

101 Fire Corridor Oak Ember Barrier and Fuel Modification Project

Planting a Legacy: Creating an Ember Screen Along a Historic Wildfire Corridor

ABSTRACT

The Mountains Recreation and Conservation Authority (MRCA) is implementing an innovative ember barrier zone on publicly managed lands along a four mile section of the 101 freeway to mitigate ember driven wild-fire ignitions in a future wind-driven wildfire event.

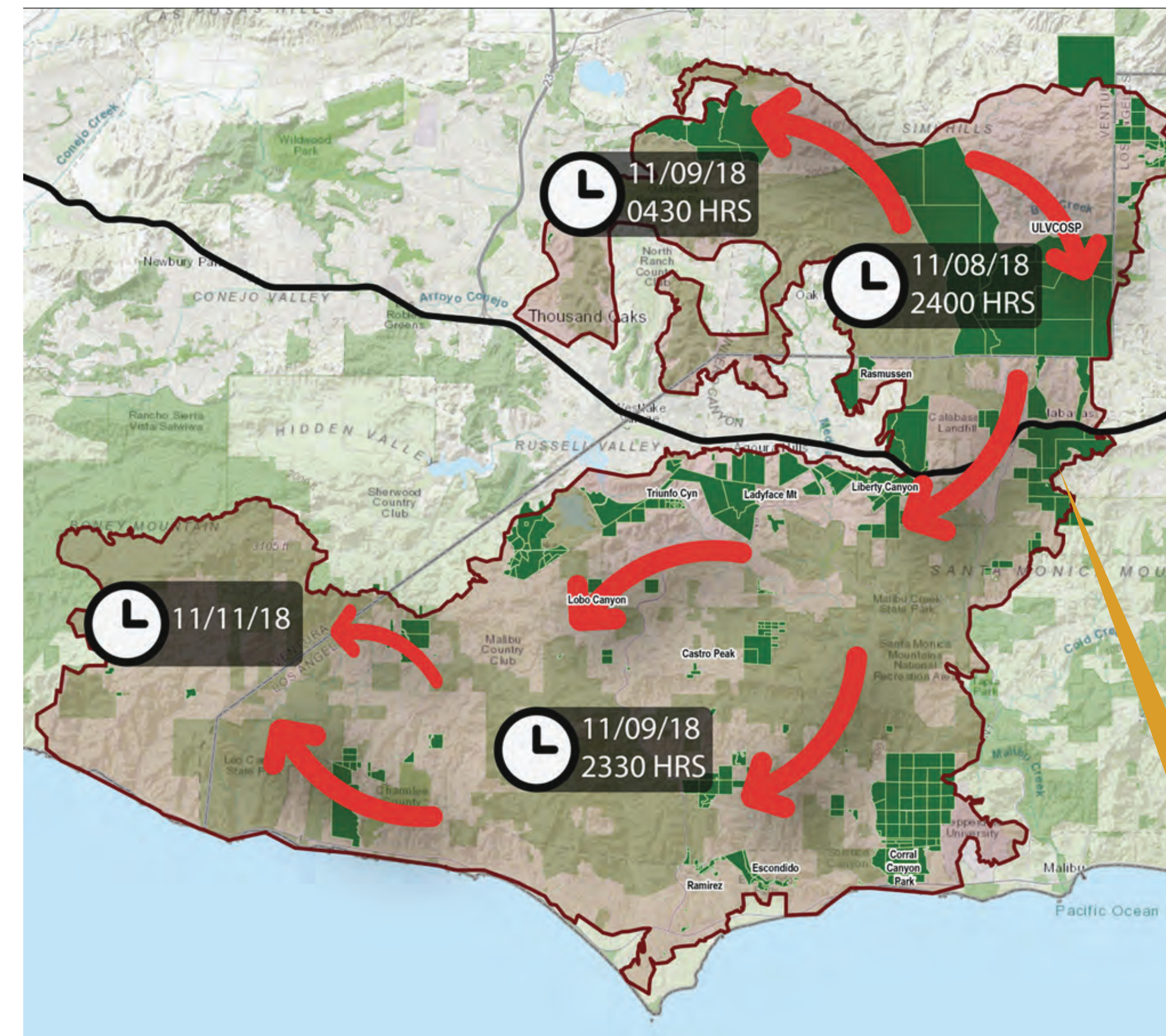
High intensity wildfires are regular events in the Santa Monica Mountains. Decades of wildfire history show large Santa Ana wind driven fires moving southward in the Simi Hills and then jumping the 101 freeway into the Santa Monica Mountains in a well-defined, historic fire corridor. Many of those large fires spread out widely in the Santa Monica Mountains and can reach the ocean, as they did in 2018. The Woolsey Fire burned 96,949 acres, destroyed 1,643 structures, killed three people, and prompted the evacuation of more than 295,000 residents.

