

WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM

**Final Mitigation Recommendations
BLM Vale District
Baker City Assessment Area**



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



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

**VALE DISTRICT
BAKER CITY ASSESSMENT AREA**

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



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ACRONYM LIST

amsl	Above mean sea level
BLM	Bureau of Land Management
GPS	Global Positioning System
NAD	North American Datum
NEPA	National Environmental Policy Act
NOTEC	National Oregon Trail Interpretive Center
SOW	Statement of Work
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator

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 the wildland urban interface. 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 federal 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 Baker City community was selected to assess the hazard of wildland fire and to identify specific actions that may reduce the risk.

Dynamac Corporation was contracted to support the BLM in their assessment of wildfire risk to the Baker City community in the wildland urban interface. Dynamac scientists conducted fuel surveys by categorizing the vegetation, slope, and aspect of the land in the Baker City 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 these mitigation recommendations. The following action items were identified to reduce the wildfire threat in the Baker City assessment area:

- Conduct fuels reduction activities in the wooded areas in the western portion of the assessment area, and coordinate these efforts with federal, state and private landowners as appropriate;
- Provide assistance to the rural fire departments in obtaining needed training and equipment; and
- Develop an ongoing education and outreach program to encourage firewise practices by the residents of Baker City and Baker County.

2.0 GOALS AND OBJECTIVES

The goals of the Baker City wildfire hazard assessment report 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, while correspondingly decreasing the risk of wildfire spreading 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 Baker City community was selected to assess the threat of wildland fire and to identify specific actions that may reduce the risk of loss.

The successful implementation of the Communities-at-Risk Program requires considerable cooperation among community officials, private landowners, and federal and state agencies. To this end, the BLM contracted with Dynamac Corporation to fulfill specific tasks to assess the hazards of wildland fire in the Baker City assessment area. The specific tasks assigned to Dynamac were to evaluate the flammability of fuels and structures in the assessment area, convene a public meeting to educate and to obtain information from the general public, and to assess the ability of the community to suppress fires in the wildland-urban interface. A summary of the information obtained from the fuels and structure surveys, public meeting, and interviews of public officials is presented in this report.

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 National Environmental Policy Act (NEPA) process and will be accomplished as funding, policy, and regulations permit.

4.0 EXISTING SITUATION

Baker City is a historic town situated among the Blue Mountains in northeastern Oregon. The assessment area is located in Baker County approximately 100 miles northwest of Ontario,

Oregon and 150 miles east of Pendleton, Oregon. The assessment area included the towns of Baker City, Haines, Keating, and other rural communities and consisted of portions of townships T07S R38E; T07S R39E; T07S R40E; T07S R41E; T07S R42E; T08S R38E; T08S R39E; T08S R40E; T08S R41E; T08S R42E; T09S R38E; T09S R39E; T09S R40E; T09S R41E; T09S R42E; T10S R38E; T10S R39E; T10S R40E; T10S R41E; T10S R42E; T11S R38E; T11S R39E; T11S R40E; T11S R41E; and T11S R42E. Within the assessment area are ranches and farms, residential areas, numerous historic buildings, and the Oregon Trail Interpretive Center, a BLM facility.

The topography of the assessment area is relatively flat at 3,300 feet above mean sea level (amsl) in Baker Valley, where the town of Baker City and surrounding farms and ranches are concentrated. The eastern portion of the assessment area, where sagebrush and perennial grasses dominate, is hilly and ranges from 3,300 feet to 5,000 feet amsl. In the west and south portions of the assessment area pine and conifer woods predominate, and altitudes climb to a maximum at Rock Creek Butte at 9,106 feet amsl in Wallowa-Whitman National Forest.

Agricultural production is primarily cattle ranching; forage and orchard crops are grown also. Most of the crops are irrigated. The rangeland is important for wildlife habitat, recreation, and livestock grazing.

The climate of the Baker City area is characterized by warm, dry summers with average daily high temperatures reaching 85° F in July, and an average daily summertime low of 45-50° F. Winter months are typically cool, with average daily temperatures from November to March ranging from the mid 40s to the high teens in ° F. Precipitation is typically low with an average annual precipitation of 11.1 inches. Most precipitation arrives between November and January as snowfall and from March through June as rain (WRCC, 2001).

BLM land in the west and south portions of the assessment area are characterized by pine and mixed conifer forest that is often multi-storied, providing “ladder fuels” that can produce crown fires. These sections are located within T09S 39E and T11S 40E. Certain residential areas are at risk if fire were to spread from these public lands. In the Wingville, Pocahontas, and Pine Creek areas (T09S 39E) and Stices Gulch along highway 245 (T11S 40E), numerous residential dwellings are located near flammable fuels on properties with little or no improved space. Many of these areas do not have adequate road improvements or road access for fire equipment. Furthermore, there are approximately 400 additional building sites available in the rapidly

growing Wingville-Pocahontas areas. In addition, two recreational properties in the forestland west of town are at risk. A Girl Scout camp is not subjected to cleanup efforts until camp sessions begin in July. Phillips Park, a retreat recently donated to Baker County, is not used and remains locked and unattended.

