2016 SHASTA COUNTY COMMUNITY WILDFIRE PROTECTION PLAN

LAKEHEAD PLANNING AREA



Covering the communities of:

- Delta
- Gibson
- Gilman Road
- Gregory Creek
- Highland Lakes
- Lakehead
- Lakeshore
- Lakeview

- LaMoine
- Northwoods
- O'Brien Mountain
- Skyline Drive
- Statton
- Sugarloaf
- Vollmers

LAKEHEAD PLANNING AREA (2016)

I. <u>PROPOSED PROJECTS</u>

A. THE PLANNING AREA

The planning area covers about 500 square miles or approximately 320,000 acres, 26 miles north of Redding, California. Access to the area is via Interstate 5, Shasta Lake, and several Forest Service roads. The communities within the Lakehead Planning Area include: Gregory Creek, Obrien Mountain, Northwoods, LaMoine, Vollmers, Delta, Lakehead, Lakeshore, Statton, Skyline Drive, Lakeview, Sugarloaf, Gibson, Highland Lakes, and Gilman Road area. The area has a population of about 1618 permanent residents (Sperling' Best Places, 2009), and about 256 seasonal/recreational residences spread throughout the Planning Area. With the presence of Shasta Lake National Recreation Area (NRA), the area is heavily used for recreation. Land ownership is 56% public and 44% private.

The topography of the area is steep, with elevations from 1,065 to 5,613 feet, draining into Upper Sacramento River and McCloud River and eventually flowing into Shasta Lake. The area has remained relatively undeveloped over time and provides high quality water for the Central Valley Project, which supplies water throughout the state. Generally, the climate of the Lakehead FSC Area is seasonal and varies with elevation. The summers are hot and dry and winters are cool with moderate rainfall, and snow above 4,000 feet elevation. The average annual precipitation in the Sacramento River Basin varies from a low of 30 inches north of Mount Shasta City, to a high of 80 inches near High Mountain.

B. PROJECT PRIORITIES

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;
- 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.

LAKEHEAD PLAN	NING AREA	FUEL RED	UCTION PR	OJECTS
PROPOSED PROJECT	MAP NUMBER ¹	ТҮРЕ	AREA (acres)	ESTIMATED COST ²
Lakeshore Drive	1	Fuelbreak	157	\$820,015
Northwoods	2	Fuelbreak	29	\$151,855
Dog Creek	3	Fuelbreak	75	\$392,291
Lakeside Woods Subdivision	4	Fuelbreak	12	\$63,273
Slate Creek	5	Fuelbreak	39	\$202,473
Old Mill Road	6	Fuelbreak	70	\$366,982
Waterman Road	7	Fuelbreak	17	\$88,582
Sims Road	8	Fuelbreak	75	\$392,291
Lakehead-Riverview Drive	9	Fuelbreak	19	\$101,236
Skyline Subdivision	10	Fuelbreak	131	\$683,345
Holiday Harbor	11	Fuelbreak	46	\$240,436
Packers Bay	12	Fuelbreak	17	\$88,582
Gregory Creek Drainage	13	Fuelbreak	116	\$607,418
O'Brian Mountain Estates	14	Fuelbreak	208	\$1,088,291
Lower Salt Creek Road	15	Fuelbreak	29	\$151,855
Snowbird Lane	16	Fuelbreak	12	\$63,273
Gilman Road	17	Fuelbreak	97	\$506,000
Top of the Hill	18	Fuelbreak	10	\$50,618
Statton Road	19	Fuelbreak	34	\$177,164
Pollard Flat	20	Fuelbreak	24	\$126,545
Lakeview Heights	21	Fuelbreak	17	\$88,582
Delta/Volmers	22	Fuelbreak	27	\$139,200
Hirz Mtn. Lookout Road	23	Fuelbreak	61	\$316,364
Shasta Marina	24	Fuelbreak	10	\$50,618
Gibson Road	25	Fuelbreak	63	\$329,018
Sugarloaf Subdivision	26	Fuelbreak	51	\$265,745
Highland Lakes	27	Fuelbreak	78	\$404,945
Sugarloaf NE Ridge	28	Fuelbreak	29	\$151,855
Sugarloaf Lookout Road	29	Fuelbreak	56	\$291,055

 ¹ Proposed projects are numbered on the map according to priority.
² Estimated costs of the projects are for planning purposes only. More accurate costs will be determined for the preparation of project proposals.

