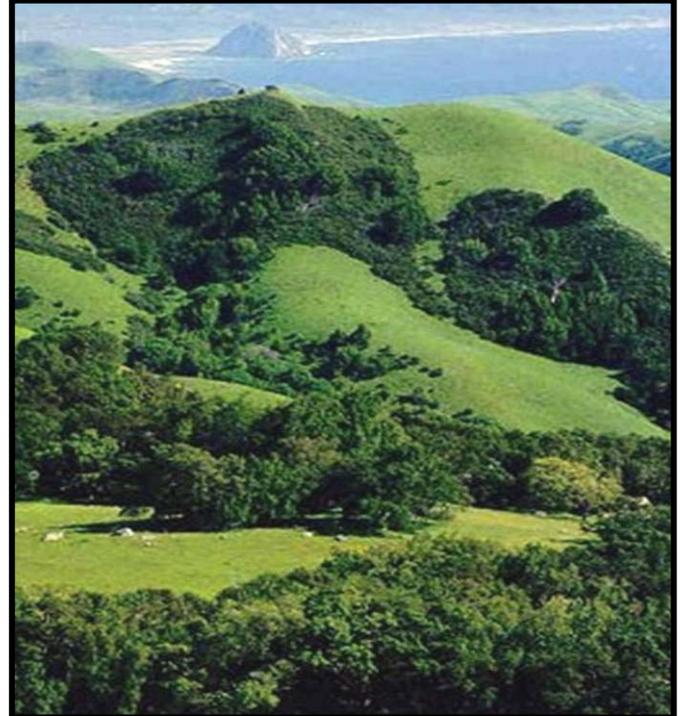
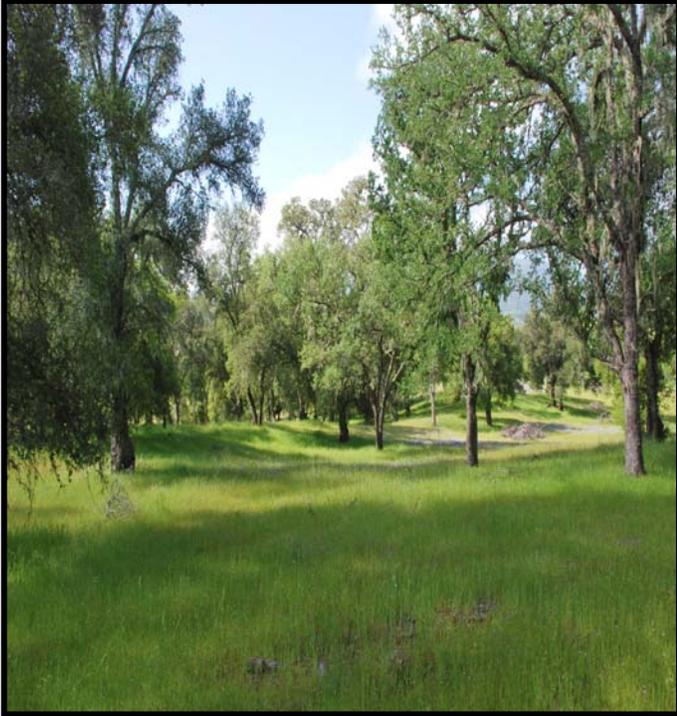


***Wildlife Conservation Board  
Oak Woodlands Conservation Program  
December 2010***



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December 2010



## Executive Summary

The management of our natural resources is a complex and challenging endeavor and conservation of oak woodlands is no exception. Currently there are about 10 million acres of oak woodlands found in 54 of California's 58 counties, 80 percent of which are located on privately owned property. As the population of California continues to increase and more and more Californians are leaving metropolitan areas in favor of a more rural lifestyle, the debate over how best to protect and conserve oak trees and oak woodlands is becoming more controversial.

In response to the continuing loss of oak woodlands, the Oak Woodlands Conservation Act was enacted (Chapter 588, Statutes of 2001). The Act specifically recognizes the important role oak woodlands play in the economic, social, environmental and ecological matters of this State and is designed to serve a segment of California's population that is instrumental in the preservation of oak woodlands, the private landowner.

