Butte Creek / Buck Mountain Forest Health Project



Project Location: Humboldt County (along State Hwy 36 between Bridgeville and Dinsmore)

Treatment Types: Shaded Fuel Breaks; Forest Stand Improvements; Commercial Thinning; Oak Woodland Restoration; Pruning; Chipping; and Pile Burning

Total Estimated Treatment Acres: ~1,531 base acres, with additional contingency areas to be treated as project revenue is generated.

Ownerships Treated: Butte Creek and Buck Mountain Ranches, BLM (Butte Creek Road Right of Way), misc. small private properties; CALTRANS Rights of Way (pending)

Permitting: Forest Fire Prevention Exemptions; Oak Woodlands Management Exemption; Timber Harvest Plan; California Vegetation Treatment Program (CalVTP); Determination of NEPA Adequacy.

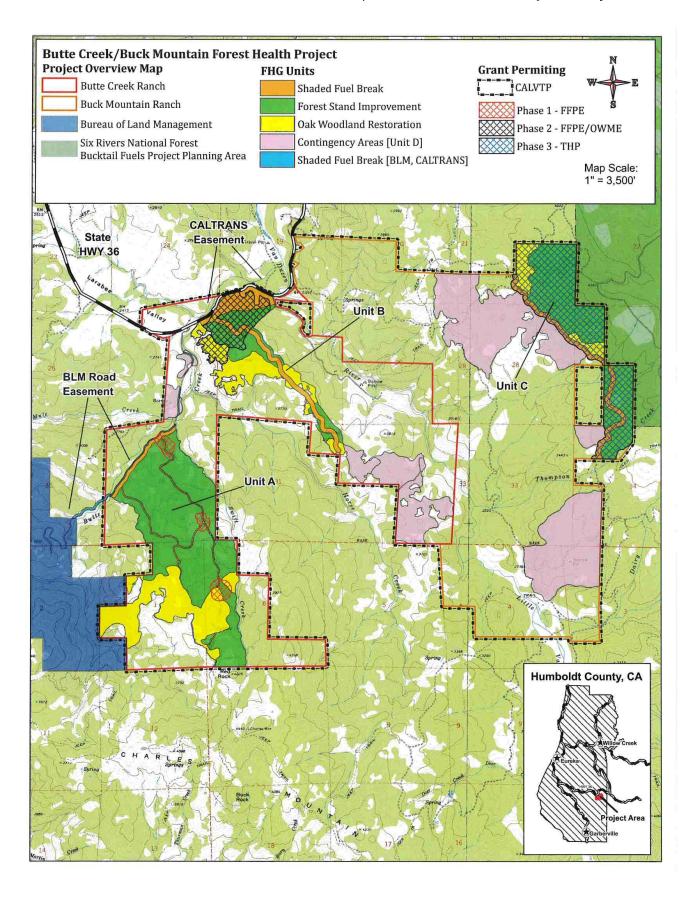
Primary Collaborators:

Cottrell Ranch, LLC. (Butte Creek & Buck Mtn Ranches) Bureau of Land Management CALTRANS Timberland Resource Consultants BBW and Associates Northcoast Regional Land Trust Humboldt County RCD Summitt Forests. Inc. Holmgren Forestry Green Conservation Consulting CAL FIRE

Primary Source of Anticipated Funding: CALFIRE—Forest Health Program

Grant Applicant: Cottrell Ranch, LLC

Estimated Project Cost: ~\$6.5-7.0 million



Project Description

The proposed forest health project will treat over 1,531 acres of forest fuels on privately-owned working lands along State HWY 36 in the Little Van Duzen River watershed. The project will increase fire resiliency and reduce the risk of catastrophic wildfire by creating \sim 201 acres of shaded fuel breaks along public roads and utilities, including 0.75 miles along the State HWY 36 corridor; 0.7 miles along PG&E powerlines; 1.25 miles along BLM's Butte Creek Road; as well as 2.3 miles along the privately owned Burr Valley Road. Fuel reduction treatments include \sim 953 acres of forest stand improvement activities, including commercial and non-commercial thinning; and \sim 377 acres of oak woodlands restoration. While the project is focused on removing smaller diameter trees, project activities include commercial operations in select areas to remove larger conifer trees that are dead, dying, or diseased, or that pose a threat to native oak woodlands. Pruning and pile burning is prescribed for most of the project area.

