

WILDLAND-URBAN INTERFACE COMMUNITIES-AT-RISK PROGRAM

Final Mitigation Plan Report Lower Snake River District Silver City Assessment Area

**Work Assignment No.: BLM4-73
BLM Contract No.: 1422-N660-C98-3003
February 2002**



FINAL

**WILDLAND-URBAN INTERFACE, COMMUNITIES-AT-RISK
MITIGATION REPORT**

**LOWER SNAKE RIVER DISTRICT
SILVER CITY ASSESSMENT AREA**

Prepared for:

**U.S. Department of Interior
Bureau of Land Management
Lower Snake River District
Boise, Idaho**

Prepared by:

**Dynamac Corporation
20440 Century Boulevard
Suite 100
Germantown, Maryland 20874**

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ACRONYMS

amsl	Above mean sea level
BLM	Bureau of Land Management
IDL	Idaho Department of Lands
NRCS	National Resource Conservation Service
SCA	Student Conservation Association

1.0 EXECUTIVE SUMMARY

During the 2000 fire season more than 6.8 million acres of public and private lands burned, 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. To this end, the Bureau of Land Management (BLM), Lower Snake River 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 and on public lands.

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, forestland 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 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 buildup, and increasing the fire protection capabilities of communities. The Silver City community was selected by the BLM 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 Silver City community in the wildland-urban interface. Dynamac scientists conducted fuel surveys by categorizing the vegetation, slope, and aspect of the land in the Silver 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 a mitigation report. The following action items were identified to reduce the hazard of wildfire in the Silver City assessment area based on the synthesis of the two reports:

- 1.) Reduce the hazardous fuels within and near the town of Silver City.
- 2.) Improve forest health in the area and reduce the risk of catastrophic wildfire by thinning the nearby forest stands.
- 3.) Study the feasibility of augmenting the city's water supply with water from sources such as Florida Mountain or other possibilities.
- 4.) Increase Silver City's water holding capacity by:
 - a. repairing the town water storage tank;
 - b. building an additional 20,000-30,000 gallon storage tank;
 - c. updating the town's water hydrant system; and
 - d. repairing the reservoir on Jordan Creek known as the "ice ponds."
- 5.) Develop an ongoing education and outreach program throughout the assessment area to:
 - a. encourage firewise practices;
 - b. train the residents to effectively use firefighting equipment; and
 - c. develop an evacuation plan.
- 6.) Station a fire truck in the town during the fire season that the residents would be capable of operating.

2.0 GOALS AND OBJECTIVES

The goals and objectives of the Silver City wildfire hazard assessment and mitigation plan 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 BLM lands onto private lands, while correspondingly decreasing the risk of wildfire spreading from private lands onto BLM lands; and to protect historic resources within the assessment area.

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

consumed annually 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, forestland and rangeland restoration, infrastructure improvements, and public outreach may reduce the risk of catastrophic fire in the wildland-urban interface. To this end, the BLM implemented the Communities-at-Risk, Wildland-Urban Interface Program. 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 Silver City community was selected by the BLM to assess the hazard of wildland fire and to identify specific actions that may reduce the risk.

4.0 EXISTING SITUATION

Silver City is a historic mining town dating back to the 1860s, when gold was discovered in the Owyhee Mountains of southwestern Idaho. The town and 10,240 surrounding acres are listed on the National Register of Historic Places. Historic buildings, mine shafts, and mining structures characterize the historical mining district. Silver City is composed of approximately 71 historic structures that include homes, a hotel, a church, cemeteries, and a school. The structures are privately owned and many of the owners reside in Silver City during the summer and fall months. During the winter, Silver City Property Owners, Inc., hires a watch person to care for the town. The Deed Covenants and the Owyhee County Silver City Preservation Ordinance requires that all structures be maintained to be as historically authentic as possible. The area for the wildfire hazard assessment consisted of portions of townships T04S R04W; T04S R03W; T05S R04W; and T05S R03W (**Map 1**).

The Silver City assessment area is located 26 miles southwest of Murphy, Idaho, in Owyhee County. The assessment area is comprised of 16630.5 acres. The town of Silver City can be

reached by taking the Silver City road from Murphy. The town of Murphy is reached by exiting Interstate 84 at Exit 38 and traveling south on Highways 45 and 78. Silver City can also be reached by traveling the Jordan Valley Road along Jordan Creek from Jordan Valley, Oregon.

The elevation of Silver City is 6,100 feet above mean sea level (amsl) and it is situated in a scenic mountainous valley. The topography slopes gently upward on the east and west for approximately one-quarter mile and then it rises sharply to War Eagle Mountain (8,501 feet amsl) on the east and Florida Mountain (7,784 feet amsl) on the west. The terrain is rugged and difficult to assess because of narrow and steep 4-wheel drive roads. The soils are weakly to moderately developed, well drained, and range in depth from shallow to deep. Erosion potential on these soils is moderate to high with soils on slopes of greater than 30 percent being the most prone to erosion. Current land uses include cattle grazing, recreation, hunting, camping, and off-road driving. Silver City is located at the confluence of the Long Gulch stream with Jordan Creek. Other open bodies of water in the assessment area include Bull Creek, Bull Frame Reservoir, Cunningham Creek, and numerous springs. Historically (ca. late 1880s and early 1890s), the hills surrounding Silver City were stripped of the forests because the trees were used for fuel wood, structural construction, and mining supports.

The climate in the assessment area is characterized by summers that are pleasant and cooler than the nearby Snake River Valley. The average maximum temperature is 78° F in July and 36° F in January. Average minimum temperatures are 43° F and 13° F in July and January, respectively. The average annual precipitation is 23° inches and occurs mostly from snowfall. Thundershowers are common in the summertime.

The diverse vegetation types of the assessment area provide valuable wildlife cover and habitat. Currently, Douglas fir stands, juniper and mountain mahogany woodlands, aspen, and mountain shrub communities are the dominant vegetation types throughout the assessment area. Western juniper and curlleaf mountain mahogany are common on the dryer lower elevations, with Douglas fir, subalpine fir and aspen at the higher elevations. Aspen, choke cherry, and other riparian species occur along the creeks and on mesic sites. Mountain shrubs, such as mountain big sagebrush, snowbrush ceanothus, and snowberry are also common throughout the assessment area. Aspen stands are an important component, occupy approximately 20 percent of the assessment area, and occur on many of the mesic sites.

Most of the aspen stands are being invaded with late seral Douglas fir trees and they will eventually disappear. In addition to the values that the aspen stands provide, they are much less of a fire hazard than Douglas fir stands. Removing the invasive Douglas fir trees from the aspen stands will maintain the valuable aspen component and the values associated with them, and significantly reduce the fire hazard near Silver City.

Douglas fir and subalpine fir stands in the assessment area are dying from tussock moth and bark beetle infestations. The dying trees are widespread throughout the assessment area and pose a fire hazard. In addition, western juniper trees and shrubs growing in and around Silver City present a fire hazard.

The dominant hazardous fuels in the assessment area are coniferous trees such as Douglas fir and subalpine fir at the mid- to high elevations, and western juniper and curlleaf mountain mahogany at the lower elevations. Mountain big sagebrush and snowberry are widespread shrubs that dominate the non-forested vegetation.

The Hazard Assessment Report for the Silver City assessment area presents and summarizes data for fuel and terrain conditions. The results of the survey are summarized as follows (Class A = low hazard, Class B = moderate hazard, Class C = high hazard):

- **Slope:** Fifty-seven percent of the sites had slopes that were greater than 30 percent (Class C) while 34 percent of the sites had slopes between 10 and 30 percent (Class B). Only 10 percent of the sites had slopes of less than 10 percent (Class A).
- **Aspect:** Sixty-nine percent of the sites had southern or western exposures (Class C) and 17 percent had eastern exposures (Class B). The aspect for the remaining sites was northern (Class A).
- **Elevation:** The elevation for all sites (100 percent) was greater than 5,500 feet (Class A).
- **Vegetation Type:** Twenty percent of the vegetation sites were considered high hazard vegetation (Class C), while 77 percent of the sites were ranked moderate hazard vegetation (Class B). Three percent of the sites were classified as low hazard vegetation (Class A).
- **Fuel Type:** Twenty percent of the sites consisted of heavy fuels such as timber and large shrubs (Class C). Sixty-six percent of the sites were scored as medium fuels because of the presence of shrubs and small trees (Class B). Finally, fourteen percent of the sites had small, light fuels (Class A).

- **Fuel Density:** Thirty-four percent of the sites had a continuous fuel bed because of the continuous nature of the tree and shrub canopy (Class C), while 49 percent of the sites had a broken fuel density (Class B). The remaining 17 percent of the sites had non-continuous fuel bed (Class A).
- **Fuel Bed Depth:** Sixty-nine percent of the fuel sites had a fuel bed depth greater than three feet (Class C), while 26 percent had a depth between one and three feet (Class B). Only six percent of the sites had a fuel bed depth less than one foot (Class A).

