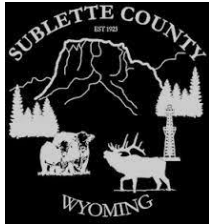


# Sublette County Community Wildfire Protection Plan



Prepared by



OCTOBER 4, 2022

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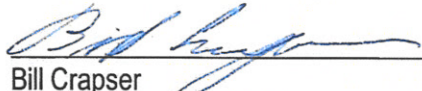
**Signature Authorization:** My signature below verifies that I have received and approved the 2022 Sublette County Community Wildfire Protection Plan.

  
\_\_\_\_\_  
Joel Bousman  
Chairman  
Board of County Commissioners, Sublette County  
P.O. Box 250  
Pinedale, WY 82941

10/4/22  
Date

  
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Sublette County Fire Chief/Warden  
Sublette County Unified Fire  
P.O. Box 2410  
Pinedale, WY 82941

10-4-2022  
Date

  
\_\_\_\_\_  
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State Forester  
Wyoming State Forestry Division  
5500 Bishop Street  
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9.26.2022  
Date

# ACRONYMS

List of acronyms and abbreviations

<b>AGOL</b>	ArcGIS Online
<b>BLM</b>	Bureau of Land Management
<b>CAR</b>	Community at Risk
<b>CWPP</b>	Community Wildfire Protection Plan
<b>ERC</b>	Energy Release Components
<b>ESRI</b>	Environmental Systems Research Institute
<b>FAC</b>	Fire Adapted Communities
<b>FDOP</b>	Fire Danger Operating Plan
<b>FDRA</b>	Fire Danger Rating Area
<b>GIS</b>	Geographic Information System
<b>HazMat</b>	Hazardous Materials
<b>HFRA</b>	Healthy Forest Restoration Act
<b>HIZ</b>	Home Ignition Zone
<b>HVRA</b>	Highly Valued Resource or Asset
<b>IFTDSS</b>	Interagency Fuels Treatment Decision Support System
<b>ISO</b>	Insurance Services Office
<b>LANDFIRE</b>	Landscape Fire Resource Management Planning Tools
<b>NEPA</b>	National Environmental Policy Act
<b>NFPA</b>	National Fire Protection Association
<b>NIFC</b>	National Interagency Fire Center
<b>NWCG</b>	National Wildfire Coordinating Group
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>PCL</b>	Potential Control Line/Location
<b>POD</b>	Potential Operational Delineation
<b>QWRA</b>	Quantitative Wildfire Risk Analysis
<b>RAWS</b>	Remote Automated Weather Station
<b>RSG!</b>	Ready, Set, Go! program
<b>SCUF</b>	Sublette County Unified Fire
<b>USFS</b>	United States Forest Service
<b>VPD</b>	Vapor Pressure Deficit
<b>WFDSS</b>	Wildland Fire Decision Support System
<b>WSFD</b>	Wyoming State Forestry Division
<b>WUI</b>	Wildland Urban Interface

# EXECUTIVE SUMMARY

The 2022 Sublette County Community Wildfire Protection Plan (CWPP) provides a scientifically based assessment of wildfire hazards and threats to communities at risk in Sublette County, Wyoming. Past wildfires, notably the 2018 Roosevelt Fire – which burned 61,511 acres and destroyed 55 primary homes – have impacted the lives of numerous residents and heightened the awareness of the risks associated with wildfire in the Wildland Urban Interface (WUI). This document is Sublette County’s commitment and plans to turn increased awareness into comprehensive action to mitigate the impact of uncontrolled wildfires on their communities.

Sublette County has a long history of collaboration with regional partners and the public. For this CWPP process, a core “steering team” of **Community Stakeholders** was convened representing local, state, and federal jurisdictions for fire response in Sublette County. Interaction between the steering team, public citizens, and industry representatives resulted in an effective collaboration that brought all perspectives into the process. **Public Workshops** were designed to engage citizens and steering team members to validate Communities at Risk data that was collected in the field and geospatial data (maps) that had been compiled.

Forty (40) **Communities at Risk (CAR)** were assessed for wildfire hazards that can adversely affect firefighter response and public safety during wildland fires in Sublette County. The hazard assessments identified opportunities and challenges in these at-risk communities in addition to actions and recommendations to mitigate wildfire risk in these locations.

