

Rocky Point Community Wildfire Protection Plan

August 15, 2005



Compiled By:
Carrie Ann Capp
Oregon Department of Forestry
3200 Delap Road
Klamath Falls OR 97601

EXECUTIVE SUMMARY	1
GOALS AND OBJECTIVES	1
METHODOLOGY	2
ACTION PLAN	3
INTRODUCTION	4
BACKGROUND AND HISTORY	4
PLANNING AREA BOUNDARIES	4
DEFINITIONS AND DESCRIPTIONS	5
<i>Wildland Urban Interface</i>	5
<i>Communities at Risk</i>	6
<i>Fire Risk</i>	6
<i>Fire Hazard</i>	6
FIRE POLICIES AND PROGRAMS	7
<i>National Fire Plan</i>	7
<i>Healthy Forest Initiative</i>	7
<i>Healthy Forest Restoration Act</i>	7
<i>The Disaster Mitigation Act of 2000</i>	8
<i>Oregon Forestland-Urban Interface Fire Protection Act of 1997</i>	8
PLANNING PROCESS	9
DESCRIPTION OF PARTNERS AND COMMITTEES	9
DESCRIPTION OF COMMUNITY WILDFIRE COMMITTEE	10
COLLABORATION AND COMMUNITY OUTREACH	11
TABLE 1: COMMUNITY WILDFIRE COMMITTEE MEETING SUMMARY	11
<i>Identifying Communities-at-risk</i>	11
<i>Communities-at-risk in Rocky Point</i>	11
COMMUNITY PROFILE	12
ENVIRONMENT AND NATURAL RESOURCES	12
POPULATION, DEMOGRAPHICS, SOCIO-ECONOMIC DATA	13
HOUSING AND DEVELOPMENT TRENDS	13
TRANSPORTATION, INFRASTRUCTURE, LAND USE	13
ISO FIRE HAZARD RATING	14
WILDFIRE RISK ASSESSMENT	14
LIMITATIONS OF THE RISK ASSESSMENT DATA	14
WILDFIRE RISK ASSESSMENT METHODOLOGY	15
FIRE RISK	16
FIRE HAZARD	16
FUELS DATA COLLECTED	17
PROTECTION CAPABILITIES	18
STRUCTURAL VULNERABILITY	19
TABLE 2: ROCKY POINT CWPP RISK ASSESSMENT FACTORS	20
HOME RISK ASSESSMENT DATA	21
TABLE 3: PROJECT PRIORITIZATION/STRUCTURAL VULNERABILITY THREATS AND ACTIONS	22
TABLE 4: HOME RISK ASSESSMENT FORM RESULTS SUMMARY	23
VALUES	23
ROCKY POINT CWPP BASE MAP	24
RISK ASSESSMENT MAPS	24
FINAL CALCULATION	24
EMERGENCY MANAGEMENT	25

COMMUNITY PREPAREDNESS.....	25
PROTECTION CAPABILITIES & INFRASTRUCTURE	25
MITIGATION ACTION PLAN	27
PURPOSE	27
CURRENT PROJECTS AND POLICIES	27
COMMUNITY STRATEGY FOR RISK REDUCTION.....	28
FUELS REDUCTION	28
FUELS REDUCTION PARAMETERS.....	29
BIOMASS UTILIZATION	30
EDUCATION AND COMMUNITY OUTREACH	31
RECOMMENDED ACTIONS.....	33
RECOMMENDED ACTIONS SUMMARY	34
MONITORING AND EVALUATION	35
PRIORITIZATION PROCESS OF MONITORING	35
IMPLEMENTATION	35
TABLE 5: IMPLEMENTATION, MONITORING AND EVALUATION.....	36
ACKNOWLEDGMENTS.....	37
APPENDICES.....	37

EXECUTIVE SUMMARY

Wildland fire is a vital part of many forest and rangeland ecosystems, yet suppression efforts in the United States since the days of European settlement have in many cases removed fire and the role it plays in vegetation management. This change from the historical fire regime has caused a shift in the native vegetation composition and structure of fire-prone ecosystems in some forests and rangelands, resulting in dangerously high accumulations of fuels. As a result, when wildland fires do occur, they may burn larger and hotter than those in the past, posing an increased threat to human welfare and ecological integrity. The hazard of wildland fires is compounded by the increasing occurrence of human structures and activities in fire-prone ecosystems, and in particular through increased development in the wildland-urban interface. The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around structures and communities, infrastructure improvements and public outreach may reduce the risk of catastrophic fire in the wildland-urban interface.

The purpose of this Community Wildfire Protection Plan is to establish priorities and recommendations that provide for a greater level of protection for the at-risk neighborhoods within the Rocky Point community, its citizens, homes, and essential infrastructure and resources from the destruction of catastrophic wildfire within the wildland-urban interface.

Community-based forest planning and prioritization is not a new concept. However, the incentive for communities to engage in comprehensive forest planning and prioritization was given new and unprecedented impetus with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003. The HFRA landmark legislation includes the first meaningful statutory incentives for the United States Forest Service (USFS) and the United States Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction projects. In order for a community to take full advantage of this new opportunity, it must first prepare a Community Wildfire Protection Plan (CWPP).

The Fremont-Winema National Forests (USFS) and the Oregon Department of Forestry (ODF) are currently in the process of working together to plan fuels reduction treatments and other mitigation measures targeted at the wildland-urban interface on both private and public lands. This partnership is indicative of a shared responsibility to reduce wildland fire risks to communities.

Goals and Objectives

The goals and objectives of the Rocky Point Community Wildfire Protection Plan are as follows:

Goals

- Evaluate the hazards of wildland fire within the assessment area; and
- Decrease chance of wildfires spreading from private land to federal lands or conversely from federal lands to private lands.

Objectives

- Collaborate specific actions and priorities that could reduce the risks to life and property. Collaboration process includes ODF, Harriman Rural Fire Department, Rocky Point Community Action Team, USFS Fremont-Winema National Forests, United States Fish and Wildlife Service, Klamath County, the Klamath Tribes (Klamath, Modoc, Paiute) and other interested parties or persons;
- Recommend measures that homeowners can take to reduce the ignitability of structures throughout the area;
- Increase chances of obtaining National Fire Plan grants for future community protection projects by having an adequate Community Wildfire Protection Plan in place.

The mitigation actions proposed herein for the Rocky Point Community Wildfire Risk Assessment are based on information acquired from the analysis of fuel surveys, Home Risk Assessments, FEMA (Federal Emergency Management Act) evaluations, Geographic Information Systems (GIS) analysis and verbal communications with community members during the course of data collection. The majority of information presented in this plan was gathered during the spring and summer of 2003. Geographic Information System technology was utilized to graphically analyze and display the data in order to identify the occurrence of risk and hazard faced by the community with regard to wildland fire. The results of this analysis were then used to prioritize fuels treatment projects in the community based on the relative risks and hazards in terms of wildland fire.

Methodology

ODF utilized National Fire Plan and Klamath County Title III funds to conduct Home Risk Assessments in the Rocky Point area to examine the factors contributing to firefighter safety and risk to structures such as presence of survivable space, road access, and other factors that may affect suppression efforts and survivability of a structure threatened by wildland fire. Fuel surveys were conducted by categorizing vegetation, slope, and aspect of the land in the Rocky Point assessment area. FEMA evaluations were conducted at a landscape scale to evaluate the area-wide situation with regard to fuels, infrastructure and structural density of the different subdivisions in order to ascertain which portions of the community are at highest risk from wildfire. The information gathered from the Home Risk Assessments, fuel surveys, FEMA evaluations and fire occurrence data were integrated into this report. The following action items were identified during the summer of 2003 to reduce the hazard of wildfire in the Rocky Point assessment area.

The recommendations listed below are supportive of and in line with the on-going county-wide hazard assessment mapping project:

- Develop a complete map of the assessment area, identifying the homes and structures and ratings of risk posed to structures from wildland fire that affect structural survivability;

- Conduct a door-to-door fire prevention education program with all residents in the assessment area;
- Encourage residents to reduce fuels on their property;
- Work in partnership with the Fremont-Winema National Forests (USFS) to maximize community fuel breaks by reducing fuels on private lands adjacent to current or planned fuel projects on federal lands.

The assessment area surrounding the Rocky Point community boundary was delineated by the ODF, USFS and Rocky Point CAT working group, referred to herein as the Community Wildfire Committee. A series of BehavePlus Version 1.0.0 computer fire behavior models were run to determine the distance a fire could travel in a 24-hour burn period under the given conditions (see Appendix A). The calculated 24-hour burn period distance (2.73 miles) was then used to buffer the established community boundary and delineated on the base map as the Rocky Point Community Wildland-Urban Interface (WUI) Boundary. A broad-based evaluation of risk posed to the community at a landscape level (assessment of subdivisions) was conducted by ODF staff utilizing FEMA rating forms (see Appendix B). On the ground risk assessments of hazards posed to structures (Home Risk Assessments), were also completed by ODF staff (see Appendix C). The rating elements included in the Home Risk Assessments were type of structure, access, driveway, roof materials, presence and condition of brush/trees/slash, slope, attachments to the structure such as decks and other hazards that may be present, and additional risks to firefighters, such as power lines, animals and propane tanks. ODF also conducted fuel surveys, which rated the characteristics of the land features and fuel sources in terms of their ability to influence fire behavior.

Action Plan

General action includes the adherence to FireWise practices within the assessment area. The vegetation growing around structures needs to be maintained in a fashion that reduces the risk of wildland fire to nearby structures. The recommended distance for survivable space is a 30-foot area around a home or structure that is properly landscaped with fire-resistant vegetation. Methods of fuels reduction include mechanical removal or herbicide treatments (limited use). There are numerous instances where large trees are growing close to structures. A professional arborist should carefully remove these trees or remove the limbs that hang over structures or that are within 30 feet of the ground and/or structure. Additionally, existing build-up of brush and debris around many structures needs to be removed. Project work should be conducted in a manner as to minimize soil disturbance in order to prevent soil erosion. Improved FireWise practices are general but long-term in nature because they require continual maintenance of vegetation to reduce the hazards posed to structures from wildfire. Recommendations for FireWise practices are aligned with the recommendations set forth in the Oregon Forestland-Urban Interface Fire Protection Act of 1997, commonly referred to as Senate Bill 360. SB360 is explained in further detail in subsequent sections of this plan.

INTRODUCTION

Background and History

Beginning in the mid 1800's Europeans began to establish settlements in the Rocky Point area. By the 1890's, tourism appeared in the area when homesteaders like A.H. Laurentz and H.H. Lincoln sold their property to J.D. Kendall, who then established the Pelican Bay Lodge on the site that is known today as the Harriman Springs Resort. Harriman Springs Resort was closed to the public in the late 1990's. Throughout the 1900's other businesses have come and gone. Rocky Point Resort was established around 1910. The early 1900's brought increased logging, including the construction of the sawmill adjacent to Odessa Creek, which operated for several years. In the twenty years, the area has lost several public businesses that contributed to the tourist trade. Large-scale logging operations no longer occur in the extensive portions of Federally managed property, posing an additional challenge in terms of mitigating wildfire hazards resulting from the lack of fuels reduction which typically occurs in the course of harvest and clean-up activities. A unique situation exists within the Rocky Point community, in that public (Fremont-Winema National Forests) lands are leased for 20-year terms and improved upon with privately-owned cabins which are utilized heavily for recreation in the summer months. The privately owned lands within the Rocky Point community are intermixed with and surrounded by public lands, presenting an additional challenge and necessitating a landscape approach to hazardous fuels reduction which treats public and privately-owned lands alike.

History of fire occurrences

Wildfire occurrence in the Rocky Point assessment area is common and results from both natural and human causes. The hazard of wildland fire is high because of the buildup of flammable fuels in the mixed conifer forest stands and the close proximity of fuels to structures. Both general and specific actions are needed to reduce the risk of wildland fire.

Planning Area Boundaries

The unincorporated community of Rocky Point is located near Oregon State Highway 140, approximately 25 miles northwest of Klamath Falls. The wildfire hazard assessment area consists of portions of townships T.33S. R.5E., T.33S.R6E, T.34S. R.5E., T.34S. R.6E., T.35S. R.5E., T.35S. R.6E., T.36S. R.5E., T.36S. R.5E., T.36S. R.6E., T.37S. R.5E. and T.37S. R.6E., and encompasses eight privately owned subdivisions and approximately 4,500 total acres. Public lands surround and intermix with private land throughout the area. Highway 140 runs from the southeast corner through the west edge of the assessment area. Rocky Point Road, a major access road to homes in the area, adjoins Highway 140 and runs essentially north-south.

For the purposes of this plan, the Rocky Point community has been delineated to include the privately owned properties within the areas of Rocky Point, Odessa and Mountain Lakes, and extends north approximately seven miles to include private lands along West Side Road. The community boundary as defined for purposes of this plan extends north along West Side Road to the intersection of Sevenmile Road. The Wildland-Urban

Interface, as delineated in this plan, incorporates adjacent public lands managed by the Forest Service on which the aforementioned cabins are located. The eight subdivisions within the Harriman Rural Fire Protection District are old, and many of the vacant lots have remained untouched for more than twenty years, resulting in a significant build-up of hazardous fuels. Public lands border and intermix privately-owned properties throughout the assessment area, further increasing the threat to the community from wildfire.

Definitions and Descriptions

Wildland Urban Interface

The wildland-urban interface (WUI) occurs where human structures meet or intermix with wildland vegetation. The WUI zone poses tremendous risks to life, property and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face. In certain situations, specific actions such as fuels reduction around communities and structures, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface.

Title I of the Healthy Forests Restoration Act (HRFA) defines the wildland urban interface (WUI) as:

- A. An area within or adjacent to an at-risk community that is identified in a community wildfire protection plan; or
- B. In the case of any area for which a community wildfire protection plan is not in effect—
 - a. An area extending ½ mile from the boundary of an at-risk community;
 - b. An area with 1½ miles of the boundary of an at-risk community, including any land that—
 - i. Has sustained steep slopes that creates that potential for wildfire behavior endangering the at-risk community
 - ii. Has a geographic feature that aids in creating an effective fire break, such as a road or a ridge top; or
 - iii. Is in condition class 3, as documented by the Secretary in the project-specific environmental analysis.
 - c. An area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.

HFRA states that community wildfire protection plans can identify the wildland urban interface for the at-risk communities in the plan. The Rocky Point CWPP identifies the WUI boundary based on BehavePlus Version 1.0.0 (fire behavior model) outputs. Please

refer to Appendix A for a copy of the inputs used and outputs generated using the BehavePlus Version 1.0.0 model.

Communities at Risk

A community at risk is one that:

- Is an interface community as defined in the Federal Register notice of January 4, 2001, or a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) in or adjacent to federal land.
- Has present conditions that are conducive to large-scale wildland fire.
- Faces a significant threat to human life or property as a result of a wildland fire.¹

All of the communities/neighborhoods identified in the Rocky Point assessment area are considered to be at-risk communities.

Fire Risk

Fire risk can be defined as:

- The probability or chance of fire starting determined by the presence and activities of causative agents.²

Fire Hazard

Fire hazard can be defined as:

- The potential fire behavior for a fuel type, regardless of the fuel type's weather-influenced fuel moisture content [is] ...based on physical fuel characteristics, such as fuel arrangement, fuel load, condition of herbaceous vegetation, and presence of elevated fuels.³
- The amount, conditions, and structure of fuels that will burn if a fire enters an area.⁴
- A fire hazard is considered to exist where there is a danger of a fire breaking out or spreading quickly. For example, the storage of combustible fuels close to the source of a flame (eg. an electrical spark) would be discouraged as constituting a fire hazard.⁵

¹ The Healthy Forests Initiative and the Healthy Forests Restoration Act: Interim Field Guide

² www.borealforest.org/nwgloss4.htm

³ Ibid.