LAKEHEAD PLA BASIC ASSUM		
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	
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	\$250,000/mile	

#1 – Lakeshore Drive

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Lakeshore Drive. 6.5 miles long x 200 feet across = 157 acres.



Vegetation along Lakeshore Drive north of the Antlers freeway exit

³ Estimated costs of the projects are for planning purposes only. More accurate costs will be determined for the preparation of project proposals. ⁴ County assessed values, 2010

#2 – Northwoods

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain; and
- Provides emergency ingress/ egress;

Proposed Solution: Construct shaded fuelbreak near the Northwoods. 1.2 miles long x 200 feet across = 29 acres.

#3 – Dog Creek

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreak near Lakeshore Drive.

3.1 miles long x 200 feet across = 75 acres.

#4 – Lakeside Woods Subdivision

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreak near the Lakeside Woods Subdivision \therefore 0.5 miles long x 200 feet across = 12 acres.

#5 – Slate Creek

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Slate Creek. 1.6 miles long x 200 feet across = 39 acres.



Vegetation along Slate Creek Road



Vegetation along Dog Creek Road

#6 – Old Mill Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Old Mill Road. 2.9 miles long x 200 feet across = 70 acres.



Old Mill Road showing the narrow road, steep canyon, and brush encroachment

#7 – Waterman Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Waterman Road. 0.7 miles long x 200 feet across = 17 acres.

#8 – Sims Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Sims Road. 3.1 miles long x 200 feet across = 75 acres.



Waterman Road Showing Brush Encroachment



Mears Ridge Road north of the intersection with Sims Road.

#9 – Lakehead-Riverview Drive

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution: Construct shaded fuelbreaks near Lakehead-Riverview Drive. 0.8 miles long x 200 feet across = 19 acres.



Riverview Drive north of Lakehead

#10 – Skyline Subdivision

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near the Skyline Subdivision. 5.4 miles long x 200 feet across = 131 acres.



Skyline Drive showing over grown conditions

#11 – Holiday Harbor

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near the Holiday Harbor marina. 1.9 miles long x 200 feet across = 46 acres.

#12 – Packers Bay

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreak near the Packers Bay marina. $0.7 \text{ miles } \log x \ 200 \text{ feet across} = 17 \text{ acres}.$

#13 – Gregory Creek Drainage

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreaks near the Gregory Creek Drainage. 4.8 miles long x 200 feet across = 116 acres.



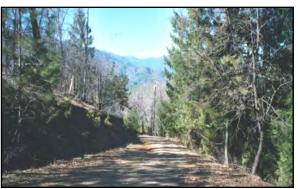
Zola Drive showing the narrow road, steep terrain, and vegetation encroachment

#14 – O'Brien Mountain Estates

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreaks near the O'Brien Mountain Estates subdivision. 8.6 miles long x 200 feet across = 208 acres.



Herman Way showing the steepness of slope

#15 – Lower Salt Creek Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreaks near Lower Salt Creek Road and Kamloop Road.

1.2 miles long x 200 feet across = 29 acres.



Note brush encroachment on Lower Salt Creek

#16 – Snowbird Lane

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct a shaded fuelbreak on and/or near Snowbird Lane, possibly along the ridge to the south.

0.5 miles long x 200 feet across = 12 acres.



Entrance to Snowbird Lane

#17 – Gilman Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Will need cooperative efforts between SPI, STNF, Shasta County Public Works, and private landowners.
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Clear right-of-way along Gilman Road to Hirz Mountain Lookout Road and McCloud Bridge. 16.0 miles long x 50 feet across = 97 acres.



Gilman Road Note dense vegetation to road edge

#18 – Top of the Hill Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreak near Top of the Hill Road and Gilman Road.

0.4 miles long x 200 feet across = 10 acres.