This plan contains historical fire information in Sublette County and local weather/conditions contributing to fire on the landscape. **Fire Behavior** was modeled to illustrate potential fire behavior (flame length, rate of spread, and crown fire), and maps of this information are included. This traditional fire behavior modeling was conducted using very dry weather and fuels condition during a typical fire season. **Integrated Hazard and Risk Modeling** was performed using landscape burn probability outputs under the worst-case fire scenario. This scientific data was utilized to determine the **Final Hazard and Risk Rating** for each Community at Risk.

The CWPP identifies **Mitigation Measures** and **Strategies to Reduce the Risk** of wildfire at the homeowner parcel and landscape planning levels. Recommended treatments to **Reduce Home Ignitability** and improve **Hazardous Fuel Reduction** are explained. **WUI Community Preparedness** programs are recommended following a **Fire-Adapted Communities** approach.

**Structure Protection Plans** were developed for all Communities at Risk and are available electronically online. These reports can be modified, updated, and provided **Geospatially** or in printed format to incoming resources.

This CWPP is viable for five to seven years before it should be revised. The **Monitoring Strategy** describes a strategy to monitor the **Action Plan and Recommendations** continually. This strategy explains how to track progress and accomplishments biennially. The Action Plan is considered a living document that can be updated before the next full-scale CWPP revision.

# 1.0 INTRODUCTION

## 1.1 BACKGROUND AND PURPOSE

Sublette County developed its first Community Wildfire Protection Plan (CWPP) in 2006. This original document illustrated the partners in the County's commitment to its communities in mitigating the effects of uncontrolled wildfire on its firefighters, citizens, and property. In 2011 and 2016, updated plans were completed that revived the original plan and designed a prioritization method to help facilitate and maximize fuel mitigation efforts within the County. In 2021, a decision was made to update the 2016 plan in the face of increasing fire risks.

Two essential purposes underlie the development of the 2022 Sublette County CWPP. The first relates to proactively addressing fire in the wildland urban interface (WUI), protecting life and property from fire, and reducing the impacts and costs of wildland fire suppression. The 2018 Roosevelt Fire burned 61,511 acres and was a wake-up call for Sublette County residents and fire responders. This WUI fire destroyed numerous structures and threatened many other values in nearby communities. All told, a significant amount of taxpayer money was expended, and many lives were disrupted. The CWPP's purpose is to reduce the number of destructive WUI fires throughout the County.

The second purpose relates to the need to assist fire agencies, land managers, and residents throughout Sublette County in building on fire preparedness and evacuation planning. To meet the intent of the 2003 Healthy Forest Restoration Act, all key stakeholders and public citizens collaborated with the core team to meet these two purpose objectives. The goal is to increase public outreach, improve property and defensible space efforts, and recommend mitigation measures at the homeowner parcel and larger landscape levels.

The CWPP identifies wildland fire hazards in the Communities at Risk by systematically illustrating the potential wildland fire hazard and prioritizes recommendations in an Action Plan to assist with community mitigation planning and implementation. The information in this plan will be utilized to prioritize projects in all jurisdictions and help agencies and communities seek grant opportunities and assistance from the funding authorities. This plan intends to share strategies and resources that can assist all residents of Sublette County in becoming more fire-prepared and fire-adapted.

## 1.2 COMMUNITY STAKEHOLDERS AND COLLABORATION

The Sublette County CWPP process started on September 09, 2021, with a kick-off meeting of the steering team. The process was collaborative by members representing the local fire authority, local government, state government, and federal agencies. The core team was also represented by specialists with Y2 Consultants, Teton Wildfire Mitigation Team, and Flaming Tree Solutions, who worked cooperatively with the steering team. Numerous other stakeholders participated in the public participation and collaboration process. Table 1 provides a list of the individuals serving on the steering team:

**Table 1. Steering team members.**

<i>Shad Cooper</i>	<i>Sublette County Unified Fire</i>
<i>Ron Ruckman</i>	<i>Sublette County Unified Fire</i>
<i>Mike Petty</i>	<i>Sublette County Unified Fire</i>
<i>Jerry Johnson</i>	<i>Sublette County Unified Fire</i>
<i>Bob Laing</i>	<i>Sublette County Unified Fire</i>
<i>Mike Straw</i>	<i>Sublette County Unified Fire</i>
<i>John Doak</i>	<i>Sublette County Unified Fire</i>
<i>Joel Bousman</i>	<i>Board of County Commissioners</i>
<i>Mike Henn</i>	<i>Sublette County Conservation District</i>
<i>Jim Mitchell</i>	<i>Sublette County Emergency Management</i>
<i>Barry Tye</i>	<i>Wyoming State Forestry Division</i>
<i>Nate Wilson</i>	<i>Wyoming State Forestry Division</i>
<i>Mark Randall</i>	<i>BLM High Desert District</i>
<i>Paul Swenson</i>	<i>USFS East Zone Fire Management</i>
<i>Paul Hutta</i>	<i>USFS East Zone Fire Management</i>
<i>Ivan Geroy</i>	<i>USFS Pinedale District Ranger</i>
<i>Greg Brooks</i>	<i>USFS Big Piney District Ranger</i>
<i>Bree Burton</i>	<i>Y2 Consultants</i>
<i>Russell Burton</i>	<i>Y2 Consultants</i>
<i>Chuck Butterfield</i>	<i>Y2 Consultants</i>
<i>Steve Markason</i>	<i>TWMT LLC</i>
<i>Tammy Shroyer</i>	<i>Flaming Tree Solutions</i>
<i>Josh Shroyer</i>	<i>Flaming Tree Solutions</i>

### **1.3 PUBLIC OUTREACH**

Several resources were used to provide the CWPP information to the public and to plan for public workshops. All information and public announcements were contained on the Sublette County Unified Fire (SCUF) Community Wildfire Protection Plan Website hosted on the temporary Social Pinpoint platform. This CWPP website provided meeting dates, locations, and agendas for each of the public workshops in addition to updates and a public comment feedback form. Social media updates for the public workshops were posted on the Sublette County Unified Fire Facebook page. A hard copy community information flyer was distributed and advertised throughout the county during the fall of 2021 and spring of 2022. Before the start of the community workshops, an invite/information postcard was mailed to all Sublette County residents through coordination between the core team and SCUF. Informational emails were sent to all cooperating agencies and stakeholder representatives. The core team hosted six public workshops held at each SCUF Battalion Station during the spring of 2022 (Table 2). These were “working” meetings to present the CWPP’s intent, progress, and potential items for the action plan. Residents validated critical local hazard concerns and map data. The concerns and ideas expressed during the workshops were captured on a wall spreadsheets/maps and incorporated into the final plan.

**Table 2. Public workshop locations and dates.**

<b>Workshop Location</b>	<b>Date of Workshop</b>
<i>Battalion 6 – Kendall Valley</i>	<i>04/21/2022</i>
<i>Battalion 4 – Boulder</i>	<i>04/28/2022</i>
<i>Battalion 5 – Daniel</i>	<i>05/05/2022</i>
<i>Battalion 3 – Bondurant</i>	<i>05/19/2022</i>
<i>Battalion 1 – Pinedale</i>	<i>05/26/2022</i>
<i>Battalion 2 – Big Piney</i>	<i>06/02/2022</i>

## **1.4 RELEVANT FIRE POLICIES**

Two key national policies and legislation drive the process of community wildfire protection planning. In addition, the Sublette County Community Wildfire Protection Plan aligns with a national strategic wildfire strategy and a Wyoming state action plan.

The **2001 National Fire Plan** was a policy developed to respond to severe wildfires, reduce fire impacts on rural communities, and ensure sufficient future firefighting resources. The National Fire Plan renewed a nationwide focus on engaging communities in federal wildfire mitigation efforts. It was founded on cooperation and collaboration between federal agencies, states, tribal governments, counties, local governments, and private industry. The outcome was a 10-year strategy to reduce damage caused by wildfires, restore, and maintain ecosystem health, and deliver cost-effective suppression programs to the public.

