

# Protecting Forests Across Landscapes and Through Generations: The Sonoma County Forest Conservation Working Group

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## **Abstract**

There are approximately 513,000 acres of coniferous forests and oak woodlands in Sonoma County, California, situated about 50 miles north of San Francisco. Most of the oak woodland, and over 68% (132,000 acres) of the coniferous forestland, is in private ownerships of 50 acres and less. These forests are unique, with 10 species of true oak and 19 species of conifer in the county. While Sonoma's forests provide a suite of benefits, factors create pressure to parcelize, convert to viticulture, and fragment the forest ecosystem. In order to address these threats, an ad-hoc committee created the Sonoma County Forest Conservation Working Group (Work Group).

The Work Group provides information and resources to forest landowners with the goal of protecting the health and long-term tenure of forests and woodlands. Lessons learned highlight landowners' interest in fire and forest management, but also a lack of wildland and forest management knowledge, a reluctance to spend money, and institutional gaps that ultimately increase fire danger and ecosystem fragmentation. This experience demonstrates the importance of our mission, 'Protecting Forests Across Landscapes and Through Generations.'

*Key words:* community forestry, extension, Sonoma, fire control

## **Introduction**

Sonoma County is unique among forested counties in California. Because of its proximity to San Francisco, fertile soils, abundant water and quicksilver mines, the area was settled early relative to much of the state. Its timber resources were accessed by rail in the 1870's for the development of San Francisco (Codoni and Trimble, 2006). Most of the land ended up in private hands, generally going back to Spanish Rancho demarcation. For this reason, there is very little public ownership of timberlands or oak

woodlands in Sonoma County. Forest health and ecosystem continuity depends, in a very large part, on the private landowner.

The Work Group grew out of a meeting convened in February, 2005, by Sonoma Land Trust, to talk about the issue of small, private parcels of forest in Sonoma County, California. The ‘problem’ with these parcels is their abundance in the County; Sonoma County is the most highly parcelized county in California (Greenbelt Alliance, 2006). North of San Francisco and Marin, the million-acre county has more than 513,000 acres of true oak woodland (*Quercus* spp.) and coast redwood-Douglas-fir (*Sequoia sempervirens* and *Pseudotsuga menziesii*) forest, about one-third of which is held in parcels of 100 acres or less. In coniferous forests, parcels of 50 acres and less constitute 68%, or 132,000 acres [1]. This relatively small size of ownership of a wide-ranging ecosystem creates parcels that are uneconomic for timber harvest or rangeland, historic uses of this land when it was in larger parcels. The general use at this time is ‘no-action’.

The no-action alternative is a concern to the colloquium of forest, land trust and trail managers. The county has unique forests with 10 native species of true oak and 19 native conifers [2, 3]. While most of the old-growth redwood and Douglas-fir forest was logged since the California Gold Rush, the ecosystem remains. The second growth redwood-Douglas-fir forest is in various stages of succession in response to previous harvests. Most of the seral stages are now fire-prone in this once frequent-fire ecosystem. The oak savannahs are similarly subject to the effects of fire, an indigenous practice in Sonoma’s valleys (Anderson, 2005). Some species, such as Knobcone Pine (*Pinus attenuata*) are fire-dependent. In addition, Sudden Oak Death (*Phytophthora ramorum*), irregular management practices, and land tenure changes all contribute to fire hazard. And most importantly, the smaller size of ownerships with dwellings increases both the likelihood of fire and the severity of fire damage, including the potential for loss of life.

The Work Group formed from a group of the Land Trust meeting’s participants and has focused on finding those private landowners with ‘small’ parcels, and providing the tools they need to plan, manage and conserve their land for themselves and the generations to come. The mission of the Work Group is: Protecting Forests Across Landscapes and Through Generations.

## Methodology

The core partners in the Work Group are: the Sonoma Land Trust; the Greenbelt Alliance; the State Department of Forestry and Fire Protection (CalFire); the University of California Cooperative Extension; Sotoyome and Gold Ridge Resource Conservation Districts; Sonoma County Agricultural and Open Space District; Fire Safe Sonoma; the Bodega Land Trust; Coast Ridge Community Forest; and interested individual and forestry professionals. People and organizations contributed space for meetings. There is no paid staff. Volunteer members rotate duties to provide agenda, facilitation, and take minutes at monthly meetings, as well as representing their respective organizations, interests, and capacities.

With the combination of capacity and will, the Work Group has been engaging with the public and learning from its experiences. The Work Group has successfully coordinated Forest Stewardship workshops and two house meetings to date, as well as engaging

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large rural-subdivision neighborhood residents in dialogue about their needs, possibilities and future options for forest management.

