

Middle Mad River Forest Enhancement Project



Project Location: Humboldt County (middle Mad River basin bounded by Maple Creek to the north; Bear Creek to south; Mad River to west; and South Fork Ridge to east)

Treatment Types: Forest Stand Improvement/Thinning; Shaded Fuel Breaks; Oak Woodland Restoration; Prescribed Fire (at selected remote locations).

Total Estimated Treatment Acres: ~2,729 acres.

Ownerships Treated: Hunter Ranch; Bear Creek Ranch; assorted privately-owned parcels along Maple Creek Road (with written landowner permission only).

Permitting: California Vegetation Treatment Program (CalVTP) PEIR; Notice(s) of Exemption; NTMP/Notice of Timber Operations.

Project Development/Management Team: Hunter Ranch, LLC; Timberland Resource Consultants; Green Conservation Consulting.

Project Collaborators and/or Informal Advisors

Bear Creek Ranch, LLC

Other Assorted Private Landowners

Humboldt County Prescribed Burn Association

Kneeland Volunteer Fire Dept.

Northcoast Regional Land Trust

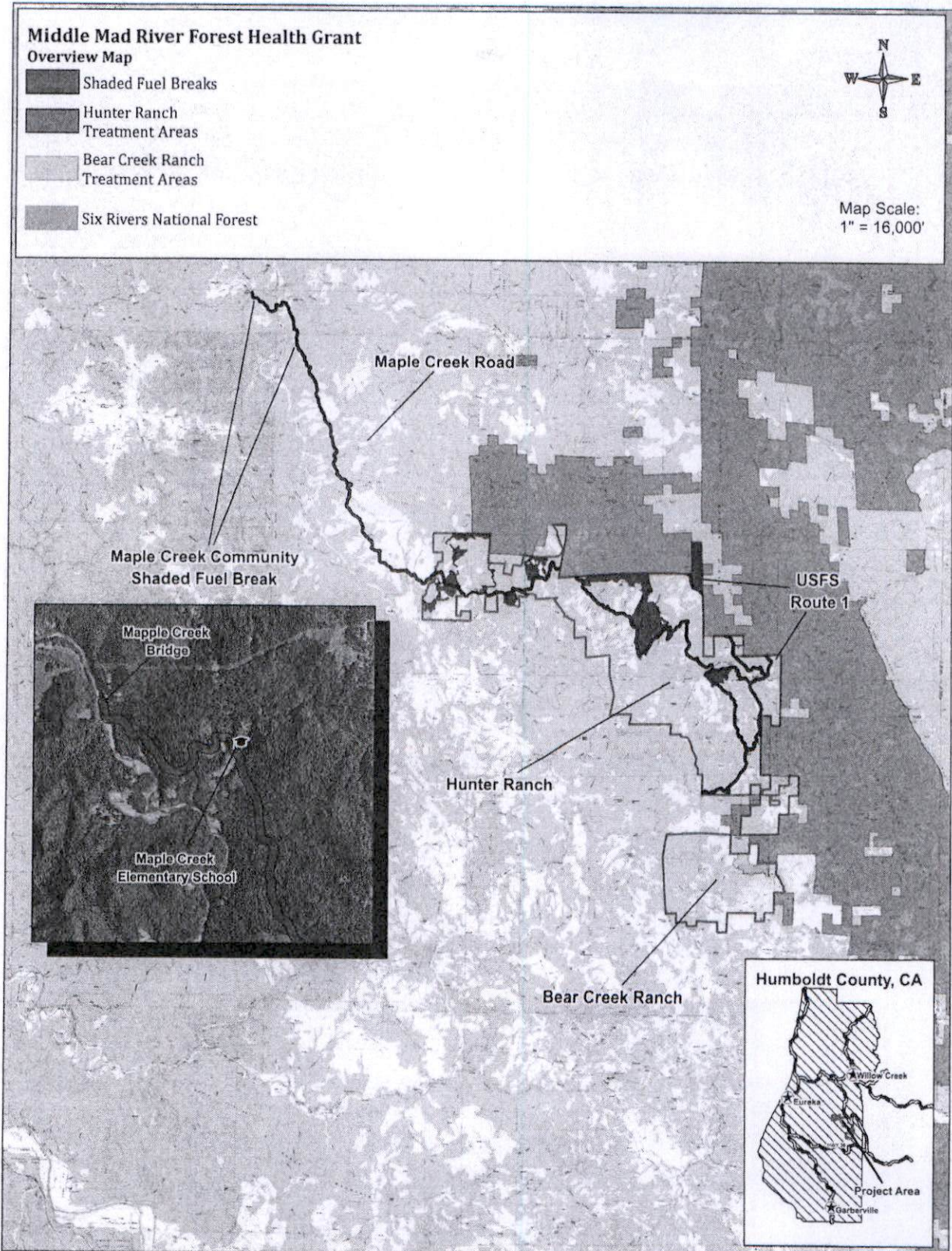
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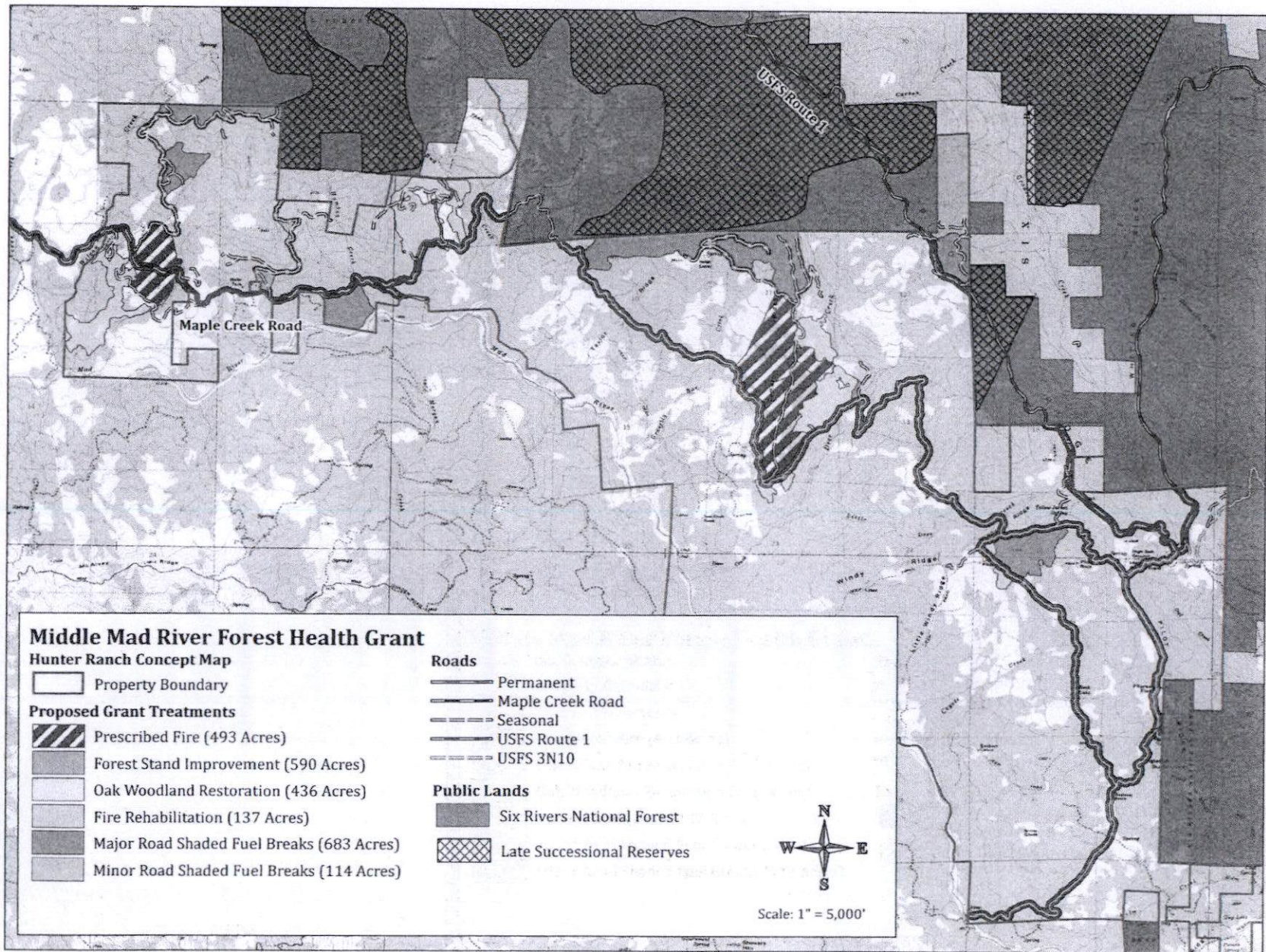
Primary Source of Anticipated Funding: CALFIRE—Forest Health Program

