

Chapter 5: Treatment Recommendations

5 Administration & Implementation Strategy

Critical to the implementation of this Wildland Urban Interface Wildfire Mitigation Plan will be the identification of, and implementation of, an integrated schedule of treatments targeted at achieving an elimination of the lives lost, and reduction in structures destroyed, infrastructure compromised, and unique ecosystems damaged that serve to sustain the way-of-life and economy of Canyon County and the region. Since there are many management agencies and thousands of private landowners in Canyon County, it is reasonable to expect that differing schedules of adoption will be made and varying degrees of compliance will be observed across all ownerships.

Canyon County encourages the philosophy of instilling disaster resistance in normal day-to-day operations. By implementing plan activities through existing programs and resources, the cost of mitigation is often a small portion of the overall cost of a project's design or program.

The federal land management agencies in Canyon County, specifically the Bureau of Land Management, are participants in this planning process and have contributed to its development. Where available, their schedule of land treatments have been considered in this planning process to better facilitate a correlation between their identified planning efforts and the efforts of Canyon County.

All risk assessments were made based on the conditions existing during 2004 - 2005, thus, the recommendations in this section have been made in light of those conditions. However, the components of risk and the preparedness of the county's resources are not static. It will be necessary to fine-tune this plan's recommendations annually to adjust for changes in the components of risk, population density changes, infrastructure modifications, and other factors.

As part of the Policy of Canyon County in relation to this planning document, this entire **Wildland Urban Interface Wildfire Mitigation Plan** should be reviewed annually at a special meeting of the Canyon County Commissioners, open to the public and involving all municipalities/jurisdictions, where action items, priorities, budgets, and modifications can be made or confirmed. A written review of the plan should be prepared (or arranged) by the Chairman of the County Commissioners, detailing plans for the year's activities, and made available to the general public ahead of the meeting (in accord with the Idaho Open Public Meeting Laws). Amendments to the plan should be detailed at this meeting, documented, and attached to the formal plan as an amendment to the Wildland Urban Interface Wildfire Mitigation Plan. Re-evaluation of this plan should be made on the 5th anniversary of its acceptance, and every 5-year period following.

5.1 Prioritization of Mitigation Activities

The prioritization process will include a special emphasis on cost-benefit analysis review. The process will reflect that a key component in funding decisions is a determination that the project will provide an equivalent or more in benefits over the life of the project when compared with the costs. Projects will be administered by local jurisdictions with overall coordination provided by the Canyon County Disaster Services Coordinator.

County Commissioners and the elected officials of all jurisdictions will evaluate opportunities and establish their own unique priorities to accomplish mitigation activities where existing funds and resources are available and there is community interest in implementing mitigation

measures. If no federal funding is used in these situations, the prioritization process may be less formal. Often the types of projects that the County can afford to do on their own are in relation to improved codes and standards, department planning and preparedness, and education. These types of projects may not meet the traditional project model, selection criteria, and benefit-cost model. The County will consider all pre-disaster mitigation proposals brought before the County Commissioners by department heads, city officials, fire districts and local civic groups.

When federal or state funding is available for hazard mitigation, there are usually requirements that establish a rigorous benefit-cost analysis as a guiding criterion in establishing project priorities. The county will understand the basic federal grant program criteria which will drive the identification, selection, and funding of the most competitive and worthy mitigation projects. FEMA's three grant programs (the post-disaster Hazard Mitigation Grant Program, the pre-disaster Flood Mitigation Assistance and Pre-Disaster Mitigation grant programs) that offer federal mitigation funding to state and local governments all include the benefit-cost and repetitive loss selection criteria.

The prioritization of projects will occur annually and be facilitated by the County Disaster Services Coordinator to include the County Commissioner's Office, City Mayors and Councils, Fire District Chiefs and Commissioners, agency representatives (BLM, Idaho Department of Lands, etc.). The prioritization of projects will be based on the selection of projects which create a balanced approach to pre-disaster mitigation which recognizes the hierarchy of treating in order (highest first):

- People and Structures
- Infrastructure
- Local and Regional Economy
- Traditional Way of Life
- Ecosystems

5.1.1 Prioritization Scheme

A numerical scoring system is used to prioritize projects. This prioritization serves as a guide for the county when developing mitigation activities. This project prioritization scheme has been designed to rank projects on a case by case basis. In many cases, a very good project in a lower priority category could outrank a mediocre project in a higher priority. The county mitigation program does not want to restrict funding to only those projects that meet the high priorities because what may be a high priority for a specific community may not be a high priority at the county level. Regardless, the project may be just what the community needs to mitigate disaster. The flexibility to fund a variety of diverse projects based on varying reasons and criteria is a necessity for a functional mitigation program at the County and community level.

To implement this case by case concept, a more detailed process for evaluating and prioritizing projects has been developed. Any type of project, whether county or site specific, will be prioritized in this more formal manner.

To prioritize projects, a general scoring system has been developed. This prioritization scheme has been used in statewide all hazard mitigations plans. These factors range from cost-benefit ratios, to details on the hazard being mitigated, to environmental impacts.

Since planning projects are somewhat different than non-planning projects when it comes to reviewing them, different criteria will be considered, depending on the type of project.