Top of The Hill Road showing brush encroachment

#19 – Statton Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain shaded fuelbreaks near Statton Road. 1.4 miles long x 200 feet across = 34 acres.



Statton Road showing narrow road, steep terrain, and brush encroachment.

#20 – Pollard Flat

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution: Construct shaded fuelbreaks near Pollard Flat. 1.0 miles long x 200 feet across = 24 acres.



Pollard Flat east of the restaurant

#21 – Lakeview Heights

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Lakeview Drive. 0.7 miles long x 200 feet across = 17 acres.

#22 – Delta/Volmers

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near the areas of Delta and Volmers.

1.1 miles long x 200 feet across = 27 acres.

#23 – Hirz Mountain Lookout Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Hirz Mountain Road.

2.5 miles long x 200 feet across = 61 acres.



Access road into Delta/Vollmers



Hirz Mtn. Lookout Road showing narrow road with steep terrain

#24 – Shasta Marina

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Shasta Marina. 0.4 miles long x 200 feet across = 10 acres.

#25 – Gibson Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution: Construct shaded fuelbreaks near Gibson Road. 2.6 miles long x 200 feet across = 63 acres.



Near Gibson Road

#26 – Sugarloaf Subdivision

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near the Sugarloaf subdivision. 2.1 miles long x 200 feet across = 51 acres.

#27 – Highland Lakes

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Construct shaded fuelbreaks near Highland Lakes. 3.2 miles long x 200 feet across = 78 acres.

#28 – Sugarloaf NE Ridge

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution:

Maintain fuelbreak along the northeast ridge of Sugarloaf Summit. 1.2 miles long x 200 feet across = 29 acres.

#29 – Sugarloaf Lookout Road

- Vulnerable to wind-driven wildfires, dense fuels, and steep terrain;
- Provides emergency ingress/ egress; and
- Protects residential and commercial properties.

Proposed Solution: Maintain fuelbreak near Sugarloaf Lookout Road. 0.4 miles long x 200 feet across = 10 acres.

II. <u>COMMUNITY PRIORITIES</u>

A. OVERALL COMMUNITY WILDFIRE RISK ASSESSMENT

	OVER	ALL CON	LAKEHEAD PLANNING AREA DMMUNITY WILDFIRE RISK /	LANNING A	LAKEHEAD PLANNING AREA VERALL COMMUNITY WILDFIRE RISK ASSESSMENT	ENT		
Community, structure or area at risk	Map Number	Fuel Hazard	Wildfire Occurrence Risk	Structural Ignitability	Preparedness Capability	Overall Risk	Fire Hazard Severity Zone Rating	MUI
Lakeshore Drive	1	High	High	High	Low	High	Very High	Yes
Northwoods	2	High	High	High	Low	High	Very High	Yes
Dog Creek	3	High	High	High	Low	High	Very High	Yes
Lakeside Woods Subdivision	4	High	High	High	Low	High	Very High	Yes
Slate Creek	5	High	High	High	Low	High	Very High	Yes
Old Mill Road	6	High	High	High	Low	High	Very High	Yes
Waterman Road	7	High	High	High	Low	High	Very High	Yes
Sims Road	8	High	High	High	Low	High	Very High	Yes
Lakehead-Riverview Drive	6	High	High	High	Low	High	Very High	Yes
Skyline Subdivision	10	High	High	High	Low	High	Very High	Yes
Holiday Harbor	11	High	High	High	Low	High	Very High	Yes
Pakcers Bay	12	High	High	High	Low	High	Very High	Yes
Gregory Creek Drainage	13	High	High	High	Low	High	Very High	Yes
O'Brian Mountain Estates	14	High	High	High	Low	High	Very High	Yes
Lower Salt Creek Road	15	High	High	High	Low	High	Very High	Yes

