Custer County - Idaho Wildland/Urban Interface Fire Mitigation Plan

"Building Safer Communities"

E²RS Global

Emergency Response Solutions.....www.ersglobal.net

PROMULGATION OF ADOPTION

Be it known that the Custer County Idaho Board of County Commissioners do hereby approve the Adoption of the Custer County Idaho Wildland/Urban Interface Fire Mitigation Plan and direct its implementation through the creation of a Custer County Wildland/Urban Interface Advisory Committee.

Be it also known that the Board of County Commissioners hereby appoints Mr. Jim Alexander, in his role as Custer County Director of Emergency Services, as the Custer County Wildland/Urban Interface Advisory Committee Chair.

This plan has been developed in the interest of providing fire mitigation protection to populations living in the wildland/urban interface. Through adoption of this Plan, all county and private agencies are requested to develop directives, Standard Operating Procedures, checklists or other supplemental guidance to insure its maximum effectiveness.

_____ _____
CUSTER COUNTY COMMISSIONER DATE

_____ _____
CUSTER COUNTY COMMISSIONER DATE

_____ _____
CUSTER COUNTY COMMISSIONER DATE

Custer County - Idaho

Wildland/Urban Interface
Fire
Mitigation
Plan

Executive Summary
And
Five-Year Action Plan

February 12, 2004

Executive Summary
And
Five-Year Action Plan

The Custer County Wildland/Urban Interface Fire Mitigation Plan, hereafter referred to as the Plan, has been assembled to assist Custer County agencies, private landowners, public and private sector organizations, and others interested participants in planning for fires within the wildland/urban interface area. The Plan provides a list of implementing actions that are based on identified hazards and vulnerabilities and designed to assist Custer County in reducing risk and preventing loss from future events. The process of wildland/urban interface fire mitigation is new to the County and many of the mitigation actions will require significant follow-up to ensure effective implementation.

The Plan contains an introduction to wildland/urban interface fire mitigation, the methodology used to develop the mitigation program, the profile of Custer County, a hazard, vulnerability and risk assessment examining hazards that might occur within the county, a section which summarizes the public participation effort, a listing of existing, short and long term implementing actions, a section of cost benefit analysis, plan maintenance and appropriate supporting appendices. The Plan is the result of a collaborative effort between Custer County citizens, federal, state, and local agencies, non-profit organizations, and the private sector. Public participation will continue to play a key role in the implementation of mitigation actions.

A project Interagency Planning Group, assembled on November 20, 2003, has met three times to guide the process of developing the plan. In addition three public meetings were conducted to gather information that has been used to assess the natural hazard and resulting actions outlined further in the body of the Plan. The final meeting of the Group was held on February 6th, 2004.

The *Four Key Issues* identified by the Group are:

- **Reduce Fire Loading**
- **Improve Equipment**
- **Increase available water storage**
- **Develop Zoning and Building Codes**

Under direction of the Interagency Planning Group the Custer County Wildland/Urban Fire Mitigation Program has been created to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from Wildfires. This mission will be achieved by increasing public awareness, documenting the resources for risk reduction and loss-prevention, and identifying activities to guide the county towards building a safer, more sustainable community.

The Group has established goals that form a foundation upon which Custer County agencies, organizations, and citizens are building upon to begin the mitigation of fire risk within the wildland/urban interface. The goals for the Custer County Wildland/Urban Interface Fire Mitigation Program are as follows:

Protect Life and Property

- Implement activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to losses from wildfire hazards.

- Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.

- Improve hazard assessment information to make recommendations the creation of County wide zoning and building codes and standards for new developments and encouraging preventative measures for existing development in areas vulnerable to wildfire hazards.

Public Awareness

- Develop and implement education and outreach programs to increase public awareness of the risks associated with wildfire hazards.

- Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation actions.

Natural Systems

- Balance watershed planning, natural resource management, and land use planning with wildfire mitigation to protect life, property, and the environment.

- Preserve, rehabilitate, and enhance natural systems to serve wildfire mitigation functions.

Partnerships and Implementation

- Strengthen communication and coordinate participation among and within public agencies, citizens, non-profit organizations, business, and industry to gain a vested interest in implementation.

- Encourage leadership within public and private sector organizations to prioritize and implement local, county, and regional hazard mitigation actions.

Emergency Services

- Establish policy to ensure mitigation projects for critical facilities, services, and infrastructure.

- Strengthen emergency operations by increasing collaboration and coordination among public agencies, non-profit organizations, business, and industry.

- Coordinate and integrate wildfire mitigation activities, where appropriate, with emergency operations plans and procedures.

Hazard, Vulnerability, and Risk Assessment

Based on the analysis conducted as part of the mitigation planning effort the largest wildfire risks within the wildand/urban interface areas in Custer County is in the SNRA/private subdivision areas. The largest threat to life may well be the recreation sites such as Red Fish Lake, but certainly the highest property loss would occur within the privately owned subdivisions where loss of life could also be significant. Another serious risk area is the Riparian Zone below the Mackay Reservoir along the Big Lost River. The conditions within this area are not as well managed as the SNRA's Red Tree treatment areas. The Federal Government does not have ultimate responsibility for the treatment program and so the County and homeowners may well have to face this risk alone.

Five Year Action Plan

The following **specific implementing and ongoing actions** comprise the ***Custer County Wildland/Urban Interface Fire Mitigation Fire Year Plan***. Additional short and long term implementing actions have been categorized in Section 5 of the Plan into the following categories:

- Establish Partnerships
- Funding Needs
- Education and Training
- Data Collection

Subcommittees formed by the Custer County Fire Mitigation Advisory Committee will further examine actions identified in these categories and implemented them as funding and resources are made available.

The Plan below provides a succinct listing of activities that county agencies and private property owners will take over the next five years to reduce risk.

Five Year Action Plan

Existing Actions

1. Revision of the Custer County Emergency Operations Plan.
2. Installation of static water supply tanks in Stanley.
3. SNRA Red Tree Reduction Project.
4. Fuel Reduction Projects in the Iron Creek, Crooked Creek, Cow Camp, Basin Creek, Fisher Creek, and Buckhorn Subdivisions. Project includes thinning, removal and replanting of dead lodgepole pine.
5. Rural Addressing of Custer County.
6. Mechanical Fuel Reduction in the areas between the Yankee Fork Ranger District and the North East Stanley District of the Salmon-Challis National Forest.
7. Procurement of new fire apparatus in South and North Custer Fire Districts.

Short Term Actions

Specific Implementing Actions Projects:

1. Implement Section 7 of the Wildland/Urban Interface Fire Mitigation Plan through Plan adoption and Advisory Committee establishment.
2. Implement re-vegetation programs in landslide areas affected by previous wildfires.
3. Develop and disseminate maps showing the fire hazard to help in the education and preparedness of the community. Use the GIS layers developed as part of the Rural Addressing Project.
4. Complete the Rural Addressing Project.
5. Improve fire protection ratings in Stanley through the construction of a new fire station and improvements in water storage and distribution.
6. Improve fire protection ratings in Mackay and the South Custer Fire District through the construction of a new fire station and improvements in the water storage and delivery infrastructure.
7. Continue to assist homeowner associations to apply for grants for the purposes of reducing fuel loading and improvements in fire protection infrastructure.
8. Conduct workshops for public and private sector organizations to raise awareness of mitigation activities and programs.
9. Place the Custer County Wildland/Urban Interface Fire Mitigation Plan on the County Web Site.
10. Implement the SNRA Community Evacuation Plan.
11. Develop Evacuation Plans for sites along the Custer Motorway Adventure Road including the historical sites along the Yankee Fork of the Salmon River.

Long Term and Ongoing Actions

Specific Implementation Projects:

1. Employ mechanical thinning and prescribe burning in Red Tree Areas.
2. Clear trimmings, trees, brush, and other debris completely from sites when performing routine maintenance and landscaping to reduce fire risk.
3. Expand Fire Districts to provide fire protection to residences within the County.

Ongoing Actions:

1. Encourage single-family residences to have fire plans and practice evacuation routes.
2. Encourage fire inspections in residential areas by fire departments to increase awareness and establish relationships between homeowners and firefighters.
3. Continue the development of adult and child education programs and incorporate them into the public libraries, community service groups, the media, and other civic forums.
4. Continue to update and improve the SNRA Community Evacuation Plan.
5. Improve Fire District capabilities through an aggressive program focusing on resources acquisition, training, and coordination.

Prior to implementation all mitigation actions will be analyzed for cost benefit using the Federal Emergency Management Agency's approach for wildfire mitigation strategies or projects. The implementing actions fall into two general categories: benefit/cost analysis and cost-effectiveness analysis. Conducting benefit/cost analysis for a mitigation activity will assist the decision makers within Custer County communities in determining whether a project is worth undertaking now, in order to avoid wildfire-related damages later. Cost-effectiveness analysis evaluates how best to spend a given amount of money to achieve a specific goal. Determining the economic feasibility of mitigating natural hazards provides decision makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

The Board of County Commissioners (BCC) will be responsible for adopting the Plan. The Interagency Planning Group, working with private property holders, will be responsible for coordinating implementation of Plan actions and undertaking the formal evaluation process. The Plan will be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities.

Custer County is dedicated to involving the public directly in the continual review and updates of the Wildland/Urban Interface Fire Mitigation Plan. Copies of the plan will be catalogued and kept at all of the public libraries in the county. The existence and location of these copies will be publicized annually, following each annual review of the plan, in the local area newspaper.

Table of Contents

Section 1: Planning Process ..... Page 9
Section 2: Custer County, Idaho ..... Page 15
Profiles of Custer County ..... Page 17
Profiles of Federal Lands ..... Page 23

Section 3: Hazard, Vulnerability and Risk Assessment ..... Page 25
Hazard Assessment ..... Page 25
Vulnerability Assessment ..... Page 31
Risk Assessment ..... Page 34

Section 4: Public Participation ..... Page 37

Section 5: Mitigation Implementing Actions ..... Page 39
Existing Actions ..... Page 39
Short-Term Actions ..... Page 40
Long-Term Actions ..... Page 41

Section 6: Economic Analysis ..... Page 43

Section 7: Plan Maintenance ..... Page 48

Appendices

Appendix 1: Meeting Minutes Interagency Planning Committee
Appendix 2: Interagency Planning Group Public Meeting Minutes
Appendix 3: RC&D Custer County Urban/Wildland Interface Fire Mitigation Plan Scoping Input Meeting
Appendix 4: Public Participation Survey
Appendix 5: Sawtooth National Recreation Area Fire Prevention Team Reports
Appendix 6: Maps

Section 1: Introduction and Planning Process

Wildfires are a part of the natural ecological cycle of forest ecosystems. However, as humans encroach onto forested lands, the risk of catastrophic disaster increases. These areas of risk are known as the wildland/urban interface. They can be sharp geographical edges or zones of ever increasing risk potential. Regardless, they pose a threat to human life and property. The National Fire Plan calls for reducing this risk through a variety of measures including the creation of local wildland/urban interface fire mitigation programs. Custer County Emergency Services received a grant through the High Country Resource Conservation and Development Program (RC&D) to prepare the Wildland/Urban Interface Fire Mitigation Plan that documents programmatic goals, identifies implementing actions, and sets priorities for reducing wildfire risk.

Wildfire Hazard Mitigation

Wildfire hazard mitigation is the development and implementation of activities designed to reduce or eliminate losses resulting from wildfires. Wildfire mitigation can be used in conjunction with other county plans, including the County Comprehensive Land Use and Emergency Operations Plans.

The Custer County Wildland/Urban Interface Fire Mitigation Plan, hereafter referred to as the Plan, addresses privately held unincorporated urban and rural areas of the county and their interface points with Federal or State Lands such as the Salmon Challis National Forest, the Sawtooth National Recreation Area. While this Plan does not establish requirements for the cities in the county or the Federal or State held lands, it does provide them with a framework for planning for common impacts from wildfires. The resources and background information in the plan is applicable countywide, and the goals and recommendations lay groundwork for local mitigation plans and partnerships.

All mitigation is local, and the primary responsibility for development and implementation of risk reduction strategies and policies lies with local jurisdictions. Local jurisdictions, however, are not alone. Partners and resources exist at the state and federal levels. No plan is complete until it is implemented. This Plan describes prescriptive programmatic actions that will bring about mitigation. These mitigation actions, if implemented over the next several years, will help reduce the damages caused by wildfire in the wildland/urban interface. However, it is up to the community to ensure that these actions are taken.

The Plan, and Appendices that follow, are the culmination of six months of work conducted by the Custer County Wildland/Urban Interface Fire Mitigation Interagency Planning Group and includes a variety of measures designed to reduce the impact of wildfires**.**

Background

Each County within the state has been requested to write a simple Wildland/Urban Interface Fire Mitigation Plan. These plans are to contain at least the following five elements:

1) Documentation of the process used to develop the mitigation plan. How the plan was developed, who was involved and how the public was involved.

2) A risk assessment to identify vulnerabilities to wildfire in the wildland urban interface (WUI).

3) A prioritized mitigation strategy that addresses each of the risks. Examples of these strategies could be:

- Training for fire departments
- Public education
- Hazardous fuel treatments

- Equipment
- Communications
- Additional planning
- New facilities
- Infrastructure improvements
- Code and/or ordinance revision
- Volunteer efforts
- Evacuation plans, etc.

4) A process for maintenance of the plan, which includes monitoring, and evaluation of mitigation activities.

5) Documentation that the plan has been formally adopted by the involved agencies.

To develop wildfire mitigation plans it is suggested that each county bring together the following individuals, as appropriate for each county, to make up the County Wildland/Urban Fire Interagency Planning Group. It is important that this group has representation from agencies with wildfire suppression responsibilities:

- County Commissioners (Lead)
- Local Fire Chiefs
- Idaho Department of Lands representative
- USDA Forest Service representative
- USDI Bureau of Land Management representative
- US Fish and Wildlife representative
- Bureau of Indian Affairs
- Local Tribal leaders
- Bureau of Disaster Services
- LEPC Chairperson
- Resource Conservation and Development representative
- State Fish and Game representative
- Interested citizens and community leaders as appropriate
- Other officials as appropriate

The planning group, with critical input from homeowners and the general public, will determine where the risks and vulnerabilities to wildland/urban fire are within the County and what mitigation actions are required. County organizations that include most of the identified representatives are already in place in Custer County.

In Custer County existing assessments and planning documentation has fulfilled many of the recommendations made above, however, the purpose of this planning activity is to integrate existing relevant information into a single place and to develop a strategic pathway to fire mitigation implementation.

Project Requirements

The Plan is being written to establish the jurisdiction's commitment to reduce risks from disasters and technological hazards, and serve as a guide for decision-makers as they commit resources to reduce the effects of wildfires upon private property within the designated wildland/urban interface areas.

The project has been outlined and conducted in accordance with the request from the State of Idaho Division of Emergency Management and cover the following format.

1. Develop and Document Planning Process
2. Assess the Risk
3. Develop Mitigation Strategies
4. Develop a Maintenance Process for the Plan

Planning Methodology

Information contained in the Plan is based on research and information taken from a variety of sources. The intention of the planning team is to not duplicate existing information, but rather to integrate resources provided by members of the planning committee.

The Interagency Planning Group is comprised of the following.

Name	Representing
Cliff Hansen	Custer County Commissioner
Lin Hintze	Custer County Commissioner
Wayne Butts	Custer County Commissioner
Jim Alexander	Custer County Disaster Coordinator
Ken Day	Mackay Fire Asst. Chief, City Foreman
Randy Ivie	City of Mackay Fire Chief
Will Marcroft	US Forest Service Lost River FMO
Wiley Smith	South Custer Board Chairman
John Fowler	USFS – South Zone Fuels Spec
Bill Baer	Challis BLM
Fritz Cluff	Salmon BLM
Launna Gunderson	Challis Fire
Andy Gunderson	Sawtooth Valley Rural Fire Department
Dave Kimpton	Iron Creek Home Owners Association
Rochelle Ahrens	Sawtooth N.F. Prevention
Michelle Erdie	North Zone Fire Prevention Technician Sawtooth N.F.
Wes Jones	ERS Project Manager
Rick Fawcett	ERS – Senior Consultant

Meetings

Three planning meetings were conducted to gather information and develop natural hazard actions for this plan. Additional meetings will be held with the County Commission, homeowners and the general public during the month of January.

Date	Group	Purpose
11/20/03	Mackay Fire, BLM, USFS	Project Introduction and Strategy Meeting
12/5/03	Challis	Project Introduction and Strategy Meeting
12/11/2003	Stanley	Project Introduction and Strategy Meeting
11/15-16/04	County Commissioners	Preparatory session for Public Meeting and project status update.
11/15-16/04	Public Meetings	Mackay, Challis, Stanley
2/6/04	Final Planning Meeting	Review Plan – Submit to Commissioners

Public Participation

Public participation process is being conducted in four specific ways.

- Examine the High County RC&D and the SNRA fire prevention related activities previously within the county. The Interagency Planning Group has been provided summaries of the public involvement and resulting recommendations.
- Ensure ongoing involvement of private homeowners and or representatives from the communities served by this process on the planning committees. Representatives have been, and will be in the future, invited to participate as members of the Interagency Planning Group.
- Notification by mail of Custer County property owners who live outside of the county, announcing the development of the plan, the availability and opportunity to review the plan online, and inviting them to make comments on the plan, and requesting them to complete a brief questionnaire (See Appendix 4).
- Conduct of three public meetings for the residents in Mackay, Challis, and Stanley. The purpose of these meetings is to provide a briefing to private property owners and the general public on planning activities to date, to solicit and receive their input, and to discuss implementation alternatives.

Mitigation Alternatives

Mitigation alternatives and resulting implementing actions have been developed for each goal area. In some instances the implementing action may simply require more study to clarify information or to solicit additional public input. All mitigation alternatives will be analyzed for cost benefit where possible. The resulting benefits will be summarized and provided as part of the final alternative descriptions.

The Five Year (*implementation)* Action Plan resulting from this effort is the most important product that will be developed by this process. The Five Year Action Plan contained in Section 4 identifies who is responsible for implementation of the action, what resources are required for implementation, and when the implementation is expected to be complete.

Plan Contents

Each section of the Plan provides important information and resources to assist in understanding the county and the issues facing citizens, businesses, and the emergency response community. Combined, the sections of the Plan work together to create a document that guides the mitigation mission to reduce risk and prevent loss from future wildfires.

The Plan is structured for ease of use and updating. Individuals interested in specific sections of the Plan will find the tabular format easy to negotiate and reference. The ability to update individual sections of the Plan places less financial burden on the county. Decision-makers can allocate funding and staff resources to review and update selected sections, thereby avoiding a full update, which can be costly and time-consuming. New data can be easily incorporated, resulting in an evolving mitigation plan that remains current and relevant to Custer County.

The Plan is organized as follows:

1. **Executive Summary and Five-Year Action Plan -** Provides an overview of the mitigation plan and a succinct listing of all implementing actions.

2. **Section 1: Introduction and Planning Process -** Describes Mitigation Planning Requirements and the Planning Methodology undertaken.

3. **Section 2: Custer County Idaho -** Presents a brief overview of Custer County, the Fire Districts within Custer County and related Federal agencies responsibilities, and the cost associated with fire suppression in Custer County.

4. **Section 3: Risk Assessment -** Provides hazard identification, vulnerability and risk analysis associated with wildfires in Custer County.

5. **Section 4: Public Participation** – Provides an overview of public involvement and documents public input into the planning process.

6. **Section 5: Hazard Mitigation Action Items -** Provides implementing actions developed to address the identified hazards and vulnerabilities.

7. **Section 6: Economic Analysis –** Provides an overview of the Benefit/Cost Analysis process.

8. **Section 7: Plan Maintenance -** Provides guidance on plan implementation, evaluation and maintenance.

Plan Adoption

The Custer County Board of County Commissioners is responsible for adopting the Plan. Once the Plan has been adopted, the County Disaster Coordinator is responsible for submitting it to the State Hazard Mitigation Officer at the Idaho Division of Emergency Management who will then submit the plan to the Federal Emergency Management Agency (FEMA) for review. This review will assess how the plan meets the federal criteria outlined in FEMA Interim Final Rule 44 CFR Part 201. Upon acceptance by FEMA, Custer County will gain eligibility for Wildfire Mitigation Grant Program funds. A formal Plan adoption form is included as the first page of the Plan.

Coordinating Body

The Custer County Wildland/Urban Interagency Planning Group has been responsible for coordinating development of the implementing Five Year Action Plan and has undertaken the formal review process. The County Commissioners will assign appropriate members of the Wildland/Urban Interagency Planning Group, private property owners, and representatives of resource providing agencies to form the Wildland/Urban Mitigation Advisory Committee to implement, evaluate and conduct the annual review of the plan. The Advisory Committee will meet at least quarterly to continue to examine opportunities to implement specific mitigation actions and to take and evaluate the implementation process.

Subcommittees may be formed under the direction of the Advisory Committee, to further evaluate actions as established and categorized in Section 5. Recommendations will then be made as to specific implementation processes including acquisition of funding and other necessary resources.

Implementation through Existing Programs

The Plan provides a series of recommendations – many of which are closely related to the goals and objectives of existing planning programs. Custer County will have the opportunity to implement recommended mitigation action items through existing programs and procedures.

Upon adoption of the initial Plan, the county will continue developing their natural hazard mitigation goals and actions using this document as a baseline of information on the wildfires that impact the county. Within six months of formal adoption of the Plan, the newly formed and appointed Wildland/Urban Mitigation Advisory Committee will review the recommendations listed. This committee will continue to

evaluate the feasibility of each strategy, determine the current status, readjust the priorities as necessary, and monitor the progress for implementation.

Section 2: Custer County Idaho

The rising cost of disasters has led to a renewed interest in identifying effective ways to reduce vulnerability to wildfires. Wildland/urban interface fire mitigation planning assists communities in reducing risk from wildfires by identifying resources, information, and strategies for risk reduction, while helping to guide and coordinate mitigation activities throughout the county. The Custer County Wildland/Urban Interface Fire Mitigation Plan provides documentation of implementing actions designed to reduce risk from wildfires through education and outreach programs, the development of partnerships, and implementation of preventative activities such as land use or building codes. The resources and information within the Mitigation Plan:

1. Establish a foundation for coordination and collaboration among agencies and the public in Custer County,

2. Identify and prioritize mitigation projects and implementing actions;

3. Assists in meeting the requirements of federal assistance programs.

Program Mission

The mission of the Custer County Wildland/Urban Fire Mitigation Program is to promote public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from Wildfires. This can be achieved by increasing public awareness, documenting the resources for risk reduction and loss-prevention, and identifying activities to guide the county towards building a safer, more sustainable community.

Program Goals

The Custer County Wildland/Urban Fire Mitigation Program establishes goals that describe the overall direction that Custer County agencies, organizations, and citizens are taking to work toward mitigating wildland/urban interface risks from wildfires. The goals are stepping-stones between the broad direction of the mission statement and the specific recommendations outlined in the implementing actions.

Protect Life and Property

- Implement activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to losses from wildfire hazards.

- Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.

- Improve hazard assessment information to make recommendations the creation of County wide zoning and building codes and standards for new developments and encouraging preventative measures for existing development in areas vulnerable to wildfire hazards.

Public Awareness

- Develop and implement education and outreach programs to increase public awareness of the risks associated with wildfire hazards.

- Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation actions.

Natural Systems

- Balance watershed planning, natural resource management, and land use planning with wildfire mitigation to protect life, property, and the environment.

- Preserve, rehabilitate, and enhance natural systems to serve wildfire mitigation functions.

Partnerships and Implementation

- Strengthen communication and coordinate participation among and within public agencies, citizens, non-profit organizations, business, and industry to gain a vested interest in implementation.

- Encourage leadership within public and private sector organizations to prioritize and implement local, county, and regional hazard mitigation actions.

Emergency Services

- Establish policy to ensure mitigation projects for critical facilities, services, and infrastructure.

