

Appendix III

Case studies

A tale of two California counties

On the surface, Trinity County in northern California and San Diego County in the southern reaches of the state don't share many similarities. Trinity is sparsely populated, with 14,177 people. It has only one major population center, Weaverville, home to about 3,800 people. About 80 percent of the county is federal land. San Diego County is home to 2,974,859 people who live in dozens of communities. The county has a large wild-land-urban interface (WUI), but population density is high, even in these areas.

The counties share at least two characteristics of interest to local resource leaders working to mitigate wildfire impacts: Both counties are in fire-prone areas, and resource conservation districts (RCDs) in both counties have played leading roles in developing and implementing CWPPs.

Trinity RCD

The Trinity County RCD has been working to mitigate fire impacts for a number of years, says District Manager Pat Frost. It took the lead in developing a county CWPP in 1999. The district worked with 16 volunteer fire departments in the county to host meetings, assess risks and develop plans for mitigating fires. Fire behavior experts were consulted to help develop plans to reduce risk in the WUI.

Mitigation measures addressed how to prevent the spread of wildfire and how to keep fires that start in populated areas from spreading to the forest.

The RCD has undertaken dozens of hazardous fuels reduction projects with its own crews and has been active in landowner and neighborhood education. The latter activity serves to help fire departments in pre-planning efforts.

The CWPP enabled the district to seek grants from the California Fire Safe Council, the county Resource Advisory Committee and other sources. The district has also used forestry provisions in the Farm Bill's Environmental Quality Incentives Program to assist landowners on forest improvement projects that reduce fire risks.

In major fires that struck the county in 2008, fuels management zones and fuel breaks resulting from the county's CWPP were credited in at least two cases with protecting property and reducing fire risk.

Advice for other local resource professionals: "Never look for funding in just one place. Use one funding source to leverage others."

For more information, contact Frost at pfrost@tcrd.net, and visit the [RCD's Web site](#).

Resource Conservation District of Greater San Diego County

The RCD plays a major role in reducing fire risks in the county. It has helped communities develop 20 CWPPs. District Manager Marty Leavitt says the district created its own template, review team and review process for developing CWPPs. "We give CWPP

training to folks on how to write plans and do the process,” she says. Completed and approved CWPPs are posted on the RCD’s Web site.

The RCD has helped to form more than 85 Fire Safe Councils in the county. It collaborates with 84 local, state and federal agencies that share a common goal of reducing fire impacts.

State and federal grants support district fuels reduction and education efforts. The RCD hosts community chipping days. Homeowners working to reduce fuel loads on their properties bring materials to a central site for chipping. At the same time, the district makes educational materials and presentations available.

Is the county safer for these and other efforts? “The County of San Diego has done studies and has statistical data showing in areas that were cleared, fires were lower in heat and flame length. Fires did much less damage around communities that have Fire Safe Councils and did fuels reduction work,” Leavitt says.

Advice for other local resource professionals: “We went where the need was. To be valid entities in your communities, you need to become active and involved as project managers, not just local non-regulatory agencies. With Fire Safe work, you’re able to get back to working one-on-one with your communities in a very successful way.”

For more information, contact Leavitt at info@rcd.org, and visit the [RCD’s Web site](#).

MOU clinches work in New Mexico

The Claunch-Pinto Soil and Water Conservation District in Mountainair, New Mexico, was first in the nation to sign a memorandum of understanding with the USDA Forest Service and state conservation agency.

That helped propel the district into a leading role in healthy forests work in New Mexico. The work, funded by Forest Service and state grants, has provided direct financial benefit to private landowners in an area with many low- and moderate-income residents. Fuels reduction and watershed health goals for the WUI are being addressed as a result of the work.

District projects also achieved natural resources goals on a landscape scale by complementing work on Forest Service lands in the Cibola National Forest and elsewhere.

The district has also helped to encourage development of a business infrastructure for small diameter woody biomass utilization, including a growing sign business and cogeneration electrical facilities.

Claunch-Pinto also cooperated with other conservation districts on a \$292,000 State Water Trust Grant that thinned pines and water-consuming junipers on private lands in the Mensano Mountains. The East Torrance, Edgewood and Ciudad districts also partnered in that program. The grant was funded by the New Mexico Finance Authority. The goal is to cut both water demand and fire danger in the Estancia Closed Basin. Again, it complements work being done on Forest Service land.

For more information on district fire protection programs, visit the [district’s fire protection Web site](#).

Conservation districts, RC&D boost stewardship contract

Achieving resource goals sometimes calls for partners to go the extra mile. That was the case for a stewardship contract on the Medicine Bow National Forest.

Several partners worked across various political jurisdictions to make a biomass component of the project a success and to help a local sawmill make a go of it. Two Wyoming conservation districts, a resource conservation and development council and other local entities cooperated with the USDA Forest Service, state and local development agencies and other partners.

Four years ago, the Little Snake River Soil and Water Conservation District in Baggs, Wyoming, signed a five-year stewardship contract with the Medicine Bow National Forest for fuels reduction, biomass utilization and habitat restoration work. The contract called for 2,000 acres of forest will be treated.

