

Spring
Vegetation
Management
Tour:
Pepperwood
Preserve

**Stewarding Forests for Wildlife and Fire
Resilience**

February 26, 2022

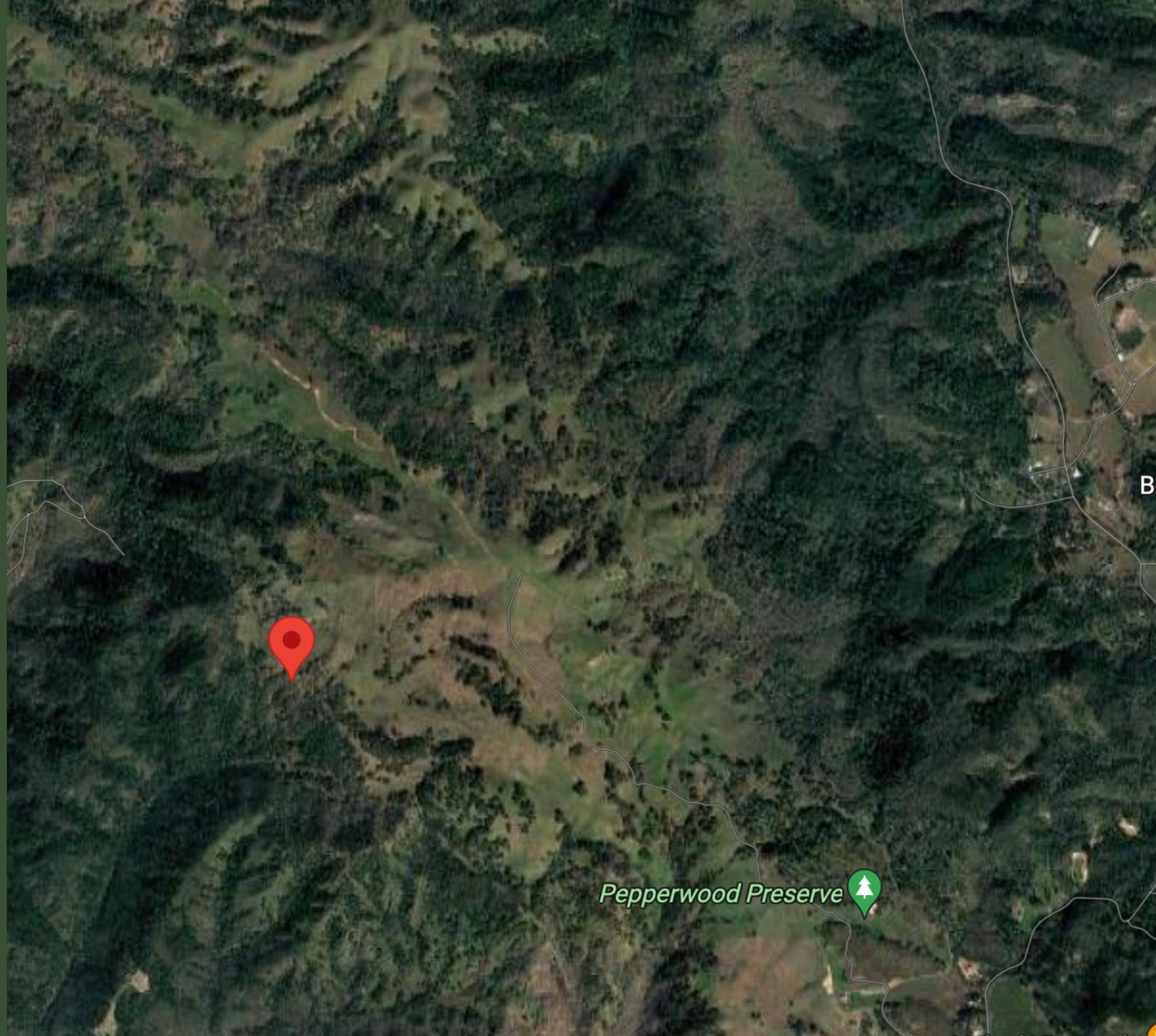


What are your stewardship goals for your site?