- Strengthen emergency operations by increasing collaboration and coordination among public agencies, non-profit organizations, business, and industry.

- Coordinate and integrate wildfire mitigation activities, where appropriate, with emergency operations plans and procedures.

Profile of Custer County

Historical and scenic Custer County, founded in 1881 and located in Central Idaho, has a population of 4,185 and an area of 4,938 sq. miles. Its landscape consists of arid desert, flat green valleys, and rugged rocky peaks and contains the highest mountain in Idaho, Mount Borah at 12,662 ft. The County Seat is Challis, with a population of just over 900. Other small towns include Mackay, Stanley, and Clayton. Custer County relies on ranching, mining, and tourism for economic resources. Custer County contains much of the Frank Church River of No Return Wilderness and the famous Salmon River as well as the Sawtooth National Recreation Area.

Custer County is characterized by the unique and attractive landscape that connects the various communities throughout the area. However, the potential impacts of hazards associated with the terrain make the environment and population vulnerable to disaster situations. It is impossible to predict exactly when these wildfires will occur, or the extent to which they will affect the county. Using modern technology, natural phenomena can sometimes be predicted, but the size and magnitude of their effects cannot.

Custer County has a total population of 4,342 with an expected growth rate of –2% according to the 2000 United States Census. This negative growth rate however, does not take into account the increased seasonal usage of the public lands in Custer County nor does it take into account the increased summer home construction underway specifically within the Stanley Basin and Sawtooth Valley. Currently there are 2,983 housing units in the County with 1770 of them occupied. Of those unoccupied housing units 747 of them are designated as seasonal or for recreation use. These 747 units are primarily located within the wildland/urban interface for which this planning effort is being conducted.

The current property valuation or market value of private lands inside of Custer County is $662,990,627. The total net property valuation for taxation purposes for the fire districts located in the County is $289,482, 658. As one can see the market value exceeds the tax value because of the homeowners' exemption, circuit breaker savings, and other reductions. The issue from a mitigation point of view

however, is the actual property loss or in other words the replacement value of the destroyed structures. The challenge facing the county is the cost for increased protection by the fire districts is not directly proportional to the replacement value of the property being protected.

Custer County Fire Districts desire to be actively involved in fire mitigation techniques reducing the fuel loading in key areas and re-planting burned areas following fire events. In addition, there is a strong BLM and USFS presence in Custer County and an excellent code or work ethic to meet the needs of the County. These departments all share a jurisdictional responsibility within the region. Rapid deployment of resources is a key advantage to the County in the protection of life, property and the environment.

Custer County Fire District Profiles

Stanley:

The Sawtooth Valley Fire District is a fire protection district. This small tourist town has a year round population of 300 and is situated in a road valley within the boundaries of the spectacular Sawtooth National Recreation Area. The surrounding terrain is rugged and mountainous with several large lakes. The Salmon River National Scenic Byway on State Highway 75 is the area's main transportation corridor with recreational activities and ranching as its primary economic base.

The fire protection area includes agriculture, rangelands, forest, wildland/urban interface, residential and business. The response area includes 76 square miles.

Over the past four years there have been 119 responses by Fire District Responders. The average response per year is 30. The highest single response total for one year was 39. The average annual loss due within the District is not available. The operating budget for the past five years has been $235,000 with an average annual budget of $47,000. The following tables provide a summary of existing resources, assets, and needs as reported in the June 2003 RC&D Fire Districts needs assessments.

Firefighting Program

Existing Resources/Assets	Needs
• 1 Station, 3 Bays • Volunteer Personnel • 2,750 Structural/1,400 Wildland Total GPM Capacity • Computerized Record Keeping System • Fire Response: Structural and Wildlands, EMS, HazMat, Rescue & High Angle Swift Water Rescue • 1 Structural/4 Wildland/Structural Vehicles • Planning for Grid Access Addressing System	• Fire Station • Public Education on Larger Access Roads • Widen and Better Maintain Access Roads • Central Water System • Underground Storage Tanks and Dry Hydrants • Assistance with Grant Writing • Local, Low-cost Grant Writing Courses • Grant Source Library • Updated Software • Truck Upgrades • SCBA Testing Equipment • Training on Apparatus Operations and Maintenance • Ongoing Wildlands Training

Hazardous Material

Existing Resources/Assets	Needs
• Tech Level Trained Personnel • Operations Level Trained Personnel • HazMat Awareness Training – All Personnel	• Refresher Training • Improved Equipment • PPE and Improved Communications Equipment

Training and Certification

Existing Resources/Assets	Needs
• IFSTA Training Manuals • Structural Protection, Wildland Suppression, HazMat and Rescue Trained Personnel • Standard Operating Procedures in Place	• S.O.G.'s Completion • Updated Training Manuals & Workbooks

Communication

Existing Resources/Assets	Needs
• Responds to Remote Alarm Calls • Some Portable Radios • Radios in All Vehicles	• Multi-Band Radios

Prevention and Inspection

Existing Resources/Assets	Needs
• Fire Cause & Origin Investigations	• Promote Wildland Interface Public Safety • Packaged Presentations • Public Meetings with BLM/FS as Guest Speakers

Public Education

Existing Resources/Assets	Needs
• Public Education Programs • Outreach Education	• Grants for Materials for Media Education

Challis:

The North Custer/Challis Fire District is a combined municipal and fire protection district. The protection area includes a slow growing area of Southern Idaho. Topography is a combination of flat farming, ranching, some mining ground and mountains with steep slopes along with rivers and streams. The Main Salmon Rivers runs through the District response area. Although sparsely populated, because of the high recreational interests of the area, the population swells during the hunting, fishing and camping seasons.

The fire protection area includes agricultural, rangelands, forest, wildland/urban interface, residential, business, and high tech/high risk (Thompson Creek Mine). The response area includes 730 miles of response area.

Over the past five years there have been 385 responses by Fire District Responders. The average response per year is 77. The highest single response total for one year was 92. The average annual

loss due within the District is estimated to be $592,000. The operating budget for the past five years has been $272,500 with an average annual budget of $54,500.

Clayton is part of the North Custer Rural Fire District and is located on the upper Main Salmon River. The industry is primarily agricultural, ranching and recreational. The recreational opportunities include camping, fishing, hunting, river rafting and off road activities. Population growth in the area is less than 5% per year and it is experiencing some increase in wildland/urban interface growth.

The topography of the area is a combination of mountains, rivers and public lands (Forest Service and BLM) with Highway 75 running through the middle of the town site. This Highway is designated the Salmon River National Scenic Byway and is the area's only transportation corridor. There are difficulties in responding to some of the areas covered due to poor road and bridge conditions, property access issues and the general remote nature of the terrain.

Over the past five years there have been 35 responses by Fire District Responders. The average response per year is 7. The highest single response total for one year was 10. The average annual loss due within the District is estimated to be $25,000. The operating budget for this department is included in the North Custer Rural Fire District budget. The following tables provide a summary of existing resources, assets, and needs as reported in the June 2003 RC&D Fire Districts needs assessments.

Firefighting Program

Existing Resources/Assets	Needs
• 4 Station, 14 Bays • Volunteer Personnel • 2,500 Structural/250 Wildland Total GPM Capacity • Manual Record Keeping System • Fire Response: Structural and Wildlands • 3 Structural/3 Wildland/Structural/2 Wildland Vehicles • Planning for Grid Access Addressing System	• Training Room Addition at North Custer and Challis City Stations • Light Fire Apparatus and Medium Sized Trucks • 2 Tenders • Grants • NFPA Manuals • All Department Personnel Trained to the Same Level • Refresher Courses • Ongoing Course for New Hires • Full Complement of Wildlands Equipment

Training and Certification

Existing Resources/Assets	Needs
• Training Provided • Videos and Manuals	• All Personnel Trained to Same Level • Recertification Courses and Continuing Education Classes at the Local Level (Low-cost) • Training Room with AV Equipment • NFPA Manuals and Workbooks • Video Library for Rental and Lending

Communication

Existing Resources/Assets	Needs
• Responds to Remote Alarm Calls • Some Portable Radios • Radios in All Vehicles	• Hand Held Units • Repeaters

Prevention and Inspection

Existing Resources/Assets	Needs
• Fire Cause & Investigations	• None Identified

Public Education

Existing Resources/Assets	Needs
• Public Education Programs • Outreach Education	• Prepackages Presentations

Clayton Substation/Department Firefighting Program

Existing Resources/Assets	Needs
• 1 Station, 3 Bays • 1 Fast Attack Mini Pumper Building • Volunteer Personnel • 2,400 Structural and 2,400 Wildland Total GPM Capacity • Grant Funding to Install Grid Address System • Manual Record Keeping System • Fire Response: Structural, Wildlands, HazMat, EMS Assists • 4 Structural/Wildland Vehicles • Meets ISO Water Flow Requirements • Meets NFPA Standards	• New Station with Space for Office, Classroom/Training • Ability to Enforce Codes for Roadway Access • City Hydrants • Computerized Record Tracking System (Hardware and Software) • Grant Writer • Grant Writing Assistance Courses • Grant Identification Sources—Grant Library • Assistance with Grant Writing • Improved Communication with Other Departments • NFPA Manuals for Testing, Maintenance & Operations • Service Manual & Training for Apparatus, Pump Operation • Wildlands Refresher Courses • County Tax Override for Funding

Hazardous Materials

Existing Resources/Assets	Needs
• None	• Local Training for Personnel through Grant Funding

Training and Certification

Existing Resources/Assets	Needs
• Wildland Suppression	• Training Materials: Manuals, Workbooks, Videos, Computer Assisted Training Aids • Funding for Courses and Instructors • Grants • Certified Local Trainer • Facility for Training • Distance Learning System

Communication

Existing Resources/Assets	Needs
• Responds to Remote Alarm Calls • Some Portable Radios • All Vehicles Radio Equipped	• Repeater for Remote Areas • Hand Held Radios

Prevention and Inspection

Existing Resources/Assets	Needs
• Support from South Custer County	• Increase Personnel

Public Education

Existing Resources/Assets	Needs
• Public Education Programs • Outreach Education	• Prepackaged Presentations • Sources for Additional Handouts

Mackay:

The Mackay/South Custer Fire District is a combined municipal and fire protection district. The protection area includes a slow growing area of Southern Idaho. Topography is varied from flat grasslands to mountainous areas. The Mackay Reservoir is within the boundaries of the District's response area with recreation, ranching and farming as the primary economic base.

The fire protection area includes agricultural, rangelands, forest, wildland urban interface, residential, and business. The response area includes two square miles of city area and 1,700 miles of district area.

Over the past five years there have been 230 responses by Fire District Responders. The average response per year is 46. The highest single response total for one year was 52. The average annual loss due within the District is estimated to be $450,000. The operating budget for the past five years has been $245,000 with an average annual budget of $49,000. The following tables provide a summary of existing resources, assets, and needs as reported in the June 2003 RC&D Fire Districts needs assessments.

Firefighting Program

Existing Resources/Assets	Needs
• 4 Station, 7 Bays • Volunteer Personnel • 4,750 Structural/3.700 Wildland Total GPM Capacity • Manual Record Keeping System • Fire Response: Structural and Wildlands • 4 Structural/5 Wildland/Structural/2 Wildland Vehicles • 1 Caterpillar Dozer	• Codes for New Developments • Smaller, More Versatile Apparatus • Additional Wells, Pumps and Holding Tanks in Accessible Areas • Another Station • Grants for One-time Purchases • Resources for the Procurement of Surplus Equipment • Wildlands Refresher Courses • Better Communication with Other Entities in the County • Current NFPA Manuals • Improved Tracking System for Training, Apparatus Maintenance, Building Maintenance, Personnel and Equipment • Better Use of Computerization

Training and Certification

Existing Resources/Assets	Needs
• Structural Protection • Wildland Fire Suppression • HazMat • Shares Mosby Produced Training Videos • Some IFSTA Essentials Books	• Grants for Training and Materials • IFSTA Training Materials, Manuals & Workbooks, Videos • Subsidized Courses • On-line Library • Certified Instructor for the Local Area

Communication

Existing Resources/Assets	Needs
• Responds to Remote Alarm Calls • Portable Radios • Radios in All Vehicles	• Improved Radio Frequencies

Prevention and Inspection

Existing Resources/Assets	Needs
• Fire Cause & Origin Investigations	• Fire Code Enforcement Training

Public Education

Existing Resources/Assets	Needs
• Public Education Programs • Outreach Education	• Prepackages Presentations

Lost River:

The Lost Rivers Fire District protection area includes a slow growing area of Southern Idaho at the Southern end of Custer County in Moore. The area's primary industry is agricultural based with ranching and farming operations. The District has a wide range of topography from flat, cultivated fields and grazing lands to severe mountain slopes. The fire protection area includes agricultural, rangelands, forest, wildland/urban interface, residential, and business, with mutual aid to the Idaho National Engineering and Environmental Laboratory. The District serves a 200 square mile area.

Over the past five years there have been 100 responses by Fire District Responders. The average response per year is 20. The highest single response total for one year was 30. The average annual loss due within the District is estimated to be $105,000. The operating budget for the past five years has been $42,460 with an average annual budget of $8,492. The following tables provide a summary of existing resources, assets, and needs as reported in the June 2003 RC&D Fire Districts needs assessments.

Firefighting Program

Existing Resources/Assets	Needs
• 1 Station, 6 Bays • Volunteer Personnel • 1,750 Structural/745 Wildland Total GPM Capacity • Grid Access Address System • Manual Record Keeping System • Fire Response: Structural and Wildlands • 2 Structural/4 Wildland/Structural Vehicles	• New Station • Codes for New Developments • Underground Water Storage Tanks • Dry Hydrants • Tender • Grants for One-time Purchases • Local Courses on Grant Writing • Regular Fleet Maintenance Program • NFPA Manuals • Regular Pump Testing Program/Equipment • Wildland Vehicles

Profiles of Federal Lands

Salmon Challis National Forest:

The Salmon-Challis National Forest covers over 4.3 million acres in east-central Idaho. Included within the boundaries of the Forest is 1.3 million acres of the Frank Church-- River of No Return Wilderness Area, the largest wilderness area in the Continental United States. Rugged and remote, this country offers adventure, solitude and breathtaking scenery. The Forest also contains Borah Peak, Idaho's tallest peak, the Wild & Scenic Salmon River and the Middle Fork of the Salmon River. The area is a highly desired destination for hunting, fishing, white-water rafting and many other popular recreational pursuits.

Sawtooth National Recreation Area:

The Sawtooth National Recreation Area (SNRA), a part of the Sawtooth National Forest, is one of the most breathtakingly beautiful spots in Western America. Three classic mountain ranges with 40 peaks of 10,000 feet or higher provide scenic landscapes in every direction. More than 300 high mountain lakes are within the SNRA and hundreds of sparkling streams with the clarity of crystal. Headwater creeks of the mighty Salmon River converge in the Sawtooth Valley to form this legendary "River of No Return."

Although the heartland of the SNRA is a 217,000-acre wilderness, it is only part of the total 756,000-acre SNRA, an area larger than the state of Rhode Island. Roads provide access to beautiful scenic places and recreational activities suited to individuals of all ages and degrees of physical ability.

ESTIMATED FIRE SUPPRESSION COSTS FOR THE SAWTOOTH SNRA FOR 1997-2002

COSTS		1997	1998	1999	2000	2001	2002	TOTAL
Lighting	$	34,000	$ 35,000	$ 208,000	$ 228,000	$ 70,000	$ 33,000	$ 608,000
Human	$	8,000	$ 1,000	$ 2,500	$ 6,500	$ 16,000	$ 194,000	$ 228,000
TOTAL	$	42,000	$ 36,000	$ 210,500	$ 234,500	$ 86,000	$ 227,000	$ 836,000
Acres								
Lightning		92	664	4133	1	5	11	4906
Human		1	1	1	26	2	50	81
TOTAL		93	665	4134	27	7	61	4987

Salmon Challis National Forest:

The combining of the Salmon and Challis National Forests in 1998 formed the Salmon-Challis National Forest. The current forest still operates under two Land and Resource Plans based on the previous administrative boundaries of the two forests. A forest plan revision is scheduled to begin on the Salmon-Challis in 2005, and will produce a single Land and Resource Management Plan. This new plan will have strong collaboration with the local government, State of Idaho and federal agencies in its development of fire management direction.

Three Fire Management Units have been designated on the Salmon-Challis National Forest. They reflect the dominant management considerations found in the Land and Resource Management Plans for the Salmon and Challis National Forests, as well as, national policy regarding the protection of communities from the impacts of wildland fires. These units are as follows:

- Wilderness Fire Management Unit
- Suppression Non-WUI Fire Management Unit
- Suppression WUI Fire Management Unit

Bureau of Land Management

Lands managed by the Challis Bureau of Land Management Office are largely boundary or interface lands between the two National Forests and private property. The map below provided by the BLM illustrates the location of Federal, State, and private property for the entire County. Note the white areas on the map. These areas are indicative of the private or urban interface areas.

Section 3: Hazard, Vulnerability and Risk Assessment

The following section provides information on wildfires and how they may affect the Custer County's ability to respond. This initial assessment is the baseline for developing a more in-depth disaster data tracking system, which will provide a more accessible and accurate profile for risk assessments in the future. For current and historical fire loading see BLM and Forest Service Fire Maps in Appendix 6.

Hazard Assessment

Analysis of Specific Areas/Conditions

Specific risks are subsets of the general risk category. They are individual improvements or resource values that have the potential to be at risk under identified fire behavior.

- Areas of fire fighter safety concerns
- Developed recreation sites
- Summer home sites
- Designated communication sites
- Oil and gas facilities
- Municipal watersheds
- Private land with structures
- Noxious plants
- Timber emphasis areas
- Mining facilities
- Above-ground utility corridors
- High-use travel corridors
- Historic Resource areas
- Capable range land
- Wildlife habitat

Sawtooth National Recreation Area

The Sawtooth National Recreation Area (SNRA) is experiencing severe drought conditions throughout the forest. ERC values are above the 97th percentile, with 1000-hour fuels showing 9-11%, and live fuel moistures ranging from 70-134%. The mountain pine beetle epidemic in the Sawtooth Valley and Stanley Basin and the high number of homes in the wildland/urban interface increase the potential for large wildfires that put community and firefighter safety at risk. In addition, there is high public usage in this area and abandoned campfires were one of the main ignition causes in 2002. The long-term fire weather forecast is predicted to remain hot and dry, with the possibility of extreme fire behavior.

Due to these variables, the Sawtooth National Forest requested a National Fire Prevention Team funded with severity funding. The team was tasked with addressing the fire potential and looking at reducing the number of human-caused ignitions on the Sawtooth National Forest and its neighbors. Homeowners in this area were very concerned about the red tree problem and the high potential for a wildfire. For a complete report of this effort see Appendix 5.

Large areas of the SNRA, as well as a portion of the Yankee Fork Ranger District of the Salmon/Challis National Forest, are experiencing significant increases in hazardous fuel loading, primarily created from a very active attack of Mountain Pine Beetle (MPD). In some areas, nearly 70-80% of the lodgepole pine trees are dead or dying. This is a naturally occurring phenomenon, brought about by successive years of drought coupled with a "short-lived" species of trees that has reached and exceeded the age of maturity.

Epidemics of MPB are not new the SNRA and have been previously documented. Historical records indicate that the lodgepole pine in the Stanley Basin suffered an infestation by the MPB on over 90,000 acres in the early 1900s. Records indicate that the infestation was too extensive to permit any control measures to be undertaken. According to the Sawtooth National Forest Historical Information Report of 1941, there was another widespread infestation in 1926. Within three or four years practically all the mature and over mature lodgepole pine in the forest were killed. The infestation subsided after six or seven years.

In the early to mid 1980's, thousands of trees were killed by the MPB in the Alturas Lake Creek, Champion Creek, Pole Creek, Lost Creek, and Taylor Creek drainages. A new infestation began in 1996, starting in the Salmon River corridor east of Stanley. Surveys indicate that the infestation continues to intensify in the Sawtooth Valley and Stanley Basin. Forest Health Protection entomologists recorded that the number of lodgepole pine tress killed by the MPB rose from 8,143 in 1999 to 845,000 in 2002.

The MPB and fire have co-existed in lodgepole pine ecosystems almost as long as there has been lodgepole pine. Wildfires play a key role in the lodgepole pine forests. In the ecosystem, without high public use, MPB killed trees would burn and prompt the regeneration of new lodgepole pine stands. In is a naturally occurring cycle of regeneration. Accurate records regarding wildfire suppression in the Sawtooth Valley/Stanley Basin date back to 1948. Wildfire suppression has occurred since 1905. Since 1948, three hundred and twenty six wildfires have been suppressed in the lodgepole pine community of the Sawtooth Valley affecting ninety-two acres. The policy of suppression has allowed for a high density, even aged lodgepole pine community and a large amount of fuel on the ground.

Hazard Condition

Mountain Pine Beetles attack trees that are between 20 and 120 years old and with diameters greater than 6 inches. A large portion of the lodgepole pine in the Sawtooth Valley is composed of dense stands of this age and diameter with decreased biodiversity, due in part to the long history of wildfire suppression. Through the course of the infestation, the fire hazard is expected to change from dry red needles to dead standing timber to heavy fuel loads on the forest floor if stands are left untreated. It is the dead needles of the affected lodgepole pine, along with excessive fuel loading and a continuous even-aged stand that represents a potential for increased wildfire behavior for the next several years. Currently, there are large amounts of standing dead, lodgepole pine in the Sawtooth Valley. The Stanley basin is not a high frequency, low-intensity burning fire regime like some areas in the County. The SNRA (lodgepole pine and sub-alpine/spruce) is in fire regime #4 (35-100 yrs and stand replacing fires) and some fire regime #5 (200+ yrs). It is currently in its natural state. However, this natural state is extremely hazardous when mixed with the wildland/urban interface and recreational uses.

Historically in the Western United States, lighting ignites and estimated 70% of wildland fires however, 80% of wildfires in the Sawtooth Valley are human caused. Wildfire starts have increased in the Sawtooth Valley due in large part to increased visitor use. The visitor use pattern in the Sawtooth Valley, coupled with the ongoing MPB infestation and drought increases significantly the risk of wildfire occurrence.

Developments of both private and public structures are encroaching on the lodgepole pine stands within the Sawtooth Valley. These structures are difficult to protect from wildfire and with limited firefighting capabilities are often impossible to protect.

Current hazardous fuel loading, as a result of the MPB infestation would exhibit extreme fire behavior if ignited. Although the MPB outbreak is a naturally occurring event, it has the potential to result in uncharacteristically intense wildfires and increased risk to life, property, firefighters, and natural resources. It has also caused noted visual changes to the landscape and a loss of vegetative diversity.

The large amount of biomass created by the MPB infestation, the dead and downed woody debris, and the dense canopy, increases the risk that a wildfire will move into the tree canopy by the way of ladder fuels, which carry a fire from the forest floor up into the trees. This condition has the potential to result in an intense "stand" replacing wildfire. Many of the homes within the Sawtooth Valley are directly adjacent to these "red tree" stands. Fires within these stands pose significant risk to nearby homes and properties. Effective suppression would be extremely difficult and firefighter safety could be comprised. The heavy fuels that enable wildfires to spread across public and private ownership boundaries are compromising the safety of the public and structures on private held properties.

Salmon Challis National Forest

The Wildland/Urban Interface Fire Management Unit within the Salmon Challis National Forest is 626,450 acres in size and is scattered across the Forest primarily along river and stream corridors. It covers areas in both Lemhi and Custer Counties. Included within the unit are areas bordering the Salmon River, Owl Creek, Panther Creek, Napias Creek, Silver Creek, Spring Creek, Indian Creek, North Fork of the Salmon River, Sheep Creek, Dahlonega Creek, Fourth of July Creek, Hayden Creek, Big Timber Creek, Little Timber Creek, Williams Creek, Williams Lake, Morgan Creek, Challis Creek, Garden Creek, Pass Creek, Wet Creek, Big Lost River, East Fork of the Big Lost River, Rio Grand Canyon and Antelope Creek.