The neighboring Saratoga-Encampment-Rawlins (SER) Conservation District in south central Wyoming was called upon to lead a multi-agency steering committee that looked at how to assist a sawmill in Encampment, Wyoming.

Keeping the sawmill in business was a key to the biomass component, which included small yields of timber for house logs and saw logs coming from 1,000 acres of spruce beetle sanitation salvage. The majority of the contract is for small diameter wood. Some marketable wood will be used for posts and poles and firewood.

Larry Hicks, natural resources coordinator at the Little Snake District, put together a group that includes two conservation districts, the towns of Encampment and Riverside, North Platte Economic Development, Carbon County Commissioners, the Carbon County Economic Development Council, the Historic Trails RC&D and Wyoming State Forestry. The group received a \$10,000 grant from state forestry. Partner funds totaling \$14,000 were added for a study and improvements for the mill.

The Casper Star-Tribune newspaper featured the work in a 2009 story, reporting: “The original contract has grown to a project worth about a quarter of a million dollars for the 2009 field season, and it’s growing.” The partners are working to manage beetle-killed conifers, restore aspen habitats and reclaim oil and gas fields.

“They’re on the cutting edge of statewide efforts,” Bob Budd, Wyoming Wildlife and Natural Resource Trust executive director, told the newspaper.

RC&D program increases safety, supports local economies

Hazardous fuels reduction work by the Northwest Regional RC&D in Montana has increased safety and provided a big boost to local economies.

The RC&D has been coordinating fuels reduction projects in Flathead, Lincoln and Sanders counties for several years. It focuses on fire-prone subdivisions in the four-county area. The work is supported by grants, including Forest Service funds administered by the Montana Department of Natural Resources Conservation and its Forestry Division.

Firefighters have credited the work with measurable increases in safety, including halting a fire in the Eureka area that started on public lands 20 miles away. Firefighters on the Chippy Fire in Sanders and Flathead counties remarked that those homes that had taken the initiative to make their property Firewise made a significant difference in allowing firefighters to safely and aggressively fight the fire.

Safety comes first, but RC&D Coordinator Sue Sutherland says there's another benefit. She estimates that from 2004 to 2009, projects in high-risk communities have also created or sustained 124 jobs and 102 businesses. More than 80 percent of the fuels reduction work was completed by contractors. Displaced timber industry workers are often part of crews now creating defensible space around homes.

The projects also incorporate education and stress collaboration with local, state and federal agencies. All planned work was set up through local communities in conjunction with the local fire departments.

Participating property owners reduced the threat of wildfire to their property by meeting the intent of a fuels prescription for their property. Thinning, fuels reduction and pruning were achieved on each property, creating defensible space around homes. Cost-sharing is available from grant funds.

Several communities invited speakers to their homeowner association meeting to discuss weed management and insects and disease in the forest. People attended classes offered by local Extension agents and conservation districts. The RC&D also met with local planning boards to help define fuels treatment needs in new subdivisions.

The RC&D has also worked with the Stone Container paper mill in Missoula, which buys pulpwood from fuels reduction projects.

RC&D Community Forester Bill Swope coordinates much of the work. "One of the things that most impresses me is we started out talking to homeowners about hazardous fuels, but it wasn't long until we started to talk forest health," he says. "Now, we talk forest health first and hazardous fuels second."

The targeted counties have community wildfire protection plans. Some communities are developing their own plans.

For more information on the RC&D's programs, visit its [Web site](#).

Oregon District Oversees Fire Pond Construction

Firefighters in the rugged Cascades Mountains of western Oregon need water to knock down blazes before they reach catastrophic proportions. The Douglas County Soil and Water Conservation District in Roseburg, Oregon, is helping to assure an adequate supply.

In cooperation with the Bureau of Land Management, the district constructs fire ponds accessible by helicopters and trucks. The ponds are located on private lands and are available for use in fighting fires on both public and private lands. Land ownership in the county follows a checkerboard pattern, with BLM, Forest Service and private lands intermingled across 3 million acres.

In addition to contracting for design and survey work, the district hires contractors and supervises construction.

Forestry remains a major industry in the county, despite the loss of several mills over the past few decades. Protecting resources and productive timber land is important. Most of the remaining mills have retooled to accept smaller diameter wood products. Much of the wood comes from private lands.

In addition to constructing several fire ponds in recent years, the district also constructed a water tank. Funding for work has come from Title III of the Secure Rural Schools and Community Self-Determination Act. Other partners have included the Douglas County Forest Protection Association and private landowners.

Ponds are a minimum of eight to 10 feet deep and contain at least one million gallons of water, which fills in naturally once they are dug. Locations are prioritized based on fire frequency and hazard. GIS maps are made available to fire-fighters.

For more information, visit the district [Web site](#).

New Mexico district helps to remove non-native threat

Following two large fires in the summer of 2003, the Ciudad Soil and Water Conservation District in Albuquerque, New Mexico used state grant money to remove non-native vegetation through a 22-mile stretch of the area's Bosque region. The area is used by public citizens as a park.