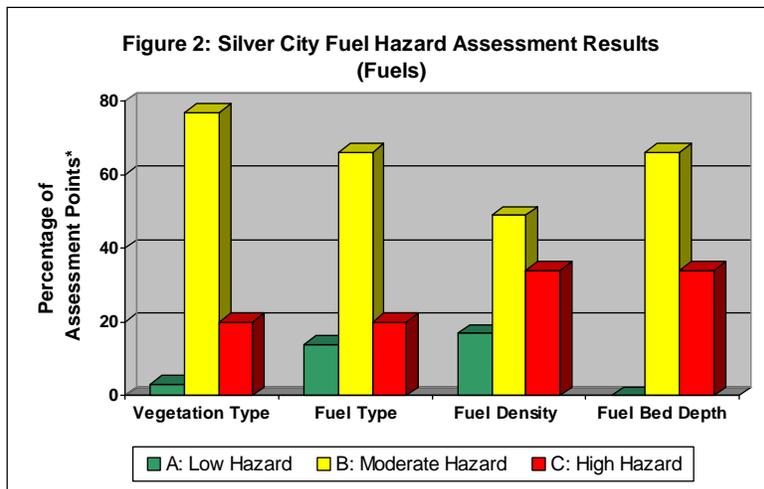
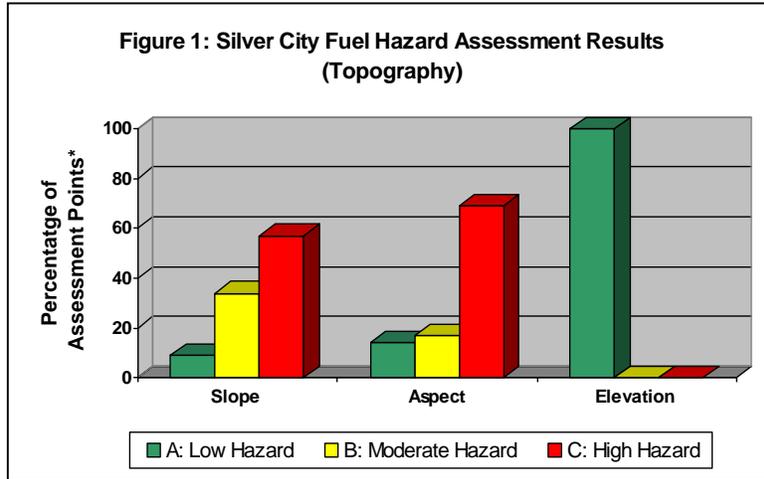
A second component of the Hazard Assessment was to characterize structures in the assessment area for structure density, building materials, proximity to fuels, presence of a survivable space, and roads/accessibility. Twenty-seven sections with private land within one mile of public land were evaluated for the structure survey and four of these sections contained structures. One section contained approximately 71 structures comprising the historic town of Silver City. Another section at the top of War Eagle Mountain contained radio towers and a third section contained a pioneer cemetery. The fourth section contained a seasonally-used home and barn. The categories described by the structural fire hazard assessment field survey are as follows:

- **Structure Density:** Twenty-seven sections were evaluated for structures, with 94 percent of the sections rated as less than one structure per 10 acres (Class C). Three percent of the sections had at least one structure per 5 acres (Class A) and another three percent had one structure per 5 to 10 acres (Class B).
- **Proximity to Structures:** One hundred percent of the four sections that contained structures had fuels that were within 40 feet of the structures (Class C).
- **Predominant Building Materials:** One hundred percent of the three sections that contained building structures had fire resistant roofs and/or siding (Class A). Even though the buildings of Silver City had metal roofs, building siding was consistently wood and posed a fire hazard. The structures associated with the communication towers were metal.
- **Survivable Space:** One hundred percent of the four sections with structures did not have improved survivable space (Class C).
- **Roads:** Two of the 27 sections that were evaluated did not contain any roads. Eighty-four percent of the 25 sections with roads had narrow, single lane, or steep roads that were minimally maintained (Class C), while 14 percent had roads that were maintained but were two lanes and narrow (Class B).
- **Response Time:** The response time was greater than 40 minutes in eighty-eight percent of the 25 sections that contained roads (Class C) because of narrow, steep roads and distance

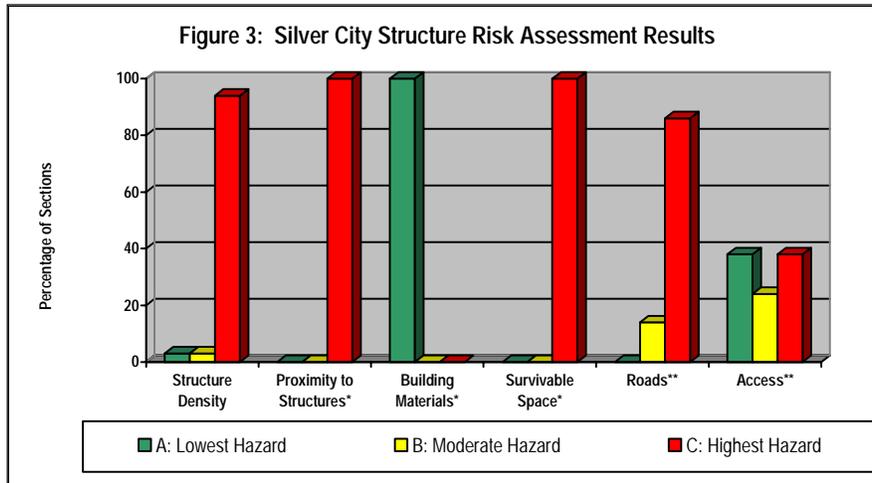
from Silver City. Eight percent of the sections had a response time between 20 and 40 minutes (Class B). These sections were adjacent to the section that contained Silver City. The response time in the one section (4 percent) containing the town of Silver City is less than 20 minutes because of the presence of a fire tanker, and a loosely organized volunteer network of homeowners that has received some training in fire fighting (Class A). There is no formal fire department in Silver City. The closest fire departments are Murphy-Reynolds-Wilson and Jordan Valley.

- **Access:** Ninety-six percent of the sections that contained roads were identified as being narrow, with one way in and out, and steep grades (Class C). Four percent of the sections were judged to have Class B roads that have limited access, with at least two ways in and out, and with moderate grades. There were no sections containing “Class A” accessibility, with good roads, multiple entrances and exits, and wide turnarounds for fire trucks.

Map 2 shows an overlay of data for the sections with highest risk in terms of fuel hazard, combined with areas of low structure density, which increase fire suppression risks. The data from the fuels hazard assessment are also graphically depicted in **Figures 1 and 2**. These charts depict the different attributes associated with the fuels survey and are based on 35 assessment points surveyed. The results of the hazards to structures survey are graphically depicted in **Figure 3**. Structure density was based on the evaluations of 27 sections of private land that occurred within one mile of public land. Analysis for the two attributes “proximity of fuels” and “survivable space” consisted of the four sections that contained structures. The “building materials” analysis was based on the three sections that only contained buildings. One section contained a cemetery and it was not included.



*The percentage of assessment points was based on 35 assessment points surveyed.



* Percentages based on 4 sections containing structures, except “Building Materials”; Structures in 3 of the 4 sections containing structures were buildings. The last section contained a cemetery.

** Percentages based on 25 sections containing roads within the assessment area.

5.0 ACTIONS SUGGESTED BY THE COMMUNITY TO ACHIEVE DESIRED CONDITIONS

Based on the interviews of community officials and the discussions during the public meeting, Dynamac ascertained that the desired condition for Silver City is to reduce the risk of wildfire to maintain so that its historical value and character for the enjoyment, recreation, and education of the seasonal residents and visitors. The community suggested the following actions in order to achieve or maintain desired conditions:

- Increase cooperation between BLM, Silver City citizens, Owyhee County, and the State Historical and Preservation Office on fuel reduction projects and infrastructure improvement to protect Silver City from wildfire;
- Increase fire suppression efforts by 1) pre-positioning water sources at specific locations within the town, 2) improving the hydrant system, 3) construct a second water storage tank, improve the “ice ponds” on Jordan Creek for water storage, and 4) position a newer fire truck in the City during the fire season that can be operated by the residents;
- Reduce the build-up of flammable fuels within the town and surrounding vicinity to levels that will reduce the risk of wildfire;
- Increase the knowledge and understanding of residents to proper firewise activities such as landscaping, use of fire resistant building materials, proper access roads, and emergency evacuation procedures;
- Remove the dying coniferous trees throughout the assessment area. Those closest to Silver City should receive highest priority;
- Maintain and improve the natural vegetation cover and wildlife habitat on BLM land; and
- Improve aspen stand health by selectively harvesting the encroaching Douglas fir trees.

6.0 NEED FOR ACTION

Wildfire occurs in the Silver City assessment area and results from both natural and human causes. The steep terrain and vegetation of the area makes wildfire suppression difficult, and makes the historic town very vulnerable to fire. The most recent noteworthy fire was the Rough Diamonds Fire that occurred in 2001, burning 8,904 acres. This fire came within two miles of Silver City, and as a result, the residents of Silver City and BLM developed a wildfire contingency plan (See Structure Protection Plan, **Appendix B**). To reduce the hazards of wildfire in the assessment area, both general and specific actions are needed.

General actions include activities that should occur on an annual basis, such as reducing the amount of vegetation that grows within Silver City, keeping the town clean of debris, and public outreach to encourage firewise practices around the structures. The vegetation growing within the town needs to be maintained at an acceptable level to reduce the levels of flammable fuels.

Cattle grazing has occurred in the area since settlement and it has proven effective in reducing herbaceous fuel loads around the town. However, grazing will not reduce the occurrence of western juniper and other shrubs near the structures. These shrubs need to be removed by hand, as cattle grazing will not reduce these types of fuels. Firewise recommendations suggest at least a 30-foot perimeter around structures that is free of flammable vegetation.

Secondly, the town needs to move lumber and other debris away from flammable structures. Improved firewise practices are long-term in nature because they require continual adherence to reduce the hazard of wildfire. A good example in the Silver City assessment area is the homeowners' diligence in fuels reduction around structures. It is also important to have people trained to respond to structural and wildland fires.

Some management actions to reduce hazardous fuels in the assessment area include: 1) removing the dying Douglas fir stands; 2) harvesting the Douglas fir trees that are invading the aspen stands; 3) reducing fuel accumulations near the town; and 4) creating firebreaks around the town. Harvesting western juniper trees and large shrubs within 100 feet of all the structures would create the necessary firebreak around the town. However, many of the residents expressed their desire for the older juniper trees not to be removed. Historical photographs from the 1800's and early 1900's show that there were few trees or large shrubs growing on the surrounding mountain slopes. Dead and dying Douglas fir stands resulting from tussock moth and Douglas fir bark beetle infestations occur throughout the assessment area. These stands need proper management to control the tussock moth and bark beetle and reduce flammable wildland fuels as the trees succumb to the insects. The Douglas fir stands located closest to Silver City should receive the highest priority. Efforts to improve the health and viability of aspen stands are also encouraged.