The Act mandates the Wildlife Conservation Board (WCB) to establish a grant program designed to protect and restore oak woodlands using conservation easements, cost-share and long-term agreements, technical assistance and public education and outreach. Consistent with the enabling legislation, the WCB developed the Oak Woodland Conservation Program (OWCP). The program provides incentives designed to foster the conservation of oak woodlands in a manner that promotes local priorities while sustaining the economic viability of working landscapes.

The following information has been prepared in response to Fish and Game Code Section 1363.5, whereby the WCB is required to prepare a report documenting the accomplishments of the program. Specifically, the Act requires the WCB to provide its best estimate of the total acreage, species and coverage of oak woodlands purchased with funds from the Habitat Conservation Fund (HCF) and the Oak Woodlands Conservation Fund (OWCF).

In September of 2004, legislation was enacted [Chapter 409, Statutes of 2004 (AB 79)] that suspended until January 1, 2008, the requirement to prepare annual reports. As such, this report has not been prepared since November, 2003. This report will also summarize activities and expenditures from the HCF and the Oak Woodlands Conservation Program from 2003 through 2010.

From the period of 1990 through 2010, the Board has allocated approximately \$55.8 million from the HCF to protect about 129,687 acres of oak trees and oak woodlands. Through the purchase of conservation easements, an additional \$21.1 million has been allocated for purposes of the Oak Woodland Conservation Program resulting in the permanent protection of about 38,022 acres of oak woodlands. Utilizing all other fund sources available to the Board, an additional \$167.8 million has been allocated to protect 45,515 acres of oak woodlands. In total, since 1990, the WCB has allocated over \$244.7 million for the protection of 213,224 acres of oak woodlands throughout the entire state of California.

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# CHAPTER 1

## Oak Woodland Conservation

### Introduction

Pursuant to the requirements of Fish and Game Code Section 1363.5, information has been prepared regarding the status of protected oak woodlands and the Oak Woodlands Conservation Program. Specifically, the WCB is required to report ,every two years, to the Legislature and the Governor on the number of acres and coverage of oak woodlands purchased with funds from the Habitat Conservation Fund (HCF) and the Oak Woodlands Conservation Fund (OWCF).

In September of 2004, legislation was enacted (Chapter 409, Statutes of 2004 (AB 79/Dutra) that suspended until January 1, 2008, the requirement to prepare annual reports. As such, a report has not been prepared since November, 2003. This report summarizes activities and expenditures from the HCF and the Oak Woodlands Conservation Program from 2003 through 2010.

### The Habitat Conservation Fund and Oak Woodlands

In June of 1990, the voters of California passed Proposition 117, the California Wildlife Protection Act of 1990, commonly referred to as Proposition 117, or the Mountain Lion Initiative. To assure the preservation of unique habitat, the initiative created the HCF and required an annual transfer of \$30 million into the Fund until the year 2020. Further, the initiative specified how the monies were to be expended for acquiring, restoring and enhancing habitat necessary to protect oak woodlands, wildlife (especially deer, mountain lions), rare, endangered, threatened or fully protected species, wetlands, riparian and aquatic habitat.

The initiative further requires that \$4.5 million be appropriated to the Department of Parks and Recreation; \$4.0 million to the California Coastal Conservancy; \$500,000 to the California Tahoe Conservancy; \$10.0 million to the Santa Monica Mountains Conservancy until July 1, 1995, after which the WCB would be the recipient of these funds, plus \$11.0 million for a total of \$21.0 million.

### Reporting Requirements

As previously mentioned, the Oak Woodlands Conservation Act requires the WCB to report, every two years, to the Legislature and the Governor and provide its best estimate of the total amount in terms of acreages, species and coverage of oak woodlands purchased with funds from the HCF. Since 1990, approximately \$55.8 million has been allocated to protect about 129,687 acres of habitat designed to benefit deer, mountain lions and oak woodlands.

Proposition 117 identified deer and mountain lion habitat as one of the eligible habitat types upon which funds should be expended. While oak woodlands were not specifically identified as a type of habitat upon which HCF funds should be expended, one can assume that oak trees and oak woodlands benefited from the allocations since deer and mountain lions generally exist within oak woodlands.



