

Community Wildfire Protection Plan

Crystal Lakes
Larimer County, Colorado

September 29, 2004 – updated October 28, 2008

Introduction

This *Community Wildfire Protection Plan* (CWPP) was developed by Crystal Lakes Association with guidance and support from Larimer County, Arapaho-Roosevelt National Forest, Colorado State Forest Service. This CWPP supplements several Larimer County documents referenced in Appendix A. Information in this plan will be provided at a level of specificity determined by the community and appropriate agencies.

The process of developing a CWPP can help a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface. It can also lead community members through valuable discussions regarding management options and implications for the surrounding watershed.

Community / Agencies / Interested Parties Involved

Representatives involved in the development of the Crystal Lakes Association CWPP are included in the following table. Their name, organization, and roles and responsibilities are indicated below:

CWPP Development Team

Name	Organization	Roles / Responsibilities
Jody Sandquist, Lyle Koller, Marvin Thomas	Crystal Lakes Association and/or Community Representatives	Primary development of CWPP and decision making – community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods
Don Rogers	Crystal Lakes Volunteer Fire Department	Primary development of CWPP and decision making – community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods
Dave Farmer	Colorado State Forest Service	Facilitation of planning process and approval of CWPP process and minimum standards. Provides input and expertise on forestry, fire and fuels, and FireWise concepts.
Tony Simons, Don Griffith	Larimer County Wildfire Safety Program / Emergency Services	Provides input and expertise on hazard assessment, defensible space, and FireWise concepts.
Chuck Alluisi, Sonya Whitesell, Richard Edwards	Arapaho-Roosevelt National Forest, Canyon Lakes Ranger District	Provides input and expertise on federal lands forestry, fire and fuels, and FireWise concepts.
	Other organizations designated by the core team (Environmental groups, utilities, recreational groups, etc.)	Provides input and expertise. This could include community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods.

Identification of Values at Risk

Using technology and local expertise, Crystal Lakes Association has developed a base map and narrative of the community and adjacent landscapes of interest. This map will act as a visual aid from which community members can assess and make recommendations. The base map includes, at a minimum, the following:

- Inhabited areas and values at potential risk to wildland fire
- Areas containing critical human infrastructure—such as evacuation routes, municipal water supply structures, and major power or communication lines—that are at risk from wildfire
- A preliminary designation of the community's Wildland Urban Interface (WUI) zone.

Community Risk Assessment

The purpose of the community risk assessment is to help to prioritize areas for treatment and identify the highest priority uses for available financial and human resources. This section is divided into five areas of concern:

- Fuel Hazards – An evaluation of vegetation conditions within the community and on adjacent lands. Products included are:
 - Larimer County Wildfire Safety Program – Subdivision Wildfire Hazard Review
 - Larimer County Fuel Hazard Map
- Risk of Wildfire Occurrence – An evaluation of the probability of fire ignition within the community and surrounding lands.
- Risk to homes, businesses, and essential infrastructure – An evaluation of the vulnerability of structures within the community to ignition from firebrands, radiation, and convection. Also includes an evaluation of risks to essential infrastructure such as evacuation routes, water supply structures, and power and communication lines. Products may include:
 - Structure Assessment (construction materials, structure access, defensible space, etc.)
 - Infrastructure Assessment (utilities, water, community roads, power lines, etc.)
- Risk to Other Community Values – An evaluation of risk to other community values such as wildlife habitat, recreation and scenic areas, water supplies, and landscapes of historical, economic or cultural value.
- Local Preparedness and Firefighting Capability
 - Initial response to all fire, medical and associated emergencies is the responsibility of Crystal Lakes Volunteer Fire Department. Wildland fire responsibilities of Larimer County, Colorado State Forest Service, United States Forest Service, Bureau of Land Management and the National Park Service are described in the current *Larimer County Annual Operating Plan*. All mutual aid agreements, training, equipment, and response are the responsibility of the local fire department and the agencies listed above.

