These guidelines for the management of Oak woodlands were developed by the Coarsegold RCD with assistance of various agencies in the State and Federal governments.

These Oak-Woodland Guidelines were developed with input from an inter-agency/private landowner team consisting of the California Department of Forestry and Fire Protection; California Department of Fish and Game; California Department of Water Resources; California Oak Foundation; Chowchilla Resource Conservation District; Coarsegold Resource Conservation District; U.S.D.A. Consolidated Farm Services Agency, Natural Resource Conservation Service, Forest Service-Sierra National Forest; Eastern Madera County Chamber of Commerce; Madera County Farm Bureau; Walter Ellis, rancher; Larry Ballew, forester; Madera County; Madera County Cattlemen's Association; North Fork Hazard Reduction Committee; San Joaquin Valley Unified Air Pollution Control District; U.C. Cooperative Extension; James Wagner, private sector; Harold 'Bud' Wolfram, private sector; W. Tom Wheeler, rancher and chairman of this committee.

These recommendations are considered to be consistent with other guidelines now in use by the California Department of Forestry and Fire Protection; U.S.D.A. Forest Service, Consolidated Farm Service Agency, Natural Resource Conservation Service; U. C. Cooperative Extension; California Department of Fish and Game; and Madera County. If any conflict exists, the agency regulations and policy may prevail.
May 25, 1995

WHEREAS, the Coarsegold Resource Conservation District [CRCD] is recognized for the leadership in protection, enhancement management, and utilization of the natural resources of Eastern Madera County; and,

WHEREAS, those lands described as the oak-woodlands within Madera County provide multiple benefits, including livestock production, wildlife habitat, fuelwood and fiber production, water production, recreational and aesthetic uses, residential and commercial use, and a social-economic landbase for the local population and visitors; and,

WHEREAS, the Federal, State, County governments, local citizens and groups fully recognize the importance of private property rights and endorse a concept that landowners be provided the maximum right of self determination; and the citizens of the County supports minimal governmental regulations imposed on the management or utilization of their lands; and,

WHEREAS, the economic, social and environmental viability of the agricultural-forestry enterprises operating within these oak-woodlands must be protected; and,

WHEREAS, the Coarsegold Resource Conservation District recognizes these lands are subject to devastating fires and other forest pests, and it encourages the integration of protection measures in fuel modification within the oak-woodland type to protect the resources, property, and life; and,

WHEREAS, the Directors of the CRCD, herein known as the Directors, recognize the citizens of Madera County have the land stewardship responsibility to manage the oak-woodland resources, and their social-economic values; and,

NOW, THEREFORE, BE IT RESOLVED, that the Coarsegold Resource Conservation District Board of Directors recommends to the citizens of Madera County, and the Madera County Board of Supervisors, that the following voluntary guidelines be adopted to assist landowners in the management and their stewardship of the oak-woodlands of Madera County; and,

BE IT FURTHER RESOLVED, these guidelines

are voluntary and in no way are binding by law on the private landowner or abridge their private property rights, and,

BE IT FURTHER RESOLVED, that:

These guidelines will be made available to all landowners in the oak-woodland type at
no expenses.

The Directors shall hold one public field trip per year to evaluate the management and utilization activities of the oak-woodland and prepare a report of their findings with the assistance from the "Integrated Hardwood Range Management Program [IHRMP]."

The Directors shall coordinate with local, State, Federal governmental agencies and local private parties or organizations to offer workshops in the oak-woodland management and stewardship for landowners, real estate brokers, developers, and community organizations.

All landowners with oak-woodlands be encouraged to develop forest/rangeland management plans for their holdings. Landowners are encouraged to utilize public and private expert assistance in the technical aspects of resource management and/or participate in government assistance programs to develop such plans and management activities.

The Directors, assisted by a team of interagency, IHRMP, and private landowners, shall monitor these recommended practices as applied in the field, and prepare a report of their findings.

The Directors shall annually assign a team to review these guidelines for any recommended additions or deletions. These modifications, if any, shall be acted upon as a resolution by the Directors, and sent to the Madera County Board of Supervisors for appropriate action.

These Oak-Woodland Guidelines were developed with input from an inter-agency/private landowner team consisting of the California Department of Forestry and Fire Protection; California Department of Fish and Game; California Department of Water Resources; California Oak Foundation; Chowchilla Resource Conservation District; Coarsegold Resource Conservation District; U.S.D.A Consolidated Farm Services Agency, Natural Resource Conservation Service, Forest Service-Sierra National Forest; Eastern Madera County Chamber of Commerce; Madera County Farm Bureau; Walter Ellis, rancher; Larry Ballew, forester; Madera County; Madera County Cattlemen's Association; North Fork Hazard Reduction Committee; San Joaquin Valley Unified Air Pollution Control District; U.C. Cooperative Extension; James Wagner, private sector; Harold 'Bud' Wolfram, private sector; W. Tom Wheeler, rancher and chairman of this committee.

