5. PROJECTS

Information concerning local fire safe and watershed planning projects can be found at the following websites:

Shasta County Projects

Shasta County Watershed Information Model
http://wim.shastacollege.edu/

Cottonwood Creek Watershed Fuels Management Plan
http://wim.shastacollege.edu/catalog.aspx?ws=5&act=Fuels%20Management%20Plan&format=Document

Cow Creek Fuels Watershed Management Plan
http://wim.shastacollege.edu/catalog.aspx?ws=6&act=Fuels%20Management%20Plan&format=Document

Lower Clear Creek Watershed Fuels Management Plan
http://wim.shastacollege.edu/watersheds.aspx?ws=8

Upper Clear Creek Watershed Fuels Management Plan
http://wim.shastacollege.edu/catalog.aspx?ws=17&act=Fuels%20Management%20Plan&format=Document

Shasta West Fuels Management Plan
http://wim.shastacollege.edu/catalog.aspx?ws=13&act=Fuels%20Management%20Plan&format=Document

Inwood / Bear creek Organization
http://www.inwoodbearcreek.org/index.html

Whiskeytown National Recreation Area
http://www.nps.gov/whis/exp/fireweb/firehomepage.htm

Trinity County Fuels Management Plans

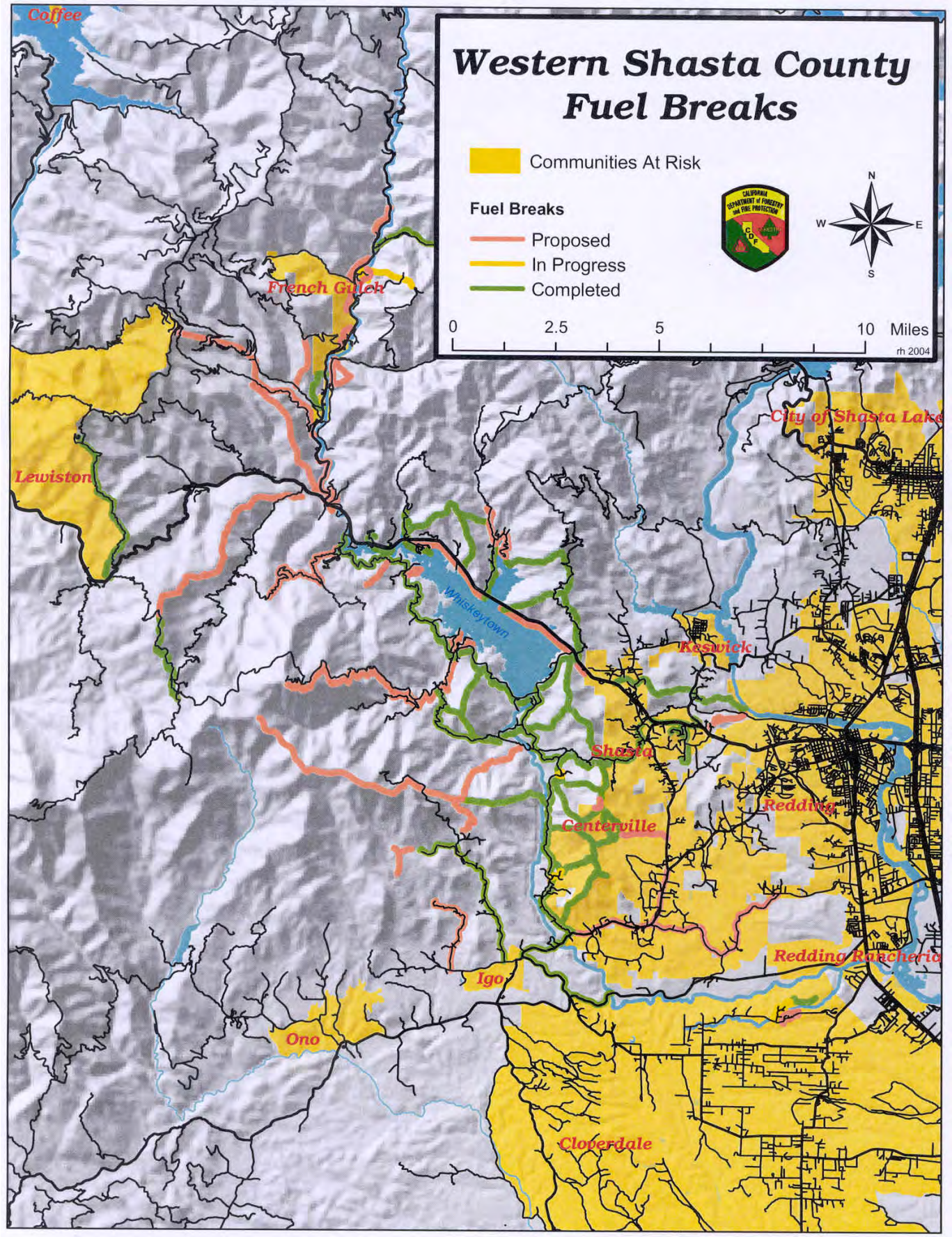
http://www.tcrcd.net/

Unit Fuel Break Projects

The following maps show the location of existing and planned fuel breaks. Details of many of these fuel breaks are located in the strategic fuels management plans listed above. These are not in any way the only fuel breaks needed. More fuel breaks will be identified as detailed evaluations of the Unit continue.

Before

After


Western Shasta County
Fuel Breaks
Communities At Risk
Fuel Breaks
Proposed
In Progress
Completed
CALIFORNIA DEPARTMENT of FORESTRY and FIRE PROTECTION
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Coffee
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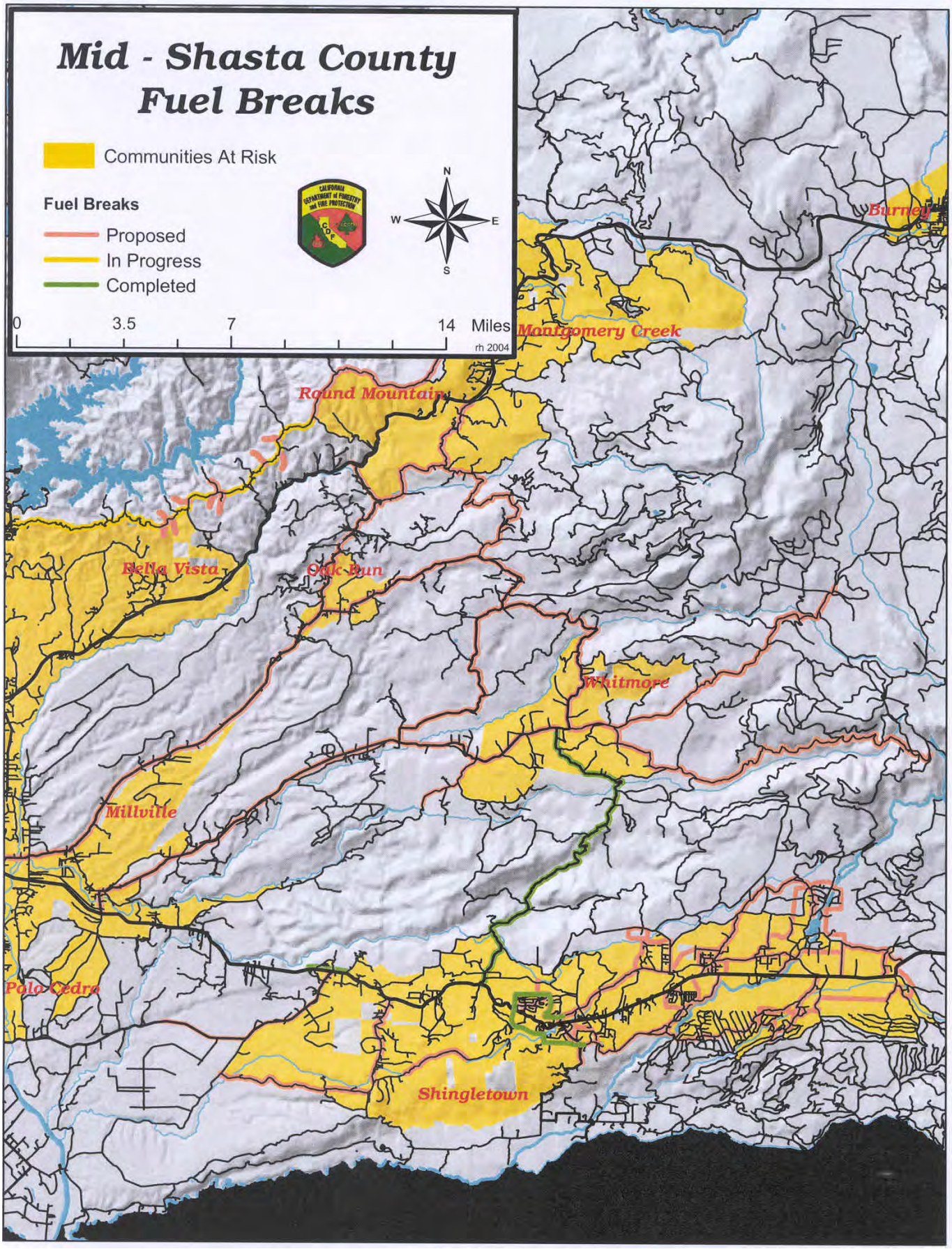
City of Shasta Lake
Whiskeytown
Keswick
Shasta
Redding
Centerville
Redding Rancheria
Igo
Ono
Cloverdale