The factors for the non-planning projects include:

- Cost/Benefit

- Population Benefit
- Property Benefit
- Economic Benefit
- Project Feasibility (environmentally, politically, socially)
- Hazard Magnitude/Frequency
- Potential for repetitive loss reduction
- Potential to mitigate hazards to future development
- Potential project effectiveness and sustainability

The factors for the planning projects include:

- Cost/Benefit
- Vulnerability of the community or communities
- Potential for repetitive loss reduction
- Potential to mitigate hazards to future development

Since some factors are considered more critical than others, two ranking scales have been developed. A scale of 1-10, 10 being the best, has been used for cost, population benefit, property benefit, economic benefit, and vulnerability of the community. Project feasibility, hazard magnitude/frequency, potential for repetitive loss reduction, potential to mitigate hazards to future development, and potential project effectiveness and sustainability are all rated on a 1-5 scale, with 5 being the best. The highest possible score for a non-planning project is 65 and for a planning project is 30.

The guidelines for each category are as follows:

5.1.1.1 Benefit / Cost

The analysis process will include summaries as appropriate for each project, but will include benefit / cost analysis results. Projects with a negative benefit / cost analysis result will be ranked as a 0. Projects with a positive Benefit / Cost analysis will receive a score equal to the projects Benefit / Cost Analysis results divided by 10. Therefore a project with a BC ratio of 50:1 would receive 5 points, a project with a BC ratio of 100:1 (or higher) would receive the maximum points of 10.

5.1.1.2 Population Benefit

Population Benefit relates to the ability of the project to prevent the loss of life or injuries. A ranking of 10 has the potential to impact over 50% of the population. A ranking of 5 has the potential to impact 25% of the population, and a ranking of 1 will not impact the population. In some cases, a project may not directly provide population benefits, but may lead to actions that do, such as in the case of a study. Those projects will not receive as high of a rating as one that directly effects the population, but should not be considered to have no population benefit.

5.1.1.3 Property Benefit

Property Benefit relates to the prevention of physical losses to structures, infrastructure, and personal property. These losses can be attributed to potential dollar losses. Similar to cost, a ranking of 10 has the potential to save over \$1,000,000 in losses, a ranking of 5 has the potential to save roughly \$100,000 in losses, and a ranking of 1 only has the potential to save less than \$100 in losses. In some cases, a project may not directly provide property benefits, but may lead to actions that do, such as in the case of a study. Those projects will not receive

as high of a rating as one that directly effects property, but should not be considered to have no property benefit.

5.1.1.4 Economic Benefit

Economic Benefit is related to the savings from mitigation to the economy. This benefit includes reduction of losses in revenues, jobs, and facility shut downs. Since this benefit can be difficult to evaluate, a ranking of 10 would prevent a total economic collapse, a ranking of 5 could prevent losses to about half the economy, and a ranking of 1 would not prevent any economic losses. In some cases, a project may not directly provide economic benefits, but may lead to actions that do, such as in the case of a study. Those projects will not receive as high of a rating as one that directly affects the economy, but should not be considered to have no economic benefit.

5.1.1.5 Vulnerability of the Community

For planning projects, the vulnerability of the community is considered. A community that has a high vulnerability with respect to other jurisdictions to the hazard or hazards being studied or planned for will receive a higher score. To promote planning participation by the smaller or less vulnerable communities in the state, the score will be based on the other communities being considered for planning grants. A community that is the most vulnerable will receive a score of 10, and one that is the least, a score of 1.

5.1.1.6 Project Feasibility (Environmentally, Politically & Socially)

Project Feasibility relates to the likelihood that such a project could be completed. Projects with low feasibility would include projects with significant environmental concerns or public opposition. A project with high feasibility has public and political support without environmental concerns. Those projects with very high feasibility would receive a ranking of 5 and those with very low would receive a ranking of 1.

5.1.1.7 Hazard Magnitude/Frequency

The Hazard Magnitude/Frequency rating is a combination of the recurrence period and magnitude of a hazard. The severity of the hazard being mitigated and the frequency of that event must both be considered. For example, a project mitigating a 10-year event that causes significant damage would receive a higher rating than one that mitigates a 500-year event that causes minimal damage. For a ranking of 5, the project mitigates a high frequency, high magnitude event. A 1 ranking is for a low frequency, low magnitude event. Note that only the damages being mitigated should be considered here, not the entire losses from that event.

5.1.1.8 Potential for repetitive loss reduction

Those projects that mitigate repetitive losses receive priority consideration here. Common sense dictates that losses that occur frequently will continue to do so until the hazard is mitigated. Projects that will reduce losses that have occurred more than three times receive a rating of 5. Those that do not address repetitive losses receive a rating of 1.

5.1.1.9 Potential to mitigate hazards to future development

Proposed actions that can have a direct impact on the vulnerability of future development are given additional consideration. If hazards can be mitigated on the onset of the development, the county will be less vulnerable in the future. Projects that will have a significant effect on all future development receive a rating of 5. Those that do not affect development should receive a rating of 1.

5.1.1.10 Potential project effectiveness and sustainability

Two important aspects of all projects are effectiveness and sustainability. For a project to be worthwhile, it needs to be effective and actually mitigate the hazard. A project that is questionable in its effectiveness will score lower in this category. Sustainability is the ability for the project to be maintained. Can the project sustain itself after grant funding is spent? Is maintenance required? If so, are or will the resources be in place to maintain the project? An action that is highly effective and sustainable will receive a ranking of 5. A project with effectiveness that is highly questionable and not easily sustained should receive a ranking of 1.

5.1.1.11 Final ranking

Upon ranking a project in each of these categories, a total score can be derived by adding together each of the scores. The project can then be ranked high, medium, or low based on the non-planning project thresholds of:

Project Ranking Priority Score

- High 40-65
- Medium 25-39
- Low 9-25

5.2 Possible Fire Mitigation Activities

As part of the implementation of fire mitigation activities in Canyon County, a variety of management tools may be used. Management tools include but are not limited to the following:

- Homeowner and landowner education
- Building code amendments and enforcement of existing codes for structures and infrastructure in the WUI
- Home site defensible zone through fuels modification
- Community defensible zone fuels alteration
- Access improvements
- Access creation
- Emergency response enhancements (training, equipment, locating new fire stations, new fire districts)
- Regional land management recommendations for private, state, and federal landowners

Maintaining private property rights will continue to be one of the guiding principles of this plan's implementation. Sound risk management is a foundation for all fire management activities. Net gains to the public benefit will be an important component in the decision making process.