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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
Snowbird Lane	16	High	High	High	Low	High	Very High	Yes
Gilman Road	17	High	High	High	Low	High	Very High	Yes
Top of the Hill	18	High	High	High	Low	High	Very High	Yes
Statton Road	19	High	High	High	Low	High	Very High	Yes
Pollard Flat	20	High	High	High	Low	High	Very High	Yes
Lakeview Heights	21	High	High	High	Low	High	Very High	Yes
Delta / Volmers	22	High	High	High	Low	High	Very High	Yes
Hirz Mtn. Lookout Road	23	High	High	High	Low	High	Very High	Yes
Shasta Marina	24	High	High	High	Low	High	Very High	Yes
Gibson Road	25	High	High	High	Low	High	Very High	Yes
Sugarloaf Subdivision	26	High	High	High	Low	High	Very High	Yes
Highland Lakes	27	High	High	High	Low	High	Very High	Yes
Sugarloaf NE Ridge	28	High	High	High	Low	High	Very High	Yes
Sugarloaf Lookout Road	29	High	High	High	Low	High	Very High	Yes

A. OVERALL COMMUNITY WILDFIRE RISK ASSESSMENT (continued)

OVEI	ERALL CO	LAKEH	EAD PLAN Y HAZARD	LAKEHEAD PLANNING AREA RALL COMMUNITY HAZARD REDUCTION ASSESSMENT	ESSMENT
Community, structure or area at risk	Map Number	Overall Risk	Cultural Value	Treatment Type	Treatment Method
Lakeshore Drive	1	High	High	Fuelbreak	Brush and tree removal, pruning
Northwoods	2	High	High	Fuelbreak	Brush and tree removal, pruning
Dog Creek	ω	High	High	Fuelbreak	Brush and tree removal, pruning
Lakeside Woods Subdivision	4	High	High	Fuelbreak	Brush and tree removal, pruning
Slate Creek	S	High	High	Fuelbreak	Brush and tree removal, pruning
Old Mill Road	9	High	High	Fuelbreak	Brush and tree removal, pruning
Waterman Road	7	High	High	Fuelbreak	Brush and tree removal, pruning
Sims Road	8	High	High	Fuelbreak	Brush and tree removal, pruning
Lakehead-Riverview Drive	6	High	High	Fuelbreak	Brush and tree removal, pruning
Skyline Subdivision	10	High	High	Fuelbreak	Brush and tree removal, pruning
Holiday Harbor	11	High	High	Fuelbreak	Brush and tree removal, pruning
Pakcers Bay	12	High	High	Fuelbreak	Brush and tree removal, pruning
Gregory Creek Drainage	13	High	High	Fuelbreak	Brush and tree removal, pruning
O'Brian Mountain Estates	14	High	High	Fuelbreak	Brush and tree removal, pruning
Lower Salt Creek Road	15	High	High	Fuelbreak	Brush and tree removal, pruning

B. OVERALL COMMUNITY HAZARD REDUCTION ASSESSMENT

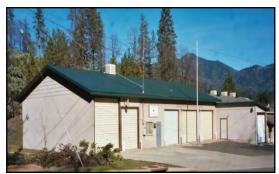
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Community, structure or area at risk	Map Number	Overall Risk	Cultural Value	Treatment Type	Treatment Method
Snowbird Lane	16	High	High	Fuelbreak	Brush and tree removal, pruning
Gilman Road	17	High	High	Fuelbreak	Brush and tree removal, pruning
Top of the Hill	18	High	High	Fuelbreak	Brush and tree removal, pruning
Statton Road	19	High	High	Fuelbreak	Brush and tree removal, pruning
Pollard Flat	20	High	High	Fuelbreak	Brush and tree removal, pruning
Lakeview Heights	21	High	High	Fuelbreak	Brush and tree removal, pruning
Delta / Volmers	22	High	High	Fuelbreak	Brush and tree removal, pruning
Hirz Mtn. Lookout Road	23	High	High	Fuelbreak	Brush and tree removal, pruning
Shasta Marina	24	High	High	Fuelbreak	Brush and tree removal, pruning
Gibson Road	25	High	High	Fuelbreak	Brush and tree removal, pruning
Sugarloaf Subdivision	26	High	High	Fuelbreak	Brush and tree removal, pruning
Highland Lakes	27	High	High	Fuelbreak	Brush and tree removal, pruning
Sugarloaf NE Ridge	28	High	High	Fuelbreak	Brush and tree removal, pruning
Sugarloaf Lookout Road	29	High	High	Fuelbreak	Brush and tree removal, pruning