President George W. Bush signed the **2003 Healthy Forest Restoration Act (HFRA)**, landmark legislation that gave the U.S. Forest Service and Bureau of Land Management statutory incentives to consider the priorities of local communities as they developed and implemented forest management and hazardous management fuels reduction projects. For local communities to take full advantage of this new opportunity, they must first prepare a Community Wildfire Protection Plan. HFRA legislation included direction for salvage logging, prescribed burning, hazard fuels reduction treatments, and a process for developing a CWPP. These strategies are designed to minimize the destructive impacts of wildfire by encouraging communities to shape plans to protect local values and resources.

The CWPP aligns with **The National Cohesive Fire Management Strategy (2014)**. This national strategic initiative is a collaborative process with the active involvement of all levels of governments, non-governmental organizations, the public, and all stakeholders to seek national, all-lands solutions for wildland fire management issues. The National Strategy identifies strategies to address vegetation and fuels management challenges, reduce risk to homes, communities, and values at risk, decrease human-caused ignitions, and enhance wildfire response capabilities. The National Cohesive Wildland Fire Strategy's goals are to:

- **Improve safe and effective wildfire response**
- **Create fire-adapted communities - living with fire**
- **Restore and maintain fire-resilient landscapes**

The **Wyoming Forest Action Plan (2020)** is an assessment of the state’s natural resources and highlights Wyoming’s forest trends, threats, and opportunities. It is a strategic guiding document intended for Wyoming State Forestry Division (WSFD), conservation partners, and those interested in forestry throughout the state. The Action Plan provides strategies and details specific actions to address threats to Wyoming’s natural resources, such as wildfires, forest insects and disease, and declining forest health. The Wyoming Forest Action Plan was initially completed in 2010 and was revised in 2020 by the WSFD.

The **Sublette County Zoning and Development Resolution** (2019) and the **Sublette County Subdivision Fire Protection Guidelines** (2018) are designed to improve fire protection and protect firefighters, citizens, and private property from the effects of uncontrolled fires. Both are intended to ensure appropriate emergency access/egress and adequate water protection resources are available in communities and new subdivisions. These resolutions aim to mitigate the risk of wildfire to responders and the public and protect the exposure of property and structures from spreading fires.

## 2.0 SUBLETTE COUNTY OVERVIEW

### 2.1 SUBLETTE COUNTY COMMUNITY DEMOGRAPHICS/LAND OWNERSHIP

Sublette County is a sparsely populated rural region with a population of 8,728, according to the 2020 United States Census. The county has a total land area of 4,936 square miles located west of the continental divide, with a 2020 population of 1.8 people per square mile (census.gov). Most residents live in the central and northern areas, along river valley bottoms surrounded by the Wind River, Wyoming, and Gros Ventre Mountain Ranges. The county seat is Pinedale, other towns include Marbleton and Big Piney. Many of the wildland-urban interface areas are situated near the communities of Bondurant, Boulder, Cora, and Daniel, which are adjacent to federal public lands. Sublette County is home to the largest natural gas resources for the State of Wyoming. Key businesses and industries include agriculture, ranching, oil/gas, tourism, and small businesses.

The county consists of the following jurisdictions with their approximate number of acres (Table 3). The recent Bridger-Teton acquisition of the 240-acre Loomis Park Ranch accounts for changes in USFS and Private acres since the 2016 CWPP:

**Table 3. Sublette County land ownership and jurisdiction.**

Bureau of Land Management – High Desert District	1,271,936 acres
U.S. Forest Service – Bridger-Teton Forest	1,165,040 acres
State of Wyoming	114,304 acres
Wyoming Game and Fish	9,728 acres
Sublette County	5,824 acres
Townships	704 acres
Private	590,800 acres
Total	3,158,336 acres

### 2.2 SUBLETTE COUNTY UNIFIED FIRE - BATTALION RESPONSE RESOURCES

Sublette County Unified Fire is a volunteer department comprised of six response stations located throughout the county. Appendix A shows the vicinity of each of the six response areas (Figure 33, Figure 39, Figure 45, Figure 51, Figure 57, and Figure 63). The fire department provides protection for 4,936 square miles of jurisdiction, with over 80% of surface land ownership administered by state or federal land management agencies. SCUF averages over two hundred annual emergency responses in Sublette County, with additional apparatus and personnel deployments supporting federal/state fire incidents outside the county. Response areas for each Battalion station are significant in size, distance, and represent six geographic areas supported by the Battalion communities listed in Table 4.