In just one summer the district teamed with other local agencies, such as the Middle Rio Grande Conservancy District and the Albuquerque Open Space Division, to treat close to 800 acres of the unwanted vegetation. The treatment helped to reduce the risk of wildfire and conserve water in the desert region. Trees such as Russian olive, Siberian elm and salt cedar are known to consume large quantities of water and can act as ladder fuels during a catastrophic wildfire.

The biomass pulled from the treatment was used for landscaping along public trails and made available to landowners for garden mulch.

After the treatment was completed, Ciudad Soil and Water Conservation District was then contracted to help re-plant native trees in the Bosque in order to help restore it to its natural setting.

For more information, visit the district [Web site](#).

Wyoming district helps to make use of biomass

Wyoming's Teton Conservation District participated in a biomass project that addresses the need for forestland thinning by offering a byproduct local landowners could appreciate.

Following a 2003 fire that cost \$15 million to suppress, local agencies began to look at ways to safeguard against future fires. Teton Conservation District was one of several partners brought in to explore value-added uses for biomass.

The material pulled from fuels reduction projects in the Grand Teton National Park, the Bridger-Teton National Forest and on public lands, was mixed with domestic stock manure and other components to produce a rich blend used for mulch.

The project helped to address several needs in the area: in addition to removing unwanted fuel from the forests, it helped to find a use for the excess horse manure produced on the many horse operations in the area. The Wyoming Department of Transportation used some of the mulch for a roadside reclamation on a nearby 37-mile highway project.

As Teton Conservation District's executive director pointed out, interagency cooperation was the key to making the project work, requiring cooperation for transportation, financing and other needs.

For more information, visit the district [Web site](#).

Washington district helps to educate landowners through Firewise

In the state of Washington, Firewise has been a helpful tool for one local conservation district. The Spokane County Conservation District has used the program to educate local landowners on the many ways to safeguard their properties from wildfire.

The district offered landowners a free home site assessment to rate each home's ability to withstand a wildfire and to examine the property's defensible space and construction.

Said the district's forestry program manager, the Valley View fire that ripped through the area did not cause as much damage as it could have due to the preventative steps taken by many of the landowners enrolled in the program.

Following the fire, the district again helped to educate its landowners. It partnered with the Washington Department of Natural Resources and the local fire district to offer educational workshops about cost-share programs, how to work with a contractor to remove dead wood, and why landowners should avoid bringing noxious weeds back into the landscape.

For more information, visit the district [Web site](#).

Arizona district does its part to help restore the forestland floor

A large number of wildfires in Arizona prompted the creation of the Northern Arizona Native Seed Alliance (NANSA), whose mission is to help make available native grass seed to those agencies and private landowners doing re-plantings. According to one expert, commercial and non-native seed have a low success rate, and the cost of native seed is often expensive due to the high demand following fire season.

The initial money used to start the Alliance was made available from grant money through the Arizona Association of Conservation Districts and Northern Arizona University.

The Coconino Natural Resource Conservation District was one of several partners involved in the Alliance, which works closely with the NRCS Plant Materials Center in

Los Lunas, N.M. NANSAs searches for new techniques to improve the success rate and advance the local native seed industry.

For more information, visit the district [Web site](#).

California district shows versatility, willingness to help where needed

California's Bureau of Land Management's Redding Field Office had \$650,000 in federal grant dollars to help clean up the 13,000 acres of land that was impacted by the French Gulch Fire. Of the 14 tasks the field office compiled, BLM awarded 12 of the tasks to the Western Shasta Resource Conservation District.

The district's work included erecting flood hazard signs, culvert cleaning and monitoring and hazard tree mitigation.

Following the Bear Fire in the same region, the National Resource Conservation Service relied heavily on Western Shasta Resource Conservation District to help with recovery efforts. The district helped to position more than 11,000 sandbags and seed and mulch 87 acres.

Montana RC&D makes livestock removal quick

When fire ripped through western Montana in 2000, the Bitter Root RC&D offered its assistance to firefighting agencies in a several ways. One was to assist in the removal of livestock from nearby ranches. One call requested the removal of 600 head of cattle in a single evening. Because Bitter Root RC&D had already collected a list of volunteers willing to donate their vehicles and/or driving time to assist in fire defense efforts, the need was met. The cattle were relocated to the nearby fairgrounds within a matter of a few hours.

Colorado conservation district makes the best of a bad situation

Timber salvage options are limited following a fire, often because lawsuits can tie up projects in court until the timber is no longer viable. The Jefferson Conservation District in Colorado found a way to satisfy all interested parties following the Hayman Fire in 2002.

Fishing is a \$3 billion industry in the state, and stream conditions are important in keeping that industry thriving. Over time, however, stream flow and depth has been impacted by development and erosion.

With more than 150,000 acres of burned forestland to deal with, the district and a number of partners, including the Coalition for the Upper South Platte, USDA Forest Service, the Colorado Division of Wildlife, Trout Unlimited, and a local Boy Scouts of America troop created the Trees for Trout project. The partners salvaged more than 150 trees which were used as streambed habitat. The project found public approval, in large part because it brought scientists and wildlife experts together early to help with its planning.