- ▶ Consider Site history:
 - ▶ fire suppression, agricultural use, invasive species, native species, cycles of disturbance
- ▶ Consider financial and human resources needed/
available for different treatment types
- ▶ **Your site goal should shape your actions**

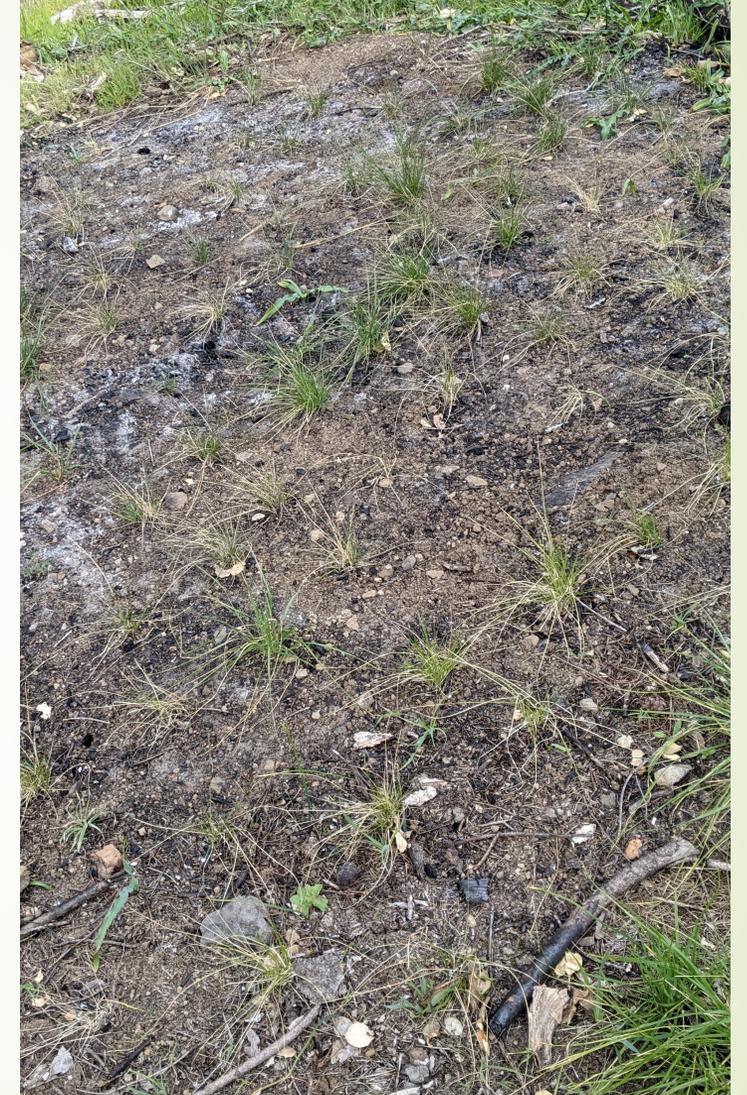
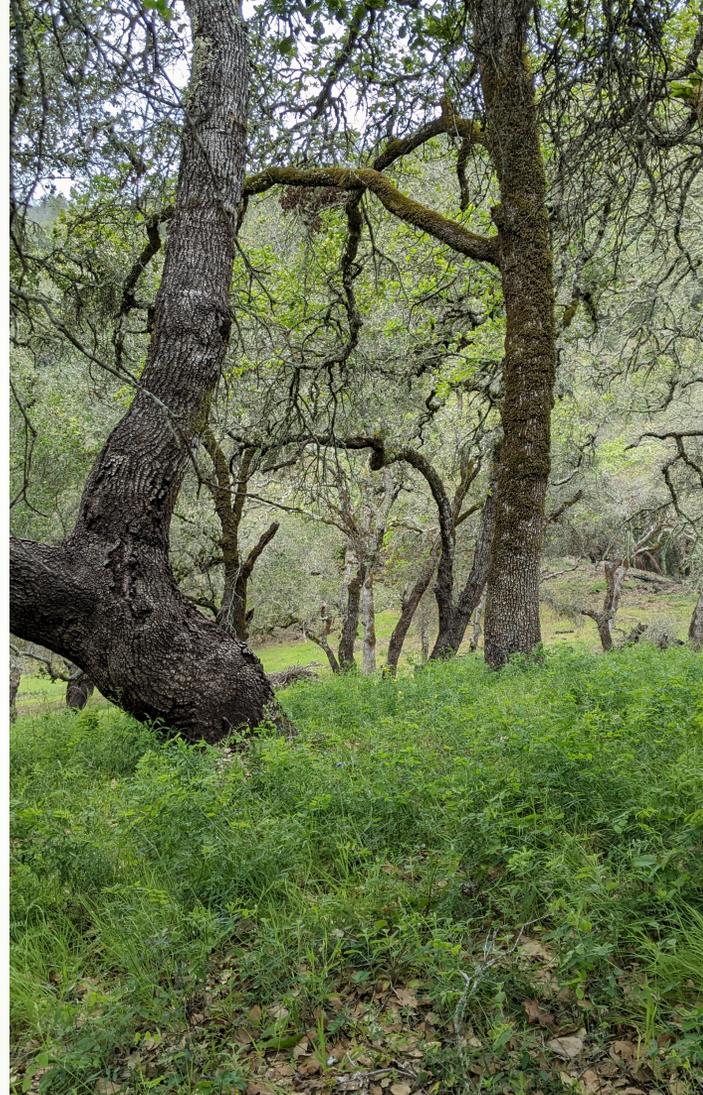
Site #1: Mixed Oak Woodland w/ Douglas Fir encroachment