5.3 WUI Safety & Policy

Wildfire mitigation efforts must be supported by county policies and regulations that maintain a solid foundation for safety and consistency. Because the Wildland Urban Interface Safety and Policy recommendations are policy are regulatory in nature, they will not necessarily be accompanied by cost estimates. It is likely that debate and formulation of alternatives will serve to make these recommendations suitable and appropriate for Canyon County.

5.3.1 Existing Practices That Should Continue

Canyon County currently is implementing many projects and activities that, in their absence, could lead to increased wildland fire loss. By enumerating some of them here, it is the desire of the authors to point out successful activities.

- The dedication of fire district volunteers and professionals has contributed tremendously to the safety and well-being of residents of Canyon County. All individuals involved in fire suppression in Canyon County should be commended and recognized for the sacrifices they make in order to provide the excellent level of community protection afforded to county residents.
- The aggressive Fire Prevention campaign by local fire departments, the Boise National Forest and the Boise District of the BLM has contributed to a reduction in the number of human caused fires over time in Canyon County. The prevention program should receive necessary support over the long term.
- The BLM Rural Fire Assistance has made significant contributions to the capabilities of the rural fire districts throughout Canyon County.
- Existing rural addressing efforts have aided emergency responses well.
- Development of the valley-wide mutual aid agreement to facilitate response procedure during mutual aid responses throughout Canyon County and the entire Treasure Valley.

5.3.2 Proposed Activities

Table 5.1. WUI Action Items in Safety and Policy.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.1.a: Adopt building codes and vegetation management requirements for homes and structures located in the urban-interface.</p>	<p>Protection of people and structures by enforcement of existing standards to insure new homes can be protected while minimizing risks to firefighters.</p>	<p>County Commissioners in cooperation with County and City Planning & Zoning, County and City Building Departments, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, Murphy-Reynolds-Wilson Fire District, and Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba.</p>	<p>Year 1 (2006): Devise strategy between involved parties on how to efficiently and effectively enforce building codes.</p>
<p>5.1.b: Adopt and enforce applicable components of NFPA code 1144 that address the unique needs of Canyon County. Ensure policy addresses the specific needs of fire suppression resources, building materials and applies to subdivisions as well as new single home construction.</p>	<p>Protection of people and structures by applying a standard of road widths, access, water supply, and building regulations suitable to insure new homes can be protected while minimizing risks to firefighters.</p>	<p>County Commissioners in cooperation with County and City Planning & Zoning Departments, County and City Building Departments, and Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba.</p>	<p>Year 1 (2006): Debate and adopt revised code. Ongoing: Ensure enforcement of codes by building department and integrate into County Comprehensive Plan.</p>

Table 5.1. WUI Action Items in Safety and Policy.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.1.c: Amend existing building codes to apply equally to new single housing construction as it does to subdivisions in regard to access standards and water availability standards.</p>	<p>Protection of people and structures by applying a standard of road widths, access, and building regulations suitable to insure new homes can be protected while minimizing risks to firefighters. (defensible space, roads and access management, water systems, building codes, signage, and maintenance of private range lands).</p>	<p>County Commissioners in cooperation with County and City Planning & Zoning, County and City Building Departments, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, Murphy-Reynolds-Wilson Fire District, and Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba.</p>	<p>Year 1 (2006): Debate and adopt revised code. Ongoing: Review adequacy of changes annually, make changes as needed.</p>
<p>5.1.d: Enact and enforce fireworks ban on public lands in rangeland areas.</p>	<p>Protection of people, structures and unique ecosystems by reducing the probability of fire occurrence through the use of fireworks.</p>	<p>County Commissioners, Sheriff's Office, and BLM.</p>	<p>Year 1 (2006): Pass ordinance and post necessary signs. Ongoing: Support enforcement of law.</p>
<p>5.1.e: Establish mutual aid agreements between Deer Flat NWR and surrounding fire departments.</p>	<p>Protection of people, structures and unique ecosystems by improving working relationships between rural departments and Deer Flat NWR.</p>	<p>Deer Flat NWR, Nampa Fire Department, Upper Deer Flats Fire Department, Caldwell Fire Protection District, and Marsing Fire Department.</p>	<p>Year 1 (2006): Enter into and formalize mutual aid agreement between all involved parties.</p>

5.4 People and Structures

Many of the recommendations in this category involve education and increasing awareness of the residents of Canyon County. Although prevention campaigns and public education efforts have been quite successful in many areas, there is still much that residents can do to protect themselves and their property from wildland fire.

The recommendations stem from a variety of factors including items that became obvious during the analysis of the public surveys, discussions during public meetings, and observations about choices made by residents living in the wildland-urban interface. Over and over, a common theme was present that pointed to a situation of landowners not recognizing risk factors:

- Fire District personnel pointed to numerous examples of inadequate access to homes.
- Discussions with the general public indicated an awareness of wildland fire risk, but they could not specifically identify risk factors.
- Almost half of the respondents to the public mail survey indicated that they wanted to participate in educational opportunities focused on the WUI and what they can do to increase their home's chances of surviving a wildfire.