Hazard Reduction Priorities

A forest management plans were prepared in 1994 and 1999 to analyze forest conditions, identify a decision making structure in the plan, and make specific stand by stand recommendations. The plan has the following objectives:

1. Reduce the risk of catastrophic forest fire, thereby improving the quality of life and level of safety for area residents.
2. Improve and maintain quality, healthy forests that are a positive attribute for current and future residents.
3. Strive to manage the broad forest systems and greenbelts in an efficient and cost-effective manner.
4. Encourage communication, cooperation and accommodation among forest landowners as they strive to achieve mutually beneficial forest resource goals.

In addition, Crystal Lakes Association initiated a Firewise task force in 2001 to address wildfire hazard. The following list identifies the priorities of the task force and individuals involved.

FIREWISE TASK FORCE

INCIDENT INFORMATION (A)	Marvin Thomas-Don Griffith-Don Rogers-John Bustos
FIREWISE INFORMATION (B)	Tony Simons-Sonya Whitesell-Marvin Thomas-Linda Mae
FUELS REDUCE & FIREST MGN (C)	Richard Edwards-Dave Farmer-Marvin Thomas-Linda Mae-Tony Simons
EVACUATION PLAN (A)	Marvin Thomas-Don Rogers-Linda Mae-Chuck Alluisi-Don Griffith
ESCAPE RTS & SAFETY ZONES (B)	Marvin Thomas-Linda Mae-Don Rogers-Chuck Alluisi-Dave Farmer
FIRE DEPT SOP'S (A)	Don Rogers-Lyle Koller
EMERGENCY ACCESS (A)	Marvin Thomas-Linda Mae-Don Rogers-Chuck Alluisi-Don Griffith
FIRE TRAINING (A)	Don Rogers-Dave Farmer
FIRE EQUIPMENT (B)	Don Rogers-Lyle Koller
COMMUNICATION PLAN (B)	Don Rogers-Lyle Koller-Don Griffith
FIRE PRE-ATTACK (B)	Don Rogers-Dave Farmer-Tony Simons-Chuck Alluisi-Don Griffith
WATER SOURCES (B)	Don Rogers-Lyle Koller-Linda Mae-Dave Farmer

Action Plan

Crystal Lakes Association has developed and attached an action plan which identifies roles and responsibilities, funding needs and timetables listed in Hazard Reduction Priorities. The core team will meet annually to evaluate progress and mutually agree on treatment priorities. See Appendix B attached for goals on Education and Awareness, Preparedness, and Emergency Response.

In cooperation with the Larimer County Fire Education Group, the Larimer Fire Council, and the Crystal Lakes Volunteer Fire Department the Crystal Lakes Association supports and promotes Firewise activities as outlined in the Larimer County Fire Plan. Crystal Lakes Association supports and educates its citizens in ways to reduce structure ignitibility through meeting Larimer County Building Code Requirements and utilizing Colorado State Forest Service FireWise Construction Fact Sheets.

The following community representatives / agencies have reviewed and support this *Community Wildfire Protection Plan*.

Crystal Lakes Association

Crystal Lakes Volunteer Fire Department

Fort Collins District
Colorado State Forest Service

Arapaho-Roosevelt National Forest

CRYSTAL LAKES COMMUNITY WILDFIRE PROTECTION PLAN

2004

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TABLE IV:

Evacuation Plan (A)

Lead / Participant	Organization	Representative
Lead Organization	Crystal Lakes Association	CLA Mgr/ Koller/Thomas
Lead Organization	Crystal Lakes Volunteer Fire Dept.	Don Rogers
Participant	Outlying Properties	Linda Mae
Participant	USDA Forest Service	Chuck Alluisi
Participant	Larimer County Emergency Services	Don Griffith

Tasks

Develop and implement plan to provide:

- A. Assessment of Emergency Response Needs
 - 1. Assess Evacuation Routes
- B. Evacuation Plan
 - 1. Reverse 911 available
 - 2. Clearly mark evacuation routes
 - 3. CLVFD members know Safety Zones (“Meeting Locations”)
 - 4. Standardize Address Identification and Placement
 - 5. Improve access mapping
- C. Increased community awareness on Emergency Procedures
 - 1. Mail out to each resident and owner the Evacuation Plan
 - 2. Post evacuation route signs
 - 3. Exercise and test evacuation and warning system annually
 - 4. Develop subdivision evacuation diagrams
 - 5. Educate property owners and guests that all Courts are dead-ends
 - 6. Post warning signs on any other dead-end roads that there is no outlet

