**NRCS**

**TREE MORTALITY**

**FOREST MANAGEMENT PLAN (FMP)**

**Instructions:** This is the FMP template for EQIP projects which include forestry–related practices that address forest tree mortality on non-industrial private forestland. (See California Bulletin No. 190-17-01.) It is primarily intended for use with Forest Tree Mortality EQIP Fund Pool and Catastrophic Fire Recovery EQIP Fund Pool. The FMP will be completed by a NRCS Certified Conservation Planner with forestry experience, a Forestry Technical Services Provider, or Registered Professional Forester assisting NRCS.

**EQIP Application Number:** Click here to enter text.

**Date Prepared:** Click here to enter text.

1. **LANDOWNER**

NAME: Click here to enter text.

ADDRESS: Click here to enter text.

PHONE: Click here to enter text. EMAIL: Click here to enter text.

1. **LOCATION**

COUNTY: Click here to enter text.

ASSESOR’S PARCEL #: Click here to enter text.

LEGAL DESCRIPTION: Click here to enter text.

GENERAL AREA LOCATION: Click here to enter text.

PROPERTY QUAD MAPS: Click here to enter text.

1. **FORESTLAND CONDITIONS**

OWNERSHIP SIZE: Click here to enter text.

ACRES OF FORESTLAND: Click here to enter text.

PRESENT LAND USE: Click here to enter text.

VEGETATION TYPE DESCRIPTION: Click here to enter text.

TIMBER STAND DESCRIPTION (Basal area, vigor, site/age class, growth potential, rehabilitation possibilities, current silviculture practice):

Click here to enter text.

SOILS (Series and discussion, slope, exposure, elevation, etc.):

Click here to enter text.

PROPERTY BOUNDARY ID (Flagging colors, corner locations):

Click here to enter text.

TRANSPORT SYSTEM (Describe road and secondary skid tails, location to drainages, and drainage structures. Provide map of road, trails, and access control features):

Click here to enter text.

TERRAIN (Slope, aspects): Click here to enter text.

1. **TREE MORTALITY PROBLEMS** (Check all that apply)

INSECT

WILDFIRE

DISEASE

Describe extent of damage, percentage of forest stands affected, type of pest or disease, and other factors in item 6. Click here to enter text.

1. **LANDOWNERS PERSONAL MANAGEMENT OBJECTIVES AND LAND USE ALTERNATIVES** (Check all that apply)

TIMBER MANAGEMENT

FOREST HEALTH/NON TIMBER MANAGEMENT

RECREATIONAL USE

FULL TIME RESIDENCE

PART TIME RESIDENCE

WILDLIFE RESERV

OTHER: Click here to enter text.

1. **RESOURCE CONCERNS** (Check all that apply and describe)

**Degraded Plant Conditions:**

INADEQUATE STRUCTURE COMPOSITIONS – OVERSTOCKED

WILDFIRE HAZARD FROM EXCESSIVE BIOMASS ACCUMULATION

EXCESSIVE PLANT PEST PRESSURE – PEST DAMAGE

UNDERSTORY COMPLETION

Described concerns including live tree overstocking conditions and area extent; excess biomass amounts per acre, configuration of dead trees and vegetation (downs, standing etc.), extent of accumulations (area) and live/dead tree characteristics of stands; pests/disease present, status of active pests

Click here to enter text.

**Soil Erosion:**

SHEET RILL EROSION

CLASSIC GULLIES

**Water Quality Degradation:**

EXCESS SEDIMENT IN SURFACE WATER

ELEVATED WATER TEMPERATURE

Describe any erosion and water quality concerns including issues related to hydrologically connected roads, trails, landings, ditches or water course crossing. Include discussion of upland erosion concerns and burn severities:

Click here to enter text.

1. **BIOLOGICAL AND NATURAL AREA CONSIDERATIONS**

Describe the results of record searches and/or field surveys regarding the presence of Threatened and Endangered species, migratory and resident birds and other local wildlife. Include description of wildlife habitat types or features that are either present or could be improved/restored/created if applicable:

Click here to enter text.

1. **ARCHEOLOGICAL, HISTORICAL, AND CULTURAL CONSIDERATION**

(Check all that apply)

INFORMATION CENTER RECORDS SEARCH COMPLETED

KNOWN ARCHEOLOGICAL/HISTORICAL SITES ON PROPERTY

1. **FIRE PROTECTION PLANS AND FEATURES** (Check all that apply)

PROPERTY IS IN A CALIFORNIA OR LOCAL WILDFIRE PROTECTION PLAN

EMERGENCY ACCESS ROUTES

FUEL REDUCTION

FUEL/FIREBREAK

AIRCRAFT PADS

WATER SOURCES

FIRE HAZARD REDUCTION/PEST CONTROLS NEAR PROPERTY

1. **COMMUNITY/AGENCY COOPERATION MECHANISMS**

Describe local home owners associations, emergency services (fire, police, and sheriff), CAL FIRE Forestry Assistance, NRCS Forestry Assistance, RCDs, UC Extension STAFF, Help Lines, and Fire Safe Councils):

Click here to enter text.

1. **SECURITY CONCERNS AND CONTROL FEATURES**

Describe known/potential vandalism (e.g. outbuilding damage) and trespass risks (e.g. illegal hunting/recreation use,) road assess control features (gates, barriers), and patrol/surveillance security systems:

Click here to enter text.

1. **AESTHETIC CONSIDERATIONS AND RECREATIONAL IMPACTS**

Describe visual impacts of tree morality damage and potential forestry improvements actions on visual and recreational values of the property:

Click here to enter text.