In addition to those items enumerated in Table 5.1, residents and policy makers of Canyon County should recognize certain factors that exist today, that in their absence would lead to an increase in the risk factors associated with wildland fires in the WUI of Canyon County. The items listed below should be encouraged, acknowledged, and recognized for their contributions to the reduction of wildland fire risks:

- **Livestock Grazing** in and around the communities of Canyon County has led to a reduction of many of the fine fuels. Domestic livestock not only eat these grasses, forbs, and shrubs, but also trample certain fuels to the ground where decomposition rates may increase. Responsible livestock grazing in this region should be encouraged into the future as a low cost, positive tool of wildfire mitigation in the wildland urban interface and in the wildlands.

5.4.1 Proposed Activities

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
<p>5.2.a: Develop a formal WUI Advisory Committee comprised of representatives from all fire and emergency service entities to coordinate and develop strategies to advance fire mitigation activities countywide.</p>	<p>Protection of people and structures, infrastructure, public and firefighter safety and ecosystems by coordinating efforts and improving communication avenues between all parties to make informed decisions about wildfire issues.</p>	<p>County Commissioners, Southwest Idaho RC&D, Emergency Management, BLM, USFS, FWS, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, Murphy-Reynolds-Wilson Fire District, and Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba, and all other organizations responsible for safety of Canyon County Residents.</p>	<p>Year 1 (2006): Formalize a committee, its membership and service decided on by the County Commissioners, to collaborate on WUI issues within Canyon County. Members potentially to include land management organizations, private landowners, and fire protection personnel.</p>

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
<p>5.2.b: Continued public education campaigns through targeted media campaigns, brochure and leaflet distribution, mailings, billboards, door-to-door visits, and any other means by which to communicate the need for fire safety throughout Canyon County.</p>	<p>Protect people and structures by increasing awareness of WUI risks, how to recognize risk factors, and how to modify those factors to reduce risk.</p>	<p>County Commissioners, Southwest Idaho RC&D, Emergency Management, BLM, UFS, FWS, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, Murphy-Reynolds-Wilson Fire District, and Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba, and all other organizations responsible for safety of Canyon County Residents.</p>	<p>Year 1 (2006): Work together to form a countywide public education working group to strategize on methods and tactics to maximize outreach effectiveness.</p> <p>Ongoing: Identify and coordinate mitigation opportunities and work as a single cohesive unit to see projects through. Determine needs for educational material and advertising budgets.</p>
<p>5.2.c: Wildfire risk assessments of homes in identified communities.</p>	<p>Protect people and structures by increasing awareness of specific risk factors of individual home sites in the at-risk landscapes. Only after these are completed can home site treatments follow.</p>	<p>To be implemented by County Commissioners in cooperation with local homeowners, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District. Actual work may be completed by Wildfire Mitigation Consultants or trained volunteers.</p>	<p>Cost: Approximately \$100 per home site for inspection, written report, and discussions with the homeowners.</p> <p>There are approximately 33,956 housing units in Canyon County, roughly 2,037 (6%) of these structures would benefit from a home site inspection and budget determination for a total cost estimate of \$203,700.</p> <p>Year 1 & 2 (2006-07): Secure funding and contract to complete the inspections.</p> <p>Home site inspection reports and estimated budget for each home site's treatments will be a requirement to receive funding for treatments through grants.</p>

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
<p>5.2.d: Home site WUI Treatments.</p>	<p>Protect people, structures, and increase firefighter safety by reducing the risk factors surrounding homes in the WUI of Canyon County.</p>	<p>County Commissioners in cooperation with local homeowners, Fire Mitigation Consulting company, and Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Actual funding level will be based on the outcomes of the home site assessments and cost estimates.</p> <p>Estimate that treatments will cost approximately \$750 per home site for a defensible space of roughly 150'. Approximately 2,037 homes in this category for an estimated cost of \$1,527,750.</p> <p>Home site treatments can begin after the securing of funding for the treatments and immediate implementation in 2006 and will continue from year 1 through 5 (2010).</p>

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
<p>5.2.e: Community Defensible Zone WUI Treatments.</p>	<p>Protect people, structures, and increase firefighter safety by reducing the risk factors surrounding high risk communities in the WUI of Canyon County.</p>	<p>County Commissioners in cooperation with local homeowners, Fire Mitigation Consulting company, and Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Actual funding level will be based on the outcomes of the home site assessments and cost estimates.</p> <p>Years 2-5 (2007-10): Treat high risk wildland fuels from home site defensible space treatments to an area extending 400 feet to 750 feet beyond home defensible spaces, where high accumulations of high risk fuels exist. This will help link home treatment areas together. Treatments target high risk concentrations of fuels and not 100% of the area identified. To be completed only after or during the creation of home defensible spaces have been implemented.</p> <p>Approximate average cost on a per structure basis is \$650-\$800 depending on extent of home defensibility site treatments, for a cost estimate of \$1,476,825.</p>
<p>5.2.f: Maintenance of Home site WUI Treatments.</p>	<p>Protect people, structures, and increase firefighter safety by reducing the risk factors surrounding homes in the WUI of Canyon County.</p>	<p>County Commissioners in cooperation with local homeowners and Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Home site defensibility treatments must be maintained periodically to sustain benefits of the initial treatments.</p> <p>Each site should be assessed 5 years following initial treatment</p> <p>Estimated re-inspection cost will be \$50 per home site on all sites initially treated or recommended for future inspections (\$101,850)</p> <p>Years 5 – 10 (2010 -2015): Follow-up inspection reports with treatments as recommended.</p>