TABLE V:

Escape Routes and Safety Zones (B)

Lead / Participant	Organization	Representative
Lead Organization	Crystal Lakes Association	CLA Mgr/ Koller/Thomas
Lead Organization	Outlying Properties	Linda Mae
Participant	Crystal Lakes Volunteer Fire Dept.	Don Rogers
Participant	USDA Forest Service	Chuck Alluisi
Participant	Colorado State Forest Service	Dave Farmer

Tasks

Develop and implement plan to provide:

- A. Assessment of Emergency Response Needs
 - 1. Assess Escape Routes and Safety Zones
- B. Include Escape Routes and Safety Zones in Evacuation Plan
 - 1. Know Safety Zones (“Meeting Locations”)
 - 2. Standardize Address Identification and Placement
 - 3. Improve access mapping
- C. Increase community awareness on Emergency Procedures (See Evacuation Plan)

TABLE VII:

Emergency Access (A)

Lead / Participant	Organization	Representative
Lead Organization	Crystal Lakes Association	CLA Mgr/ Koller/Thomas
Lead Organization	Outlying Properties	Linda Mae
Participant	Crystal Lakes Volunteer Fire Dept.	Don Rogers
Participant	USDA Forest Service	Chuck Alluisi
Participant	Larimer County Emergency Services	Don Griffith

Tasks

Develop and implement plan to provide:

- A. Assess Emergency Response Needs
 - 1. Assess emergency access needs
- B. Emergency Response Plan
 - 1. Dispatch Procedures
 - 2. Standard Operating Procedures
 - 3. Standardize Address Identification and Placement
 - 4. Improve access mapping
- C. Improve Firefighting Capabilities
 - 1. Improve Road Access (if necessary, Bear Gulch Road or any other identified road)

TABLE X:

Communication Plan (B)

Lead / Participant	Organization	Representative
Lead Organization	Crystal Lakes Volunteer Fire Dept.	Don Rogers
Participant	Crystal Lakes Associations	CLA Mgr/ Koller/Thomas
Participant	Larimer County Emergency Services	Don Griffith

Tasks

Develop and implement plan to provide:

- A. Assess Emergency Response Needs
 - 1. Assess communication
- B. Crystal Lakes Firewise Management Plan
 - 1. Prepare Communication Plan and include in Management Plan
 - a. Radio frequencies
 - b. Pager
 - c. Reverse 911
 - d. Siren warning system

TABLE XI:

Fire Pre-Attack (B)

Lead / Participant	Organization	Representative
Lead Organization	Crystal Lakes Volunteer Fire Dept.	Don Rogers
Participant	Colorado State Forest Service	Dave Farmer
Participant	Larimer County Wildfire Services	Tony Simons
Participant	USDA Forest Service	Chuck Alluisi
Participant	Larimer County Emergency Services	Don Griffith

Tasks

Develop and implement plan to provide:

- A. Assess Emergency Response Needs
 - 1. Assess Department capabilities
- B. Identification of Hazards
 - 1. Utilize Wildland/Urban Interface Fire Hazard Assessment Process for existing homes
 - 2. Assess fire hazard for vacant properties
- C. Increase community awareness on Emergency Procedures
 - 1. Mail out to each resident and owner the evacuation plan
 - 2. Post evacuation route signs
 - 3. Know locations of Safety Zones (“Meeting Locations”)
 - 4. Exercise and test evacuation and warning system annually
 - 5. Develop subdivision evacuation diagrams and post them at development entrances
 - 6. Post warning signs at entrances to all dead-end roads

Appendix A

Larimer County Fire Plan a Community Wildfire Protection Plan (Larimer County 2004)

Larimer County Wildfire Mitigation Plan (CSFS 1998)

Recommendations for Improving Wildfire Safety in Larimer County (CSFS 1997)

Larimer County Subdivision Wildfire Hazard Review (Larimer County/CSFS 2002)

Larimer County Annual Operating Plan (updated annually)

FEMA—Northern Colorado Natural Hazard Mitigation Plan (2004)

Appendix B
FOREST MANAGEMENT/FIREWISE TASK FORCE
(Updated October 17, 2002)

VISION STATEMENT:

Develop a community that understands and implements the necessary steps to minimize the impact on human and natural resources at risk from the hazards of wildfire.