These recommendations are considered to be consistent with other guidelines now in use by the California Department of Forestry and Fire Protection; U.S.D.A. Forest Service, Consolidated Farm Service Agency, Natural Resource Conservation Service; U. C. Cooperative Extension; California Department of Fish and Game; and Madera County. If any conflict exists, the agency regulations and policy may prevail.

GENERAL INFORMATION:
[see glossary for definition of terms]
Following treatment, the 'crown closure' and 'residual dry matter (RDM)' remaining should average the following per acre, at the various elevational zones [these are considered minimal levels under most conditions and do not pertain to grazing areas]:

< 1,000 feet - retain 25% crown closure and provide 500lbs. RDM
1,000-2,500 feet - retain 30% crown closure (thin up to 50% of the canopy) and provide 700 lbs. RDM

>2,500 feet - retain 30% crown closure of single stemmed oaks, and 15% multi-stemmed oaks (thin up to 60% of the total canopy) and provide 1,000 lbs. RDM

Oak seedlings for artificial regeneration can be obtained from private nurseries or State of California Nursery. Call LA Moran Reforestation Center (916) 753-2441 or write P.O. Box 1590, Davis, CA 95617

Where soil or litter disturbance will take place or mechanical clearing/utilization, it is recommended a "Soil Erosion Hazard Rating" be conducted to insure adequate protection of the soil is considered. Use "Board Technical Rule Addendum #1, dated 2/1/90, form #1" for this rating. This form may be obtained from the CRCD or California Department of Forestry. The landowner can conduct this simple rating or use the maps of the Madera County Soil Survey [U.S.D.A. Natural Resource Conservation Service - in Madera (NRCS)].

Where 50 cubic yards of earth is planned for movement, a "Grading Permit" is needed from Madera County under "Madera County Code - Chapter 14.5 - Grading and Erosion Control".

The California Department of Fish and Game warden should be contacted when a wetland, riparian area, or a Class 1, 2, or 3 water course will be impacted by the operation. "Fish and Game Code 1603"

The California Department of Forestry and Fire Protection should be contacted when a commercial tree removal operation is planned, or significant impact on the woodland community is scheduled.

For fire protection purposes, the maximum goal should be not to retain in excess of 1,600 pounds of dry grass per acre. This does not pertain to grazing areas. Mowing, grazing or utilization, improves fire protection and protects the environment.

Refer to the Madera County General Plan for any other details regarding special requirements for the zoning specific to the landowners property.

"PREPARE DEFENSIBLE SPACE AROUND ALL IMPROVEMENTS AND KEY TREES"

General Objective, Protection, and Enhancement:
• Retain specimen age and heritage size oaks of all species.
• Retain oaks of all size and species represented on the site.
• Reforest oak species through natural or artificial regeneration.
• Remove trees which are a fire or safety hazard.
• Retain, where possible, hollow or dead trees used for nesting, etc.
• Plan for replacement trees of all ages, species, sizes, and growth form.

Fire Protection purposes:

• Reduce stocking to 15-30% crown closure in the 2,500 feet, plus, elevation zone.
• Prune branches and limbs of single stemmed oaks, conifers or other trees to 10' above groundline, near structures and fuel breaks.
• Prune lower limbs and remove dead limbs on desired brush species to reduce the "fire-ladder" effect.
• On multi-stemmed oaks, reduce the number of stems to 2-4 per clump, and prune to 10'.
• Emphasize single stemmed oak species.
• Remove brush from under the dripline of desired and residual trees.
• Remove debris from the base of the residual trees.
• Remove, push aside, burn, and pile away from desired species any unwanted plants on the fuelbreak.
• Control unwanted sprouts by manual, biological, mechanical, chemical means or burning.

For further information see publication "A Property Owners Guide to Reducing Wildfire Threat". The RDM [dry grass] should not exceed 1,600 pounds per acre. This does not pertain to grazing areas.

Range and woodland purposes:

• Reduce stocking by thinning trees from the smallest size leaving the larger size.
• Trees of all sizes and species should be retained and represented.
• Plan on replacement trees, with emphasis on desired species, by natural or artificial regeneration.
• Leave clumps of natural undisturbed vegetation, and create permanent grass savanna-openings.
• Control unwanted sprouts with manual, biological, mechanical, chemical means or burning.
• Leave enough sprouts and seedlings to become replacement trees.