Within the Baker City limits, houses along four blocks of Spring Garden Road, Highways 30 and 7, and Indiana Avenue in the southeastern section of town are at risk from wildfire. These properties have little improved space in their back yards, which are contiguous with wildland fuels on private property (section 21, T09S R40E). These fuels are continuous with fuels on BLM land in sections 26 and 27 of T09S R40E.

Dynamac Corporation conducted evaluations of the flammable fuels hazards near the wildland interface in the Baker City assessment area. Details of the methods used in the fuels survey are presented in Section 7.0 of this document. In brief, locations on or near public land were categorized as to fuel (vegetation) and land characteristics associated with the spread of wildfire. In choosing fuel survey points, emphasis was placed on land near the urban interface that is representative of the features in the surrounding area. The results have been reported in the Hazard Assessment Report for the Baker City assessment area. The results of the fuel and terrain characterizations can be summarized as follows:

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 62 fuel points surveyed, that received a high, moderate, or low hazard ranking.

- **Slope:**

- Class A - 27% of points were flat land (less than 10% slope).

- Class B - 41% of the points were moderate slopes (10 - 30% slope).

- Class C - 32% of the points were steep slopes (greater than 30% slope).

- **Aspect:**

- Class A - 24% of points faced north, northeast or northwest.

- Class B - 19% faced east.

- Class C - 57% had southern and western exposures (S, SE, SW, or W).

- **Elevation:**

- Class A - 46% of points were below 3,500 feet above mean sea level (amsl).

- Class B - 49% between 3,500 and 5,500 feet amsl.

Class C - 5% were above 5,500 feet amsl.

- **Fuel Type:**

Class A - 3% of points represented light fuels (grasses and annual weeds).

Class B - 78% of the points had medium fuels (primarily brush).

Class C - 19% of the points had heavy fuels (wooded).

- **Fuel Density:**

Class A - 3% of points had sparse fuels.

Class B - 29% of the points had had a broken/moderate fuel bed.

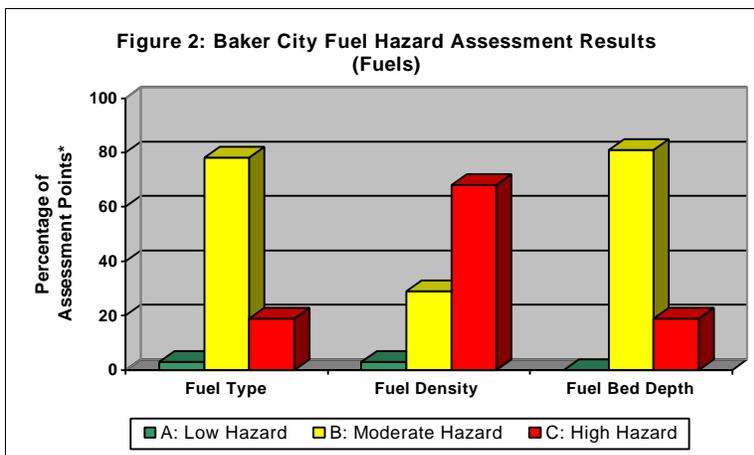
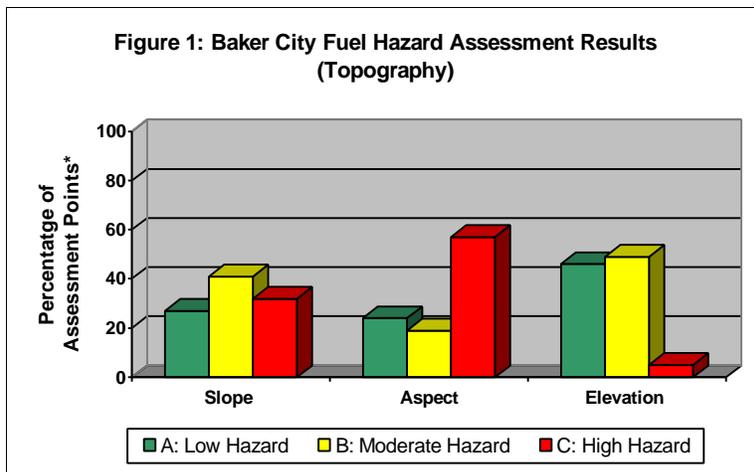
Class C - 68% of the points had a continuous fuel bed.

- **Fuel Bed Depth:**

Class A - 0% of points had low fuels (<1 foot).