Lands within or in close proximity to this Fire Management Unit are classified as Wildland urban interface areas. Included are the at risk communities identified by the State of Idaho as a part of the National Fire Plan as well as other communities and developed areas that qualified as Wildland Urban Interface and Wildland urban intermix communities using the Forest Wildland Urban Interface definition. The specified suppression strategy for fires occurring within this area is full suppression. Fire management direction comes from either the Challis National Forest or Salmon National Forest Land and Resource Management Plan.

The geographic landform can be characterized as river and stream bottom lands. Many of these areas are located in extremely narrow canyons bordered by steep mountain slopes. The climate within the Fire Management Unit is consistent with valley bottom weather patterns in Central Idaho. Precipitation is light with average annual precipitation ranging from 7.4 inches per year to 15 inches. The majority of annual precipitation occurs during late fall through early spring months however; summer thunderstorms may also bring intense short duration periods of precipitation to the area, occasionally in significant quantities. Fall, winter and early spring precipitation may come in the form of rain or snow; snow pack development is uncommon in the area. Representative weather stations in Salmon, Challis and Stanley Idaho provide 70-year precipitation average of: 9.12 inches, 7.4 inches and 14.33 inches respectively. Temperatures are cool in the winter and warm in the summer, the January mean average winter temperature at Salmon, Challis and Stanley is: 18°, 20° and 13° degrees respectively. The July mean average summer temperature at these three stations is: 68°, 68° and 57° respectively. The upper air wind pattern in the area is dominated by westerly winds however; surface winds are heavily influenced by topography with wind funneling very common. A number of canyons and valleys in the unit are aligned with the predominant winds and this has a marked influence on fire behavior. Local winds are also influenced by surface heating so up slope/up valley breezes are common during the summer months.

The geology of the Fire management Unit is very diverse owing to the fragmented and dispersed nature of the unit. This unit is located in valley bottoms along the major rivers and streams that flow the length of

the Forest accordingly a number of geologic formations are represented within the unit. Four basic vegetative conditions typify the area and can be used in a general way to describe anticipated vegetative conditions. The conditions are:

- Canyon bottoms with sparse vegetation primarily in the form of grass and shrubs and a narrow riparian zone exists along streams and Rivers.
- Canyon bottoms are dominated by a broad band of riparian vegetation types including cottonwood and willow thickets.
- Forested canyon bottoms with a narrow band of riparian vegetation giving way to coniferous forest stands including ponderosa pine, Douglas fir lodgepole pine or mixed stands.
- Altered forest or rangelands where natural vegetation has been removed or modified as a result of agriculture, habitation, mining, road construction or other human activities.

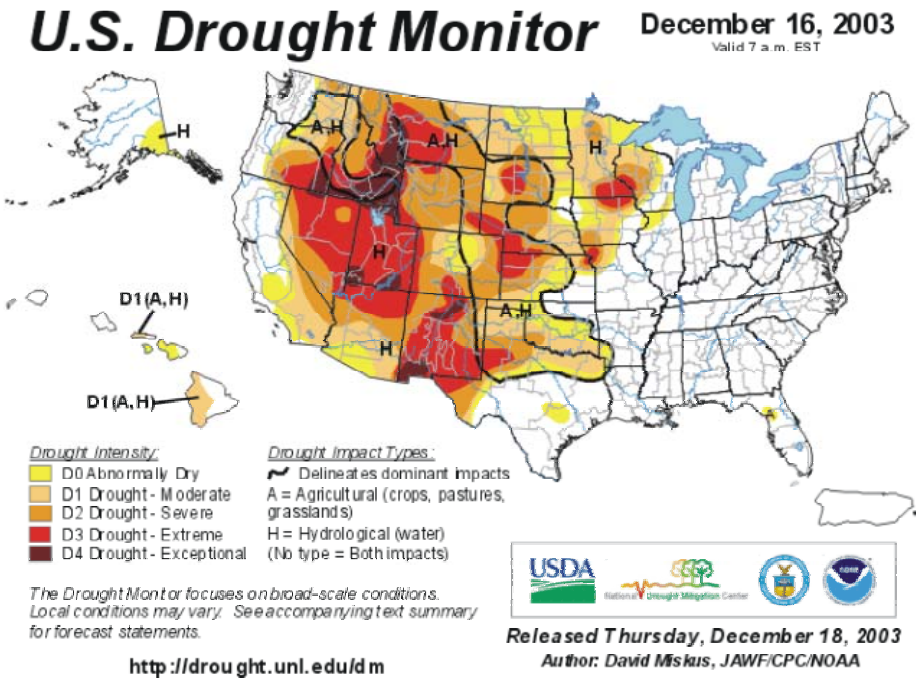
Big Lost Drainage

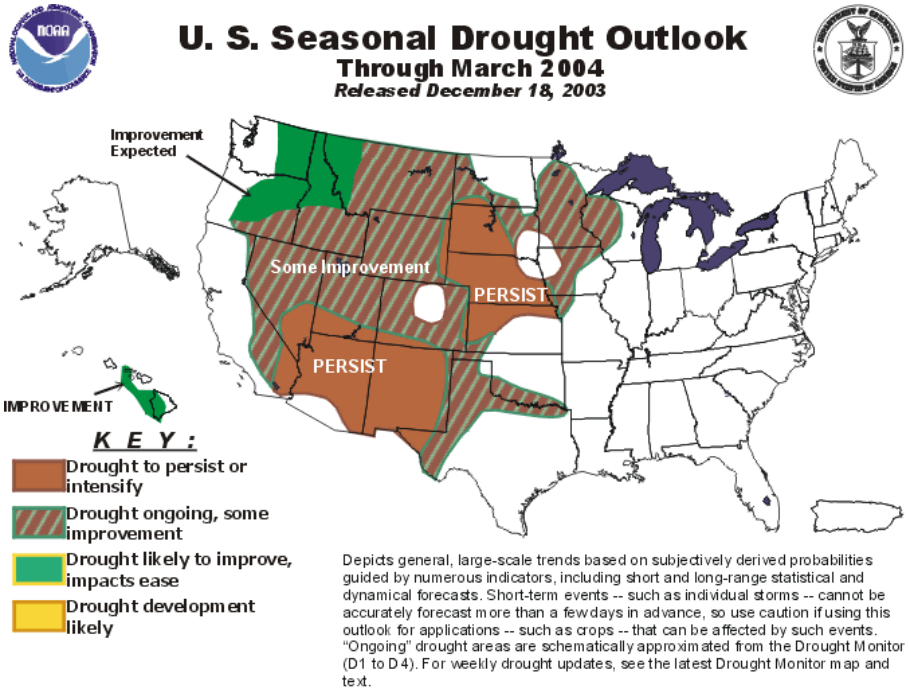
Severe Drought has significantly impacted the Big Lost Drainage. The Mackay Reservoir, according to the Basin Wide Reservoir Summary of September 2003 was 2% of capacity at the end of the 2003 irrigation season. Currently the USDA Natural Resource Conservation Service reports the Reservoir at 16% of capacity. Riparian lands along the Big Lost River have been severely impacted due to low stream. Naturally occurring vegetation has died leaving dead trees and brush within the Riparian Zones below Mackay Reservoir.

Private Lands, held along the Big Lost River, are vulnerable to Wildfires within the Riparian Zone. There has been a significant increase in construction of homes within the Riparian Zone within the past 10 years. These homes are surrounded with high levels of fuel due to the dead and dying trees and natural vegetation. The South Custer and Big Lost Fire Districts provide fire Suppression within the Big Lost River Riparian Zone.

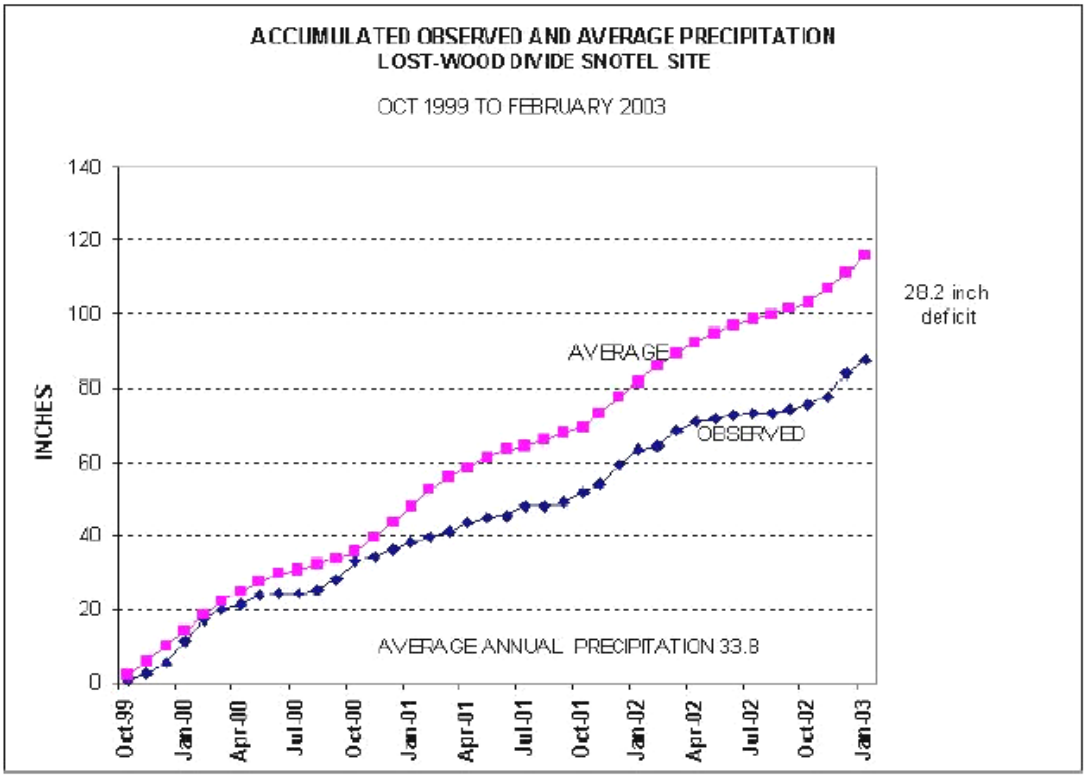
Drought

Drought conditions have existed in Custer County since 1999. The County Commissioners requested a Drought Disaster Declaration from the Idaho Department of Water Resources in April 2001, which was approved by Governor Dirk Kempthorne. The County has been under declaration status since that time with the declaration renewed annually by the Governor. According to the National Weather Service it is expected that in 2004 the drought will continue with below normal snow pack and below normal water supplies. See Figure 1 for current drought condition throughout the United States and Figure 2 for the 2004 Drought Condition Forecast.





The graph below illustrates the magnitude of the precipitation deficit that has developed at the Lost-Wood Divide site in the headwaters of the Big Lost River above Mackay. Since October 1999 an accumulated deficit of over 28 inches or almost a whole year's worth of precipitation has occurred. Three years of above normal precipitation will be needed to restore ground water conditions.



Landslide

Landslides occur when masses of rock, earth, or debris move down a slope. *Debris flows*, also known as *mudslides*, are a common type of fast-moving landslide that tends to flow in channels. Landslides are caused by disturbances in the natural stability of a slope. They can accompany heavy rains or follow droughts, earthquakes, or volcanic eruptions. Mudslides develop when water rapidly accumulates in the ground and results in a surge of water-saturated rock, earth, and debris. Mudslides usually start on steep slopes and can be activated by natural disasters. Areas where wildfires or human modification of the land have destroyed vegetation on slopes are particularly vulnerable to landslides during and after heavy rains.

In the United States, landslides and debris flows result in 25 to 50 deaths each year. The health hazards associated with landslides and mudflows include:

- Rapidly moving water and debris that can lead to trauma;
- Broken electrical, water, gas, and sewage lines that can result in injury or illness; and,
- Disrupted roadways and railways that can endanger motorists and disrupt transport and access to health care.

Some areas are more likely to experience landslides or mudflows, including:

- Areas where wildfires or human modification of the land have destroyed vegetation;
- Areas where landslides have occurred before;
- Steep slopes and areas at the bottom of slopes or canyons;

- Slopes that have been altered for construction of buildings and roads;
- Channels along a stream or river; and
- Areas where surface runoff is directed.

Landslides resulting from the removal of vegetation during a wildfire incident are common. The most vulnerable area within Custer County for damage due to landslides is the Salmon River Corridor from Stanley to Challis and beyond into Lemhi County along State Highway 75. This area is currently within the "Red Tree" treatment area discussed above. Work to remove dead and dying lodgepole pine along the Salmon River Corridor is underway however; the process is difficult because of the increasing requirements brought about by the Clean Water Act and issues related to fisheries.

Landslides within Custer County and the Sub Salmon River Drainage are not uncommon. For example on July 27, 2003 a major landslide occurred along the Salmon River between Dutch and Panther Creeks in Lemhi County. This landslide resulted in significant ecological and economic damage to the area.

The Upper Salmon River Sub Basin Assessment and Total Maximum Daily Load Report, published in January 2003, by the State of Idaho Department of Environmental Quality, provide and excellent review of the Topography, Geology, and Hydrology of the Salmon River Sub Basin with includes the majority of Custer County. The report, not replicated herein, http://www.deq.state.id.us/water/tmdls/Upper_Salmon/Upper_Salmon_1.pdf, describes the potential for significant landslides in the area due to loss of vegetation as a result of wildfires.

Landslides, not withstanding the cause, could cause significant public safety, ecological, and economical damage to Custer County. Damage to transportation routes, electrical transmission systems, communication systems, and private property are of high probability. Significant damage to the watershed is also highly probable.

Vulnerability Assessment

A vulnerability assessment identifies areas in the county that may be affected, individuals in the county who may be subject to injury or death, and what facilities, property, or environment may be susceptible to damages should a wildfire occur.

Electrical Power:

The Salmon River Electric Cooperative (SREC) transmission system has only one line into Custer County with limited redundancy outside of the county. This situation, while usually reliable, is very vulnerable to wildfires. For example, in July of 2003 a wildfire on the Idaho National Engineering Laboratory damaged power lines running from the Goshen Substation, near Idaho Falls, to Custer County. The County experienced two power outages as a result of the line damage, one on the 27th lasting 5 hours and one on the 28th lasting 3 hours. A map of the electrical supply system for Custer County is included in Appendix 12. As experience in July 2003, a wildfire anywhere between the Goshen substation and Custer County as the "end of the line" has a potential to interrupt electrical power.

Transportation Routes:

The main transportation routes through Custer County are U. S. Highway 93 and State Highways 75 and 21. These highways are two-way, opposing traffic roadways. The highest times of use are in the summer months during the tourism season. While U. S. Highway 93 essentially traverses the open valleys of

Custer County between Mackay and Challis, it crosses the Big Lost River riparian zone between Mackay and Leslie. This riparian area has a high concentration of dead trees and vegetation.

Highway 75 follows the Salmon River from Stanley to Challis and then into Lemhi County. The highway between Stanley and Challis winds through narrow river gorges filled with dead and dying lodgepole pines as described above. A wildland fire, or a resulting landslide, could easily close this major east/west corridor. Highway 75 leaves Stanley and turns south through the heart of the SNRA into Blaine County. The SNRA and Idaho Department of Lands Map, (See Appendix 12) showing the Red Tree Treatment areas, illustrates that Highway 75 is extremely vulnerable to wildfire closure due to the high fuel loading from the red tree hazard describe above.

Highway 21 comes from the North into Stanley through the SNRA and passes through designated Red Tree treatment areas as well and has the same vulnerabilities as highway 75.

Many of the improved roads in the County leave the main arteries described above to reach into remote areas within the confines of the two national forests. These roads, for the most part, end as unimproved roadways. Discussion within the Interagency Planning Group has focused on the width of these roadways, the narrow bridges, and lack of clearances for fire apparatus. Additionally there is concern that evacuation from high mountain areas, recreations areas, and in many instances, housing subdivisions have a single access road that could easily be blocked by wildfire or landslides.

Recreation Sites:

There are several significant recreation sites within Custer County. The most frequently mentioned area of concern is Red Fish Lake, the Red Fish Lake Lodge, and the Red Fish Lake Camp grounds and trail heads. Other areas include but are not limited to, Eddy Lake, Copper Basin, and campgrounds along the Salmon River. The SNRA has developed some evacuation plans for the Red Fish Lake Area. These areas are of significant risk due to the high fuel loading, the continued drought, and the high instance of visitation by the general public.

Custer Idaho and the Custer Motorway Adventure Road

In 1966, the Challis National Forest took ownership of the few remaining building of Custer, Idaho. Established in 1870s along the Yankee Fork of the Salmon River, this City was home to gold miners and other adventures. The City, essentially a ghost town, was placed on the National Registry of Historic Places. In 1990, the Idaho Department of Parks and Recreation joined the Forest Service in managing Custer. This led to the establishment of the "Land of the Yankee Fork" State and National Forest Historic Area.

Additional Historic Sites along the Custer Motorway Adventure Road include the City of Challis, Cartwright Gulch, Corkscrew Grand and Slab Barn, Greenwood Station, Tollgate Station, Homestead Station, Twelve-mile Station, Eleven Mile Barn, Yankee Fork Fisheries, Custer Cemetery, General Custer Mill Site, Jordan Creek, Yankee Fork Gold Dredge, Bonanza City, Dredge Tailings, Sunbeam Store and Sunbeam Dam. Any and all of these sites are within the boundaries of the Salmon-Challis National Forest and are considered part of the Urban Interface because of their relationship to Tourism.

Housing Subdivisions:

There are eleven major subdivisions and the Red Fish Lake Lodge within the SNRA and Custer County boundaries that are of specific concern. These subdivisions are within the Red Tree Treatment Areas. Many have not completed any fuel reduction activities and in some instances the fuel reduction activities are in direct conflict with their building certificates with the SNRA. These subdivisions are all vulnerable for significant loss due to wildfire. Most have only one-way in and out, narrow bridges, and various other

obstructions. Because of the drought and the MPB infestation there is significant fuel loading with little, if any, water available for suppression actions. Private Subdivisions and property of concern include but are not limited to the following:

- Cabin Creek
- Valley View
- Fisher Creek
- Stanley Basin /Buckhorn
- Iron Creek
- Goat Creek
- Crooked Creek
- Homestead
- Cow Camp Area
- Red Fish Lake Lodge

Local Fire Response:

The description of the fire districts in Custer County and there respective needs are included in Section 1 and, and therefore are not replicated here however, the following analysis is conducted as part of the vulnerability assessment to establish those challenges facing the local fire response elements. During meetings with each of the District Fire Chiefs the following concerns were expressed and documented in several reports found in the Appendices 1-3.

- Lack of adequate water supplies, water distribution systems, etc.
- Inaccessible structures
- Narrow roads and bridges
- Load limits on bridges
- Inadequate fire plans
- Inadequate Protection Codes and Code Enforcement
- Lack of integrated communications, planning, preparedness, and response protocols
- Additional and improved communications equipment
- Training of personnel
- Staffing and retention of volunteers
- Public Education
- Fire District Coverage
- Fire Station construction/expansion
- Additional response vehicles and equipment
- Maintenance and testing procedures
- Lack of Resources, assistance in obtaining grants and other funding

The challenges facing the Custer County Fire Districts are not unlike those facing most rural fire districts throughout the U.S. The need for additional manpower, vehicles, equipment, and training are all common challenges facing rural departments. The Custer County Fire Districts face these challenges and others listed above. The current response capability, while it could be improved, is adequate for most of the response areas within the county. There are however, significant challenges in dealing with the hazards facing the County in the wildland/urban interface areas within the South Custer, North Custer/Challis, and Stanley Fire Districts.

The largest vulnerability is the access to water for suppression actions. Much of the water used in the wildland/urban interface is either transported in or comes from streams, the Salmon River, and mountain

lakes. The Fire Districts indicate an inadequate "tender" capacity. The ongoing drought has lowered natural flows, additionally these flows are not available during the late fall, winter, and early spring due to freezing of natural water supplies.

The second largest vulnerability is access to residences and structures within the wildland/urban interface. Most subdivisions have a single, unimproved roadway leading in and out of the area. These roadways are narrow, clearances are poorly maintained, and in some instances have bridges that are impassable. Responders have a difficult time getting response equipment to the structures to be protected.

A third vulnerability, and one that could be easily addressed, is the lack of an integrated planning, preparedness and response. While this issue is easily addressed, if left unresolved it could be the most serious of all the vulnerabilities. The lack of a coordinated response capability can lead to ineffective protection, potentially resulting in significant property loss and a reduction in public safety.

Risk Assessment

General Risk

General risk as defined by the Forest Service is their Fire Management Unit (FMU) determinations is defined as a concentration of at-risk conditions that can be identified by a geographic area. General risk categories are used to describe relative risk on the Sawtooth and the Salmon Challis National Forest. (See Historic Fire Map in Appendix 6) Fuel conditions, concentrations of wildland urban intermix and interface, areas defined for protection from wildland fire by the Sawtooth and Salmon Challis National Forest Land Management Plans were used to geographically define general risk categories. General risk categories include:

Red Category - High Risk

Fire may perform an important role in the function of the ecosystem but because of resource concerns and potentially high economic impacts from unplanned ignitions, considerable constraints and mitigation measures are required. The appropriate management response is usually aggressive suppression actions to fire control. Fuels reduction is a major means of mitigating the potential risks and losses. Prescribed fire projects are often complex and costly due to stringent contingency planning and monitoring. Unplanned ignitions are typically not managed to meet resource management objectives due to the proximity of high value improvements and the concentration of areas excluded from wildland fire use by the National Forest Land Management Plans. Large relative concentration of private land in holdings surrounded by fire prone vegetation types has been classified a HIGH general risk area.

Yellow Category – Moderate Risk

Fire is a desirable component of the ecosystem with moderate mitigation requirements and constraints. A significant level of prescribed fire activity is used to attain desired resource and ecological conditions. Prescribed fire treatments for hazard reduction are a priority, but less than in the Red category. Wildland fires may be managed to meet resource management objectives under an approved wildland fire implementation plan (WFIP). Areas with scattered individual campgrounds, isolated developments or improvements and or vegetation that could have undesired effects from wildland fire have been classified as MODERATE general risk area.

Green Category – Low Risk.

Fire is an integral component in maintaining or achieving the desired future condition for affected lands with less mitigation requirements or resource constraints than categories described above. Prescribed

fire for hazardous fuel reduction is not a priority except where an immediate threat to public health and safety exists. Wildland fires may be managed to meet resource management objectives under an approved wildland fire implementation plan. An area with few improvements and or vegetation that has a high potential for beneficial effects from wildland fire has been classified as LOW general risk area.

Designated Wilderness, such as the Frank Church Wilderness, and Proposed Wilderness areas are included in the Green category where natural processes are encouraged.

Based on assessment made by the National Forest Service much of the current wildland/urban interface area within Custer County is rated as a Yellow – or Moderate Risk Area.

Table 1 is the evaluation of risk probability versus consequence. It has been used as a discussion tool with the Interagency Planning Group in establishing mitigation action priority. The table compares the identified hazard with the potential threat to life, property, and the environment. Future risk analysis efforts will better define the targets of consequence to specific risk. The ranking criteria are presented in Table 2.