⁴ www.cfr.washington.edu/classes.esc.322/glossary.html

⁵ en.wikipedia.org/wiki/Fire_hazard

Fire Policies and Programs

National Fire Plan

After the unprecedented fire season of 2000, Congress approved funds for Federal and State agencies and local communities to better plan and prepare for future wildfire seasons. The resultant planning and preparation is commonly referred to as the National Fire Plan (NFP). The Goals of the NFP are listed below:

Goals

- Ensuring sufficient firefighting resources for the future;
- Rehabilitating and restoring fire-damaged ecosystems;
- Reducing fuels (combustible forest materials) in forests and rangelands at risk, especially near communities; and
- Working with local residents to reduce fire risk and improve fire protection⁶

Healthy Forest Initiative

HFI provides several categories of projects that can be categorically excluded from an Environmental Assessment or an Environmental Impact Statement within the NEPA process. Hazardous fuel reduction projects are only one of the categories subject to exclusion. To be categorically excluded under HFI, a proposed hazardous fuel reduction activity must meet the following requirements:

- Hazardous fuel reduction activities using prescribed fire are less than 4,500 acres
- Hazardous fuel reduction activities using mechanical methods are less than 1,000 acres
- Activities shall be limited to areas in the wildland urban interface or to areas in Condition Classes 2 and 3 in Fire Regime Groups I, II, or III outside of the wildland urban interface
- Projects shall be identified collaboratively using the framework identified in *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan*.⁷

Healthy Forest Restoration Act

HFRA authorizes special procedures for Environmental Assessments and Environmental Impact Statements for a variety of land management goals including authorized hazardous fuel reduction projects. The Forest Service and the BLM are not required to analyze alternatives to the proposed action, as is typically required by the National Environmental Policy Act, if:

⁶ The National Fire Plan: Managing the Impact of Wildfires on Communities and the Environment

⁷ Ibid.

The project area is inside the wildland urban interface and is within 1½ miles of the boundary of an at-risk community except if the proposed action does not implement the recommendations in the adopted community wildfire protection plan. In that case, the agencies are required to analyze the recommended actions in the plan as an alternative to the proposed action.⁸

The use of both HFI and HFRA can aid in streamlining the planning process to accomplish more work on the ground. Use of both tools requires the identification of communities at risk, a determination of the wildland urban interface, and a completed community wildfire protection plan.⁹

The Disaster Mitigation Act of 2000

In the past, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The Disaster Mitigation Act of 2000 (DMA 2000 under the Federal Emergency Management Act) is the latest legislation to improve this planning process. The new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. As such, this Act establishes a pre-disaster hazard mitigation program and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). Section 322 of the Act specifically addresses mitigation planning at the state and local levels. It identifies new requirements that allow HMGP funds to be used for planning activities, and increases the amount of HMGP funds available to fire departments and non-profits that have developed a comprehensive, enhanced mitigation plan prior to a disaster. States and communities must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. Local and tribal mitigation plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.¹⁰

DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. It encourages and rewards local and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network will better enable local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.¹¹

Oregon Forestland-Urban Interface Fire Protection Act of 1997

Also referred to as Senate Bill 360, the act responds to several escalating problems:

- Wildland fires burning homes
- Firefighters risking their lives in conflagrations
- Rising suppression costs

⁸ The National Fire Plan: Managing the Impact of Wildfires of Communities and the Environment

⁹ Ibid, page 293

¹⁰ <http://www.fema.gov/pdf/fima/howto1.pdf>

¹¹ Ibid.

- Reduced fire protection for wildland areas¹²

The Act enlists the aid of the only people who can make fuel reduction changes to private land—the landowners themselves. In general, the Act applies to lands classified as “forestland-urban interface” by a local classification committee using the following criteria to identify lands which are:

- Within an ODF protection boundary
- Urban or suburban
- 10 acres in size or smaller
- Improved with one or more structures
- Grouped with other improved properties in a density of at least four structures per 40 acres¹³

The guidelines provided in the Oregon Forestland-Urban Interface Fire Protection Act are aligned with the recommendations outlined in the Living With Fire, FireWise and FireFree educational materials.

PLANNING PROCESS

Despite increased funding for hazardous fuels reduction in and around communities, the need for funding far exceeds available resources. Thus, it is important that implementation projects target the highest priority areas.

The purpose of the risk assessment is to gauge the relative risk and hazard due to wildland fire for the lands and communities within the planning area. It is a tool to direct implementation to the highest priority areas and promote cross-boundary coordination. The risk assessment is key to developing an understanding of the risk of potential losses to life, property, and natural resources during a wildland fire. Specifically, the risk assessment:

- 1) Assesses risk, hazard, fire protection capability, structural vulnerability, and values to be protected.
- 2) Identifies the wildland urban interface (WUI) across the plan area.
- 3) Identifies and prioritizes areas in which to conduct fuels reduction treatments.

Description of Partners and Committees

Cooperators for the Rocky Point Community Wildfire Protection Plan include the Harriman Rural Fire Protection District (HRFPD), the Community Action Team (CAT) of Rocky Point, the Fremont-Winema National Forests (USFS-FWNF), the U.S. Fish and Wildlife Service (USFW), and the Oregon Department of Forestry (ODF). The community is considered a special district and is led by the Harriman Rural Fire

¹² The Oregon Forestland-Urban Interface Fire Protection Act of 1997 Brochure

¹³ Ibid.

Protection District and the Rocky Point Community Action Team (CAT) in its fuels reduction and fire safety efforts.

The HRFPD will take a lead role in educating landowners within the community with regards to FireWise practices and the creation of defensible space, in addition to directing community fuels reduction projects on private lands. Established in 1975, HRFPD is situated on the west side of Klamath Lake, twenty miles northwest of Klamath Falls, Oregon. HRFPD jurisdiction includes approximately 30 square miles for structural fire protection and over one hundred square miles of ambulance/rescue protection services. Please refer to Appendix F for a map depicting the HRFPD boundary. HRFPD is housed in a recently rebuilt station on Rocky Point Road in the center of the district. HRFPD runs one brand new structure/rescue engine and a second older engine, a newer Type III 4x4 heavy wildland/interface engine, one newer 4x4 ambulance, one 2,200 gallon water-tender and one chief's fire pick-up. HRFPD staff consists of one part time paid fire chief and twelve volunteers. Average call volume is nearing one hundred calls a year; 88% of which are highway rescue calls, 7% are wildland fire related and the remaining 5% are structural and miscellaneous calls. HRFPD operates from a small tax assessment, rescue income and local community fund raising. The fire district is experiencing an increase in response calls due to new structural and population growth as well as commuter traffic on Highway 140 between Klamath Falls and Medford, Oregon.¹⁴

The Rocky Point Community Action Team has a close working relationship with the Oregon Department of Transportation, and in a collaborative effort involving both parties, community input has been utilized in discussions pertaining to issues of signage and safety as they relate to areas in and around Rocky Point. These discussions have resulted in a number of improvements in the signs as well as the establishment of a "Safety Corridor" along Highway 140 from milepost 29 to milepost 47. The "Safety Corridor" is a designation by ODOT to alert travelers to a dangerous stretch of highway. The signs and the increased patrol by law enforcement are designed to improve observance of the 55 mph from milepost 29 to mp 47 along Hwy. 140.¹⁵ The Rocky Point Community Action Team is also involved with the creation of this plan.

Description of Community Wildfire Committee

The development of the Rocky Point CWPP was a collaborative effort that relied on the participation and input of many different organizations and individuals, and a Community Wildfire Committee was formed to assist in the creation of the plan.

The Community Wildfire Committee was formed to assist with the following:

- Provide oversight to all activities related to the development of a CWPP
- Develop and refine goals for fire protection in the planning area

¹⁴ Per discussion with Loren Head, HRFPD Fire Chief

¹⁵ Per discussion with Pat Higgins, Rocky Point Community Action Team member
4/11/2005.

- Provide recommended actions and remedies to reduce the risk of structure loss due to wildfire within the Wildland-Urban Interface

The Community Wildfire Committee met several times during the winter and spring of 2004/2005. Although the Community Wildfire Committee did not identify a specific decision-making process, almost all decisions were made by consensus to ensure that the outcomes were strongly supported. This committee was formed specifically to address the community’s needs regarding wildland fire suppression and protection in the plan area. Participants on the Community Wildfire Committee include:

Loren Head	Harriman Rural Fire Protection District
Terri Head	Rocky Point Community Action Team
Julie Black	Rocky Point Community Action Team
Pat Higgins	Rocky Point Community Action Team
Mata Rust	Rocky Point Community Action Team
Danny Benson	Oregon Department of Forestry
Carrie Ann Capp	Oregon Department of Forestry
Dennis Lee	Oregon Department of Forestry
Joy Augustine	USFS Klamath Ranger District

Collaboration and Community Outreach

The following is a table displaying Community Wildfire Committee meetings held, topics covered, and stakeholders in attendance:

Table 1: Community Wildfire Committee Meeting Summary

Meeting Date	Topics Covered	Attendees
12-18-04	Information sharing, assignment of roles and responsibilities, timeline and date of completion	HRFPD Chief, Rocky Point CAT, ODF, USFS
01-18-05 01-18-05	CAT Meeting: Continued data compilation and information sharing for CWPP	HRFPD Chief, Rocky Point CAT, ODF, USFS
03-09-05	CAT Meeting- Review of CWPP to date and update of information	HRFPD Chief, Rocky Point CAT, ODF, USFS
04-08-05	Review of plan to date with discussion of weighting assessment results to prioritize project areas	HRFPD Chief, Rocky Point CAT, ODF

Identifying Communities-at-risk

To determine communities at risk, the Community Wildfire Committee first had to define “community.” The following criteria were used to identify sub-communities (neighborhoods/subdivisions) within the plan area:

- Recognized development (e.g. platted subdivisions);
- Any large grouping of structures (e.g. private residences on West Side Road)

Applying these criteria resulted in the identification of five communities.

Communities-at-risk in Rocky Point

- Rocky Point Proper (*subdivisions due North of Highway 140*)
- North Rocky Point (*subdivisions East of Rocky Point Road, approximately 1.5 miles North from the intersection with Highway 140*)
- Mountain Lakes
- Odessa
- West Side Road (*the clusters of improved parcels along West Side Road South of Sevenmile Road*)

Privately owned cabins on leased public lands were not incorporated into the above communities at risk. However, these lands will be addressed in the fuels treatment plans produced by the Forest Service. The results of this assessment will affect public lands intermixed with and adjacent to assessed private lands with regard to WUI treatment priority and type.

COMMUNITY PROFILE

Environment and Natural Resources

The elevation of Rocky Point is 4,159 feet above mean sea level, with general elevations ranging from approximately 4,150 to 5,000 feet. The terrain is mountainous and not easily accessed due to the small number of roads, most of which are un-improved. Soil disturbance in the area is fairly minimal on private lands, however, machine piling has displaced large areas of soil on public lands; the extent of disturbance and adverse impacts to productivity has not been quantified.¹⁶ Current land uses include recreation, hunting, camping, cross-country skiing, snowmobiling, sightseeing and limited timber production. The Upper Klamath Lake is the dominant body of open water. There are no community water sources to draw from, as water is delivered to individual parcels via private wells and springs, however, there are numerous creeks and a couple of ponds within the assessment area.

The climate of the Rocky Point area is characterized by warm, dry summers with average daily high temperatures reaching 80 degrees Fahrenheit in July and August and average daily summertime lows of 45 degrees Fahrenheit. Winter months are typically cool, with average daily temperatures from November to March ranging from the high 40s to the low 10s Fahrenheit. Precipitation is typically low with an average annual precipitation of 14 inches of rain equivalent. Most precipitation arrives during the months of November to March, typically in the form of snow. Summers are dry and prone to frequent thunderstorms that may be wet or dry. These thunderstorms frequently cause multiple fire ignitions during any given storm; July, August, and September are the most active months for wildland fire occurrences.

Due to its geographical location, the Rocky Point community and surrounding areas experience dominate Westerly winds, most pronounced during the evenings of summer

¹⁶ Per discussion with George Badura, retired USFS Soil Scientist 4/26/05.

months. These thunderstorms frequently cause multiple fire ignitions during any given storm; July, August, and September are the most active months for wildland fire occurrences.

The primary vegetative type throughout the community is a mixed conifer forest with fir and cedar occurring on the north slopes. Manzanita and bitterbrush are common throughout the assessment area. Many areas are overstocked and have multiple canopy layers, posing a wildfire risk within the Rocky Point assessment area. Lightning and human-caused fires can easily occur when there is a buildup of hazardous fuels in forest communities and have occurred within the assessment area. The dominant hazardous fuels in the assessment area are the mixed conifer stands with scatterings of brush components that occur throughout the assessment area on both privately owned and adjacent public lands.

The vegetation within Rocky Point community and surrounding area has been categorized by the Forest Service as Condition Class 3. Condition classes are a function of the degree of departure from historical fire regimes resulting in alterations of key ecosystem components such as species composition, structural stage, stand age, and canopy closure. One or more of the following activities may have caused this departure: fire exclusion, timber harvesting, grazing, introduction and establishment of exotic plant species, insects and disease (introduced or native), or other past management activities.¹⁷

Population, demographics, socio-economic data

The area contains approximately 375 homes and/or structures (as of 6-1-2004), and the current population of the area is approximately 350 full time residents with a seasonal population of approximately 600 residents: The seasonal population swells in the summer when privately-owned vacation homes and private cabins on leased public lands are occupied.

Housing and development trends

The area is experiencing continued steady growth both in the sub-divisions as well as the surrounding area. Since the 1980s, the area has seen a growth rate of around four homes built per year, and this trend of increased growth is expected to increase over the next five years.¹⁸ As an unincorporated community, Rocky Point does not have a formal government entity to represent and/or address the issues faced by the community, thereby increasing the need for a cohesive plan to reduce the wildfire threat faced by its residents.

Transportation, Infrastructure, Land use

As a small, unincorporated community, Rocky Point has little infrastructure to speak of relative to larger communities. The three primary roads (Highway 140, Rocky Point Road and West Side Road) serve as the transportation conduit and evacuation route for residents and visitors. One 350 gallon-per-minute well at the Harriman Rural Fire Protection District serves as the primary water source for suppression activities within the

¹⁷ <http://www.frcc.gov/>

¹⁸ Per discussion with HRFPD Fire Chief Loren Head 5/3/05

area and is supported by a drafting site at the Harriman Springs Resort boat ramp. Domestic wells serve individual residents, and electricity is delivered via disperse, overhead transmission lines, eliminating a main transmission terminal.

ISO Fire Hazard Rating

The community of Rocky Point has an ISO rating of an 8-B. This rating is fairly high (on a scale of one to ten) and is due primarily to the remoteness (response time) of the community as a whole and a lack of fire suppression infrastructure (hydrants, water sources, paid fire department, etc.).