Class B - 81% of the points had a depth of 1-3 feet.

Class C - 19% of points had fuels <3 feet.



* Percentages for Figures 1 and 2 are based on 62 assessment points surveyed

A second component of the hazard assessment was to observe the features of structures such as homes and other structures of value, which could categorize fire resistance. For this survey, Dynamac assessed one-square-mile sections of the assessment area that are within 1 mile of the wildland interface near public land. The data that were gathered characterize structure density, building materials, proximity to fuels, presence of a survivable space, and roads/accessibility for each square mile section. Overall, Dynamac surveyed 356 sections and determined that of these, 248 had no structures such as homes or buildings. Results of the structure survey are summarized below. It should be noted that the figures below are based on the 108 sections surveyed with structures, with the exception of structure density, which is summarized for both sections with structures and in terms of all sections surveyed; and building materials, which is summarized only for those 104 sections that contained dwellings.

- **Structure Density:**

- Class A - 0.6% had at least one structure per 5 acres

- Class B - 0.3% had one structure per 5-10 acres

- Class C - 99.1% had less than one structure per 10 acres.

With respect to 108 sections with structures, the following data were obtained:

- Class A - 2% had at least one structure per 5 acres.

- Class B - 1% had one structure per 5-10 acres.

- Class C - 97% had less than one structure per 10 acres.

- **Proximity of Wildland Fuels to Structures:**

- Class A - 62% had structures >100 feet from fuels.

- Class B - 18% had fuels 40-100 feet away from structures.

- Class C - 20% of sections averaged fuels less than 40 feet from the structures.

- **Predominant Building Materials:**

- Class A - 59% the majority of homes had fire- resistant roofs and/or siding.

- Class B - 31% (10-50% built with fire resistant materials).

- Class C - 10% (less than 10% built with fire resistant materials).

- **Survivable Space:**

- Class A - 57.4% of sections had the majority of properties with improved survivable space around structures.

- Class B - 22.2% had 10-50% structures surrounded by survivable space.

- Class C - 20.4% had little or no survivable space (<10% of structures).

- **Roads:**

Class A - 60% had predominately wide looped roads that were maintained, paved or solid, surfaced with shoulders.

Class B - 27% had maintained two lane roads with no shoulders.

Class C - 13% of sections had narrow, steep, rutted roads overall.

- **Response Time:**

Class A - 65% had reported response times of <20 minutes.

Class B - 35% had response times of 20-40 minutes.

Class C - 0% of sections had intervals >40 minutes.

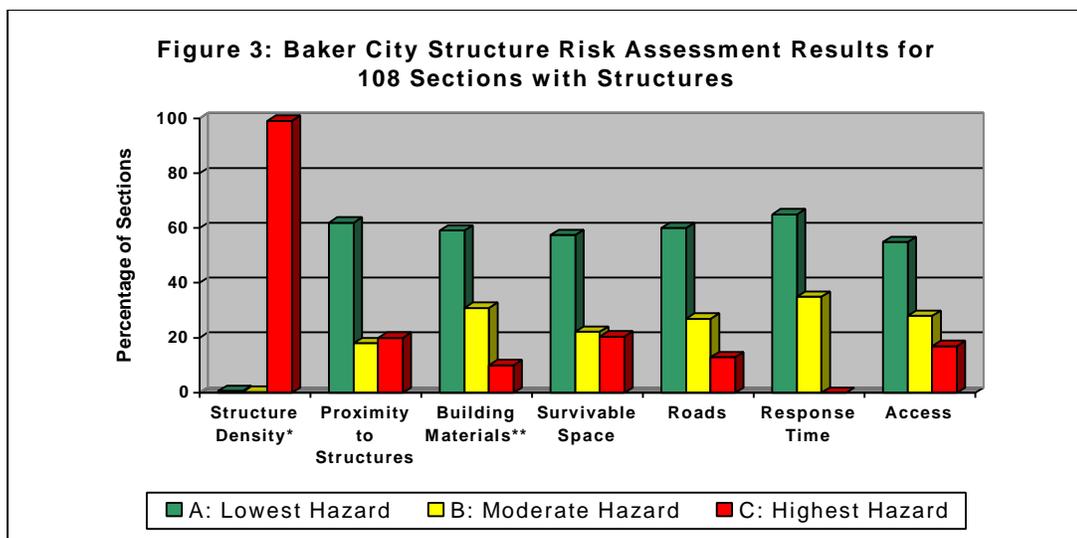
- **Access:**

Class A - 55% were identified as having multiple entrances and exits that were suitable for trucks with turnarounds.

Class B - 28% of the sections had limited access routes.

Class C - 17% of the sections had poor overall access for fire trucks.