Table 1 Risk Ranking

Risk Analysis				
Identified Hazards	Life Safety	Property Damage	Environmental Damage	Economic Impact
Wildfires within the Big Lost River Riparian Zone	Medium	High	Medium	Medium
Wildfire Adjacent to Subdivisions within SNRA Boundary	High	High	High	High
Wildfire Adjacent to Challis	Low	Low	Low	Low
Landslide Along the Salmon River/ Highway 75	Low	Low	Medium	Medium
Lack of Integrated Planning, Preparedness and Response	Medium	High	Medium	Medium

Table 2 Ranking Criteria

Consequence Criteria		
Life Safety	Low	Injuries limited to the area of effect. < 10
	Medium	Serious injuries >10
	High	Multiple fatalities, critical and serious injuries
Property Damage	Low	Minimal damages
	Medium	Structural damages evident
	High	Loss of structure
Environmental Damages	Low	Minimal impact at area of effect
	Medium	Regional damage

	High	Long-term recovery. Requires significant after action
Economic Impact	Low	Economic impact minimal
	Medium	Loss of business
	High	Regional long term loss

Summary

Based on the analysis conducted to date as part of the mitigation planning effort the largest risk within the wildland/urban interface areas from wildfires in Custer County is in the SNRA/private subdivision areas. The largest threat to life may well be the recreation sites such as Red Fish Lake, but certainly the highest property loss would occur within the privately owned subdivisions where loss of life could also be significant. Another serious risk area is the Riparian Zone below the Mackay Reservoir along the Big Lost River. The conditions within this area are not as well managed as the SNRA's Red Tree treatment areas. The Federal Government does not have ultimate responsibility for the treatment program and so the County and homeowners may well have to face this risk alone.

Section 4: Public Participation

The ***key to successful implementation*** of the goals of the Fire Mitigation Program is involvement from the private property owners in Custer County and the general public who participate in the recreation and tourism within the confines of the County. The public participation process is being conducted in four specific ways.

First the High County RC&D and the SNRA have conducted several fire prevention related activities previously within the county. The Interagency Planning Group has been provided summaries of the public involvement and resulting recommendations. This valuable input has been included into the development of this Plan. Appendix 5, for example, contains the input from the SNRA Fire Prevention Team reports. The second step is the ongoing involvement of representatives from the communities served by this process on the planning committees. Representatives have been, and will be in the future, invited to participate as members of the Interagency Planning Group. The third step was a mailing to county property owners, who live outside of the county, announcing the development of this plan, the availability and opportunity to review the plan online and inviting comments on the plan, and the request to complete a brief questionnaire.

Absentee Homeowner Questionnaire

The results from the questionnaire are provided in detail in Appendix 4. There were 1037 questionnaires mailed out. Roughly 6.5% of the questionnaires were returned. The following are highlights of the responses:

- 55% of the respondents owned property in Stanley.
- 78% responded that they had not participated in hazard reduction activities.
- Only 46% thought that Wildfire would affect their community.
- 80% indicated that they did not know of a Wildfire Public Education Program in the area.
- 60% indicated that a Wildfire Public Education Program would be beneficial.
- 78% indicated that a Web Page would be very beneficial in providing information to them regarding Wildland/Urban Interface Mitigation.
- 74% indicated that they would be willing to participate in wildland/urban interface mitigation activities.

The table below illustrates those who would be willing to participate in wildland/urban interface mitigation from each community.

Custer County Communities * Are You Willing to Participate

		Are You Willing to Participate		Total
		Yes	No	
Custer County Communities	Challis/North Custer	5	4	9
	Clayton	5	1	6
	Mackay/South Custer	8	6	14
	Stanley	30	6	36
Total		48	17	65

Public Meetings:

Three public meetings were conducted on January 15th and 16th, 2003 for the residents in Mackay, Challis, and Stanley. The purpose of these meetings is to provide a briefing to private property owners and the general public on planning activities to date, to solicit and receive their input, and to discuss

implementation alternatives. The meetings were lightly attended however valuable input was gathered from attendees. A full record of the public interactions will be captured and provided as Appendix 2.

SNRA Public Participation:
Public interaction activities undertaken by the SNRA are documented in Appendix 5. These activities support the information gleaned from the questionnaire referenced above. The primary concern by homeowners in Custer County appears to be the dead and dying trees in the National Forests and the dead and downed trees in the Big Lost River Riparian Zone.

Section 5: Mitigation Implementing Actions

The **implementing actions** are a listing of activities that the county agencies and citizens have proposed and agreed upon as those if implemented will reduce the risk in the wildland/urban interface.

- **Existing actions -** are activities that are currently in progress.
- **Short-term actions -** are activities that county agencies may implement with existing resources and authorities within one to two years.
- **Long-term actions -** may require new or additional resources or authorities, and may take between one and five years to implement.
- **Ongoing actions –** actions that have, or will begin as part of the mitigation process that will be ongoing over the course of the five-year planning window.

Existing Implementing Actions

1. **Revision of the Custer County Emergency Operations Plan.**

   Responsible Individual: Jim Alexander
   Due Date: January 2004
   Resources: Assistance from a RC&D Grant awarded to the Northeast Emergency Management Council

2. **Installation of static water supply tanks in Stanley.**

   Responsible Individual: Andy Gunderson
   Due Date:
   Resources: Fire District Funding

3. **SNRA Red Tree Reduction Project.**

   Responsible Individual: Sawtooth National Forest
   Due Date:
   Resources: Forest Service Funding

4. **Fuel Reduction Projects in the Iron Creek, Crooked Creek, Cow Camp, Basin Creek, Fisher Creek, and Buckhorn Subdivisions. Project includes thinning, removal and replanting of dead lodgepole pine.**

   Responsible Individual: Homeowners Associations
   Due Date:
   Resources: Community Grants through Sawtooth National Forest

5. **Rural Addressing of Custer County.**

   Responsible Individual: Chris James
   Due Date: December 2004
   Resources: RC&D Managed BLM Grant

6. **Mechanical Fuel Reduction in the areas between the Yankee Fork Ranger District and the North East Stanley District of the Salmon-Challis National Forest.**

   Responsible Individual: John Fowler
   Due Date: Begin Fall 2004
   Resources: Salmon-Challis Forest Service Funding

7. **Procurement of new fire apparatus in South and North Custer Fire Districts.**

   Responsible Individual: District Fire Chiefs
   Due Date: Summer 2004
   Resources: FEMA Assistance to Firefighters Grant

Short Term Actions

Responsible Individual: Custer County Wildland/Urban Interface Advisory Committee
Due Date: TBD
Resources: TBD

Develop Partnerships to improve wildland/urban interface fire mitigation:

1. Establish subcommittees to investigate and lead the implementation of mitigation projects.
2. Identify all organizations within Custer County that have programs or interests in wildland/urban interface fire mitigation including private business and other joint planning groups and investigate if common issues are being addressed. Invite them to assist in the implementation mitigation projects.
3. Develop, approve and promote Fire Protection Agreements and partnerships to clarify roles and responsibilities and to provide for fire mitigation activities and suppression preparedness.
4. Develop partnerships with Water Districts to improve the water storage facilities and delivery capabilities in development within and outside of Fire Protection Districts.
5. Integrate requirements for water drafting into Annual Operating Plans developed between the Fire Districts and the Federal Agencies.

Education and Training:

1. Provide training for Advisory Committee members on current and developing issues related to the wildland/urban interface fire hazards loss reduction field.
2. Develop a brochure that addresses fire and relating watershed issues in the wildland/urban interface that can be used by the general public and private businesses.
3. Encourage the development of unifying organizations to ensure communications and dissemination of the wildland/urban interface mitigation information such as planned programs and results from mitigation actions.
4. Develop the capability to apply for grant funding for the implementation of mitigation actions through training of grant writers and the monitoring of available grant opportunities.
5. Conduct joint training and exercises between the Fire Districts, the Forest Service, Bureau of Land Management, and SNRA to improve communications and coordination during fire suppression.
6. Provide public education of the need to improve water storage and distribution capacity within the County including improved mapping of existing water storage.

7. Improve knowledge of causes and effects of landslides resulting from wildfires including hazards vulnerabilities, and risks to life and property in hazard prone areas.
8. Enhance outreach and education programs aimed at interface fire hazards through cooperation with existing programs within the Forest Service, BLM, and State Department of Lands.

Data Collection:

1. Working within the partnerships created above, gather information and propose the development of building codes and a permit process to ensure that defensible space has been properly planned for in new construction.
2. As part of the Rural Addressing Project, identify critical facilities, such as wireless communications repeaters and bridges used for evacution, within the interface areas at risk from wildfire events.
3. Assess bridges and roadways for their ability to support fire apparatus ingress and egress.
4. Map and evaluate the landslide prone areas of the county for possible land movements.

Specific Implementing Actions Projects:

1. Implement Section 7 of the Wildland/Urban Interface Fire Mitigation Plan through Plan adoption and Advisory Committee establishment.
2. Implement re-vegetation programs in landslide areas affected by previous wildfires.
3. Develop and disseminate maps showing the fire hazard to help in the education and preparedness of the community. Use the GIS layers developed as part of the Rural Addressing Project.
4. Complete the Rural Addressing Project.
5. Improve fire protection ratings in Stanley through the construction of a new fire station and improvements in water storage and distribution.
6. Improve fire protection ratings in Mackay and the South Custer Fire District through the construction of a new fire station and improvements in the water storage and delivery infrastructure.
7. Continue to assist homeowner associations to apply for grants for the purposes of reducing fuel loading and improvements in fire protection infrastructure.
8. Conduct workshops for public and private sector organizations to raise awareness of mitigation activities and programs.
9. Place the Custer County Wildland/Urban Interface Fire Mitigation Plan on the County Web Site.
10. Implement the SNRA Community Evacuation Plan.
11. Develop Evacuation Plans for sites along the Custer Motorway Adventure Road including the historical sites along the Yankee Fork of the Salmon River.

Long Term and Ongoing Actions

Responsible Individual: Custer County Wildland/Urban Interface Advisory Committee
Due Date: TBD
Resources: TBD

Establish Partnerships:

1. Coordinate the maintenance of emergency transportation routes through communications with the County Interagency Transportation Working Group and neighboring jurisdictions.
2. Work with community planning organizations and other neighborhood groups to establish Community Emergency Response Teams (CERT).
3. Develop Quick Response Units for medical response in sparsely populated areas.

4. Develop Memoranda of Understanding with existing Emergency Medical Services in the County to increase coverage.

Funding Needs/Support:

1. Purchase and equip a mobile command unit to improve emergency response communications between public agencies, response entities, and the County Emergency Operations Center.
2. Hire a County Fire Prevention Officer to oversee public education programs.
3. Develop a structured Fire Prevention Education Program based on the community hazards.
4. Develop and equipment additional Emergency Medical Services Organizations in areas not covered.

Education and Training

1. Educate private property owners on limitations of physical infrastructure and dangers associated with them following wildfire events.
2. Develop a process to encourage private property owners to upgrade their bridges and roadways to support ingress and egress of fire apparatus.
3. Encourage individual and family preparedness through public education projects such as safety fairs and fire prevention month.
4. Develop or enhance existing outreach materials to include focus on protecting natural ecosystems and watersheds as a mitigation activity.
5. Improve training for existing Emergency Medical Services.

Data Collection:

1. Conduct risk analysis incorporating data and hazard mapping using GIS technology to identify vulnerable sites and to further assist in the prioritization of mitigation activities.
2. Identify watersheds and develop a watershed protection program.

Specific Implementation Projects:

1. Employ mechanical thinning and prescribe burning in Red Tree Areas.
2. Clear trimmings, trees, brush, and other debris completely from sites when performing routine maintenance and landscaping to reduce fire risk
3. Expand Fire Districts to provide fire protection to residences within the County.

Ongoing Actions:

1. Encourage single-family residences to have fire plans and practice evacuation routes.
2. Encourage fire inspections in residential areas by fire departments to increase awareness and establish relationships between homeowners and firefighters.
3. Continue the development of adult and child education programs and incorporate them into the public libraries, community service groups, the media, and other civic forums.
4. Continue to update and improve the SNRA Community Evacuation Plan.
5. Improve Fire District capabilities through an aggressive program focusing on resources acquisition, training, and coordination.

Section 6: Economic Analysis

Using the guidance found below the Interagency Planning Group will evaluate all implementing actions to establish a prioritized ranking. In addition to examining the estimated economic cost benefit analysis implementing actions must also be ranked based on the impacts to the community or social structure of Custer County as a whole. Once the economic analysis is completed the results will be reported in this section of the plan the guidance will be moved to the Appendices Section for future reference. The Guidance is included in the plan at this point simply to identify procedural steps necessary to establish implementation priorities.

Fire Mitigation Economic Analysis Guidance

Benefit/cost analysis is a key mechanism used by the Idaho State Bureau of Disaster Services, the Federal Emergency Management Agency, and other state and federal agencies in evaluating wildfire mitigation projects, and is required by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. This guide outlines several approaches for conducting economic analysis of wildfire mitigation projects. It describes the importance of implementing mitigation activities, different approaches to economic analysis of mitigation strategies, and methods to calculate costs and benefits associated with mitigation strategies. Information in this section is derived in part from: The Federal Emergency Management Agency Publication 331, Report on Costs and Benefits of Wildfire Mitigation.

This guide is not intended to provide a comprehensive description of benefit/cost analysis, nor is it intended to provide the details of economic analysis methods that can be used to evaluate local projects. It is intended to (1) raise benefit/cost analysis as an important issue, and (2) provide a description of how economic analysis will be used to evaluate fire mitigation implementing actions discussed in Section 4.

Mitigation Strategies

Mitigation activities reduce the cost of disasters by minimizing property damage, injuries, and the potential for loss of life, and by reducing emergency response costs, which would otherwise be incurred. Evaluating wildfire mitigation provides decision-makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

Evaluating mitigation projects is a complex and difficult undertaking, which is influenced by many variables.

- Wildfires affect all segments of the communities they strike, including individuals, businesses, and public services such as fire, police, utilities, and schools.
- While some of the direct and indirect costs of disaster damages are measurable, some of the costs are non-financial and difficult to quantify in dollars.
- Many of the impacts of such events produce “ripple-effects” throughout the community, greatly increasing the disaster’s social and economic consequences.

While not easily accomplished, there is value, from a social and public policy perspective, in assessing the positive and negative impacts from mitigation activities, and obtaining an instructive benefit/cost comparison. Otherwise, the decision to pursue or not pursue various mitigation options would not be based on an objective understanding of the net benefit or loss associated with these actions.

Economic Analysis Approaches for Mitigation Strategies

The approaches used to identify the costs and benefits associated with wildfire mitigation strategies, measures, or projects fall into two general categories: benefit/cost analysis and cost-effectiveness analysis. The distinction between the two methods is the way in which the relative costs and benefits are measured. Additionally, there are varying approaches to assessing the value of mitigation for public sector and private sector activities.

Benefit/cost Analysis

Benefit/cost analysis is used in wildfire mitigation to show if the benefits to life and property protected through mitigation efforts exceed the cost of the mitigation activity. Conducting benefit/cost analysis for a mitigation activity can assist communities in determining whether a project is worth undertaking now, in order to avoid disaster related damages later. Benefit/cost analysis is based on calculating the frequency and severity of a hazard, avoided future damages, and risk. In benefit/cost analysis, all costs and benefits are evaluated in terms of dollars, and a net benefit/cost ratio is computed to determine whether a project should be implemented (i.e., if net benefits exceed net costs, the project is worth pursuing). A project must have a benefit/cost ratio greater than 1 in order to be funded.

Cost-Effectiveness Analysis

Cost-effectiveness analysis evaluates how best to spend a given amount of money to achieve a specific goal. This type of analysis, however, does not necessarily measure costs and benefits in terms of dollars. Determining the economic feasibility of mitigating wildfire can also be organized according to the perspective of those with an economic interest in the outcome. Hence, economic analysis approaches are covered for both public and private sectors as follows.

Investing in public sector mitigation activities

Evaluating mitigation strategies in the public sector is complicated because it involves estimating all of the economic benefits and costs regardless of who realizes them, and potentially to a large number of people and economic entities. Some benefits cannot be evaluated monetarily, but still affect the public in profound ways. Economists have developed methods to evaluate the economic feasibility of public decisions that involve a diverse set of beneficiaries and non-market benefits.

Investing in private sector mitigation activities

Private sector mitigation projects may occur on the basis of one of two approaches: it may be mandated by a regulation or standard, or it may be economically justified on its own merits. A building or landowner, whether a private entity or a public agency, required to conform to a mandated standard may consider the following options:

1. Request cost sharing from public agencies;
2. Dispose of the building or land either by sale or demolition;
3. Change the designated use of the building or land and change the wildfire mitigation compliance requirement; or
4. Evaluate the most feasible alternatives and initiate the most cost effective wildfire mitigation alternative.

The sale of a building or land triggers another set of concerns. For example, real estate disclosure laws can be developed which require sellers of real property to disclose known defects and deficiencies in the property, including earthquake weaknesses and hazards to prospective purchasers. Correcting deficiencies can be expensive and time consuming, but their existence can prevent the sale of the building. Conditions

of a sale regarding the deficiencies and the price of the building can be negotiated between a buyer and seller.

Conducting Economic Analysis

Benefit/cost analysis and cost-effectiveness analysis are important tools in evaluating whether or not to implement a mitigation activity. The framework, which will be used for evaluating the Custer County Urban/Wildland Fire Mitigation Alternatives, is outlined below:

1. **Identify the Alternatives**
   Alternatives for reducing risk from wildfires can include structural projects to enhance disaster resistance, education and outreach, and acquisition or demolition of exposed properties, among others. Different mitigation projects can assist in minimizing risk to wildfires, but do so at varying economic costs.

2. **Calculate the Costs and Benefits**
   Choosing economic criteria is essential to systematically calculating costs and benefits of mitigation projects and selecting the most appropriate alternative. Potential economic criteria to evaluate alternatives include:

   - **Determine the project cost**
     This may include initial project development costs, and repair and operating costs of maintaining projects over time.

   - **Estimate the benefits.**
     Projecting the benefits or cash flow resulting from a project can be difficult. Expected future returns from the mitigation effort depend on the correct specification of the risk and the effectiveness of the project, which may not be well known. Expected future costs depend on the physical durability and potential economic obsolescence of the investment. This is difficult to project. Estimating the costs and benefits of a hazard mitigation strategy can be a complex process. Employing the services of a specialist can assist in this process these considerations will also provide guidance in selecting an appropriate salvage value. Future tax structures and rates must be projected. Financing alternatives must be researched, and they may include retained earnings, bond and stock issues, and commercial loans.

   - **Consider costs and benefits to society and the environment**
     These are not easily measured, but can be assessed through a variety of economic tools including existence value or contingent value theories. These theories provide quantitative data on the value people attribute to physical or social environments. Even without hard data, however, impacts of structural projects to the physical environment or to society should be considered when implementing mitigation projects.

   - **Determine the correct discount rate**
     Determination of the discount rate can just be the risk-free cost of capital, but it may include the decision maker's time preference and also a risk premium. Including inflation factors should also be considered.

3. **Analyze and Rank the Alternatives**
   Once costs and benefits have been quantified, economic analysis tools can rank the alternatives. Two methods for determining the best alternative given varying costs and benefits include net present value and internal rate of return.

Net present value
The net present value is the value of the expected future returns of an investment minus the value of expected future cost expressed in today's dollars. If the net present value is greater than the project costs, the project may be determined feasible for implementation. Selecting the discount rate, and identifying the present and future costs and benefits of the project calculates the net present value of projects.

Internal Rate of Return
Using the internal rate of return method to evaluate mitigation projects provides the interest rate equivalent to the dollar returns expected from the project. Once the rate has been calculated, it can be compared to rates earned by investing in alternative projects. Projects may be feasible to implement when the internal rate of return is greater than the total costs of the project. Once the mitigation projects are ranked on the basis of economic criteria, decision-makers can consider other factors, such as risk, project effectiveness, and economic, environmental, and social returns in choosing the appropriate project for implementation.

Calculating Economic Benefits of Mitigation
The estimation of economic returns, which accrue to building or landowner as a result of wildfire mitigation, is difficult. Owners evaluating the economic feasibility of mitigation should consider reductions in physical damages and financial losses. A partial list follows:

- Building damages avoided
- Content damages avoided
- Inventory damages avoided
- Rental income losses avoided
- Relocation and disruption expenses avoided
- Proprietor's income losses avoided

These parameters can be estimated using observed prices, costs, and engineering data. The difficult part is to correctly determine the effectiveness of the wildfire mitigation project and the resulting reduction in damages and losses. Equally as difficult is assessing the probability that an event will occur. The damages and losses should only include those that will be borne by the owner. The salvage value of the investment can be important in determining economic feasibility. Salvage value becomes more important as the time horizon of the owner declines. This is important because most businesses depreciate assets over a period of time.

Additional Costs from Wildfires
Property owners should also assess changes in a broader set of factors that can change as a result of a large wildfire. These are usually termed "indirect" effects, but they can have a very direct effect on the economic value of the owner's building or land. They can be positive or negative, and include changes in the following:

- Commodity and resource prices
- Availability of resource supplies
- Commodity and resource demand changes
- Building and land values
- Capital availability and interest rates
- Availability of labor
- Economic structure
- Infrastructure
- Regional exports and imports
- Local, state, and national regulations and policies
- Insurance availability and rates

Changes in the resources and industries listed above are more difficult to estimate and require models that are structured to estimate total economic impacts. Total economic impacts are the sum of direct and indirect economic impacts. Total economic impact models are usually not combined with economic feasibility models. Many models exist to estimate total economic impacts of changes in an economy. Decision-makers should understand the total economic impacts of natural disasters in order to calculate the benefits of a mitigation activity. This suggests that understanding the local economy is an important first step in being able to understand the potential impacts of a disaster, and the benefits of mitigation activities.

Additional Considerations

Conducting an economic analysis for potential mitigation activities can assist decision-makers in choosing the most appropriate strategy for their community to reduce risk and prevent loss from wildfires. Economic analysis can also save time and resources from being spent on inappropriate or non-feasible projects. Benefit/cost analysis is complicated, and the numbers may divert attention from other important issues. It is important to consider the qualitative factors of a project associated with mitigation that cannot be evaluated economically.

There are alternative approaches to implementing mitigation projects. Many communities are looking towards developing multi-objective projects. With this in mind, opportunity rises to develop strategies that integrate wildfire mitigation with projects related to watersheds, environmental planning, community economic development, and small business development, among others. Incorporating wildfire mitigation with other community projects can increase the viability of project implementation.

Section 7: Plan Maintenance

The Plan maintenance process includes a schedule for monitoring and evaluating the programmatic outcomes established in the Plan annually and producing a Plan revision every five years. This section describes how the county will integrate public participation throughout the Plan maintenance process.

Formal Review Process

The Plan will be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes that may affect mitigation priorities. The evaluation process includes an annual schedule and timeline, and identifies the local agencies and organizations participating in Plan evaluation. The project facilitator or designee will be responsible for contacting the Wildland/Urban Mitigation Advisory Committee members and organizing the annual review. Group members will be responsible for monitoring and evaluating the progress of the mitigation strategies in the Plan.

The Committee will review the goals and action items to determine their relevance to changing situations in the county, as well as changes in State or Federal policy, and to ensure they are addressing current and expected conditions. The Committee will also review the risk assessment portion of the Plan to determine if this information should be updated or modified, given any new available data. The coordinating organizations responsible for the various action items will report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised or removed.

The facilitator will assign the duty of updating the Plan to one or more of the committee members. The designated members will have three months to make appropriate changes to the Plan before submitting it to the Committee members. The Committee will also notify all holders of the county plan and private property owners when changes have been made. Every five years the updated plan will be submitted to the State Wildfire Mitigation Officer and the Federal Emergency Management Agency for review.

Continued Public Involvement

Custer County is dedicated to involving the public directly in review and updates of the Plan. The Committee is responsible for the annual review and update of the plan. The public will also have the opportunity to provide input into Plan revisions and updates. Copies of the Plan will be catalogued and kept at all of the appropriate agencies in the county. The existence and location of these copies will be publicized in the local newspaper following each annual review and update.

A public meeting will be held after each annual evaluation or when deemed necessary by the Committee. The meetings will provide the public a forum where they can express concerns, opinions, or new alternatives that can then be included in the Plan. The County Commission will be responsible for using county resources to publicize the annual public meetings and maintain public involvement.

