

**2016
SHASTA COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN**

**SHASTA WEST
PLANNING AREA**



Covering the communities of:

- Centerville
- Redding (west & downtown)
- Shasta

SHASTA WEST PLANNING AREA (2016)

I. PROPOSED PROJECTS

A. THE PLANNING AREA

The 47 square miles or about 30,400 acres Shasta West Watershed is the area west of the Sacramento River and Redding and includes the drainages of Rock Creek, Middle Creek, Salt Creek, Jenny Creek, Downtown Redding, Canyon Creek, Oregon Gulch, and Olney Creek which all flow directly into the Sacramento River. Elevation ranges from 430 feet at the Sacramento River to 2,325 feet at the top of Mule Mountain along the northwestern edge of the watershed. The Shasta West watershed is the most highly populated area in Shasta County. The communities of Old Shasta, Centerville, and downtown Redding are within the watershed with the highest density located in urban Redding. However, during the late 1990's and early 2000's, population grew rapidly in the rural portions of the planning area. Land ownership is primarily private, with the exception of the extreme western edge, which is managed by the National Park Service as part of the Whiskeytown National Recreation Area. Scattered sections throughout the watershed are managed by the Bureau of Land Management (BLM).

The watershed has a typical Mediterranean climate with long hot days from late spring to mid-fall with intermittent rain and snow during the cooler season. Below 2,000 feet elevation snow seldom remains longer than a few days. Annual average precipitation as measured by the Bureau of Reclamation (BOR) at Shasta Dam for the period of 1983 through 1993 is 51.2 inches. Summer daytime humidity readings can reach lows of 15 percent or lower. The watershed experiences extreme fire weather conditions, especially from May until September when the high temperature range is between 95-115 degrees F. Frequent strong zonal north winds occur throughout the summer; dry lightning storms occur most years; and dry foehn (down-slope) winds are common in the late summer and throughout the fall.

B. PROPOSED PROJECTS

Locations of the proposed fuel breaks are a combination of neighborhood protection and compartmentalizing the fuels in the watershed. New fuel breaks should be constructed following the priorities set below, as funding becomes available.

SHASTA WEST PLANNING AREA FUEL REDUCTION PROJECTS				
PROPOSED PROJECT	MAP NUMBER¹	TYPE	AREA (acres)	ESTIMATED COST²
Iron Mountain Road South	1	Fuelbreak	24	\$126,545
Buenaventura Blvd (west)	2	Fuelbreak	25	\$132,873
Kenyon Drive/Oregon Gulch	3	Fuelbreak	56	\$291,055
Lower Springs Road	4	Fuelbreak	22	\$113,891
Swasey Drive	5	Fuelbreak	34	\$177,164
Middle Creek Ridge	6	Fuelbreak	27	\$139,200
HWY 299 Corridor	7	Fuelbreak	90	\$468,218
Sugarloaf Ridge	8	Fuelbreak	41	\$215,127
Lower Springs Road to Sugarloaf	9	Fuelbreak	15	\$75,927
Rock Creek Ridge	10	Fuelbreak	32	\$164,509
Old Shasta to Iron Mtn Rd Powerline	11	Fuelbreak	68	\$354,327
Swasey Recreation Area	12	Fuelbreak	53	\$278,400
Rock Creek Road	13	Fuelbreak	56	\$291,055
Upper Muletown Road	14	Fuelbreak	56	\$291,055
Olney Park/Simmons Road	15	Fuelbreak	58	\$303,709
Secluded Valley	16	Fuelbreak	36	\$189,818
Benson Road	17	Fuelbreak	27	\$139,200

The identified fuel reduction projects fall into two categories:

1. defensible space for homes and structures, and
2. roadside and ridgeline shaded fuelbreaks intended to create safe ingress and egress for fire personnel and escape routes for residents.

Projects were prioritized based on need and factors such as the following:

- Protection of private residences and properties;
- Access or escape route for the public and fire suppression forces;

¹ Proposed projects are numbered on the map according to priority.

² Estimated costs of the projects are for planning only. More accurate costs will be determined for the preparation of project proposals.

- Identification of staging areas in conjunction with the fuelbreak development to provide fire suppression forces strategic locations for planning fire management and suppression actions.
- Connections to other fuelbreaks or areas of lower risk.

Landowners and residents are strongly encouraged to develop defensible space or maintain the fuels reduction projects on their properties to keep the integrity of the work done and to show project sustainability which could lead to additional future projects.