Given the predictability of fire travel through this fire corridor and the climate change driven increase in wildfire threat, the MRCA took direct action with this project in 2021. The project consists of the removal of invasive flashy fuel along the highway and establishing a wildfire resilient ember barrier to prevent future embers from traveling across the highway and creating new ignitions. The ember barrier will consist of a screen of 1,000 trees including Coast Life Oaks and Valley Oaks, interspersed with California Walnuts.

The MRCA Restoration Division has partnered with various workforce development-oriented partner organizations such as Los Angeles Conservation Corps and the San Gabriel Valley Conservation Corps to facilitate cross-organization sharing of native plant education and native plant establishment practices. The project is also in partnership with Los Angeles County Fire Department whose nursery is supplying many of the trees. The program intends to demonstrate novel wildfire resilience practices that can be implemented in the unique wind-driven, shrubland landscapes of Southern California where the primary wildfire mitigation effort is centered around ignition prevention.

WOOLSEY FIRE

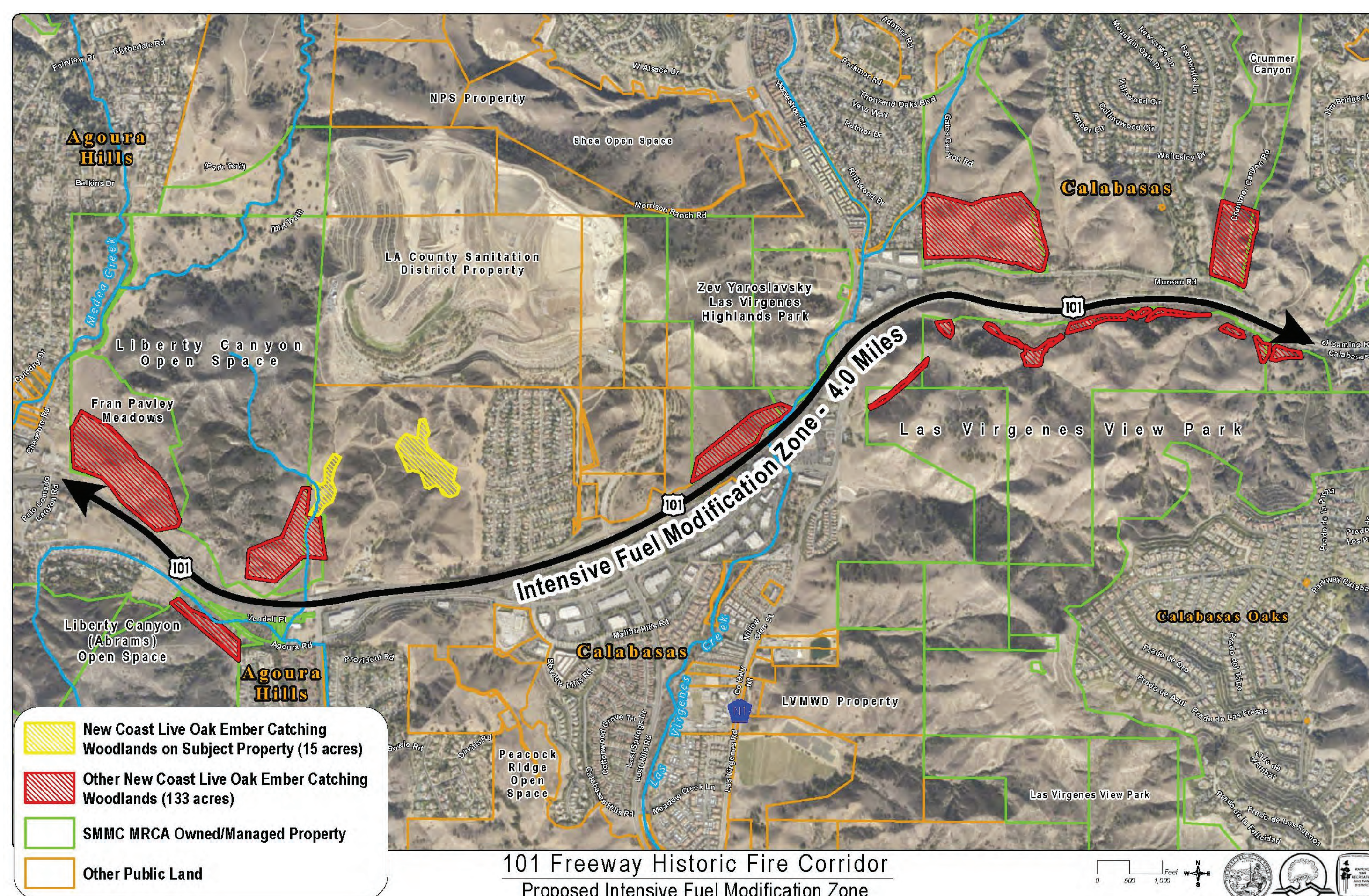
The project was prompted by the 2018 Woolsey Fire which started north of the 101 freeway, jumped the freeway, and spread through the Santa Monica Mountains. The project footprint matches the 4-mile stretch of the 101 freeway that was impacted by the wildfire.



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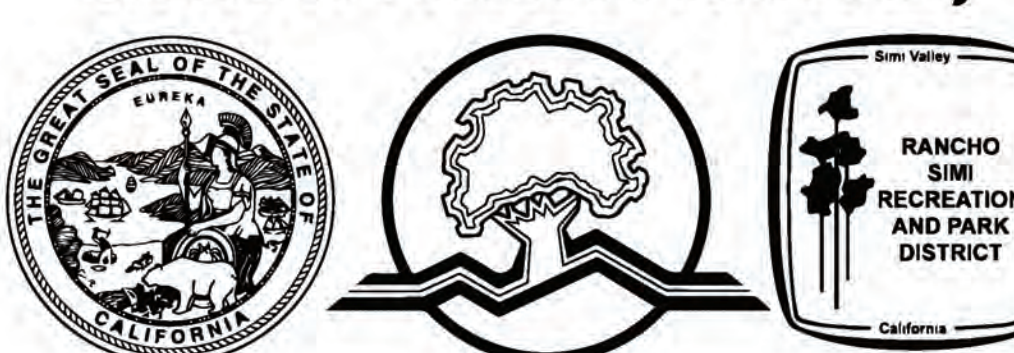
During wind driven wildfire events, embers are able to travel over fuel break infrastructure such as the 101 Freeway



WHY OAKS?

Oak trees, such as Coast Life Oak and Valley Oaks, are fire-adapted and native to the region. Progressively more invasive flashy fuel is present along highways. Replacing the flashy fuel with oak trees creates an ember catchment that can defuse embers, preventing the spread of wildfires.

Mountains Recreation & Conservation Authority



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