The percentages of sections that received a high, moderate, or low hazard ranking for the risk assessment to structures in the assessment area are graphically depicted in **Figure 3**. Again, it should be noted that, with the exception of structure density and building materials, these percentages are based on the 108 sections *with* structures in the assessment area and not on all 356 sections surveyed (248 of which had no structures.) Structure density is based on all sections within the assessment area, and building materials is based on building materials used in dwellings in the 104 sections in which dwellings were observed.



* Percentage for Structure Density is based on 356 sections surveyed within the assessment area.

** Percentage for Building Materials is based on 104 sections surveyed that contained dwellings.

5.0 PUBLIC COMMENT SUMMARY

As part of the community assessment Dynamac solicited comments and suggestions from the public through two public meetings (October 30, 2001 and March 5, 2002), survey forms, and individual conferences. The following represent the primary concerns of citizens and landowners in the Baker City assessment area:

1. Many residents are interested in clearing dead trees from forested public land for use as firewood. Some recommended selective thinning of forested land while instituting a forest management policy that was more lenient but still worked to maintain healthy forests. Some residents are interested in reducing fuels around their homes. Controlled burns and brush piling with winter burns were also recommended. Additionally, grazing was recommended as a method of reducing fuels.
2. Some residents recommended forming partnership agreements between homeowners and government agencies (BLM, USFS, and/or ODF). The agreements would ensure that homeowners were maintaining fuel reductions on their property.
3. Everyone agreed that BLM, USFS, and ODF should form a partnership agreement to reduce wildland fire risks on their respective lands. Each agency is currently working on similar projects in Baker City. The agencies could share information and strategies to best reduce the threat of wildland fire in the community.
4. Additional partnerships between the government agencies and the rural fire departments were requested during interviews. Specifically, the rural departments would like more involvement from BLM. The local departments are willing to provide their skills in the event of a wildland fire on BLM property; it was noted that BLM does not actively seek support from local departments. As a result, wildland fires can spread substantially before BLM fire fighters can respond; local fire departments can respond faster than BLM, in some cases.
5. The City of Baker City is currently trying to develop a GIS for the community. Funds and manpower are lacking for this project. A GIS database could eventually be used by Emergency Services and the local departments during responses to fire and other emergencies.
6. Radio communications were reported to be troublesome. The repeater system needs to be improved to enhance communications between the sheriff's department, the fire departments, BLM, and the USFS, during a fire event.
7. Some of the rural fire departments are in need of wildland fire fighting training, wildland fire personal protective equipment and hoses, brush trucks, and tankers. Many of the current trucks are old, and in various states of disrepair.

8. The Baker City Watershed provides the City of Baker City with all its water. The water supply is completely unfiltered, and is one of only three such pure watersheds in the country. Although very little BLM land borders the watershed, there is still a possibility of fire spreading from BLM land onto the watershed property (the Forest Service maintains forest conditions in the watershed). Baker City does not have a water treatment plant; forest fires within the watershed could quickly degrade the water quality, thus diminishing the supply of safe drinking water for the city.

6.0 NEED FOR ACTION

Wildfires in the Baker City assessment area are common and have both natural and human origins. At risk are dwellings and other structures on private land near the wildland interface, the watershed, and cultural and historic resources such as the Oregon Trail Interpretive Center. To reduce the risks of wildfire in the assessment area both general and specific actions are needed. In general, the residents and public agencies must support activities that promote firewise safety for dwellings and structures at risk. Agencies such as the BLM, the USFS, and ODF, should coordinate efforts as appropriate to achieve fuels management programs aimed at decreasing the spread of wildfires from public lands.

7.0 METHODOLOGY

The mitigation actions proposed herein for the Baker City assessment area are based on information acquired from wildland fuel and structure surveys, a public meeting, interviews of community officials, and surveys filled out and submitted by residents of Baker City and Baker County. Dynamac gathered the majority of information presented in this report between October 30 and November 6, 2001.

Dynamac characterized land and fuels at 62 points on public land within a 15-mile radius of Baker City, 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 (See Hazard Assessment Report, Table 3, and Appendix B). The rating elements included slope, aspect, elevation, fuel type, fuel density, and fuel bed depth, and were assigned to a risk category of low (Class A), moderate (Class B), or high (Class C). At each survey point, the field crew recorded the location in UTM coordinates using a Trimble hand-held global positioning system unit (GPS), and photographed the surrounding area in the four cardinal

directions. Also, a wildland fuels fire hazard assessment form (Form 1) was completed which rated the characteristic of the land features and fuel sources.

Dynamac staff also collected information on the flammability and defensibility of structures on private land from over 300 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 (Class A), moderate (Class B), or high hazard (Class C) category (See Hazard Assessment Report, Table 4, and Appendix C).