SHASTA WEST PLANNING AREA BASIC ASSUMPTIONS³	
Estimated cost of fuelbreak (roadside)	\$5,220 per acre
Estimated cost of fuelbreak (ridgetop or off-road)	\$7,310 per acre
Estimated cost of defensible space (hand labor)	\$600 per dwelling (<1 acre)
Standard fuelbreak width	200 feet
Population	2.6 per dwelling
Dwellings	8355
Property Value (~ \$201,250 - \$475,000 per dwelling)	\$260,000
Schools	\$145,000,000
Commercial Structures Value ⁴	\$415,500 – \$23,900,000
Power line (39 miles @ \$250,000/mile)	\$19,437,200

³ Estimated costs of the projects are for planning only. More accurate costs will be determined for the preparation of project proposals.

⁴ County assessed values, 2010

#1 – Iron Mountain Road South

- Vulnerable to northerly wind-driven wildfires, dense fuels, and steep terrain;
- Protects residential properties, sawmill, church, and rock quarry; and
- Provides emergency ingress/egress.

Proposed Solution:

Construct shaded fuelbreaks along the right-of-way on Iron Mountain Road between HWY-299W and Keswick Dam Road

2.0 miles x 100 feet or right-of-way = 24 acres

*Iron Mountain Road
looking south*



#2 – Buenaventura Boulevard (west)

- Protects residential properties, general offices, medical centers, and commercial properties; and
- Provides emergency ingress/egress.

Proposed Solution:

Construct shaded fuelbreaks to the right-of-way along Buenaventura Blvd between Placer Road and HWY-273.

2.1 miles x 100 feet or right-of-way = 25 acres

*Buenaventura Boulevard
looking south*



#3 – Kenyon Drive/Oregon Gulch

- Protects 7 community subdivisions, and several businesses;
- Connects Kenyon Drive to the Powerline fuelbreak; and
- Provides emergency ingress/egress.

Proposed Solution:

Construct shaded fuelbreak along north side of Kenyon Road westward toward Power Line Road.

2.3 miles x 200 feet = 56 acres



Kenyon Drive looking west

#4 – Lower Springs Road

- Connects Swasey Drive to Eureka Way/CA-299 a major transportation route;
- Provides access for emergency crews and escape for residents; and
- Benefits both the city of Shasta and community west of Mary Lake subdivision.

Proposed Solution:

Construct shaded fuelbreaks to the right-of-way along Lower Springs Road, from Swasey Drive to Eureka Way/CA-299.

1.8 miles x 100 feet or right-of-way = 22 acres

#5 – Swasey Drive

- Provides emergency ingress/egress; and
- Benefits both the city of Shasta and community west of Mary Lake subdivision.

Proposed Solution:

Construct shaded fuelbreaks to the right-of-way along Lower Springs Road.

2.8 miles x 100 feet or right-of-way = 34 acres

#6 – Middle Creek Road

- Provides emergency ingress/egress; and
- Protects residential properties south of Keswick and north of HWY-299W.

Proposed Solution:

Construct shaded fuelbreaks near Middle Creek Road.

1.1 miles x 200 feet = 27 acres

#7 – HWY-299W Corridor

- Provides emergency ingress/egress; and
- Benefits communities of Old Shasta and Redding.

Proposed Solution:

Construct shaded fuelbreaks near HWY-299W.

3.7 miles x 200 feet = 90 acres

#8 – Sugarloaf Ridge

- Protects multiple residential communities;
- Protects a communications tower (KNNN-FM); and
- Provides emergency ingress/egress.

Proposed Solution:

Construct an east-west fuelbreak in the Sugarloaf area from Swasey Drive to Skywalker Lane.

1.7 miles x 200 feet = 41 acres; 0.75 miles x 200 feet = 18 acres if the Lower Springs Drive to Sugarloaf fuelbreak is completed prior



Looking west towards Sugar Loaf

#9 – Lower Springs Road to Sugarloaf

- Protects multiple residential communities;
- Protects a communications tower (KNNN-FM); and
- Connects to hiking trails (Westside Trails) for access.

Proposed Solution:

Construct an east-west fuelbreak along the ridges from Lower Springs Road to Skywalker Lane.