*Eagle Ridge Conservation Easement, Calaveras County*

## CHAPTER 2

### The Oak Woodland Conservation Program

#### Opportunities for People and Oak Woodlands

Approximately two-thirds or 10 million acres of California's oak woodlands remain intact, of which, about 80 percent are found on private property. Of the remaining oak woodlands, about 4 percent are protected from conversion. Today, the single largest threat to oak woodlands is residential, commercial and industrial development. Conversion of oak woodlands to intensive agricultural development such as orchards and vineyards also takes a heavy toll.

Other factors, contributing to the loss of oak woodlands include woodcutting, the lack of oak regeneration and Sudden Oak Death (SOD). For these reasons and because the preponderance of remaining oak woodlands can be found on privately owned property, the Oak Woodlands Conservation Program is designed to accommodate the needs of the private landowner while fostering incentives designed to protect oak woodlands.

Although the rate of conversion of oak woodlands, coupled with the lack of oak regeneration and the emergence of SOD present a very dismal outlook and future for California's oak woodlands, there is an opportunity to reverse the present trend. With 80 percent of the remaining oak woodlands on private lands, an opportunity exists to compensate landowners who have maintained economic opportunities for the property without sacrificing open space, healthy watersheds and quality wildlife habitat. In addition, opportunities exist for private landowners to restore oak woodlands while further enhancing the economic potential of their ranchlands.

#### The Oak Woodlands Conservation Program

The Oak Woodlands Conservation Program recognizes the importance of California's oak woodlands, how they enhance the natural and scenic beauty of this great State, the critical role of the private landowner and the importance of private land stewardship. The program further acknowledges how oak woodlands increase the monetary and ecological value of real property and promotes ecological balance.

The Oak Woodlands Conservation Program offers landowners, conservation organizations, cities and counties, an opportunity to obtain funding for projects designed to conserve and restore California's oak woodlands. While the Program is statewide in nature, it provides opportunities to address oak woodland issues on a regional priority basis.

The Program is designed to help local efforts achieve oak woodland protection. More importantly, this program provides a mechanism to bring ranchers and conservationists together in a manner that allows both to achieve that which is so valued -- sustainable ranching and farming operations and healthy oak woodlands.

## Legislative Intent

Recognizing the importance of oak woodlands and the critical role private landowners have in the conservation of oaks, the Legislature created the Oak Woodlands Program with the expressed intent the program accomplish the following:

- Support and encourage voluntary, long-term private stewardship and conservation of California oak woodlands by offering landowners financial incentives to protect and promote biologically functional oak woodlands;
- Provide incentives to protect and encourage farming and ranching operations that are operated in a manner that protect and promote healthy oak woodlands;
- Provide incentives for the protection of oak trees providing superior wildlife values on private land; and
- Encourage planning that is consistent with oak woodlands preservation.



*Scott River Easement, Siskiyou County*

To accomplish the legislative intent, WCB is authorized to purchase oak woodland conservation easements and provide grants for land improvements and restoration efforts. In addition, the WCB is authorized to award cost-sharing incentive payments to private landowners who enter into long-term agreements. Such agreements are structured to include management practices that benefit oak woodlands and promote the economic sustainability of the farming or ranching operation.

### Local County Plans

To qualify for a grant, the Act requires the county or city in which the grant money would be spent to prepare an oak woodlands management plan that in part, includes a description of all native oak species located with the county or city’s jurisdiction. To date, 21 California counties have adopted an Oak Woodland Management Plan thus qualifying the county to participate in the Oak Woodland Conservation Program.

The 21 adopted plans are unique and as diverse as the counties themselves. The plans also vary in breadth and complexity with respect to the type and specificity of information they contain. The plans all contain a description of the native oak species located within the particular county and provide a description of the major threats to oak woodlands in the particular county. All of the plans are voluntary in nature as they do not regulate the management of oak woodlands.

