

Lake County Community Wildfire Protection Plan

Table of Contents

Chapter 1. The Lake County Community Wildfire Protection Plan

1. The Lake County Community Wildfire Protection Plan	1-1
1.1. Plan Purpose	1-1
1.2. Organization of This Document	1-1
1.3. Lake County Community Description.....	1-2
1.4. Lake County Communities at Risk.....	1-5
1.5. Lake County Fire Protection Areas and Agencies	1-6
1.6. Introduction to Lake County Fire Safe Councils.....	1-7
1.7. Fire Safety Objectives	1-8
1.8. Conservation Principles for Community Wildfire Protection	1-9

Chapter 2. Lake County Fire Safe Planning Process

2. Lake County Fire Safe Planning Process	2-1
2.1. Planning Area Boundaries	2-1
2.2. Planning Area Descriptions	2-1
2.2.1. Lake Pillsbury, Blue Lakes, and Upper Lake	2-1
2.2.2. Scotts Valley and Lakeport	2-1
2.2.3. Nice and Lucerne	2-2
2.2.4. Spring Valley and Double Eagle.....	2-2
2.2.5. Glenhaven, Clearlake Oaks, Paradise Valley, and Kono Tayee	2-2
2.2.6. Soda Bay, Rivas, and Buckingham.....	2-2
2.2.7. Jago Bay, Lower Lake, and Clearlake	2-3
2.2.8. Finley and Kelseyville	2-3
2.2.9. Cobb Mountain	2-3
2.2.10. Hidden Valley and Middletown	2-3
2.3. Process and Plan Development	2-4
2.3.1. Community Meetings.....	2-4
2.3.2. Community Outreach	2-5
2.3.3. Public Comment Process	2-5
2.3.4. CWPP Working Group	2-5
2.3.5. CWPP Community Internal Review Committee	2-6

Chapter 3. Wildfire: Current Environment and Behavior

3. Wildfire: Current Environment and Behavior	3-1
3.1. Introduction: Defining the Wildfire Problem	3-1
3.2. Fire Behavior Characteristics	3-1
3.3. General Wildfire Environment Descriptions	3-2
3.3.1. Topography	3-3
3.3.2. Weather	3-3
3.3.3. Hydrology	3-4
3.3.4. Vegetation and Fuels.....	3-4
3.3.5. Wildlife	3-5
3.4. Fuel: Description of Standard Fuel Models.....	3-8
3.5. Fire History.....	3-11
3.5.1. Fire Caused by Natural Lightning.....	3-11
3.5.2. Native American Period Fire History	3-12
3.5.3. European Settlement Fire History.....	3-12
3.5.4. Recent Fire History	3-13
3.6. Fire Hazard	3-13

3.6.1. Hazard Assessment	3-14
3.7. Fire Regime	3-15
3.7.1. Condition Class	3-15
3.8. Fire Threat	3-16
3.9. Changing Fuels in the Wildland-Urban Interface	3-17

Chapter 4. Fire Ecology and Management of Lake County Vegetation Types

4. Fire Ecology and Management of Lake County Vegetation Types	4-1
4.1. Grassland	4-2
4.1.1. Grassland Role of Fire	4-2
4.1.2. Grassland Fire Regime	4-3
4.1.3. Grassland Plant Adaptations to Fire.....	4-3
4.1.4. Grassland Conservation and Fuel Modification Objectives.....	4-3
4.1.5. Grassland Fuel Modification Treatment Prescription	4-3
4.2. Chaparral and Chamise-Chaparral	4-4
4.2.1. Chaparral Role of Fire.....	4-4
4.2.2. Chaparral Fire Regime	4-4
4.2.3. Chaparral Plant Adaptations to Fire	4-5
4.2.4. Chaparral Conservation and Fuel Modification Objectives.....	4-5
4.2.5. Chaparral Fuel Modification Treatment Prescription	4-6
4.3. Foothill Woodland	4-10
4.3.1. Foothill Woodland Role of Fire	4-10
4.3.2. Foothill Woodland Fire Regime.....	4-10
4.3.3. Foothill Woodland Plant Adaptations to Fire	4-10
4.3.4. Foothill Woodland Conservation and Fuel Modification Objectives	4-10
4.3.5. Foothill Woodland Fuel Modification Treatment Prescription.....	4-11
4.4. Ponderosa Pine and Mixed Conifer	4-13
4.4.1. Ponderosa Pine and Mixed Conifer Role of Fire	4-13
4.4.2. Ponderosa Pine and Mixed Conifer Fire Regime.....	4-13
4.4.3. Ponderosa Pine and Mixed Conifer Plant Adaptations to Fire	4-13
4.4.4. Ponderosa Pine and Mixed Conifer Conservation and Fuel Modification Objectives	4-13
4.4.5. Ponderosa Pine and Mixed Conifer Fuel Modification Treatment Prescription.....	4-14
4.5. Closed-Cone Pine-Cypress	4-16
4.5.1. Closed-Cone Pine-Cypress Role of Fire	4-16
4.5.2. Closed-Cone Pine-Cypress Fire Regime.....	4-16
4.5.3. Closed-Cone Pine-Cypress Plant Adaptations to Fire	4-16
4.5.4. Closed-Cone Pine-Cypress Conservation and Fuel Modification Objectives	4-16
4.5.5. Closed-Cone Pine-Cypress Fuel Modification Treatment Prescription.....	4-17
4.6. Montane Hardwood Conifer	4-18
4.6.1. Montane Hardwood Conifer Role of Fire	4-18
4.6.2. Montane Hardwood Conifer Fire Regime.....	4-18
4.6.3. Montane Hardwood Conifer Adaptations to Fire.....	4-18
4.6.4. Montane Hardwood Conifer Conservation and Fuel Modification Objectives	4-18
4.6.5. Montane Hardwood Conifer Fuel Modification Treatment Prescription.....	4-18

