

WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM

**Final Hazard Assessment Report
BLM Vale District
McDermitt Assessment Area**



**Order No.: NAD010208
Contract No.: GS-10F-0085J
April 2002**



DYNAMAC
CORPORATION
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**FINAL
WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK
MITIGATION RECOMMENDATIONS**

**VALE DISTRICT
MCDERMITT ASSESSMENT AREA**

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ACRONYM LIST

| | |
|------|--------------------------------------|
| amsl | Above mean sea level |
| BIA | Bureau of Indian Affairs |
| BLM | Bureau of Land Management |
| CCC | Civilian Conservation Corps |
| EOG | Emergency Operations Group |
| FERC | Federal Regulatory Commission |
| GPS | Global Positioning System |
| LEPC | Local Emergency Planning Committee |
| NAD | North American Datum |
| NFPA | National Fire Protection Association |
| NWCG | National Wildfire Coordination Group |
| ODF | Oregon Department of Forestry |
| RFD | Rural Fire Department |
| SOW | Statement of Work |
| USFS | U.S. Forest Service |
| USGS | U.S. Geological Survey |
| UTM | Universal Transverse Mercator |
| WRCC | Western Regional Climate Center |

APPENDIX A

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1.0 EXECUTIVE SUMMARY

During the 2000 fire season more than 6.8 million acres of public and private lands were burned by wildfire, resulting in loss of property, damage to resources, and disruption of community services. Many of these fires occurred in wildland-urban interface areas and exceeded fire suppression capabilities. To reduce the risk of fire in the wildland-urban interface, the President of the United States directed the Secretaries of the Departments of Agriculture and the Interior to increase federal investments in projects to reduce the risk of wildfire in wildland-urban interface areas. The Bureau of Land Management (BLM), Vale District is currently in the process of forming partnerships with local governments to plan fuels reduction treatments and other mitigation measures targeted at the wildland-urban interface in the vicinity of public lands. These partnerships are indicative of a shared responsibility to reduce wildland fire risks to communities.

The wildland-urban interface occurs where manmade structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the Vale District BLM implemented the Communities-at-Risk Wildland-Urban Interface Program. The program seeks to reduce the hazard of wildland fires to communities through public outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The McDermitt community was selected to assess the hazard of wildland fire and to identify specific actions that may reduce the risk of loss and disruption of services from wildland fires.

Dynamac Corporation was contracted to support the BLM in their assessment of wildfire risk to the McDermitt community in the wildland-urban interface. Dynamac scientists conducted fuel surveys by categorizing the vegetation, slope, and aspect of the land in the McDermitt assessment area. The risk of wildland fire to homes, structures, and cultural resources on private land was also evaluated according to building materials, the presence of survivable space, road access, and the response time of the local fire department. Dynamac assessed the adequacy of the community's service infrastructure (including roads, water supplies, and fire fighting equipment) by systematic observation, and by interviewing community officials and fire prevention personnel. A community open house was held to disseminate information about the Communities-at-Risk, Wildland-Urban Interface Program to citizens, to afford them the

opportunity to identify resources that are of value to the community, and to have them identify actions that may reduce the risk of wildland fire. The information gathered from the fuel surveys, structural surveys, interviews, infrastructure assessments, and community profile was integrated into two reports: a hazard assessment report and mitigation recommendations. The following action items were identified to reduce the wildfire threat in the McDermitt assessment area.

- Provide assistance to the McDermitt Fire District in obtaining an additional pumper truck;
- Construct firebreaks at specific locations to the west and northwest of McDermitt;
- Establish a Rural Fire Department (RFD) on the Fort McDermitt reservation;
- Reduce fuel loads on specified sections by spraying and re-seeding;
- Modifications to an existing water-storage tank approximately 12 miles north of McDermitt on Highway 95 and the addition of two other water sources to improve the availability of water resources and to reduce the time needed to refill pumper truck; and
- Develop an ongoing education and outreach program throughout the assessment area to encourage firewise practices.

2.0 GOALS AND OBJECTIVES

The goals of the McDermitt wildfire hazard assessment and mitigation recommendations are to evaluate the hazards of wildland fire within the assessment area and then identify specific actions that could reduce the risks. The objectives are to decrease the chances of wildfire spreading from public lands onto private lands, and from private lands onto public lands.

3.0 BACKGROUND

Wildland fire is an integral component of many forest and rangeland ecosystems. In the conterminous United States before European settlement, an estimated 145 million acres were annually scorched by wildfire. In comparison, only about 14 million acres are currently burned annually due to increased agriculture, urbanization, habitat fragmentation, and fire suppression programs. This change from the historical fire regime to the present day has caused a shift in the native vegetation composition and structure of fire-prone ecosystems such as some forests and rangelands, resulting in a dangerously high accumulation of fuels. As a result, when wildland fires do occur, they may burn larger and hotter than those in the past and pose an increased risk 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. The wildland-urban interface occurs where human structures meet or intermix with wildland vegetation. In certain situations, specific actions such as fuels reduction around communities, forest and rangeland restoration, infrastructure improvements, and public outreach may reduce the risk of losses to catastrophic fire in the wildland-urban interface. The Vale District BLM implemented the Communities-at Risk Wildland-Urban Interface Program to determine what these specific actions may be, and where they are needed. The program seeks to reduce the hazard of wildland fires to communities through public education and outreach, the reduction or prevention of fuel build-up, and increasing the fire protection capabilities of communities. The McDermitt community was selected to assess the threat of wildland fire and to identify specific actions that may reduce the risk of loss.

The BLM Vale District intends to use the mitigation measures identified in this document as a guide and prioritization tool in implementing the Communities at Risk program. The District is committed to working with any partners (private, local government, state, and federal) in order to accomplish mutual goals and objectives identified in the recommendations. The recommendations that the District chooses to implement will go through the NEPA process and will be accomplished as funding, policy and regulations permit.