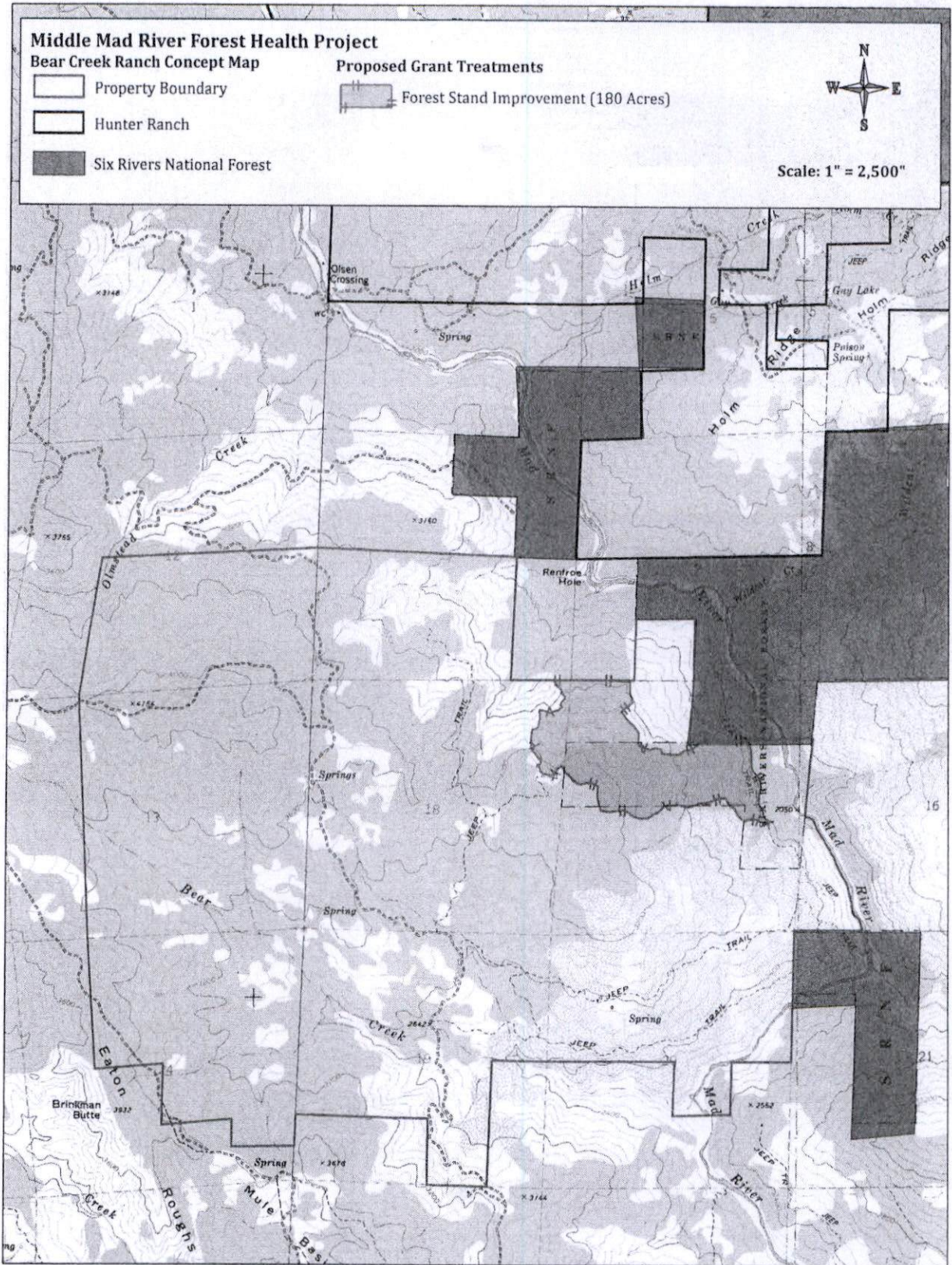
Grant Applicant: Hunter Ranch, LLC.