MISSION:

To create a Firewise Community. A Firewise Community is one that is Responsible, Educated, Aware, and Active to minimize the impact of wildfire.

GOALS:

I. Education and Awareness

(Short Term = less than 1 year)

(Long Term = more than 1 year)

- | | |
|---|--------|
| A. Educate the community on acceptable Fire Protection Measures and Forest Health | |
| 1. Firewise Community Training Session | ST |
| 2. Mailings on defensible space and forest health | ST |
| 3. Participation at community meetings | ST |
| a. Defensible space | |
| b. Fuel breaks | |
| c. Other forest management practices | |
| 4. Demonstration area | ST |
| 5. One on one assistance | ST |
| 6. Signs along road (Firewise, Fire Danger, etc.) | ST, LT |
| 7. Identify Point of Contact | ST |
| B. Increase community awareness on Emergency Procedures | |
| 1. Mail out to each resident and owner the evacuation plan | ST |
| 2. Post evacuation route signs | ST |
| 3. Post safety zone signs | ST |
| 4. Exercise and test evacuation and warning system annually | ST,LT |
| 5. Develop subdivision evacuation diagrams and post them at development entrances | ST,LT |
| 6. Post warning signs at entrances to all dead-end roads "No Outlet" | ST |

II Preparedness

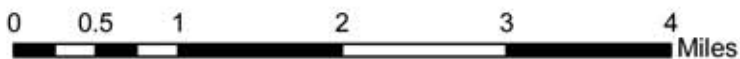
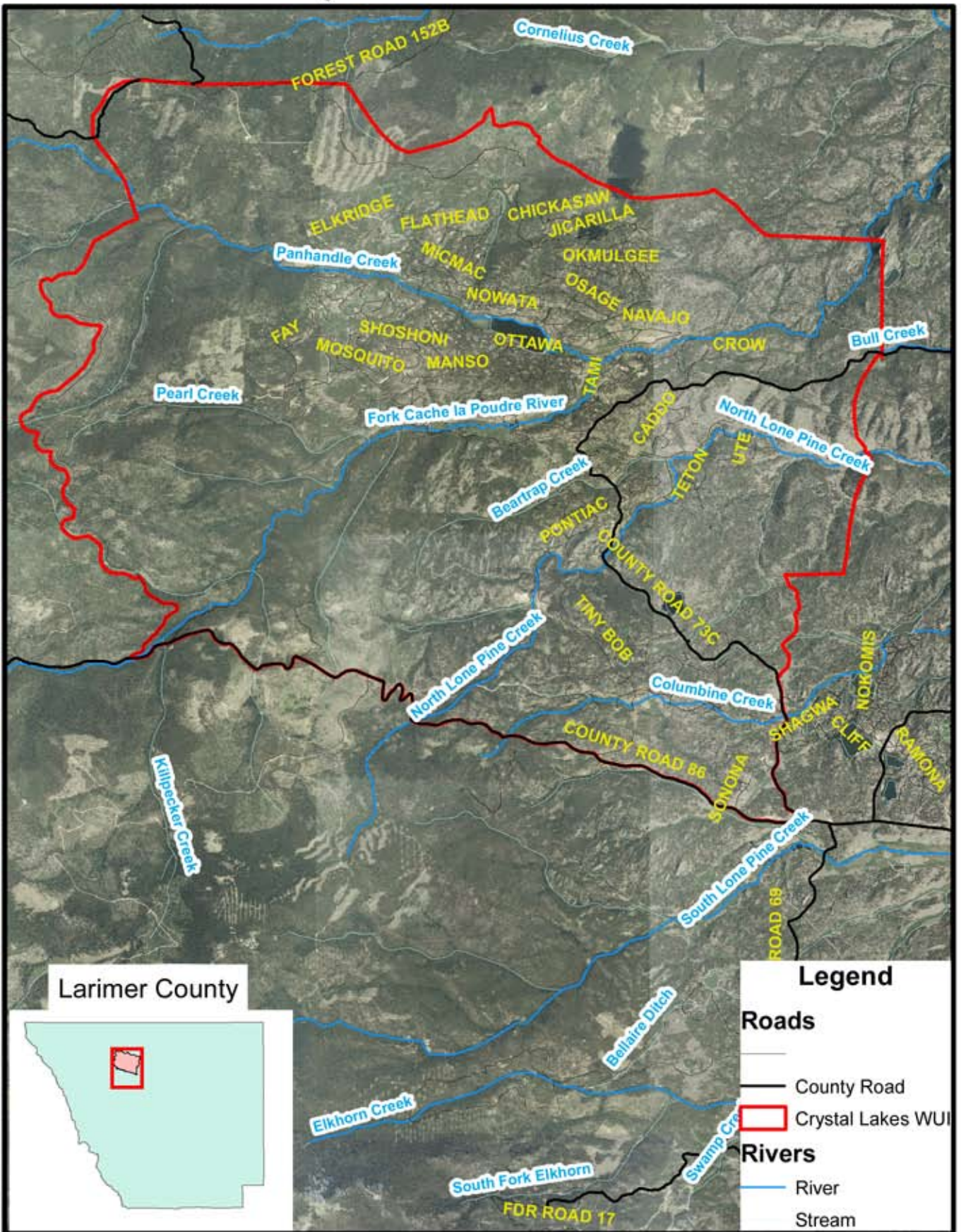
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|---|-------|
| A. Identification of Hazards | |
| 1. Utilize Wildland/Urban Interface Fire Hazard Assessment Process for existing homes | LT |
| 2. Assess fire hazard for vacant properties | LT |
| B. Assess Emergency Response Needs (1 st Priority) | ST |
| 1. Assess Evacuation Routes | ST |
| 2. Assess Escape Routes and Safety Zones | ST |
| 3. Assess emergency response needs—Access | ST |
| 4. Assess communication | ST |
| 5. Assess water sources | ST |
| 6. Assess Department capabilities | ST |
| C. Develop Crystal Lakes Firewise Management Plan | |
| 1. Plan mitigation and develop priorities for treatment of all public & private lands | LT |
| a. Defensible Space | ST,LT |
| b. Construction Materials | ST,LT |
| c. Safety Zones | ST |
| d. Defensible Profile Thinning, and Prescribed Fire (National Forests) | ST,LT |
| e. Mountain Pine Beetle | ST,LT |