B. OVERALL COMMUNITY HAZARD REDUCTION ASSESSMENT (continued)

III. <u>COMMUNITY PRIORITIES</u>

RESIDENCES AND MAJOR STRUCTURES

About 704 homes and 256 vacation/recreation homes make up the communities of Lakeshore, Lakehead, Delta, Pollard Flat, Vollmers, LaMoine, the Gilman Road neighborhood, and surrounding area. Major structures include stores, post office, motels, school, resorts and marinas. The winter population is 1,618 residents, but in summer the population can swell to three times this number of people (personal communication with local business leaders).



Lakehead Volunteer Fire Company



The Lions Club Hall



Canyon Community Church



Canyon Elementary School

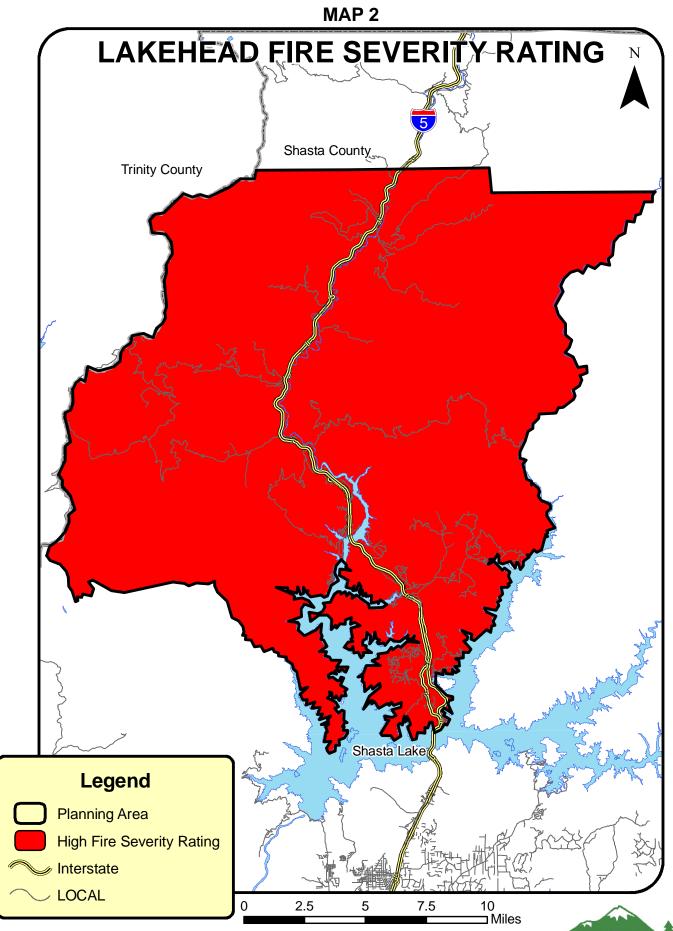


Dog Creek Bridge

MAPS OF LAKEHEAD PLANNING AREA

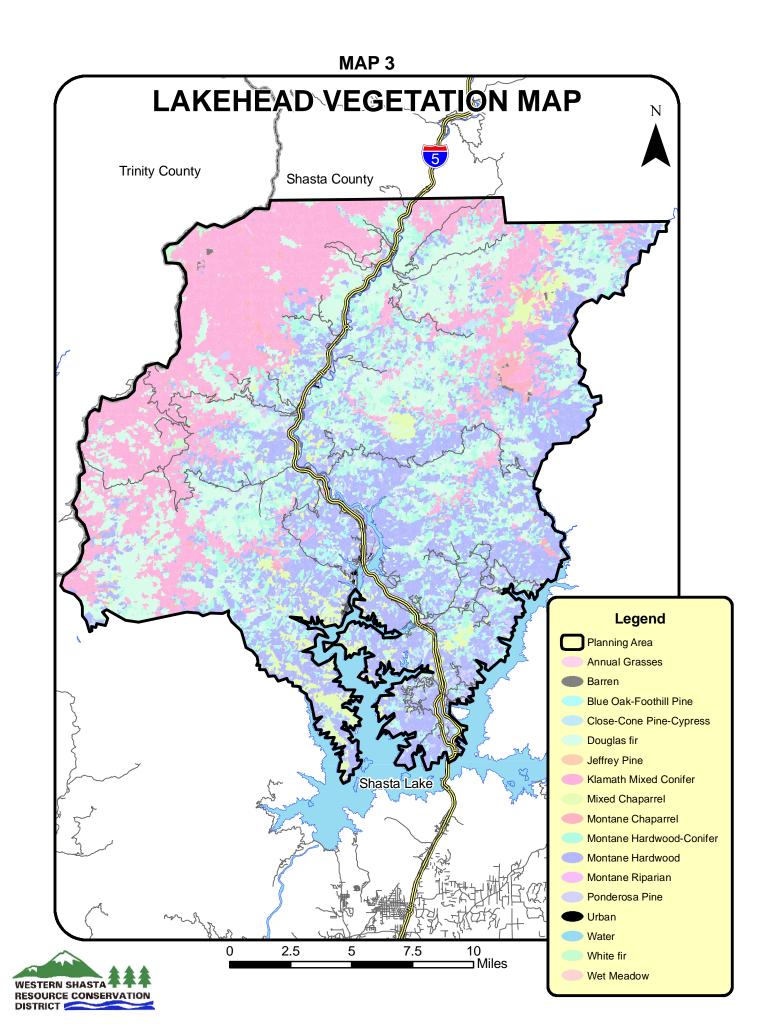
- 1. LAKEHEAD PROPOSED PROJECTS AND PLANNING AREA
- 2. FIRE SEVERITY RATING
- **3. VEGETATION**
- 4. SPECIAL STATUS SPECIES AND HABITAT

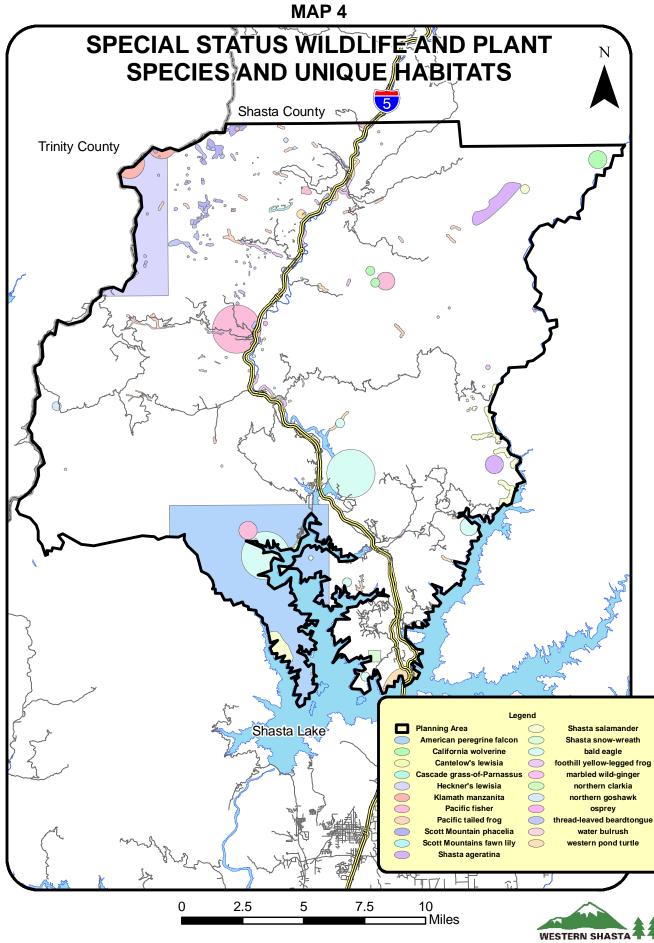




VERY HIGH FIRE HAZARD SEVERITY ZONE as Recommended by CAL FIRE

WESTERN SHASTA RESOURCE CONSERVATION DISTRICT





RESOURCE CONSERVATION DISTRICT

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