4.0 EXISTING SITUATION

The town of McDermitt straddles the Oregon-Nevada state line with the major portion of the town in Nevada. The ranchers living in Oregon receive their mail and other services in McDermitt. The entire assessment area is situated in a large valley in southeastern Oregon. The assessment area is located in Malheur County, Oregon, and Humboldt County, Nevada, and is approximately 144 miles south of Vale, Oregon, and 73 miles north of Winnemucca, Nevada. The assessment area includes the town of McDermitt, Nevada, and consists of portions of townships T38S R40E; T38S R41E; T38S R42E; T38S R43E; T38S R44E; T38S R45E; T39S R40E; T39S R41E; T39S R42E; T39S R43E; T39S R44E; T39S R45E; T40S R40E; T40S R41E; T40S R42E; T40S R43E; T40S R44E; T40S R45E; T41S R40E; T41S R41E; T41S R42E; T41S R43E; T41S R44E; and T41S R45E. Within the assessment area are ranches, residential areas, and historic structures and sites.

The assessment area is in a wide valley in the high desert. Surrounding this wide valley are cliffs and rock formations. McDermitt is at approximately 4,300 feet above mean sea level (amsl) and the elevation of the assessment area ranges from 4,200 feet to 4,800 feet amsl. There is a concentrated residential area in McDermitt but scattered ranches populate the surrounding portion of Oregon. The approximate population of the assessment area is 433. The predominant vegetation throughout the assessment area is sagebrush and grasses (e.g., cheatgrass and bunchgrass). Large bushes and trees are only found near residential areas. The Fort McDermitt reservation is within the assessment area, although the portion of the reservation in Oregon is unpopulated.

Agricultural production is primarily cattle ranching. There is open rangeland throughout the entire assessment area. The rangeland is important for livestock grazing, wildlife habitat, and recreation.

The climate of the assessment area is characterized by warm, dry summers with maximum average temperatures reaching 91° Fahrenheit (F) in July, and an average daily summertime low of 43-47° F. Winter months are typically cool, with average daily temperatures from November to March ranging from 30 to 40°F. Precipitation is typically low with an average annual precipitation of 9.43 inches. July has the lowest average precipitation with 0.35 inches and May has the most with 1.38 inches. Between November and March precipitation arrives predominantly as snowfall and from April through October as rain (WRCC, 2002).

The Hazard Report for the McDermitt assessment area reported on a fuel and structure surveys. The fuel survey consisted on 31 fuels assessment points, and at each site six fuel variables were rated as to low hazard (Class A), moderate hazard (Class B), and high hazard (Class C). The fuel survey data are summarized as follows:

- **Slope:**

- Class A - 64.5% of the points were flat land (less than 10% slope).

- Class B - 29% of the points were moderate slope (10 to 30% slope).

- Class C - 6.5% of the points were steep slopes (greater than 30% slope).

- **Aspect:**

Class A - 10% of the points faced north.

Class B - 71% of the points faced east or were flat land.

Class C - 19% of the points faced south and west.

- **Elevation:**

Class A - 3% of the points were at elevations greater than 5,000 feet amsl.

Class B - 97% of the points were at elevations between 3,500 and 5,500 amsl.

Class C - 0% of the points were at elevations lower than 3,500 feet amsl.

- **Fuel Type:**

Class A - 23% of the points had small, light fuels (grass, weeds, shrubs).

Class B - 74% of the points had medium fuels (brush, medium shrubs, small trees).

Class C - 3% of the points had heavy fuels (timber, woodland, large brush, or heavy planting of ornamentals).

- **Fuel Density:**

Class A - 26% of the points had a non-continuous fuel bed (less than 30% cover).

Class B - 71% of the points had a broken moderate fuel bed (31 to 60% cover).

Class C - 3% of the points had a continuous fuel bed (greater than 60% cover).

- **Fuel Bed Depth:**

Class A - 13% of the points had a low fuel bed depth (less than 1 foot).

Class B - 84% of the points had a moderate fuel bed depth (1-3 feet).

Class C - 3% of the points had a high fuel bed depth (greater than 3 feet).

Data from the fuels hazard assessment are also depicted on **Figures 1 and 2**.

The second component of the Hazard Assessment was to characterize structures in the assessment area for structure density, building materials, proximity to fuels, presence of survivable space, and roads/accessibility. Again, these variables were rated as low hazard (Class A), moderate hazard (Class B), and high hazard (Class C). Results of the structure survey are summarized as follows:

- **Structure Density:**

Class C - 100% of all sections surveyed had less than one structure per 10 acres.

- **Proximity to Structures:**

Class A - 5% of the sections with structures had flammable wildland fuels greater than 100 feet from the structures.

Class B - 80% of the sections with structures had wildland fuels 40 to 100 feet away from the majority of structures.

Class C - 15% of the sections with structures had fuels less than 40 feet from the structures.

- **Predominant Building Materials:**

Class A - 35% of the sections with structures had more than 50% of homes built with fire-resistant roofs and/or siding.

Class B - 50% of the sections with structures had 10-50% of the homes built with fire-resistant roofs and/or siding.

Class C - 15% of the sections with structures had less than 10% of the homes built with resistant roofs and/or siding.

- **Survivable Space:**

Class A - 40% of the sections with structures had a majority of homes with improved survivable space around the homes (greater than 50%).

Class B - 45% of the sections with structures had 10-50% of homes with improved survivable space around them.

Class C - 5% of the sections with structures had less than 10% of homes with improved survivable space around them.

- **Roads:**

Class A - 29% of the sections where roads were observed had wide looped roads that were maintained, paved or solid, and/or surfaced, with shoulders.

Class B - 57% of sections with roads had maintained, two-lane roads with no shoulders.

Class C - 14% of the sections surveyed had narrow, steep, rutted roads.

- **Response Time:**

Class A - 21% of all sections surveyed had a response time of less than 20 minutes.