While the plans were adopted by the local governing boards of supervisors, the plans were prepared and reflect the input from numerous stakeholders interested in oak woodland habitat. While discussions were time consuming and oftentimes contentious, divergent interests groups representing the numerous stakeholders from the farming and ranching community, conservation and environmental community, came together, discussed ideas and concerns and reached a level of consensus that resulted in an adopted Oak Woodland Management Plan.

To date, the following counties have adopted Oak Woodland Management Plans:

Alameda	Marin	San Luis Obispo
Butte	Mariposa	Santa Barbara
Calaveras	Mendocino	Santa Clara
Colusa	Monterey	Tehama
El Dorado	Napa	Ventura
Fresno	Placer	Yolo
Madera	Sacramento	Yuba

## Conservation Easements

The Act requires that at least 80 percent of the money be used for grants for the purchase of conservation easements, for restoration activities or for enhancement projects. In addition, the funds may be used for grants that provide cost-share incentive payments and long-term agreements. While the Act specifies how the monies are allocated, the Act requires that priority be given to grants that result in the purchase of oak woodland conservation easements.



*Pleasant Valley Conservation Area, Solano County*

To date, approximately \$21.1 million has been allocated to protect in perpetuity approximately 38,022 acres of oak woodlands in counties that have adopted oak management plans. While all of the conservation easements are designed to protect the oak woodlands and the surrounding habitat, the majority of the easements are located on working landscapes. While oak trees and oak woodlands provide critical habitat for deer, mountain lions and numerous species of migrating birds, the ranches are operated in a manner that promotes sustainable economic returns beneficial to the landowners and the wildlife species that are dependent upon the preservation of oak woodlands.

## Education and Outreach:

Consistent with the Act, 20 percent of the funds may be used for public education and outreach efforts. The Board has allocated \$612,235 to fund educational and outreach projects designed to educate private landowners, city and county planners, land trusts and K-8 grammar school children on the social, economic and environmental values associated with healthy oak woodlands.



*K-8 grade students learn about oaks at the Santa Margarita School in San Luis Obispo County.*





*Santa Margarita Ranch, Outdoor Education, San Luis Obispo County*

Over the years, emphasis has been placed on securing money for the acquisition of important natural resources to protect in perpetuity, those critical habitat values that in many ways define California. One of the unique features of the Oak Woodlands Conservation Program is the recognition and emphasis on the need for public education and outreach. This component of the program has received a great deal of interest from scholars at major universities, land use planners and a group of people whose role in our society is critical, i.e., the grammar school teacher.

Through the oak program, WCB has facilitated educational and outreach efforts specifically designed to reach private landowners and ranchers on how best to integrate oak conservation efforts into their farming and ranching operations. The program funded an effort to educate and assist county planners with the process of determining project significance including, what types of projects fall under the purview of regulations governing land use changes, what constitutes a “significant impact”, compliance standards and effective strategies to conserve oak woodlands. Funds have been provided to create a “Master Naturalists” program patterned after the popular and successful UC California Cooperative Extension “Master Gardeners” program.

While each of the projects are designed and tailored to reach a unique audience, i.e. ranchers, planners, homeowners or grammar school students, they all have a unique feature in common. The projects are sustainable in nature and will continue to provide benefits beyond their initial applicants. The knowledge and expertise gained by each of the participants, that range in age from 72 years to 8 years of age will help shape future management and conservation of oak woodlands.



*Education and Outreach to local ranchers, San Luis Obispo County*



## **Geographic Distribution of Oak Woodlands and Major Threats**

To appreciate the vast geographic distribution of oak woodlands and areas in need of protection, the Oak Woodland Conservation Program is focusing on eight ecological regions. Using information from the Ecological Units of California, information has been compiled describing the characteristics of each region and the approximate location of oak woodlands by species. For purposes of this report, information is provided with respect to oak woodlands protected by WCB. Overall, since 1990 with funding from the HCF and the oak program, WCB has protected in fee or easement approximately 167,709 acres of oak woodlands. To better understand the distribution, protection status and management issues associated with approximately 10 million acres of oak woodlands, the eight ecological regions are described below. In addition, Table 1 displays the major threats to oak woodlands within each of the ecological regions.