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
5.2.g: Re-entry of Home site WUI Treatments.	Protect people, structures, and increase firefighter safety by reducing the risk factors surrounding homes in the WUI of Canyon County.	County Commissioners in cooperation with local homeowners and Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.	Re-entry treatments will be needed periodically to maintain the benefits of the initial WUI home treatments. Each re-entry schedule should be based on the initial inspection report recommendations, observations, and changes in local conditions. Generally occurs every 5-10 years.
5.2.h: Fuels reduction project on BLM ground subdividing in the Middleton area.	Protection of people and structures by reducing fuel concentrations and creating a defensible space around homes.	BLM in cooperation with Middleton Fire, Rescue, and Emergency Service and local homeowners.	Year 1 (2006): Determine project areas and secure funding sources. Conduct educational campaign for homeowners near the project areas to inform them of fire risk and the importance of the project. Years 2 & 3 (2007-08): Implement planned fuels reduction projects.
5.2.i: Evacuation planning and education campaign to inform public of evacuation routes and evacuation procedures.	Protection of people and structures by providing residents and visitors with the information they need for an orderly and safe evacuation.	County Commissioners in cooperation with Canyon County Highway Districts, Sheriffs Office, Emergency Management, and Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.	Year 1 (2006): Establish primary and secondary roads that will be defined as evacuation routes. Post signs along routes identifying them to the public as designated and safe evacuation routes. Year 1 (2006): Conduct a public education campaign to inform residents of the existence of designated evacuation routes and the proper procedures to follow during an emergency evacuation.

Table 5.2. WUI Action Items for People and Structures.

Action Item	Goals and Objectives	Responsible Organization	Action Items, Planning Horizon and Estimated Costs
<p>5.2.j: Hire or appoint Technical Assistance Coordinator/Special Project Leader to aid in grant writing, coordination of training and equipment needs, and administration of funds countywide.</p>	<p>Protection of people and structures by coordinating county needs and by facilitating writing of district and county grants for fire and other special projects.</p>	<p>County Commissioners and Emergency Management in cooperation with Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Year 1 (2006): Develop county budget to include funding for a Technical Assistance Coordinator/Special Project Leader. Release notice of job availability and seek qualified applicants.</p>

5.5 Infrastructure

Significant infrastructure refers to the communications, transportation (road and rail networks), energy transport supply systems (gas and power lines), and water supply that service the county. Protection of these elements is critical in protecting the health, safety and economy of Canyon County.

Communication Infrastructure: Generally, there is little that needs to be done to safeguard communication infrastructure within Canyon County from wildland fire. However, there are some improvements that could be made in order to better serve emergency communications needs during mutual aid responses.

Transportation Infrastructure (road and rail networks): Wildland fire poses little direct threat to roadways. However, ignitions along highways and roadways contribute significantly to fire load across the county and should be address as part of the implementation of this plan. Various alternatives from herbicides to intensive livestock grazing coupled with mechanical treatments have been suggested. A variety of approaches will be appropriate depending on the landowner, fuels present, and other factors.

Many roads in the county have limiting characteristics, such as steep grades, narrow travel surfaces, sharp turning radii, low load limit bridges and cattle guards, and heavy accumulations of fuels adjacent to some roads. Roads that have these characteristics and access homes and businesses are the priority for improvements in the county. Furthermore, alternate access routes are absent in many areas. Access improvements should be made where possible. Specific recommendations for these roads are enumerated in Table 5.3.

There are a number of active railways belonging to Union Pacific Railroad that pass through Canyon County. The routes generally traverse relatively level rangelands with few curves, grades, or sidings; however, the potential for an ignition due to sparks, hot stack carbon, or blown brake shoes emitted by a train is significant. Care should be taken to keep the railroad corridor clear of wildland fuels by mowing, grazing, harvesting, or other means.

Energy Transport Supply Systems (gas and power lines): A number of power and gas lines pass through Canyon County. Many of these pass through undeveloped, rangeland areas that are subject to wildland fire events. The potential for wildland fire causing catastrophic damage due to pipeline explosions is very real. All possible steps should be taken to secure this infrastructure. In cases where non-flammable steel support structures are used for power transmission lines, there is little direct threat of power supply damage. However, where wooden power poles have been used, there is some risk of failure. Since retrofitting of these infrastructure components is not practical, no such recommendations will be made. It is the recommendation of this Wildfire Mitigation Plan that this situation be evaluated annually and monitored.

Water Supply: In Canyon County irrigation water is derived from surface flows that feed the larger irrigation network that sustains the county's agricultural economy. High intensity wildfires threaten the quality of these surface water sources by removing the organic material and vegetation that keeps sediments from entering streams. Protection of watersheds is important to maintaining high quality surface water for Canyon County.

The emergency water supply is limiting in many areas. Many areas of Canyon County are not serviced by any type of emergency water supply. Where this condition exists, municipalities should consider extending the hydrant system, or requiring the installation of dry hydrants to provide an emergency water supply.

5.5.1 Proposed Activities

Table 5.3. WUI Action Items for Infrastructure Enhancements.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.3.a: Identify and post FEMA “Emergency Evacuation Route” signs along the identified primary and secondary access routes in the county.</p>	<p>Protection of people and structures by informing residents and visitors of escape routes that will be maintained in the case of an emergency.</p>	<p>County Commissioners in cooperation with the County Highway Districts, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Year 1 (2006): Obtain funding and purchase signs. Post roads and make information available to residents of the importance of Emergency Routes.</p>
<p>5.3.b: Fuels mitigation of the FEMA “Emergency Evacuation Routes” in the county to insure these routes can be maintained in the case of an emergency.</p>	<p>Protection of people and structures by providing residents and visitors with ingress and egress that can be maintained during an emergency.</p>	<p>County Commissioners in cooperation with the County Highway Districts, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Year 1 (2006): Conduct full assessment of road defensibility, cost, and ownership participation. Year 1 – 5 (2006-2010): Obtain funding and Implement recommended projects.</p>
<p>5.3.c: Improve road access to homes through construction of off-road access points and loop roads in subdivisions and other populated areas.</p>	<p>Protection of people, structures, infrastructure, and economy by improving access for residents and firefighting personnel in the event of a wildfire.</p>	<p>County Highway Districts, County and City Planning and Zoning Departments Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Year 1 (2006): Determine subdivisions and areas in greatest need of access improvements countywide and prioritize access improvement projects. Year 2 – 6 (2007-2011): Obtain funding and implement projects.</p>