A public open house was convened on October 30, 2001, at Baker City Hall from 6:00 to 9:00 p.m. The community was invited to attend through a newspaper article in the local paper and through announcements posted in public places such as grocery stores and the post office. Also, flyers were sent to 1,612 residences in Baker City and the vicinity. Despite good advertisement and outreach, only 24 residents attended. 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. This survey form was also included with the flyer announcing the meeting that was mailed to 1,612 residences. Several of these were received from people that did not attend the meeting. (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 Baker City Councilors, County Commissioners, various BLM representatives, the fire chiefs of the Baker City and Baker Rural Fire Departments, the Sheriff's office (See Hazard Assessment Report, Appendix E).

A second public open house was held on March 4, 2002, at the Baker City Hall. Publicity for this meeting included a direct mailing to 1,612 residences, and also mailing a letter and a factsheet about findings from the community assessment to 36 people who attended the first meeting and signed the mailing list, responded to mailed surveys, or who were interviewed.

Seventeen people attended the second open house. Dynamac's team lead for the Baker City assessment area presented a short slide show of the fuel hazard and structure hazard assessments that had been conducted in October and November 2001. A USFS participant contributed information regarding ongoing and planned fuels reduction projects in the assessment area. In addition, an ODF representative discussed National Fire Plan public outreach, mitigation surveys, and addressed the potential for local districts to obtain additional equipment and help with grant applications.

8.0 PROPOSED PROJECTS AND PRIORITY

The projects proposed are based on information obtained from the fuel and structure surveys, community meeting, and interviews. The following specific action items were identified to reduce the hazard of wildfire in the Baker City assessment area through partnerships among federal, state, and county agencies with wildfire control authority:

- Establish a fuels reduction plan for areas of BLM and USFS land that is focused on land in the western and southern portions of the assessment area to decrease fire risk to residential areas and the watershed;
- Develop an on-going education and outreach program throughout the assessment area to encourage firewise practice; and
- Assist the rural fire departments in obtaining needed training and equipment.

8.1 Fuels Reduction Recommendations

Purpose of Fuels Reduction: The hazard to the community from wildfire on public lands near Baker County is high. Recent fuels assessments revealed high risks in several categories, including fuel height, density, and elevation. Moreover, dead vegetation and multiple understory layers in some areas could serve as ladder fuels, spreading fire rapidly and increasing the chances of canopy fires. Fuels reduction has been shown to be effective around communities to reduce the risk of fire in the wildland-urban interface. A good assessment of specific hazards and threats to a community will help identify problems and solutions for both federal and private landowners, and offer opportunities for partnerships and agreements. Treatments will aid in reducing the wildfire threat and risks of loss to existing homes in the vicinity of the most hazardous fuels.

Types of Fuels Treatments: Mitigation measures appropriate to reduce forest crown fire risk include commercial and non-commercial mechanical fuel removal, and maintenance of treated areas. Fuel removal could be effected through timber sales, opening of firewood-clearing areas on public land, and removal of dead and insect-infested wood. Residential homeowners are encouraged to coordinate individual fuels reduction efforts with those of the public and commercial landowners in their respective areas.

Locations of Firebreaks and Fuel Treatments: **Map 2** shows locations where fuels analyses indicate high-fuel-hazard areas along the interface of public and private land. **Map 3** illustrates the extent of ongoing fuels reduction efforts, as well as those where additional fuels reduction activities are proposed as a result of this fuel hazard assessment. These areas include T08S R38E, Sections 9, 10, 14, 15, 16, 21, and 22 (Elkhorn Face, Hunt Creek and Pine Creek); T09S R39E, Sections 2-8, and 24 (Wingville); T10S R39E, sections 10, 16, 27, 28, 29 (Washington Gulch, Auburn Road); T11S R40E, Sections 6, 7, and 8 (Stices Gulch); and T09S R41E, Sections 6 and 7 (National Oregon Trail Interpretive Center). Much of this land is administered by USFS, and the area includes private land also. Therefore, BLM, USFS, ODF, and private landowners should coordinate their fuels reduction efforts in these regions of concern.

The BLM land that is part of the Oregon Trail Historical Interpretive Center is currently maintained annually to reduce fire risk. However, as the 500 acres around the center are not grazed, wildfire remains a concern. Furthermore, the Center's land area is part of a very large contiguous area of BLM wildland exceeding 30,000 acres within the Baker City assessment area.

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 NEPA are planned, analyzed, and designed. In Year Three, NEPA projects begin implementation. All steps are contingent on available funding. In Year Four, post-treatment monitoring begins. Fuels reduction on private property can be implemented at any time with compliance with local, State, and Federal regulations if applicable.

Project Necessity: Fuel removal and reduction of ladder fuels will reduce the danger of fires escalating to uncontrollable levels. This treatment will help to protect structures, forestland, and the pristine watershed by lowering the risk fires pose, and by making fires that do occur easier to suppress.

