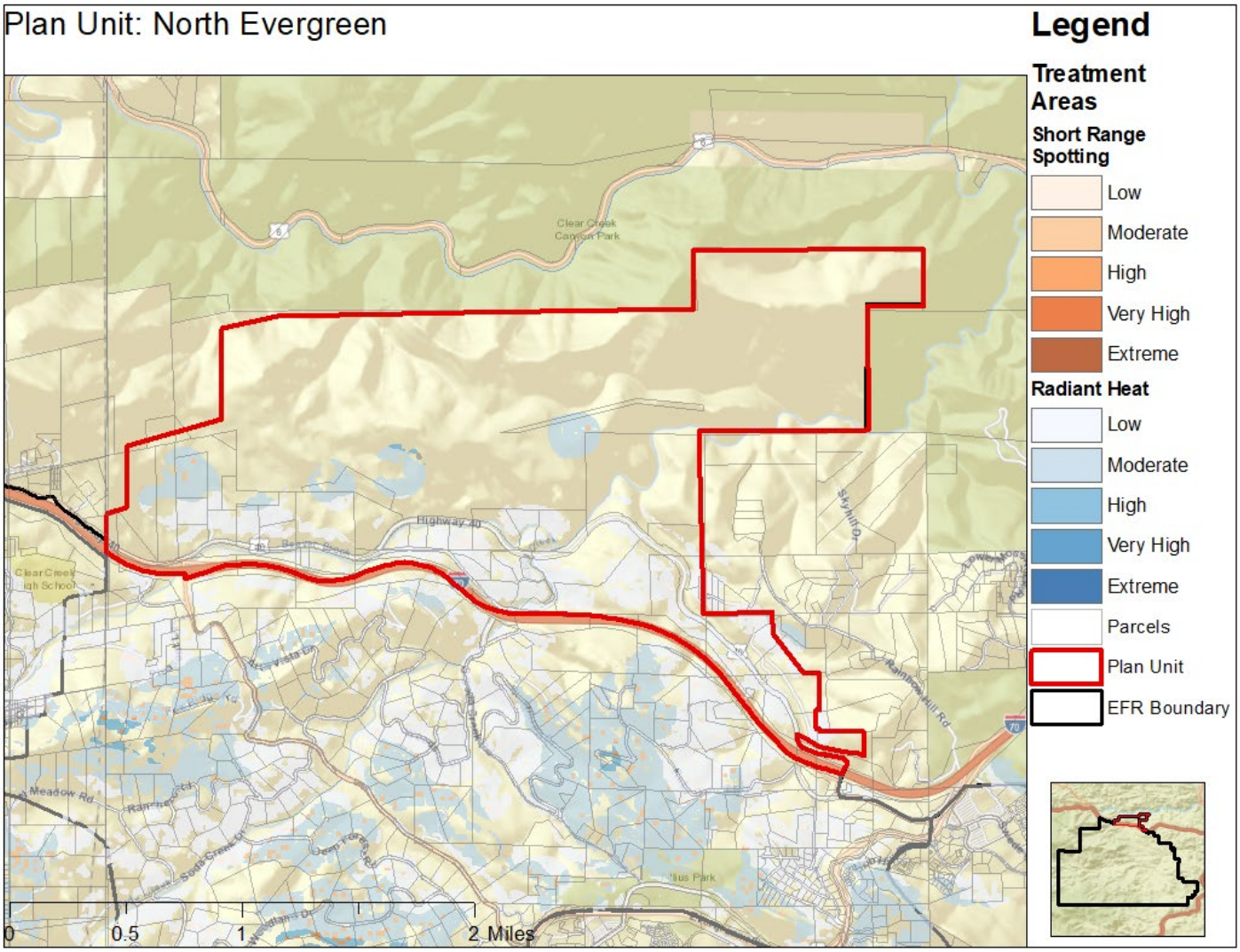
Radiant Heat exposure is designed to show neighborhoods where vegetation will create fire behavior extreme enough to ignite home materials. Short- and long- range spotting is when embers travel a distance from the fire and continue its spread away from the main fire –this can be a deluge of embers that is difficult to combat. These ignition risks are present to extreme degrees in Evergreen Fire Protection District. Different visualizations of this data are mapped on the following pages and will give residents a clearer path forward to mitigation.



Ember exposure outputs (radiant heat, short range spotting, and long-range spotting, as seen above) were overlaid with structure points buffered as the Home Ignition Zone (100 ft). Structures in which greater than 50% of the home ignition zone was covered by radiant heat, short range spotting, or long-range spotting were defined as being at risk from that hazard. Extreme exposure means all three factors are present, as the model indicates.

These values were then aggregated at the structure cluster level which are dissolved 100 m buffers of structures. If a structure's 100m buffer intersects a different structure's buffer, they are part of the same cluster. Average exposure to all the structures in the cluster is displayed behind the structure point on the above map. This means that even though some structures may be a lower risk due to the wildland fuels adjacent to their home, they will be still at extreme risk as home to home ignition is extremely likely.

North Evergreen has mostly un-linked cluster exposure, but many homes have extreme risk. The worst exposure is between Highway 40 and Soda Creek Road. Some of these homes have linked exposures and need to implement home hardening and defensible space to lessen the collective risk.



Radiant heat and short-range ember exposure are displayed and filtered by accessible treatment areas (by slope and distance to a roadway). High to Extreme risk areas displayed in those maps are highest priority to protect from radiant heat and short-range spotting, however, this does not negate the need for defensible space treatment across the landscape.

Much of North Evergreen is modeled as inaccessible, but the areas between Soda Creek Road and Highway 40, as well as some structures along Crooked Pine Lane would be highest priority for treatment and located in accessible places.

Shelter-in-place

There is no currently recommended shelter-in-place location in North Evergreen. Some roadways could be expanded to allow for shelter, but considerable mitigation needs to happen first.