Table 5.3. WUI Action Items for Infrastructure Enhancements.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.3.d: Update and improve road signing and rural addressing compliant with NFPA standards for visibility throughout Canyon County.</p>	<p>Protection of people and structures by reducing emergency response time.</p>	<p>County Commissioners in cooperation with County and City Planning & Zoning and local homeowners.</p>	<p>Year 1 & 2 (2006-07): Update rural addressing and assure that 911 Dispatch, fire departments, sheriff, and all emergency services are aware of new addresses.</p> <p>New subdivisions should be signed with names as well as county grid addresses to assure consistency in addressing throughout the county</p>
<p>5.3.e: Roadside vegetation treatments to reduce flammability of fuels immediately adjacent to roads at high risk of ignitions.</p>	<p>Protection of people and structures and unique ecosystems by reducing probability of ignitions along travel corridors.</p>	<p>County Highway Districts, Idaho Transportation Department, BLM, and other affected landowners.</p>	<p>Year 1 (2006): Conduct full assessment of road defensibility, cost, and ownership participation.</p> <p>Year 1 – 5 (2006-2010): Obtain funding and implement recommended projects. Treatments may include mowing, spring application herbicide treatments, or other treatments to reduce flammability.</p> <p>This item is applicable to the Interstate 84 corridor as well as all county and state roads not specifically identified by this plan.</p>
<p>5.3.f: Identification of resource staging areas throughout the county for coordination during major incidents.</p>	<p>Protection of people and structures by improving tactical planning efficiency.</p>	<p>County Emergency Management, BLM, USFS, FWS, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, Murphy-Reynolds-Wilson Fire District, and all other organizations responsible for safety of Canyon County Residents.</p>	<p>Year 1 (2006): Identify areas throughout the county and share information between all entities. Post staging area signing at appropriate locations.</p>

Table 5.3. WUI Action Items for Infrastructure Enhancements.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.3.g: Access Improvements of bridges, cattle guards, and limiting road surfaces.</p>	<p>Protection of people, structures, infrastructure, and economy by improving access for residents and firefighting personnel in the event of a wildfire. Reduces the risk of a road failure that leads to the isolation of people or the limitation of emergency vehicle and personnel access during an emergency.</p>	<p>County Highway Districts in cooperation with BLM, Idaho Transportation Department, Idaho Department of Lands, and affected landowners.</p>	<p>Year 1 (2006): Update existing assessment of travel surfaces, bridges, and cattle guards in Canyon County as to location. Secure funding for implementation of this project (grants).</p> <p>Year 2 (2007): Conduct engineering assessment of limiting weight restrictions for all surfaces (e.g., bridge weight load maximums). Estimate cost of \$150,000 which might be shared between County, BLM, State, and private based on landownership associated with road locations.</p> <p>Year 2 (2007): Post weight restriction signs on all crossings, copy information to fire districts and wildland fire protection agencies in affected areas. Estimate cost at roughly \$25-\$30,000 for signs and posting.</p> <p>Year 3 (2008): Identify limiting road surfaces in need of improvements to support wildland firefighting vehicles and other emergency equipment. Develop plan for improving limiting surfaces including budgets, timing, and resources to be protected for prioritization of projects (benefit/cost ratio analysis). Create budget based on full assessment.</p>
<p>5.3.h: Augment emergency water supply through establishment of dry hydrants and cisterns at designated locations</p>	<p>Protection of people and structures by improving water accessibility.</p>	<p>County Emergency Management, BLM, Idaho Department of Lands, FWS, local landowners, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.</p>	<p>Year 1 (2006): Conduct survey to determine areas in need of water source development. Make recommendations and obtain needed funding.</p> <p>Year 2 – 5 (2007-2010): Acquire needed equipment and install recommended water supply developments.</p>

5.6 Resource and Capability Enhancements

There are a number of resource and capability enhancements identified by the rural and wildland firefighting districts in Canyon County. All of the needs identified by the districts are in line with increasing the ability to respond to emergencies in the WUI and are fully supported by the planning committee.

Specific reoccurring themes of needed resources and capabilities include:

- More water tenders for Rural Fire Districts with drafting capabilities at unimproved sites
- Improved radio capabilities within each district and for mutual aid operations
- Retention and recruitment of volunteers
- Training and development of rural firefighters in structure and wildland fire

The implementation of each issue will rely on either the isolated efforts of the fire districts or a concerted effort by the county to achieve equitable enhancements across all of the districts. Given historic trends, individual departments competing against neighboring departments for grant monies and equipment will not necessarily achieve county wide equity. However, the Southwest Idaho RC&D may be an organization uniquely suited to work with all of the districts in Canyon County and adjacent counties to assist in the prioritization of needs across district and even county lines. Once prioritized, the RC&D is in a position to assist these districts with identifying, competing for, and obtaining grants and equipment to meet these needs.