WILDFIRE RISK ASSESSMENT

The Rocky Point Community Risk Assessment examined all of the lands within the assessment area and evaluated four factors (risk, hazard, structural vulnerability, and protection capability) across the entire plan area using geographic information system (GIS) analysis technology. The five identified at-risk communities within the assessment area were assigned numerical scores derived from the assessment of structural vulnerability for improved lots (using the Home Risk Assessment forms) with respect to risk and hazard. The lands outside of the at-risk communities (privately owned cabins on leased Forest Service land) did not receive scores for structural vulnerability, however, these areas will be encompassed by the WUI boundary and will be addressed in the fuels reduction planning efforts of the Forest Service. In addition to analyzing the factors contributing to hazard, visual interpretations of risk were conducted to identify areas where fire ignition and structural density trends increase the danger of fire potential. These factors were mapped with GIS technology as a visual aid for identifying the areas where both human use and geographic location contribute to increased fire activity.

To address the relative risk immediately adjacent to the communities, we established a 2.73 mile buffer (using the outputs generated from the BehavePlus Version 1.0.0 fire behavior computer model) around the community boundary to create the wildland-urban interface (WUI) protection boundary. Due to the fact that a vast majority of the land that falls within the wildland-urban interface boundary is under federal jurisdiction (U.S. Forest Service and U.S. Fish and Wildlife), these WUI lands were not rated in terms of risk. Instead, these lands will be evaluated in terms of proximity to the ranked lands within the community with consideration of past, present and planned fuels treatments and assigned priorities as project areas based on proximity to assessed private lands. In addition, fuel treatments on public lands were considered in the prioritization of projects on proximal private lands.

It is important to note that throughout this document, the words “risk” and “hazard” are used in more than one context to define multiple factors which affect both fire behavior and the ability of fire professionals to safely suppress wildland fire. For further clarification, the assessment forms used for each analysis are provided as appendices to the plan.

Limitations of the Risk Assessment Data

The Rocky Point Community Risk Assessment is a depiction of what exists on the landscape at the time the assessment was conducted. Some of the data used is no longer current due to ongoing development in the area and the natural tendency of vegetation to grow and change state in terms of fuel load, continuity and composition. Some of the data collected is subjective by the very nature of the interpretation process used for data collection.

Wildfire Risk Assessment Methodology

The Rocky Point Community Risk Assessment is based on the template developed by the Oregon Department of Forestry in an attempt to achieve consistency in the CWPP planning approach on a statewide level. The assessment is intended to illustrate the relative level of risk to life, property, and natural resources within the plan area. The assessment is based on recommendations made by the National Association of State Foresters in June 2003 for “identifying and prioritizing communities at risk.” The assessment considers five categories in determining the relative severity of fire risk:

- **Risk:** what is the likelihood of a fire occurring (based on past occurrences of human and lightning caused fires)? [Data from both the Oregon Department of Forestry and the U.S. Forest Service depicting fire ignition densities is utilized.]
- **Hazard:** what are the conditions that hinder control of a wildland fire once it starts (fuels, slope, aspect, elevation and weather)? [Fuel surveys, FEMA evaluations, and Home Risk Assessments utilized to collect data.]
- **Values:** the people, property, natural resources and other resources that could suffer losses in a wildland fire event [Information collected via informal interviews with homeowners (Home Risk Assessments) and Community Wildfire Committee meetings]
- **Structural Vulnerability:** the elements that affect the level of exposure of the hazard to the structure (roof type and building materials, access to the structure, and existing defensible space or fuels reduction around the structure.) [Information collected via Home Risk Assessments]
- **Protection Capability:** the ability to mitigate losses, prepare for, respond to and suppress wildland and structural fires [HFRA Protection Boundary Map]

The Rocky Point Community Wildfire Committee began their evaluation of the wildland urban interface with the guidelines set forth by the National Fire Plan, establishing the WUI at 1½ miles around the community as delineated. After completing the risk assessment and considering potential actions to protect communities from wildland fire, the committee determined that the 1½ mile band around the communities did not align with the forest conditions, fuel accumulations, recent fire history, and the direction of prevailing wind. A BehavePlus Version 1.0.0 computer model of predicted fire behavior was run to establish a WUI that would encompass the 24-hour burn period and better serve to protect the community given the area-specific conditions (see Appendix A). The wildland urban interface boundary around the Rocky Point community was established as

a 2.73-mile buffer around the perimeter of the community boundary (see Appendix F, Rocky Point CWPP Base Map).

The mitigation actions proposed herein are based on information acquired from fuel surveys (resulting in a Vegetation Hazard layer on the GIS Maps; (Appendix F-L), Home Risk Assessments (Risk Assessment Form; Appendix C), subdivision evaluations (FEMA Wildfire Hazard Rating Form-Subdivision; Appendix B), Geographic Information System analysis mapping (Appendix F-L), and verbal communications with community residents during the course of conducting the Home Risk Assessments. The majority of information presented in this plan was gathered during the spring and summer of 2003.

Fire Risk

Risk is quantified through an examination of the density of historical fire ignitions (human and lightning caused) coupled with an examination of structural density, access and other infrastructural factors on a subdivision scale that affect the ability of firefighters to safely fight a fire. Utilizing ODF and Forest Service data, maps depicting fire starts within the area were generated and are provided with this document as Appendices F-L. Please refer to the maps for a graphical representation of ignition points within the assessment area for the last 10 years. The maps show that large numbers of fires are concentrated in and around the populated areas. In addition to analysis of ignition point fire history, the subdivision evaluations also provided information with regard to risk as it relates to infrastructure. The subdivision evaluations produced a rating of “high” for all assessed areas. As a result, this factor effectively acts as a constant across the entire area and therefore is not used in the ranking process.

Fire Hazard

Hazard equates to the conditions that may hinder control of a wildland fire: The hazard layer is a compilation of weather, topography, and fuels information.

Weather is the single most important factor in the hazard layer. This factor is based on the number of days per season that forest fuels are capable of producing a significant fire event. This score does not change across the Rocky Point CWPP area because all of south central Oregon is in Zone 3—the most hazardous rating. (Weather Zones were generated for the Oregon Forestland Urban Interface Fire Protection Act of 1997).

Topographic characteristics include slope, aspect and elevation. Steeper slopes can cause wildland fires to spread more quickly and increase the difficulty of suppression efforts. Aspect is broken into two classes corresponding roughly to the amount of insulation or sun exposure expected on the site. This information was captured and quantified using the fuel surveys (vegetation hazard maps) and Home Risk Assessment forms.

Fuels (Vegetation) The fuels layer is based on fire regime condition class. Fire regime is a general classification of the role fire would play across a landscape in the

absence of modern human intervention. Coarse scale definitions for natural (historical) fire regimes have been developed and interpreted for fire and fuels management. The five natural (historical) fire regimes are classified based on average number of years between fires (fire frequency) combined with the severity (amount of replacement) of the fire on the dominant over story vegetation.

A fire regime condition class (FRCC) is a classification of the amount of departure from the natural regime. Coarse-scale FRCC classes include three condition classes for each fire regime. The classification is based on a relative measure describing the degree of departure from the historical natural fire regime.¹⁹

The three classes are based on low (FRCC 1), moderate (FRCC 2), and high (FRCC 3) departure from the central tendency of the natural (historical) regime. The central tendency is a composite estimate of vegetation characteristics (species composition, structural stages, stand age, canopy closure, and mosaic pattern); fuel composition; fire frequency, severity, and pattern; and other associated natural disturbances. Low departure is considered to be within the natural (historical) range of variability, while moderate and high departures are outside.²⁰

A portion of the Rocky Point Community Risk Assessment presents and summarizes data for fuel and terrain conditions. This information was captured in fuels surveys and Home Risk Assessments and can be placed in context of the ignition patterns across the landscape to identify areas at greatest risk of both potential fire starts and existing conditions which are conducive to rapidly carrying a fire from the ignition point.

Fuels Data Collected

The fuels information collected through the Home Risk Assessment process can be summarized as follows (see Appendix C):

- **Slope:** Eighty percent of the assessed lots are on slopes less than 20 percent;
- **Aspect:** Eighty percent of the assessment sites had southern exposures while the remaining 20 percent were on all other exposures;
- **Elevation:** The elevations for all of the assessment sites were between 4150 and 5000 feet;
- **Vegetation Type:** Fifty percent of the assessment sites had a high vegetation hazard rating, 30 percent of the sites had a moderate vegetation hazard rating and the remaining 20 percent had a low hazard vegetation rating;
- **Fuel Type:** Seventy percent of the fuel survey points had heavy fuel loads, 20 percent had moderate fuel loads and the remaining 10 percent had light fuel loads;
- **Fuel Density:** Sixty percent of the sites had a continuous fuel bed and the remaining fuel beds were non-continuous with natural and man-made breaks throughout the area;
- **Fuel Bed Depth:** Forty percent of the sites had a fuel bed depth of greater than three feet, while the other Sixty percent had a fuel depth of one to three feet;

¹⁹ <http://www.frcc.gov>.

²⁰ Ibid.

- **Fire Condition Class:** The entire assessment area has been identified on the Klamath County Fire Regime Condition Class Map as a Condition Class 3 (Forest Service).

The risk assessment uses a point system for each category of the analysis. The categories are added together to produce a final score and scores are bracketed into four categories or ranges representing corresponding levels of risk and hazard to each property. Parcels are color coded according to these categories and are displayed graphically using GIS technology (see Appendices C, and Appendices F-L).

The vegetation hazard maps display hazard through visual analysis of weather, topography, and fuels for privately owned lands surrounding the communities at risk. As weather and fire regime/condition class are constants across the assessment area, the maps mostly display variations in topography and fuel loads. Digital orthophotos were analyzed to identify areas where topography and heavy fuel loading were greatest. The maps classify the assessment area in terms of hazard with respect to topography and fuel loading for the private unimproved lands surrounding the parcels on which Home Risk Assessments were conducted. This data assists in analyzing the fuels in proximity to assessed structures and enables resource managers to better understand the fuels conditions on a landscape scale. It should be noted that the process of identifying the hazards posed to structures from vegetative and topographic factors will be conducted through the classification and identification processes for lands subject to the Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB360). In order to prevent confusion and possible discrepancies, information regarding vegetative hazard mapping was not collected for the subdivisions at the time of this assessment but instead was generated for the larger, privately owned, unimproved parcels adjacent to the subdivisions. Upon completion of land classification through the SB360 implementation process, the vegetation hazard classification data should be appended to this plan for future GIS analysis of vegetation hazards on improved lots. Land classification under Senate Bill 360 is scheduled to commence January 2006.

Protection Capabilities

Water is drawn from domestic wells for each property in the assessment area; hydrants are non-existent within the community. The three primary roads in the area (Highway 140, Rocky Point Road, and West Side Road) are able to accommodate emergency service vehicles. Direct access to approximately forty percent of the properties is possible from these primary roads, while the remaining parcels are accessed by roads which are not improved and/or maintained and are not easily accessed by emergency service vehicles. Community members are encouraged to contact the HRFPD to ascertain whether or not individual parcels can be easily accessed by emergency response vehicles.

The Harriman Rural Fire Protection District is typically the first agency to respond to wildland fire within a ten mile radius of Rocky Point. As a small, volunteer-based entity, HRFPD faces several challenges in terms of wildland fire suppression, including a lack of

personnel (paid and volunteer firefighters), inadequate water supply, a lack of adequate maneuverability and limited access on unimproved/unmaintained roads, and a build-up of forest debris. HRFPD runs one brand new structure-rescue engine and a second older engine, a newer Type III 4x4 heavy wildland-interface engine, one newer 4x4 ambulance, one 2,200 gallon water-tender and one Chief's fire pick-up. HRFPD staff consists of one part time paid fire chief and twelve volunteers.

ODF is assigned primary private wildland fire suppression responsibilities within the assessment area, and through a mutual-aid agreement, the Fremont-Winema National Forests responds to wildfires burning on public lands within the vicinity. The resources available through the Interagency Wildland Fire Center for a high-level (Red, or worse-case scenario) dispatch include nine engines (two to five crew members each), one helicopter, one bulldozer, one 3,000 gallon water-tender and one optional air attack unit if requested. A Type III helicopter is available under contract with ODF as well. Additional wildland fire resources are available upon request and are utilized when extreme weather events are forecasted.

The base map shows the boundaries of the Harriman Rural Fire Protection District (Appendix F). The Community Wildfire Committee took into consideration that all lands are protected for wildland response, even those areas outside the boundaries of Harriman Rural Fire Protection District jurisdiction. According to the map, the fire protection district protects four of the five identified at-risk communities with the exception being the West Side Road neighborhood.

Structural Vulnerability

The analysis examines the structural vulnerability (the elements that affect ignitability) of existing structures to wildland fire in the plan area. To arrive at the quantitative and qualitative values for this layer, local fire officials developed and implemented an analysis based on their knowledge of the community and professional experience. The goals for reducing structural vulnerability to wildfire are as follows:

Goals

- Minimize structural vulnerability of all structures within the plan area.
- Make all communities and structures as defensible/survivable as possible in the event of a wildland fire.

Unlike the other four factors in the risk assessment, structural vulnerability is not based on pre-existing quantitative information. Rather, it is based on local fire professional judgment and quantified using the ODF derived Home Risk Assessment form (Appendix C). The Community Wildfire Committee assumed that all lands within the boundary of the plan were effectively covered by wildland response.

Local fire officials developed six criteria with which they evaluated each home within the community and awarded a score to each respective home. The Home Risk Assessment forms evaluated structural vulnerability based on the following factors:

1. Access infrastructure (roads, bridges, driveways).
2. Roofing material and debris accumulation (weakest point of structural ignitability).
3. Fuel arrangement and density in proximity of structures (overhanging and/or within 30 feet).
4. Topography (slope, aspect).
5. Decks/structures on stilts (unenclosed areas).
6. Other fire fighting hazard factors (power lines, dogs, propane tanks, etc.).

The result of each Home Risk Assessment was a numerical score to be ranked relative to all other scores in order to prioritize project areas for fuels reduction. The scores assigned to each home were grouped into four categories, color coded to correspond with the relative risk and hazard ratings and mapped for visual interpretation. Please refer to Appendix C for a copy of the Home Risk Assessment form used in this portion of the Rocky Point Community Risk Assessment.

Table 2: Rocky Point CWPP Risk Assessment Factors

Assessment Categories	Elements	Data Source
Risk	Ignition Density (human and lightning caused from 1995-2004).	Based on visual interpretation of FS/ODF Fire History Points
Hazard	Landscape approach to evaluate Slope, Aspect, Elevation, Weather, Structure Density, Ingress/Egress based on local fire professional experience	FEMA Subdivision Assessment Form, (Appendix B).
	Fuels survey based on interpretation of ortho-photos by local fire professionals for vegetation density, fuel type and topography	Vegetation Hazard Map Layer (Appendix F-L).
	Structural Vulnerability (Home Risk Assessments) based on the professional judgment and experience of local fire professionals	Risk Assessment Form, (Appendix C).
Values	Structural Density based on visual interpretation.	Derived from 2005 Klamath County Tax Assessor's Information
Protection Capability	Based on the boundary of the HRFPD	John Ritter, Aspen GIS

Note should be taken that the values found in this analysis are subject to change over time with subsequent changes in population and structure density, growth of ladder fuels and forested areas, and fuels treatments on both private and public lands.

The purpose of conducting the Home Risk Assessments was to analyze the plan area for structural density, building materials, proximity to fuels, presence of a survivable space (the vegetation within a 30-foot perimeter around structures) and accessibility of

structures by emergency response vehicles. Roughly 1,100 acres of improved private property were evaluated to produce hazard ratings based on the Home Risk Assessments, and a majority of structures evaluated are located within one quarter mile of publicly-owned lands (Forest Service).