Class B - 62% of all sections surveyed had a response time of 20 to 40 minutes.

Class C - 17% of all sections surveyed had a response time of greater than 40 minutes.

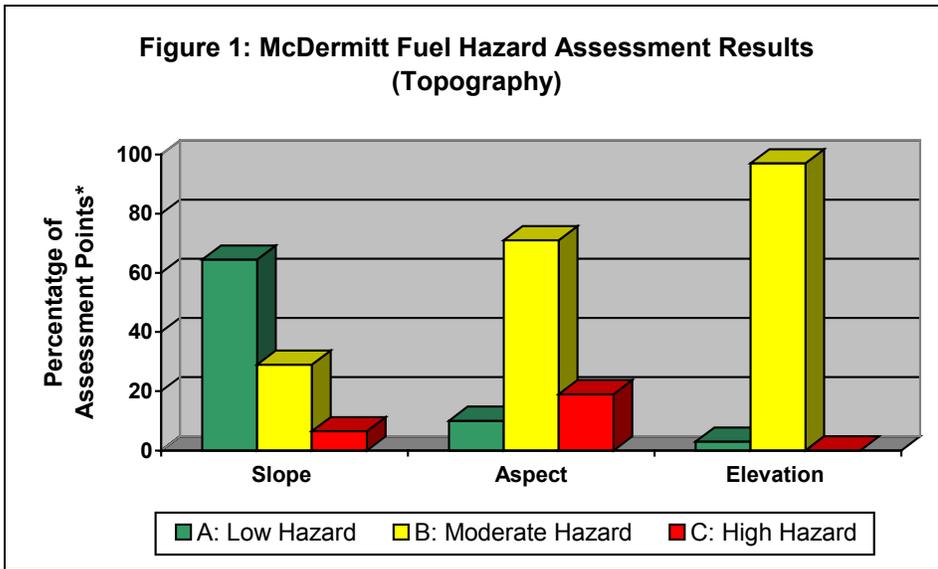
- **Access:**

Class A - 10% of the sections with roads had multiple entrances and exits that were suitable for trucks with turnarounds.

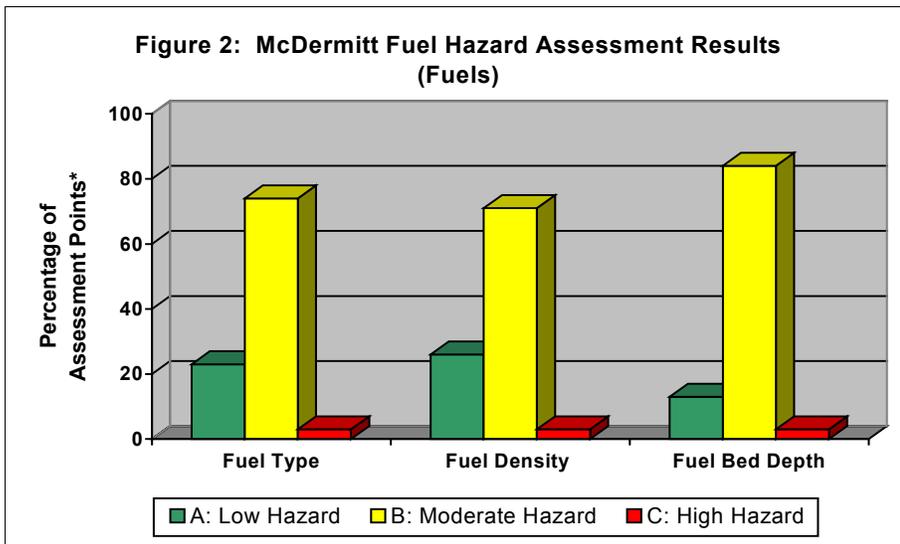
Class B - 86% of the sections had limited access routes.

Class C - 4% of the sections had poor access routes.

Areas of highest risk in terms of fuel hazards and difficulty in fire suppression are shown on **Map 2** in Appendix A. The data from the fuels hazard assessment are also graphically depicted in **Figures 1 and 2**. The charts depict the percentage of assessment points, based on a total of 31 points surveyed, which received a high, moderate, or low hazard ranking for hazards posed by fuels and topography of the assessment area. The percentages of assessment points for hazards to structures are graphically depicted in **Figure 3**. It should be noted that data reported for structure density and response times refers to all sections surveyed within the assessment area; proximity to fuels, building materials, and survivable space, refer to 20 sections *with structures* in the assessment area; and roads and access percentages are based on the 21 sections with roads that were observed in the assessment area. The reason for the discrepancy in numbers of sections where road characteristics were observed and where structural features were observed is that in one section, a locked and gated, but observable road across private land prevented Dynamac from observing any possible structures which may have been on the other side of a ridge. This occurred in only one section.