0.6 miles x 200 feet = 15 acres



East-West fuelbreak looking west from Skywalker Lane

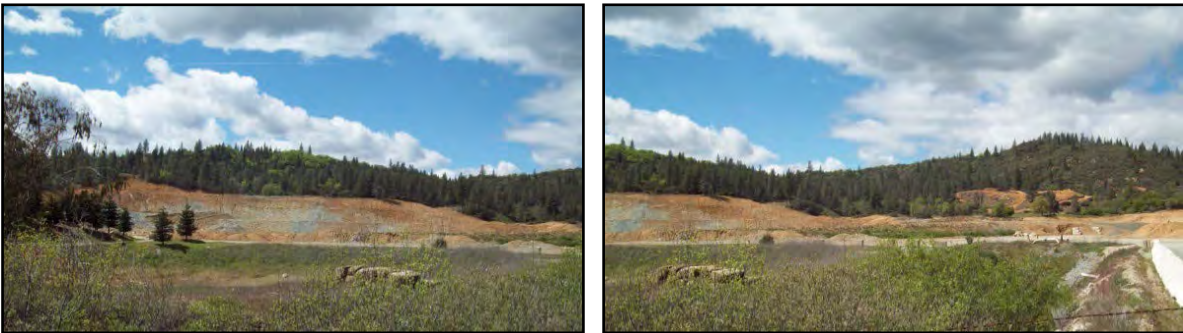
#10 –Rock Creek Ridge

- Provides access for emergency crews and escape for residents; and
- Was formerly called “Southern Boundary Fuelbreak”

Proposed Solution:

Construct fuelbreak along the ridge between Rock Creek and Spring Creek.

1.3 miles x 200 feet = 32 acres



Rock Creek Ridge in the background

#11 – Old Shasta to Iron Mountain Rd Powerline

Proposed Solution:

Widen existing fuelbreak along the powerline between the community of Shasta and Iron Mountain Road.

2.8 miles x 200 feet = 68 acres



Powerline fuelbreak looking east and west (left-right)

#12 – Swasey Recreation Area

Proposed Solution:

Construct BLM Tributary fuelbreaks in the Swasey Recreation Area.

2.2 miles x 200 feet = 53 acres

#13 – Rock Creek Road

- Allows access for emergency crews and escape for residents
- This project will connect the communities of Shasta and Keswick.

Proposed Solution:

Construct shaded fuelbreaks near Rock Creek Road .

2.3 miles x 200 feet = 56 acres

#14 – Upper Muletown Road

Proposed Solution:

Construct fuelbreaks near Upper Muletown Road.

2.3 miles x 200 feet = 56 acres

#15 – Olney Park/Simmons Road

Proposed Solution:

Construct fuelbreaks near Olney Park Drive and Simmons Road.

2.4 miles x 200 feet = 58 acres



Simmons Road



Trail Drive

#16 – Secluded Valley Drive

Proposed Solution:

Construct fuelbreaks near Secluded Valley Drive.

1.5 miles x 200 feet = 36 acres

#17 – Benson Road

Proposed Solution:

Construct fuelbreaks near Benson Road..

1.1 miles x 200 feet = 27 acres

II. COMMUNITY PRIORITIES

A. OVERALL COMMUNITY WILDFIRE RISK ASSESSMENT

SHASTA WST PLANNING AREA OVERALL COMMUNITY WILDFIRE RISK ASSESSMENT								
Community, structure or area at risk	Map Number	Fuel Hazard	Wildfire Occurrence Risk	Structural Ignitability	Preparedness Capability	Overall Risk	Fire Hazard Severity Zone Rating	WUI
Iron Mountain Road South	1	High	High	High	Low	High	Very High	Yes
Buenaventura Blvd (west)	2	High	High	High	Low	High	Very High	Yes
Kenyon Drive/Oregon Gulch	3	High	High	High	Low	High	Very High	Yes
Lower Spring Road	4	High	High	High	Low	High	Very High	Yes
Swasey Drive	5	High	High	High	Low	High	Very High	Yes
Middle Creek Ridge	6	High	High	High	Low	High	Very High	Yes
HWY-299 Corridor	7	High	High	High	Low	High	Very High	Yes
Sugarloaf Ridge	8	High	High	High	Low	High	Very High	Yes
Lower Spring Road to Sugarloaf	9	High	High	High	Low	High	Very High	Yes
Rock Creek Ridge	10	High	High	High	Low	High	Very High	Yes
Old Shasta to Iron Mountain Rd Powerline	11	High	High	High	Low	High	Very High	Yes
Swasey Recreation Area	12	High	High	High	Low	High	Very High	Yes
Rock Creek Road	13	High	High	High	Low	High	Very High	Yes
Upper Muletown Road	14	High	High	High	Low	High	Very High	Yes
Olney Park / Simmons Road	15	High	High	High	Low	High	Very High	Yes
Secluded Valley	16	High	High	High	Low	High	Very High	Yes
Benson Road	17	High	High	High	Low	High	Very High	Yes