Custer County - Idaho

Wildland/Urban Interface Fire Mitigation Plan

Appendices

February 12, 2004

Appendix 1

Meeting Minutes
Interagency Planning Committee

Custer County Wildfire Mitigation Planning Project
Meeting Minutes - 11/20/03

Attendees:

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS
Kim Jordan	552-2627	kjordan@ida.net	ERS
Ken Day	588-2274	mackaywater@cs.com	Mackay Fire Asst. Chief, City Foreman
Randy Ivie	588-3361	mackaywater@cs.com	City of Mackay Fire Chief
Will Marcroft	588-3416	wmarcroft@fs.fed.us	US Forest Service Lost River FMO
Bill Baer	879-6204	william_baer@blm.gov	Challis BLM
Wiley Smith	588-2218	wileys@atcnet.net	South Custer Board Chairman
John Fowler	879-4321	jfowler@fs.fed.us	USFS – South Zone Fuels Spec
Walt Johnson	588-3387	6139 Train Creek Rd	South Custer RFD Fire Chief Macky, ID 83251

Scope:
Emergency Response Solutions held the first Planning session on November 20, 2003 at the Mackay City Conference Room, from 0900 to 1200 hours. This was the first opportunity to brainstorm and plan for future activities in regard to the Custer County Wildfire Mitigation Planning project.

Provided:
All personnel in attendance were provided copies of the Project Scope, Table of Contents for draft Wildfire Mitigation plan, Summaries from meetings which were held in Mackay, Challis, Clayton, and Stanley during May and June with local Fire Departments and Agencies.

Documentation/Data Received:

- South Custer Rural Fire District Grant Needs List – Wiley Smith
- Mutual Agreement Between The City of Mackay and The South Custer Rural Fire Protection District
- 2003 Operating Plan for South Custer County Rural Fire District and United States Department of Agriculture, Forest Service Salmon-Challis National Forest and United States Department of Interior, Bureau of Land Management Upper Columbia-Salmon Clearwater District
- 2003 Annual Operating Plan between Mackay City Fire Department and United States Department of Agriculture, Forest Service Salmon-Challis National Forest and United States Department of Interior, Bureau of Land Management Upper Columbia-Salmon Clearwater District
- Cooperative Fire Protection Agreement between US Department of Agriculture, Forest Service Salmon-Challis National Forest and South Custer Rural Fire District
- Cooperative Fire Protection Agreement between US Department of Agriculture, Forest Service Salmon-Challis National Forest and Mackay City Fire Department and US Department of Interior, Bureau of Land Management Upper Columbia-Salmon Clearwater Districts
- Salmon-Challis National Forest Fire Management Plan 2003
- MAP - Fire History of the Salmon-Challis National Forest and Custer County 1919-2003 (US Forest Service)

  Fire History Data: This map depicts the occurrence of wildland fires on the Salmon-Challis National Forest. Many data sets were used in compiling this map including Fire Atlases from the Challis National Forest 1919-1995, Fire Atlas of the Salmon National Forest 1919-1995, Fire reports of the Central Idaho Interagency Fire Center 1930-2002, and the Bureau of Land

Management Upper Columbia Field Office, Salmon Idaho. The historical record is incomplete for the area, especially in the early years. For instance, reports from 1910 show 19,000 acres burned on the Challis NF but were not mapped. This map was produced for display purposes only and should not be used for navigation.

- MAP - South Custer Fire District
- MAP - Lost River Ranger District Fire Protection Boundary (LRRD Gis Staff)

Assignments/Discussion points:

- Discussed the possibility of the Salmon District being transferred to BLM in IF.
- ERS will complete a Timeline specific to the activities necessary to be implemented and completed between now and project completion date of February 15, 2004.
- Interagency Planning Team suggestions based upon members present.

North Custer	Bill Blount	*John Fowler	*Jim Alexander
	Wayne Butts	Doug Hammond	
South Custer	*Bill Baer	*John Fowler	*Randy Ivie
	Will Marcroft	Wiley Smith	Ken Day
	Walt Johnson	*Jim Alexander	Lin Hintze
Stanley	Cliff Hansen	Troy Hagen	Andy Gunderson
	*John Fowler	Bill Blount	

* Key Interagency Planning team members who will be participating in all planning sessions.

- The web page for the Idaho Statewide Implementation Strategy for the National Fire Plan is located at: http://www2.state.id.us/lands/Natl%20Fire%20Plan/Idaho%20Implementation%20Strategy/Idaho%20Implementation%20Strategy%20Home.htm
- Idaho Statewide Implementation Strategy for the National Fire Plan – reviewed the draft Wildfire Mitigation Plan format and discussed how it complies with the guidelines.
- Mapping activities will be coordinated with John Fowler, Bill Baer, and Michell Walker to include overlays for water sources, hydrants, power lines, etc…. (Committee will identify the information necessary for the project needs).
- ERS will compile format and discussion points for the draft plan and route to the Interagency Planning Team, and interested participants for comment(s).
- ERS will develop a questionnaire for routing to County residents, and Home Owner associations. As part of the public involvement process to solicit input and comments.
- ERS will contact Chris James for names and addresses of homeowners for questionnaire routing.
- Scoping meetings will be scheduled and conducted in Stanley and Challis, similar to the meeting held today.
- ERS will develop posters announcing Public meeting sessions. These posters will be placed at strategic locations within the County prior to Public meeting sessions.
    1. Local media will be informed of public sessions
    2. Channel 8 Community Calendar
    3. Challis Messenger (as applicable)
    4. Mackay Miner (as applicable)

Custer County Wildfire Mitigation Planning Project
Challis Meeting Minutes – 12/5/2003

Attendees:

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS – Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS – Senior Consultant
Jim Alexander	879-2463	custerdscja@yahoo.com	Custer County Disaster Coordinator
Launna Gunderson	879-2932	launnag@custertel.net	Challis Fire
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Bill Baer	879-6204	william_baer@blm.gov	Challis BLM
Fritz Cluff	756-5457	fcluff@blm.gov	Salmon BLM
John Fowler	879-4321	jfowler@fs.fed.us	USFS – South Zone Fuels Spec

Scope:
Emergency Response Solutions held the second Mitigation Planning session on December 5, 2003 in Challis, Idaho at the Custer County Court House, from 1300 to 1530 hours. This was the second opportunity to discuss the mitigation plan development and future implementation activities in regard to the Custer County Wildfire Mitigation Planning project.

Provided:
All personnel in attendance were provided updated copies of the Project Scope, Table of Contents for draft Wildfire Mitigation plan, Summaries from meetings which were held in Mackay, Challis, Clayton, and Stanley during May and June with local Fire Departments and Agencies.

Documentation/Data Received:
1. Copy of the Private/Federal/State Land interface Map.

Assignments/Discussion points:
- Interagency Planning Team suggestions based upon members present.

North Custer	Bill Blount	*John Fowler	*Jim Alexander
	Wayne Butts	Doug Hammond	
South Custer	*Bill Baer	*John Fowler	*Randy Ivie
	Will Marcroft	Wiley Smith	Ken Day
	Walt Johnson	*Jim Alexander	Lin Hintze
Stanley	Cliff Hansen	Troy Hagen	Andy Gunderson
	*John Fowler	Bill Blount	

  - Key Interagency Planning team members who will be participating in all planning sessions.

- The web page for the Idaho Statewide Implementation Strategy for the National Fire Plan is located at: http://www2.state.id.us/lands/Natl%20Fire%20Plan/Idaho%20Implementation%20Strategy/Idaho%20Implementation%20Strategy%20Home.htm
- Idaho Statewide Implementation Strategy for the National Fire Plan – reviewed the draft Wildfire Mitigation Plan format and discussed how it complies with the guidelines.
- The Kootneai County Fire Mitigation Plan will be used as a template where possible.
- Mapping activities will be coordinated with John Fowler, Bill Baer, and Michell Walker to include overlays for Wild Land/Private Property Interfaces, Fire History and Transportation Routes.
- ERS will complete the Mitigation Plan Draft and route it for review and comment by December 20, 2003.
- ERS will develop a questionnaire for routing to County residents, and Home Owner associations. As part of the public involvement process to solicit input and comments.
- ERS will contact Chris James for names and addresses of homeowners for questionnaire routing.
- Homeowner associations will be contacted and invited to meet as subcommittees to provide important input into the planning stages.
- An additional scoping meeting will be scheduled and conducted in Stanley, similar to the meeting held today. The meeting will be held December 11, 2003 at 1300 hours.
- GIS Maps will be complete and available for use once the Rural Addressing Project is complete.
- ERS requested Fire Histories from the individual Fire Departments if available.
- SNRA will be invited to participate in Stanley.
- ERS will explore the use of community web pages to transmit information to citizens.
- ERS will contact the Shoshone Bannock Tribe and invite them to participate.
- Meetings will be held with the County Commissioners prior to public meetings.
- Watershed issues will be addressed in the hazard and vulnerability assessment process. Information was requested on historical post-fire watershed issues from the participants.
- ERS will provide copies of the Stanley Basin Fire Assessment to participants.
- ERS will coordinate with RC&D the use of the individual fire assessments completed on each community.
- Forest Service and BLM will try to determine historical suppression cost for the Custer County area.
- Fish and Game needs to be included in the planning.
- Idaho Department of Lands needs to be included in the planning.
- The Planning Team needs to clearly determine who has the responsibility for implementation once the County, the State, and FEMA approve the plan.
- ERS will contact Salmon River Electric to get a map of transmission lines.
- ERS will develop posters announcing Public meeting sessions. These posters will be placed at strategic locations within the County prior to Public meeting sessions.
  2. Public Poster Boards in Business, the Y Café, Post Offices, Village Square, Lambs Market, East Idaho Credit Union, Smiley Creek Lodge, Jerry's Country Store, Mt. Village Market,
  3. Post Register, Messenger, Other News Papers as appropriate
  4. Channel 8 Community Calendar
  5. Web Sites for Custer County, City of Challis, Chambers of Commerce

Custer County Wildfire Mitigation Planning Project
Stanley Meeting Minutes – 12/11/2003

Attendees:

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS – Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS – Senior Consultant
Jim Alexander	879-2463	custerdscja@yahoo.com	Custer County Disaster Coordinator
Wilma Alexander	879-2463		Custer County Disaster Coordinator Assistant
Cliff Hansen	879-2360		Custer County Commissioner
Launna Gunderson	879-2932	launnag@custertel.net	Challis Fire
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Dave Kimpton	774-3386		Resident
Rochelle Ahrens	737-3229	rahrens@fs.fed.us	Sawtooth N.F. Prevention
Michelle Erdie	622-8275 or 622-8268	merdie@fs.fed.us	North Zone Fire Prevention Technician Sawtooth N.F.

Scope:
Emergency Response Solutions, assisted by Custer County Disaster Services, held the third and final Mitigation Planning session on December 11, 2003 in Stanely, Idaho at the Sawtooth Valley Rural Fire Department, from 1300 to 1500 hours. This was the third opportunity to discuss the mitigation plan development and future implementation activities in support of the development of the Custer County Wildfire Mitigation Planning project.

Provided:
All personnel in attendance were provided updated copies of the Project Scope, Table of Contents for draft Wildfire Mitigation plan, Summaries from meetings which were held in Mackay, Challis, Clayton, and Stanley during May and June with local Fire Departments and Agencies.

Documentation/Data Received:
Field Guide for Red zone Surveys

General Information:

- Interagency Planning Team suggestions based upon members present.

North Custer	Bill Blount	*John Fowler	*Jim Alexander
	Wayne Butts	Doug Hammond	
South Custer	*Bill Baer	*John Fowler	*Randy Ivie
	Will Marcroft	Wiley Smith	Ken Day
	Walt Johnson	*Jim Alexander	Lin Hintze

Stanley	Cliff Hansen	Troy Hagen	Andy Gunderson
	*John Fowler	Bill Blount	Rochelle Ahrens
	Michelle Erdie		

- Key Interagency Planning team members who will be participating in all planning sessions.

- The web page for the Idaho Statewide Implementation Strategy for the National Fire Plan is located at: http://www2.state.id.us/lands/Natl%20Fire%20Plan/Idaho%20Implementation%20Strategy/Idaho%20Implementation%20Strategy%20Home.htm
- Idaho Statewide Implementation Strategy for the National Fire Plan – reviewed the draft Wildfire Mitigation Plan format and discussed how it complies with the guidelines.
- The Kootneai County Fire Mitigation Plan will be used as a template where possible.
- Watershed issues will be addressed in the hazard and vulnerability assessment process. Information was requested on historical post-fire watershed issues from the participants.
- GIS Maps will be complete and available for use once the Rural Addressing Project is complete.
- ERS will contact the Shoshone Bannock Tribe and invite them to participate.
- Meetings will be held with the County Commissioners prior to public meetings.
- ERS will coordinate with RC&D the use of the individual fire assessments completed on each community.

Assignments/Discussion points:

- ERS will complete the Mitigation Plan Draft and route it for review and comment by December 20, 2003.
- ERS will develop a questionnaire for routing to County residents, and Home Owner associations. As part of the public involvement process to solicit input and comments.
- A post card announcing the availability of the project information on the Web will be set out to all home owners and other interested parties prior to public meetings.
- ERS will contact Chris James for names and addresses of homeowners for questionnaire routing.
- Homeowner associations will be contacted and invited to meet as subcommittees to provide important input into the planning stages.
- ERS will develop posters announcing Public meeting sessions. These posters will be placed at strategic locations within the County prior to Public meeting sessions.

  Public Poster Boards in Business, the Y Café, Post Offices, Village Square, Lambs Market, East Idaho Credit Union, Smiley Creek Lodge, Jerry's Country Store, Mt. Village Market,
  Post Register, Messenger, Other News Papers as appropriate
  Channel 8 Community Calendar

  - Web Sites for Custer County, City of Challis, Chambers of Commerce
- Public Meetings are planned to be conducted the week of January 11, 2004 in Stanley, Challis, and Mackay
- ERS requested Fire Histories from the Sawtooth Fire Prevention Offices and individual Fire Departments if available.
- ERS will continue to explore the use of community web pages to transmit information to citizens.
- ERS provided copies of the Stanley Basin Fire Assessment to participants.
- Forest Service will try to determine historical suppression cost for their areas in Custer County.
- It was recommended that the FEMA Community Emergency Response Team program be implemented in the Stanley area with homeowner associations as well as the seasonal workforce.

- Discussed the placement of fire suppression storage systems in subdivisions.
- Discussed the option of inviting a representative of the Insurance Industry to participate in the public meetings.
- Discussed the need for integration between the Forest Service and the Sawtooth Valley Rural Fire Department.
- Discussed the need for integrated training, drills and exercise.
- Discussed Grants that have been applied for by Homeowners and the need for improved coordination.
- Discussed the need to examine the intentional setting of fires in the area, i.e., arson. F. S. will look into this issue and provide data if available.
- Discussed the need to improve the interface with Blaine County (recommended sending Wildfire Mitigation Plan to Blaine County when completed).
- Discussed areas not covered by any Fire District in the County.
- Discussed the need to increase coverage of some Fire Districts in the County.

The Three Key Issues for fire mitigation are:

- *Reduce Fire Loading*
- *Improve Equipment*
- *Increase available water storage*

Fire Mitigation Planning
Final Planning Meeting
Challis
February 6, 2004

The final planning meeting of the Custer County Wildland/Urban Fire Mitigation Interagency Planning Group was held in Challis Idaho on February 6, 2004. The meeting began 8 a.m. and was held in the Challis-Salmon Forest Service conference room.

In attendance at the meeting were the following individuals.

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS – Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS – Senior Consultant
Jeff Knudson	756-5197	Jeff_knudson@blm.gov	BLM AFMO
Scott Belknap	879-4103	sbelknap@fs.fed.us	MFRD FMO
Launna Gunderson	879-2932	launnag@custertel.net	Challis Fire
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Bill Baer	879-6204	william_baer@blm.gov	Challis BLM
Ken Day	588-2274	mackaywater@cs.com	Mackay FD Assistant Chief
John Fowler	879-4321	jfowler@fs.fed.us	USFS – South Zone Fuels Spec
Rochelle Ahrens	737-3229	rahrens@fs.fed.us	Sawtooth NF Prevention
Michelle Erdie	622-8275	merdie@fs.fed.us	North Zone Fire Prevention
Troy Hagan	774-3015	thagan@fs.fed.us	NZ AFMO

The meeting format included a briefing by ERS on the status of the Mitigation Plan and the comments received to date from the Public Questionnaire. The meeting was then focused on reviewing Section 5 of the Plan, which lists in detail the mitigation implementing actions. The comments were centered on the following general issues:

- Section 5 will be revised to include 5 additional existing actions
- The Group review the current list of short-term actions, removed redundant actions and organized the remain actions into the following categories
    - Partnership Development
    - Funding and Grant Opportunities
    - Education
    - Data Collection
    - Specific Implementing Action Projects
- The long-term actions were also reviewed and organized into the same categories as stated above.
- It was recognized that some implementing actions would be ongoing programmatic issues. These types of actions will be designated as such.
- It was suggested that subcommittees be formed with appropriate individuals to address specific implementing actions rather than having the entire advisory committee work each item.
- It was suggested that all of the County Commissioners be members of the Interagency Planning Group.

- Procedural issues and actions for plan implementation and maintenance will be addressed in Section 7.
- Advisory Committee meeting frequency will be spelled out in Section 7.
- The Advisory Committee will have the responsibility to prioritize the implementing actions and work with the responsible entity to secure appropriate funding.
- It was suggested that a long-term schedule be developed for each action item linking it to the appropriate grant.
- The Interagency Planning Group will provide final comments on the Plan via email by 2/11/04.
- ERS will revise the Plan based on the comments from the meeting and any additional comments received on 2/11/04.
- ERS will provide a hard copy of the Plan to each Commissioner for final review prior to the Plan being submitted to them at their February 23rd Meeting.
- The Group will submit the Final Plan at the County Commission Meeting on February 23rd, 2004 at 11:00 A.M.

Appendix 2

Interagency Planning Group
Public Meeting Minutes

Custer County Idaho
Wildland/Urban Interface
Fire Mitigation Planning
Public Meeting
Stanley Idaho
January 15, 2004

A public meeting was held to gather comments on the Custer County Wildland/Urban Fire Mitigation Plan in Stanley Idaho on January 15th 2004. The meeting began 1 p.m. and was held in the Stanley City community center. The final meeting of the Interagency Planning Group will be held on February 6th in Challis at the Forest Service Building.

In attendance at the meeting were the following individuals.

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS – Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS – Senior Consultant
Jim Alexander	879-2463	custerdscja@yahoo.com	Custer County Disaster Coordinator
Wilma Alexander	879-2463		Custer County Disaster Coordinator Assistant
Launna Gunderson	879-2932	launna@custertel.net	Challis Fire
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Rochelle Ahrens	737-3229	rahrens@fs.fed.us	Sawtooth N.F. Prevention
Troy Hagan	774-3015	thagen@fs.fed.us	Sawtooth Asst. Fire Mgmt. Officer
Michelle Erdie	622-8275 or 622-8268	merdie@fs.fed.us	North Zone Fire Prevention Technician Sawtooth N.F.
Ruth Wooding	774-3011	rwooding@fs.fed.us	SNRA Private Lands Administrator

The meeting format included a briefing by ERS on the status of the Mitigation Planning effort. Comments were then solicited. The following comments were made:

- The data in the RC&D Assessment, Appendix 1 is not specific. It needs to be revised so that specific needs can be identified and assigned to the appropriate agency for resolution.
- Mapping of the Red Tree treatment areas should be developed so that retreated activities can be tracked.
- Instructions should be developed for the homeowners on how to complete defensible space programs.
- Develop options for reuse of slash piles.
- Can chipping of mechanically removed vegetation be an option?
- There needs to be Codes developed for the construction and maintenance of roadways within the County.
- There are many single access roads into Subdivisions and recreation areas. Secondary evacuation routes should be developed.

- It is estimated that in July approximately 3000 are in the Red Fish recreation area. The evacuation plan is not equipped for such a large population.
- The SNRA/Forest Service/County must work together to develop a methodology for development of evacuation routes.
- A tabletop exercise/discussion on evacuation should be held with the homeowners, SNRA, the Forest Service, and the Fire District.
- Fire Districts need to be established for Yankee Fork and Antelope Creek.
- The Interagency Group should sign together as the recommending the Mitigation Plan to the County for adoption.

Custer County Idaho
Wildland/Urban Interface
Fire Mitigation Planning
Public Meeting
Challis
January 15, 2004

A public meeting was held to gather comments on the Custer County Wildland/Urban Fire Mitigation Plan in Challis Idaho on January 15th 2004. The meeting began 6 p.m. and was held in the Challis-Salmon Forest Service conference room. The final meeting of the Interagency Planning Group will be held on February 6th in Challis at the Forest Service Building.

In attendance at the meeting were the following individuals.

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS – Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS – Senior Consultant
Jim Alexander	879-2463	custerdscja@yahoo.com	Custer County Disaster Coordinator
Wilma Alexander	879-2463		
Launna Gunderson	879-2932	launna@custertel.net	Challis Fire
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Bill Baer	879-6204	william_baer@blm.gov	Challis BLM
Bill Blount	879-4123	bblount@fs.fed.us	Challis/Yankee Fork FMO
John Fowler	879-4321	jfowler@fs.fed.us	USFS – South Zone Fuels Spec
Jack Ebberts	879-2237		Citizen

The meeting format included a briefing by ERS on the status of the Mitigation Planning effort. Comments were then solicited. The following comments were made:

- The Plan needs a better definition of probability and potential.
- The BLM has developed some "rough" condition maps for BLM land in the county. Bill Baer will provide them for inclusion.
- There are data gaps in the plan such as the location of the mines, wireless communication towers, and other structures that should be included in the first annual revision of the plan.
- The rural addressing effort should be completed and maps included in the next annual revision of the plan.
- Extend the efforts of the Fire Prevention Teams from the Sawtooth into the Challis Salmon National Forest interface.
- Examine Red Tree issues in the Challis Salmon National Forest.
- Bed and Breakfast facilities should be addressed in the planning effort from a protection and evacuation perspective.

Custer County Idaho
Wildland/Urban Interface
Fire Mitigation Planning
Public Meeting
Mackay
January 16, 2004

A public meeting was held to gather comments on the Custer County Wildland/Urban Fire Mitigation Plan in Mackay Idaho on January 16th 2004. The meeting began 11 a.m. and was held in Mackay City Council Chambers. The final meeting of the Interagency Planning Group will be held on February 6th in Challis at the Forest Service Building.

In attendance at the meeting were the following individuals.

Name	Phone	Email	Affiliation
Wes Jones	552-2627	wjones@ida.net	ERS Project Manager
Rick Fawcett	552-2627	fawcett@dats.com	ERS Senior Consultant
Lin Hintze	588-3085	Linhintze8@cs.com	County Commissioner
Randy Ivie	588-3361	mackaywater@cs.com	City of Mackay Fire Chief
Carol Eckert	588-2224	ceckert@fs.fed.us	District Ranger
Andy Gunderson	774-2222	SVRFD@ruralnetwork.net	Sawtooth Valley Rural Fire Department
Wiley Smith	588-2218	wileys@atcnet.net	South Custer Board Chairman
John Fowler	879-4321	jfowler@fs.fed.us	USFS – South Zone Fuels Spec
Walt Johnson	588-3387	6139 Train Creek Rd	South Custer RFD Fire Chief Macky, ID 83251

The meeting format included a briefing by ERS on the status of the Mitigation Planning effort. Comments were then solicited. The following comments were made:

- The needs in the RC&D Summary, Appendix 1 of the Plan, must be specifically assigned to the different departments.
- Clayton Fire is in the North Custer Fire District
- Chris James can provide maps of the fire districts for inclusion in the plan.
- Planning and Zoning ordinances must be developed in the City of Mackay as well as the County.
- Tourism should be addressed in the plan as a vulnerable population and as an economic issue.
- Access to water in the new subdivisions should be addressed and required by the developers.
- The roads going into subdivisions along the Lost River are to narrow for fir e apparatus access.
- CRP lands have increased the risk of wildfires in the area. A map showing a CRP Lands, especially new CRP wet lands, should be included and planning issues addressed.
- Dead cotton wood tress within the Big Lost River Riparian Zone must be clean up and removed.
- Question – who owns the river channel and the riparian zone issues, Corp of Engineers? Contact should be made with them and they should be included in the planning.