Actions that would improve the wildfire fighting capability within the town include exploring additional water sources such as on Florida Mountain and constructing a new water storage tank above the existing water tank or at another strategic location. Surface water is available in the assessment area from Jordan Creek and Long Gulch Creek and other sources. However, a new

water storage tank would ensure the availability of water when needed for fire emergencies. Also, maintenance of the “ice ponds” on Jordan Creek and placing a water pump there could be a second source of water for fire protection.

A fire protection contingency plan was developed in August 2001 when the Rough Diamond Fire threatened Silver City. See **Appendix B**, Structure Protection Plan: Silver City, Idaho.

7.0 METHODOLOGY

The mitigation actions proposed herein for the Silver City assessment area are based on information acquired from fuel and structure surveys, a public meeting, and interviews of community officials. The majority of information presented in this report was gathered during the time period between July 21 and 23, 2001.

Fuel Survey

The fire hazard assessment area surrounding Silver City was defined by the BLM. The BLM assigned 35 fuel survey points in the assessment area to be evaluated by Dynamac (**Map 1**). The fuel survey points occurred in sections where BLM land occurred. At each survey point, digital photographs were taken of the surrounding area in the four cardinal directions. Also, a wildland fuels hazard assessment was completed which rated the characteristic of the land features and fuel sources. 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 as defined by BLM (see Hazard Assessment Report, Table 3, and Appendix B). In addition, notes were taken of the surrounding vegetation and recorded on topographic maps. The location of some of the dying Douglas fir stands was recorded on the topographic maps as they were opportunistically observed to demonstrate the extent of the problem throughout the assessment area. However, this survey was not designed to locate all insect-infected Douglas fir stands.

Structural Hazard Assessment

Dynamac staff also collected information on the flammability and defensibility of structures on private land from 27 sections located within one mile of BLM 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, medium, or high hazard category defined by BLM (see Hazard Assessment Report, Table 4, and Appendix C).

Initial Public Meeting

A public meeting was convened on July 21, 2001, at the Oddfellows Hall in Silver City from 10:00 a.m. to noon. The community was invited to attend through a newspaper article in the local paper and announcements posted in public places such as the grocery store and post office, and a direct mailing to the members of the homeowners association. Dynamac, BLM, and Student Conservation Association (SCA) staff attended the public meeting to hand out firewise brochures, obtain information from the community on hazardous fire situations and desired conditions, and be an informational resource to those attending the meeting. Twenty-six people signed the meeting attendee list.

Interviews

Dynamac staff conducted interviews with numerous local public officials and residents. Individuals or groups interviewed included Owyhee County Commissioners, various BLM representatives, the fire chief of the Murphy Reynolds Fire department, the Silver City Homeowners' Association President; the Chairman of the Silver City Historical Preservation Advisory Committee, the State Historical and Preservation Organization, and local residents and homeowners. (See Hazard Assessment Report, Appendix E).

Follow-Up Public Meeting

A second public meeting was convened on November 14, 2001, 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 the residents of this meeting. The meeting was held at the Civic Center in Nampa, Idaho, from 7:00 to 8:30 pm. Seven people attended the meeting in addition to BLM and Dynamac staff (see Hazard Assessment Report, Appendix F, for a summary of the meeting). The meeting participants were given a copy of the mitigation report and requested to provide comments on the report to either BLM or Dynamac Corporation within two weeks. Several public comments were received on the draft mitigation report (see **Appendix C**).

8.0 PROPOSED PROJECTS AND PRIORITY

The projects proposed are based on information obtained from the fuel and structure surveys, community meeting, and interviews of community residents and officials. The following specific action items were identified to reduce the risk of wildfire in the Silver City assessment area, in order of priority:

- 1.) Reduce the hazardous fuels within and near the town of Silver City.
- 2.) Improve forest health in the area and reduce the risk of catastrophic wildfire by thinning the nearby forest stands.
- 3.) Study the feasibility of augmenting the city's water supply with water from Florida Mountain or other possible sources.
- 4.) Increase Silver City's water holding capacity by:
 - a. repairing the town water storage tank;
 - b. building an additional 20,000-30,000 gallon storage tank;
 - c. updating the town's water hydrant system; and
 - d. repairing the reservoir on Jordan Creek known as the "ice ponds."
- 5.) Develop an ongoing education and outreach program throughout the assessment area to:
 - a. encourage firewise practices;
 - b. train the residents to effectively use firefighting equipment; and
 - c. develop an evacuation plan.
- 6.) Station a fire truck in the town during the fire season that is capable of being operated by the residents.

Many of the proposed projects require compliance with the National Environmental Policy Act (NEPA) and other environmental laws before they can be implemented. Any impacts of proposed projects would be analyzed in an environmental assessment prior to implementation.

The locations of the proposed fuel reduction projects are illustrated on **Map 3**. These projects are proposed because of the impact they would have on reducing the hazard of wildland fire in the Silver City assessment area. The fuel surveys found widespread dying Douglas fir and subalpine fir trees, and Douglas fir invading into aspen stands. These firs are highly flammable and are conducive to the occurrence and rapid spread of wildfire. As such, fuels reduction treatments are necessary in strategic locations in the assessment area. The area immediately surrounding Silver City is high-priority. Numerous residents at the town meeting were in favor of removing the

dying trees northeast and southwest of the town. Also, they would like the juniper trees growing within town and in the immediate vicinity to be removed. However, the community would like the juniper trees that are older than 100 years to remain. The citizens also suggested that dead willow accumulations along Jordan Creek near the town be removed. Finally, Douglas fir accumulations within aspen stands should be removed.

The community's next priority was the maintenance of the existing water tank, establishment of a new 20,000 to 30,000 gallon water storage tank above the old one, and the maintenance of the “ice pond” on Jordan Creek to provide quick and reliable access to water for firefighting. The ice pond on Jordan Creek could hold approximately 0.5 million gallons of water after needed maintenance is completed.

Finally, the structure survey showed the lack of firewise practices associated with historic structures. Therefore, a public education and outreach program is warranted to inform and encourage specific actions that will reduce the chances of wildfire damaging their structures. The public outreach program received the lowest priority, not because of low importance, but because it is an ongoing need throughout the assessment area, while the other proposed actions are time- and location-sensitive. However, the public education and outreach program may, over time, prove to be the most effective in reducing wildland fire risk in the Silver City assessment area.

8.1 Fuels Reduction and Firebreak Recommendations

Fuels Reduction and Firebreak: The BLM and Silver City should cooperatively undertake fuels reduction projects. The BLM would be responsible for appropriate fuels projects such as reducing the dying Douglas fir trees, selective removal of Douglas fir from aspen stands, and removal of western juniper within 100 feet of structures in the immediate vicinity of Silver City (**Map 3**). The community and BLM would be responsible for reducing the amount of hazardous fuels and cleaning up debris and lumber piles within Silver City on their respective property.

Type of Fuels Treatment: Several different methods are proposed to reduce the amount of flammable vegetation within and around Silver City. Some of the possible treatments to reduce flammable fuels include continued cattle grazing, commercial firewood cutting, salvage logging, and controlled burning, depending on the proximity to Silver City and the type of vegetation.

Cattle grazing has occurred in this area for many years and reduces herbaceous vegetation but does not reduce most woody vegetation such as juniper, Douglas fir, and mountain big sagebrush. The vegetation should be cut and pile-burned. Also, Douglas fir trees invading aspen stands may need to be removed. In addition, there are several piles of lumber near structures within Silver City that appear to have been in place for quite a while. These lumber piles should be removed and burned away from the town during a BLM-sponsored spring cleanup.

Juniper adjacent to the town site should be cut and removed to create a fuel break. Older juniper trees should remain, provided they are not too close to any structures. The boles and larger limbs from the juniper trees could be dried and used for firewood by the residents. The slash could be piled and burned during the annual BLM-sponsored spring cleanup.

Salvage logging, commercial firewood cutting, and controlled burns are possible methods to reduce hazardous fuels associated with the dying Douglas fir stands. The dying and recently killed trees may be salvaged for timber while they still have value as marketable timber. The dead trees that are no longer marketable or useful for lumber could be removed by commercial firewood cutters. Controlled burning has also been suggested as another option to remove the dying trees. However, conducting burns without posing a danger to the town site would be difficult. Suggestions have been made about burning these areas during the winter, when fire intensity would be much lower. These high elevations usually receive early snows that would preclude broadcast burning, but may allow burning of piles. Thinning and pile-burning unwanted timber during the winter would be a possible, albeit labor-intensive method of removing these flammable fuels. All proposed fuels reduction projects should be evaluated as to their environmental and social impacts.

Recommended Locations for Fuel Treatments: Map 3 shows the locations of the proposed fuel reduction area. This area includes the dying Douglas fir tree stands to the northeast and southwest of Silver City and within the town itself. The BLM would be responsible for the fuels reduction associated with the dying Douglas fir trees on public land and with partners on private land. The residents of Silver City would be responsible for fuels reduction on private land within Silver City. BLM will be responsible for fuels reduction on public lands in Silver City. The BLM could assist in this effort by pile burning flammable debris during the proposed BLM sponsored annual spring cleanup. An appropriate split of costs for fuels treatments between BLM and the Silver City residents will be explored for fuels reduction associated with the juniper and

brush stands around the community. The residents could use the juniper trees for firewood. The proposed fuel reduction would create a substantial firebreak around Silver City.

Treatment Timing: BLM generally projects the timing of fuels reduction projects in the following manner: In year one, potential projects are identified and justified, treatment objectives are determined and defined, and field surveys are initiated. In year two, fuel reduction projects that require compliance with the National Environmental Policy Act (NEPA) are planned, analyzed, and designed. Projects that do not require NEPA compliance begin implementation. In year three, projects that require NEPA adherence usually begin after compliance is completed. In Year Four, post-treatment monitoring begins and continues as needed. All steps are contingent on available funding.