Estimated Project Cost: ~\$7.3 million

Project Maps







Project Purpose and Need:

The purpose of the project is to enhance forest structure, fire resilience, and long-term ecosystem function across ~2,729 acres of privately-owned forestlands spanning multiple sub-watersheds of the middle Mad River in eastern Humboldt County. Integrated treatments will reduce wildfire risk in stands bordering fire-prone U.S. Forest Service lands; enhance structural complexity in stands that previously underwent industrial even-aged management; protect upper basins of tributary streams that supply drinking water to downstream communities; restore oak woodlands; reintroduce historic fire regimes through prescribed burning; reforest an area severely burned in 2023; create safer ingress and egress for the Maple Creek community; and improve access for firefighters responding to wildfires along an extensive forested interface between State and Federal Responsibility Areas. These activities would complement and expand upon landowners' ongoing stand enhancement and fuels reduction efforts.

The project is needed because:

- Mature private forests along the Six Rivers National Forest boundary are vulnerable to wildfire spread from the east;
- Hazardous fuel conditions along the Maple Creek–McIntosh Road corridor threaten safe evacuation and fire response;
- The viability of native oak woodlands is threatened by conifer encroachment;
- Dense, homogenous pine plantations previously established by the US Forest Service on what are now privately-held lands are susceptible to severe wildfire;
- A privately owned stand along the USFS boundary burned severely in 2023 and has not been reforested; and
- Long-term fire exclusion has compromised forest health, stand type diversity, and resilience through overcrowding of conifer stands and encroachment of conifers into oak woodlands.

The project will implement landscape-scale forest management to comprehensively address these resource concerns, creating a resilient, structurally complex forested landscape that stores more carbon, supports biodiversity, produces timber, supports jobs, and maintains important watershed and habitat functions.

Project Description:

The project is located in the middle Mad River watershed extending from the Maple Creek community near valley bottom to headwaters of the middle Mad River along South Fork Ridge and beyond, spanning privately-owned forestlands on the Hunter Ranch, Bear Creek Ranch, and small portions of nine other private ownerships. The project includes the following treatments and methodologies:

Fuels Reduction/Forest Stand Improvements (1,663 acres): The project will implement a range of forest treatment types to improve stand conditions—including thinning, pruning, piling, pile burning, chipping, and biomass removal. Prescriptions are designed to improve stand structure; increase fire resilience; slow the vertical and horizontal spread of wildfire; reduce fire intensity/burn severity; optimize tree spacing; enhance species diversity; improve growth of larger trees in treated stands; and promote carbon sequestration. Chip sales is an anticipated component of some treatments, enabling biomass byproducts to be utilized to help offset treatment costs.

Forest stand improvements incorporate a **shaded fuel break (SFB)** component to enhance community safety and to support firefighting operations in the middle Mad River landscape. The network of SFBs is designed to create defensible space for firefighters and to improve access for the protection of residential structures and forest resources. The SFBs run through most treatment areas and extend to multiple locations at the interface between State and Federal Responsibility Areas along South Fork Ridge. The main route was used extensively by CALFIRE personnel to access wildfires burning from USFS lands into private forestlands in 2015 (Route Complex) and 2023 (Sound Fork Complex).