Appendix 3

RC&D
Custer County
Urban/Wildland Interface
Fire Mitigation Plan

Scoping Input Meetings

CLAYTON

Summary - The fire chief felt within the area covered by the Clayton Fire Department there are no wild land / urban interface areas threatened by a heavy build up of fuels. Most areas are intermixed sagebrush/grass/rock. The biggest issue for the Clayton Fire Department is adequate water supplies. The City of Clayton is presently working with the USDA - Rural Development to design and eventually fund an upgrade of their water system. Several locations should be evaluated as potential dry hydrant location to reduce water shuttle time.

LOCATION	CONCERNS	OPPORTUNITY
East Fork	Access to existing water supply	Other water access
Clayton	Some fuels river edge behind town	
Yankee Fork	Not in a fire district	
Sunbeam	Not in a fire district	
French Creek	No concern	
Torrey Creek	No concern	
Tunnel Rock	No concern	
Thompson Creek Mine		Pump station has water supply. Need to investigate a use agreement.
Squaw Creek		Potential dry hydrants
Road Creek		Potential dry hydrants

CHALLIS

Summary - The fire chief felt there is not a major hazardous fuels issue in the wild land / urban interface serviced by the Challis Fire Department or the North Custer Fire District. Most areas are intermixed sagebrush/grass/rock. High fuel levels in the Garden Creek watershed are a concern because it provides the municipal water supply for Challis. Inadequate water sources are a major concern across the District. Poor access exists to some sites. There is a concern about the vulnerability of the single source power line that brings electricity into Custer County. The Chief expressed a concern about recruiting new volunteers. The Chief also suggested that the Fire District and agencies host joint wildfire response exercises.

LOCATION	CONCERNS	OPPORTUNITY
Garden Creek Watershed	High fuels, Challis water supply, poor access	Control burn
City of Challis	Water capacity	
Pahsimeroi	Long response time, access to existing water sources	Evaluate & harden existing water sites, develop new water sources
Round Valley	Response time	Develop water sources
Challis Creek		Mosquito Flat Res. Agreements with land owner
Corrigan Lane		Corrigan Spring development
Custer Motor Way	Historical sites	
Tunnel Rock		Develop water supply
Hwy. S. 75 River	Protection Power Line Single	
Hwy 93 N		
Spar Canyon		Mine, Power Line
Morgan Creek	Dead trees, 2-3 houses	
Grouse Creek	Repeater site	
Mosquito Ranch	Fuels	

MACKAY

Summary - A build up of hazardous fuel levels that threaten homes in the wild land/urban interface were identified at several locations. Access problems including narrow roads and bridges were identified. The lack of accessible, dependable water supply is a major concern. The Forest Service has completed some fuels inventories and is working on the Copper Basin Front Wildfire Mitigation Plan.

LOCATION	CONCERNS	OPPORTUNITY
Municipal Water Supply		Forest Service Plan in process
Antelope	No fire district coverage, bridges, fuels - Sage/Timber, Access Issue, water supplies down lower	Public education on the need to be in Fire District, F.S. – wild land public education in process
Twin Bridges / N. Fork	Poor access, locked community, address problem, homeowner assoc., possible growth	F.S. Plan in process
Barton Flat	Cottonwood dead tree, fuels, access	
Copper Basin	Bridges limit access, homes not occupied year around however	Need public education. There is a Homeowner Association in place
City of Mackay	Fuels, sagebrush, White Knob Mtn. heavy fuels, Big issue, empty lots – Smelter Road, Water Supplies	Look at dry hydrant areas
Res. To Leslie		
Wildhorse	Fuels	
Barton Flat / Bartlott Pt.	Fuels, Need water supply, dry wells	
Leslie	Fuels River Bottom, Some access problems	
Pass Creek	Access issue, fuel loads, water, access, potential for subdivision	
Alder Creek	Made provisions for water access, access fuel around, fuels lower part	
Waste Site	No Concern	
Dickey Station	No concern	
Wiley's	No concern	

General Comments:

- New subdivisions need to provide water sources for fire protection.
- Need ID boundaries of areas of concern
- Sprinkler adapter – 3 different kinds, need uniformity
- Contact Irrigation Company for access for Fire Department
- Copper Basin Front Wildfire Mitigation Plan F.S.
- Excavation Plans need to be developed
- Forest Service GPS Draft Sights – Agreements are in place with private to use water source

STANLEY BASIN

Summary - There is considerable concern about the "red fuels" issue in the wildland/urban interface. In some areas the fuels were described as extreme placing numerous homes and recreational developments at high risk from wildfire. Developing evacuation plans is a high concern for the fire chief and agencies. Some developments may not be defensible do to narrow roads, bridges, one way in / one-way out, poor water supplies. The power line serving Stanley Basin crosses high fuels areas. There is a need for homeowner education programs, fuels reduction projects, developing new water supplies, developing evacuation plans, rural addressing, and improving communications.

LOCATION	CONCERNS	OPPORTUNITY
Fisher Creek -100 lots with 60% occupancy,	High risk, one way in one way out, water supply is minimal, river is source, no winter access	There is a homeowners association.
Iron Creek -120 lots all in the trees	Extreme risk, human caused fires, one way in one way out, road maintenance issues, some winter plowing, minimal water supply in the summer, no cell phone coverage, trailhead, evacuation plan needed, no home owners association.	Cistern plan underway
Boundary Creek	Extreme fuels, bridge not passable for fire equipment, through access one way, water available at the river, no winter access, power line.	$60,000 fuel reduction plan under way At the Stanley Basin Cabins - IDL grant. There is a homeowners association
Casino Creek, approximately 20 houses	High risk from fuels, no fire district, non-defensible, power line for Stanley goes through Casino Creek.	
Red Fish Lake Complex	Extreme fuels, one access road (two lane), water supply good, high number of people in the summer, campgrounds, permitted lodge and housing, trail head for back country, no fire district, evacuation plan needed, communication concerns.	
Crooked Creek	High fuels that will become extreme, one way in one way out, minimal water supplies.	
Yankee Fork	No fire district	
Lower Stanley	• Low fuels, houses too close together, Good water supply	

Stanley Lake	High fuels, one access in, two lanes paved, summer access only, evacuation plan needed, campground, trailhead.	Good water supply
Cow Camp	Some houses in the trees	
Forest Service Complex	Moderate fuels, have a hydrant system	
City of Stanley	Low risk from fuels	Good water source, cisterns being developed.
Boy Scout tent structures		
Petit Lake (24 houses) **Valley View** (60 houses)-	Mutual aid agreements could tie up resources needed in Custer County.	
Smiley Creek	Blaine County, no coverage, FS looking at grants for water sources	

Appendix 4

Public Participation Survey

Custer County Questionnaire
Wildland Fire Hazard Mitigation Planning

This questionnaire is being provided to you on behalf of the Custer County Commissioners to solicit feedback, and aid in the development of the Custer County Wildland/urban interface fire Mitigation Plan. The plan seeks to reduce the threat of wildfire damage within the areas of wildland/urban interface through hazard identification, vulnerability assessment and risk mitigation. Mitigation measures will include, but are not limited to, wildfire prevention through reduction of fuels, increasing fire protection capabilities of communities, and public education. The goal of the program is to decrease the cross over of wildfire spreading from public lands onto private or community lands.

You can help in this countywide effort by providing valuable information and comments, which will be used during the assessment process and in the development of potential mitigation alternatives for your community.

You may either mail this questionnaire to the address provided; or you may drop it off at your local fire department.

---

1. Which Fire District do you reside in?

   ☐ Clayton ☐ Challis ☐ Stanley ☐ Mackay

2. What specific locations within your community do you think are currently being exposed to an extreme fire hazards and pose a wildfire risk to homes or property?

3. Have you participated in community-sponsored activities to reduce the risk of wildland fires or to protect residents from wildfires spreading from public land to private?

4. Are you aware of any fire reduction education programs in your community? If so, which ones?

5. Do you think these education programs are beneficial?

   ☐ Yes ☐ No

6. How can they be improved?

7. Do you know what to do if a wildland fire affects your community?

☐ Yes ☐ No

8. Would a web page with wildland fire information help keep the community informed?

☐ Yes ☐ No

9. If we have questions or would like more information, can we contact you?

☐ Yes ☐ No

10. Are you willing to support/participate in wildland risk mitigation activities?

☐ Yes ☐ No

(Optional)

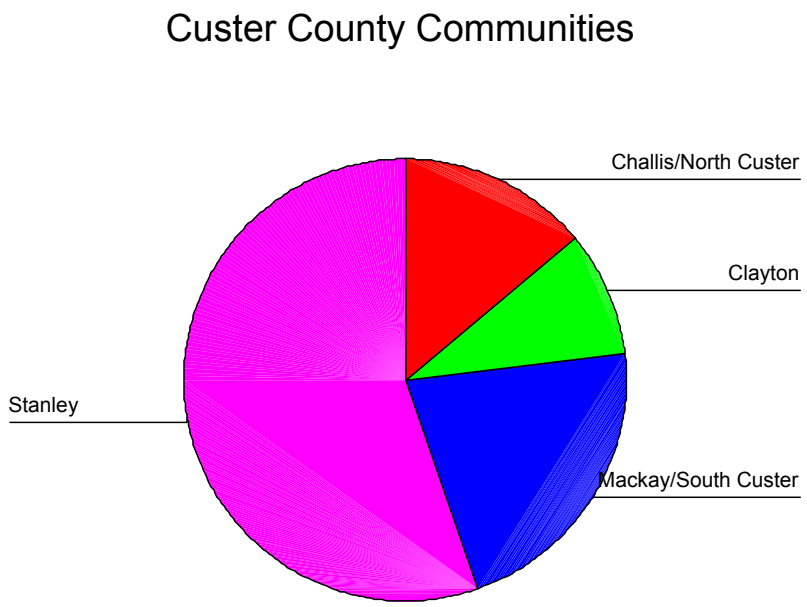
Name:
Address:
E-mail:
Phone:

Additional questions or comments can be provided to Emergency Response Solutions, Project Manager Wes Jones 208-552-2627 or wjones@ida.net.

Custer County Wildland/Urban Interface
Mitigation Planning Questionnaire Results
6.5% Return Rate
February 2, 2004

1. Which Fire District do you reside in?

Custer County Communities	Frequency	Percent	Cumulative Percent
Challis/North Custer	9	13.8	13.8
Clayton	6	9.2	23.1
Mackay/South Custer	14	21.5	44.6
Stanley	36	55.4	100.0
Total	65	100.0	



2. What specific locations within your community do you think are currently being exposed to an extreme fire hazards and pose a wildfire risk to homes or property?

Locations of Hazards	Frequency	Percent	Cumulative Percent
Listed Location	45	69.2	69.2
Did not list location	20	30.8	100.0
Total	65	100.0	

Comments:

- Brown tress, SNRA between Peach Creek Treon Creek, and Gardner Creek; either side of the Salmon River and along HWY 75.
- Any location where 30% or more trees are dead due to Pine Beetle and other causes.
- South end of the Crooked Creek Subdivision, lot of dying trees.
- Building (old barn) "old stage coach stop" and the land at Thompson Creek.
- All throughout Stanley where there are dead trees because of the Pine Beetle.
- Trees and Cabins in Trees
- By the Mountains
- Where ever they don't graze cattle

- The entire forest! My property is adjacent to the National Forest on the west boundary.
- Surrounding Forest Service Lands, especially dead timber in forests.
- Big Casino Campground, very close to private property
- Beetle Problem
- Stanley, Redfish, Petit, and Alturas Lake areas with bug killed trees.
- Probably only a forest fire or a fire pit
- Don't know of any
- Along Salmon River below Stanley Basin Cabin Sites
- River bottom land along the Big Lost, heavy brush and dead tree load
- Trees, sagebrush (BLM Lands) adjacent to the City property
- Smelter Road towards bridge that leads traffic up Mine Hill Road.
- All of the forest is in big danger
- Barton Flats Area along Fish Hatchery Road, Chilly Road
- Between the Ranger Station and Squaw Creek bridges because of the wind west to east on the River.
- Iron Creek, Fisher Creek
- 5 miles south up Stanley Basin, both sides of the highway
- Stanley Basin Cabin Sites, Fish Hatchery, Redfish Lake
- We have removed all dead and infected trees within our subdivision. This helped, but forest service needs to continue to reduce fuels around us.
- Willows along north fork of the Big Lost
- Beetle Pine Trees
- Dry fields and grasslands
- Don't know
- Christopher James Resort, with people hiking through woods that have no interest or knowledge of preservation or private property
- Don't know
- Alturas Lake Area
- Iron Creek Area
- Forest Land- the usual, Fisher Creek, Sagebrush bench to the south
- Iron Creek
- Bark Beetle damaged (dead) trees along HWY 75 from Galena Summit to below Yankee Fork (Sunbeam) and HWY 21 west from Stanley. The dead trees need to be cut and removed.
- Unknown
- Not sure
- The whole 153 acres that comprise the homes and properties of the Iron Creek Homeowners Association.
- My property is located in the Stanley Subdivision near Iron Creek and borders the National Forest on the west side. Until the dead and dying trees are removed my property is probably lost in the event of a forest fire. It is apparent that the Forest Service could care less about private properties by the way they have responded to the red tree problem. If a fire should occur on the west or south of the subdivision chances are most of the homes in the area would be lost.
- Timber stands along Job Creek Road, beetle kill in Iron Creek Subdivision
- Iron Creek, Crooked Creek, Redfish, Stanley Lake Area, Basically most of the SNRA
- Not Aware of any
- Forest Service Property to Crooked Creek
- Pine Beetle Infestations, Homes in wooded areas w/o 30'buffer zones between wood and house, Hunting areas, Campfire in undesignated fire pits, Mike Hill four wheelers
- None
- None
- Trash fires
- Open Campfires on the Robinson Bar road in Summer, also White Cloud Area
- Everywhere there is lodgepole pine
- Dead Trees on the river, Antelope Creek campground underdeveloped on Antelope Creek, no fire regs, they should make the people use the developed campground for this reason and because of contamination

of ground water as there are no outhouses and they drive ATVs around and around trampling vegetation compacting soil, ATVs over vegetation risking fire hazards and causing more permanent scaring of the land
- Open campfires in drought summers

3. Have you participated in community-sponsored activities to reduce the risk of wildland fires or to protect residents from wildfires spreading from public land to private?

Participate in Hazard Reduction	Frequency	Percent	Cumulative Percent
Yes	14	21.5	21.5
No	51	78.5	100.0
Total	65	100.0	

4. Are you aware of any fire reduction education programs in your community? If so, which ones?

Fire Education Programs	Frequency	Percent	Cumulative Percent
Yes	13	20.0	20.0
No	52	80.0	100.0
Total	65	100.0	

Comments:
- No, I don't think that there has been any.
- Not aware of any
- There are none
- Didn't know there was any.
- The Sawtooth National Recreation Area representatives made a presentation to our area last August.
- Not in Stanley
- Attended Forest Service and Department of Lands Seminar
- Fisher Creek Group
- I have gone to some of the meetings in Stanley that the state and forest service put on.
- I live in Nevada so I am not aware
- No, we are presently building a home in Stanley
- F. S. – Sawtooth NF community phone tree
- Not aware
- Specialists from the forest service stopped by our house last summer when it looked, briefly, that a fire down Highway 21 might turn towards Stanley
- Forest Service/National Forest Brochures and Campfire Safety in Wilderness areas
- USFS has been successful prescribing burns and those should continue

5. Do you think these education programs are beneficial?

Education Beneficial	Frequency	Percent	Cumulative Percent
Yes	39	60.0	60.0
No	26	40.0	100.0
Total	65	100.0	

6. How can they be improved?

How Can They be Improved	Frequency	Percent	Cumulative Percent
Made Comment	18	27.7	27.7
Did Not Make Comment	47	72.3	100.0
Total	65	100.0	

Comments:
- By informing all property owners of the programs and when and where they can be attended.
- Start and education program

- More information
- Cut down the dying and dead trees
- Maybe more publicized
- Don't know
- Let more people be made aware they exist
- Not sure
- Keep telling the people how to prevent and show some films
- Communication with homeowners
- Better advertising about meetings
- Information published regularly in Challis Messenger
- I don't know
- Don't know
- An annual community meeting for neighborhood residents in Fisher Creek
- More trimming of beetle kill tress and overgrown forests, plus less hassle for trimming projects, firebreaks, near community etc.
- Offer Fire pans and/or asbestos blankets for sale at Stanley Ranger Station
- Ranger visits were helpful
- Lived through the San Bernadino fires of 2003, although Mackay does not have the TV coverage for Emergency routes out a posted and published emergency plan
- It was truly frightening to realize that entire streets were burning in San Bernadino w/o a single fire truck near by – winds were so dangerous. Fire creates its own weather; the 2000 burn in Salmon had a tornado run thru a camp. Fire fighting in Custer County has such limited resources, w/drought, it's conceivable to have the entire County burn – BUT – where previous burns have taken place, a new wildfire has less fuel. The key is to not let a prescribed burn blowup. Tourism is the main thing Custer County has going for it – Federal lands has our policy hands tied. Your best bet is to make residents aware of emergency exists, and animal safety (horses, stock) on short notice.
- Don't know
- By seeing one advertised

7. Do you know what to do if a wildland fire affects your community?

Do wildfire Effect Your Community	Frequency	Percent	Cumulative Percent
Yes	30	46.2	46.2
No	35	53.8	100.0
Total	65	100.0	

1. Would a web page with wildland fire information help keep the community informed?

Would a Web Page be Effective	Frequency	Percent	Cumulative Percent
Yes	51	78.5	78.5
No	14	21.5	100.0
Total	65	100.0	

9. If we have questions or would like more information, can we contact you?

Can We Contact You	Frequency	Percent	Cumulative Percent
Yes	55	84.6	84.6
No	10	15.4	100.0
Total	65	100.0	

10. Are you willing to support/participate in wildland risk mitigation activities?

Are You Willing to Participate	Frequency	Percent	Cumulative Percent
Yes	48	73.8	73.8
No	17	26.2	100.0
Total	65	100.0	

Cross Tabulations:

Custer County Communities * Do Wildfires Effect Your Community

		Do wildfire Effect Your Community		Total
		Yes	No	
Custer County Communities	Challis/North Custer	4	5	9
	Clayton	4	2	6
	Mackay/South Custer	3	11	14
	Stanley	19	17	36
Total		30	35	65

Custer County Communities * Locations of Hazards

		Locations of Hazards		Total
		Listed Location	Did not list location	
Custer County Communities	Challis/North Custer	2	7	9
	Clayton	4	2	6
	Mackay/South Custer	10	4	14
	Stanley	29	7	36
Total		45	20	65

Custer County Communities * Participate in Hazard Reduction

		Participate in Hazard Reduction		Total
		Yes	No	
Custer County Communities	Challis/North Custer		9	9
	Clayton	1	5	6
	Mackay/South Custer		14	14
	Stanley	13	23	36
Total		14	51	65

Custer County Communities * Fire Education Programs

		Fire Education Programs		Total
		Yes	No	
Custer County Communities	Challis/North Custer	2	7	9
	Clayton		6	6
	Mackay/South Custer	1	13	14
	Stanley	10	26	36
Total		13	52	65

Custer County Communities * Education Beneficial

		Education Beneficial		Total
		Yes	No	
Custer County Communities	Challis/North Custer	5	4	9
	Clayton	3	3	6
	Mackay/South Custer	8	6	14
	Stanley	23	13	36
Total		39	26	65

Custer County Communities * Would a Web Page be Effective

		Would a Web Page be Effective		Total
		Yes	No	
Custer County Communities	Challis/North Custer	7	2	9
	Clayton	4	2	6
	Mackay/South Custer	10	4	14
	Stanley	30	6	36
Total		51	14	65

Custer County Communities * Are You Willing to Participate

		Are You Willing to Participate		Total
		Yes	No	
Custer County Communities	Challis/North Custer	5	4	9
	Clayton	5	1	6
	Mackay/South Custer	8	6	14
	Stanley	30	6	36
Total		48	17	65

Appendix 5

Sawtooth National Recreation Area
Fire Prevention Team Reports

Sawtooth Fire Prevention Education Team
Stanley Basin/Sawtooth Valley
Final Report
August 6-20, 2003

Contents

Introduction…….....3

Team Members……...4

Communication Plan…….……5

Objectives and Accomplishments…….8

Acknowledgements……..…..……11

Appendix A Homeowner Issues……..12

Appendix B Homeowner Questions……..…….…….13

1. Introduction

Background

The Sawtooth National Forest was experiencing severe drought conditions throughout the forest. ERC values were above the 97th percentile, with 1000-hour fuels showing 9-11%, and live fuel moistures ranging from 70-134%. The pine beetle epidemic around the Stanley Basin and the high number of homes in the wildland urban interface increased the potential for large wildfires that put community and firefighter safety at risk. In addition, there is high interest in this area and abandoned campfires were one of the main ignition causes in 2002. The long-term fire weather forecast was predicted to remain hot and dry, with the possibility of extreme fire behavior.

Due to these variables, the Sawtooth National Forest requested severity funding to order a National Fire Prevention Team. The team was tasked with addressing the fire potential and looking at reducing the number of human-caused ignitions on the Sawtooth National Forest and its neighbors. Homeowners in this area were very concerned about the red tree problem and the high potential for a wildfire.

Report Contents

This report contains the following major sections:

- Communication Plan: This plan describes the principal objectives, key messages, and target audience.
- Tasks and Accomplishments: This section discusses emphasis areas and lists the major accomplishments.
- Appendix: This section includes supplemental report information.

Team Members

Sue McCourt, Team Leader
Fire Prevention Officer
Beckworth Ranger District
Plumas National Forest
P.O. Box 7, 23 Mohawk Road
Blairsden, CA 96103
Phone: (530) 836-7136
FAX: (530) 836-0493
Email: smccourt@fs.fed.us

Lola Bird
Public Affairs Specialist
Utah State Office
Bureau of Land Management
324 S. State Street, Suite 301
Salt Lake City, UT 84111
Phone: (801) 539-4033
FAX: (801) 539-4013
Email: Lola_Bird@blm.gov

Roger W. Lane
Chief Forest Ranger, Sr.
Georgia Forestry Commission
5707 Lula Rd.
Lula, GA 30554
Phone: (770) 869-3641
FAX: (770) 869-0183
Email: rwlane@gfc.state.ga.us

Janice Madden
Fuels Technician
Ochoco National Forest
3050 NE Third St.
Prineville, OR 97754
Phone: (541) 416-6575
FAX: (541) 416-6798
Email: jmadden@fs.fed.us

2. Communication Plan

Objectives

1) Work with the Sawtooth National Forest to assess fire prevention needs.
2) Develop emergency response plans for wildland urban interface, coordinating with ranger districts and cooperators.
3) Raise public awareness of the critical burning conditions and the effect it could have on their communities, coordinated with the ranger districts and all cooperators. Encourage property owners and special use permittees to take responsibility for reducing fire risks on their property.
4) Coordinate efforts with the Red Tree Team Leader.
5) Assist ranger districts with development of prevention materials and events as needed.
6) Maintain flexibility within the scope of the Sawtooth's needs.
7) Coordinate all media efforts with the forest public affairs office.
8) Stay within pre-identified budget constraints.
9) Maintain timely, courtesy contacts with elected officials – Custer County Commissioners, City of Stanley (Mayor, City Council)

Key Messages

The team worked with staff members from the Stanley Ranger Station to develop the following key messages:

Situation:

- The bark beetle infestation is a natural cycle. This problem occurred in the same area approximately 80 years ago.