The highest priority is to reduce flammable debris and lumber piles in Silver City. This should occur by spring 2002. Mechanical removal of the juniper trees is anticipated and could also be carried out during spring and summer 2003. The fuels reduction associated with the dying Douglas fir trees is more problematic because careful planning is required. In some instance salvage logging may be possible but that should happen within 1-3 years in order for the trees to have commercial value. Commercial woodcutting could be conducted in the spring, summer, and fall. Pile burning could be conducted in the winter. Scrap lumber and debris burning would be conducted by BLM during the proposed annual spring cleanup.

Treatment Necessity: The combination of fuel reduction and firebreaks has been shown to be effective around communities to reduce the risk of fire in the urban-wildland interface. An 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. Approximately 71 existing historic structures in the vicinity of the fuels reduction and firebreak will have increased protection.

8.2 Water Storage Facilities Recommendations

Maintenance and Construction of Water Storage Facilities: The BLM and the town of Silver City (via the Homeowners Association,) through a partnership, would be responsible for maintaining the existing water tank (15,000 gallon). Perhaps, Florida Mountain could be investigated for additional water sources to augment the city's water supply. If feasible, a new additional water storage tank (20,000 to 30,000 gallons) would be established and maintained

through a BLM - Silver City partnership. The proposed new tank would be established above the existing water tank or at another strategic location identified by the residents of Silver City. It is also proposed that the old "ice pond" be maintained on Jordan Creek above Silver City and outfitted with a water pump. The pond could potentially hold 0.5 million gallons of water. The current hydrant system should be further equipped with hoses and fittings to allow improved water delivery.

Type of Water Storage Facilities: The proposed water storage tank should be 20,000 to 30,000 gallons in size and be properly equipped to fill tanker trucks. The old ice pond on Jordan Creek needs structural maintenance and should be outfitted with a pump to supply water to the fire hydrants and/or to the water tank.

Locations of Facilities: **Map 3** shows the location of the ice pond on Jordan Creek. The new water tank should be established above the existing water tank.

Project Timing: The water tank could be installed and the needed maintenance on the ice pond could occur no sooner than spring 2003.

Treatment Necessity: Readily available water sources have been shown to be effective in reducing the risk of wildland fire. 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. Approximately 71 historic structures will be protected from wildland fires.

8.3 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 low-intensity fire in woodland or grassland 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 will be co-sponsored by the BLM and Silver City Homeowners Association through a partnership agreement.

Outreach Implementation: An annual "Firewise Clean-Up Day" should be organized to encourage residents to create defensible space around their residence. BLM Fire personnel could be available that day to burn branches, lumber, and other debris at a predetermined location near town. In conjunction with the Firewise Clean-Up Day, specific demonstration projects will be organized to educate residents about longer-term investments they could make to increase fire safety. The clean-up day will occur in conjunction with public demonstrations and education programs on wildfire and firewise practices.

Outreach Timing: The annual "Firewise Clean-up Day", education program, and public demonstrations will occur in the spring or early summer to remind people to prepare their properties for the coming fire season.

Outreach Necessity: Public education and outreach has been shown to reduce the hazards of wildfire in a community. 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. Taking the actions outlined here will help reduce the threat from wildfire to approximately 71 existing historical structures.

9.0 POTENTIAL SOURCES OF STATE FUNDING

Idaho Department of Lands representative Kurt Houston, who is based out of IDL's Boise office, provided the following information. Communities-at-Risk may benefit from these State-administered grant programs, which provide financial assistance for various types of fire safety-, fire suppression- and fire education-related projects, as well as stewardship activities.

Idaho Fire Assistance Program: A cost-share program designed to assist fire service organizations with organizing, training, and purchasing equipment for fire protection and suppression. Open application period is from May 1 through June 15 each year. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Volunteer Fire Assistance Program: A cost-share program with federal funds administered by the State of Idaho. The rural community must have a population of less than 10,000. Only those projects to organize, train, and equip fire service organizations qualify for financial assistance. Open application period is from October 1 through December 31 each year. Contact Fire Warden

Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Federal Excess Property Program: An equipment loaning program for fire service organizations with populations less than 10,000 residents. Usable fire related equipment is loaned to the organization until such time the organization no longer wants it. Titles for vehicles remain with the state government. Applications are continuously accepted. Contact Fire Warden Kurt Houston at the Idaho Department of Lands office in Boise at (208) 334-3488 for more information and applications.

Forest Incentive Program: Federal cost-share funds administered by the Natural Resources Conservation Service (NRCS). The Forestry Incentives Program (FIP) supports good forest management practices on privately owned, non-industrial forest lands nationwide. FIP is designed to benefit the environment while meeting future demands for wood products. Eligible practices are tree planting, timber stand improvement, site preparation for natural regeneration, and other related activities. FIP is available in counties designated by a Forest Service survey of eligible private timber acreage. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and applications. Additional information on the program and NCRS contacts is available at <http://id.nrcs.usda.gov/programs.htm>.

Stewardship Incentive Program: Federal cost-share funds administered by the NRCS. The Stewardship Incentive Program provides technical and financial assistance to encourage non-industrial private forest landowners to keep their lands productive and healthy. Qualifying land includes rural lands with existing tree cover or land suitable for growing trees and which is owned by a private individual, group, association, corporation, Indian tribe, or other legal private entity. Eligible landowners must have an approved Forest Stewardship Plan and own 1,000 or fewer acres of qualifying land. Authorizations may be obtained for exceptions of up to 5,000 acres. Depending on funding, the open application period varies. Contact the nearest NRCS or Tim Kennedy at the Boise IDL for more information and applications. Additional information on the program and NCRS contacts is available at <http://id.nrcs.usda.gov/programs.htm>.

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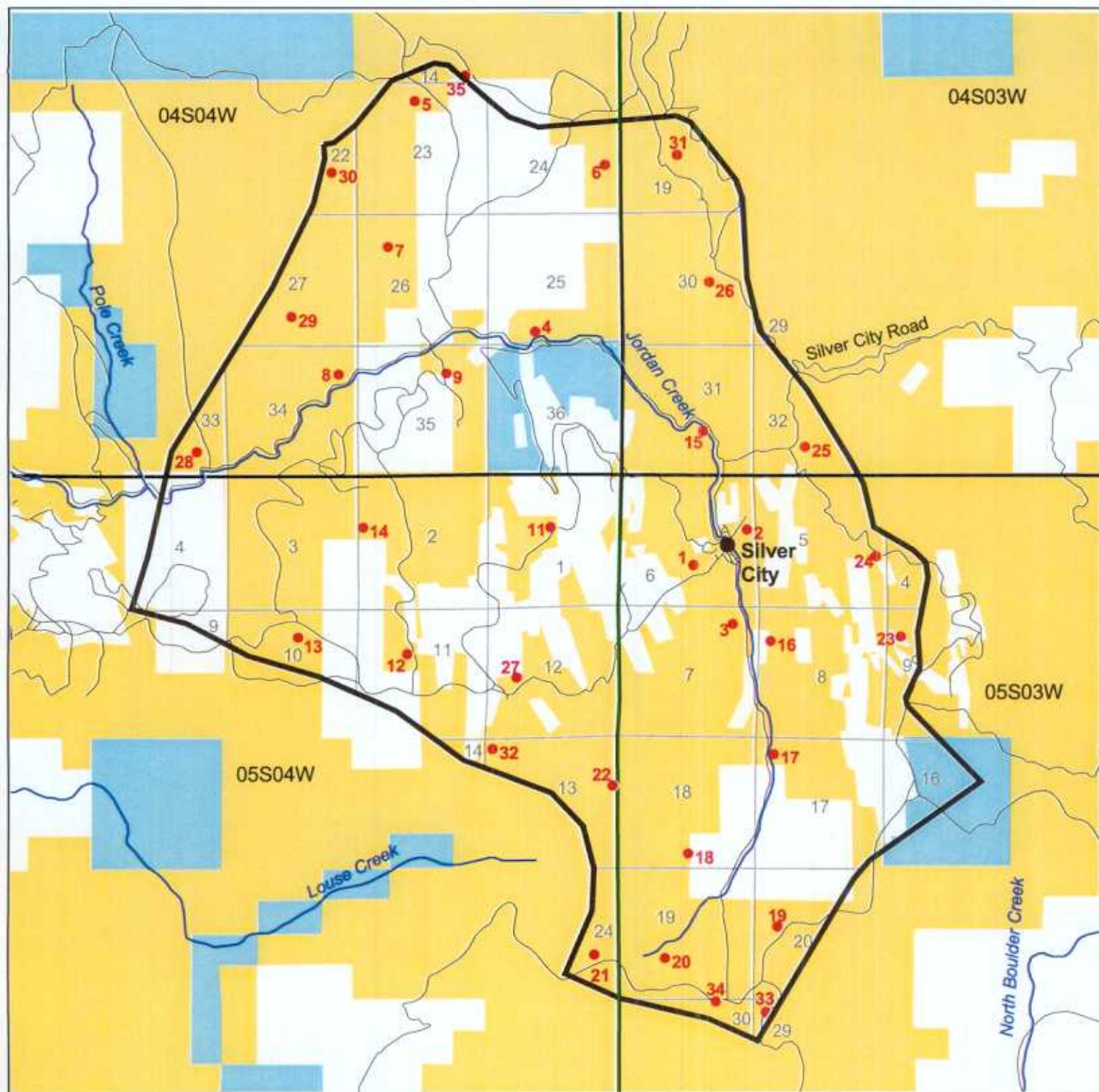
Video: Firewise Landscaping, Part 2-Design and Installation.