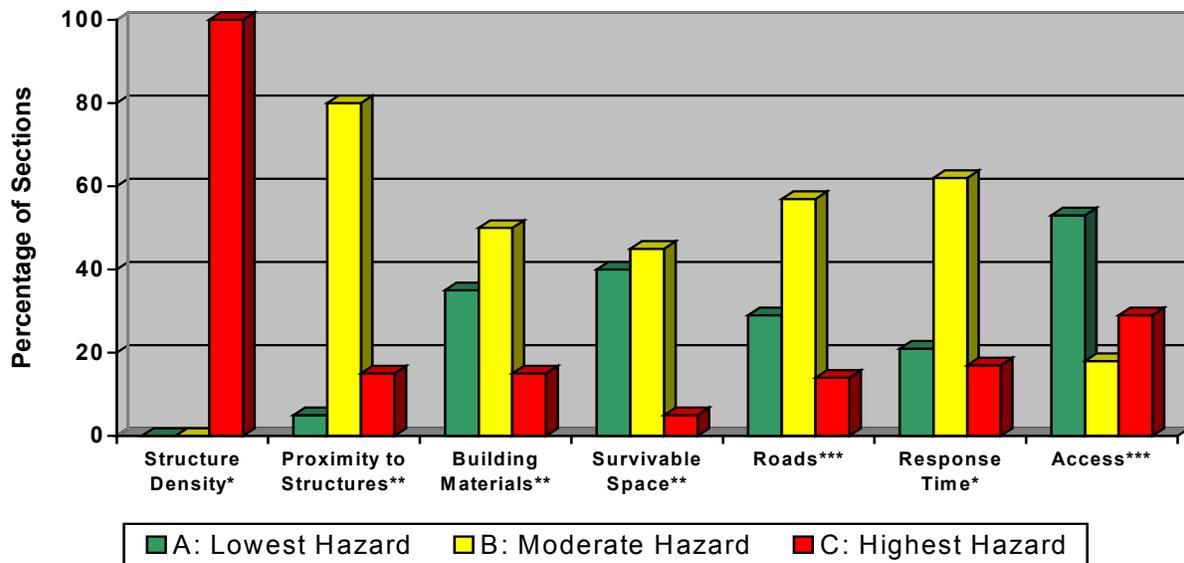


*Percentage of assessment points based on 31 points surveyed in McDermitt assessment area.



*Percentage of assessment points based on 31 points surveyed in McDermitt assessment area.

Figure 3: McDermitt Structure Risk Assessment Results



* Based on all 87 sections surveyed within the assessment area.

** Based on 20 sections with observable structures within the assessment area.

*** Based on 21 sections with structures and roads within the assessment area.

5.0 PUBLIC COMMENT SUMMARY

Through discussions with community leaders, fire officials, and residents of McDermitt and the surrounding wildland-urban interface lands, the following actions were suggested to improve fire preparedness and prevention measures along the wildland-urban interface. Most of these have been developed into recommendations (See Section 8.0, Proposed Projects) for lessening the risk posed by fire.

- A pumper truck for the McDermitt Fire Department;
- Construct firebreaks at specific locations to the west and northwest of McDermitt;
- Spray and re-seed specific sections to reduce the fuel load;
- Increased ability to control wildland fires by pre-positioning water sources for firefighting;
- Increased ability to control wildland fires by modifying an existing water storage tank to accommodate pumper trucks;
- Establishment of a rural fire department on the Fort McDermitt reservation; and
- Area-wide adoption of firewise practices in residential building and landscaping.

6.0 NEED FOR ACTION

Wildfire frequency in the McDermitt assessment area is not uncommon, and results predominantly from natural causes and also from human causes. At risk are dwellings and other structures on private land near the wildland interface and the open rangeland. To reduce the risks of wildfire in the assessment area both general and specific actions are needed. In general, the residents and their public agencies should support activities that promote safety for dwellings, structures and rangeland at risk.

7.0 METHODOLOGY

The mitigation actions proposed herein for the McDermitt assessment area are based on information acquired from fuel and structure surveys, a public meeting, interviews of community officials, and surveys filled out and submitted by residents of McDermitt. The majority of information presented in this report was gathered between November 13 and November 16, 2001. A Hazard Assessment Report has been completed for the area and is available at the BLM-Vale District Office in Vale, Oregon.

Dynamac characterized land and fuels at 31 points on public land within a 15-mile radius of McDermitt (for the most part, excluding land within Nevada), concentrating on sections of land near inhabited areas. As not all sections of public land were accessible, Dynamac endeavored to choose fuel survey points that were representative of surrounding sections. The rating elements included slope, aspect, elevation, fuel type, fuel density, and fuel bed depth, and were assigned to a risk category of low, medium, or high (See Hazard Assessment Report, Table 3, and Appendix B). At each survey point, the field crew recorded the location in UTM coordinates using a Trimble hand-held global positioning unit (GPS), and photographed the surrounding area in the four cardinal directions. A wildland fuels fire hazard assessment form (Form 1) was completed which rated the characteristics of the land features and fuel sources.

Dynamac staff also collected information on the flammability and defensibility of structures on private land from 87 sections located within one mile of public lands, within the assessment area. The structural hazard assessment rated the structures based on the resistance of building materials to fire, and the distance of flammable fuels to the structures located within a section. The rating elements included structure density, proximity of flammable fuels to the structures, building materials, survivable space, and types of roads, response times, and accessibility. Each

element was assigned a rating of low, moderate, or high hazard category (See Hazard Assessment Report, Table 4, and Appendix C).

A public open house was convened on November 13, 2001, at the McDermitt Community Hall, from 7:00 to 10:00 p.m. The community was invited to attend through announcements posted in public places such as the post office, restaurants and stores. A meeting announcement was sent to 290 mailing addresses in McDermitt. Dynamac and BLM staff attended the public meeting to hand out firewise brochures, obtain information from the community on hazardous fire situations and desired conditions, and to be an informational resource to those attending the meeting. Residents attending the meeting were asked to fill out a survey form regarding their perceptions and concerns about wildland fire in their communities. (See Hazard Assessment Report, Appendix D.)

The Dynamac Community Relations Specialist conducted interviews with numerous local public officials and residents. Individuals or groups interviewed included the Acting McDermitt Fire District Chief, McDermitt Combined School principal, Oregon Fire Board Treasurer, and the Fort McDermitt Tribal Chairman. (See Hazard Assessment Report, Appendix E).

A second public meeting was convened on March 20, 2002, to present the findings of the hazard assessment and discuss with the public potential mitigation actions that may reduce the risk of wildfire in the assessment area. A direct mailing was used to notify 290 residences of this meeting. The meeting was held at the McDermitt Community Hall from 7:00 to 9:30 p.m. Eighteen people attended the meeting in addition to BLM and Dynamac staff. The proceedings of the meeting are also in Appendix F. A question and answer period followed a presentation on the findings of the hazard assessment and the mitigation recommendations. In addition, the meeting participants were requested to provide comments on the report to either BLM or Dynamac Corporation within one week. Comments were received during the meeting and were also received in writing from community members. (See Hazard Assessment Report, Appendix F).

