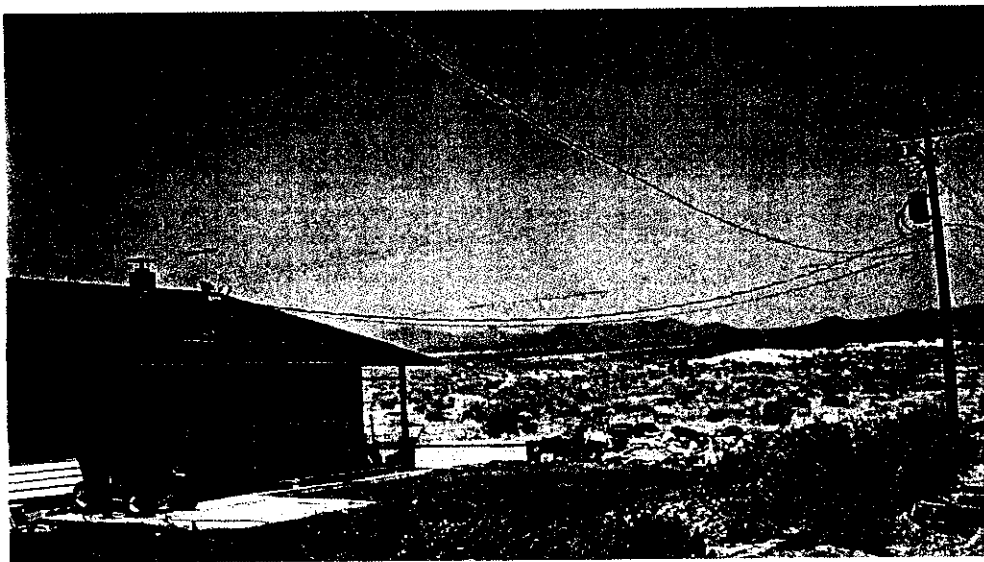


# Community Wildfire Risk Assessment and Fuel Reduction Plan *for*

## Panaca *in* Lincoln County, Nevada

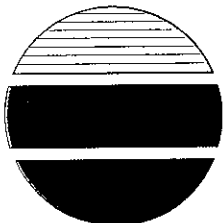
*December 2002*



***Prepared For:***

**LINCOLN COUNTY  
P.O. Box 90  
PIOCHE, NEVADA 89043**

***Prepared By:***



**ENGINEERING ♦ PLANNING ♦ RESOURCE MANAGEMENT**

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EXHIBIT C7 Lands

Document consists of 39 pages.

- ☐ Entire document provided.
- ☒ Due to size limitations, the cover, inside title page, pages i through ii, and 1 through 3, and page 15 provided.
- A copy of the complete document is available through the Research Library (775/684-6827) or e-mail [library@lcb.state.nv.us](mailto:library@lcb.state.nv.us).

*Meeting Date: 01-22-04.*

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## **PART I. COMMUNITY RISK ASSESSMENT**

### **1.0 INTRODUCTION**

During the 2002 fire season more than six million acres and nearly 2,000 homes were lost to wildfires in the western U.S. This record fire year resulted in the greatest natural resource losses and the highest wildfire suppression costs recorded to date, with reclamation costs yet to be determined. Congress, aware of the potential for this type of tragedy to occur, and the potential for pre-suppression planning and treatments to reduce the risks, has allocated National Fire Plan funding for fuel reduction projects. In fiscal year 2001, 775,880 acres were treated for fuel reduction in the wildland/urban interface (National Fire Plan website).

In Nevada, the Nevada Division of Forestry (NDF) administers grants awarded through the National Fire Plan to develop and implement plans to reduce the risk of loss during wildland fires in the interface communities. In 2001, Panaca was listed as a community at risk for a wildland/urban interface fire, along with numerous other communities in Lincoln County. Lincoln County submitted an application for assistance to NDF to complete a Wildfire Risk Assessment for Panaca. Resource Concepts, Inc. (RCI) was retained by Lincoln County to perform the risk assessment and provide specific, community-wide fuel reduction recommendations. The primary goals of the plan are to effectively reduce the wildfire threat while sustaining the needs, opportunities, land uses, and values of the community.

There have been at least two wildfires in the vicinity of Panaca in the last several years. Recommended fuel hazard reduction methods will assist in reducing the threat and impacts from a wildfire.

The objectives of the Panaca Fire Safe Plan are to:

- Empower private landowners by presenting defensible space and firebreak recommendations to reinforce personal safety and protect property.
- Increase community safety by expanding current fire suppression resources and promoting pre-suppression methods that minimize ignition risks and fuel hazards.
- Set guidelines that will enable Lincoln County to implement community hazard reduction programs that ensure maintenance of fire safe communities.
- Promote fire hazard reduction and pre-suppression cooperation with public land managers to ensure the sustainability of the fire safe plan for private and public lands alike.