. Response travel times can be substantial due to the remote nature of communities in the county, with limited water supplies in rural communities. Natural water sources (lakes, ponds, and rivers) provide alternatives for fire suppression, but suitable drafting sites are not always available.



The following resources are currently available for wildfire and structure fire response at each SCUF Battalion fire station in Sublette County and federal cooperators. *Note that all resources, equipment, and personnel numbers are contingent upon annual funding, hiring, and volunteer recruitment and retention. These are estimates for all agencies and are subject to change.*

**Table 4. Sublette County Battalion fire stations and resources.**

<b>Fire Station</b>	<b>Fire Apparatus</b>	<b>Personnel</b>	<b>Additional</b>
<b>Battalion 1 - Pinedale</b>	1 Structure Engines 1 Water Tender (Type 1) 1 Rescue Unit 2 Wildland Engines 1 Command Unit 1 Portable Air Trailer 1 Portable Pump	Fire Warden/Chief Fire Investigator 2 Fire Prevention Officers 1 Training Officer 1 Health/Safety Officer	Municipal water source at the station.
<b>Battalion 2 - Big Piney/ Marbleton</b>	1 Structure Engine 1 Water Tender (Type 1) 1 Rescue Unit 2 Wildland Engines 1 Command Unit 1 HazMat Trailer 1 Rehab Trailer 1 Portable Pump	Battalion Chief	Municipal water source at the station.
<b>Battalion 3 - Bondurant</b>	1 Structure Engine 1 Water Tender (Type 2) 1 Light Rescue Unit 2 Wildland Engines 1 Command Unit 1 Portable Pump	Battalion Chief	(2) 1,500 gal. below ground water tanks with dry hydrants
<b>Battalion 4 - Boulder</b>	1 Structure Engine 1 Water Tender (Type 2) 1 Rescue Unit 2 Wildland Engines 1 Command Unit	Battalion Chief	
<b>Battalion 5 - Daniel</b>	1 Structure Engine 1 Water Tender (Type 2) 1 Rescue Unit 2 Wildland Engines 1 Command Unit	Battalion Chief	
<b>Battalion 6 – Kendall Valley</b>	1 Light Structure Engine 1 Light Rescue Unit 1 Wildland Engine 1 Command Unit	Battalion Chief	
<b>Reserve Apparatus</b>	1 Structure Engine 1 Wildland Engine (Light T5) 1 Wildland Engine (Heavy T6)		

## 2.3 INTERAGENCY COORDINATION

The Bridger-Teton National Forest and High Desert District - Bureau of Land Management share fire resources and work as an integrated interagency fire program. Resources are trained and qualified at all levels in wildland fire response and coordinate effectively with Sublette County Unified Fire. The Bridger-Teton East Zone Fire Management program, High Desert District BLM, and Teton Interagency Fire resources work together through the Wyoming Master Cooperative Wildland Fire Management and Stafford Act Response Agreement and the WY State Forestry District 4 Annual Operating Plan for wildland fire response on federal and non-federal incidents in Sublette County. These agreements address cooperation, interagency working relationships and protocols, financial arrangements, and joint mutual aid activities. The availability of all federal resources is dictated by the national, regional, and local wildland fire activity, which may draw local resources to outside areas supporting national wildland fire efforts. Table 5 shows the federal wildland fire resources in this area.

**Table 5. Federal wildland fire resources.**

Fire Station	Equipment	Personnel	Note
<b>Bridger-Teton – Pinedale/Big Piney Districts</b>	3 Type 3 Incident Commanders 2 Wildland Engine 1 Prevention Engine	23 Firefighters	
<b>High Desert District – Pinedale Field Office</b>	2 Type 3 Incident Commanders 3 Wildland Engines 1 Fuels Crew	22 Firefighters	Pinedale/Rock Springs
<b>High Desert District – SEAT Tanker Base</b>	2 Single Engine Airtankers	N/A	Rock Springs
<b>Teton Interagency Helitack</b>	2 Light Type 3 Helicopters 2 Support Trucks	20 Firefighters	Jackson Airport