The SFBs include ~14 miles along Maple Creek Road (50 ft. each side of public road); ~16 miles along the McIntosh Road and other mainline private roads (150 ft. each side of roads); ~ 4 miles along appurtenant private roads accessing treatment units and associated forest resources (100 ft. each side of roads); and ~5 miles along USFS roads Route 1 and 3N10 (150 ft. each side). The longest SFB extends ~26 continuous miles along the primary road system (Maple Creek/McIntosh), starting at the Mad River in the Maple Creek community and extending to South Fork Ridge/Route 1 on USFS land.

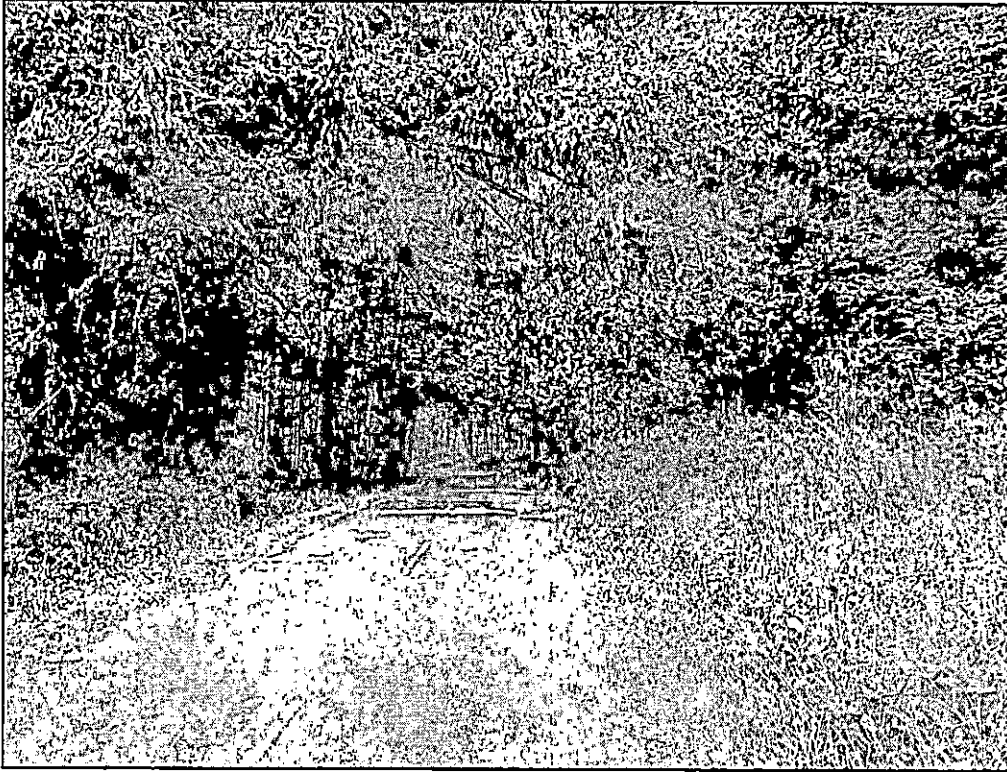
Fuels Reduction/Oak Woodland Restoration (436 acres): The project will restore priority native oak woodlands through non-commercial removal of encroaching conifer trees that are a primary threat to this important habitat type. Primary treatment types include thinning, piling, and pile burning. Burn planning and prescribed burning activities included in the project sets the stage for future broadcast burning needed to cost-effectively maintain this forest type across the landscape.

Reforestation (137 acres): Conifer trees will be planted in a previously-forested area severely impacted by high-intensity wildfire in 2023, with the goal of establishing a diverse, native forest; increasing carbon sequestration; improving watershed functions; and reestablishing forest habitat.

Prescribed/Broadcast Burning (493 acres): Broadcast burning will be used to eliminate colonizing young conifers; reduce dead fuel loads; and enhance native understory plant composition in oak woodland stands that previously underwent manual restoration treatments. Burn planning and implementation activities proposed by this project set the stage for ongoing, more widespread fire management across the Hunter Ranch.

This combination of proposed treatments builds on past investments and ongoing efforts by landowners to reduce fuel loads while enhancing forest stand structure and type diversity. FH Program grant funds would enable understory and pre-commercial fuels treatments in high-priority, high-risk, and/or threatened stands across the project area—treatments that would not be otherwise financially feasible and that are a missing link in ongoing enhancement activities. FH grant funds will also catalyze broadscale reintroduction of fire across this fire-adapted landscape.