Home Risk Assessment Data

The results of the Home Risk Assessments conducted on the privately owned parcels are as follows:

- **Structure Density:** The areas of highest structure density are within the Rocky Point proper community and outlying areas directly to the north.
- **Proximity to Structures:** Structures were rated with regards to hazards posed by vegetation and other flammable material within a 30-foot perimeter. Nine percent of the properties were rated at a high hazard level; 12% were rated at a moderate hazard level and 70% of the structures were rated to be at a low hazard level.
- **Predominant building Materials:** Approximately 55% of the structures were rated as having some type of fire resistance roof, while the roofs of remaining structures were deemed unsafe due to wood shakes and/or needle accumulation.
- **Survivable Space:** 76% of the structures were rated as having survivable space in tact, but had some other feature (primarily access) that increased the hazard rating.
- **Vacant/Unimproved Parcels within identified subdivisions:** Approximately 63% of the parcels within the Rocky Point community are undeveloped, and a vast majority of these undeveloped lots have no defensible space and/or fuels reduction work implemented to reduce the hazard both on these lots and the parcels adjacent to them. Approximately 83% of the total number of privately owned, improved lots within the community have existing defensible space.
Therefore approximately 80% of the parcels within the assessment area are at potentially High risk for a catastrophic fire due to unmanaged vegetation on both improved and vacant lots.
- **Roads:** The assessment area consists of three primary two-way roads (Highway 140, Rocky Point Road and West Side Road), while a majority of the roads in the area are predominately narrow with gravel or dirt surfaces, a majority of which are inaccessible to emergency response vehicles. The existing subdivisions are linked by public roads, and current development is occurring primarily on unimproved roads. With regard to private property access, 135 of the driveways within the Rocky Point community are accessed from the three paved roads within the area, namely Highway 140, Rocky Point Road and Westside Road. The remaining two-thirds of private properties in the area are accessed by unpaved, unimproved roads.
- **Response Time:** 100% of the assessment area has a response time of less than 30 minutes for a single fire engine (structural type). 50% of the assessment area has a response time of more than 30 minutes for multiple engines (structural and wildland, multi-agency response).
- **Access:** 15% of the assessment area has roads with multiple entrances and exits that would accommodate fire truck turnarounds. Roughly 33% of the parcels

within the area have limited access routes with only two ways in and out or may have moderate road grades. The remaining (approximate) 52% of the area is accessed by roads which are narrow, single lane, and/or have no turn around area.

Table 3 identifies and prioritizes the main threats and risks to structures and communities at risk in the Rocky Point Community Risk Assessment area. For each threat or risk listed, an action is recommended to address the threat or decrease the risk.

Table 3: Project Prioritization/Structural Vulnerability Threats and Actions

Community Name (<i>priority</i>)	Primary Threat/Risk	Recommended Action/Mitigation
Odessa (<i>Priority One</i>)	Density and Condition of structures/ignitability	Education an Outreach
	Vegetation: structure & composition	SB 360, Fire Free, Fire Wise compliance/education
North Rocky Point (<i>Priority Two</i>)	Ignition History of fire starts	Education and Outreach
	Structural Density	Fire Free/Fire Wise compliance/education
	Vegetation: structure & composition	SB 360, Fire Free, Fire Wise compliance/education
Mountain Lakes (<i>Priority Three</i>)	Vegetation: structure & composition (vacant lots in subdivision)	SB 360, Fire Free, Fire Wise compliance and education
	Vegetation: structure & composition (unimproved lots adjacent subdivisions)	Fire Free, Fire Wise compliance and education
Rocky Point Proper (<i>Priority Four</i>)	Vegetation: structure & composition	SB 360, Fire Free, Fire Wise compliance/education
West Side Road (<i>Priority Five</i>)	Vegetation: structure & composition	SB 360, Fire Free, Fire Wise compliance/education

Structural vulnerability is mapped according to the analysis completed by fire professionals via Home Risk Assessments. Each parcel within the community is color coded according to the results of the evaluation. Table 4 provides a breakdown of this data and color coding scheme. These codes are intended for use by fire fighters when entering a community to conduct suppression activities to evaluate the risks posed to their safety. For example, the code “May Stand Alone” is to be interpreted by a fire fighter such that the property has a defensible space zone established around the home and other structures, and access allows safe ingress and egress to minimize the threads posed to emergency response personnel. At the other end of the of the coding scheme, the code “Use Extreme Caution” would be interpreted by firefighters as meaning that the home

does not have a zone of defensible space around structures in which firefighters could safely fight fire in.

Table 4: Home Risk Assessment Form Results Summary

Color	Code	Definition
Green	May Stand Alone	Existing defensible space, non-combustible roof and/or structure, low probability of ignition and combustion.
Blue	Defend Aggressively	Limited defensible space, moderate probability of structural ignition.
Yellow	Defend Cautiously	High structural ignition potential, minimal if any defensible space, may pose threat to fire fighter safety.
Red	Use EXTREME Caution	No defensible space and/or multiple factors attributing to structural vulnerability. Extreme risk to fire fighter safety.

The following general recommendations were identified as actions which can reduce the chances of a structure igniting in the event of a wildfire;

- Replace combustible roof materials
- Keep roofs clear of flammable material
- Reduce density and continuity of vegetation within thirty feet of structures

Values

Members of the Community Wildfire Committee, Community Action Team, and local fire professionals from HRFPD, ODF and the Fremont-Winema National Forests contributed their local knowledge of the values to be protected.

Economic values

Within the greater Rocky Point area, there are forty-two vacation cabins, the Rocky Point Resort (consisting of a store, a motel and eight additional cabins, totaling 10 structures), and the community resources of Mountain Lakes Organizational Camp (six special-use permit cabins, a chapel, dining hall and two full time residences), all of which are located on National Forest lands. In addition to residences and resort facilities on public lands, the boat docking station at Rocky Point Resort is another economic value at risk. Within the community as delineated, there are approximately 375 livable structures on private land. For the purpose of this plan, all of the above mentioned resources are considered values at risk within the Rocky Point community.

Social values

The area is rich in both pre-historic and historic cultural resources. The Klamath Tribes (Klamath, Modoc, Paiute) work in cooperation with the Fremont-Winema National Forests to identify these resources on public land when planning fuels reduction projects and suppression efforts.

Ecological Values

The community is bordered to the east by the Upper Klamath National Wildlife Refuge, and the area resides within the Pacific Flyway. Numerous waterfowl and upland bird species frequent the area annually. Additionally, there are many other species of wildlife which inhabit the area, including but not limited to bald eagles, deer, elk, black bear, cougar and numerous fish species.

Cultural Resources

Cultural resources are prevalent throughout the assessment area. Appendix E provides a summary of the resources expected within the assessment area. These resources should be considered to a fuller extent in future revisions of the plan and at the project level as part of an implementation strategy.

Rocky Point CWPP Base Map

The base map for the Rocky Point CWPP shows the boundary of the plan area WUI, the five at-risk communities within the assessment area, land ownership, major roads, water bodies, HRFPD protection boundary and the location of the wildland-urban interface (WUI).

Risk Assessment Maps

The risk assessment resulted in a series of maps that display the results of the analysis in graphic form. The landscape maps graphically display assessment data and the final calculations or ranking of risk faced by each of the five identified areas within the community.

In addition, the five at-risk communities in the Rocky Point area are displayed on small-scale “community” or neighborhood/subdivision maps. These maps are intended as a tool for more specific project planning and implementation. While the risk assessment identifies risk and hazard across the planning area in order to prioritize fuel treatment projects on a landscape level, the break-out maps help identify priority areas for treatment within and around the individual at-risk neighborhoods (sub-communities).

Final Calculation

Upon completion of scoring the risk and hazard factors for the parcels within the assessment area (through use of the Home Risk Assessments), the points for each were summed to establish a ranking scheme in a relative comparison of analyses results. The order of ranking determines priority levels for fuels reduction projects amongst the different areas or neighborhoods within the community.

The final maps display, in graphic form, the scores attributed to the factors evaluated (risk, hazard, structural vulnerability, and protection capability) using the Home Risk Assessments and other data collection methods. Of the five at-risk communities assessed in the plan, Odessa emerges as the area with the highest risk and hazard and thus the highest priority for fuels reduction project consideration. This is attributed to both the highest relative ratio of improved lots evaluated and categorized under the Home Risk Assessment as “Defend Cautiously” and/or “Use Extreme Caution” and a predominate vegetation hazard rating of extreme for the fuels surrounding the subdivision. The

second highest priority for fuels treatment projects is the area of North Rocky Point. Factors that contributed to this ranking were a high density of historic fire ignition points and relatively high density structure. The third-ranked priority area for fuels reduction projects is the subdivision of Mountain Lakes, due to the hazardous accumulation and condition of fuels on both vacant, unimproved lots within the subdivision as well as hazardous fuels conditions on improved private lands bordering the entire north side of the subdivision. The subdivision identified as Rocky Point Proper was ranked fourth for consideration of fuels reduction treatments, in light of the fact that the area is almost entirely surrounded by public lands which have been treated prior to the creation of this plan, in conjunction with a relatively low ratio of improved parcels rated as “Defend Cautiously” and “Use Extreme Caution” under the Home Risk Assessment form. The area identified as West Side Road was ranked fifth priority for fuels reduction projects because of the area’s relatively low structural density, and proximity to previously treated public lands, despite the lack of structural protection. The message from these maps is to focus and prioritize the efforts to reduce hazardous fuels in and around the communities faced with the highest levels of risk and hazard on both private and public lands.

EMERGENCY MANAGEMENT

Community Preparedness

The level of preparedness at the onset of a wildfire can be a deciding factor for how well a community survives a potentially catastrophic event. This plan sets forth several goals for which the community of Rocky Point should strive to meet to increase the community’s survivability in the event of a wildfire:

Goals for Community Preparedness

- Meet or exceed Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360) and Klamath County vacant lot ordinance standards
- Increase training and emergency response capability
- Improve ingress/egress and evacuation routes
- Educate residents and visitors about appropriate wildland fire response actions
- Acquire additional water sources for fire suppression

Protection Capabilities & Infrastructure

Fire District Capabilities

The Harriman Rural Fire Protection District is typically the first agency to respond to wildland fires within a ten mile radius of Rocky Point. Refer to Appendix F for an overview of the area served by HRFPD. As a small, volunteer-based entity, HRFPD faces several challenges in terms of wildland fire suppression, namely; a lack of personnel, inadequate water supply, a lack of adequate access roads, and a build up of forest debris. HRFPD staff consists of one part time paid fire chief and twelve volunteers. Volunteer firefighters do not have federal training records, but have been

trained in basic wildland fire suppression techniques. Equipment wise, HRFPD runs one brand new structure/rescue engine and a second older engine, a newer Type III, 4x4, heavy wildland/interface engine, one newer 4x4 ambulance, one 2,200 gallon water tender and one chief's fire pick-up. The HRFPD operates wide-band radios which are programmed to communicate with the Oregon Department of Forestry and other rural fire districts. The Forest Service has recently switched to single-band radios and ODF is scheduled to make the transition from wide-band to narrow-band radios in 2006. This switch could present possible future challenges with regard to interoperability communications and should be addressed prior to the fire season of 2006. One 350 gallon-per-minute well located at the fire station, and a drafting site at the resort boat ramp are the only local water sources HRFPD can draw from to fight wildland fire within the community; domestic wells supply water to private residences in the assessment area.

Inventory of fire protection resources

In addition to the resources of the HRFPD, fire protection resources are also available from the Forest Service and the Oregon Department of Forestry. Through a mutual aid agreement, ODF is assigned primary private wildland fire suppression responsibilities within the assessment area, and the Fremont-Winema National Forests respond to wildfires burning on public lands within the vicinity. The resources available through the Interagency Wildland Fire Center for a high-level (Red; worse-case scenario) dispatch include nine engines (two to five crew members each), one helicopter, one bulldozer, one 3,000 gallon water-tender and one optional air attack unit. A Type III helicopter is available under contract with ODF as well. Additional wildland fire resources are available upon request and are utilized when extreme weather events are forecasted.

Wildland fire suppression procedures

Wildland fire suppression procedures are guided by ODF and Forest Service protocol for dispatching wildland fire suppression resources through pre-identified geographic blocks. Resource dispatch plans are derived based on daily fire danger levels and the level of response increases with a corresponding increase in fire danger. The inventory of available fire protection resources and capabilities listed above are generated using extreme fire danger levels; actual resource deployment is determined by the level of fire danger.

Training resources and needs

The chief of Harriman Rural Fire Protection District has identified the need for additional training wildland fire for all HRFPD volunteer staff.

Mutual aid agreements

A 12 hour, non-reimbursement, mutual-aid agreement exists between the federal, state and rural fire protection district with regards to wildland fire suppression in the Rocky Point community and surrounding area.

Evacuation, Telephone trees, emergency contacts, community information database

Currently, the community of Rocky Point does not have an evacuation plan, telephone tree with emergency contacts, or a community information database.

Recommended Actions

The following recommendations were identified as actions which can enhance the level of wildland fire protection for the Rocky Point greater community. The action items below are recommendations for the community to implement as funding and resources allow:

- Assemble a community telephone tree with a list of emergency contacts
- Establish and practice a community evacuation plan
- Create a community information database to organize and disseminate information pertaining to wildfire, defensible space, education opportunities, etc.
- Identify and address interoperability communication barriers with regard to wide- and narrow-band radios

In addition to the above recommendations, HRFPD Fire Chief Loren Head has expressed the need for the additional action items as means of addressing the issues and challenges faced by the Rocky Point community in terms of protection from wildfire:

- Increased firefighting staff
- Enhanced training for firefighters
- Adding suppression water storage tanks, and
- Replacing and/or upgrading fire district equipment.

MITIGATION ACTION PLAN

Purpose

The purpose of the action plan is to guide implementation based on the results of the risk assessment and planning process. Upon completion of scoring the risk and hazard factors for the parcels within the assessment area (using the Home Risk Assessment form), the points awarded to each parcel were summed to establish a ranking scheme. The order of ranking determines priority levels for fuels reduction projects amongst the different areas or neighborhoods within the community.

The proposed projects and their priority are based on information obtained from the fuel surveys, Home Risk Assessments, FEMA evaluations, CWPP meetings, GIS analysis and verbal communications with landowners who were present at the time of the Home Risk Assessments. The following specific action items are proposed to reduce the hazard of wildfire in the Rocky Point assessment area:

- Reduce the buildup of hazardous fuels within the Rocky Point CWPP assessment area.
- Develop an ongoing education and outreach program throughout the assessment area to encourage FireWise practices.

Current projects and policies

As an unincorporated community, Rocky Point does not have ordinances which apply to private lands. Currently, the Rocky Point community does not have an evacuation plan in

place, nor is there a community outreach program aimed at raising landowner awareness and encouraging personal responsibility for fuels reduction on private property.

Results of the Home Risk Assessments were reviewed in 2004 and eligible residents were offered incentives to clear the areas around their homes to standards recommended by ODF or to have ODF crews conduct fuels reduction work for them. Fuels reduction activities were completed on private property by ODF as funding would allow throughout the 2003-2004 funding cycle.