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 A: Maps



Map 1: Map of Silver City Assessment Area and Fuel Survey Points

Date: December 2001

Scale: 1 0 1 Miles



DYNAMAC
CORPORATION
Environmental Services

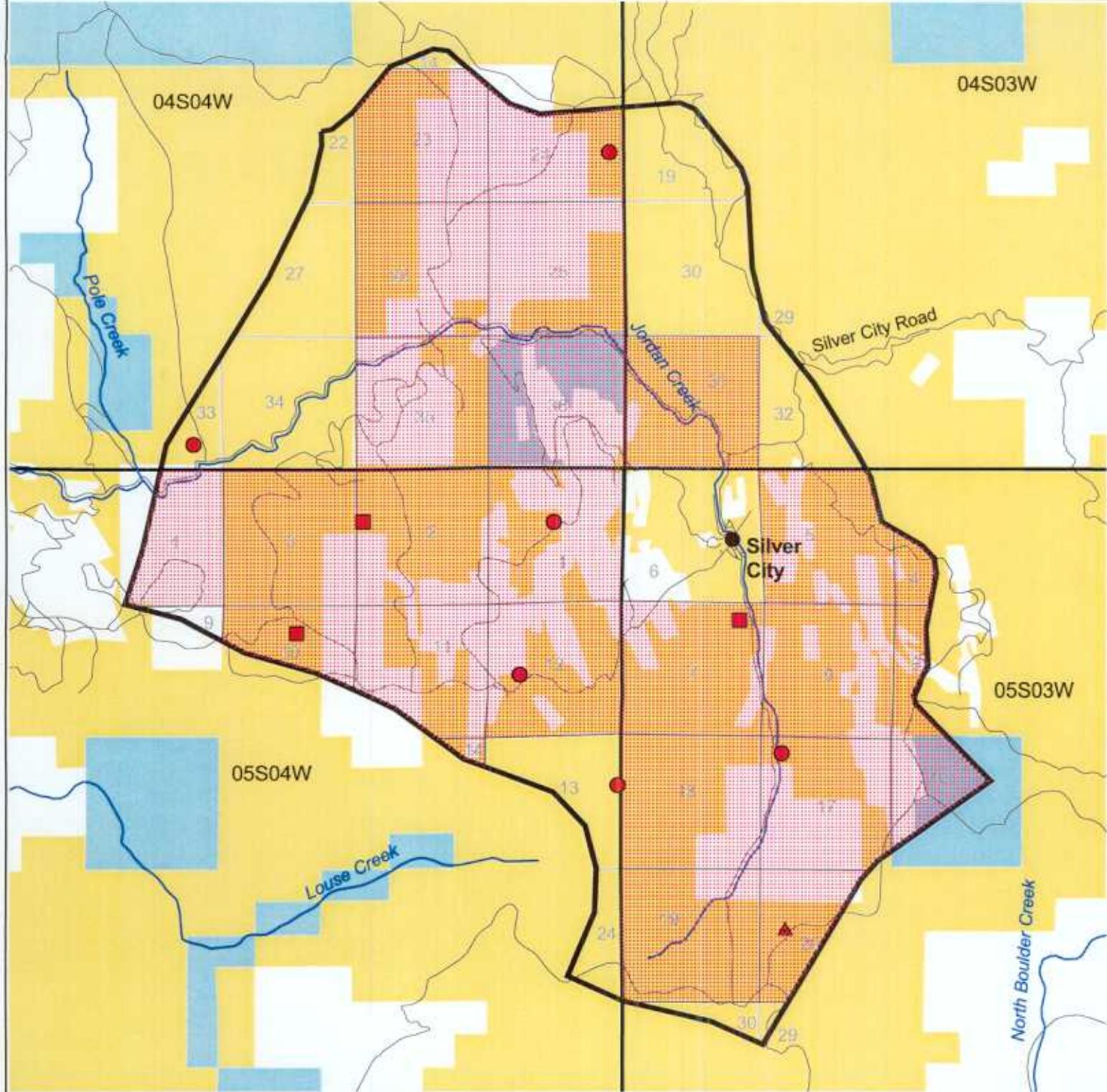


Legend:

- Actual Assessment Point
- ▭ Assessment Area
- ~ River
- Road

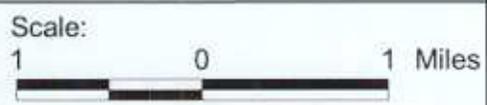
Ownership:

- Private
- Bureau of Land Management
- State of Idaho
- Open Water



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

Date: December 2001



DYNAMAC
CORPORATION
Environmental Services



Legend:

- Assessment Area
- River
- Road

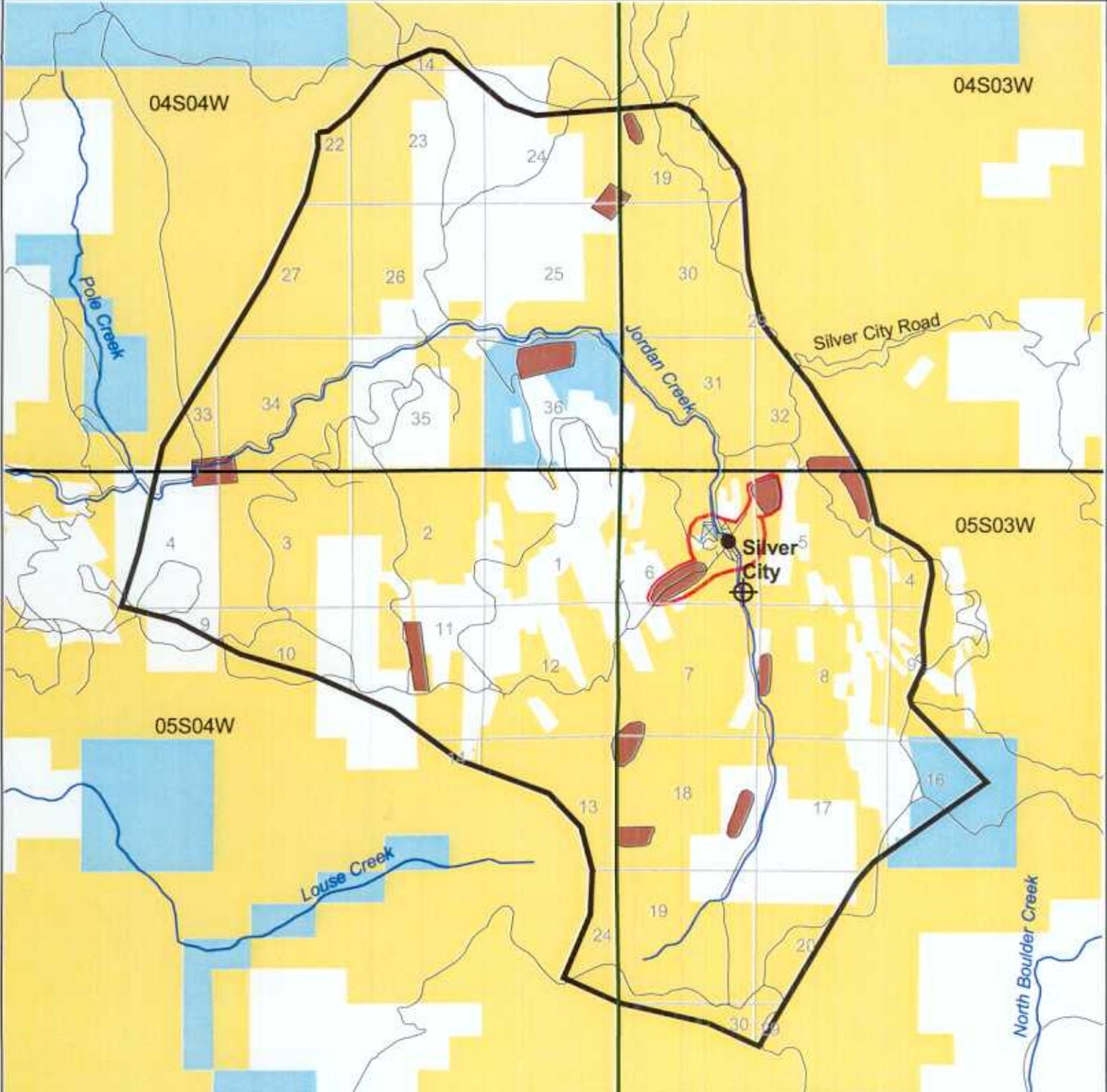
Ownership:

- Private
- Bureau of Land Management
- State of Idaho
- Open Water

Highest Risk Fuel Areas within the Assessment Area

High Risk Fuel Areas within the Assessment Area

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



Map 3: Proposed Mitigation Projects in the Silver City Assessment Area

Date: December 2001



- Legend:**
- Assessment Area
 - River
 - Road
 - Dying Stand of Douglas Fir

- Ownership:**
- Private
 - Bureau of Land Management
 - State of Idaho
 - Open Water

- Mitigation:**
- Jordan Creek Ice Pond
 - Fuel Reduction Area

**Appendix B:
Structure Protection Plan**

STRUCTURE PROTECTION PLAN: SILVER CITY, IDAHO

Prepared 30 August 2001 by Lower Snake River District BLM

INTRODUCTION AND HISTORY

In late August 2001, the historic township of Silver City was threatened by the Rough Diamond fire, which encroached within 3 miles of the town's northern border. An Imminent Threat Response was drafted to enable firefighters to take effective measures to protect the century and a half old town. Akin to most mining communities in the Intermountain west, Silver City is a series of wooden buildings, many constructed immediately adjacent to another. The forest of the surrounding hills was the source for the building material, resulting in clear-cutting and what is now century-old second growth. Based on local knowledge and historical documents, there is no account of wildfire in the town's history.

Silver City is now a tourist destination and is a historical site managed by the BLM while the buildings themselves are owned by numerous private parties. This historical site status affects fire mitigation in two significant ways: disturbing the ground requires dire circumstances and any modification to structures must be implemented with paramount importance placed on historical consideration.

SILVER CITY FIRE PROTECTION

Silver City is an unincorporated community and has an informal fire protection plan oriented primarily to protection from structural fire. There is a four inch diameter hydrant system tied into the domestic water supply and installed within the past few decades with 16 hydrants and a 65 psi rating drawing from a 30,000 gallon tank on the hillside northwest of town which currently has a 4gpm spring-fed recharge rate (roughly four days to completely refill). There is speculation that this recharge rate could be improved with the existing water source.

The following is an inventory of fire protection equipment as of August 2001:

- 150 gallon brush truck
- 35gpm @ 225 psi trailer mounted pump
- Two portable pumps of unknown status
- 1300' of 1 ½" hose [c. 1985]
- 30' of draft hose
- 2000' 1 ½" hose
- 16 nozzles [nozzles, backboards, turnouts]

The Student Conservation Association (SCA) and a BLM-contracted urban interface fire mitigator, Dynamac Corp., both have made assessments of Silver City in 2001, however that information was not available at the time this document was being produced.