- ▶ The red dot is the approximate location of the site

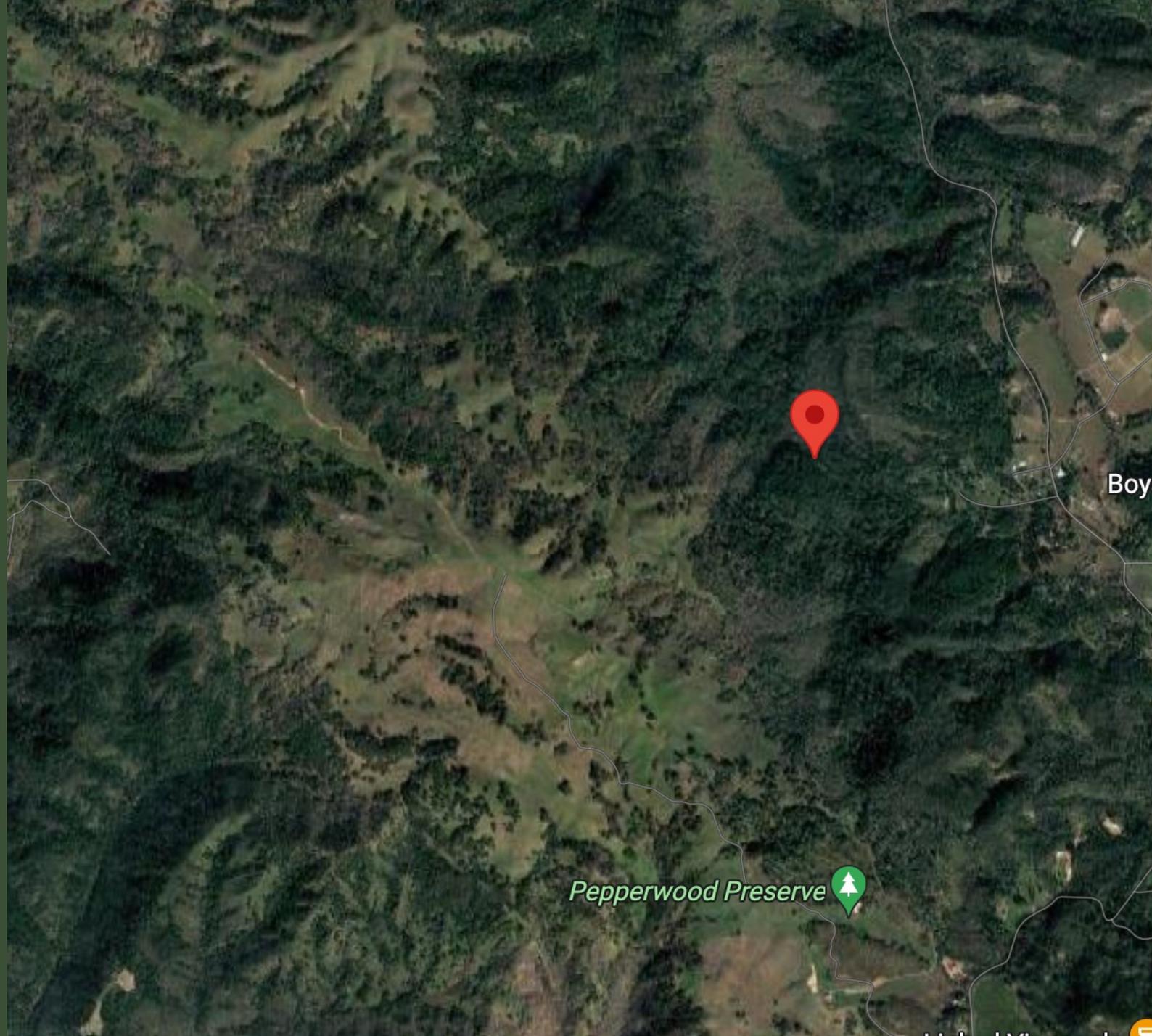


Approach: Tree Removal, Thinning, Pile Burning, Native Grass Plug Planting

- Previously mixed Oak and Douglas Fir forest burned in 2017 and 2019 fires
- All Douglas firs removed
- The resulting fuel was reduced by pile burning (~1200 burn piles burned)
- Burn scar soil is mixed as the center is nutrient dense but its seed bank has been eliminated by high temperatures
- Burn scars replanted with native fescue grass plugs which will help stabilize the soil