8.0 PROPOSED PROJECTS

The following projects are proposed based on information obtained from the fuel and structure surveys, the community meeting, and interviews. The following specific action items were identified to reduce the hazard of wildfire in the McDermitt assessment area:

- A pumper truck for the McDermitt Fire Department;
- Construct and maintain firebreaks at specific locations to the west and northwest of McDermitt;
- Provide guidance to the Fort McDermitt tribal office in establishing a rural fire department and assist in identifying methods for obtaining equipment and training;
- Reduction of fuel loads on specific sections within the assessment area by spraying and re-seeding;
- Increased ability to control wildland fires by pre-positioning water sources for firefighting;
- Increased ability to control wildland fires by modifying an existing water tank for firefighting; and
- Area-wide adoption of firewise practices in residential building and landscaping.

8.1 Local Fire Department Assistance

Purpose of Local Fire Department Assistance: The ability of the McDermitt Fire District to respond to wildland fires would be greatly enhanced by the addition of a pumper truck. The additional pumper truck would be pre-positioned during the fire season in a location that does not have an adequate water supply, requires a long response time from current firefighting capabilities, and also has volunteers to man the truck in case of fire. Currently, the McDermitt Fire District pre-positions a small pumper truck for this purpose. An additional pumper truck would provide some redundancy and allow this practice to continue. According to the acting Fire Chief, this was a very effective strategy. The area where the pumper truck was pre-positioned was in Oregon near Kimble Wilkinson's ranch. The location was chosen for the reasons already stated, and because this location also had good access to the interface between the Fort McDermitt reservation and land protected by the McDermitt Fire District.

Necessity for Assistance: An additional pumper truck would enable the fire district to continue to pre-position a pumper truck at areas that are difficult to reach quickly and that have no water supply.

Project Timing: The McDermitt Fire District should request BLM's assistance in obtaining a pumper truck as soon as possible. The McDermitt Fire District should work with the BLM in obtaining grant money as soon as possible. The McDermitt Fire District would initiate application for grant monies, and the BLM could offer advice, and assistance through any means

necessary, and also write a recommendation that the McDermitt Fire District should receive grant monies.

8.2 Firebreaks

Construction and Location of Firebreaks: The locations of the proposed firebreaks is shown on **Map 3**. The proposed firebreaks are predominantly on BLM land but also cross private land and follow existing roads and topography. To create and increase their use as firebreaks would require either widening roads to 50 feet, or clearing areas adjacent to roadways approximately 15 feet on either side. Clearing the roads could be accomplished by mechanical treatment, either discing or by mowing. BLM and private landowners could share in the responsibility of maintenance of the firebreak.

Project Timing: BLM generally times projects in the following manner: Year One is the year identification and justification of projects occurs, and treatment objectives are determined. Field surveys begin. In Year Two, projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, project monitoring begins.

Project Necessity: Firebreaks have been shown to be effective in reducing the risk of loss from fire in the wildland-urban interface. Firebreaks are also beneficial by making fires that do occur easier to suppress.

8.3 Establishment of Rural Fire Department

Purpose of Establishment of Rural Fire Department: The Fort McDermitt reservation receives fire protection from the BLM Guard Station located adjacent to the reservation on Highway 95. The Guard Station is restricted by federal policy from combating structural fires. Therefore, the Fort McDermitt reservation, a large portion of the assessment area, has no organized firefighting capability for structural fires. By establishing an RFD, equipment and training can be obtained, greatly increasing the protection of people, structures and rangeland. There is interest at the tribal office level and among the residents of the reservation. In addition, many residents of the reservation have been members of fire teams and have firefighting experience.

Necessity for Assistance: By establishing an RFD, the McDermitt area as a whole, and the Fort McDermitt Reservation specifically, can obtain equipment and training, greatly increasing the protection of people, structures, and rangeland. BLM's role in this process can be as an advisor on the process of establishing an RFD, and as a source of information on obtaining equipment and training.

Project Timing: There was strong support for this project from members of the community. The community should contact the Oregon Fire Marshall to determine the state requirements for recognition as a fire department. **Appendix B** provides a list of action items required to form a rangeland fire protection association. During this process the community should request information and assistance from BLM. Once the Oregon Fire Marshall recognizes the fire department, it can work with BLM in obtaining grant money and submitting grant proposals for Federal assistance funds. The overall timing of this project is dependent on the actions of the community members, but should occur as soon as possible.

8.4 Water Storage Tanks

Purpose of Modification and Construction of a Water Storage Tank: There is no water storage capability in the Oregon portion of the assessment area and there is limited capability in the Nevada portion of the assessment area. When fighting a fire, trucks must return to McDermitt to refill, which reduces their capability to fight fires. To facilitate fire-fighting efforts, BLM and the McDermitt Fire Department could coordinate the modification of an existing BLM tank so that it can be used to fill tanker trucks and also provide a quick fill capability. The tank is located near the Civilian Conservation Corps (CCC) camp off of Oregon Canyon Road. Two other locations, in Nevada, have been identified that already have wells that can be used to fill tanks. The locations are approximately 15 miles south of McDermitt off of Highway 95 and approximately 2 miles southwest of McDermitt on BIA land. The tanks would need to be constructed and put in place but the water source is already established. The proposed locations of the new tanks (identified by members of the community) and the location of the existing tank, are shown on **Map 3**. These additional water sources would enable the McDermitt fire district to more rapidly respond to fires throughout the assessment area.

Necessity of Assistance: Having a consistent water supply will lower response times and enable a sustained response uninterrupted by return trips to McDermitt to refill trucks.

Project Timing: This project may require lengthy negotiations to come to agreement on the tank location and to address stakeholder’s concerns (e.g., water board). Therefore, discussions among the McDermitt Fire Department, BLM, and stakeholding parties should begin as soon as time and funding permit.