Community strategy for risk reduction

Informal interviews were conducted with landowners who were present when ODF staff conducted the Home Risk Assessments to analyze hazard ratings for improved (private) properties. The interviews provided community input and guidance for project implementation. The following is a list of actions that the community felt should take place to reduce fuel hazards in and around the Rocky Point community:

- Reduce the build-up of fuels within the sub-division areas;
- Reduce fuel loading on private lands adjacent public lands;
- Reduce fuel loading on public lands adjacent private lands;
- Increase the knowledge and understanding of residents with regards to proper FireWise activities such as landscaping, use of fire resistant building materials, safe access roads, and emergency evacuation procedures;
- Increase fuel breaks established by Forest Service by reducing fuel loading on private lands that are adjacent to Federal lands;
- Reduce fuel loading on vacant/absentee-owner lots

Fuels Reduction

Community partners

Collaboration amongst stakeholders is paramount to achieving the goals set forth by this plan. In working towards that end, the Harriman Rural Fire Protection District, USFS Fremont-Winema National Forests and ODF are continuing to work together to reduce the build-up of fuels in and around the community, and to educate members of the community as to what role they can play in reducing the risk wildfire poses to the community as a whole.

Current Activities

ODF and the USFS Fremont-Winema National Forests are working together within the Rocky Point assessment area to reduce fuels in the wildland-urban interface. ODF has taken an active roll with private land, and the Forest Service is responsible for work on public lands. Prior to the creation of this Community Wildfire Protection Plan, landowners were presented with an opportunity to receive consultation and technical assistance from ODF with regard to fuels reduction work on private land. Consultations included recommendations for which fuels should be removed, spacing and recommended clearances for fuel breaks. The Forest Service is creating firebreaks on public lands adjacent to the assessment area through a combination of prescribed burns, thinning, hand piling and pile burning.

Recommended Actions

It is strongly recommended that the Harriman Rural Fire Protection District embark on a community outreach and education campaign to raise community awareness and promote proactive behavior on behalf of landowners to reduce the risk faced by the community from wildland fire.

Fuels Reduction Parameters

Fuels Reduction and Firebreaks

One of the objectives of the project is to conduct prescribed fires on National Forest lands and thin forest stands and brush on private lands to reduce the build-up of hazardous fuels. Through collaboration with landowners and state and federal agencies, a landscape approach to fuels reduction can be achieved on adjacent public and private lands, reducing the threat of wildland fire to the Greater Rocky Point community.

Type of Fuels Treatment

Prescribed fire, thinning, piling and burning on federal land and thinning, hand piling and burning on private land are proposed to reduce the amount of flammable vegetation within and around the community on a landscape scale. Treatments could be implemented in the spring, summer and fall, weather permitting. Firebreaks should be approximately 100 feet wide but may increase depending on slope, topography and the prevailing wind. The preferred method of cleared material disposal is mechanical chipping. Burning the material is less desirable because of liability and smoke management issues and because fire season is in effect during part of the project period.

Locations of Firebreaks and Fuel Treatments

The priority areas for fuel treatments are within 30-200 feet of structures depending on slope and topography. The area may be extended beyond the recommended distance by the landowner within their property boundary should conditions warrant. The Forest Service is creating firebreaks on public lands adjacent to the assessment area through a combination of prescribed burns, thinning, hand piling and burning. The comprehensive area assessment resulted in the risk and hazard maps provided as Appendices F-L to this plan. The maps serve as graphical representation of the ranking process used to prioritize and identify project areas for fuels treatments in and around the community.

Project Timing

Due to inclement weather conditions in the assessment area, on-going fuels reduction work could begin in early spring and continue until late fall or as funding is available. Fuel surveys and Home Risk Assessments have been completed for the Rocky Point community and fuels reduction work would require a scheduling process with work being done on a first come, first served basis.

Education and Community Outreach

Education and outreach are fundamental goals for the Rocky Point CWPP. The two main themes of education and outreach are to create an understanding of living in a fire-prone environment and increasing personal responsibility when it relates to defensible space. Education efforts are intended to help homeowners and communities understand their responsibility to take action and implement protective measures to reduce the threat of wildfire to their lands and structures.

Education around fire and life safety must be approached as an ongoing activity, due to the rapid influx of new and seasonal residents and ongoing maintenance needed to manage vegetation in a fire-safe manner. Many new residents may be unfamiliar with wildland fire and have limited experience with issues like defensible space. In addition to having easy access to resources to help them take action, residents and visitors alike need to see clear examples of what fire resilient forests and communities look like.²²

The population of the Rocky Point community fluctuates seasonally, due in large part to the privately owned cabins located on leased public lands. This seasonal fluctuation in the resident population presents an additional challenge in raising community awareness of fire safety in the wildland-urban interface.

Purpose of Public Education and Outreach

The purpose of the community-wide education program is to:

- Educate the public of the dangers of wildfire in the area;
- Urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence and throughout their ownership;
- Increase awareness of the natural role of low-intensity fire in woodland or grassland ecosystems and the benefits of prescribed burns and/or occasionally allowing woodlands or grasslands to burn.²³

The public education and outreach program could be co-sponsored by the US Forest Service, US Fish and Wildlife and ODF through a partnership agreement.

Education and Outreach Goals

- Increase residents' understanding of living in a fire prone environment and encourage the acceptance of personal responsibility for taking preventative actions to reduce the risks and hazards associated with wildland fire.
- Develop an overall education campaign with one clear, concise message. Ensure that all education and outreach efforts convey a consistent message to the public.

²²Ibid.

²³http://www.sistersfire.com/Mission_files/Wildfire/Sisters%20Plan%20&%20Chapters/SistersPublicDraft.doc

- Target the education campaign at children, residents, and visitors in a wide variety of settings including:
 - FireFree debris drop off days
 - Newsletters, Newspaper articles, Public Service announcements
 - Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360) mailings and outreach meetings
 - Fire Station tours and other community events
 - Home Risk Assessments and door-to-door contacts
 - Post Fire Danger Ratings in local newspapers and bulletin boards (such as at Ranger Station, Harriman Rural Fire Protection District)
 - Utilize any and every opportunity, such as a fire, to educate the public about fire safety
- Increase residents' compliance in meeting the standards set by the Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360), FireWise and FireFree standards.
 - Train local residents and volunteer firefighters as SB 360 Accredited Assessors
 - Provide incentives for the implementation of SB 360 standards
- Coordinate education activities with ongoing fuel reduction projects to achieve maximum effectiveness.
 - Develop education materials that explain the purpose and methods of the fuel reduction project to the public
 - Have education available to talk to the public on projects that are likely to attract Rocky Point area visitors and recreation enthusiasts
 - Identify neighborhood champions in key communities that serve as examples of defensible space for their neighbors
 - Utilize media coverage of community events and progress conveying efforts and successes
- Utilize both active and passive forms of outreach including hands-on, face-to-face, as well as mailings, fliers, web sites, community meetings, etc.
- Distribute the Defensible Space Checklist at appropriate opportunities (see Appendix D)²⁴

²⁴http://www.sistersfire.com/Mission_files/Wildfire/Sisters%20Plan%20&%20Chapters/SistersPublicDraft.doc

Recommended Actions

Continued public education efforts aimed at encouraging the implementation of FireWise practices on private land are recommended. As lead entity within the Rocky Point community and assessment area, it is recommended that HRFPD take a leading role in future outreach efforts.

It is highly recommended that the Rocky Point Community Action Team host several community meetings to introduce the idea of a community fire plan to the local public and to solicit their feedback. Fostering public understanding and support for community fuels reduction projects is essential to program success. Below is a brief summary of the goals and objectives to be achieved by holding such public meetings:

Goals

- Increase community support and involvement in fuels treatment activities in and around the Rocky Point community

Objectives

- Inform the community about the purpose of the Community Wildfire Protection Plan
- Identify the community values that residents most want protected from wildland fire
- Identify local residents' most pressing concerns about wildland fire
- Identify potential emergency response improvements
- Invite local leaders to participate in the planning process

Outreach Occurrence

An annual "FireWise Clean-up Day" is one tool that is recommended to encourage residents to create defensible space around their residence. In conjunction with the "FireWise Clean-up Day", specific demonstration projects may be designed and utilized to educate residents about longer-term investments they could make to increase fire safety. The clean-up day would occur in conjunction with public demonstrations, education programs, and speakers on wildfire and FireWise practices.

Outreach Timing

The annual "FireWise Clean-up Day", education program, and public demonstrations are most effective in the spring to remind people to prepare their properties for the coming fire season.

Outreach Necessity

Citizen involvement with wildfire mitigation in and around communities is a necessary element for success. Public education and outreach is an effective means of engaging the public in the process of reducing risks to a community, can help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Such education and outreach has been

shown to motivate landowners to take measures around their individual property, thereby contributing to the reduction of wildfire hazards in the community as a whole.

Recommended Actions Summary

The subsections provided below summarize the recommended actions identified throughout the plan for each category.

Protection Capability Recommendations

- Enhance access to privately owned parcels on unimproved roads.
- Increase HRFPD staff (both volunteer and paid) during fire season and during project implementation periods.
- Increase water supply (dry hydrants, holding ponds on private lands).
- Improve and maintain roads for emergency service vehicle accessibility

Fuels Reduction Recommendations

- Reduce the fuel load (continuity, composition, density) on private lots (vacant and improved) and adjacent/intermixed public land.
- Decrease the structural vulnerability of homes by encouraging the replacement of wood shakes with non-combustible materials when a homeowner decides to replace a roof, in addition to promoting the maintenance of a roof kept clear of accumulations of flammable materials.
- Increase the amount of defensible space around homes and other structures through education and outreach, and possible incentive programs.
- Develop a long-term strategy for sustaining fuels reduction efforts identified in the CWPP

Education and Outreach Recommendations

- Create an action plan and timeline for the education and outreach campaign.
- Create education and outreach campaign targeted specifically at absentee owners to encourage responsibility for fuels management on vacant and seasonally used private parcels.

Collaboration Recommendations

- Work collaboratively with the Klamath County Emergency Manager to create an evacuation plan for the greater Rocky Point Community
- Work collaboratively with the Forest Service to locate areas of historical significance and/or presence of pre-historic cultural resources for fuels reduction project delineation to avoid disturbance of these resources.

Community Recommendations

- Reduce the build-up of fuels within the sub-division areas;
- Reduce fuel loading on private lands adjacent public lands;
- Reduce fuel loading on public lands adjacent private lands;

- Increase the knowledge and understanding of residents with regards to proper FireWise activities such as landscaping, use of fire resistant building materials, safe access roads, and emergency evacuation procedures;
- Increase fuel breaks established by Forest Service by reducing fuel loading on private lands that are adjacent to Federal lands;
- Reduce fuel loading on vacant/absentee-owner lots

Biomass Utilization

- Use biomass utilization as an incentive to increase the amount of hazardous fuels reduction completed by offsetting the costs of treatments.
- Support markets for small diameter timber and biomass products.
- Provide economic incentives for property owners (public and private) to remove hazardous fuels.

MONITORING AND EVALUATION

Prioritization Process of Monitoring

The following list identifies the areas for which activities should be monitored and subsequently evaluated to assure that the plan is implemented to the fullest and most effective extent possible to protect the Rocky Point Community from wildland fire.

Document all accomplishments including:

- Fuel Reduction Acres (private and public land)
- Private Parcel Improvements (addition of structures on private land)
- Road Improvements
- Number of people who attend trainings (volunteer and paid firefighters, SB360 Accredited Assessors)
- Number of people taking advantage of free dump days

In addition to the priorities for monitoring listed above, requests for proposals (state and federal grants) often stipulate that specific criteria be monitored and evaluated as a condition of monies being awarded. If different from the items listed above, these criteria will also need to be addressed at the time of application.

Implementation

Building a collaborative and cooperative environment between community-based organizations, fire districts, local and state government and the public land management agencies has been the first step in identifying and prioritizing measures to reduce the risk of wildland fire. Maintaining this cooperation with the public is a long-term effort that requires commitment of all partners involved. As lead entity in the community, HRFPD is best suited to head up all monitoring and evaluation efforts.

What are the benefits of monitoring?

Monitoring is a critical component of all natural resource management programs; it provides information on whether a program is meeting its goals and objectives. In addition to program tracking for community purposes, often times both federal and state contracts require a monitoring component.

Adaptive management is a process of learning from our management actions. As applied to the Rocky Point CWPP, it involves implementing an approach to current projects, monitoring and analyzing the effects of that approach, and then incorporating these findings into the next round of projects.

The purpose of this monitoring strategy is to track implementation of activities and evaluate how well the goals of the Rocky Point CWPP are being met over time. The data gathered will assist in the identification of trends within the assessment area and provide the public with a measure of accountability for the community’s progress in accomplishing the stated goals and objectives.

Goals

- Ensure that the Rocky Point CWPP is implemented and maintained through continued coordination with partners in the planning area.
- Review and update the Rocky Point CWPP annually
- Develop an annual action plan that lists priorities
- Establish an ongoing group to guide the implementation, coordination, and monitoring of the Rocky Point CWPP. Membership of this group should include the Fire Chief (or representative) of HRFPD, members of the Rocky Point CAT, and community members
- Convene and produce an annual update within one year of its completion.

Table 5: Implementation, Monitoring and Evaluation

Objective	Monitoring Tasks	Timeline
Risk Assessment	Continue to use reliable and usable data that is compatible among the various partner agencies.	Annual
	Update risk assessment with new data or changing conditions.	Annual
	Continue to reflect community input from meetings in risk assessment.	Annual
Fuels Reduction	Track the number of acres changed from Fire Regime/Condition Class (FR/CC) from 2 or 3 to 1.	Annual
	Track the total acres treated through fuel reduction measures.	Annual
	Track grants and utilize risk assessment data in new applications.	Annual
	Document number of residents that meet the requirements of Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360).	Every 3 years

Fuels Reduction (continued)	Monitor number of evacuation routes and roads treated for fire protection on county, private, state and federal roads.	Annual
	Track education programs and document how well they integrate fuels objectives.	Annual
	Evaluate opportunities for biomass marketing and utilization.	Annual
Emergency Management	Track education efforts around emergency management	Annual
	Track progress on water source improvements	Annual
	Track progress on evacuation route improvements	Annual
	Track progress on access/egress improvements	Annual

As the outcome of this plan is intended to benefit the residents and valued resources of the Rocky Point Community, members of the HRFPD, CAT and the Rocky Point community itself are best suited to put into practice the implementation strategy presented above.

Acknowledgements

The Rocky Point Community Wildfire Protection Plan could not have been completed without the invaluable information and insight provided by many local professionals. The following are acknowledged and appreciated as having contributed to the completion of this plan: Loren and Terry Head, Pat Higgins, Julie Black, Mata Rust, Joy Augustine, Kent Russell, Doug Miller, Danny Benson, Dennis Lee, Ann Walker, John Ritter, Mike Wagner, Laurie Campbell, William E. Ray, and Marcus Kauffman.

