

**Five-Year Assessment of the Programs  
Affecting Oak Woodlands in Lake  
County, California. December 2001**

**A report to the Board of Supervisors  
by the Biological Resources Sub-  
committee of the Lake County  
Resource Management Committee.**

**Report compiled by:**

**Gregory A. Giusti**

**U.C. Integrated Hardwood Range Management Program**

**Five Year Assessment of the Programs Affecting  
Oak Woodlands in Lake County, California.  
December 2001**

**SUMMARY**

The Biological Resource sub-committee of the Lake County Resource Management committee compiled this report. This assessment fulfills the requirements established by the Lake County Board of Supervisors resolution #95-211 directing the Biological Resource sub-committee to identify and assess changes that potentially impact or affect the oak woodland resources of the County.

The assessment was conducted through an afternoon educational forum held in Lakeport. The agenda included an overview of policies, projects and initiatives that have been developed or initiated during the past five years having some relevance to the conservation oak woodlands. The program included an overview of activities on both public (state and Federal) and private lands.

The assessment confirms that Lake County has no specific policy or initiative that provides exclusive oversight to the conservation of oaks. Furthermore, there does not exist a central depository of information to assess recruitment or regeneration of oaks occurring throughout the County. Rather, there currently exists a combination of educational programs, incentive-based opportunities and regulatory statutes that in combination address many of the issues important to oak woodland conservation. Additionally, Lake County is well positioned to expand current activities through the use of emerging technologies including Geographic Information Systems and remote sensing programs.

Other initiatives that have long-term potential benefits to oak woodlands include the growth of the Lake County Land Trust and their ability to attract private landowners to consider the utility of conservation easements. In addition public acquisition of oak woodland acreage help insure their long-term protection against land-use practices that potentially could infringe on their ecological integrity through fragmentation.

This assessment also reaffirmed the high-use recreational demands placed on Lake County's oak woodlands. Though financially important to the long-term economic

stability of the County, the highly intensive public use of some of these lands produces challenges to resource managers to balance public access and resource protection.

### **New Monitoring Techniques - Adina Merenlender. UCB.**

Since 1995 advances in geospatial analysis techniques has improved the ability to monitor vegetation changes across the landscape due to a variety of factors. Some of these new technologies combine historical aerial photos, satellite imagery, and other sources of metadata into Geographical Information Systems (GIS) that provide new abilities to monitor change over time (Map 1).

Through these technologies there currently exist the ability to identify, map, and monitor oak woodlands. Additionally, the new modeling techniques allow for the ability to evaluate risk factors to oak woodlands.

Dr. Merenlender believes that given Lake County's ability to utilize these technologies that the county is "well ahead of the curve" when compared to the capabilities of other rural county's. Specifically, she identified:

- oak woodlands of Lake County are currently mapped,
- core woodland areas are identified,
- change detection monitoring maps exists for the years 1994-1998.

She then presented a research project as a case study example currently underway in Sonoma County , which is analyzing impacts to oak woodland fauna and flora from different land use patterns. The analysis is evaluating the impacts on oak woodland biological diversity between high-density residential development, scattered ranchette development and open rangeland. Because of Lake County's GIS capabilities the County is currently in a position to conduct a similar type of monitoring program.

### **Overview of Public Land management and Oak Woodlands.**

A number of Federal and state agencies are responsible for managing oak woodlands throughout Lake County. Representatives were invite to participate in the forum to provide an overview of their management goals and objectives.

## **Federal Agencies**

**Blaine Baker, USDA-Forest Service.** The Forest Service is responsible for managing the Mendocino National Forest (MNF) aimed at a number of objectives. The forest has a number of different vegetation types classified as: mixed-conifer, conifer-hardwood, hardwood and plantations. The MNF ranges in elevation between 1500' and 7000'. Currently, approximately 155,000 acres are classified as a mixed conifer/hardwood type.

USDA-Forest Service attitude toward hardwood management has changed dramatically during the past ten years. This has resulted in a shift in management emphasis from hardwood control and elimination to hardwood management for wildlife and other non-timber resources. Much of the change was in response to meeting the needs for managing the Northern Spotted Owl populations and the need to increase decadent structure within forest stands.