1. **FOREST MANAGEMENT RECOMMENDATIONS**

Generally describe recommended forestry vegetation/tree prescription, erosion control actions, slash disposal treatment, and reforestation needs: Click here to enter text.

1. **NRCS PRACTICE RECOMMENDATIONS AND PROJECT DESCRIPTIONS**

Check all recommended Practices, list EQIP Practice Scenario number, and describe project (Location, stand #, Ac.):

**Practice Number Scenario Number/Description**

314 – Brush Control Click here to enter text.

384 – Woody Residue Treatment Click here to enter text.

383/394 – Fuel Break and Firebreaks Click here to enter text.

490 – Tree Shrub Site Preparation Click here to enter text.

500 – Obstruction Removal Click here to enter text.

560 – Access Road Click here to enter text.

578 – Stream Crossing Click here to enter text.

612 – Tree Establishment Click here to enter text.

654 – Road/Trail/Landing Closure Click here to enter text.

655 – Forest Trail and Landings Click here to enter text.

660 – Pruning Click here to enter text.

666 – Forest Stand Improvement Click here to enter text.

Other: Click here to enter text. Click here to enter text.

1. **COMMERCIAL HARVESTING OPPORTUNITIES/FOREST PRODUCT UTILIZATION OPPORTUNITIES**

Describe opportunities for utilization of forest products including for saw logs, biomass chips, or other minor forest products. Include quantities, values, and costs of utilization and potential utilization sites (mills, export sites, biomass plants): Click here to enter text.

1. **MAPS**

Attach maps that refer to information included in the Management Plan as an Exhibit or Attachment at the back of the plan. Maps will include a USGS quadrangle map at a minimum scale of 4 inches = 1 mile that identifies the ownership as well as the location of proposed project, forest stand/vegetation delineations, treatment areas by practice number, roads, water courses, and all other pertinent information that will help with property management issues.

1. **STANDARD IMPLEMENTATION REQUIREMENTS**

Below is a list of forestry operation methods and limitations that are required of all projects using this management plan.

**Dead and Dying Trees Identification**\*:

Trees to be included in treatments are those which are dead or likely to be dead (dying) within one year as a result of insect attack, fire damage, and/or disease. Trees with green crowns which are likely to be dead within one year shall be stump marked or otherwise designated by an Registered Professional Forester, or there supervised designee, prior to cutting.

Trees will be consider likely to die within one year when assessed in accordance with:

1. Risk classification systems including Smith et al., 1981
2. Guidelines for Estimating the Survival of Fire-Damaged Trees in California, Wagner, 1961
3. Survival of Fire-Injured Conifers in California. CAL FIRE. Donald R. Owen, Daniel R. Cluck, and Sheri L. Smith. Tree Notes 2015.
4. Trees with evidence of a current beetle attack exists (i.e., existence of boring dust, woodpecker feeding, or recent top kill) and these trees are within 100 feet of multiple tree kills.
5. Similar risk-rating systems recognized in the profession.

\* Documents can be found at: <https://ems-team.usda.gov/sites/NRCS_California/ecs/Forestland%20Conservation/Forms/AllItems.aspx>

**Operations:**

No heavy equipment in watercourse buffer area, meadows, wet areas, slide or unstable areas, or on slopes greater than 50%. Except for road maintenance.

No new tractor trails on slopes greater than 40%.

No known rare, threatened, or endanger plants or animal will be disturbed, threatened or damaged.

No operations in known archeology or historical sites.

Special conditions apply for tree removal and operations in the Lake Tahoe region. Contact the State Forester for details.

No operations during breeding season of migratory birds unless survey are conducted prior to operations and known breeding areas are avoided until after the breeding period. Refer to NRCS Tech Note #23.

**Slash Treatment:**

All slash generated with 200 feet of habitable structures or roads will be removed, chipped, or piled and burned in accordance with a CAL FIRE burning permit. Do not put slash in watercourses.

Lop and scatter: 80% of material is 18 inches or less from ground. Maximum size of slash is 3 inches outside bark diameter small end and 24 inches in length.

Chipping, shredding, mastication: Maximum depth of 3 inches or 6 inches depth when chipped material is placed in an isolated cleared areas such as a landing. Maximum shredding residual material size is 18 inches in length. Spread chips away from the base of residual trees.

Crushing: 80% of material is 12 inches or less from ground. Maximum length is 48 inches.

Tractor Piling: 75% of slash exceeding 3 inches outside bark diameter small end and 24 inches in length shall be piled. Slash in plies will be maximum 8 feet in length. A bare mineral soil areas of 10 feet in width shall be cleared around pile.

**Excluded Areas:**

Areas within the 100 ft. of homes are not within the scope of a FMP and are not nonindustrial forestland. Forestry practice are not included in these areas.

Several NRCS forestry practice standards state that completion of a practice is obtained when 80% of the area is appropriately treated. Untreated areas have environmental benefits and should include locations where there are concentrations of large snags (2- 4 per acre or more when associated with unique habitats such as meadows), down logs (concentrations of 2-8 per acre), or other areas with unique natural features. The design of leave areas should include isolating the untreated areas from other untreated areas to avoid continuous fuels build ups; and locating untreated away from homes, infrastructure (utility line, waters tanks, bridges, etc.), and emergency access routes.

1. **SIGNATURES**

**Landowner Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_**

**NRCS Planner Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_**

**RPF Preparer Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_**