Building within the Oak-woodland:

• Cluster improvements to preserve wildlife corridors.
• Protect existing oaks during construction, replace trees with seedlings if removal was unavoidable.
• Avoid root compaction by limiting heavy equipment in the root zone \[1\frac{1}{2}\text{-times the crown width}\]
• Minimize cutting roots during road construction, building foundations, or septic systems.
• Avoid grade changes in the dripline zone of the trees.
• Avoid landscaping which requires or allows irrigation within the dripline of the crown of the tree.
• Reseed with grass, fertilize, and/or mulch on disturbed ground just prior to the fall rains or the first rains following disturbance.
• Treat selected diseased or mistletoe infected trees or portion thereof, where appropriate.

Disposal of unwanted vegetation:

• Utilize the unwanted vegetation if at all possible for mulch, co-generation, fuelwood, etc.
• Unutilized material should be piled and burned.
• Burn dry material, with good ventilation, to reduce the smoke production.
• Burn on "burn days only" in compliance with San Joaquin Valley Unified Air Pollution Control District Guidelines.
• Use prescribed burning when possible. Obtain permits when necessary.

Wildlife needs: Enhance and retain other habitat components

• Diversity of plant and animal species.
• Scattered openings and undisturbed patches of plants.
• Thermal cover in the riparian system.
• Escape cover from predators.
• Scattered dead trees [and replacements] for nesting, cover and feeding purposes.
• Scattered large downed rotten logs, where appropriate.
• Scattered small brush piles, for nesting and escape, for a maximum of 3 years.
• Develop water sources where appropriate.

Erosion Reduction, watershed protection and enhancement:

• Avoid mechanical machinery use on slopes greater than 30%, whenever possible.
• Divert water on all skid trails and temporary roads as needed to prevent gully erosion.
• Seed waterbars, as needed, or place litter on disturbed areas.
• Retain, when needed, untreated buffer strips of vegetation along all riparian areas.
• Minimize soil surface disturbance. Leave litter and debris in place if possible.
• Install properly sized culverts, where needed, in swales on permanent or semi-permanent roads.
• Rock major dry-draw crossings on roads, where needed.
• Clean undesirable man-caused debris from riparian areas.
• Minimize use of heavy equipment on saturated soils.
• Provide soil protection, and maintain forage production on rangeland by following "Residual Dry Matter (RDM)" standards for annual grasslands.

OAK-WOODLAND MANAGEMENT PUBLICATIONS
University of California Cooperative Extension, Madera County
328 Madera Ave., Madera, California, 93637; [209] 675-7879

A Planner's Guide to Oak Woodlands, 94 pages - $ 10.00
Living Among the Oaks, 8 pages - Free
Wildlife Among the Oaks, 16 pages - Free
How to Grow California Oaks, 4 pages - Free
Preliminary Guidelines for Managing California Hardwood Rangeland - $ 5.00
Harvesting Firewood for Sustained Yield on Oak Rangelands, 32 pages - $ 3.50
Oaks 'n' Folks, Newsletter - Free
Quercus, Newsletter - Free
Property Owners Guide to Reducing the Wildfire Threat - Free
Guidelines for Residue Management on Annual Range #21327 - $ 1.50

Other sources of information can be obtained from:

Calif. Department of Forestry and Fire Protection - P.O. Box 67 - Ahwahnee, CA 93601- [209] 683-2885

California Native Plant Society - 909 12th Street, Suite 116 - Sacramento, CA 95814 - [916] 447-2677

Calif. Department of Fish and Game, Region IV - 1234 E. Shaw Ave. - Fresno, CA 93710 - [209] 222-3761

California Oak Foundation - 1212 Broadway, Suite 810 - Oakland, CA 94612 - [510] 763-0282

Additional copies of these guidelines or assistance may be obtained by contacting the:

Coarsegold Resource Conservation District
P.O. Box 1288
North Fork, CA 93643-1288

Board of Directors:

Ronald Severe, President
W. Tom Wheeler, Vice President
Robert B. Lindley, Secretary
June A. Coyle, Treasurer
Robert Peckinpah, Director
Larry Ballew, Director
Neil McDougald, Director
**Glossary:**

**Class 1.2 or 3 water course:** River, yearlong or intermittent stream that runs water part of the year.

**Co-generation:** Utilization of waste by burning under controlled conditions to produce steam and electricity

**Diversity:** Number, types, and variety of animals and plants living in a defined area.

**Dripline:** The area directly under the tree canopy, which is the distance from the tree trunk to a point on the ground directly below the outermost tips of the branches.