- There is no way to stop the bark beetle epidemic.

- The potential of a high intensity wildfire is increasing due to high mortality of timber stands and natural fuel accumulation.

Forest Service Response:

- The Forest Service is taking a proactive approach to the problem by conducting hazard fuel reduction projects on 2,465 acres of National Forest land.

- Treatment methods will include pruning low-lying branches up to 10-15 feet in height, removing dead and down trees, piling and burning slash, cutting back tall shrubs, and encouraging the use of native fire safe plants for landscaping.

- Treatments will include areas within the immediate vicinity of structures and developments such as summer home areas, campgrounds, lodges, fences, and private land within 120 feet.

- An estimated 3.3 mmbf (million board feet) of lodgepole pine would be harvested during the next five years.

Homeowner Responsibility

- Homeowners have responsibility for creating defensible space on their own property. This will help defend their home against wildfire as well as provide for firefighter and public safety should the home need to be defended against a wildfire.

Guidelines for removal of dead trees next to structures on private property for defensible space within the SNRA:

- Homeowners have a blanket authorization to clear live and dead vegetation from the first 30' around buildings or improvements on non-easement private land *where it is not visible from a primary travel corridor.*
- If building is visible from primary travel corridor, Tom Streit must be involved in that approval.

Guidelines for removal of dead trees next to structures from Recreation Residences and Organizational Camps under Special Use Permit within the SNRA:

- Permittees have a blanket authorization to clear dead vegetation (trees, hanging limbs, leaves, and grass) from the first 30' around buildings or improvements.
- Green trees not affected by beetles may remain, but need to have branches removed within 15' of the chimney or building, whichever is closer.
- If building is visible from visually sensitive areas such as recreation sites, lakes, rivers, and roads commonly traveled by recreationists, Tom Streit must be involved in that approval. *In order to protect cavity nesting birds species, trees cannot be removed between May 15th and July 30th.* However, if reviewed and approved by the Forest Service wildlife biologist, the tree may be removed.
- *Permit holder may remove leaning trees, dead or alive that are beyond 30' defensible space that pose a threat to cabin or improvement.*

Note: The above information regarding SNRA regulations was the initial direction that the team was working under. Due to the red tree issue, these guidelines have been revisited by SNRA staff and clarification on direction has been made.

Target Audiences (In Order of Priority)

- Iron Creek and Goat Creek subdivision
- Redfish Lake Area
- Crooked Creek subdivision
- Stanley Basin Cabin Sites (Buckhorn)
- Fisher Creek subdivision
- Pettit Lake summer homes
- Valley View Summer Homes
- Smiley Creek

Highlights of Methods and Products

The team produced the following materials:

- **Wildland Fire Preparation and Evacuation Plan:** This brochure is in the process of being distributed to all homeowners in each of the subdivisions on the priority list.

- **Wildland Fire Evacuation Response Plan:** This document was prepared for the use of the Sawtooth National Forest and local officials.

- **Subdivision Evacuation Maps:** These maps will be inserted into the wildland fire preparation and evacuation plan.

- **Redfish Lake Area Evacuation Map:** This shows the organizational structure that would be needed to evacuate the Redfish Lake area.

3. Tasks and Accomplishments

The following tasks were accomplished for each objective:

Objective 1: Assess fire prevention needs

Accomplishments:

- Consulted with local officials including Mayor of Stanley, Blaine County Sheriff, Blaine County Disaster Services, Custer County Sheriff, Custer County Disaster Services, Sawtooth Valley Rural Fire Department, Sawtooth North Zone fire and fuels management staff and local LEO to assess needs and gather input for the wildland fire evacuation response plan.
- Made contact with Organizational Camps.
- Met with Jeff Clegg, Redfish Lake Lodge Manager, to assess their needs.
- Reviewed current fire prevention materials in use.
- Received briefing on SNRA regulations.
- Assessed local homeowner needs by reaching out to various communities in the area. The team acted as a resource for homeowners to express issues, concerns, and possible solutions for how to deal with defensible space and the red tree problem.

Objective 2: Develop Evacuation Plans for Wildland/Urban Interface Areas

Accomplishments:

- Developed format and components for plan.
- Developed ICS type command organization structure for evacuation.
- Contacted cooperators for input.
- Developed "Wildland Fire Preparation and Evacuation Plan" for homeowners.
- Developed "Wildland Fire Evacuation Response Plan" for agency officials.
- Developed maps for specific subdivisions.
- Obtained input from homeowners/resorts.

Objective 3: Raise Public Awareness

Accomplishments:

- Established a key contact with each residential area/subdivision on our priority list. Met with each key contact to tour and map their subdivision. By working with key contacts in this manner, homeowners are aware of their responsibilities and have a sense of ownership in their plan. Key contacts have agreed to act as ambassadors in promoting community fire safety and defensible space awareness to absentee homeowners.

- Interviewed homeowners on issues, barriers, ideas, and solutions to enhance community fire safety. These issues were brought forward to the SNRA staff.

- Provided numerous homeowner consultations – residents expressed the need for a place to deposit slash.

- Interviewed homeowners regarding concerns/questions/ideas relating to making their subdivision/homes more fire safe.

- Provided Jack Cohen's video "Wildfire: Preventing Home Ignitions" to homeowner groups for internal distribution.

- Developed digital photo library for future needs.

- Initiated a plan to upgrade bulletin boards in subdivisions with red tree/defensible space/slash treatment information.

- Assisted homeowners by putting them in touch with Julie Thomas to help them in preparing National Fire Plan grant submissions.

Objective 4: Coordinate Effort with Red Tree Group

Accomplishments:

- Met with members of the Red Tree team to discuss public concerns, regulations, project timeframes, and homeowner notification on project.

- Obtained direction from SNRA staff regarding SNRA regulations pertaining to hazardous fuel removal.

- Pulled information out of the Red Tree EA for use in the Communication Plan.

- Provided a forum for Red Tree representatives to provide updates on fuel reduction efforts by involving them in homeowner meetings.

Objective 5: Assist Ranger Districts with fire prevention material and events

Accomplishments:

- Developed "Wildland Fire Preparation and Evacuation Plan" for homeowners.
- Developed "Wildland Fire Evacuation Response Plan" for agency officials.
- Purchased copies of the Jack Cohen video "Wildfire: Preventing Home Ignitions" for use by the Forest and homeowners.
- Provided additional copies of "Living With Fire" tabloid for distribution to Forest and homeowners.
- Created maps for the following: all eight subdivisions on the priority list plus the Cow Camp Area, Homestead subdivision, and Cabin Creek Organization Camp.
- Conducted homeowner meetings to discuss defensible space and fuels treatments.
- Provided fire information to the Community of Stanley and surrounding areas during the first few days of the Canyon Creek incident.

Acknowledgements

The team would like to acknowledge the following individuals for their assistance in preparing the maps and plans for areas in the Stanley Basin/Sawtooth Valley.

Jim Alexander

Michelle Erdie

Susie and Don Evans

Matt Filbert

Andy Gunderson

Jessica Holmes

Gary and Connie Kohler

Kelly Lewis

Steve Rogers

Joyce and Tom Vietor

Ed Waldapfel

Ruthie Wooding

Breck Young

Homeowner Issues Appendix A

Issues from Homeowners	Iron Creek	Redfish Lake	Crooked Creek	Buckhorn	Fisher Creek	Pettit Lake	Valley View	Smiley Creek
Evacuation Planning	X	X	X	X	X	X	X	X
One way in and out	X	X	X		X	X		
Locked gates on ranches (Emergency Egress)	X							
Would like punitive powers for non-compliance by FS	X							X
More info on defensible space	X	X	X	X	X		X	X
Lack of knowledge on local fire behavior	X	X	X	X	X		X	X
Absentee homeowners unaware of problem	X		X	X	X			X
Slash disposal (dump getting filled up)	X	X	X	X		X	X	X
Lack of updates on Red Tree Project – specifics on fuel break locations, treatment along roads, and projected timetables for completion	X	X	X	X			X	X
Width of access road – single lane will create bottleneck	X	X	X	X		X		
Potential power shut-off by local power company (loss of water at residence for protection)	X		X	X		X	X	X
Concerned that campfires are allowed in campground above subdivision	X		X	X				
Afraid to burn			X	X	X		X	X
Lack of follow-up by FS								X
No structure protection					X	X	X	X

Questions from Homeowners	Iron Creek	Redfish Lake	Crooked Creek	Buckhorn	Fisher Creek	Pettit Lake	Valley View	Smiley Creek
Does FS have own lock on ranch gates?	X							
Can FS institute punitive powers for property owners that don't reduce Red Tree fuels on their property?	X							X
Dump is only open 2 days per week. Is there another location to get rid of slash?	X		X				X	X
Need help with grant application: -Not getting response from HFT project manager -Don't know cost per acre for fuel treatment	X		X		X			
Does the FS have a chipper to loan out to homeowners?	X						X	X
Does the FS have a dump truck to loan out to homeowners?	X							
Can a water district apply for a national fire grant?								X
Has my application for permission to install a 500 gallon per minute well been approved?								X

Sawtooth Fire Prevention & Education Team 2
Stanley Basin/Sawtooth Valley
Final Report
August 19 – September 1, 2003

Contents

Introduction…….....3

Team Members……...4

Communication Plan…….……5

Objectives and Accomplishments…….…….…….…..……7

Recommendations……..……8

Acknowledgements……..……..9

Introduction

Background

The second National Fire Prevention and Education Team began in Stanley, Idaho on August 19, 2003 and departed on September 1, 2003. This two-person team continued to implement much of what Team One had begun.

Most work was done with private homeowners, educating them about the importance of defensible space, answering questions about fuel treatments, potential contractors, slash disposal, and grant information and defensible space maintenance. U.S. Forest Service special use permittees at organizational camps were also contacted and similar concerns were discussed.

Report Contents

This report contains the following major sections:

- Communication Plan
- Objectives and Accomplishments
- Recommendations:

Team Members

Rich Olsen, Team Leader
Retired – Plumas National Forest
P.O. Box 31
Blairsdan, CA 96103
Phone: (530) 836-2835
Email: richolsen@hotmail.com

Kimiko Nalle
Fire Prevention Officer
Okanogan & Wenatchee NFs
P.O. Box 476
Entiat, WA 98822
Phone: (509) 784-1511
Email: knalle@fs.fed.us

Communication Plan

Objectives

1. Work with homeowner groups and special use permittees in doing fuel hazard assessments for reducing fire risks.
2. Distribute Fire Preparedness and Evacuation Plans to property owners.
3. Attend homeowner meetings and promote defensible space.
4. Develop a list of contractors who do fuel hazard reduction work.

Key Messages

Continue to implement Team One's messages:

Situation:

- The bark beetle infestation is a natural cycle. This problem occurred in the same area approximately 80 years ago.
- There is no way to stop the bark beetle epidemic.
- The potential of a high intensity wildfire is increasing due to high mortality of timber stands and natural fuel accumulation.

Target Audiences

- Iron Creek and Goat Creek subdivision
- Redfish Lake Area
- Crooked Creek subdivision
- Stanley Basin Cabin Sites (Buckhorn)
- Fisher Creek subdivision
- Pettit Lake summer homes
- Valley View Summer Homes
- Smiley Creek
- Smokey Bear Organizational Camp
- Luther Heights Organizational Camp
- Perkins Camp Organizational Camp
- Cabin Creek Organizational Camp

Objectives and Accomplishments

Objective 1: Assess fire prevention needs

Accomplishments:

- (Same as Team 1) Assessed local homeowner needs by reaching out to various communities in the area. The team acted as a resource for homeowners to express issues, concerns and possible solutions on how to deal with defensible space and the red tree problem.

Objective 2: Continue to develop evacuation information for wildland / urban interface areas.

Accomplishments:

- Developed organizational camp evacuation maps
- Obtained input from homeowners and permittees

Objective 3: Raise Public Awareness

Accomplishments:

- Attended a meeting in which Julie Thomas showed homeowners how to apply for National Fire Plan grants.
- Toured homeowner developments and tried to educate people on how to make their property more fire defensible.
- Continued to discuss with homeowners, as did Team 1, about how they can dispose of their slash.
- Provided "Wildfire: Preventing Home Ignitions" video to homeowner groups.
- Put Stage II Fire Restriction message on the continually scrolling AM 1610 radio announcement from the Sawtooth Fish Hatchery.
- Supplied the Redfish Lake Visitor Center employees with Smokey Bear pins to handout at the August 23-24 Salmon Festival in Stanley.
- Advise homeowners of where they may find contractors to do fuel cleanup work.

Recommendations

1. Continue the efforts already made with homeowners groups concerning defensible space. The team heard comment from the public that this was the best contact the Forest Service had made with the locals

2. Plan and implement a disaster drill in one of the subdivisions that will include all of the emergency services agencies in the county.

3. Distribute all evacuation plans and maps to fire suppression forces.

4. Continue to work with the Sawtooth Fish Hatchery about putting fire prevention messages on their 1610 AM radio.

5. Hire a temporary-seasonal employee at the Stanley Ranger Station to work with the private landowners concerning the red tree problem.

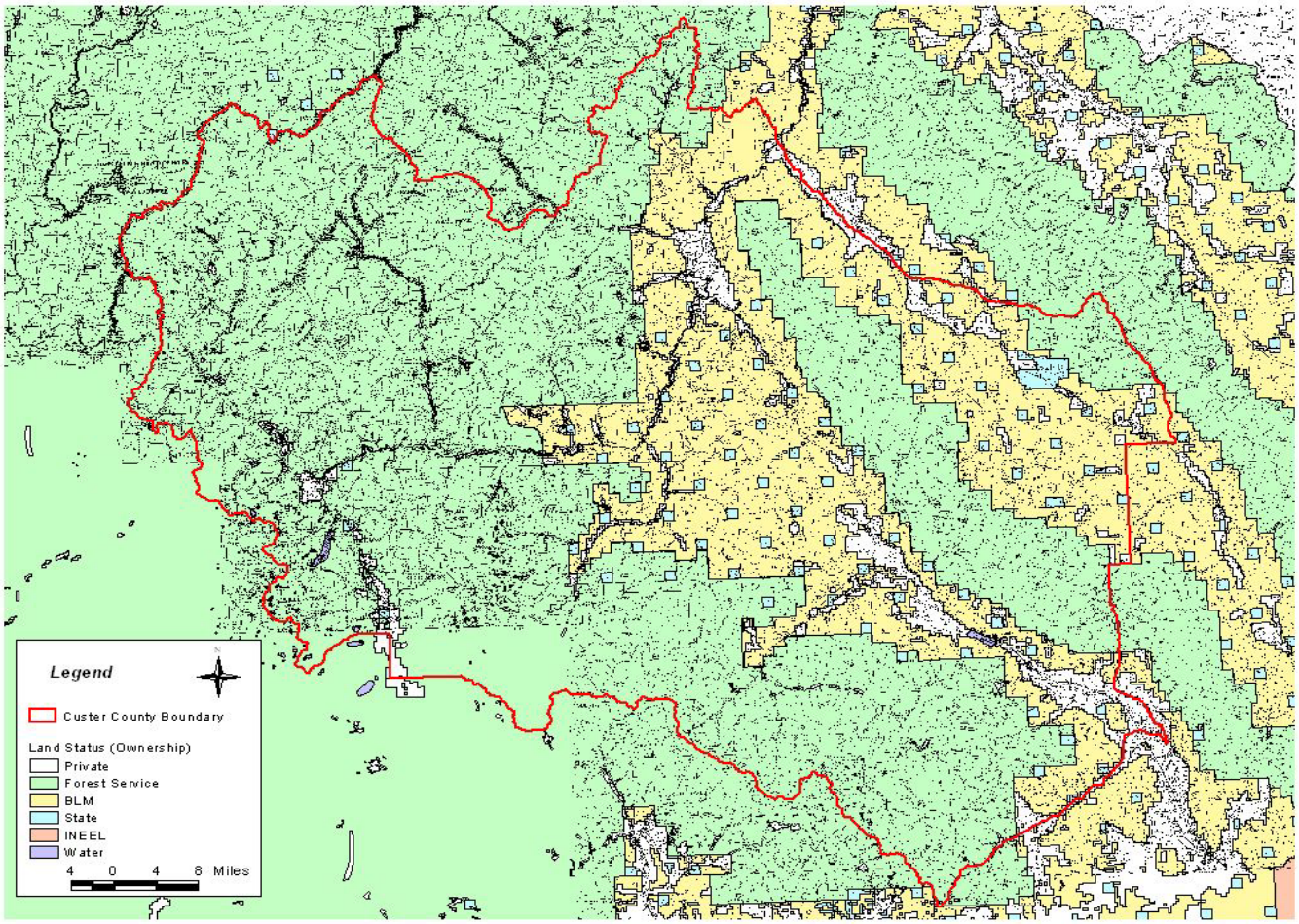
6. Have local fire suppression forces visit each of the private developments and become familiar with the areas.

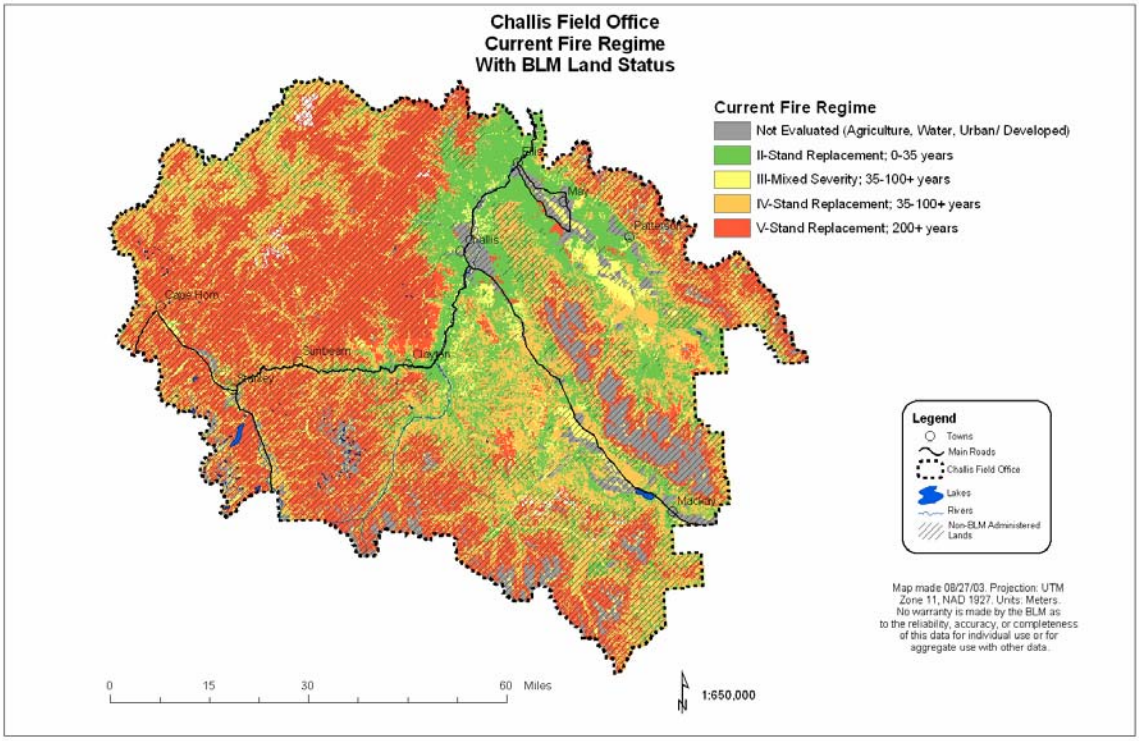
Acknowledgements

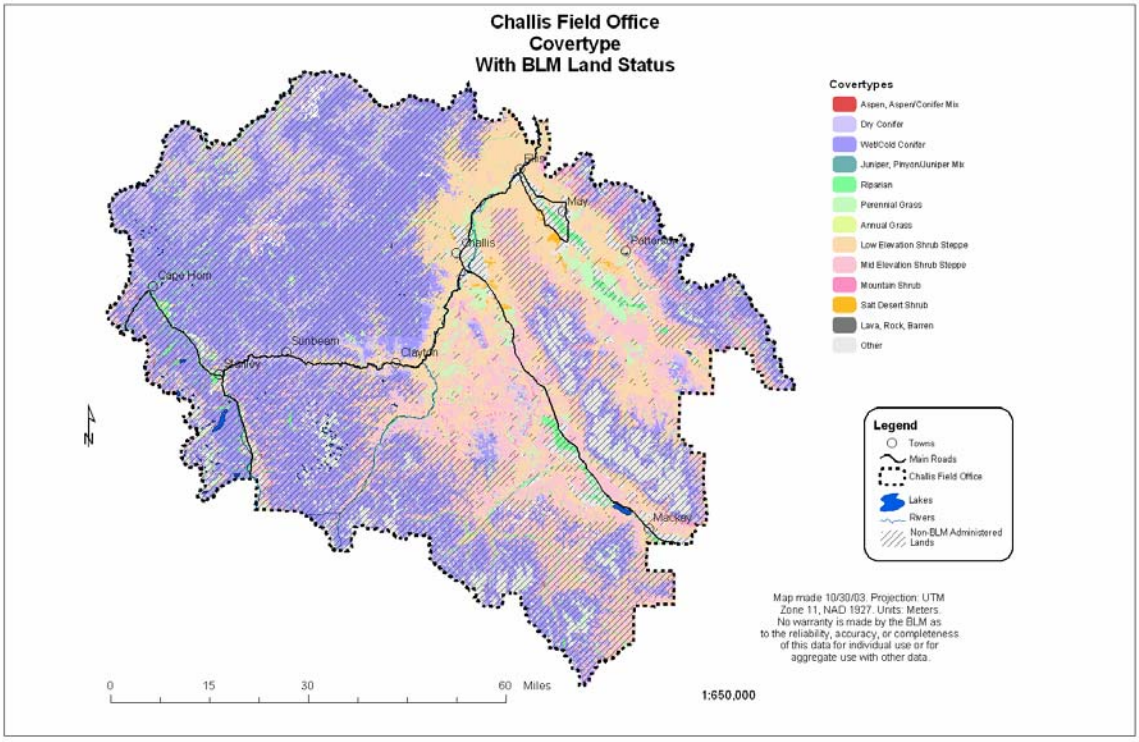
Rochelle Ahrens
Michelle Erdie
Joyce and Tom Vietor
Jessica Holmes
Tom Evans
Stanley Post Office
Eric Stand and River 1
Jeannette Hartog
Sue McCourt
Janice Madden
Lola Bird
Roger Lane