Appendices

- Appendix A: BehavePlus Version 1.0.0 Fire Behavior Model Outputs.
- Appendix B: FEMA Subdivision Hazard Rating Form
- Appendix C: Home Risk Assessment Form
- Appendix D: Defensible Space Checklist
- Appendix E: Cultural Resources Write-up
- Appendix F: Rocky Point CWPP Base Map
- Appendix G: Rocky Point CWPP North Map
- Appendix H: Rocky Point CWPP South Map
- Appendix I: Rocky Point CWPP North Rocky Point Map
- Appendix J: Rocky Point CWPP Rocky Point Proper Map
- Appendix K: Rocky Point CWPP Mountain Lakes Map
- Appendix G: Rocky Point CWPP Odessa Map

ROCKY POINT COMMUNITY WILDFIRE PROTECTION PLAN

Date: _____

Danny Benson, Acting District Forester
Oregon Department of Forestry, Klamath District

Date: _____

Bill Brown, Board of Commissioners
Klamath County

Date: _____

Loren Head, Fire Chief
Harriman Rural Fire Protection District

ROCKY POINT COMMUNITY WILDFIRE PROTECTION PLAN

Date: _____

Danny Benson, Acting District Forester
Oregon Department of Forestry, Klamath District

Date: _____

Bill Brown, Board of Commissioners
Klamath County

Date: _____

Loren Head, Fire Chief
Harriman Rural Fire Protection District

MODULES: Surface

Description

Rocky Point

FUEL/VEGETATION

Fuel Model

10

FUEL MOISTURE

1-h Moisture

%

4

10-h Moisture

%

8

100-h Moisture

%

10

Live Herbaceous Moisture

%

Live Woody Moisture

%

30

WEATHER

Midflame Wind Speed

mi/h

3

Direction of Wind Vector (from upslope)

deg

270

TERRAIN

Slope Steepness

%

0

OUTPUT VARIABLES

Rate of Spread (maximum) (ch/h)

Heat per Unit Area (Btu/ft²)

Fireline Intensity (Btu/ft/s)

Flame Length (ft)

Direction of Maximum Spread (from upslope) (deg)

Maximum Wind Exceeded?

(continued on next page)



Thu, Feb 03, 2005 at 13:01:50

Rocky Point

Rate of Spread (maximum)	9.1 ch/h
Heat per Unit Area	1527 Btu/ft ²
Fireline Intensity	255 Btu/ft/s
Flame Length	5.8 ft
Direction of Maximum Spread (from upslope)	270 deg
Maximum Wind Exceeded?	No

20 FT WIND 15 MPH

24 HR PERIOD = 218.4 CHAINS = 14,114.4 FT = 2.73 MI





STEWARDSHIP IN FORESTRY

Wildfire Hazard Rating Form Subdivision

Name of Subdivision: _____

Date: _____

County: _____

Size (acres): _____

of Lots: _____

Rating: _____

Comments: _____

A. Subdivision Design

Points

1. Primary Roads

Two or more primary roads 1 _____
 One Road 3 _____
 One way in, one way out 5 _____

2. Width of Primary Road

20 Feet or more 1 _____
 20 Feet or less 3 _____

3. Accessibility

Road Grade 5% or less 1 _____
 Road Grade 5% or more 3 _____

4. Secondary Roads

Loop roads, cul-de-sacs with outside turning radius of 45' or greater 1 _____
 Cul-de-sac turnaround radius is less than 45 feet 2 _____
 Dead-end roads 200 feet or less in length 3 _____
 Dead end roads greater than 200 feet in length 5 _____

5. Average lot size

10 Acres or larger 1 _____
 Larger than 1 acre, but less than 10 acre 3 _____
 1 acre or less 5 _____

6. Street sign

Present 1 _____
 Partially 3 _____
 Not present 5 _____

B. VEGETATION

1. Fuel Types

Light 1 _____
 Medium 5 _____
 Heavy 10 _____

2. Defensible Space

70% or more of site 1 _____
 30% or more, but less than 70% 3 _____
 Less than 30% of site 5 _____

C. TOPOGRAPHY

1. Predominant Slope

8% or less 1 _____
 More than 8% but less than 20% 4 _____
 20% or more, but less than 30% 7 _____
 30% or more 10 _____

Points

D. ROOFING MATERIAL

Class A Rated 1 _____
 Class B Rated 3 _____
 Class C Rated 5 _____
 Non-Rated 10 _____

E. FIRE PROTECTION –WATER SOURCE

500 GPM Hydrant within 1000' 1 _____
 Hydrant farther than a 1000' or draft site 2 _____
 Water source within 20 min or less round trip 5 _____
 Water source father than 20 min and less than 45 min. Round trip 7 _____
 Water source farther than 45 min 10 _____

F. EXISTING BUILDING

CONSTRUCTION MATERIALS

Noncombustible siding / deck 1 _____
 Noncombustible siding & combustible deck 5 _____
 Combustible siding & Deck 10 _____

G. Utilities

All underground utilities 1 _____
 1 underground, 1 above ground 3 _____
 All above ground 5 _____

TOTAL FOR SUBDIVISION

RATING SCALE:

Moderate Hazard 40-59
 High Hazard 60-74
 Extreme Hazard 75+

Rated by: _____

Date: _____

Note: This form is intended to give you information about improving the survivability of your subdivision from wildfire. However, survivability cannot be guaranteed.



"STEWARDSHIP IN FORESTRY"

Oregon Department of Forestry
 Klamath – Lake District
 883-5681 947-3311

Appendix C

Physical Address: _____ Area: _____

City, State, Zip: _____

Latitude: _____ Longitude: _____ MapTax Lot #: _____

Township: _____ Range: _____ Section: _____ Subsection: _____

Occupant Name: _____ RENTER / OWNER (circle one)

Telephone (Home): _____ (Work): _____ (Other): _____

Number of Occupants: _____ Specials Needs Occupants? YES / NO: _____

Owner Name: (if different than occupant): _____ Water Source: _____

Mailing Address of the Owner: _____

City, State, Zip: _____

ACCESS ISSUES: _____

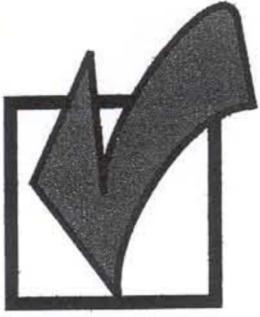
Type of Structure: Wood Home-Other Home – Mobile – Camp Trailer – Other _____

RISK ASSESSMENT		
Category	Description	Points
ACCESS	Driveway too steep or narrow to allow apparatus to back in. Down, dead fuels line the driveway. Bridges unable to withstand the load of fire apparatus. If the answer to any of the above is <u>Yes</u> , STOP HERE and place this structure in the "EXTREME" category. Describe above! 8 points	
DRIVEWAY	Dead End (no adequate turnaround) 1 Point	
ROOF	Composition = 1 point; Composition with needles = 2 Wood Shakes = 3 Points; Metal, Concrete or Ceramic Tile = 0 Points	
TREES	Overhanging structure 1 Point	
BRUSH/TREES SLASH	<u>NOT</u> thinned in area within 30 feet of structure light to moderate = 1 Point High accumulation = 2 Points	
SLOPE	20% - 30% = 1 Point 30% - 40% = 2 Points 40% or Greater = 3 Points ASPECT: north east south west	
DECK / STILT	Not enclosed underneath (to ground): 1 Point	
OTHERS	Power lines, propane tank, dogs, heating oil tank, or _____ 1 point	

Total Score _____

0-2 Points May Stand Alone (green)	3-5 Points Defend Aggressively (blue)	6-7 Points Defend Cautiously (yellow)	8+ Points Use EXTREME Caution (red)
--	---	---	---

Prepared By: _____ Date: _____



Evaluation Form

Use this checklist to evaluate what you may need to do to comply with the Oregon Forestland-Urban Interface Fire Protection Act's standards.



Within 30-50 feet of the house, evaluate what you may need to do to create a primary fuel break:

- Is the area substantially composed of nonflammable ground cover? If not, tall grass will need to be cut, and needles and leaves raked and removed.
- Are trees and shrubs green and healthy? If not, remove dead branches, and dead or dying trees and shrubs.
- Are the lowest branches of trees directly above shrubs or tall, dry grass? If so, these lower branches must be pruned, or the vegetation beneath them trimmed or removed.
- Are trees and shrubs growing in large, continuous thickets? If so, consider thinning some of them; it is recommended that you consult a forester before cutting trees.
- Is your roof covered with flammable material, such as cedar shakes? If so, a secondary fuel break needs to extend beyond the primary fuel break, to a distance of 50-100'.

Other considerations:

- Is your driveway longer than 150 feet? If so, brush needs to be cleared 10 feet from both sides of the centerline, and overhead branches must be removed to 13' 6".
- Are any tree branches within 10 feet of a chimney that vents a wood-burning fireplace or stove? If so, the branches will have to be removed.
- Do any dead branches hang over the roof? If so, the dead branches will have to be removed.
- Are lumber piles or firewood piles stored under wooden decks or stairways? If so, the firewood and lumber will have to be removed.
- Is there an accumulation of tree needles, leaves and other fine, woody debris under wooden decks or stairways? If so, this debris will have to be raked and removed.
- Is a pile of firewood next to the house? If so, by the time fire season starts, the firewood pile will need to be fully enclosed, or moved at least 20 feet from the house.
- Are there vents in attic, soffits and foundation? Are there openings to the undersides of wooden decks and stairways? If so, these openings need to be covered with 1/4" metal screen, or other nonflammable material.
- Are there spark arresters in the chimneys and vents of all wood-burning devices, such as fireplaces, wood stoves, barbecues and incinerators? Is there a safe disposal site for ashes and charcoal? If not, screens must be installed and a disposal site created.
- Do the gutters contain dry leaves, needles and other fine woody debris? If so, these need to be cleaned, and fitted with screens or covers to keep debris out.

ODF ROCKY POINT COMMUNITY FUELS PLAN HERITAGE RESOURCE SPECIALIST REPORT

6-21-05

1.5 Management Direction and Federal Laws

The Forest Service will ensure that heritage resource sites are addressed in a manner that assures compliance with *Section 106 of the National Historic Preservation Act (NHPA) of 1966*, as amended, and that consultation with the Oregon State Historic Preservation Office (SHPO) results in concurrence with the Oregon Department of Forestry Rocky Point Community Fire Plan Process. In keeping with the 1992 amendments to NHPA, the Forest Service will consult with the Klamath Tribes to identify traditional cultural values, Tribal use areas, plant gathering areas, spiritual places, and religious sites. The Forest Service will ensure that Tribal values are considered and traditional use areas are identified and considered.

Heritage Resources

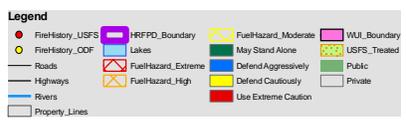
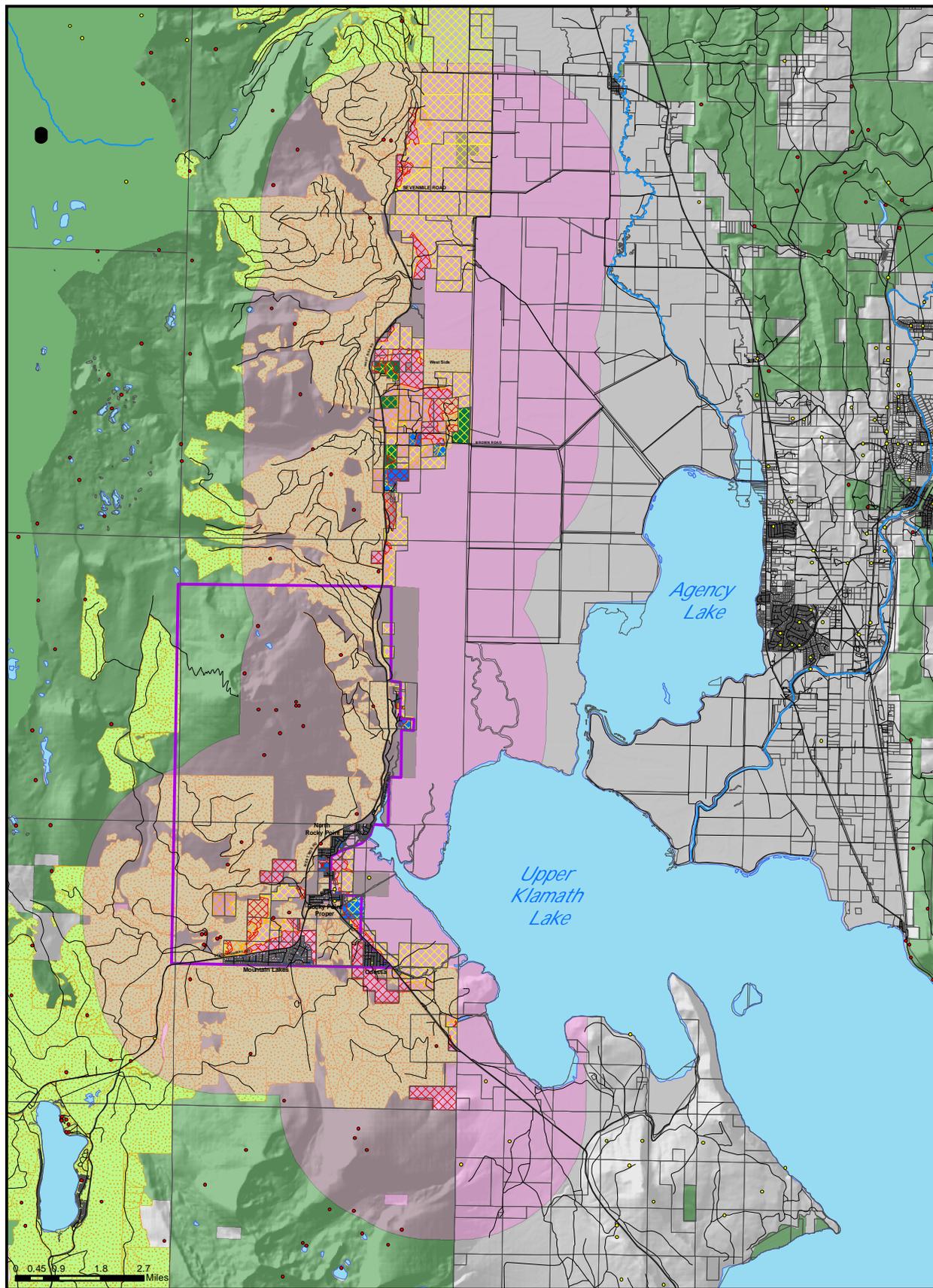
Current Condition

Cultural Resource inventories were completed in the 1989, 1991, 1992, 1995, 1997, 2002 and 2003. A total of 2,450 acres have been adequately surveyed, representing 100 percent of the Rocky Point Community Fuels Reduction Project area on National Forest System land ownership (**This excludes private lands**). Surveys were conducted on National Forest System lands at the intensive (100 percent) level, consistent with SHPO standards for 100 percent coverage, for all potential project impact areas. A total of 72 archaeological sites are located in or within ½ mile of the Rocky Point Community Fuels Reduction Project area on National Forest System lands. Recorded prehistoric heritage resource sites include winter village, lithic scatter, rock feature-vision quests, cambium peeled trees and a cemetery. Recorded historic heritage resource sites include can scatters, railroad logging and administrative sites. SHPO concurred that this project would have no effect on significant cultural resources on July 25, 2005.