B. OVERALL COMMUNITY HAZARD REDUCTION ASSESSMENT

SHASTA WEST PLANNING AREA OVERALL COMMUNITY HAZARD REDUCTION ASSESSMENT						
Community, structure or area at risk	Map Number	Overall Risk	Cultural Value	Treatment Type	Treatment Method	
Iron Mountain Road South	1	High	High	Fuelbreak	Brush and tree removal, pruning	
Buenaventura Blvd (west)	2	High	High	Fuelbreak	Brush and tree removal, pruning	
Kenyon Drive/Oregon Gulch	3	High	High	Fuelbreak	Brush and tree removal, pruning	
Lower Spring Road	4	High	High	Right-Of-Way	Brush and tree removal, pruning	
Swasey Drive	5	High	High	Fuelbreak	Brush and tree removal, pruning	
Middle Creek Ridge	6	High	High	Fuelbreak	Brush and tree removal, pruning	
HWY-299 Corridor	7	High	High	Fuelbreak	Brush and tree removal, pruning	
Sugarloaf Ridge	8	High	High	Fuelbreak	Brush and tree removal, pruning	
Lower Spring Road to Sugarloaf	9	High	High	Fuelbreak	Brush and tree removal, pruning	
Rock Creek Ridge	10	High	High	Fuelbreak	Brush and tree removal, pruning	
Old Shasta to Iron Mountain Rd Powerline	11	High	High	Fuelbreak	Brush and tree removal, pruning	
Swasey Recreation Area	12	High	High	Fuelbreak	Brush and tree removal, pruning	
Rock Creek Road	13	High	High	Fuelbreak	Brush and tree removal, pruning	
Upper Muletown Road	14	High	High	Fuelbreak	Brush and tree removal, pruning	
Oliney Park / Simmons Road	15	High	High	Fuelbreak	Brush and tree removal, pruning	
Secluded Valley	16	High	High	Fuelbreak	Brush and tree removal, pruning	
Benson Road	17	High	High	Fuelbreak	Brush and tree removal, pruning	

III. COMMUNITY VALUES

RESIDENCES

According to the 2000 Census, residential land use makes up 55% (16,163 acres) of the watershed. The two rural population centers are the community of Centerville and the historic town of Shasta. The area was rapidly developing in the early to mid 2000's, resulting in a rapid increase in population. The assets at risk from fire consist primarily of the many homes that are located throughout the area. The residences are primarily houses located on large lots, ranchette-style homes with small acreage, and ranches with houses and outbuildings located on the property.

HISTORIC AREA

The 19-acre Shasta State Historic Park is located in the historic town of Shasta. The park includes historic trails and roads, cottage ruins, gardens, orchards and a Catholic Cemetery, where many of Shasta's prominent citizens are buried. Historic structures include the Courthouse Museum and Art Gallery, Jail, and Pioneer Barn.

The restored museum building served as the Shasta County Courthouse for three decades in the late 1800s. Today, the building houses the visitor center and information desk, and a collection of historic California artwork. The courtroom, jail, and gallows have been restored and furnished with many original items to interpret Shasta County justice in the days of the gold rush. The Pioneer Barn area houses farming and mining implements of the 1800s, an original stagecoach, and other agricultural supplies.



In the town of Old Shasta, the old business district dates back to the 1850s



MAPS OF SHASTA WEST PLANNING AREA

- 1. SHASTA WEST PROPOSED PROJECTS AND PLANNING AREA**
- 2. FIRE SEVERITY RATING**
- 3. VEGETATION**
- 4. SPECIAL STATUS SPECIES AND HABITAT**