## 2.4 WATER SOURCES

Water sources vary throughout Sublette County and may be available by hydrants, wells, cisterns, and natural sources such as lakes, ponds, streams, and rivers. The availability of adequate and reliable water sources significantly influences tactical firefighting decisions and successful suppression efforts. Sublette County Unified Fire has historically experienced fire control difficulties in rural areas and has identified the lack of adequate water supplies as a critical issue (SCUF 2021). As a result, SCUF has completed a comprehensive evaluation of mobile water supply apparatus and necessary resource configurations, equipment, procedures, and training to increase water shuttling from water sources to an incident. Preplanning and practical training are paramount to the success of these operations and having water tenders and staffing at all six Battalion fire stations. SCUF recommends having one Type 1 Water Tender (1,000 GPM/3,000-gallon capacity) at each county's municipal and rural fire station. These tenders carry large folding portable water tanks, hoses, nozzles, pumps, suction manifolds, and other equipment necessary to draft and haul water in rural areas where no hydrant water supply is available. Limited water

supply can impact International Services Office (ISO) ratings for fire departments, so improvements to water infrastructure have been identified as a priority for this CWPP update and in Sublette County.

**Recommendation:** Seek opportunities to fund one Type 1 water tender at each Battalion Fire Station with a 1,000 GPM flow rate and 3,000-gallon tank capacity. Ensure standardized requirements are met for apparatus and associated water handling equipment, as described in the 2021 SCUF Strategic Plan.

The ISO fire rating for the County considers alternative water supplies, including dry hydrants, suction points, large-diameter hose relays, and hauled water using tender shuttles. ISO treats suction points – with or without a dry hydrant – the same way it treats standard fire hydrants. Sublette County currently has 21 dry hydrants in addition to numerous suction points. See Appendix E for a full dry hydrant location list.

The Sublette County Zoning and Development Regulations: Section 3: Subdivision Design Standards (f) Utilities (1) Water Supply – includes water source requirements for fire protection purposes on all newly platted subdivisions. The regulations resolution also incorporates the Sublette County Subdivision Fire Protection Guidelines, August 2008. The resolution exempts subdivisions where lots are 20 acres or larger from fire protection requirements. The guideline recommendations provide information on design criteria, site selection parameters, fill site layouts, signing, maintenance, access, cistern construction, and connection information that are critical to meet Sublette County United Fire standards and operability for adequate fire protection operations.

All water supply systems should be designed and stamped by a professional engineer and constructed to ensure operational capability. All open water source dry-hydrant(s) and underground cistern(s) required should be installed and operational before occupancy of the subdivision.

#### **2.4.1 SMALL WATER PROJECT PROGRAM**

The Wyoming Water Development Commission participates with counties and land management agencies to offer the Small Water Project Program. Water improvement projects are eligible for funding for rural community fire suppression and small water development. Projects should improve the watershed condition and benefit wildlife, livestock, the environment, and the public. Developing ponds, cisterns, tank storage, and water delivery improvements are excellent examples that have been accomplished through this program offered in Wyoming. Additional information can be found at:

[https://wwdc.state.wy.us/small\\_water\\_projects/small\\_water\\_project.html](https://wwdc.state.wy.us/small_water_projects/small_water_project.html)[https://wwdc.state.wy.us/small\\_water\\_projects/small\\_water\\_project.html](https://wwdc.state.wy.us/small_water_projects/small_water_project.html)

#### **2.4.2 SUBLETTE COUNTY UNIFIED FIRE WATER USE AGREEMENT**

To provide the best possible emergency response for everyone served, it is sometimes necessary to draw upon approved water sources for use outside of the area the water source was constructed to serve. A water-use contract should be in place to allow the fire department to legally use the water outside of the area and to cover the cost to the water system owner. The applicant for the water source has the option of not signing the agreement if they do not wish to allow fire department use for emergency response for nearby areas. A copy of the Sublette County Unified Fire Water Use Agreement form can be found in Appendix F.

## 2.5 WILDLAND URBAN INTERFACE

The Wildland Urban Interface (WUI) is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. This general interface term technically refers to the areas where communities, structures, critical infrastructure, essential resources, and values at risk encroach onto wildfire-prone landscapes and vegetation. In Sublette County, the land, developments, and communities adjacent to and surrounded by wildlands are at risk from potential wildfire events.