**Forest Stewardship:** A long-term landowners commitment to improving, managing, and/or protecting multiple forest resources and uses within the landowners objectives.

**Fuel ladder:** The continuous vertical distribution of live or dead fuel from the ground up to tree crowns that encourages wildfire to spread up into the tree crowns.

**Fuelbreak:** A strategically located and continuous wide block or strip where fuels have been permanently modified to reduce flame length and height and increase the chance of fire suppression success.

**Grading:** Is the movement of soil and litter as in land leveling, road construction, landscaping.

**IHRMP:** Integrated Hardwood Range Management Program was started on July 1, 1986, with a mission: "To maintain and where possible increase the acreage of California hardwood range resource to provide wildlife habitat, recreational opportunities, wood and livestock products, high quality water supply and aesthetic value."

**Multi-stemmed oak:** Plants of the genus Quercus that can or tend to grow in a shrub or small tree form with two or more woody stems, include: Interior Live Oak [Quercus wislizenii]; also known as "Evergreen Live Oak" Scrub Oak [Quercus berberidifolia]

**Oak-Woodland type:** An area where existing or potential tree crown closure is greater than 10% and the hardwood tree component is 50% of the capability of the land. (There is no known definition. This is a combination of several University references.)

**Percent Crown Closure:** The percent of an acre covered by the shadow of standing vegetation, in leaf, when the sun is directly overhead. Percent crown closure in these guidelines pertain to standing oak trees only.
**Riparian area**: Area in close proximity of wetland, with characteristic water associated plants and animals.

**Residual Dry Matter (RDM)**: The amount of dry plant material left on the ground from the previous year's growth. RDM provides favorable micro environments for early seedling growth, sod protection, organic matter, and a source of low-moisture fall forage for livestock feed. Single Stemmed Oak: Plants of the genus Quercus that tend to grow under natural conditions as a tree with a single woody stem, include: Blue Oak [(Quercus douglasii); also known as "White Oak" Valley Oak [Quercus lobata]; also known as "Water Oak" and "White Oak" California Black Oak [(Quercus kelloggii]; also known as "Black Oak" Canyon Oak [(Quercus chrysolepis]; also known as "Goldencup Oak" or "Live Oak"

**Swale**: Drainage bottom and flats receiving a considerable amount of seepage or surface water, and can remain saturated for long periods. Often a good producer of herbaceous material.

**Thermal Cover**: Vegetative cover used by animals to protect themselves from extreme temperatures.

**Tree Stocking**: An expression of the number and size of trees per acre.

**Voluntary**: Proceeding with any act from one's own will, choice, or consent that is totally unconstrained by interference from others, self-impelled and freely given, by self design or intention. Acting, or done of one's own free will without valuable consideration or legal obligation.

**Wetland**: A pond, stream, lake, etc. that holds water anytime of the year.

**Agencies, groups and private parties endorsing these Guidelines**

*(signed) Ronald Severe, President* Coarsegold Resource Conservation District

*(signed) Don Nielsen* Natural Resource Conservation Service

*(signed) Ronald S. Cohn* California Department of Forestry and Fire Protection

*(signed) Andy Watkins* Consolidated Farm Service Agency

*(signed) Richard B. Standiford* University of California Cooperative Extension

*(signed) Harry H. Baker* Madera County Board of Supervisors

*(signed) James L. Boynton* U.S.D.A., Forest Service-Sierra National Forest
*(signed) James Wagner  James Wagner, Landowner

*(signed) Gay Wright  Madera County Cattlemen's Association

*(signed) Robert Brosi  Eastern Madera County Chamber of Commerce

*(signed) Walter Ellis  Walter Ellis, Rancher

*(signed) James H. Flanagan  North Fork Chamber of Commerce

*(signed) Neil McDougald  Madera County Fish and Game Committee

*(signed) Joan L. Catania  Yosemite Gateway Association of Realtors, Inc.

*(signed) Norman Kuhr,  President Chowchilla Resource Conservation District

*(signed) Larry Ballew  Larry Ballew, Forest Consultant

*(signed) James Wagner  North Fork Hazard Reduction Committee

*(signed) Al Petrovich, Jr. (for) Boyd Gibbons California Department of Fish and Game

*(signed) W. Tom Wheeler  W. Tom Wheeler, Rancher Guidelines Committee Chairman

*(signed) Harold Wolfram  Harold Wolfram, CRCD Associate Director; CDF (Retired)

*Ssignatures on file in the Coarsegold Resource Conservation District Office*