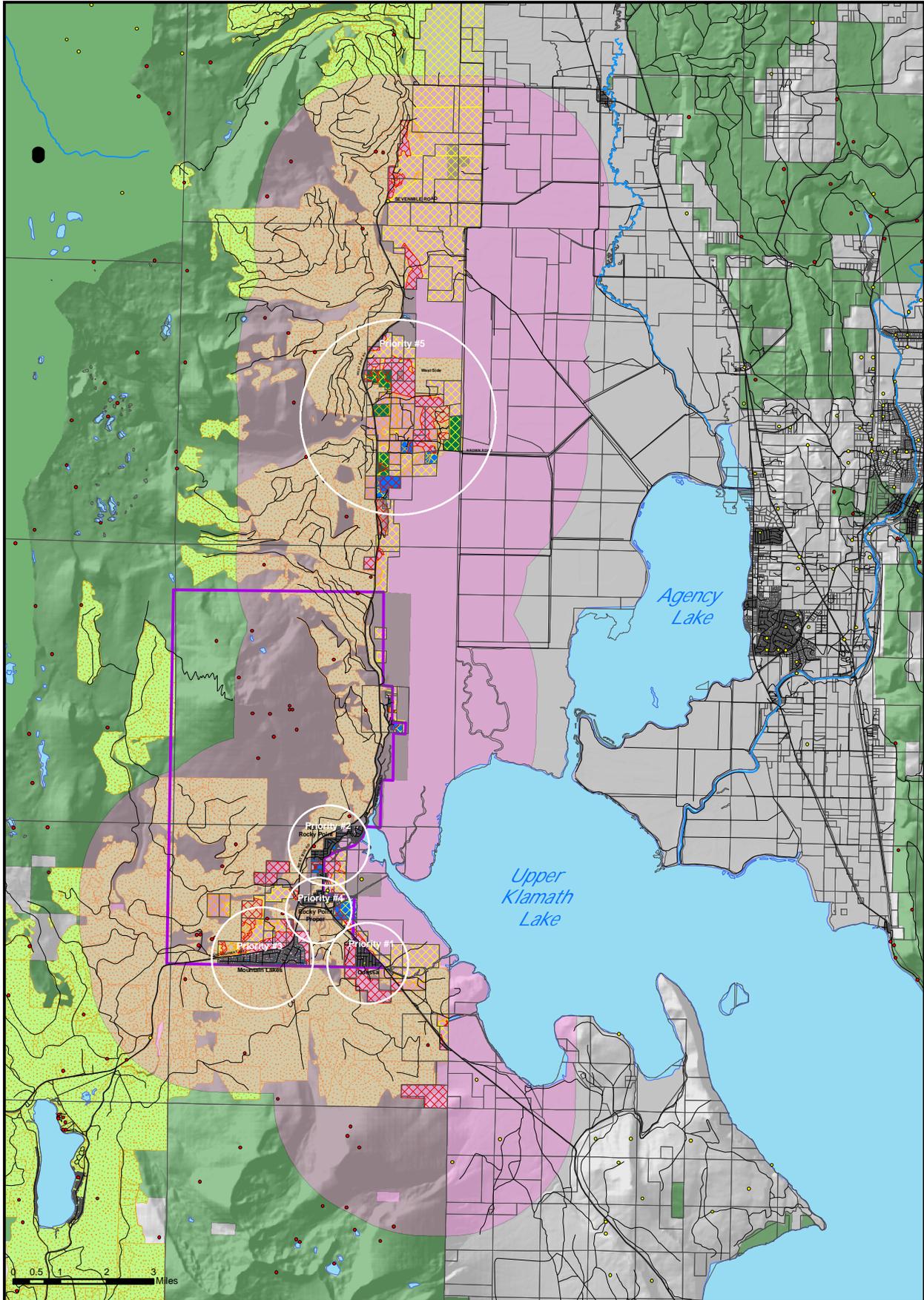
Effects to Heritage Resources

Heritage resource sites, both prehistoric and historic activities in the past, are protected from impacts relating to all ground disturbing activities by project design, avoidance, and protection in place. Since, the surveys were conducted at an intensive level, it is not considered likely that undiscovered sites would be found within proposed impact areas; however, in the event of an unanticipated discovery during ground disturbing activities, according to federal and state laws and regulations, which provides for the protection of newly discovered sites, would be enforced.

Rocky Point CWPP Map



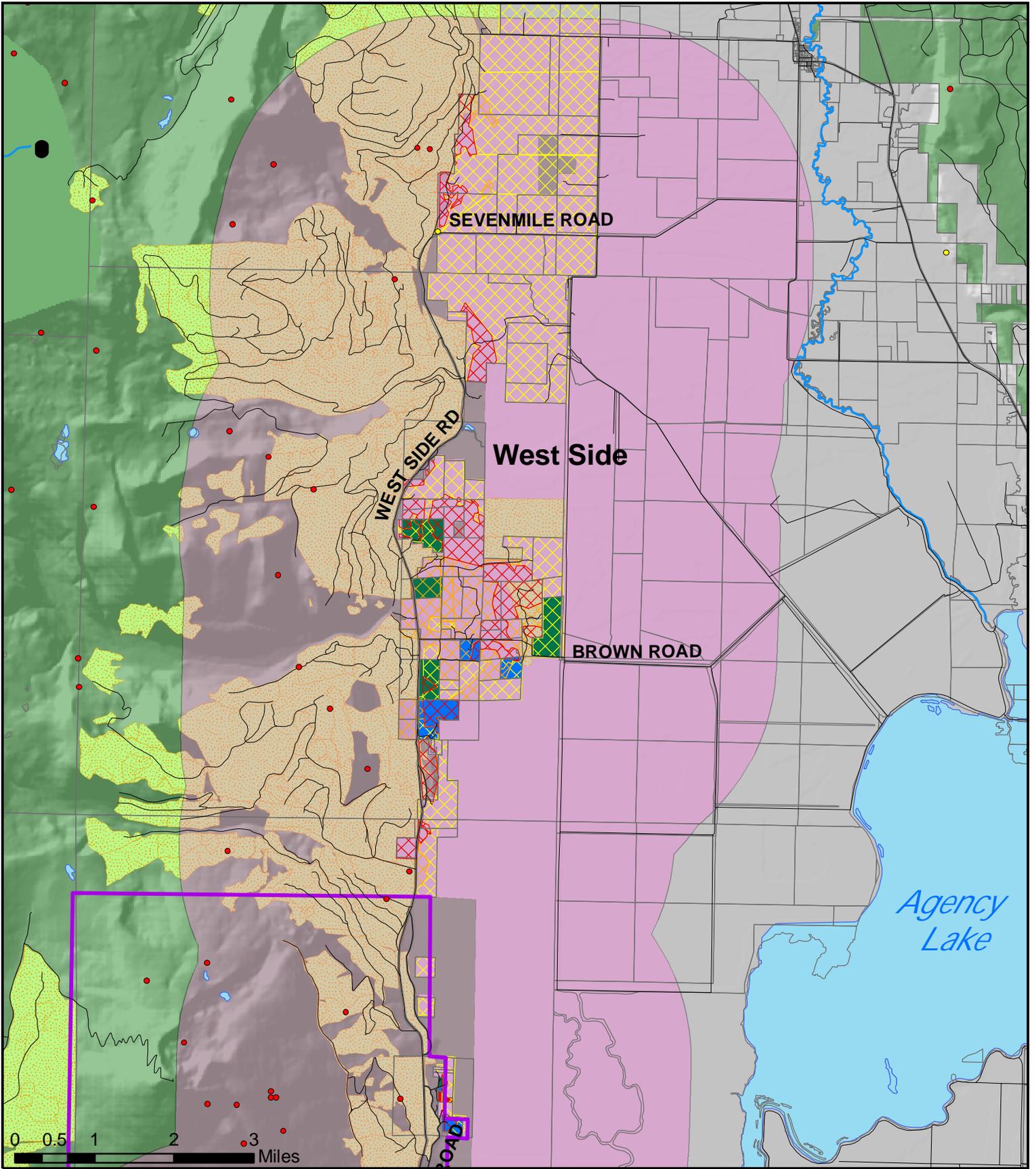
Rocky Point CWPP Map



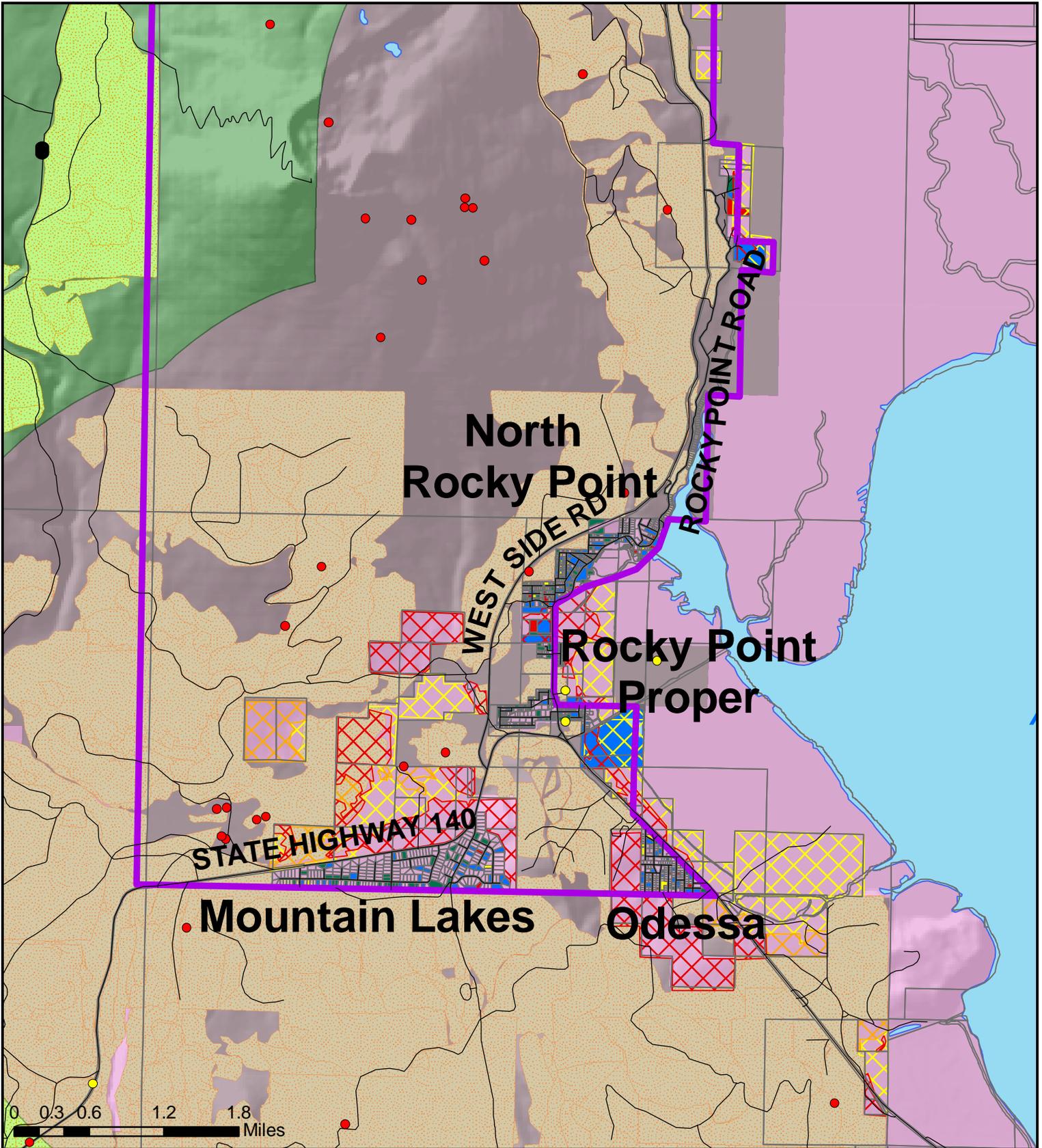
Legend

● FireHistory_USFS	▭ HRFPD_Boundary	▨ FuelHazard_Moderate	▭ WUI_Boundary
● FireHistory_ODF	▭ Lakes	▭ May Stand Alone	▨ USFS_Treated
— Roads	▭ FuelHazard_Extreme	▭ Defend Aggressively	▭ Public
— Highways	▭ FuelHazard_High	▭ Defend Cautiously	▭ Private
— Rivers	▭ Use Extreme Caution		
▭ Property_Lines			

Rocky Point CWPP North

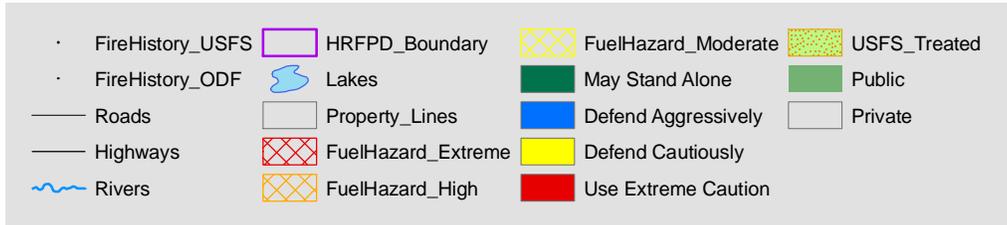
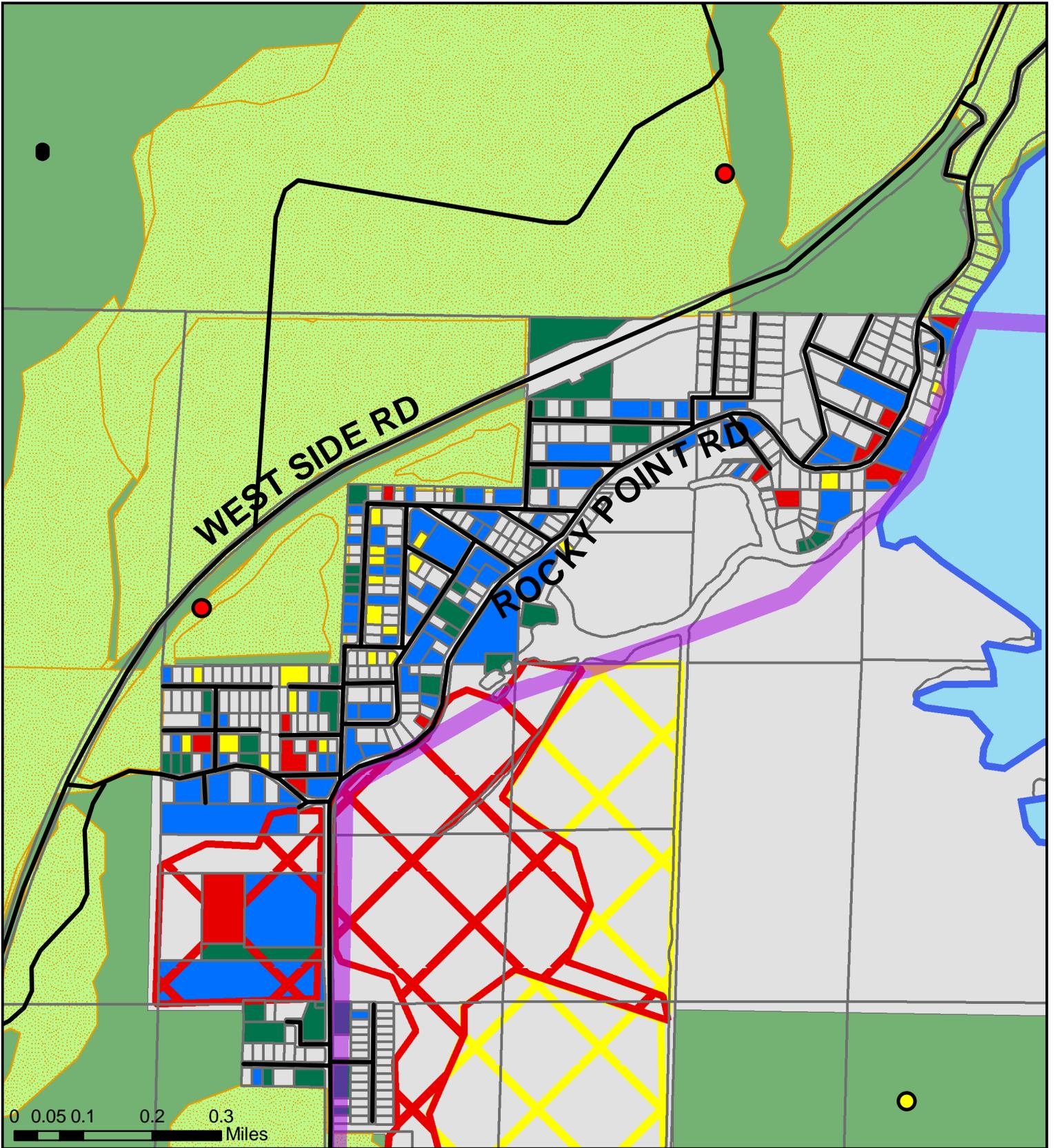