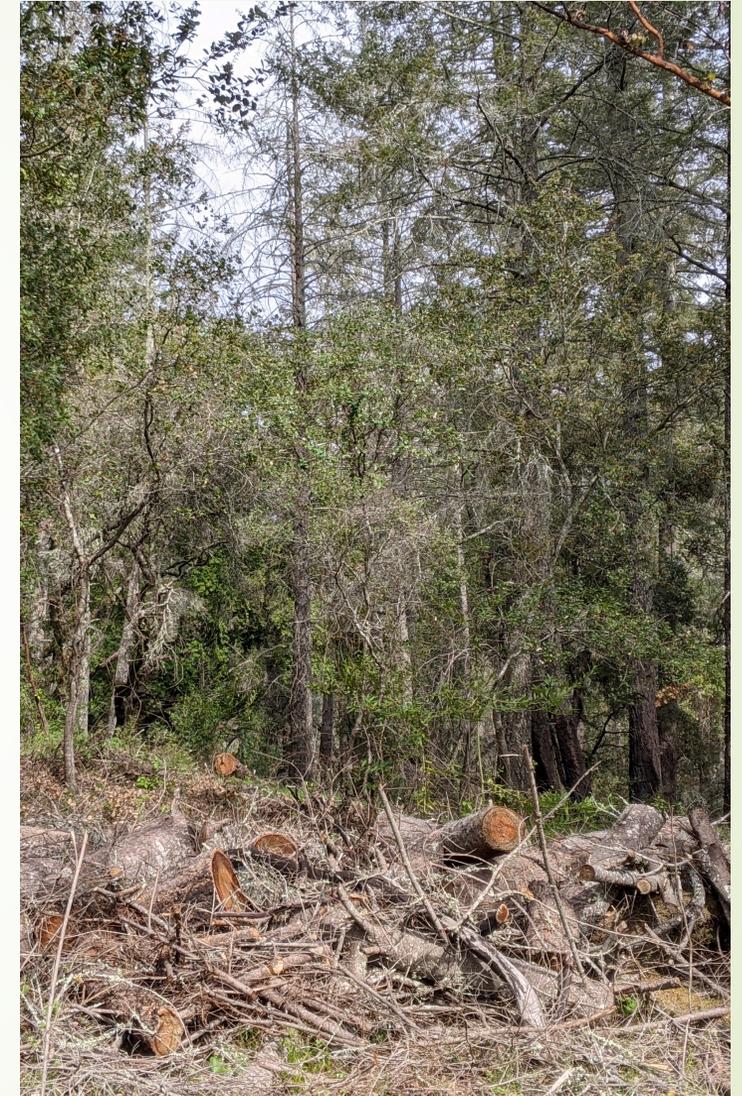


Site #2:
Mature
Douglas Fir
Forest burned
in 2017 fire

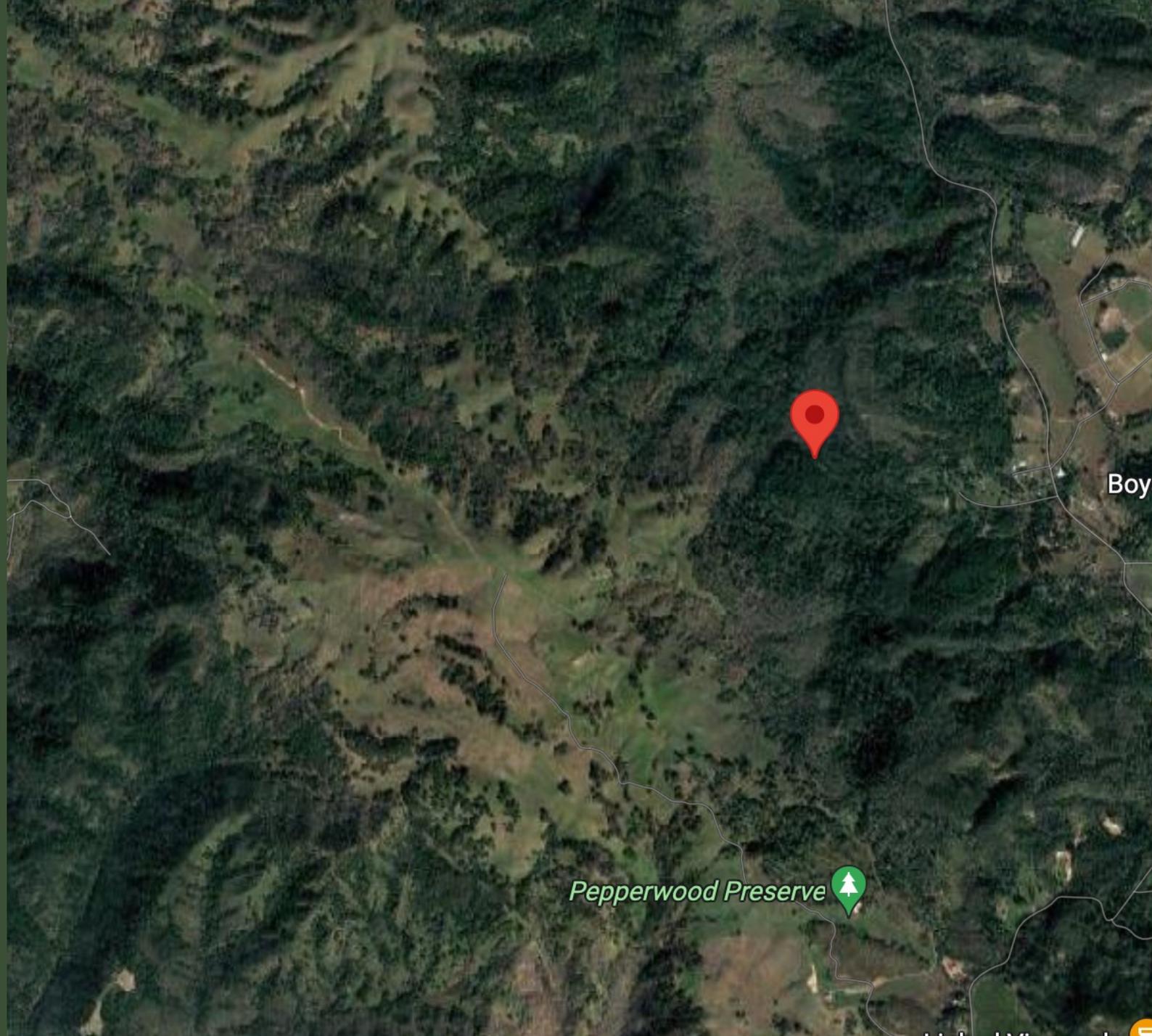


Approach: Lop and Scatter

- ▶ Lop and scatter, waiting for conditions to burn
- ▶ Road serves as a fuel break
- ▶ Mature Douglass Fir Forest maintained by removing smaller firs (10" diameter or less)