Permitting requirements for these treatments will be met using a variety of pathways, including Forest Fire Prevention Exemptions; an Oak Woodlands Management Exemption; a Timber Harvest Plan (paid for by landowner as match); the CA Vegetation Treatment Program EIR. CALFIRE will be the lead agency for the Exemptions and THP, and the HumCo RCD is proposed to be the lead agency for the CA VTP. BLM will be the lead agency on the Determination of NEPA Adequacy. Permitting will be phased to allow operations to begin as soon as possible, with exemptions being secured first.

Treatments are being coordinated with a BLM project on the southwestern border of the project area, and the Six Rivers National Forest on the northeastern border to amplify landscape-scale benefits. The project will protect natural resources including forestlands, oak woodlands, soils, streams, and associated wildlife.

The project occurs in an area of generally high tree mortality, which substantially contributes to fuel loads. It is also located at the nexus of diverse ownerships and infrastructure, including public lands; working ranches; timber holdings; and rural residential neighborhoods. As such, the project supports efforts to reduce the risk of catastrophic wildfire spread across jurisdictions—protecting natural resources, rural residents, fire fighters, and privately-owned working lands that are concentrated in the immediate vicinity.

Project funding will be sought from CALIRE's Forest Health Program, with Cottrell Ranch LLC. as the grant applicant. A broad support team with decades of experience in forestry and related fields will provide planning, environmental compliance, project implementation, supervision, and grant administration support.

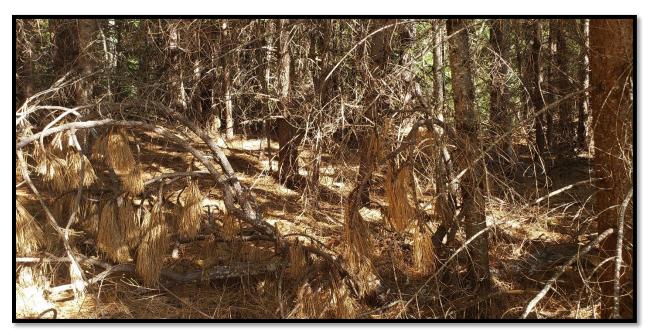
The project is located in an area of high conservation significance and involves headwater streams, habitat for Threatened steelhead trout, expansive oak woodlands, late successional forest reserves; public wilderness; and other natural attributes. The project area occurs in a matrix of protected lands totaling ~48,000 acres—including ~33,000 acres working ranchlands and/or forestland holdings that are conserved already or in the process of being conserved.



A dense Douglas-fir/hardwood slated for thinning.



An Oregon white oak and California black oak woodland with modest Douglas-fir encroachment.



Removal of dense understory fuels is a top priority for the project.



 ${\it Mixed-conifer\ stand\ with\ dead,\ diseased,\ and\ dying\ trees-slated\ for\ treatments.}$

Butte Creek Buck Mountain Forest Health Project

Total Project: 1,531 acres

- 201 acres of Shaded Fuel Break
- 953 acres of Forest Stand Improvement
- 377 acres of Oak Woodland Restoration
- 299 acres of Tree Planting (overlaps other prescriptions)

Project Prescriptions:

Unit A (Butte Creek) - 811 Acres

A1- Shaded Fuel Break - Cut/Prune/Pile - 48 Acres*

Cut all woody material 1" - 10" DBH. (All species and brush). Residual trees are to be pruned per the pruning requirements below. All fuels shall be piled per the piling requirements below. *13 acres is within BLM road easement and slash will be chipped.

A2 - Forest Stand Improvement - Cut/Thin/Pile - 549 Acres

Cut all dead woody material 10" DBH and less. All hardwood species 10" and less shall be cut. Residual conifers 10" DBH or less (to a minimum of 1" DBH) shall be thinned to an approximate 25' spacing. Spacing is secondary to proper tree selection (healthy, free of conk, broken top, or other observable defect). Douglas-fir is to be favored over other conifer species. All fuels shall be piled per the piling requirements below.