Currently, 61,000 acres are identified for timber production across the forest. Within these lands, harvests are restricted to single tree selection silvics including a hardwood retention target of 15% basal area. This target is intended to retain approximately 6-7 hardwood trees/acre.

Other specific hardwood management objectives include:

- within plantations, black oak stumps are allowed to sprout and re-occupy the site,
- within the designated deer range, an increase number of hardwood trees > 12" dbh are retained,
- hardwoods are utilized for public fuel wood outside the Late Seral Reserve areas,
- fuel wood cutting is restricted to personal use.

## **Rich Burns, USDI - Bureau of Land Management (BLM).**

The BLM is responsible for managing approximately 125,000 acres of non-continuous lands throughout Lake County. These lands include: Cow Mountain, the Geysers, Cache Creek, Indian Valley, and Knoxville. Of the total acreage approximately 15,000 acres is considered pure oak woodlands. The BLM's mission includes both preservation and protection strategies as well as recreational opportunities.

The BLM is not actively involved in “oak management” per se. Specifically, there is no commercial or personal tree harvest allowed on their management areas. Consumptive management is limited to provided public hunting access for deer, bear and turkey.

The Bureau recently acquired the Paine Ranch (13,000 total acres) in a cooperative agreement with the Rocky Mountain Elk Foundation. The new acquisition will be available for non-motorized public use i.e. river rafting, fishing, hunting, biking and hiking. A draft management plan is currently being composed and will soon be available for public review.

### **State Agencies**

#### **Val Nixon & Margaret Baumgratz, Calif. Dept. of Parks and Recreation (CDPR).**

The CDPR is a resource protection agency responsible for the management of both Clear Lake State Park (500 acres) and Anderson Marsh (150 acres). Both sites contain substantial oak woodland acreage. Neither of the two sites is managed for consumptive uses.

The two sites receive high levels of public use, approximately 230,000 user/days/year, requiring special management attention to human impacts on oak woodland resources. These practices include trail management, interpretive programs, and hazard tree evaluation and management.

Land use practices occurring on adjacent private lands have had negative impacts to Park properties in the recent past. These impacts are generally associated with the clearing of abandoned agricultural lands or the conversion of oak dominated sites to intensive agriculture.

As of March 2001, no confirmed cases of Sudden Oak Death (SOD) syndrome have been confirmed at either site. CDPR is well informed and involved with SOD because of Park properties being impacted in Sonoma and Marin counties.

Regeneration of oaks is generally low across the properties with past regeneration efforts having mixed results. Future regeneration plantings are scheduled for the meadow area at the entrance to CL State Park. In addition to oak regeneration, prescribed burning

is planned in the future for Anderson Marsh to limit the spread of noxious plants and to promote native tree regeneration.

**Allen Buckman, California Dept. of Fish and Game (DFG).**

The DFG manages approximately 3,500 acres of predominately oak woodlands in the Cache Creek area. Generally, the land is managed in a passive form, i.e. no consumptive tree harvesting is allowed. The property is open to public use, for hunting, hiking, and other non-motorized activities.

In most cases, with regards to oak woodlands, the DFG is involved in a consultative process with private landowners. The program, which demands the highest amount of the landowner consultations, is the CEQA 1600 permit, which focuses on stream alterations in oak woodlands and requires DFG approval.

**Private Land Initiatives, Policies and Programs.**

A number of new programs and policies have been implemented dealing with oak resource management on private lands during the past five years. These initiatives involved both voluntary and mandatory approaches to resource protection and conservation.

**David Wappler, Lake County Community Development Department,  
Planning Division.**

Mr. Wappler gave an overview of the current policies and General Plan language pertinent to oak conservation contained in the Lake County. The County's policy is as stated in the General Plan is; *"The County should ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare and endangered"* (LC GP Plant and Animal Resource Policy 1.1). The plan was last updated in 1981.

The County is currently engaged in developing a series of Area Plans as a mechanism to update the General Plan. Area plans are currently being developed for both Upper Lake and Nice. Within those plans attention is provided to the encouragement of native trees and oak woodlands (Policy 3.31c and 3.331e).