## **1. North Coast Oak Woodland Region**

The North Coast Region contains approximately 2.1 million acres of oak woodlands. The boundaries run from Crescent City in the north to Marin in the south. The Region covers approximately 12,618 square miles (8.08 million acres) and varies in elevation from sea level on the western edge to approximately 8,100 feet. The predominant oak species include valley oaks in the southern reaches of the area, blue oak, black oak, canyon oak, interior live oak, Shrives oak and Oregon white oak in the upper reaches of Humboldt and Del Norte Counties and coast live oak along coastal areas. Oak woodlands face conversion pressures, predominantly to vineyards, residential developments and ranchettes. Overgrazing, lack of oak regeneration, firewood cutting and in some areas, Sudden Oak Death (SOD), threaten the biological integrity of the oak woodlands.

Since 1990, approximately 2,768 acres of oak woodlands have been protected.

## **2. Klamath/South Cascade Oak Woodland Region**

The Region contains approximately 940,000 acres of oak woodlands and borders the North Coast Region on the west. The Region covers approximately 15,198 square miles (9.7 million acres) and varies in elevation from 200 feet to 14,600-foot elevation at Mt. Shasta. The predominant oak species include valley oak, blue oak, black oak, interior live oak and Oregon white oak. The major threat in this section comes from firewood cutting. In addition, threats include agricultural conversion, development of mini ranchettes, and lack of oak regeneration, drought and poor watershed conditions.

Since 1990, approximately 32,701 acres of oak woodlands have been protected.

## **3. Modoc Oak Woodland Region**

The Region contains approximately 5,000 acres of oak woodlands comprised of a few areas of blue oak woodlands and montane hardwood forests. This Region is 6,222 square miles (4 million acres) in size and ranges in elevation from 300 to 9,900 feet. The principal threat in this area comes from overgrazing and extensive firewood cutting.

Since 1990, approximately 1,226 acres of oak woodlands have been protected.

## **4. Central Coast Oak Woodland Region**

The Central Coast Region contains approximately 1.9 million acres of oak woodlands and covers the area from San Francisco in the north to San Luis Obispo in the south. The Region covers approximately 14,891 square miles (9.5 million acres) and varies in elevation from sea level on the western edge to approximately 5,200 feet in the eastern portion of the section. The predominant oak species include valley oak, a few black oak, blue oak, interior live oak and coast live oak. Intensive agricultural development and conversion of oak woodlands to vineyards is the major threat in this Region. In the northwest portions of the Region there are confirmed cases of SOD. Lack of oak regeneration, and fire risk, threatens many of the remaining stands of oak woodlands.

Since 1990, approximately 8,559 acres of oak woodlands have been protected.

## **5. Southern California Coast Oak Woodland Region**

The Southern Coast Region has approximately 590,000 acres of oak woodlands remaining throughout the area. The Region covers the area from Santa Barbara County in the north to San Diego County in the south. The entire section covers approximately 15,893 square miles (10.2 million acres) and varies in elevation from sea level on the western edge to approximately 11,500 feet in the eastern portion of the section. The predominant oak species include Engleman oak, valley oak, coast live oak, interior live oak, canyon live oak and blue oak. High density, residential development is the principal threat in this area resulting in fragmented landscapes and few remaining large tracks of oak woodlands. Intensive agricultural development also threatens the remaining oak woodlands.

Since 1990, approximately 15,258 acres of oak woodlands have been protected.

## **6. Great Valley Oak Woodland Region**

This Region contains approximately 960,000 acres of oak woodlands and covers the Central Valley from Redding in the north to Bakersfield in the south. The entire area covers approximately 21,815 square miles (about 14 million acres) and varies in elevation from 300 feet on the western edge to 50 feet in the center to approximately 3,000 feet on the east side. The predominant oak species include valley oak, blue oak, Oregon white oak, black oak, interior live oak and canyon live oak. The principal threat to oak woodland values in the Central Valley comes from residential development and intensive agricultural conversion. In addition, extensive firewood cutting in the northern areas of Shasta and Tehama County, poor oak regeneration, development of small ranchettes, overgrazing and hobby livestock coupled with ground water diversions pose additional threats.