Mid - Shasta County
Fuel Breaks
Communities At Risk
Fuel Breaks
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Burney
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Bella Vista
Oak Run
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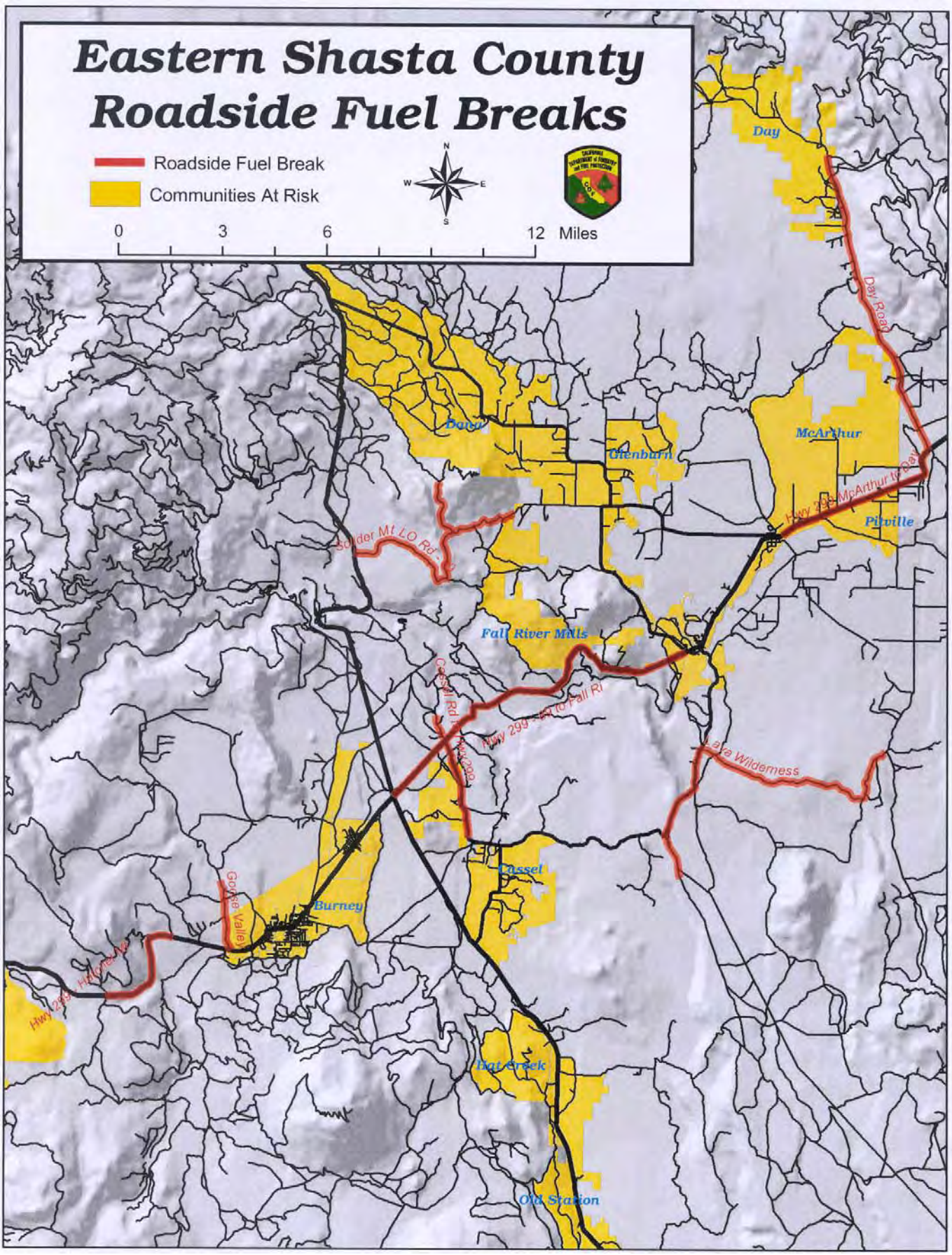
Shingletown