## **1.1 PROJECT AREA DESCRIPTION**

The project area includes the private land in and around the town of Panaca. Panaca is located on US Highway 93 about 15 miles north of Caliente and 15 miles south of Pioche. Panaca is primarily an agricultural community with farmland surrounding approximately half of the town (Figure 1.0). Riparian areas in the vicinity of Panaca include Meadow Valley Wash, White Wash, and Panaca Spring. Farmland directly borders the town in several areas. Elevations range approximately from 4,720 feet to 4,800 feet in elevation.

The most recent population estimate for Panaca is 882 people. There are many absentee homeowners and some vacant abandoned buildings within the town. Old, abandoned structures are very susceptible to fire because they are neither maintained nor treated for weed control.

Land ownership around Panaca consists of both private and public lands. Agriculture, residential, and recreation comprise much of the land use in the general area. The Bureau of Land Management (BLM) manages most of the public land in the area, except for Cathedral Gorge State Park managed by the Nevada Division of State Parks (Figure 2.0).

## **1.2 CLIMATE**

The climate in Panaca is generally warm to hot in the summers and cool in the winters. The average annual precipitation is approximately 8 to 12 inches. The largest amounts occur during the winter months with a second peak during August. Average annual snow depth is approximately one inch in January, with generally no snowfall occurring the rest of the year. On average, temperatures range from 95 degrees (F) in July to 19 degrees (F) in December (Western Regional Climate Center).

Prevailing weather conditions in the area create late morning and afternoon breezes from the south and southwest. During weather changes stronger winds blow from the same direction. During thunderstorm activity lightning strikes are common and winds can come from any direction. The predominantly flat terrain in the area makes the vegetation conducive to preheating from sun exposure, especially in the afternoon. Preheating increases the chance of ignition and results in rapid spread of fire given low humidity, low fuel moisture, and windy conditions.

### 1.3 WILDFIRE HISTORY

Prior to 1990, wildfire occurrences around the project area were infrequent but resulted in relatively large fires (between 5,000-10,000 acres). Wildfire frequency has increased significantly since 1990. A majority of the most recent fires (1995-2002) have been small, less than 1,000 acres in size. Table 1.0 demonstrates the increase in wildfire frequency for Lincoln County. In 1999 the Condor Fire burned north of Panaca consuming approximately 1,700 acres (Figure 3.0). A wildland fire adjacent to Panaca on the east side of town eliminated heavy fuels, was reseeded and currently functions more or less as a firebreak (as shown in Appendix B, Photo 1).

**TABLE 1.0 PARTIAL SUMMARY OF THE WILDFIRE HISTORY IN LINCOLN COUNTY**

	PERIOD OF RECORD 1975-1989	PERIOD OF RECORD 1990-2002
Number of Fires	15	92
Acres Burned	34,566	182,594

## 6.0 SUMMARY

The risk of wildfire in Panaca is moderately low. General and specific recommendations provide a critical starting point for the community to take a proactive approach to reduce risks and maintain fire-safe communities. Recommendations for Panaca are summarized in Table 2.0.

**TABLE 2.0 PRIORITY TREATMENTS TO REDUCE WILDFIRE RISKS IN PANACA.**

RECOMMENDED TREATMENT	RESPONSIBLE PARTY	TREATMENT DESCRIPTION
Firebreaks	Property Owners	Construct a 200-foot wide firebreak on the east side of Panaca incorporating the existing disturbed area.
		Revegetate with a low-stature fire-resistant mixture to prevent cheatgrass invasion.
		Maintain the firebreak on a regular basis to prevent shrub reestablishment and fuel build-up.
Defensible Space	Property Owners	Create a <i>minimum</i> of 30-feet of defensible space around all residences in the interface neighborhoods.
		Clean up weeds and other flammable vegetation and debris throughout the Community.
	Lincoln County	Maintain vegetation clearance beneath and around power lines.
Roads	Lincoln County	Develop brush clearance and biomass disposal programs for safe and timely disposal of debris removed during fuel reduction treatments.
Fire Suppression Resources	Lincoln County	Encourage the Nevada Department of Transportation to maintain weed-free road right-of-ways along all highways near Panaca.
		Purchase and install a back-up generator system to provide power for fire suppression water supplies in the even of a power outage.

*There is no guarantee that a wildfire will not occur in Panaca even if all of the recommendations in this report are implemented. However, community awareness and individual attention to fuels management on private property will help achieve the highest level of wildfire safety possible.*