Forest Stewardship workshops are all-day classes, with a morning session focusing on forest ecology, roads and fisheries, fire safety, Sudden Oak Death, and conservation easements as a tool for family succession. The afternoon is a field tour for participants to visit sites that highlight the practices discussed during the morning session. Because the Work Group represents a broad base of knowledge and resources, many individuals can connect with the people or program they most need: cooperative extension, land trusts, foresters, federal and state grant coordinators, or even free chipping of dead and thinned brush and trees.

In addition, we have had a series of ‘brownbag’ seminars in Santa Rosa, presenting topical issues related to forests and their management. Presenters’ subjects have included the carbon cycle, carbon sequestration, and monetizing carbon credits; oak ecology and history in Sonoma County; Sonoma County fire history and ecology; and climate change and its potential impacts to the county. The audience for the seminars includes many land and resource professionals from local and regional government, creating an opportunity for people to ‘get to the woods’ while eating their lunch in town. The continued success of the Work Group has included the melding of the brownbag program in Santa Rosa with workshops and house meetings in Sonoma’s rural areas. This balance has developed a needed rapport between the county’s urban center and its forested periphery.

This success has also been driven by the diverse nature of the core partners of the Work Group, which includes representatives from farm, forest, environment, government, academia, non-profit agencies and local volunteers. Based on workshops and outreach, the partners seek to fulfill the public’s need: How do I manage my forest?

## **Case Studies**

The cumulative effect of combining agencies and volunteers for a common goal is that many resources are already available, others can be had inexpensively, and some can be derived from the community which receives the benefit. The combination of resources which has worked for the Work Group includes: help with outreach from all three local Resource Conservation Districts and UC Cooperative Extension; educational funding and support from UC Cooperative Extension; grant funding from the Community Foundation of Sonoma County and the Ernie Carpenter Fund for the Environment; donations of food, coffee, field transportation and meeting space from neighborhood groups; and donated time from both volunteer and professional educators. With this, the Work Group was able to engage the most important resource to the forests of Sonoma County, a cross-section of its landowners.

Six workshops and six brownbags have been conducted by the Work Group over the last four years in Sonoma County. They are presented in Table 1 as categorized case studies, because they all differ in content, ecosystem and community.

**Table 1.** Summary of outreach activities by the Sonoma County Forest Conservation Working Group

Workshop or series	Date	Attendance	Ecosystem	Field tour
Mark West Creek	9/29/2007	40	Mixed Douglas-fir	Yes
Occidental	10/13/2007	50	Redwood-Douglas-fir	Yes
Cazadero	10/4/2008	38	Redwood-Douglas-fir	Yes
Mill Creek	10/18/2008	48	Redwood-Douglas-fir	Yes
Cavedale Road	3/19/2011	40	Mixed Douglas-fir	No
Shone Farm	5/7/2011	28	Mixed Douglas-fir	Yes
Brownbags	Six to date	25 per	Santa Rosa	No

An average of 40% of workshop attendees report either having changed or planning to change land management practices as a result of the information learned. The attendees also felt they had significantly increased their understanding of forest processes, ecology, fire and fire breaks, disease and succession.

Our now-standard Healthy Forests curriculum is forest ecology, watersheds and roads, Sudden Oak Death, and fire safety. We have also presented panels on funding sources, economics of forest management, conservation easements, carbon credits, biomass utilization and lessons from Trinity County.

We speak of the classes as “101” and “102”, because people consistently want more in-depth knowledge of particular topics. In addition to fire planning, heritage planning and ecosystem management, future Forest Stewardship workshops which will address Healthy Forests, Healthy Economies, and Healthy Communities on an on-going basis. Brownbags will continue to address carbon, wildlife management, ecological services, oak woodland management, wood cogeneration, and the forest assets of Sonoma County. House meetings will continue to address the individual concerns of specific neighborhoods.

The Cavedale Road workshop, requested by the community, focused on “What’s killing our trees and what to do about it.” The agenda covered tree health and beetle outbreak in Douglas-fir and madrone (*Arbutus menziesii*), fire safety and the chipper program, and how to protect wildlife habitat while doing fuels management work. This was a less organized, less formal workshop in a person’s home, which generated lots of interest and good feedback. The community has requested that the Work Group present a full Forest Stewardship workshop next fall.

The Shone Farm workshop was also a new approach for the Work Group. On land managed by Santa Rosa Junior College, the theme was Community Forests, with updates on selected forest conservation projects presently in the county. The field trip was a tour of the Shone Farm forest led by the students of recreation at the College.