5.6.1 Proposed Activities

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
5.4.a: Develop comprehensive fire district growth plans that address issues associated with growing populations and integrate into county Comprehensive Plan.	Protection of people and structures by incorporating new developments and structures into fire protection districts.	Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with County Commissioners and Planning and Zoning.	Year 1 (2006): Establish community growth benchmarks for the expansion of district resources. Expand fire districts' planning horizon beyond five-years. Ongoing Activity: Evaluate need to expand district resources as set benchmarks are reached. Integrate plan into county Comprehensive Plan

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.4.b: Annexation of currently unprotected parcels into neighboring fire districts as discussed in Section 4.6.6.</p>	<p>Protection of People and Structures by providing fire protection in areas of the county that are currently without structural fire protection.</p>	<p>Local residents in cooperation with the County Commissioners, BLM, FWS, Melba Fire Department, Upper Deer Flat Fire Department, and Marsing Rural Fire Department.</p>	<p>Year 1 (2006): Determine interest among affected communities and landowners.</p> <p>Ongoing: Provide materials, resources and assistance for those community members interested in chartering new districts.</p>
<p>5.4.c: Acquisition of additional rolling stock and Personal Protective Equipment for Nampa Fire Department.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Nampa Fire Department</p>	<p>Year 1 (2006): Determine specific needs and actively pursue funding sources.</p>
<p>5.4.d: Construction of new fire station in Melba Fire Protection District to keep up with demands of a growing population.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Melba Fire Department, Southwest Idaho RC&D, and Canyon County Emergency Management.</p>	<p>Year 1 (2006): Develop expansion plan and determine station location.</p> <p>Year 2 (2007): Develop cost estimates and secure funding.</p> <p>Year 3 (2008): Complete construction and outfit station as necessary.</p>
<p>5.4.e: Acquisition of large capacity pumper-tanker for Melba Fire Department.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Melba Fire Department</p>	<p>Year 1 (2006): Determine funding possibilities through BLM Rural Fire Assistance Program and other sources.</p> <p>Year 2 (2007): Acquire additional equipment.</p>
<p>5.4.f: Enhance radio availability in each district, link into existing dispatch, and improve range within the region, update to new digital, narrow band frequency adopted by feds and state.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with BLM, FWS, Southwest Idaho RC&D, Canyon County Emergency Management.</p>	<p>Year 1 (2006): Summarize existing two-way radio capabilities and limitations. Identify costs to upgrade existing equipment and locate funding opportunities.</p> <p>Year 2 (2007): Acquire and install upgrades as needed.</p> <p>Year 2-3 (2007-08): Identify opportunities for radio repeater towers located in the region for multi-county benefits.</p>

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.4.g: Acquisition of mapping system for Middleton Fire Service that is compatible with CAD to keep pace with change in the district.</p>	<p>Protection of people and structures by facilitating address location.</p>	<p>Middleton Fire, Rescue, and Emergency Service and City of Middleton.</p>	<p>Year 1 (2006): Determine necessary hardware and software needs.</p> <p>Year 2 (2007): Acquire and install equipment and train personnel to use the new system.</p>
<p>5.4.h: Recruitment and retention of volunteer firefighters.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with BLM, FWS, Southwest Idaho RC&D, Canyon County Commissioners, Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba, and Canyon County Emergency Management.</p>	<p>Ongoing: Target an increased recruitment (+10%) and retention (+20% longevity) of volunteers</p> <p>Year 1 (2006): Develop incentives program and implement it.</p>
<p>5.4.i: Increased training and capabilities of firefighters.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with BLM, FWS, Southwest Idaho RC&D, Canyon County Commissioners, and Canyon County Emergency Management..</p>	<p>Year 1 (2006): Develop a multi-county training schedule that extends 2 or 3 years in advance (continuously).</p> <p>Year 1 & 2 (2006-07): Identify funding and resources needed to carry out training opportunities and sources to acquire.</p> <p>Year 1 (2006): Begin implementing training opportunities for volunteers.</p>

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.4.j: Create a mechanism to keep updated maps of new subdivisions including common names available to dispatch personnel and fire departments.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with BLM, FWS, Southwest Idaho RC&D, Canyon County Commissioners, County and City Planning & Zoning Departments, Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba and Canyon County Emergency Management.</p>	<p>Ongoing: Include updated map creation and distribution to dispatch and fire departments on County GIS Lab's monthly agenda.</p>
<p>5.4.k: Training of Deer Flat NWR personnel to Single Resource: Engine Boss or higher qualification.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Deer Flat NWR working with qualified local fire departments and BLM, IDL, and USFS for wildland training opportunities.</p>	<p>Ongoing: Work with cooperators to determine training needs and training schedule.</p> <p>Ongoing: Identify funding and resources needed to carry out training opportunities and sources to acquire.</p> <p>Year 1 (2006): Begin implementing training opportunities for volunteers.</p>
<p>5.4.l: Acquisition of Type 3 or 4, four-wheel drive engine for Kuna Fire District.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Kuna Fire District</p>	<p>Year 1 (2006): Determine possibilities through BLM Rural Fire Assistance Program.</p> <p>Year 2 (2007): Secure funding source and purchase necessary equipment.</p>
<p>5.4.m: Acquisition of newer rolling stock and Personal Protective Equipment for Notus Fire Department.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Notus Fire Department</p>	<p>Year 1 (2006): Determine possibilities through BLM Rural Fire Assistance Program.</p> <p>Year 2 (2007): Secure funding source and purchase necessary equipment.</p>