Site #3: Black Oak Forest

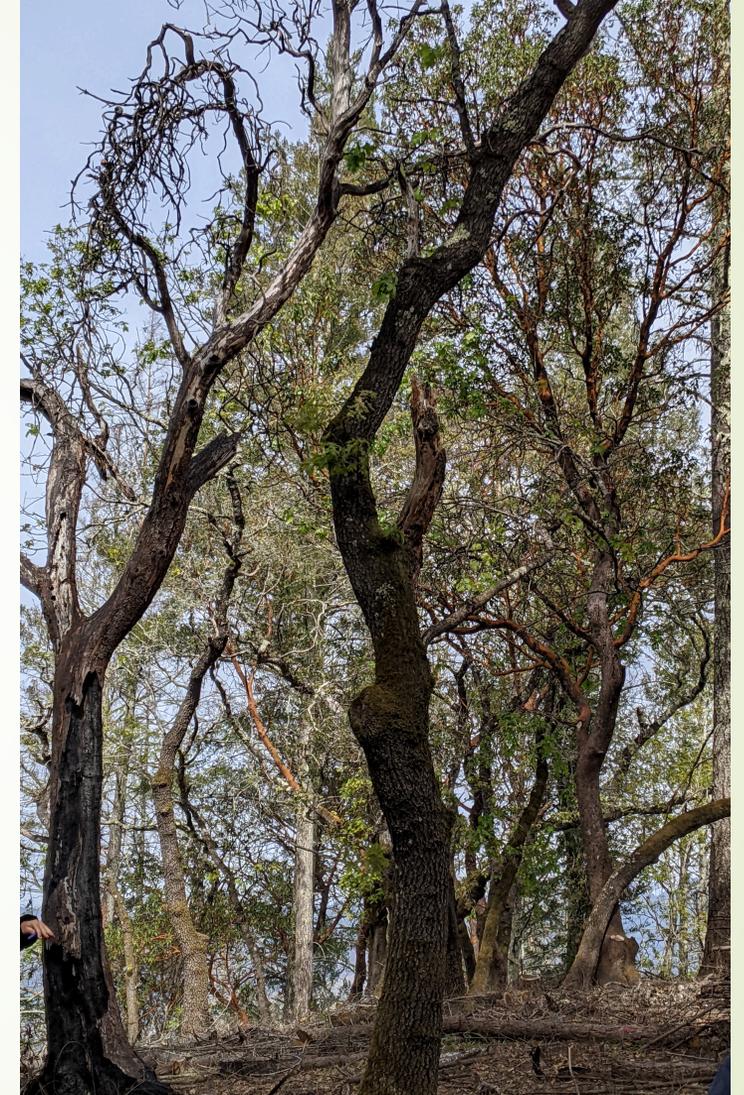


Approach: Burn Piles and Tree Girdling

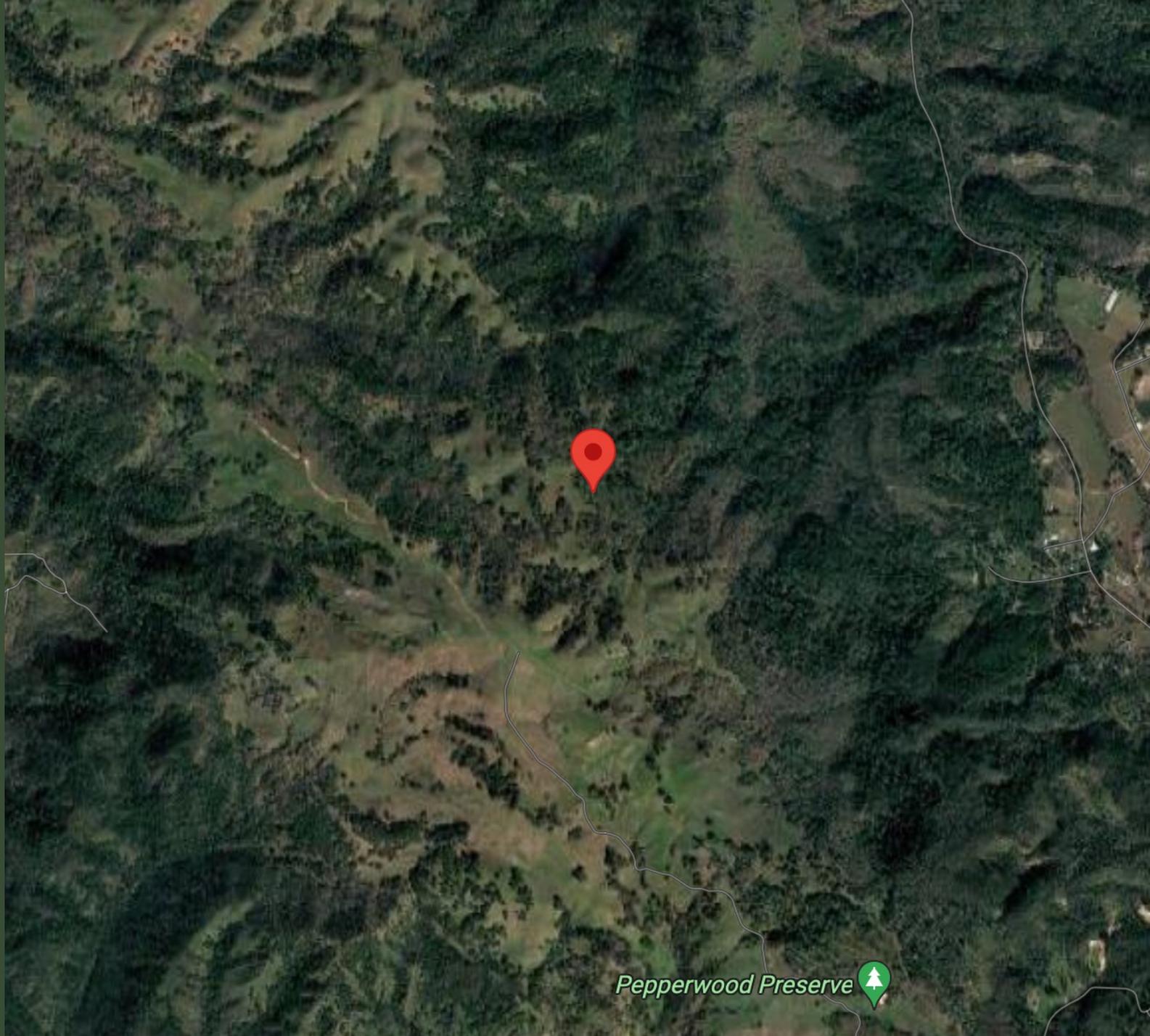
- ▶ Douglas Fir intrusion caused Black Oaks to grow vertically, decreasing productivity
- ▶ Opening canopy allows new branch growth lower on trunk
- ▶ Burn piles used to prevent high intensity fire
- ▶ Tree girdling: killing a tree without felling it, avoiding damage to other trees and creating habitat