Eastern Shasta County
Roadside Fuel Breaks
Roadside Fuel Break
Communities At Risk
0
3
6
12 Miles
Day
Day Road
Dana
Glenburn
McArthur
Hwy 299 McArthur to Day
Pitville
Soldier Mt LO Rd
Fall River Mills
Cassel Rd
Hwy 299 to Fall Ri
aka Wilderness
Cassel
Goose Valley
Burney
Hwy 299 Highland
Hat Creek
Old Station

Other Projects

Evacuation Plans

Evacuation plans were developed for Shingletown, French Gulch and the West Redding/Centerville/ Shasta/Keswick areas. The plans included wildfire safety tips as well as designated evacuation collection points. Maps were included that showed the location of the evacuation collection points. The plans were distributed to residents residing in these areas.

In 2003 – 2004 evacuation plans were developed for the Lakehead and Igo/Platina areas

Trinity County Map Projects

Trinity County has experienced several large urban interface fires in recent years. Most recently the 1999 Lowden fire and the Oregon Fire of 2001 caused substantial structure and property destruction.

Initial attack forces assigned to these fires were quickly overwhelmed by the fire's magnitude and intensity so additional resources were ordered. The additional resources responded to Trinity County from throughout the state. The closest of these are located one to two hours away. The out of area fire equipment operators were not familiar with Trinity County roads, water systems or the location of structures.

With this in mind, structure / water source location maps were created for several of the larger communities. Copies of these maps will be given to incoming fire equipment to help them locate and protect threatened properties.

Previous road maps for Trinity County were not very detailed nor were they indexed. Responding fire equipment often did not know where to find individual roads in Trinity County. An indexed map book was created in the Shasta – Trinity Unit's Pre-Fire office and included details of the Trinity County communities located within State Responsibility Area. Trinity County GIS Department has taken over the project and extended detailed map coverage to those areas not included in the initial map book.

These mapping projects should be continually maintained.

Day Bench Fire Safe Council

The Day Bench Fire Safe Council was formed in June of 2001 and serves the residents living in the vicinity of the Day Bench located on the Eastern Shasta County boundary. The area served includes portions of Shasta, Lassen and Modoc counties. They have completed some fuel removal demonstration sites and evacuation plans. The Lassen - Modoc Unit has been the main CDF contact with this Fire Safe Council.

The Hat Creek Ranger District of the Lassen National Forest has also proposed a fuels reduction project for the Day Bench. In addition the Bureau of Land Management has planned to use some prescribed fire for fuel reduction on their lands located in the Day Bench area.

The Day Bench Fire Safe Council is now (2004) developing a detailed Fire Safe Plan for the community and surrounding area.