8.5 Community Education and Outreach Recommendations

Purpose of Public Education and Outreach: The purpose of the community-wide education program is to 1) educate the public about the dangers of wildfire in the area, 2) urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence, and 3) increase awareness of the natural role of fire in forest and rangeland ecosystems, and the benefits of occasionally managing natural wildland fires to achieve ecological benefits, while maintaining firefighter and public safety as the top priority. The public education and outreach program should be co-sponsored by the BLM and McDermitt Fire Department. In addition, the Fort McDermitt tribal council should be included in the program.

Outreach Occurrence: An annual “Firewise Clean-Up Day” is one tool that is recommended to encourage residents to create defensible/survivable 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: Within the general guidelines set forth above, the annual “Firewise Clean-Up Day,” education program, and public demonstrations would be most effective in the spring, to remind people to prepare their properties for the coming fire season.

Outreach Necessity: Citizen involvement in 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. Such education and outreach has been shown to motivate homeowners to take measures around their individual properties, thereby contributing to the overall reduction of wildfire hazards in a community. Further, a community education and outreach program will help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Implementation of

the program, and appropriate action by homeowners, will reduce fire risk to structures in the assessment area.

8.6 Fuels Reduction

Areas to receive Herbicide Treatment and Re-seeding: The location of the proposed herbicide treatment and re-seeding is shown on **Map 3**. The proposed areas are predominantly on BLM land but also include some private land. After the areas have been treated they will be re-seeded with perennial grasses that create less of a fire hazard. The re-seeded areas will have to be fenced until the new grasses have sufficiently established themselves. This will impact some community members who use the land for grazing.

Project Timing: BLM generally times projects in the following manner: Year One is the year identification and justification of projects occurs, and treatment objectives are determined. Field surveys begin. In Year Two, projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, project monitoring begins.

Project Necessity: Fuels reduction has been shown to be effective in reducing the risk of loss from fire in the wildland-urban interface.

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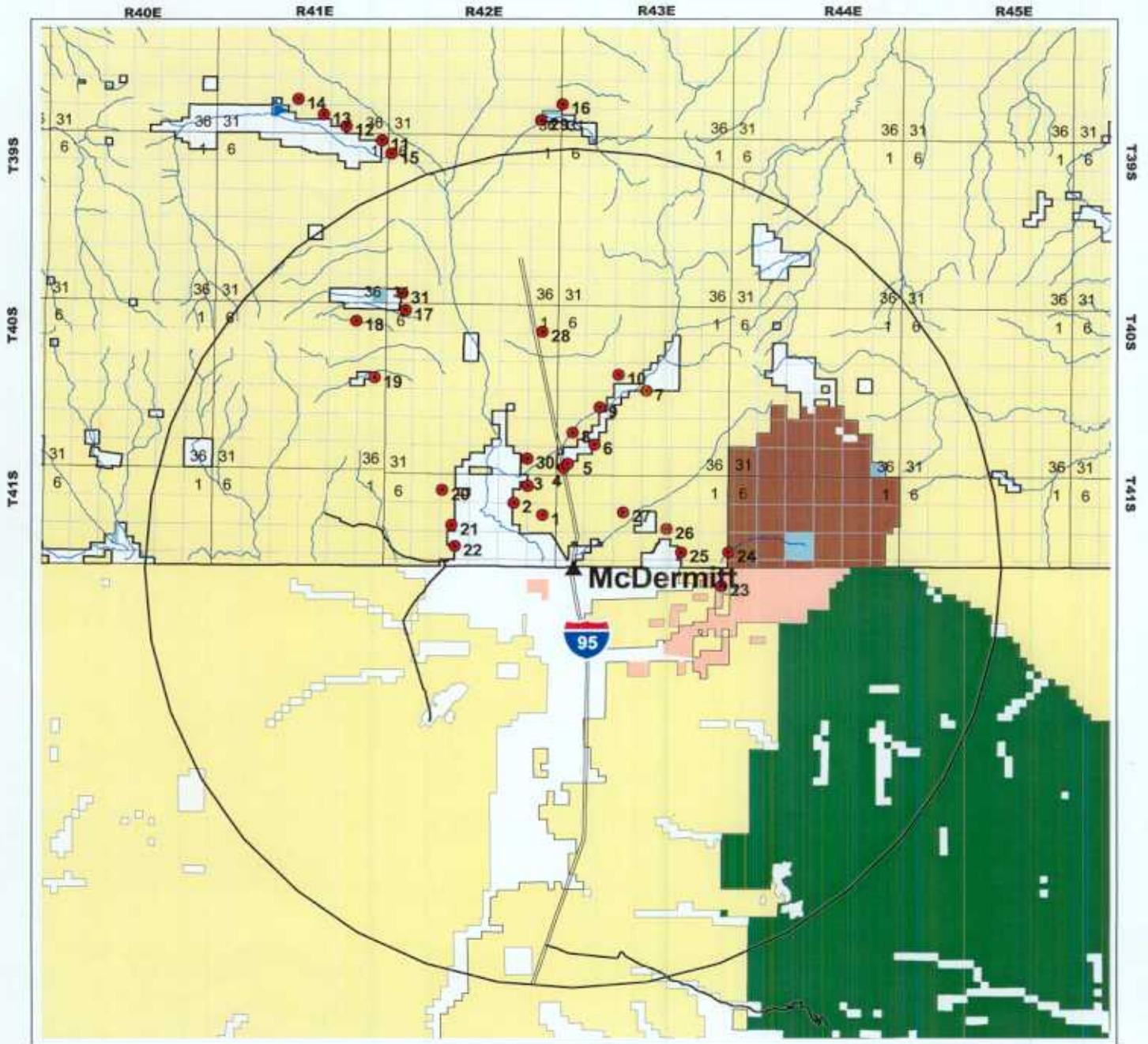
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Appendix A