Furthermore, the Lake County Zoning Ordinance through the Waterway Combining District (WW) has provisions that prohibit the clearing of vegetation and/or the topping or felling of standing vegetation.

The policy that is currently directing most of the conservation measures aimed at oak woodlands is the Lake County Grading Ordinance. The ordinance requires discretionary approval of a grading permit and environmental review pursuant to CEQA. Measures needed to mitigate environmental impacts are incorporated in the grading permit as conditions of approval.

The most difficult aspect of the Grading Ordinance program is post-project monitoring due to resource and personnel constraints. Monitoring, though viewed as a critical element of program evaluation is currently not comprehensive and is limited to tracking through the permit process. Estimated losses of oak woodland during the past five year period were provided. They included:

- 1) Since 1997, approximately 500-800 acres of oak woodlands have been removed, primarily due to vineyard projects. Further research of Department files is needed to “fine tune” this estimate.
- 2) The Department has received numerous complaints regarding oak tree cutting in the Cobb Mountain Area and Borax Lake Area. The Department is unable to accurately estimate oak woodland losses from these types of activities that do not require a permit filing.

**Greg Dills, Resource Conservation Districts.**

During the past five years a number of watershed groups have been formed as a mechanism to involve resident landowners in a variety of conservation efforts. In many cases, these efforts have led to cooperative programs with the US Forest Service, the USDA Natural Resources Conservation Service and the Bureau of Indian Affairs. The predominant theme in each of the Coordinated Resource Management Planning (CRMP) efforts that was highlighted focused on an aspect of stream or stream corridor restoration. The CRMPs that were identified included: Middle Creek, Scott’s Creek, Kelsey Creek, Big Valley, Schindler Creek and Putah Creek.

Each of the CRMP efforts varies depending on landowner commitment and project specificity. Past activities have included oak planting programs with youth, a pamphlet aimed at getting kids involved in oak conservation and a future photography program aimed at identifying the largest oak in the county.

**Steve Tylicki, UCCE Viticulture Research Associate - The vineyard industry and oak woodlands.**

The acreage of commercial vineyards in Lake County in 1995 was 3,327 acres. That has increased to 5,000 in 1999, 8,000 in 2000 and is expected to reach 12,000 acres by 2005.

As noted by the Planning Department data, the majority of the vineyard acreage increases as occurred on lands that are not currently dominated by oaks. It is the general position of the UCCE viticulture program to discourage conversion of oak woodlands to vineyards, though they have no statutory authority to direct vineyard expansion.

When given the opportunity to discuss potential vineyard development the position of the program is to discourage oak conversion and direct developers toward existing sites that are currently being used for agricultural production i.e. walnut orchards.

**Steve Tylicki, UCCE Viticulture Research Associate - The EPEC Effort**

During the past five years a newly developed program has been instituted in Lake County to work collaboratively with the vineyard industry to minimize erosion impacts from development. The Erosion Prevention and Education Committee (EPEC) is charged with evaluating vineyard development projects on sites currently being used for agricultural production to identify mitigation measures aimed at minimizing potential erosion. Since its inception in 1998, the Committee has reviewed 36 applications affecting approximately 2,000 acres.

**Michael Friel - Lake County Land Trust (LCLT)**

Though in existence since 1993, the LCLT has become much more visible and active during the past five years. The organization does not have a mandate focusing



exclusively on oak woodlands; rather, it is looking toward using conservation easements as a mechanism to protect important natural areas found throughout Lake County.

Two projects of note that have taken most of the Trust's efforts during the past five years include the \$1.2 million Rodman Slough project and the current negotiations involving the Black Forest.

Repeatedly asking the audience to consider the desired future condition of Lake County, the LCLT is evolving into an organization that will develop collaborative programs with landowners to conserve both agricultural and Wildlands.

### **Sudden Oak Death (SOD) Syndrome in Lake County**

As of this writing, SOD has not been confirmed within Lake County. A number of known host species occur within the County's boundaries, but to date this has not resulted in any confirmed or suspected outbreaks.