ACTION PLAN

A thorough initial size-up was conducted and the following section details the essence of this document: an imminent threat response. Liberties have been taken for brevity's sake.

Escape Routes

1. Silver City RD. to Delmar, Jordan Valley and Murphy
2. Silver Cord; to War Eagle Mountain (Road improvement needed)

Safety Zones

(map on file with BLM)

1. Delmar Mine: NW of town, air access only
2. Upper Long Gulch Road loading pen, hill west of town: N.43°00.894 min, W.116°44.159 min
3. Banda City, south of town: N.43°00.296min, W.116°43.776 min

Helispots

(map on file with BLM)

1. Junction to Jordan Valley, north of town: N.43°01.591 min, W116°44.003 min
2. Behind Hyslop home, hill east of town: N.43°01.067 min, W116°43.820 min
3. Intersection of Jordan and 2nd Streets, south of town center: N.43°00.936 min, W.116°43.897 min
4. Banda City, south of town: N.43°00.296min, W.116°43.776min
5. Upper Long Gulch Road loading pen, hill west of town: N.43°00.894, W.116°44.159

Communications

1. Cellular Phones. Many residents utilize AT&T service.
2. Silver City Magneto Telephone System. 26 units in town serve as intercom system.
3. Notification process. Homeowners' association should annually confirm contacts with Owyhee County Sheriff and BLM to advise on local contact personnel. (See attached contact list)

Dip Sites

1. (4 mi W) Beaver Ponds in Rich Gulch
2. (2 mi E) Linehan Flat Pond on War Eagle Mountain

Fill Sites

1. Culvert under Jordan Street: either from spill pool or upstream of checkboard gate
2. North end of Morning Star Mill Street (mine shaft water; Improvements needed)
3. Creek below powder houses north of town

Structure Protection

1. A strike team of engines (3-Type IV and 2-Type III, all 4WD) plus two tactical water tenders and 1-20 person hand crew.

Engines

- #1: division 1 (per attached map [map #?]) amidst homes under Mayfield Mine
- #2: division 5 above Morning Street north of school
- #3: division 2 at house southwest of cemetery NW of town
- #4: division 8 at end of Long Gulch Road
- #5: division 9 at intersection of 2nd and Clinton St.

Tenders

- #1-At campground, south end of town
- #2-West side of Jordan Street, north of Jordan Creek (NW of land bridge)

2. Hose Lays

- #1-1 ½” trunk line from Mayfield Mine water source to intersection of Jackson and Morning Star Streets with 4 laterals (600’ of 1 ½”, 600’ of 1”)
- #2-Utilize hydrant system for western half of town [materials undetermined]

Firing Operations

- Begin on Jordan Creek burning westward to Cemetery Road. From Cemetery Road burn west to white house with red roof while pre-treating and protecting house with existing hydrant.
- Burn around house and tie into Long Gulch Road to the south.
- Using Long Gulch Road as the break continue to aspen stand. Protect red house.
- Anchoring from red house, construct hand line south to Potosi mine.
- Burn to white and yellow house.
- Continuing west, use road to white house with yellow trim. Prep road as needed. Burn south perimeter of house.
- Construct hand line past brown house to Jordan Street.

Develop Morning Star Mine as water resource

Recommendation is to install an electric submersible pump such that it can reach sufficient depth [to be determined]. In recent history, there was an attempt to drain the mine. After a month of operating a pump around the clock, efforts were abandoned. This is anecdotal evidence of the mine’s potential to supply water and encourages further research. Pump unit, including cable should demand less than 4,000 watts so that any number of gas-powered generators already in town could supply power. Also, a 4,000-gallon tank would facilitate expedient filling of engines and tenders. Negotiations with mine owner and water resource official required. There exists an offer from the Hyslop/Miller family to ensure maintenance of pump.

WILDLAND/URBAN INTERFACE WATCH OUT as they pertain to Silver City

1. All buildings are of wooden construction. To their benefit, all roofs are metal. One issue noted is that many buildings are built on piers such that the undersides are exposed with fuel growing up to, and under the buildings.
2. Currently, Silver City is bottlenecked by the one road in or out of town to the north. Within town there is enough places to position engines and collapsible water tanks.
3. The domestic water supply provides 65 psi to the 3" hydrant system with a 30,000-gallon reserve, which requires roughly 4 days to refill. Two mineshafts are recognized to be potential water sources. Jordan Creek runs through town at 40 gpm by late August. Remnants of damming at the upper ice pond south of town could be built upon to provide a small reservoir for drafting and/or dipping.
4. The prevalence of natural fuels adjacent to buildings is an evident hazard in Silver City. Seventy percent of buildings do not have adequate fuel breaks in their perimeters. Without electricity, the town relies heavily on propane. All occupied buildings have propane tanks above ground. Many buildings have wood or scrap piles within a hazardous range.
5. Extreme fire behavior was recognized on the Rough Diamond fire nearby. Insect kill of juniper trees creates a significant threat in combination with low fuel moisture in 10- and 100-hour fuels. Local topography lends itself to extreme fire behavior.
6. Silver City has few permanent residents so evacuation wouldn't pose a great challenge. Limited access out of town (one road) is mitigated by the existence of safety zones noted in this document.
7. There are only a few hillside homes and they are in light fuels. Silver City has steep slopes (30 percent or greater) on all sides with narrow gulches and flashy fuels.
8. There are two bridges in town with load limits excluding their use by fire engines; however, there are alternate routes to the areas served by these bridges.

CONCLUSION

Silver City, Idaho has a significant wildfire threat—that has been evident since the second growth of trees on the surrounding hillsides after being logged during the town's boom in the latter half of the 19th century. What has emerged during the summer of 2001 is an understanding of prevention required and tactics suggested to mitigate the hazard of fire rolling into this valley or originating from within. In summary, the following are the main points for short-term defensibility of Silver City:

- *Reduction of lights fuels around homes and between buildings in the heart of town;
- *Concise plan of attack for a strike team of engines including dip spots and safety zones;
- *Ensure a sufficient water source including exploring the Morning Star mine option;
- *Predetermined hose lay routes and the quantity of hose required to execute said lays.

This study of Silver City in regards to wildfire hazard took the narrow focus of outlining actions that could be taken by an engine strike team with a limited amount of time in the face of an approaching fire. A comprehensive survey of long-term fire threat reduction is needed and apparently is in the works with SCA and Dynamac having surveyed the town.

Silver City has been fortunate to have not fallen victim to wildfire in its century and a half. The fire of August 2001 has provided the impetus for research and communication; may the commitment of both the homeowners and the BLM to mitigate wildfire hazard not cool with the embers of Rough Diamond.

Recommended Pre-order List

- 3 - Type IV engines, 4WD
- 2 - Type III engines, 4WD
- 2 - Tactical water tenders

- 1 - Type II hand crew, 20 person

- 4 - Mark III pump kits
- 20 - 5-Gallon class A foam containers
- 20 - Sprinkler kits
- 30 - Rolls structure wrap
- 1000 feet of 1-inch hose
- 1000' - 1 ½" hose
- 6 - 1 ½" x 1 ½" x 1 ½" gated wye
- 6 - 1 ½" x 1" reducer
- 8 - 1" nozzle (KK)
- 2 - 1 ½" nozzle (KK)
- 4 - 1" x 1" x 1" gate wye
- 1000' - 1" x ¾" hose, garden
- 10 - ¾" gated wye
- 8 - ¾" nozzle

(List of Silver City Homeowners Omitted. See Hazard Assessment Report, Appendix D, for a List of Homeowners and interested parties.)

Appendix C:
Public Comments to Draft Mitigation Report

12-05-2001 10:19 FROM-BOISE DISPATCH

208 334 3499

T-037 P-002

F-008

301-417-5801

November 28, 2001
11618 Emerald Rd.
Nampa, ID 83686

RECEIVED
BOISE FIELD OFFICE

2001 NOV 30 AM 9:00

U. S. Department of the Interior
Bureau of Land Management
Lower Snake River District
Boise, ID

Dear Sir:

The following comments apply to the Draft Wildland-Urban Interface Communities-at-Risk Mitigation Assessment for the Silver City Assessment Area. I attended the meeting November 14, 2001 at the Nampa Civic Center. My husband, son and I were in Silver City during the week of the Rough Diamonds Fire in August. We did not leave town until after the fire was contained at the end of the week. We can claim first hand knowledge of the fire situation in Silver City. We own a house on Lot #31 high on the east hillside overlooking Silver City. The BLM fire personnel were professional and easy to work with. They taught us a lot.

Escape Routes:

The Rough Diamonds fire could have easily cut off all normal escape routes from Silver. There are other ways out of town known to locals that are possibly passable by 4 wheel drive vehicles. But if a fire occurred on a holiday weekend with many tourists in town, the situation could be very dangerous. I strongly urge the BLM to allow maintenance or to maintain at least two roads out of the Jordan Basin. The road up Long Gulch should be rerouted out of the creek bottom and then maintained the rest of the way up to the haul road near the Beaver Ponds. The road up Silver Chord needs maintenance in at least one spot and it could be a viable alternative if the other road was cut off by fire. These two roads would provide escape routes to the east and west of Silver City with both roads culminating in defensible "safe" areas.

Helispots

As the owners of the home mentioned east of town, we would be willing to work with the BLM in establishing a helispot behind the house.

Dip Sites and Fill Sites

The ice pond above Silver City should be rebuilt. It is mostly intact. It is an historic structure and an historic feature. Water impounded there could be let down to a dip site above the culvert at Jordan Street and/or at another site accessible to the road for access by the tender trucks.

Structure Protection

The fire crews that assessed the houses in Silver had to say that some of the structures were not defensible from fire. We passed this word on to various homeowners and they took action to establish defensible perimeters around their homes. Many homeowners have taken no action. I suggest that ANY help the BLM would offer to the Silver City Homeowners Association, such as a fire truck and/or water tank, be tied to proof that the homeowners have trained to fight fire and have established a plan of attack and proper use of resources in case of a fire. I also suggest that the BLM approach homeowners as individuals and not through the Silver City Homeowners Association.