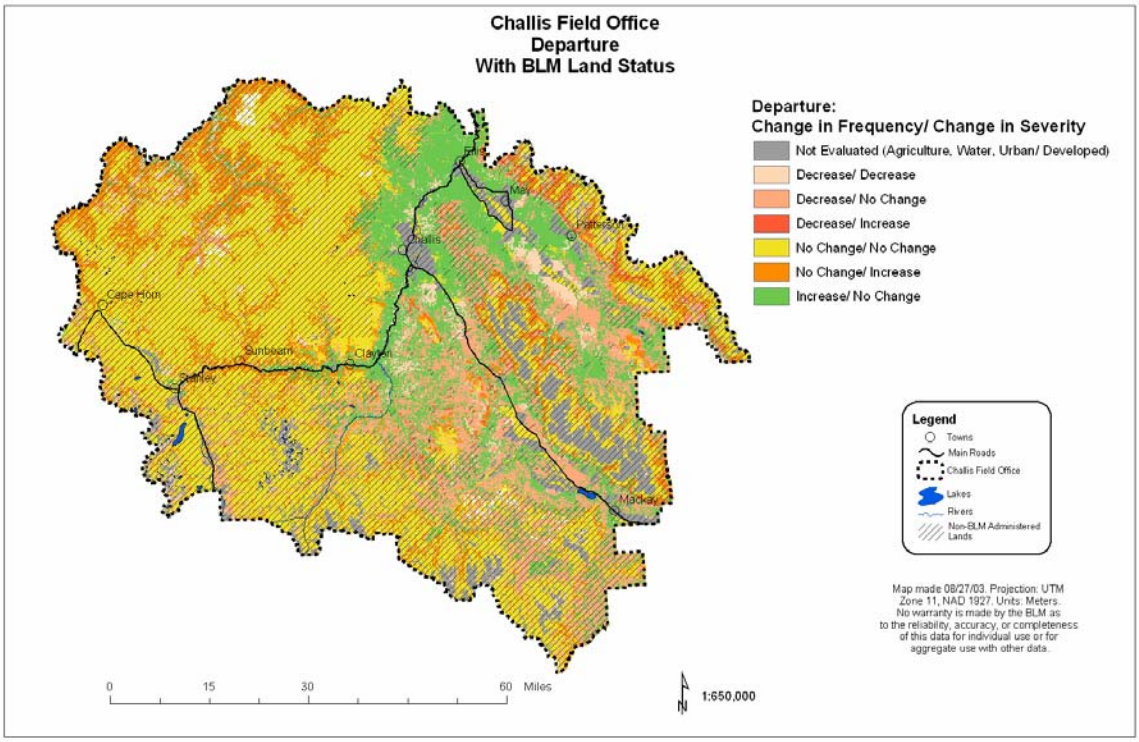
Appendix 6

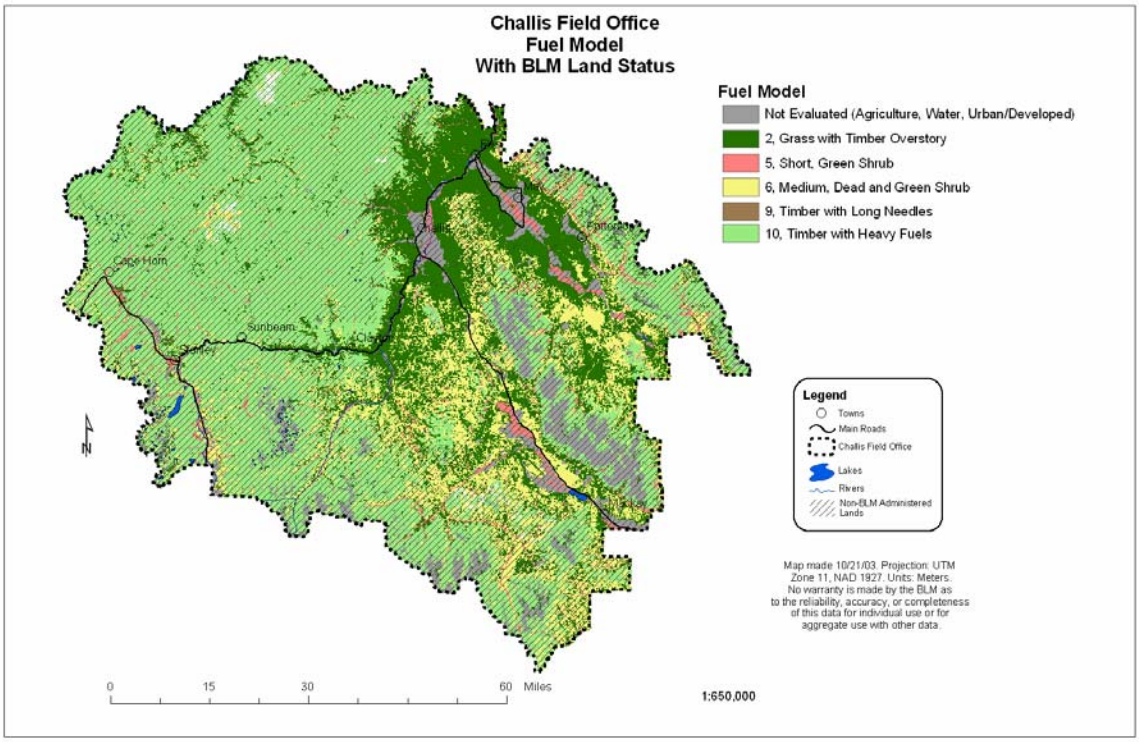
Maps

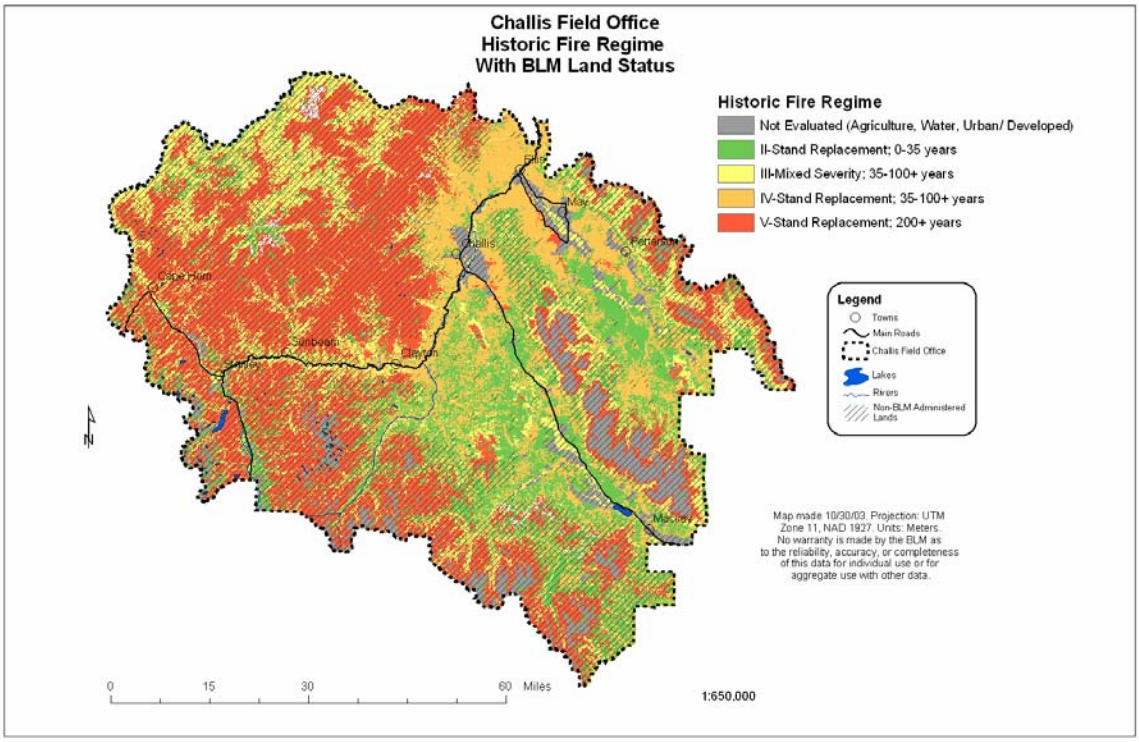

Legend
Custer County Boundary
Land Status (Ownership)
Private
Forest Service
BLM
State
INEEL
Water
4 0 4 8 Miles

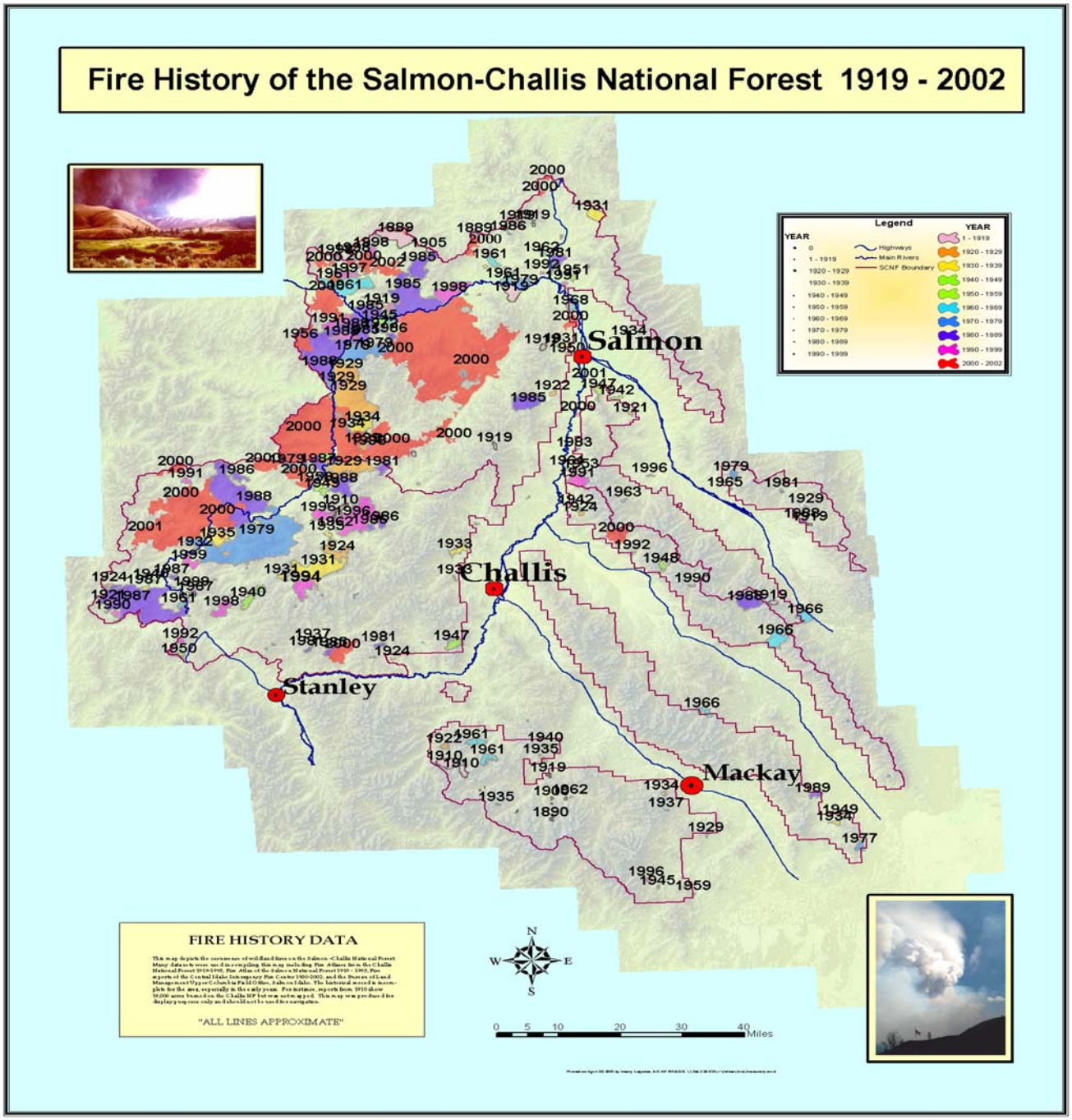

Challis Field Office
Current Fire Regime
With BLM Land Status
Current Fire Regime
Not Evaluated (Agriculture, Water, Urban/ Developed)
II-Stand Replacement; 0-35 years
III-Mixed Severity; 35-100+ years
IV-Stand Replacement; 35-100+ years
V-Stand Replacement; 200+ years
May
Challis
Patterson
Cape Horn
Sunbeam
Clayton
Stanley
Mackay
Legend
Towns
Main Roads
Challis Field Office
Lakes
Rivers
Non-BLM Administered Lands
Map made 08/27/03. Projection: UTM Zone 11, NAD 1927. Units: Meters. No warranty is made by the BLM as to the reliability, accuracy, or completeness of this data for individual use or for aggregate use with other data.
0
15
30
60 Miles
1:650,000

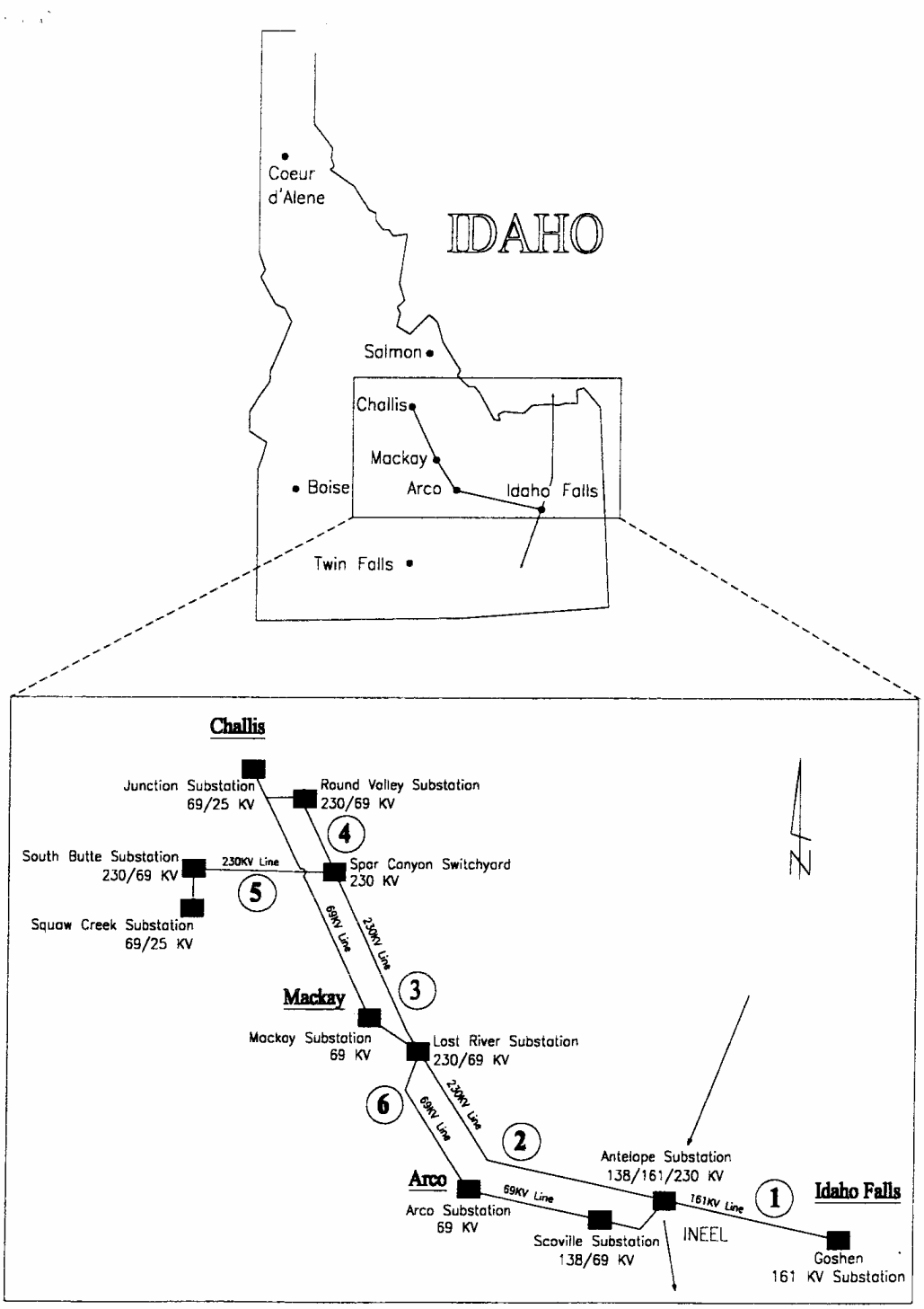

Challis Field Office
Covertype
With BLM Land Status
Covertypes
Aspen, Aspen/Conifer Mix
Dry Conifer
Wet/Cold Conifer
Juniper, Pinyon/Juniper Mix
Riparian
Perennial Grass
Annual Grass
Low Elevation Shrub Steppe
Mid Elevation Shrub Steppe
Mountain Shrub
Salt Desert Shrub
Lava, Rock, Barren
Other
May
Challis
Patterson
Cape Horn
Sunbeam
Clayton
Stanley
Mackay
Legend
Towns
Main Roads
Challis Field Office
Lakes
Rivers
Non-BLM Administered Lands
Map made 10/30/03. Projection: UTM Zone 11, NAD 1927. Units: Meters. No warranty is made by the BLM as to the reliability, accuracy, or completeness of this data for individual use or for aggregate use with other data.
0
15
30
60 Miles
1:650,000

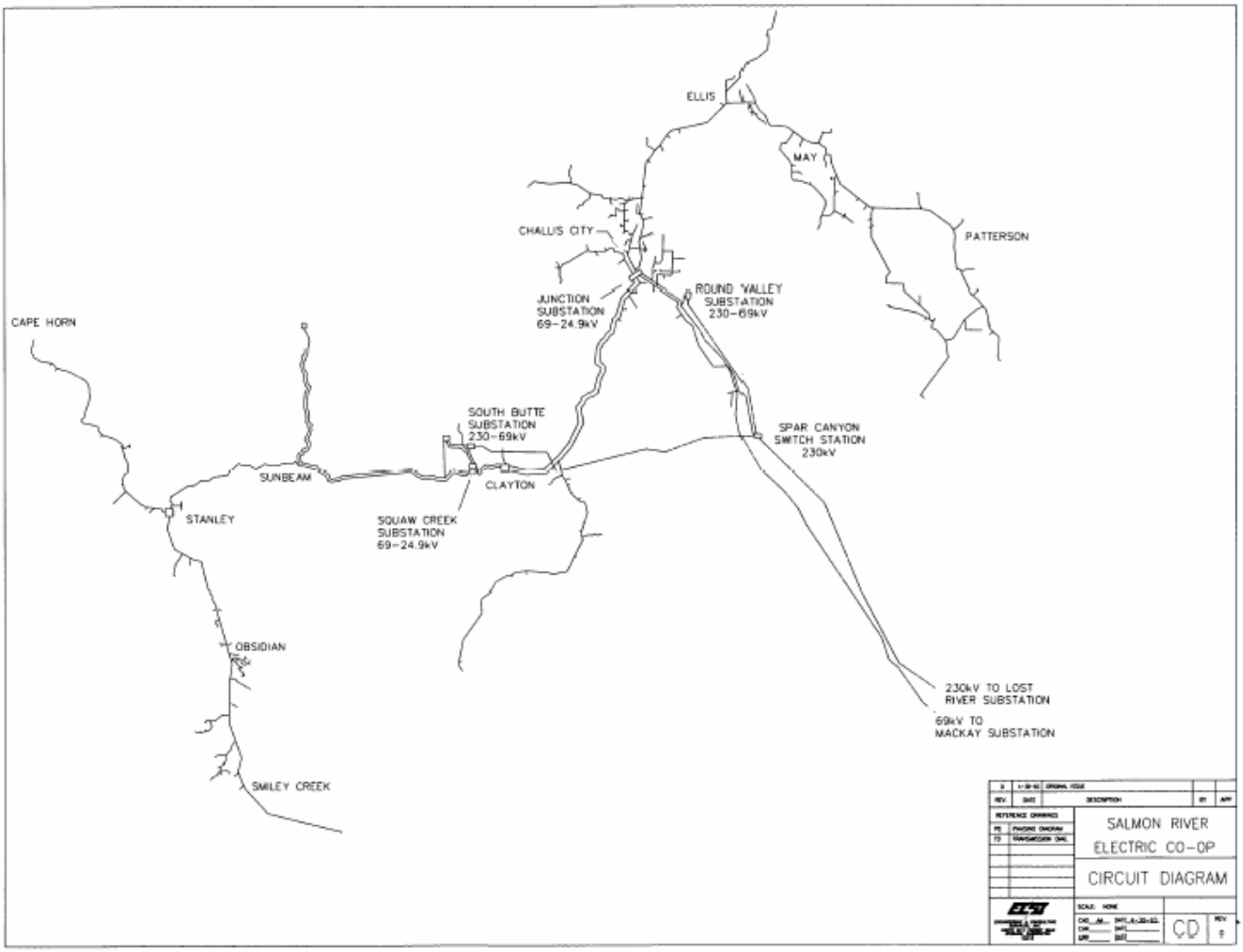

Challis Field Office
Departure
With BLM Land Status
Departure:
Change in Frequency/ Change in Severity
Not Evaluated (Agriculture, Water, Urban/ Developed)
Decrease/ Decrease
Decrease/ No Change
Decrease/ Increase
No Change/ No Change
No Change/ Increase
Increase/ No Change
Challis
Cape Horn
Sunbeam
Clayton
Stanley
Mackay
Legend
Towns
Main Roads
Challis Field Office
Lakes
Rivers
Non-BLM Administered Lands
Map made 08/27/03. Projection: UTM Zone 11, NAD 1927. Units: Meters. No warranty is made by the BLM as to the reliability, accuracy, or completeness of this data for individual use or for aggregate use with other data.
0
15
30
60 Miles
1:650,000


Challis Field Office
Fuel Model
With BLM Land Status
Fuel Model
Not Evaluated (Agriculture, Water, Urban/Developed)
2, Grass with Timber Overstory
5, Short, Green Shrub
6, Medium, Dead and Green Shrub
9, Timber with Long Needles
10, Timber with Heavy Fuels
Cape Horn
Sunbeam
Clayton
Mackay
Legend
Towns
Main Roads
Challis Field Office
Lakes
Rivers
Non-BLM Administered Lands
Map made 10/21/03. Projection: UTM Zone 11, NAD 1927. Units: Meters. No warranty is made by the BLM as to the reliability, accuracy, or completeness of this data for individual use or for aggregate use with other data.
0
15
30
60 Miles
1:650,000


Challis Field Office
Historic Fire Regime
With BLM Land Status
Historic Fire Regime
Not Evaluated (Agriculture, Water, Urban/ Developed)
II-Stand Replacement; 0-35 years
III-Mixed Severity; 35-100+ years
IV-Stand Replacement; 35-100+ years
V-Stand Replacement; 200+ years
Legend
Towns
Main Roads
Challis Field Office
Lakes
Rivers
Non-BLM Administered Lands
Challis
Clayton
Sunbeam
Stanley
Cape Horn
Mackay
Map made 10/30/03. Projection: UTM Zone 11, NAD 1927. Units: Meters.
No warranty is made by the BLM as to the reliability, accuracy, or completeness of this data for individual use or for aggregate use with other data.
0
15
30
60 Miles
1:650,000


Fire History of the Salmon-Challis National Forest 1919 - 2002
Salmon
Challis
Stanley
Mackay
Legend
YEAR
0
1 - 1919
1920 - 1929
1930 - 1939
1940 - 1949
1950 - 1959
1960 - 1969
1970 - 1979
1980 - 1989
1990 - 1999
Highways
Main Rivers
SCNF Boundary
2000 - 2002
FIRE HISTORY DATA
"ALL LINES APPROXIMATE"
N
W
E
S
0 5 10 20 30 40 Miles


Coeur d'Alene
IDAHO
Salmon
Challis
Mackay
Boise
Arco
Idaho Falls
Twin Falls
Challis
Junction Substation 69/25 KV
Round Valley Substation 230/69 KV
South Butte Substation 230/69 KV
230KV Line
Spar Canyon Switchyard 230 KV
Squaw Creek Substation 69/25 KV
69KV Line
230KV Line
Mackay
Mackay Substation 69 KV
Lost River Substation 230/69 KV
230KV Line
69KV Line
Antelope Substation 138/161/230 KV
Arco
69KV Line
161KV Line
Idaho Falls
Arco Substation 69 KV
Scoville Substation 138/69 KV
INEEL
Goshen 161 KV Substation
N


ELLIS
MAY
PATTERSON
CHALLIS CITY
JUNCTION SUBSTATION 69-24.9kV
ROUND VALLEY SUBSTATION 230-69kV
CAPE HORN
SOUTH BUTTE SUBSTATION 230-69kV
SPAR CANYON SWITCH STATION 230kV
SUNBEAM
CLAYTON
STANLEY
SQUAW CREEK SUBSTATION 69-24.9kV
OBSIDIAN
230kV TO LOST RIVER SUBSTATION
69kV TO MACKAY SUBSTATION
SMILEY CREEK
SALMON RIVER ELECTRIC CO-OP
CIRCUIT DIAGRAM
CD