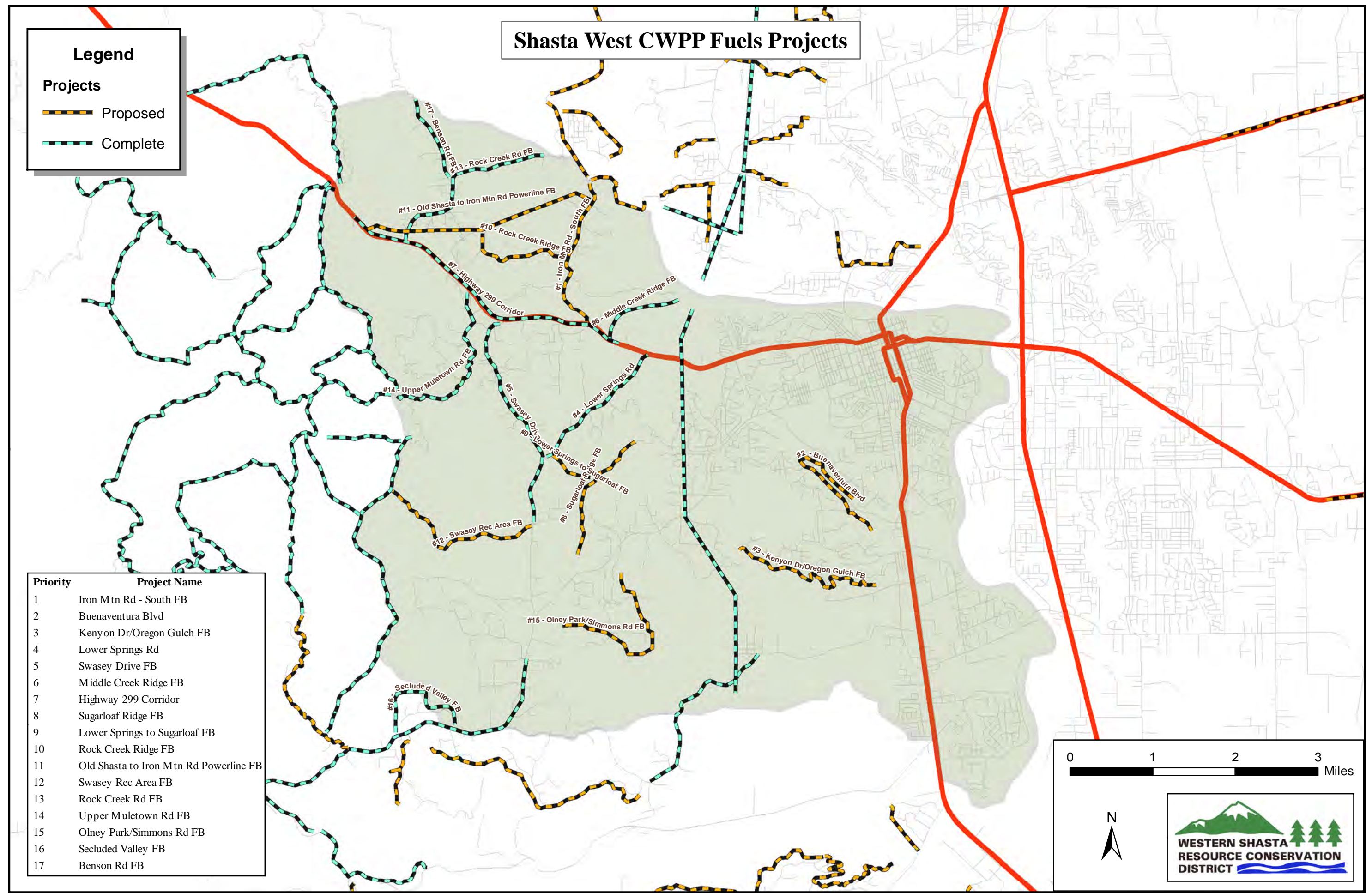
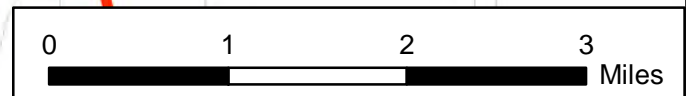
Shasta West CWPP Fuels Projects