A3 - Oak Woodland - Cut/Pile - 214 Acres

Cut all dead woody material 10" DBH and less. All conifer species 12" and less shall be cut. All conifer seedlings are to be cut or pulled from the roots. Additionally, a 97 acre portion of this unit will be treated to remove larger (10-30"DBH) conifer that is scattered throughout. These trees are to be cut and bucked to 10" diameter. All fuels shall be piled per the piling requirements below. Material 10" and greater ios to be left as large woody debris.

A4 - Forest Fire Prevention Exemption - Commercial Thin - 38 Acres

Commercial thinning of trees 10" - 24" DBH. An average of 100 sq feet of basal area shall be retained. All action generated slash and legacy logging slash is to be mechanically piled for burning. These areas will additionally be treated under the A2 prescription following the completion of timber operations.

Unit B (Little Van Duzen) - 320 Acres

B1 - Shaded Fuel Break - Cut/Prune/Pile - 98 Acres*

Cut all woody material 1" - 10" DBH. (All species and brush). Residual trees are to be pruned per the pruning requirements below. All fuels shall be piled per the piling requirements below. *4 acres is within the CALTRANS highway easement and slash will be chipped.

B2 - Forest Stand Improvement - Cut/Thin/Prune/Pile - 105 Acres

Cut all dead woody material 10" DBH and less. All hardwood species 10" and less shall be cut. Residual conifers 10" DBH or less (to a minimum of 1" DBH) shall be thinned to an approximate 25' spacing. Spacing is secondary

^{*}Contingency areas include another potential 344 acres of Forest Stand Improvement and 486 acres of Oak Woodland restoration.

to proper tree selection (healthy, free of conk, broken top, or other observable defect). Douglas-fir is to be favored over other conifer species. Residual trees are to be pruned per the pruning requirements below. All fuels shall be piled per the piling requirements below.

B3 - Oak Woodland - Cut/Pile - 117 Acres

Cut all dead woody material 10" DBH and less. All conifer species 12" and less shall be cut. All conifer seedlings are to be cut or pulled from the roots. All fuels shall be piled per the piling requirements below.

B4 - Forest Fire Prevention Exemption - Commercial Thin - 106 Acres

Commercial thinning of trees 10" - 24" DBH. A average of 100 sq feet of basal area shall be retained. All action generated slash and legacy logging slash is to be mechanically piled for burning. These areas will additionally be treated under the B1 and B2 prescriptions following the completion of timber operations.

B5 - Oak Woodland Management Exemption - 29 Acres

Commercial removal of conifer trees 10" - 30" DBH. All action generated slash and legacy logging slash is to be mechanically piled for burning. These areas will additionally be treated under the B3 (Oak Woodland) prescription following the completion of timber operations.

Unit C (Buck Mountain) - 400 Acres

C1 - Shaded Fuel Break - Cut/Prune/Pile - 55 Acres

Cut all woody material 1" - 10" DBH. (All species and brush). Residual trees are to be pruned per the pruning requirements below. All fuels shall be piled per the piling requirements below.

C2 - Forest Stand Improvement - Cut/Thin/Prune/Pile/Plant - 299 Acres

Cut all dead woody material 10" DBH and less. All hardwood species 10" and less shall be cut. Residual conifers 10" DBH or less (to a minimum of 1" DBH) shall be thinned to an approximate 25' spacing. Spacing is secondary to proper tree selection (healthy, free of conk, broken top, or other observable defect). Douglas-fir is to be favored over other conifer species. Residual trees are to be pruned per the pruning requirements below. All fuels shall be piled per the piling requirements below.

C3 - Oak Woodland - Cut/Pile - 46 Acres

Cut all dead woody material 10" DBH and less. All conifer species 12" and less shall be cut. All conifer seedlings are to be cut or pulled from the roots. All fuels shall be piled per the piling requirements below.

C4 - Timber Harvest Plan

A THP is proposed for the entire 400-acre Buck Mountain Unit. This THP will use a combination of Fuel Break, Selection, and Oak Woodland Management silviculture to meet stand objectives. All action generated slash and legacy logging slash is to be mechanically piled for burning. These areas will additionally be treated under the C1, C2 and C3 prescriptions above following the completion of timber operations.