Morning Star Mine as a Water Resource

I would suggest follow up on this idea in conjunction with Millers and the mine owner. It would provide a good source of water with minimal visual impact on town.

Timber Harvest

I support harvest and thinning of dead and dying firs in the Owyhees. I would like juniper eliminated.

12-05-2001

10:38

FROM-BOISE DISPATCH

208 384 3468

T-037 P.003

P-008

I hope that the action plan proposed can be implemented. I am very wary that nothing will be done. If no dead timber is cut and no plans enacted, Silver City is in grave danger from wildland fires. The danger will only increase with the years. Please don't let this plan become so watered down and bogged down that no action is taken.

Sincerely,



Jan Hyslop

RECEIVED
BOISE FIELD OFFICE

November 20, 2001

Randy Eardley
Lower Snake River District
3948 Development Drive
Boise, Idaho 83705

2001 NOV 30 AM 8:00

Dear Mr. Eardley,

Silver City people who attended the Fire Plan presentation meeting in Nampa last week tell me that you are interested in hearing about individual problems as well as reactions to the general overall plan. I am sorry I could not attend because I am most interested in fire prevention and all who attended the program report that the presentation was excellent. I hope the information will be available in printed form soon. Below is my situation and my opinion regarding fire protection.

GENERAL

The town water system, which has been inadequate since its beginning, is now dangerously dysfunctional. The problem is being compounded because Silver City residents are increasing their water demands by adding modern conveniences and desiring higher health standards. The town governing body (Silver City Property Owners, or SCPO) has refused to acquire additional sources of water. The town could afford it because most of the residents are far wealthier than the average Idaho citizen. However, in the hopes of getting financial aid from the deLamar mines or from the BLM, they have not considered paying for a system. Also a few residents believe that lack of water may curtail public interest in the town's historic values, prevent commercial development and discourage home owners from active use of their property. Now the threat of fire may motivate the residents to address the problem although the lack of participation in your meeting indicates that the usual apathy still reigns.

I strongly urge the following:

Location and development of additional sources of water: new springs and wells sufficient to service a small village of 300 people in 70 homes, tourist facilities for 200 people housed in one hotel, two inns and five rental units and fire protection for 70 buildings.

A fire water storage unit of 30,000 gallons (only 15,000 available now), either a dam or tank or both. Increased fire education and fire drills.

A practical system to fight fires including immediate and protracted response. Immediate response is the better idea.

The BLM could strengthen the building owners' motivation to participate in fire prevention by pointing out that each home owner signed an agreement with the BLM to protect the integrity of his building as part of a historical site and that part of that covenant involves fire protection, paying fire fighting fees, etc..

A citizens' fire board could be appointed by the SCPO board to monitor fire risks and compliance. That board could interact with government agencies on a regular basis, set goals, recruit trainees. If any pressure or control were exerted by the citizens' board and backed up discretely by BLM clout, interest in fire prevention might improve. Some of the Silver City residents might sell their homes because many of them come to Silver to be completely free of all responsibility of all kinds. Good riddance!!!!

BLM should set a good example for residents by exercising good fire prevention management on the public lands entrusted to it. The BLM should provide a fire break around the

town which could be defended in an emergency. The BLM should control the fire potential on the public land within and bordering Silver City. The BLM should involve the building owners adjacent to the public land area that the BLM intends to improve by initiating telephone or personal conferences. Interaction is essential.

The diseased fir stand on the east flank of Florida mountain should be examined by a forestry specialist. Most of the trees there have been in extremely poor condition for many years. They make poor firewood and have been full of bugs (worms, etc.) for many years. What ever the BLM decides to do is acceptable to me as long the action is recommended by a forestry expert who is prescribing for the future as well as for the near-term.

MY INDIVIDUAL CONCERNS

My properties (three acres of the TipTop millsite and Lots 87, 98, 93, and 105) are interseeded with BLM land. I would like to cooperate with the BLM in exercising good fire protection for our common problems. I propose that the BLM and I work out a fire protection plan tailored specifically for our shared lands and that we maintain a minimum but effective amount of communication to make sure that each of us is paying attention to and doing something about implementing the plan.

The stands of quaking aspen and willows on my lands and public lands would normally function as fire retardants. From neglect, dead plant material within them has increased to such a point that they are now fire hazards. I don't know what to do and would appreciate advice from experts. The quaking aspen stands must be guaranteed water on a year around basis or they will continue to die. I own the water rights to the overflow from the city tank. When I allow the SCPO Association to divert some of that water to the winter watchman's use at the IOOF hall, I have to make sure that they don't take it all. There is plenty of water for both uses in the winter months but the town must recognize that the quaking aspens are worth keeping and that the present system of distributing the water is poor. The trees suffer terribly when the town bogs all the city system's capacity. I need to institute a vigilance system to guarantee that the city watchperson and my watchperson effectively cooperate their efforts. The BLM owns about sixty feet of the quaking aspen stand which lies between my Lot 105 and my TipTop millsite. Perhaps the BLM could provide the expertise to figure out a plan, and the town and I could implement the plan and pay the bills.

The public land between the cemetery and my Lot 87 (my primary residence) is a severe fire threat. Some of the plant material in that strip provides stabilization for the embankment next to my house. Whatever clearing of fire fuel is done needs to address stabilization of that embankment. I should be able to get title to the impacted area or else the BLM should pay to stabilize the embankment. Let's talk.

The BLM and I should cooperate on an agreement about the fire hazards that we share, a plan to cure the present problem and develop a plan for future action on all the lands where we are neighbors. I admit that my land management is as poor as those of the BLM. Lets put aside blame and concentrate on solutions. If you have noticed, the whole town watches and often mimics my relationship with authority, trespassers and neighbors. Here's a chance for both of us to set a good example. I'm ready.

I would like to participate in the methods to be used to prevent fire. I am willing to listen to and implement suggestions made by experts. I am willing to share the expenses of work on the public as well as on my private lands but I would like to have the opportunity to tailor the costs

of labor and materials to my specifications. As a rule, I would rather pay a bill than recruit and supervise the labor and purchase materials, but I am wary of cost-plus agreements. Let's talk.

I enjoy working with the BLM and the Fire Agency because I think that you know what land and fire management need. I am a little hesitant to turn all of the the planning and implementing over to the government but I welcome the opportunity to cooperate.

Sincerely,

cc: Jenna Whitlock
Rosemary Thomas
Jerry Barker
Clarence Orton

Glenn A. Otto
250 Austin Ave.
Atherton, Ca. 94027-4006
650-368-5004

Barker, Jerry

From: MOSALIO@aol.com

Sent: Wednesday, November 28, 2001 2:34 PM

To: jbarker@dynamac.com

Cc: randy_eardley@blm.gov

Subject: Comments on Draft Mitigation Plan Report - Silver City Assessment Area

Pg. 2 Item 1.0 Add - Study water sources on Florida Mt. and develop sources to increase water flow to the Silver City water system.

Change second item to read - Develop and maintain an additional water storage tank for the Silver City water System and improve the "ice pond" on Jordan Creek above Silver City to provide

Pg. 3 Item 4.0 para. 1 correction - residents do not remain as caretakers. During the winter the Silver City Property Owners, Inc. hire a watchperson to care for the town. The next sentence should read: Deed covenants and the Owyhee County Silver City Historic Preservation Ordinance requires that all

Pg. 10 Item 8.0 para. 1 - add as priority #2 Study water sources on Florida Mt. and develop sources to increase the water flow to the Silver City Water System.

Correct item #2 to read: Develop and maintain an additional water storage tank for the Silver City water system (20,000 to 30,000 gallons) and conduct maintenance on the existing storage tank to extend its life. (sand blast and recoat interior)

Pg. 11 Item 8.1 para. 1 Add: BLM to thin brush on BLM ground within Silver City.

Pg. 12 para. 2 Comment: New road construction and existing road improvement will cause negative impacts to Silver City and surrounding area. Improving roads around Silver City will increase traffic through Silver City and increase other negative impacts associated with increased usage. Use the money for reducing fuels/fire break around Silver City's perimeter. Helicopter logging is preferred plus no logging should be allowed during winter as plowing roads to Silver City causes more problems.

Pg. 12 para. 4 Comment: Please explain the 50% split of costs and provide an estimate.

Pg. 13 Item 8.2 para. 1 Add information about additional water sources development as stated under 8.0 pg. 10 para. 1.

Pg. 13 item 8.2 para. 2 Tank size 20,000 to 30,000 gallons.

Pg. 13 Item 8.2 para. 3 Tank should be located above the existing storage tank.

Also, incorporate somewhere in the plan the proposal to provide Silver City with a newer fire truck.

All these items are items which BLM and myself brought up the night of the meeting in Nampa.

In the back of the plan is Appendix B: Structure Protection Plan. Under page 2 of the plan is the Action Plan. Under Escape Routes is a proposal to improve the Silver Cord road. This is not a good idea. I stated some of the reasons above why not to build new roads or improve existing roads around Silver City. (other than the Jordan Valley and Murphy roads) Other reasons are: cost and upkeep, steep and slow, plus the Silver Cord road runs right back to the Silver City/Murphy road unless you want to improve many many miles of road to Triangle via Boulder Creek or around the head of Jordan Creek to Flint or on to Delamar which is the Jordan Valley Road. In other words its a waist of money plus other impacts need to be considered.