Maps

Map 1: McDermitt Assessment Area and Fuel Survey Points



No warranty is made by the Bureau of Land management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



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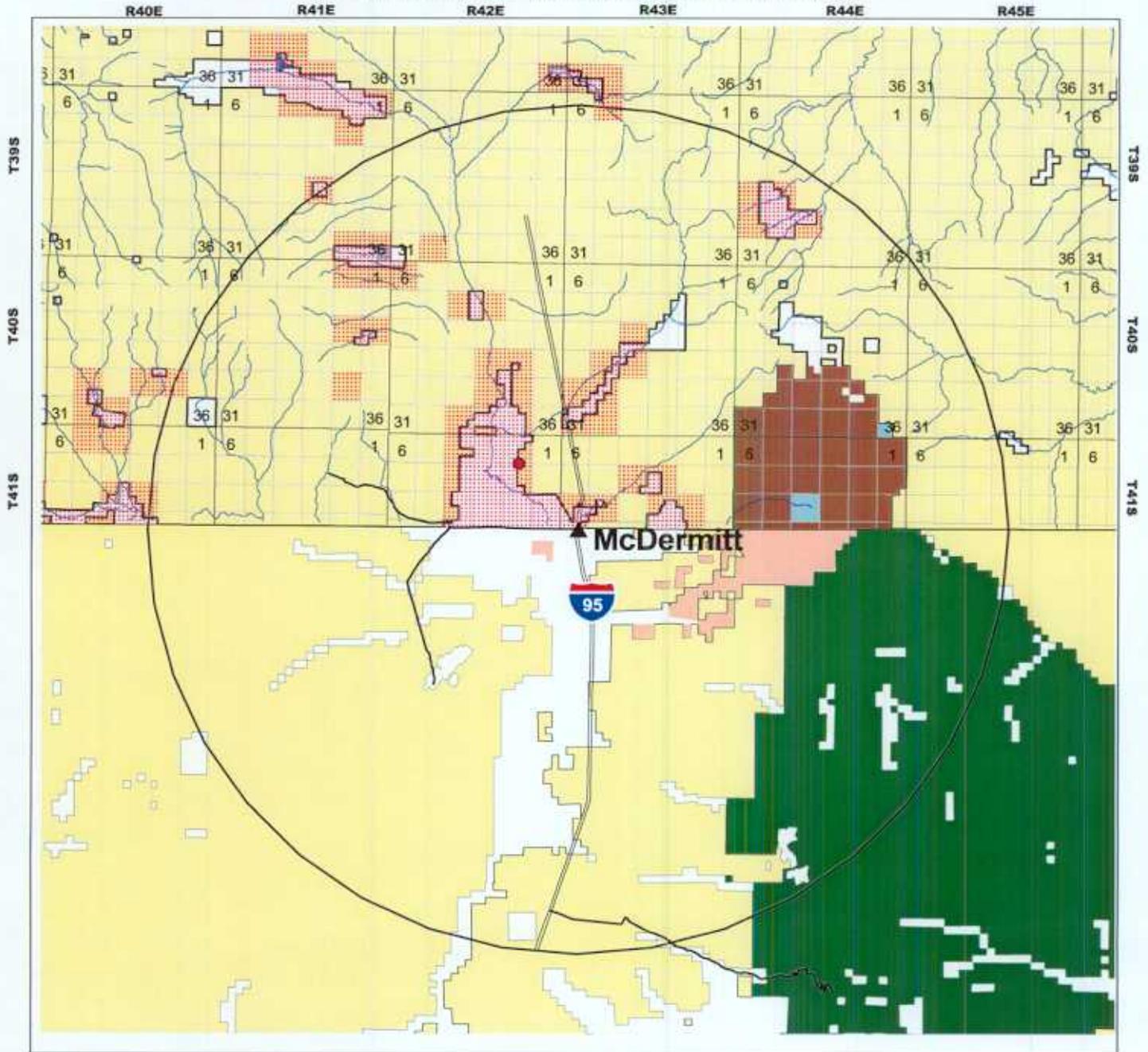
Map created by *Environmental Services* April 2002

Ownership:

- BLM
- U.S. Forest Service
- Oregon BIA
- Nevada BIA
- Private
- State
- Assessment Area
- Highway
- Stream
- Surface Water

Actual Assessment Point

Map 2: Highest Risk Areas for Fuel and Fire Suppression within the McDermitt Assessment Area