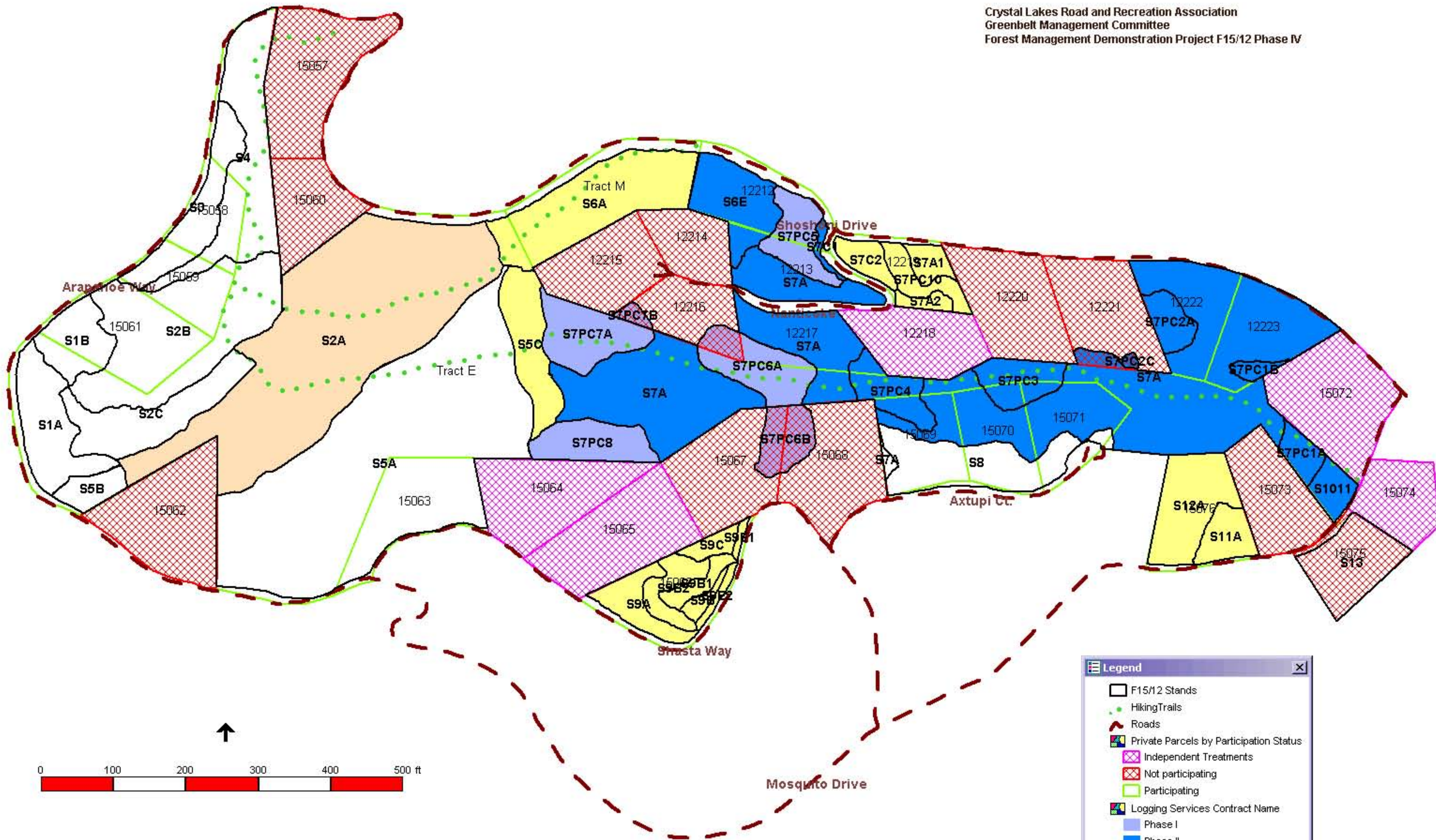
- f. Mistletoe ST,LT
 - 2. Prepare communication plan ST
 - 3. Prepare emergency response plan (2nd Priority) ST
 - a. Dispatch procedures
 - b. Standard Operating Procedures
 - c. Standardize Address Identification and Placement
 - d. Improve access mapping LT
 - 4. Prepare Evacuation Plan (On-going) ST
 - 5. Confirm Mutual Aid Agreements (Continual) ST
 - 6. Pursue grants when available ST,LT
- D. Implementation of Crystal Lakes Firewise Management Plan as developed ST,LT
- E. Improve Firefighting Capabilities (Wait for Tim Endsley to provide input to finalize)
- Some suggestions include:
- 1. Road Access (implement Bear Gulch Road and any other road access decision) ST
 - 2. Aviation Resources LT?
 - 3. Update Mutual Aid Agreement if Necessary ST
 - 4. Annual Firefighter Training (Larimer County) (On-going) ST
 - 5. Perform semi-annual mock emergency response (On-going) check with Tim E. #s 5-7 ST
 - 6. Update Equipment – facilities, protective, apparatus, infrastructure, communication ST
 - 7. Maintain Equipment ST,LT

III. Emergency Response

- A. Communication Plan ST,LT
- 1. Radio frequencies
 - 2. Pager
 - 3. Reverse 911
 - 4. Siren warning system – more area?
on vehicles? ST,LT
- B. Evacuation Plan ST
- 1. Reverse 911 available ST
 - 2. Clearly mark evacuation routes ASAP ST
 - 3. Clearly mark safety zones ASAP ST
- C. Incident Status Information ST,LT
- 1. Information card ST,LT
 - 2. Web page (local and county) ST,LT
 - 3. Media ST,LT
 - 4. Public Information Group – national, county, County Web ST,LT
 - 5. Incident Point of Contact ST,LT

Crystal Lakes CWPP





Legend

- F15/12 Stands
- Hiking Trails
- Roads
- Private Parcels by Participation Status
 - Independent Treatments
 - Not participating
 - Participating
- Logging Services Contract Name
 - Phase I
 - Phase II
 - Phase III
 - Phase IV