Photographs—Sites and Conditions



Maple Creek Road where understory thinning and pruning are planned to create a shaded fuel break.



Dense vegetation surrounds Maple Creek Elementary School.



Overgrown private road. A shaded fuel break is planned.



Overly dense young forest growing up next to a remnant stand of much older trees. Thinning of young trees is planned to improve spacing, increase fire resilience, and enhance stand structure.



Overcrowded trees comprise a dense conifer stand where thinning is needed.



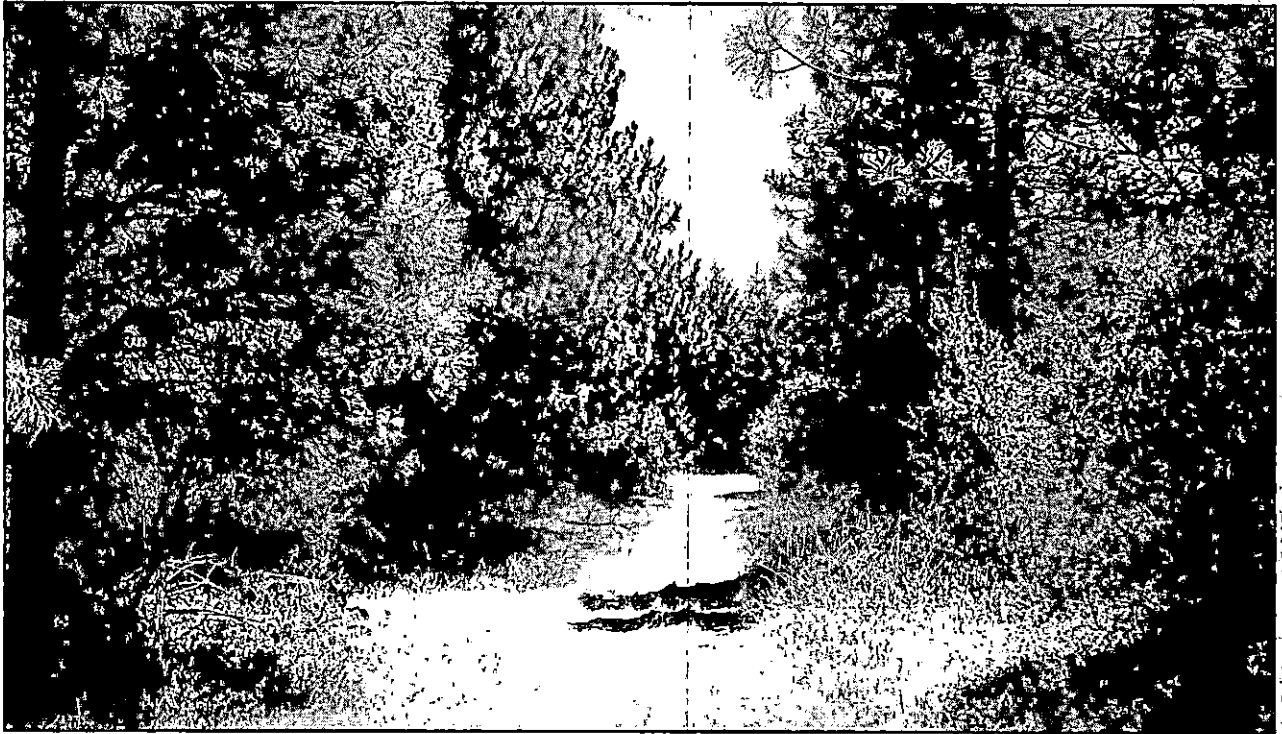
Young conifers encroaching upon an oak woodland.



Previously restored oak woodland where prescribed fire will be applied to stop the re-establishment of young conifers in the stand.



A shaded fuel break is planned where US Forest Service Route 1 runs through private land.



Densely spaced pine trees along an access road.



Heavy fuel loads in the interior of an overcrowded pine stand.