Shasta West Fire Safe Council

The Shasta West Fire Safe Council was formed in early 2004. This group developed from members of the Victoria Project, Shasta West Watershed Group, and several neighborhood and community groups that lie within the boundaries of the Shasta West Watershed. A Strategic Fuels Management plan was developed by the watershed group and has been adopted by the fire safe council. Several fuel breaks have been completed and some are being constructed, and others planned.
http://wim.shastacollege.edu/catalog.aspx?ws=13&act=Fuels%20Management%20Plan&format=Document

The Victoria Project is a neighborhood effort to reduce and/or eliminate the dense vegetation from around the homes within the Victoria Drive and Highland Circle areas. Local residents organized, coordinated, and managed this project. The project goal is to ensure that homes within the project area meet or exceed Section 4291 of the Public Resources Code (PRC 4291).

Mountain Gate Projects

In April 2004 CDF, Mountain Gate Fire Protection District, and the Western Shasta Resource Conservation District presented a fire safe informational meeting to the community members in and around the community of Mountain Gate. Since that meeting many residents have initiated fire safe fuel modification projects on their properties including multi-acre fuel modification. Most of the larger projects were accomplished with mechanical mastication of the brush and ladder fuels.

Before **After**

Private Landowner Pre-Fire Management

Several private landowners throughout the Unit are conducting pre-fire management fuel modifications on their properties. Timberland owners and managers have instituted thinning and biomass projects. A biomass project conducted on lands managed by Beaty and Associates, in the Whitmore area, removed both the ladder fuels as well as opening the crown closure of a dense conifer forest. On October 27, 2003 a campfire escape propelled by 15 to 20 mile per hour winds quickly turned into a 1,063 acre crowning timber fire that was burning toward the town of Whitmore. When the fire burned into the project area, it immediately fell out of the crowns of the trees and was able to be contained by fire personnel. The project was instrumental in the containment of the fire.

Some woodland areas have also been improved. Some for enhanced grazing others for wildfire prevention.

Participation of landowners both large and small, are an important part of the Fire Plan Process. The Unit and the Stakeholders need to continue educational outreach programs and continue to encourage private landowner participation.

Shingletown Community Fire Safe Program

In 1993, the Fire Safe Program began in Shingletown. The primary goal was to generate community-wide involvement in the reduction of fuels in and around the individual residences of this subdivision. Brush and other ladder fuels was cut by the individual property owners and moved to street side for pick-up by CDF personnel. This program has grown to involve the entire ridge from Viola to Black Butte Road. Over twenty-five volunteer neighborhood coordinators assist with over 200 property owners participating annually. The material collected is chipped and transported to a local co-generation plant for electricity generation. The annual program normally begins the week after Memorial Day and participants are asked to donate $10.00 per pile to help offset costs.

To date, over 5 million pounds of vegetation has been removed as a result of the Community Fire Safe Program.

For the last several years, the number of participants and the amount of vegetation removed annually have leveled off. The program will need to evolve and seek ways to increase participation and decrease costs. The residents of the Shingletown Ridge area are eager to see this program continue and fully understand that in order to do so, some changes in the program are to be expected.

Shingletown Shaded Fuel Break Project

The 1995 Shingletown Area Fire Defense Plan identified the need for significant fuel reduction in and around the developed areas of Shingletown. The Shingletown fuel break is an effort to create a 300-foot wide shaded fuel break to separate two subdivisions, Woodridge Lake Estates and Shasta Forest Village, from the larger undeveloped wildland areas. The project was designed to reduce the potential fire-causing catastrophic damage in the Shingletown Ridge area. Brush and non-commercial trees in the under-story were removed from the corridor.

The original proposal called for treatment of 4.2 miles, a very ambitious goal considering monetary constraints, inclement weather, and competition for fire crew time. However, in the spring of 2001, our goal was successfully accomplished. The fuel loading was dramatically reduced, fire equipment can access the area, health of the remaining trees will be enhanced, and visually the corridor has a park-like appearance.

The following measures were utilized to reduce any potential impact to environmental and cultural resources:

a) Retained vegetation canopy (over-story trees) of 50-70 percent crown closure.
b) Retained base layer of litter and duff of at least 2" of ground cover.
c) All vegetation was cut and piled by California Department of Forestry and Fire Protection (CDF) fire crews and either burned or transferred to a chipper site for ultimate use in co-generation plants.
d) Riparian zones and potential archaeological sites were delineated and no mechanized activity occurred in these zones.