8.2 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 of 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 prescribed burning or 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 occur in partnerships among federal, state, county, and rural fire districts as appropriate.

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 motivates homeowners to take measures around their individual property, thereby contributing to the 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.

8.3 Local Fire Department Assistance

Purpose of Improvements: The efficiency of all rural fire districts would be enhanced and response times shortened by the addition of a 3,000-gallon tender. For example, adding a new truck would allow the Baker City fire department to respond to more than one fire at a time.

Necessity for Assistance: The residential component of Baker County and City may outgrow the capabilities of the Baker City Rural Fire Department in the future. The area is growing rapidly; over 80 new dwellings were added in the year 2001. Because much of this development is within one mile of the wildland interface, the Baker City Rural Fire Department should submit grant proposals for federal assistance funds.

Project Timing: While considered a lower priority than fuels reduction and public outreach and education activities, rural fire districts should work with federal and state agencies in developing partnerships to obtain grant money as appropriate.

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Video: Firewise Landscaping, Part 2-Design and Installation.

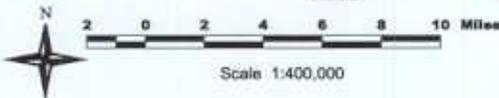
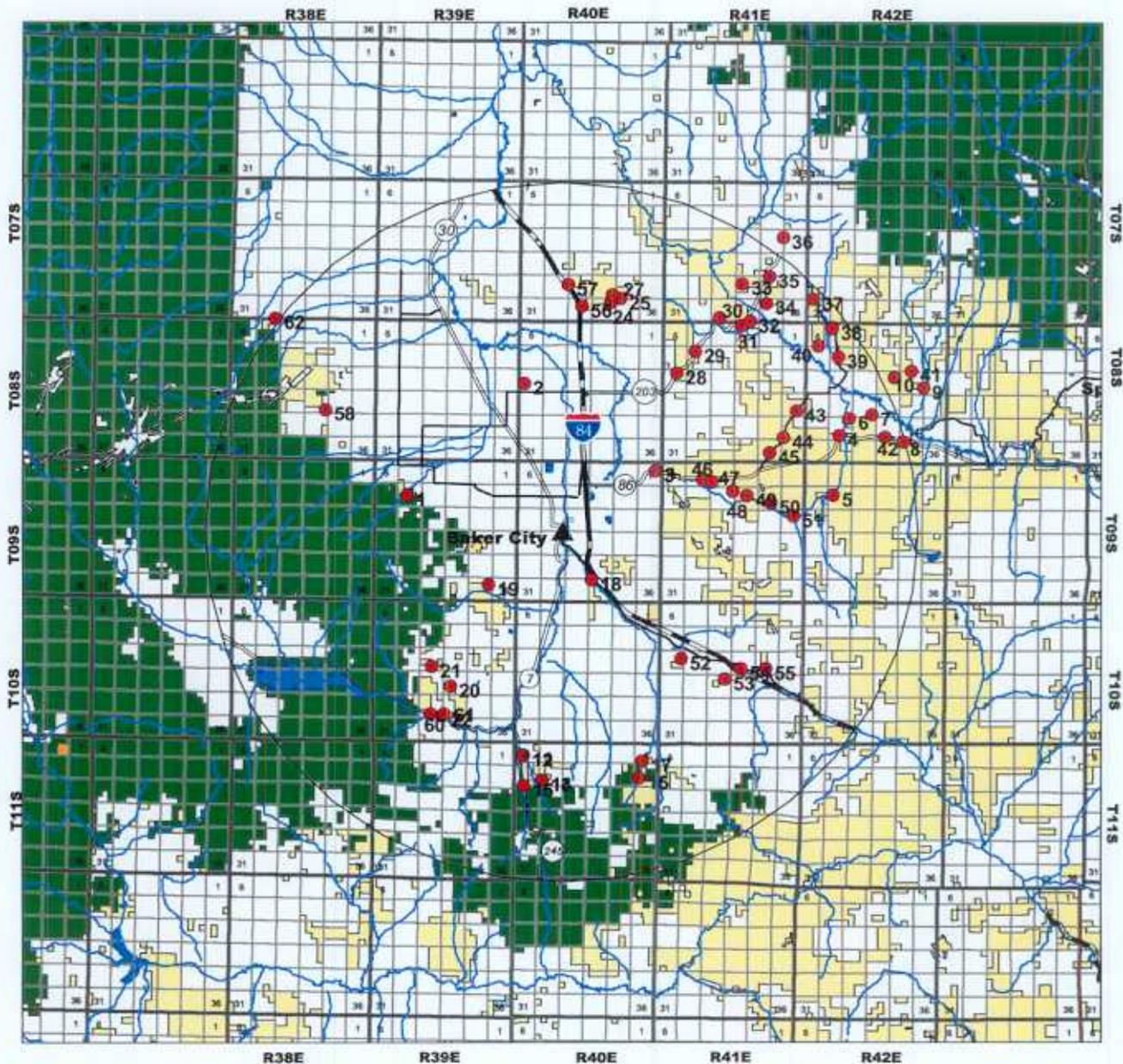
Video: Firewise Landscaping, Part 3-Maintenance.