Since 1990, approximately 68,770 acres of oak woodlands have been protected.

## **7. Sierra Nevada Foothills Oak Woodland Region**

The Sierra Nevada Foothill Region, one of the largest oak woodland areas remaining in California, contains approximately 2.1 million acres of oak woodlands. The Region covers the eastern edge of the Central Valley from Redding in the north to Kern County in the south. The section covers approximately 7,024 square miles (4.5 million acres) and varies in elevation from 200 feet on the western edge to approximately 5,000 feet on the eastern edge of the section. The predominant oak species include blue oak, black oak, interior live oak and some valley oak. Residential development and intensive agricultural conversion to vineyards threaten the oak woodlands. In addition, firewood cutting, poor oak regeneration and low density, suburban development in the form of small ranchettes, affect the oak woodlands.

Since 1990, approximately 2,525 acres of oak woodlands have been protected.

## 8. Sierra Nevada Oak Woodland Region

The Sierra Nevada Region contains approximately 590,000 acres of oak woodlands and covers the higher elevations of the west side and the eastern edge of the Sierra Nevada. The Region covers approximately 19,919 square miles (12.7 million acres) and varies in elevation from 1,000 feet on the western edge to approximately 15,000 feet in the eastern portion of the section. The predominant oak species include blue oak, black oak, interior live oak and some valley oak. The Region also provides critical riparian vegetation containing oaks. Threats to this Region include residential development and intensified agricultural conversion, primarily vineyards. In addition, poor oak regeneration, increasing low density, suburban development and high fire risk are concerns.

Since 1990, approximately 35,901 acres of oak woodlands have been protected.



*Eagle Ridge Conservation Area, Calaveras County*

**Table 1**

**OAK WOODLANDS --- REGIONAL THREATS**

<b>ELEMENT of THREAT</b>	<b>North Coast Region</b>	<b>Central Coast Region</b>	<b>South Coast Region</b>	<b>Modoc Region</b>	<b>Klamath Region</b>	<b>Sierra Foothill Region</b>	<b>Sierra Nevada Region</b>	<b>Great Valley Region</b>
Riparian Conversion	✓							
Vineyards	✓	✓				✓	✓	
Agricultural Intensification		✓	✓		✓	✓		✓
Ranchettes	✓				✓	✓		✓
Fragmentation			✓			✓		✓
Over Grazing	✓			✓				✓
Regeneration	✓	✓			✓	✓	✓	✓
Wood Cutting	✓			✓	✓	✓	✓	✓
High Fire Risk		✓					✓	
Drought		✓						
Rural Develop.	✓		✓			✓	✓	✓
Water Diversions					✓			✓
Sudden Oak Death	✓	✓						
Livestock						✓	✓	
Drug Labs	✓	✓					✓	✓
Golf Courses							✓	✓
Recreation						✓	✓	✓

## Conclusions

A great deal of interest has been expressed regarding incentive-based approaches to protecting natural resources and oak woodlands are no exception. Further, private landowners, representatives from the ranching and farming industry, rural counties and metropolitan cities have expressed interest and support for innovative approaches. The Oak Woodland Conservation Program provides such an opportunity. To date, 21 counties across California have prepared Oak Woodland Management Plans and adopted county resolutions reflecting local oak woodland priorities and interests. While each county has adopted plans reflective of local interests and priorities, recognition continues to grow regarding the importance of maintaining and preserving our oak woodlands.

As one colleague shared with the Board, “Conserving oak woodlands reflects a wise investment toward achieving clean air, safe drinking water and sustainable wildlife habitat in this fast-growing state”. Since 1990, the Board has allocated \$76.9 million from the HCF and the Oak Woodland Conservation Program, to protect over 167,709 acres of oak woodlands. Utilizing all other fund sources available to the Board, an additional \$167.8 million has been allocated to protect 45,515 acres of oak woodlands. While a tremendous amount of work remains to be completed, the \$244.7 million allocated by the Board since 1990 to protect about 213,224 acres of oak woodlands throughout California exemplifies the Board’s commitment and dedication toward preserving oak woodlands.



*Hearst Ranch, San Luis Obispo County*