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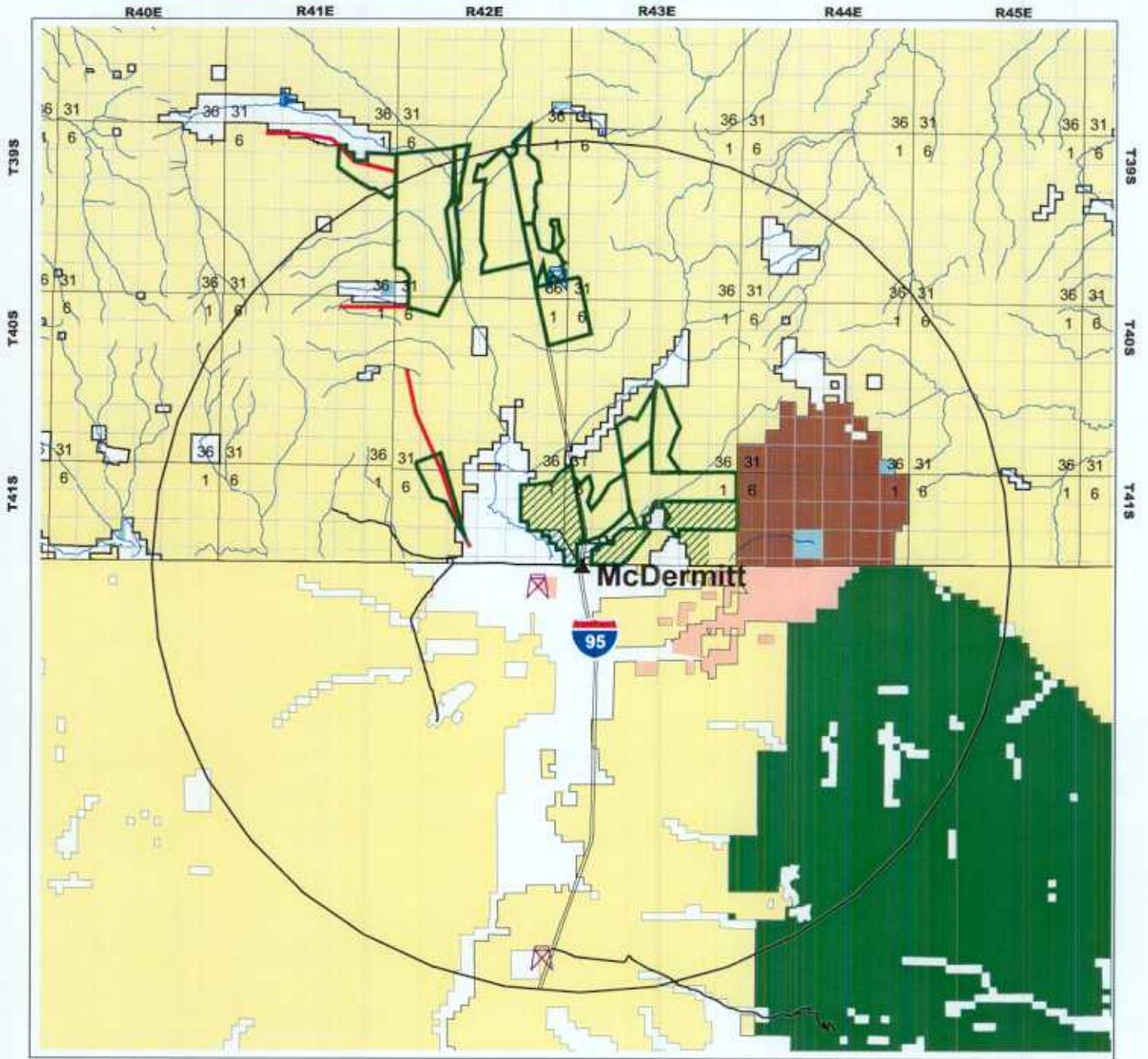
Map created by *Environmental Services* April 2002

Ownership:

- BLM
- U.S. Forest Service
- Oregon BIA
- Nevada BIA
- Private
- State
- Assessment Area
- Highway
- Stream
- Surface Water

- Highest Risk to Fire Suppression Areas (Low Structure Density) within the Assessment Area
- Highest Risk Fuels Areas within the Assessment Area

Map 3: Proposed Mitigation Recommendations in the McDermitt Assessment Area



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Map created by Environmental Services April 2002

Ownership:

- BLM
- U.S. Forest Service
- Oregon BIA
- Nevada BIA
- Private
- State
- Assessment Area
- Highway
- Stream
- Surface Water

Mitigation:

- Modify Existing Water Tank
- Proposed Water Tank
- Proposed Fire Break
- Proposed BLM Projects
- Herbicide Treatment and Re-seeding

Appendix B

Action Items Required to form a Rangeland Fire Protection Association

**ACTION ITEMS REQUIRED TO FORM A
RANGELAND FIRE PROTECTION ASSOCIATION**

ORS 477.320 & 477.325

REVISED: 20 APR 00 FILE: RFPA FORMATION

Rangeland owners write letter to Board of Forestry requesting formation of a RFPA.
Responsible party: Rangeland owners

Board of Forestry acknowledges rangeland owners request via letter and appoints a local Department of Forestry contact.
Responsible party: Salem Fire Staff

Board of Forestry agenda item is requested regarding formation of requested RFPA.
Responsible party: Salem Fire Staff

Board of Forestry orders the holding of a public hearing into the formation of a RFPA.
Responsible party: Board of Forestry

Date, time and location of the public hearing are arranged.
Responsible party: Salem Fire Staff, District and RFPA

Board of Forestry public hearing officer is appointed.
Responsible party: Salem Fire Staff

Board of Forestry public hearing is scheduled; time and place are determined.
Responsible party: Salem Fire Staff and District

News release about Board of Forestry public hearing is issued.
Responsible party: Salem Fire Staff and Salem Public Affairs

Local notice is given about Board of Forestry public hearing.
Responsible party: District

Board of Forestry public hearing is conducted.
Responsible party: Salem Fire Staff

Board of Forestry public hearing records are filed.
Responsible party: Salem Fire Staff

Board of Forestry agenda item is requested regarding formation of requested RFPA.
Responsible party: Salem Fire Staff

Board of Forestry authorizes the formation of the requested RFPA.
Responsible party: Board of Forestry

Bylaws of the RFPA are developed.
Responsible party: Rangeland owners

Draft Memorandum of Understanding is developed to define the extent and type of protection to be conducted by the RFPA.

Responsible party: Salem Fire Staff, District and RFPA

Memorandum of Understanding, which defines the extent and type of protection to be conducted by the RFPA, is signed.

Responsible party: Salem Fire Staff, District and RFPA

Develop and sign a Mutual Aid Agreement between the District and the RFPA.

Responsible party: District and RFPA

Facilitate acquisition of FEPP equipment by RFPA.

Responsible party: District and RFPA

Facilitate acquisition of VFA federal grant funds by RFPA.

Responsible party: Salem Fire Staff

Develop first budget and forward to Board of Forestry.

Responsible party: RFPA

Board of Forestry agenda item is requested regarding RFPA budget.

Responsible party: Salem Fire Staff

Board of Forestry approves RFPA budget.

Responsible party: Board of Forestry