Legend

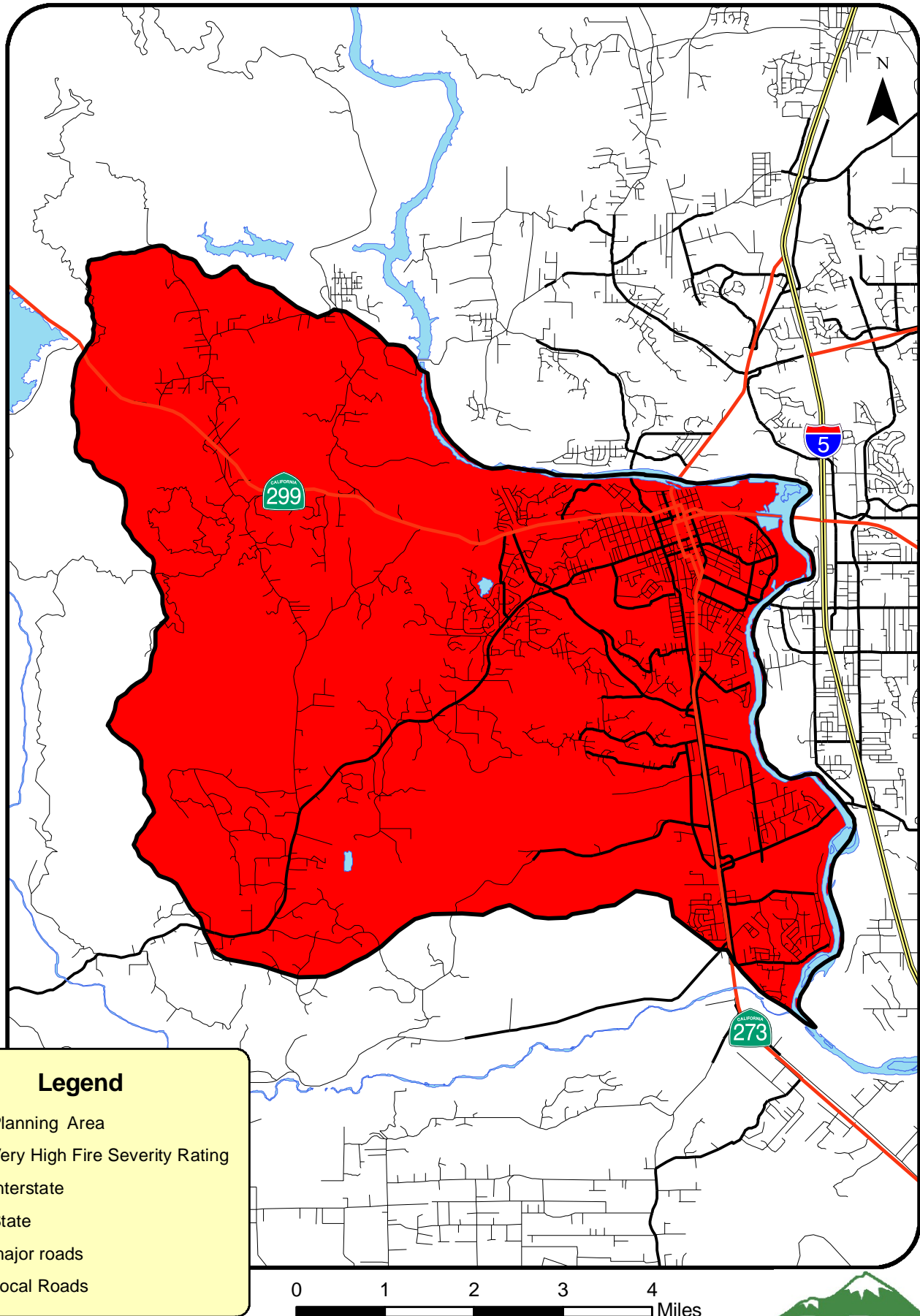
Projects

-  Proposed
-  Complete

Priority	Project Name
1	Iron Mtn Rd - South FB
2	Buenaventura Blvd
3	Kenyon Dr/Oregon Gulch FB
4	Lower Springs Rd
5	Swasey Drive FB
6	Middle Creek Ridge FB
7	Highway 299 Corridor
8	Sugarloaf Ridge FB
9	Lower Springs to Sugarloaf FB
10	Rock Creek Ridge FB
11	Old Shasta to Iron Mtn Rd Powerline FB
12	Swasey Rec Area FB
13	Rock Creek Rd FB
14	Upper Muletown Rd FB
15	Olney Park/Simmons Rd FB
16	Secluded Valley FB
17	Benson Rd FB