The original project budget estimate was $70,870. However, the final cost of the project was $119,637. Shasta County Fire applied for and received two FEMA Hazard Mitigation grants, which funded $56,209 of the cost. This was approximately 47 percent of the total.

Top Picture: Before thinning

Bottom Picture: After thinning

Ponderosa Way Fuel Break

The Civilian Conservation Corps (CCC) originally established the Ponderosa Way Fuel Break in conjunction with the construction of Ponderosa Way. This fuel break is one of the oldest continuously existing fuel breaks in the state of California. The intent of the fuel break was to separate large tracts of privately owned timber from the lower elevation non-commercial vegetation.

Maintenance of this fuel break has been on going since its original construction and consisted of several different methods of removal over the years. Treatments have included cut, pile, and burn, cut and scatter, and the introduction of low intensity ground fire to remove unwanted vegetation.

Local records indicate that Crystal Creek Conservation Camp worked on the fuel break in the late 1960's. Since the establishment of Sugarpine Conservation Camp in 1988, crews have annually re-treated sections of the fuel break. This year alone, crews from Sugarpine spent over 20 days on the Ponderosa Way Fuel Break, or over 2,400 man-hours.

Top Picture: Before

Bottom Picture: After

Education / Inspection Project

In 2003 the Student Conservation Association Inc., a national conservation organization, through a contractual agreement with the Bureau of Land Management (BLM) in cooperation with the California Department of Forestry and Fire Protection (CDF) provided a Fire Education Corps team, for the purpose of educating the public, specifically residents in the wildland-urban interface, about how to best prepare and protect their homes in the event of a wildland fire.

The primary goal of the Fire Education Corps was to conduct defensible space evaluations of residential properties for CDF in the wildland urban interface. These defensible space evaluations will include recommendations on defensible space, landscaping, and building materials currently used and alternatives. Ancillary goals will be to educate the general public about the dangers of wildland fires and how to protect themselves and their property, and to demonstrate the effectiveness of investing in partnership with youth development agencies.

The team worked with BLM to coordinate and implement the BLM Vegetation Hazard Reduction Program for private landowners adjacent to BLM.

The education/inspection continued in 2004 and 2005 with CDF personnel conducting inspections in high fire hazard severity areas. In 2006 the program will continue with CDF personnel who will educate residences in the new amendments to PRC 4291. The phase of the project will emphasis property inspections and educate residents to prepare for a defensible space during the winter months when they can easily dispose of excess fuel.

Equipment Use Education Program

The major cause of wildland fires in the Unit is equipment use, which includes the improper use of equipment, improperly maintained equipment and equipment failure. Leading causes are the use of lawn mowers and wheeled string trimmers.

This year several television and newspaper advertisements were developed and distributed in order to educate people in the hazard and the safe use of equipment use.

Defensible Space Video Project

Before

The California Department of Forestry and Fire Protection was awarded a $50,000 Western Wildland Urban Interface grant for the production and distribution of an educational and instructional video. The content of the video demonstrates to homeowners how to remove the vegetation from around their homes that are located within the wildland urban interface areas of Shasta County.

In addition, the grant funding was used for the development and distribution of a Wildland Fire Evacuation Plan for the residential area known as the Victoria/Swasey areas located west of the Redding City Limits.

The video depicts a non-fire safe residence and follows the homeowner through the steps necessary to achieve a fire safe residence and obtain a 100-foot “Defensible Space” around the home.

After

Emergency Fire Escape Road Evaluation

As part of the Ingress/Egress priority, emergency fire escape roads within Shasta County were identified and evaluated. Previous development plans within the county were researched to determine if and where these roads existed and which parcels were effected by the roads. The roads were physically inspected to see if they complied with the original requirements, were still accessible, and if they provided a safe passage. A problem with most of the roads is the lack of maintenance requirements and that some do have deeded easements.

Shasta County Supervisors adopted new building standards that require an assessment on future emergency fire escape roads that will be used for maintenance. This does not alleviate the problems associated with the existing roads but will prevent future problems from developing.