Chapter 5. Lake County Community Context

5. Lake County Community Features	5-1
5.1. Social and Political Setting.....	5-1
5.1.1. Community Legal Structure and Jurisdictional Boundaries	5-2
5.2. Public Lands Fire Management.....	5-2
5.2.1. Federal Lands	5-2
5.2.2. California State Lands.....	5-5
5.2.3. Tribal Lands	5-8

5.3. Community Planning Context	5-8
5.3.1. General Plan	5-9
5.3.2. Natural Hazard Mitigation Plan	5-13
5.3.3. LAFCO Municipal Service Review and Sphere of Influence.....	5-14
5.3.4. Emergency Operations Plans	5-14
5.3.5. Land Use Goals and Objectives	5-15
5.4. Community Infrastructure to Address and Implement Objectives.....	5-15

Chapter 6. Fire Protection

6. Fire Protection.....	6-1
6.1. County Fire Protection Agencies.....	6-2
6.1.1. Kelseyville Fire Protection District.....	6-2
6.1.2. Lake County Fire Protection District	6-4
6.1.3. Lake Pillsbury Fire Protection District	6-5
6.1.4. Lakeport Fire Protection District	6-6
6.1.5. Northshore Fire Protection District	6-7
6.1.6. South Lake County Fire Protection District.....	6-9
6.2. State Fire Protection Agencies: California Department of Forestry and Fire Protection (CAL FIRE)	6-11
6.3. Federal Fire Protection Agencies: USDA Forest Service, Mendocino National Forest	6-13

Chapter 7. Risk Assessment: Identifying and Evaluating Assets at Risk

7. Risk Assessment: Identifying and Evaluating Assets at Risk.....	7-1
7.1. Assets at Risk in Lake County.....	7-1
7.1.1. Homes and Structures	7-1
7.1.2. General Infrastructure Assets	7-2
7.1.3. Commercial Assets	7-3
7.1.4. Schools	7-3
7.1.5. Medical Facilities	7-3
7.1.6. Cultural Assets	7-4
7.1.7. Natural Assets	7-4
7.1.8. Conflicts Between Natural Assets and Human Occupation.....	7-5
7.2. Assessing Risks in Lake County	7-6

Chapter 8. Action Plan

8. Lake County Community Wildfire Protection Plan, Action Plan.....	8-1
8.1. Designation of Wildland-Urban Interface Areas.....	8-1
8.2. Designation of Communities at Risk.....	8-2
8.3. Advancing Defensible Space	8-2
8.3.1. Residential Fuel Reduction Ordinance	8-4
8.3.2. Defensible Space and New Development	8-5
8.3.3. Community Defensible Space and Fuel Reduction Programs	8-6
8.3.4. Community Chipping Program.....	8-7
8.3.5. Firewise Communities Program.....	8-7
8.4. Reducing Fuels	8-8
8.4.1. Priority Fuel Reduction Projects	8-9
8.5. Reducing Structural Ignitability	8-10
8.5.1. WUI Building Standards	8-10
8.5.2. Roofing.....	8-10
8.5.3. Windows	8-10
8.5.4. Decks.....	8-10
8.5.5. Outbuildings	8-11
8.5.6. Woodpiles and Other Fuel Sources.....	8-11
8.6. Enhancing Fire Protection	8-11

8.6.1. Resources for Fire Protection.....	8-11
8.6.2. Water	8-12
8.6.3. Roads.....	8-13
8.6.4. Signage of Roads and Structures (Addressing.....	8-13
8.7. Evacuation Planning and Emergency Preparedness	8-14
8.7.1. Developing Evacuation Routes and Sites	8-14
8.7.2. Emergency Notification and Communications	8-15
8.7.3. Emergency Planning and Coordination	8-15
8.7.4. Residential Emergency Preparedness	8-16
8.7.5. Sheltering in Place.....	8-17
8.7.6. Evacuation Plans for Pets and Livestock	8-18
8.8. Integrating Policy	8-18
8.9. Promoting Fire Safe Education	8-19
8.9.1. Fire Safety Education in Schools	8-19
8.9.2. Fire Safety Education for New Residents and Tourists	8-20
8.10. Utilizing Excess Fuels	8-20
8.11. Facilitating Lake County Fire Safety in the Long Term	8-21

Chapter 9. Facilitating Lake County Fire Safety in the Long Term

9. Facilitating Lake County Fire Safety in the Long Term	9-1
9.1. Monitoring	9-1
9.1.1. Project Monitoring	9-1
9.1.2. Ecological Monitoring	9-2
9.2. Project Maintenance	9-3
9.3. Updating This Plan	9-3
9.4. Resources Needed to Support Ongoing Efforts.....	9-3