Video: Wildfire Control--An Introduction for Rural and Volunteer Fire Departments.

Video: The Meeting: Fire Protection Planning in the Wildland/Urban Interface (1991).

Appendix: Maps

Map 1: Baker City Assessment Area and Fuel Survey Points

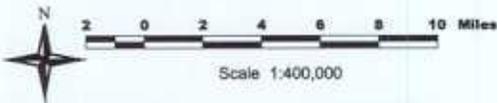
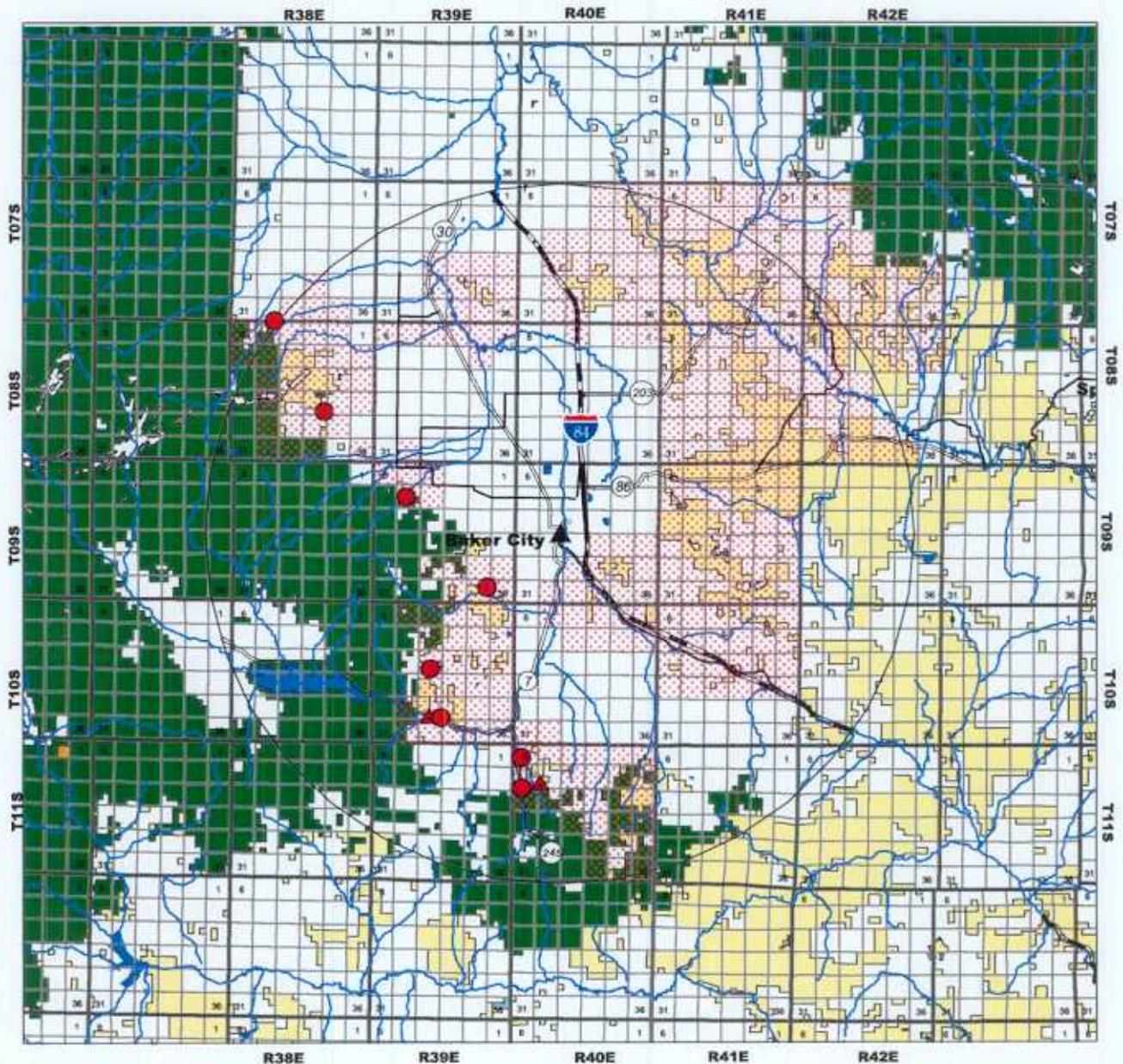