Rocky Point CWPP South

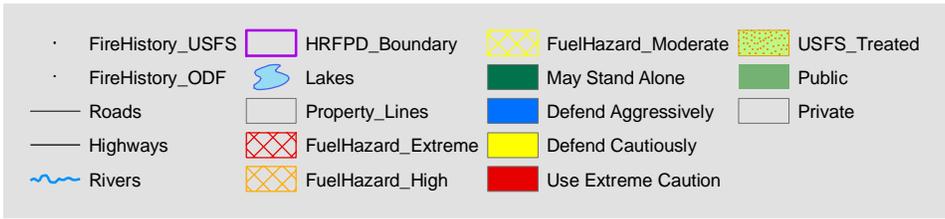
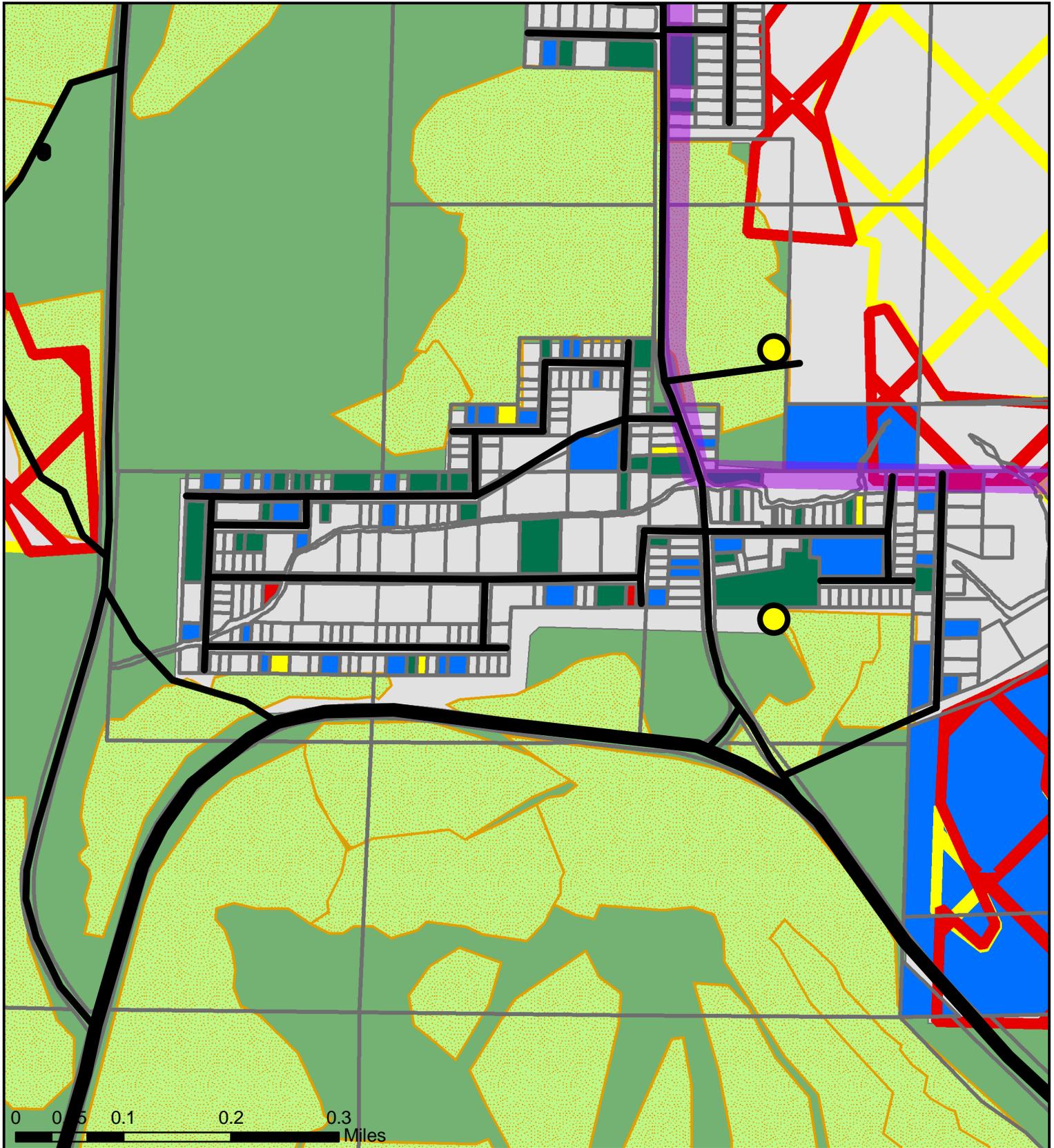


• FireHistory_USFS	▭ HRFPD_Boundary	▭ Lakes	▭ WUI_Boundary
• FireHistory_ODF	▭ Property_Lines	▭ May Stand Alone	▭ USFS_Treated
— Roads	▭ FuelHazard_Extreme	▭ Defend Aggressively	▭ Public
— Highways	▭ FuelHazard_High	▭ Defend Cautiously	▭ Private
~ Rivers	▭ FuelHazard_Moderate	▭ Use Extreme Caution	

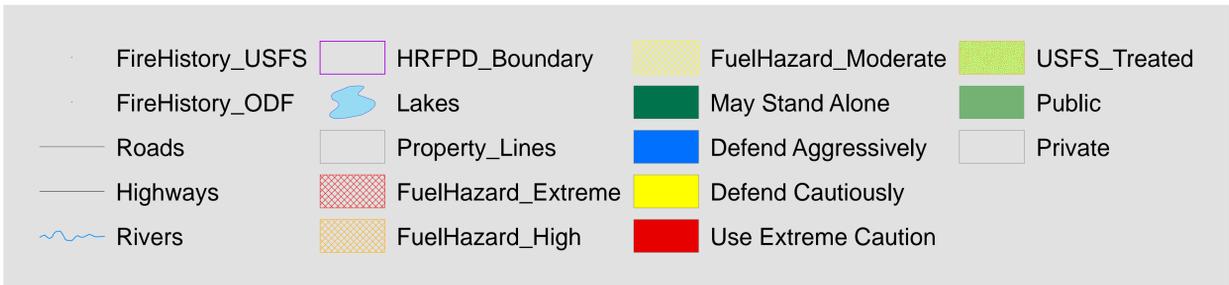
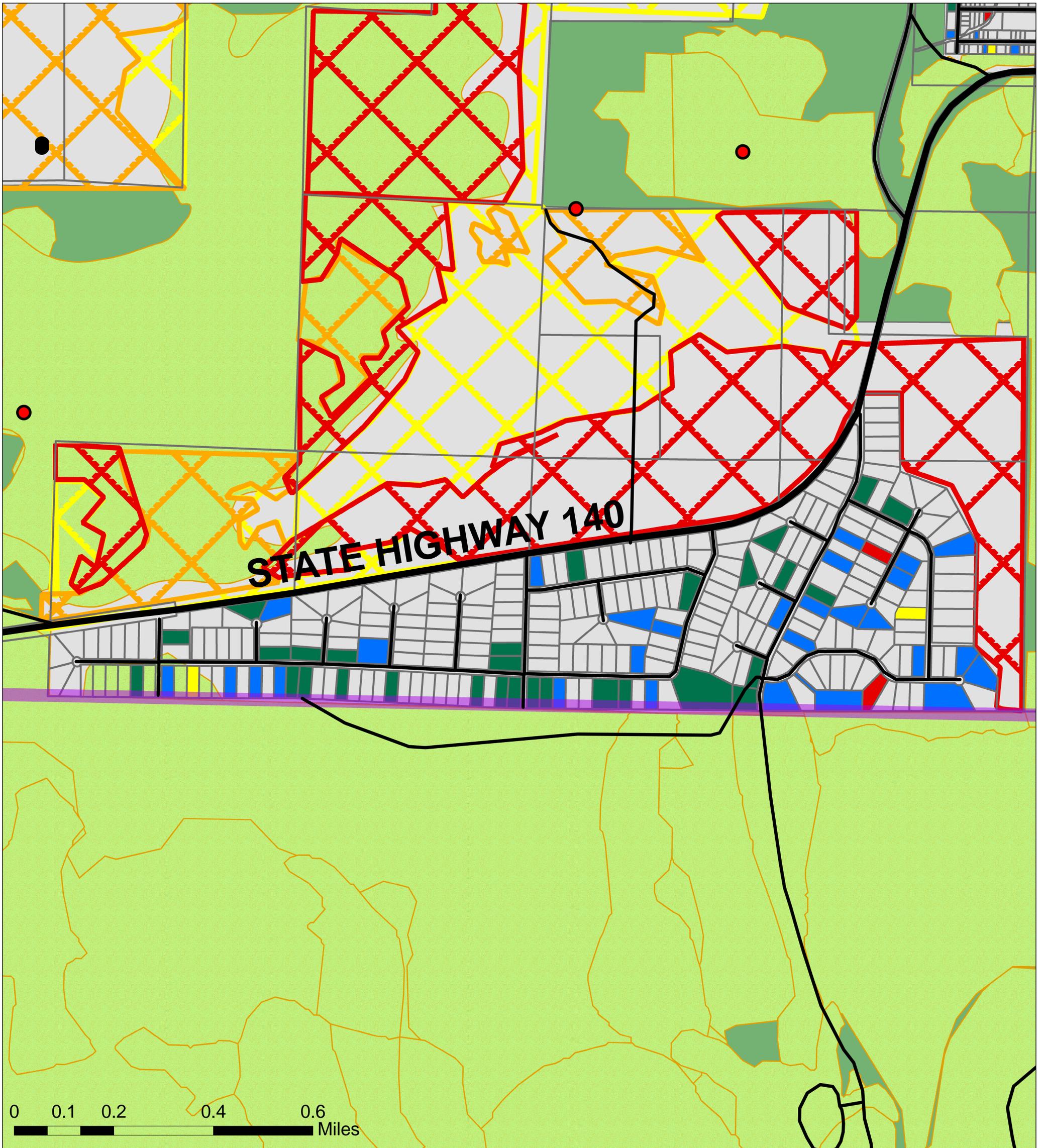
North Rocky Point CWPP



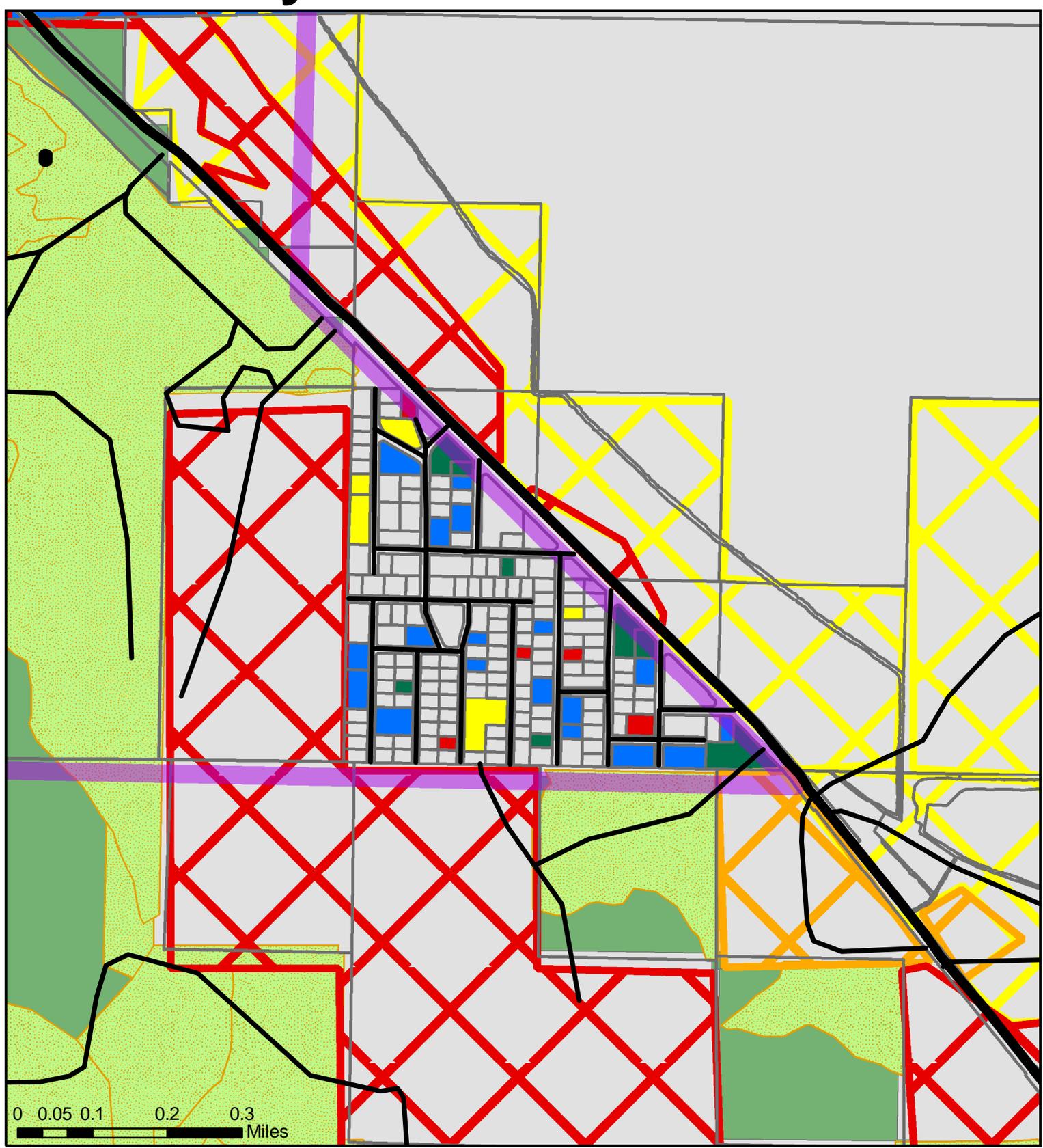
Rocky Point Proper CWPP



Rocky Point CWPP Mountain Lakes



Rocky Point CWPP Odessa



· FireHistory_USFS	HRFPD_Boundary	FuelHazard_Moderate	USFS_Treated
· FireHistory_ODF	Lakes	May Stand Alone	Public
— Roads	Property_Lines	Defend Aggressively	Private
— Highways	FuelHazard_Extreme	Defend Cautiously	
~ Rivers	FuelHazard_High	Use Extreme Caution	