This tree has been girdled to reduce competition

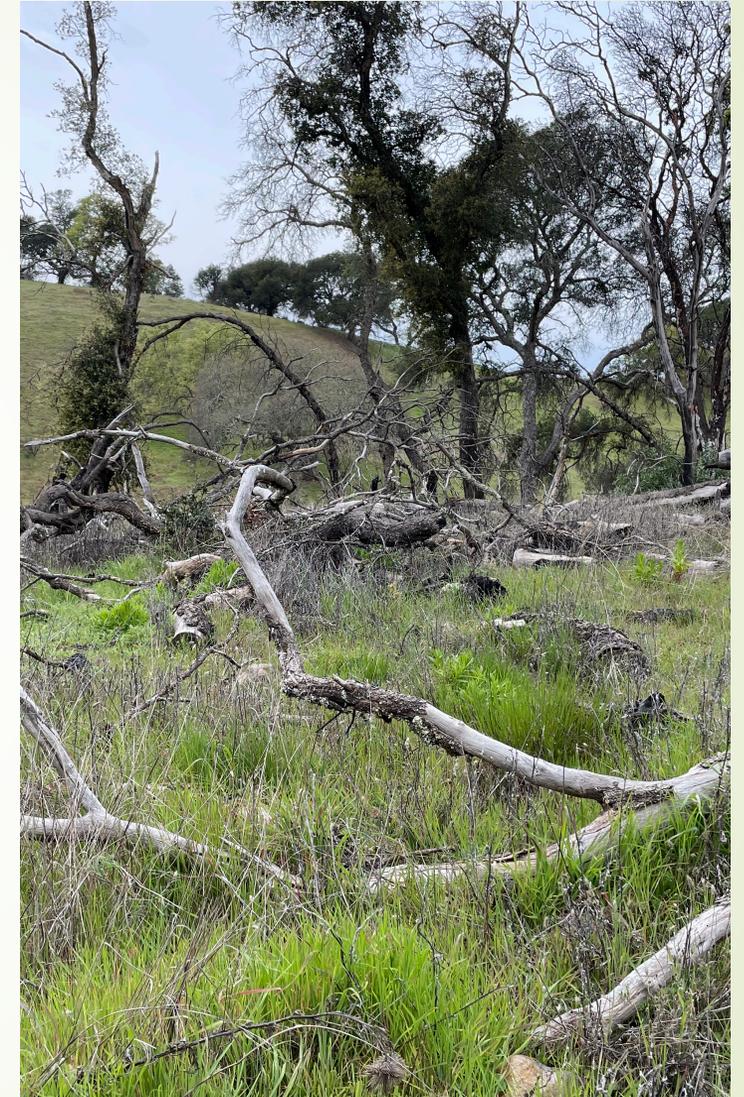


Site #4: High
intensity fire
led to high
Black Oak
mortality

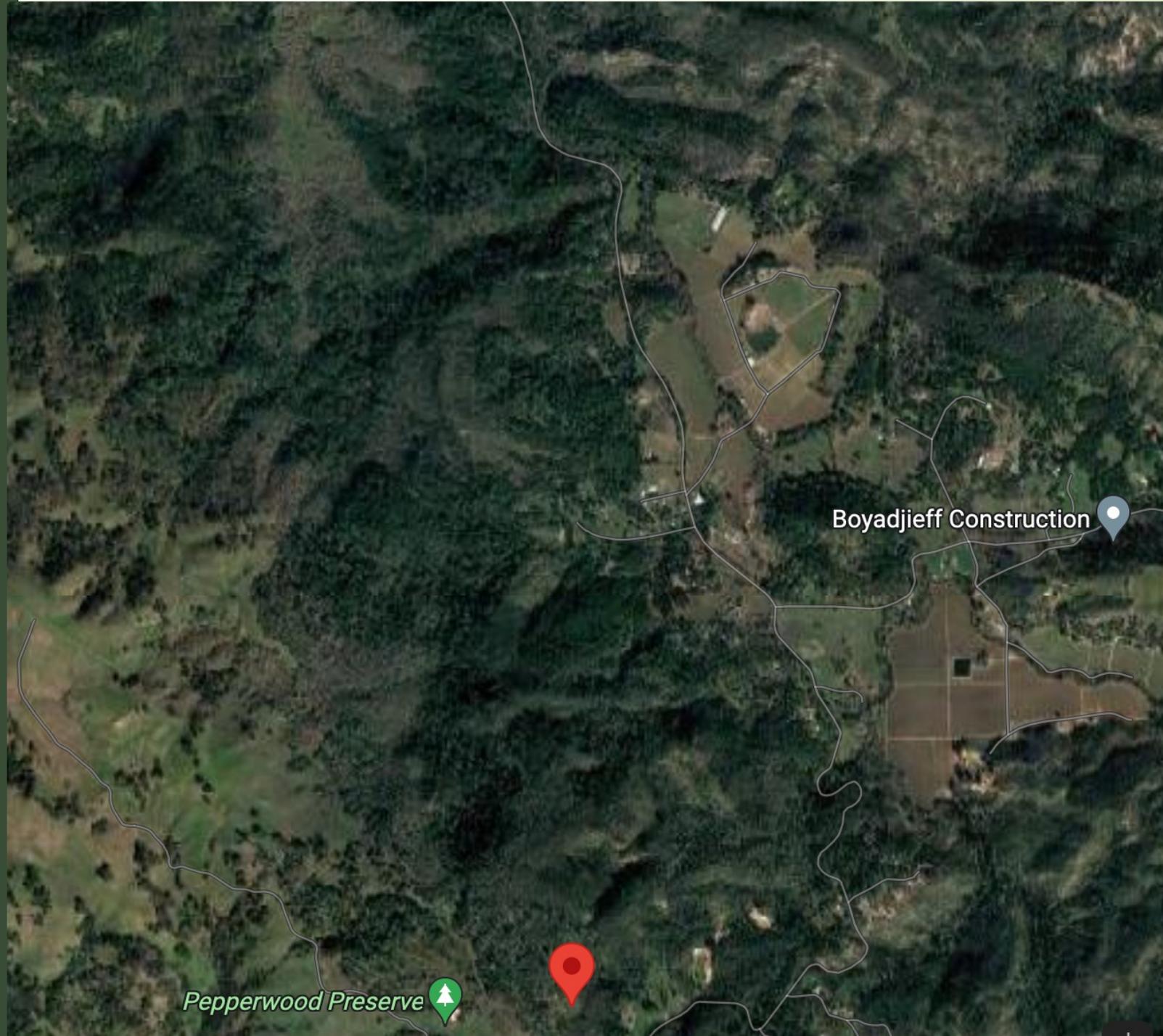


Approach: Lop and Scatter

- Lop and scatter used before Tubbs fire in the thought that the downed fuels would decay
- Lack of moisture prevented decay and the site burned at high intensity, leading to tree mortality
- Example of what can go wrong with fuels left on the ground during the climate crisis
- Regeneration is occurring among some shrubs and plants with some trees still living
- Limited resources has postponed any plans for this site



Site #5: Oak Seedling Restoration Plot



Approach: Salvage logging, oak seedling transplant and direct seeding

- Site of badly burned Douglass Firs, tree rings date trees to 1964 Hanly Fire
- Salvage logging
- Oak seedlings will be caged until taller than deer browsing height (>5 feet)
- Bay laurels pruned to simulate browsing by deer
- On the edge of Pepperwood Preserve, treated areas in foreground





Remember: It all depends

- ▶ When thinking about your goals, there is not one right answer. It all depends.
 - ▶ Consider what you want to see and what you can do on your property?
- ▶ To understand more about your parcel's risk, including fire history, vegetation, hazards assessments and slope and aspect, visit wildfirefuelmapper.org/