Thank you, Sincerely,

CLARENCE ORTON

12/5/01

Jim Hyslop
11618 Emerald Road
Nampa, Idaho 83686

208-466-5064
(Nampa)

208-890-6718
(Silver City)

November 15, 2001

Mr. Randy Eardley
Lower Snake River District
3948 Development Avenue
Boise, Idaho 83705

Mr. Jerry Barker
Dynamac Corporation
jbarker@dynamac.com

Re: BLM Contact No. 1422-N660-C98-3003, Silver City Assessment Area

To whom it may concern:

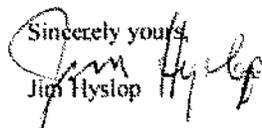
I was one of the few Silver City residents that attended your meeting in Nampa to present the findings of the Dynamac study. The lack of attendance by my neighbors, glaringly points to the truth of your statement on page 11 of the Draft Mitigation Assessment, "the public education and outreach program may, in the long run, prove to be the most effective in reducing wildland fire risk in the Silver City assessment area." Our failure to attend this meeting demonstrates the challenge ahead.

One thing that is mentioned, in passing, in the report is the work by SCA last summer. I encourage BLM to utilize the resource of the Student Conservation Association. More even, to partner with them. It's one of those, bang-for-the-buck opportunities. SCA methods might bring Silver City people along in a way that agency and contractors don't. It's a synergy thing, in my way of thinking. Please facilitate SCA to bring its resource along in the Silver City fire mitigation effort.

Both Jenna Whitlock and Jerry Barker encouraged me to send my comments regarding Jordan Creek impoundments. That is the main point of this letter. We could impound water measured in portions of a million gallons, rather than in thousands of gallons. A new water storage tank might hold 60,000 gallons, but the old ice pond could contain $\frac{1}{4}$ to $\frac{1}{2}$ of a million gallons. If we could remove the long-ago-deposited sediments it might hold much more. This sediment is not currently in the stream channel so we wouldn't be messing with the fish habitat and it could be utilized locally to resurface our long-neglected roads. The county road department might even help with the job. The sediment might also be used for additional campsite development; much like was done at the public campground this summer.

Please consider the Ice Pond Plan that I am attaching (below). It has long made sense to me to utilize Jordan Creek as the necessary component to fill the "recharge" requirement that a worthy structural fire fighting system dictates. It's utilization as a wildfire water component makes sense as well.

Thank you for your effort in safeguarding Silver City. Our buildings are a national treasure and worthy of your efforts. Our community will realize this in time and take a more determined stand in its preservation. Also, thank you for your invitation to comment further. I am at your service, should you need further clarification or on-the-ground perusal. My cell phone (above) is my Silver City connection to the outside.

Sincerely yours,

Jim Hyslop

The Ice Pond Plan

As Envisioned by
Jim Hyslop, Silver City resident
11618 Emerald Road, Nampa, Idaho 83686
Phone: 208.466.5064 or 208.890.6718
November 15, 2001

Please accept this as a comment to the Draft Mitigation Plan Report, Lower Snake River District, Silver City Assessment Area, Work Assignment No.: BLM4-73, October 2001.

Almost twenty years ago, I was a member of the Silver City Water Committee. Ed Jagels and Martin Peterson were the other members. Ed later retired from the Committee and Bob Leonard took his place. It was during this time that Oscar Anderson was BLM Area Manager. He and I talked about Silver City water system needs. Near the end of one fiscal year, he phoned saying that there may be money that BLM could put into materials for Silver's water system. The tank and pipe system we have now resulted from Oscar's work. Also, it should be commented that BLM-Silver City relations have been greatly enhanced by this contribution. Ultimately, the public has gained unmeasured rewards as well.

Ed Jagels and I visited with people at the Idaho Fire Rating Bureau. We learned of details that are necessary for a worthy fire fighting system. Recharge of the system was a component that our spring seemed unable to accomplish. To achieve the necessary gallonage to accomplish the recharge requirements, we obviously looked to Jordan Creek. USDA's Soil Conservation Service (now NRCS) came to Silver to assess the Ice Pond impoundment concept. Stream flow-speed seemed to be a detractant. However, if there is also a pond in Silver that could serve in an initial fire attack, the ice pond water could be there in time for a sustained attack and for recharge needs.

A two-pond system answers the concern about getting water from the ice pond to town. The ice pond will hold upward to a half million gallons. A pond in town could hold 50,000 gallons or more. Neither pond would have to be maintained at full capacity all year long. They only need to be filled ahead of the time that natural stream-flow drops below necessary fire suppression needs; that is, about the first of July. This being the case, the stream could flow normally from November through June. The mighty spring run-off would flow through the pond area just as it does today, thus minimizing over-flow (spillway) considerations.

I was a farmer in Canyon County for twenty years. I observed simple impoundment structures wherein boards dropped into concrete notches in a headwall served very well to dam up an entire canal. These structures have been in place in Idaho for nearly a century. Properly designed, Silver City could be well served by this low-tech impoundment system.

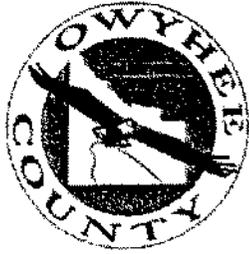
It would be reasonably easy to make an in-town impoundment at the main culvert crossing on Jordan Street. The fill material around the culvert is porous, so a clay layer on the up-stream base of the fill would likely be necessary. Fencing might also be necessary to keep swimmer/waders out. This pond could have a pump station that would discharge directly into the town water system. Or, the pump could be used to fill tenders or fire trucks. Obviously, if creek water were pumped into the town's water system, the pipes would have to be sanitized before culinary water could be delivered again. As Carl Liable said at last night's meeting, "After the fire is suppressed, we would worry about re-cleaning the system."

The issue of impounding water does reach into down-stream user's water rights issues. I believe a reasoned discussion with those users would resolve their concern. Silver City would not actually consume any water impounded, except in the event of a fire. Stream flows would remain the same, in all seasons, except for the hours it would take to fill the ponds initially each year. Having ponds, in addition to the pools that now come with the low water season, fish habitat might actually be enhanced.

Also, you might be well served to know that there were two ice ponds above Silver. The lower pond was just a short distance above the present public campground. There is still a remnant of the concrete check in the streambed. The dam material may all be gone now from this lower ice pond.

Please do not hesitate to contact me if I can be of further service in this, or any other effort to improve Silver City's fire suppression and prevention efforts. Indifference and inaction exacerbate the threat of fire in Silver. I am one, ready to contribute everything possible to assist Silver in its preservation.

Thank you for considering this concept for increasing water supply for fire fighting needs in and near Silver City.



OWYHEE COUNTY
BOARD OF COMMISSIONERS
COURTHOUSE - P.O. BOX 128
MURPHY, ID 83650-0128
TELEPHONE (208) 495-2421

DISTRICT #1
CHRIS SALOVE
ROUTE 1 BOX 336
MARSING, IDAHO 83639
(208) 896-4843

DISTRICT #2
CHAIRMAN - HAROLD TOLMIE
PO BOX 966
HOMEDALE, IDAHO 83628
(208) 337-3711

DISTRICT #3
DICK REYNOLDS
HC 85 BOX 141A
BRUNEAU, IDAHO 83604
(208) 845-2035

February 19, 2002

Randy Eardley
Fire Mitigation and Education Specialist
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

Re: BLM Letter of January 17 requesting Comment on Silver City Wildland Fire Mitigation Plan

Dear Mr. Eardley:

This Board asked that the Owyhee County Natural Resources Committee review the Fire Mitigation Plan and recommend appropriate comment. In their review, the Committee found many elements of the plan to be beneficial, constructive actions that will decrease the likelihood of catastrophic fire damage in or around the Silver City Historic District. Unfortunately, the Committee also found several issues that they recommended this Board should bring to your attention.

As you may know, Owyhee County is committed to the protection of private property rights and has a record of strongly supporting the rights of our citizens with respect to their private property holdings. Several elements of the proposed plan are potentially in conflict with our position on property rights. It appears that a significant element of the proposed plan calls for creation of additional water storage capacity for the town of Silver City, with the accompanying requirement to obtain additional water rights. In fact, page 16 of the plan states, "Florida Mountain would be investigated for additional water sources to augment the city's water supply." While that might seem like an acceptable way to moderate fire danger in Silver City, it raises the contentious issue of conflicts between current water rights owners on Florida Mountain and the possibility of contested rights, with the associated costs of such contests. A member of the Committee, employed by the Delamar Mine, advised the Committee that his employer has made an extensive search of Florida Mountain for water and has determined that no significant sources of water are available. While the plan intends to consider the use of waters currently thought to be available from flooded mines in the area, comments made during the Committee Meeting are cause for concern and possible conflict among the varied interests within the County. During the discussion it became apparent that the Silver City residents would prefer that the

search be conducted for potable water which they could use for daily domestic use in addition to occasional firefighting. That apparent preference has the potential to pit one element of the county population against another in contests over water rights and is not something this Board will endorse.

In addition to the specific issue of private property water rights, other questions concerning property rights were raised by the Committee members. Several members present during the discussion owned, or represented the owners of, private property located in the study area, but outside the limits of Silver City. These owners indicate that they have not contacted by BLM or Dynamac regarding this proposal. We believe that this is a significant issue that must be corrected before this report can be considered final. Mr. Ernie Bahem, Owyhee County Assessor, 495-2817 can provide you with a list of private property owners within the study area.

In addition to the comments already made regarding the proposed water storage project, this Board questions the priority established within the project list. The Committee felt, in particular, that placing the last priority (see page 13) on stationing a fire truck in the town during the fire season was incorrect. The members recommended, and we concur, that positioning a means of mobile firefighting in the town during the fire season should be a high priority project. We agree with the Committee in their belief that the equipment should not be a high-tech, state of the art item of equipment. We concur with the Committee's belief that BLM and the Contractor may have placed this item last in priority due to the expense and man-hour cost that would be required to place a high-tech fire truck in the town. We recognize that such a piece of equipment would require the continuous presence of BLM firefighting personnel and would be very difficult for the BLM to support. We concur with the Committee recommendation that a very low-tech item be obtained and positioned that could be operated by the residents as the first line of defense against any fire originating within the town. We agree with the Committee that a project item of this type should be at, or very near, the top of the priority list for this plan.

We appreciate the effort and expense that have gone into the creation of this plan and believe that the amendments suggested will make the plan more effective and beneficial to all concerned.

Sincerely,


Hal Tolmie, Chairman

cc: Ernie Bahem, Owyhee County Assessor