**Discussion**

Our lessons learned may be summarized in the following points:

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- Stop looking for money to hire someone else. The experts are already in the room.
- Find all the agencies that may have an interest, public and private. Both efficiency and synergy can be created with existing agencies, though they may seem ‘unlikely.’ Everybody wants to help the forest.
- People are hungry for information. While ‘old-timers’ may remember the methods, contractors and agencies related to land management, new landowners are eager to learn.
- People generally do not perceive fire danger in forested lands, nor understand how to prepare for it. With information, they become more motivated to protect their homes and property.
- People are ready to meet and learn, but not so ready to spend money. While fire danger may threaten valuable homes, people are reluctant to pay full costs for clearance. The free chipper program from Fire Safe Sonoma is an effective, tangible incentive.
- The general forest management goals of most landowners are relatively uniform: fire danger reduction, large tree dominant ecosystems, and liberty to manage their lands.
- Many landowners have wildlife, pest, disease or other forest health goals, but generally have neither the knowledge nor the capability to effectively achieve those goals.
- There is a significant need for management strategies to coordinate multiple owners for multi-parcel management. For instance, one rural subdivision near Santa Rosa has 104 parcels, ranging in size from 4 to 40 acres, in about 1000 acres.
- People want to manage sustainably and achieve their goals, but do not have a definition for sustainability.
- People are generally not familiar with the conservation easements that may be used to protect elements of their land for succeeding generations.

Lessons learned are only a part of this; much of the benefit has gone to the individual members of the Work Group . It serves as a networking and support group for all those who do or want to do forestry education and outreach to the interested public.

The Work Group has just finished its first brochure for outreach to the community. We are working to have a web presence, and to develop, publish and distribute a forest landowner’s manual. That manual would outline and elaborate on the information presented in the workshops.

The intention of the Work Group is not to create new information, only to get good information into the right people’s hands. In Sonoma County, behind almost every vineyard is a forest, and above almost every grassland is an oak savannah. In a region that depends on private land ownership to achieve public goals of (1) fire and watershed protection, (2) ecosystem maintenance and (3) aesthetic protection, yet

where economic decisions drive forest management, it appears critical that an organization like the Sonoma County Forest Conservation Working Group exists.

In retrospect, the Work Group has learned a great deal in conducting outreach to hundreds of forest landowners in Sonoma County. We have also learned how to focus our efforts to achieve the goals at hand, moving forward on volunteer and lunchtime energy. It is important to note that, while many people have served on the ad-hoc committee that forms the Work Group, everyone does so with the enthusiasm, readiness-to-work and positive attitude that often accompanies the word ‘volunteer.’ Conducting outreach has been our goal, but the creation and perseverance of the Work Group has been our pleasure.

## Conclusion

The Sonoma County Forest Conservation Working Group was formed in 2005 to address the needs of forest landowners throughout the county. The need for the Work Group was perceived due to the paucity of public lands in the county, and its extensive parcelization. Most of the oak woodland and the coniferous forestland are in private ownerships of 50 acres and less.

The Work Group was established to address threats to Sonoma County’s forestland. A number of factors, including population growth, regulatory requirements, estate issues and changes in the economy have created pressure to convert Sonoma’s forests to other uses.

The Work Group has used community workshops, seminars and neighborhood meetings and lunchtime ‘brownbag’ seminars to disseminate information and connect experts, landowners and resource managers to access technical and financial support. Four years of outreach experience and feedback has allowed the Work Group to look back and assess lessons learned.

Our experience demonstrated the need for learning both in the Work Group and the public. The Work Group found that the synergy of interested individuals and agencies could create a cost effective, well-equipped educational forum. With small grants and donations, we used our own energy and expertise on our mission. Landowners showed an interest in information on fire, ecosystems, wildlife and sustainability. The outreach also highlighted a lack of wildland management knowledge, a reluctance to spend money, and a no-management practice across the landscape that ultimately degrades forest health and increases fire danger and ecosystem fragmentation.

This experience demonstrated the importance of our mission, ‘Protecting Forests Across Landscapes and Through Generations.’ At this time, forests remain vulnerable, and significant education, policy, and public will are necessary to achieve long term success.

### Footnotes:

1. Sonoma County Agricultural Preservation and Open Space District. 2009. Analysis of Forested Parcels and Ownerships in Sonoma County, California. Unpublished
2. CalFlora Data Base. 2011. (calflora.org).

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3. Sonoma County Agricultural Preservation and Open Space District. 2010. Oak Woodland Plan. Unpublished.

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