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
<p>5.4.n: Construct a new fire station and helipad located near the Firebird Raceway as a joint station between Star Joint Fire Protection District and the BLM.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Star Joint Fire Protection District, BLM, Southwest Idaho RC&D, Canyon County Emergency Management, and Canyon County Emergency Management.</p>	<p>Year 1 (2006): Develop agreement between Star Joint Fire Protection District and BLM.</p> <p>Year 2 (2007): Develop cost estimates and secure funding.</p> <p>Year 3 (2008): Complete construction and outfit station as necessary.</p>
<p>5.4.o: Acquisition of two 3,000 gallon water tenders for Star Joint Fire Protection District.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Star Joint Fire Protection District.</p>	<p>Year 1 (2006): Determine possibilities through BLM Rural Fire Assistance Program.</p> <p>Year 2 (2007): Secure funding source and purchase necessary equipment.</p>
<p>5.4. p: Construction of two new fire stations for Caldwell. One east of I-84 and one west of Farmway Road.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Caldwell City and Rural Fire Protection District. and residents of Caldwell.</p>	<p>Year 1 (2006): Develop expansion plans and station locations. Develop cost estimate and secure funding.</p> <p>Year 2 & 3 (2007-08): Construct and outfit the stations.</p>
<p>5.4.q: Construction of living quarters at Notus Fire Station.</p>	<p>Protection of people and structures by direct firefighting capability enhancements.</p>	<p>Notus Fire Department</p>	<p>Year 1 (2006): Develop expansion plans and station locations. Develop cost estimate and secure funding.</p> <p>Year 2 & 3 (2007-08): Construct and outfit the station.</p>

Table 5.4. WUI Action Items in Firefighting Resources and Capabilities.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
5.4.r: Establishment and training of Type II Overhead Team.	Protection of people and structures by direct firefighting capability enhancements.	Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District in cooperation with BLM, FWS, Southwest Idaho RC&D, Canyon County Commissioners, and Canyon County Emergency Management.	Year 1 (2006): Identify needed training. Year 1 & 2 (2006-07): Provide needed training and experience. Ongoing: Implement a Type II overhead team for wildfire and other hazards.
5.4.p: Obtain two newer pumper trucks, a utility trailer to haul extrication equipment, an air compressor, and SCBA's for the Parma Fire Department.	Protection of people and structures by direct firefighting capability enhancements.	Parma Fire Department	Year 1 (2006): Determine funding possibilities through BLM Rural Fire Assistance Program and other sources. Year 2 (2007): Acquire additional equipment.

5.7 Regional Land Management Recommendations

Wildfires are a fact of life in Canyon County. Fires will continue to occur despite efforts of all city, county, state, and federal agencies within the county. However, active land management that modifies fuels, promotes healthy grassland and rangeland conditions, and promotes the use of these natural resources (consumptive and non-consumptive) will insure that these lands will continue to provide value to residents of Canyon County.

Of particular concern in Canyon County is the spread of non-native vegetative species that alter natural ecological systems and degrade resource values for wildlife, range and recreational use. The proliferation of cheatgrass and other exotic species threatens the biological integrity of the Foothills region and the Deer Flat National Wildlife Refuge. Efforts by local, state, and federal agencies responsible for management of these lands should be encouraged.

5.7.1 Proposed Activities

Table 5.5. Action Items for Regional Land Management Recommendations.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
5.5.a: Continue or initiate aggressive cheatgrass	Regional Land Management	Cooperative effort between the BLM, Fish and Wildlife	Year 1 (2006): Continue with weed control and

Table 5.5. Action Items for Regional Land Management Recommendations.

Action Item	Goals and Objectives	Responsible Organization	Action Items & Planning Horizon
and other noxious weed abatement programs on rangeland ecosystems throughout Canyon County.	Recommendations in order to ensure integrity of grassland and rangeland ecosystems through the control of exotic vegetation.	Service, Idaho Fish and Game, IDL, USFS, Cities of Nampa, Caldwell, Middleton, Notus, Parma, Wilder, Greenleaf, and Melba, and the communities of Roswell, Huston, Walters Ferry, and Bowmont.	abatement programs where they already exist. Develop and implement comprehensive weed control program on targeted areas. Subsequent Years: Continue monitoring and control efforts through the long term.
5.5.b: Create a buffer along major roadways and along interface streets throughout the foothills to reduce the probability of roadside ignitions.	Regional Land Management Recommendations in order to ensure integrity of grassland and rangeland ecosystems by reducing potential for wildland fire events originating along roadways.	Idaho Fish and Game, BLM, Fish and Wildlife Service, IDL, private landowners, and other agencies responsible for land management throughout the county.	Year 1 (2006): Determine best means by which to control roadside vegetation and implement control program immediately.
5.5.c: Create greenbelt around Deer Flat NWR for reduce potential for roadside and other ignition sources from entering the refuge.	Regional Land Management Recommendations in order to ensure integrity wildlife habitat in the refuge.	FWS, private landowners, and other agencies responsible for land management in the Deer Flats NWR area.	Year 1 (2006): Develop management regime and secure funding for immediate implementation.
5.5.d Fire awareness and prevention signage in high use areas.	Regional Land Management Recommendation in order to make the public aware of fire related issues when recreating on public lands in the county.	BLM, Idaho Fish and Game, Fish and Wildlife Service , IDL, USFS, in cooperation with other entities including the County Commissioners, Nampa Fire Department, Melba Fire Department, Caldwell Fire Protection District, Notus Fire Department, Parma Fire Department, Upper Deer Flat Fire Department, Star Joint Fire Protection District, Wilder Rural Fire Protection District, Kuna Fire District, Middleton Fire, Rescue, & Emergency Services, Marsing Rural Fire Department, and Murphy-Reynolds-Wilson Fire District.	Year 1 (2006): Determine best signage location and verbiage. Year 2 (2007): Secure funding and install signs.