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 - Surface Water
- Assessment Area
 - Assessment Communities
 - Interstates
 - Major Routes
 - Roads
 - Major Streams
 - Assessment Points

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



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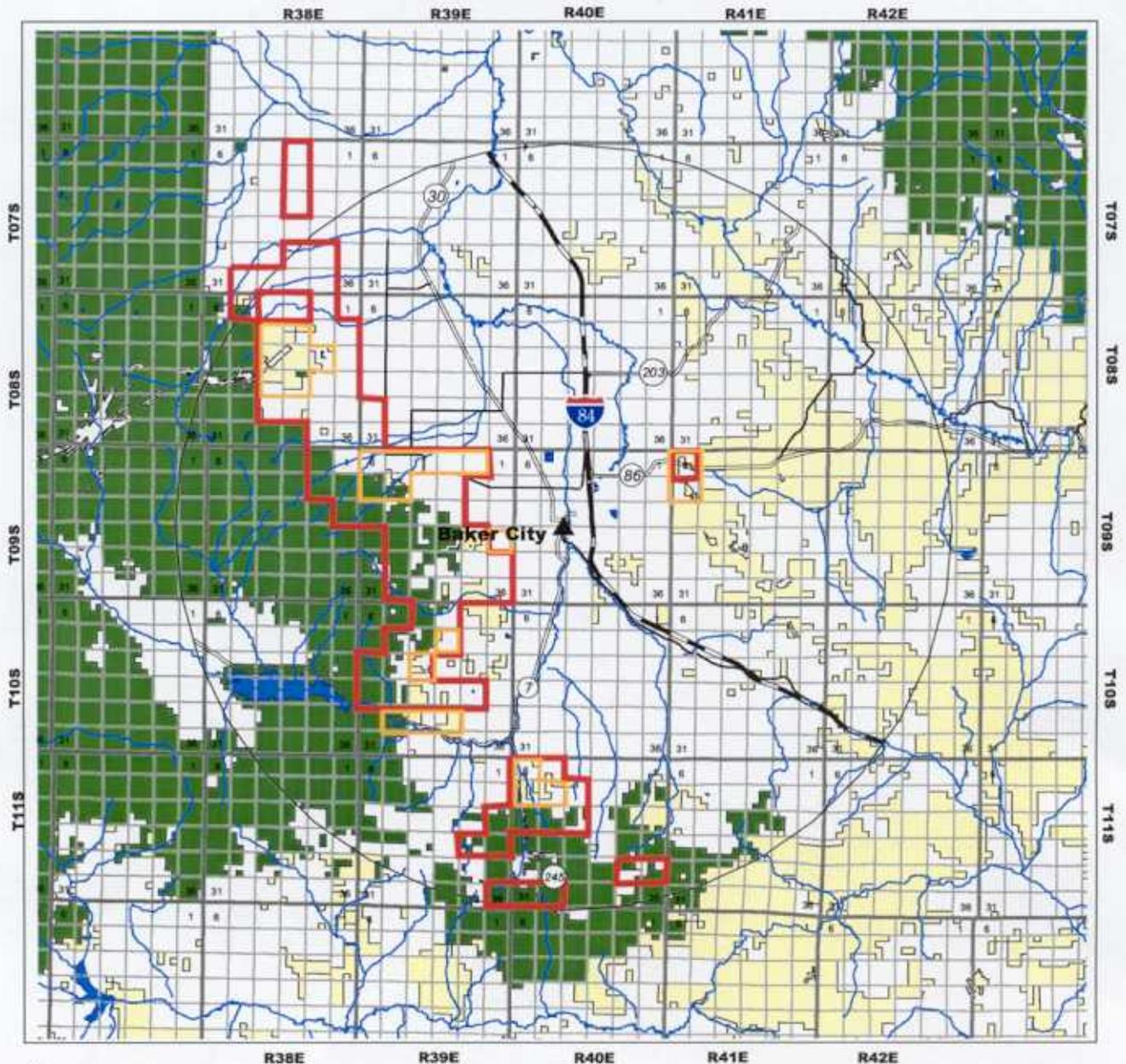
Highest Risk Fire Suppression Areas (Low Structure Density) within the Assessment Area

Highest Risk Fuel Areas within the Assessment Area

- Assessment Area
- Assessment Communities
- Interstates
- Major Routes
- Roads
- Major Streams

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Map 3: Proposed and Ongoing Mitigation Projects in the Baker City Assessment Area



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Mitigation:

- Areas of ongoing fuels reduction activities
- Areas posing greatest fuels hazard, proposed for additional fuels reduction activities

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