FIRE SEVERITY



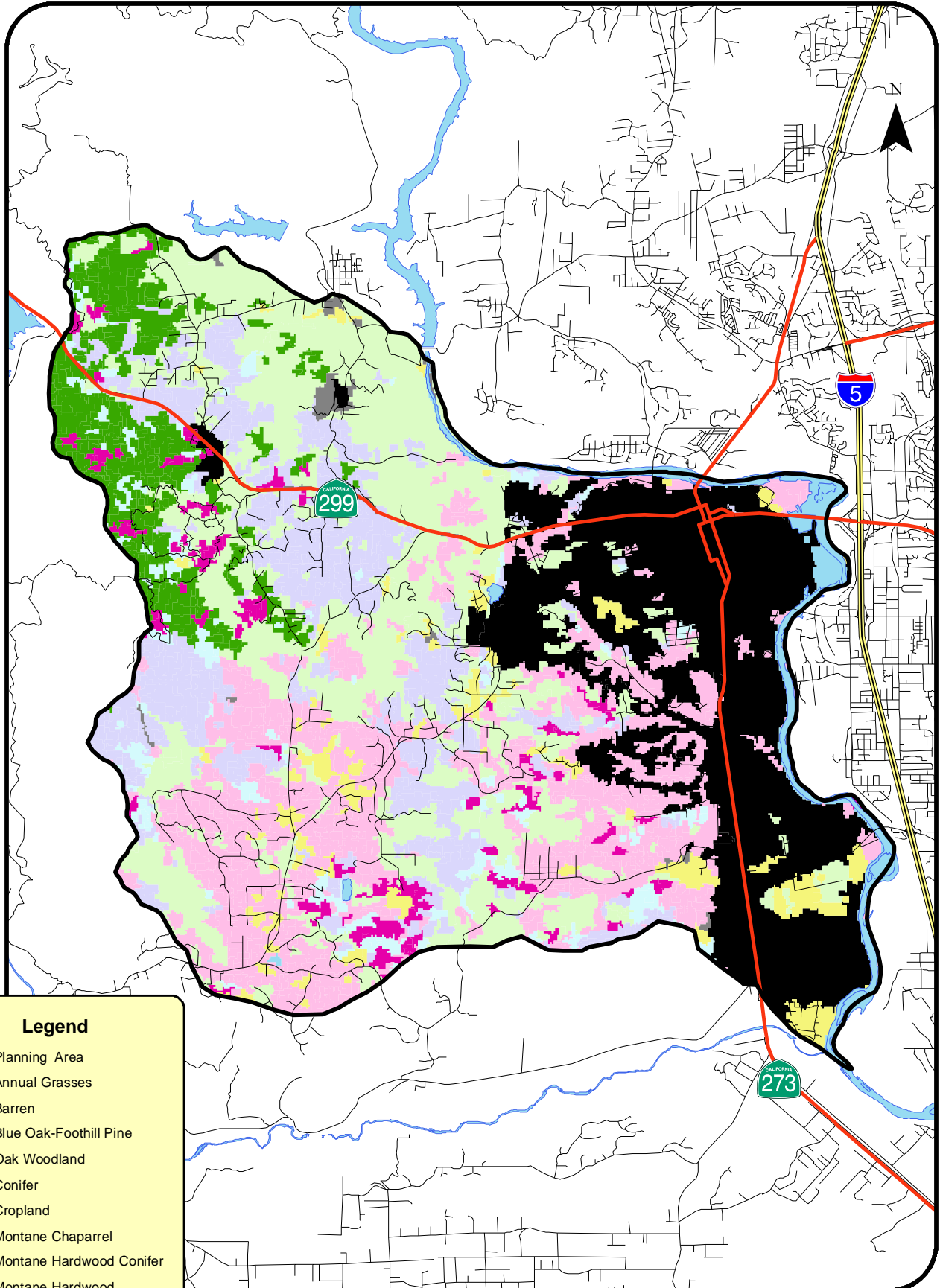
Legend

- Planning Area
- Very High Fire Severity Rating
- == Interstate
- State
- major roads
- Local Roads

VERY HIGH FIRE HAZARD SEVERITY ZONE
as Recommend by CAL FIRE

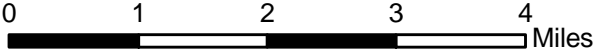


VEGETATION

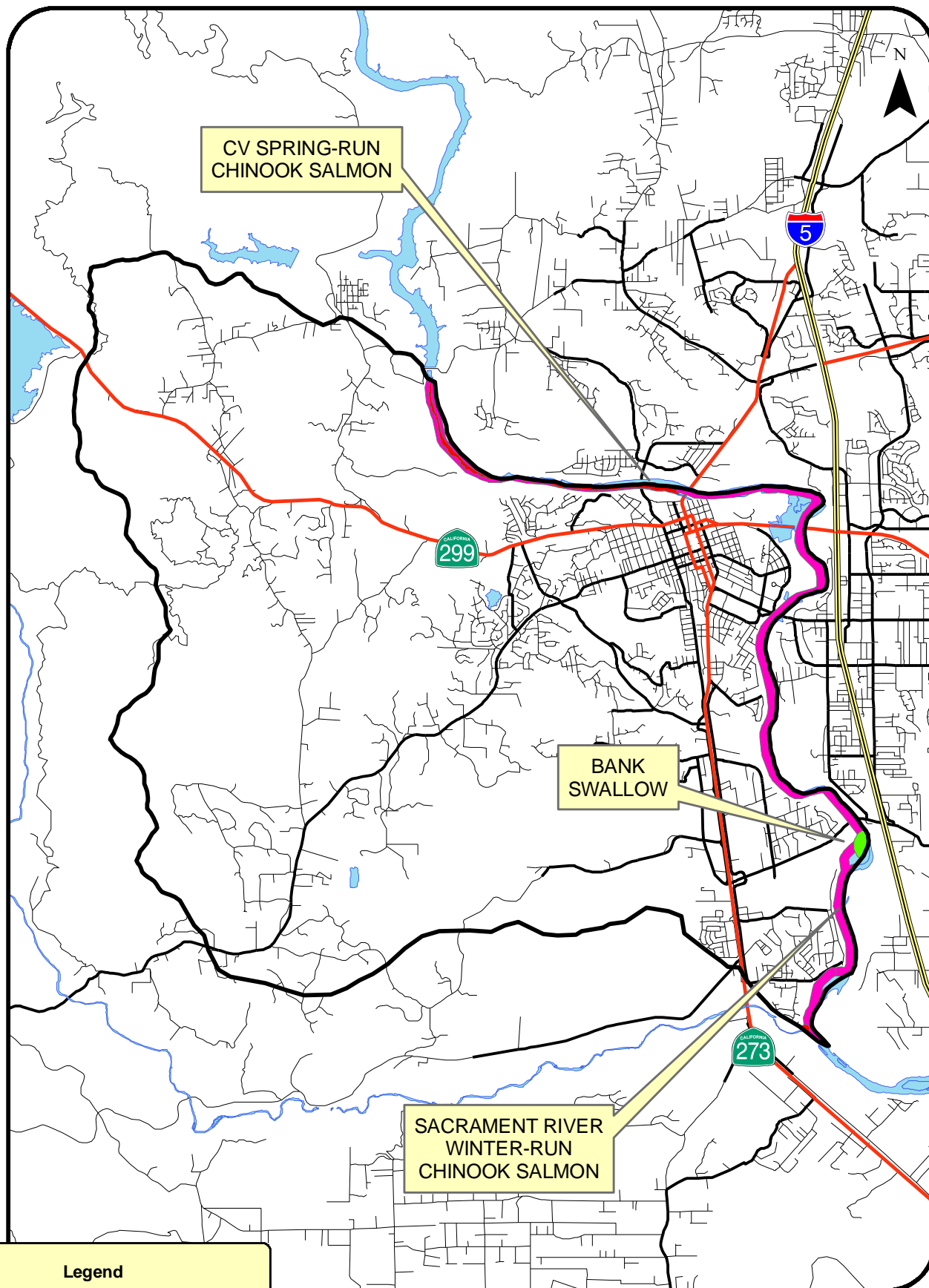


Legend

- Planning Area
- Annual Grasses
- Barren
- Blue Oak-Foothill Pine
- Oak Woodland
- Conifer
- Cropland
- Montane Chaparral
- Montane Hardwood Conifer
- Montane Hardwood
- Montane Riparian
- Urban
- Water

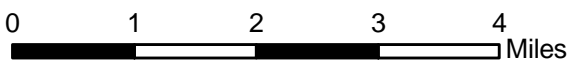


SPECIAL STATUS WILDLIFE AND PLANT SPECIES



Legend

- Planning Area
- Central Valley spring-run chinook salmon ESU
- Sacramento River winter-run chinook salmon ESU
- bank swallow



Department Name: Shasta County Board of Supervisors
Agreement Number: FAF-040020
Dollar Amount: \$53,500