Headwaters Economics has developed a wildfire risk report system that creates customizable reports for every city, county, and state in the U.S. that describe wildfire risk, exposure, and susceptibility. The *2022 A Profile of Wildfire Risk for Sublette County* explains that the populated areas in Sublette County have a 91% greater risk to homes from wildfire than other counties in the state. This risk model integrates probability fires with the intensity of wildland fires from simulation risk modeling, utilizing data from the U.S. Forest Service, U.S. Census Bureau, and other sources.

The Headwaters report and data for Sublette County illustrate that 76% of homes in the county may be directly exposed to potential wildfire from adjacent ignition sources such as flammable vegetation. The remaining 24% of homes are indirectly exposed to potential wildfires from other sources such as embers or home-to-home ignition (Headwater Economics 2022). County residents can reduce their exposure to wildfire by mitigating ignition potential in the Home Ignition Zone and by communities implementing land use goals and plans found in this CWPP and Sublette County Forest Collaborative reports and recommendations.



**Figure 1. Wildfire home risk/exposure for Sublette County (source: Headwaters Economics 2022).**

The Sublette County WUI boundary was revised during the updated 2016 CWPP, and its delineation was informed by the coalition of stakeholders that worked collaboratively to create the current boundary. These map perimeters and the existence and vulnerability of current values at risk were re-evaluated during the 2022 public workshop process and adjusted by the CWPP Steering Committee. The WUI boundaries for this plan were extended in the following areas: Irish Canyon, northeast of Pinedale, north of Highway 191/Rim Station, Hoback Canyon, and the Wyoming front range.

### 2.5.1 WUI CODES AND FIRE PROTECTION ORDINANCES

Recent research has shown that WUI building codes can reduce the vulnerability of homes to wildfire. Teton County first adopted the International Wildland Urban Interface (IWUI) building code in 2008 and is currently using the 2018 version of the code. The WUI code objective is the establishment of minimum special regulations for the safeguarding of life and property from the intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to prevent structure fires from spreading to

wildland fuels, even in the absence of fire department intervention (ICC 2017). The WUI Code for Teton County only affects building permits in the mapped Wildland Urban Interface and directs attention to ignition-resistant construction and vegetation management for defensible space.

Chapter 7A of the California Building Code (2008) requires fire resistance measures, including exterior construction materials used for roofing, vents, walls, and decks for new residential and commercial structures in WUI fire hazard areas. In the published paper *Mandatory vs. Voluntary Adaptation to Natural Disasters: The Case of U.S. Wildfires*, the authors conducted in-depth property and wildfire research to identify if structures built under 2008 California building codes enhanced resistance to wildfire. They concluded that structures built after 2008 are 16 percentage points (40%) less likely to be destroyed than a 1990-built home experiencing an identical wildfire exposure. Furthermore, they suggest there is strong evidence that these effects are due to state and local building code changes – first after the deadly 1991 Oakland fire and again with the strengthening of wildfire codes in 2008 (Baylis 2021).

Expanding development into wildland-urban interface areas has resulted in more destructive wildfires and significant annual economic losses in recent years. The National Fire Protection Association encourages more localities and states to adopt at least minimum wildfire building codes and defensible space ordinances. They have outlined in their *Outthink Wildfire Comprehensive Strategy* that all levels of government should require homes and businesses in the WUI to be more fire-resistant to ignition from wildfire/embers and that current codes and standards be in use for new development and rebuilding in wildfire-prone areas (NFPA 2021). This NFPA policy strategy is rooted in two realities—wildfires will happen, and the fire service will not be able to extinguish wildfires at a pace to save people and property in their path. While no WUI building code is a guarantee, there is an opportunity to consider adopting WUI building codes in Sublette County to improve how we live in wildfire prone WUI areas.

**Recommendation:** Consider adopting a WUI Building Code for Sublette County that addresses ignition-resistant building materials, subdivision design, fire protection water supply, and vegetation measures for defensible space in the Home Ignition Zone.

## 3.0 FIRE ENVIRONMENT

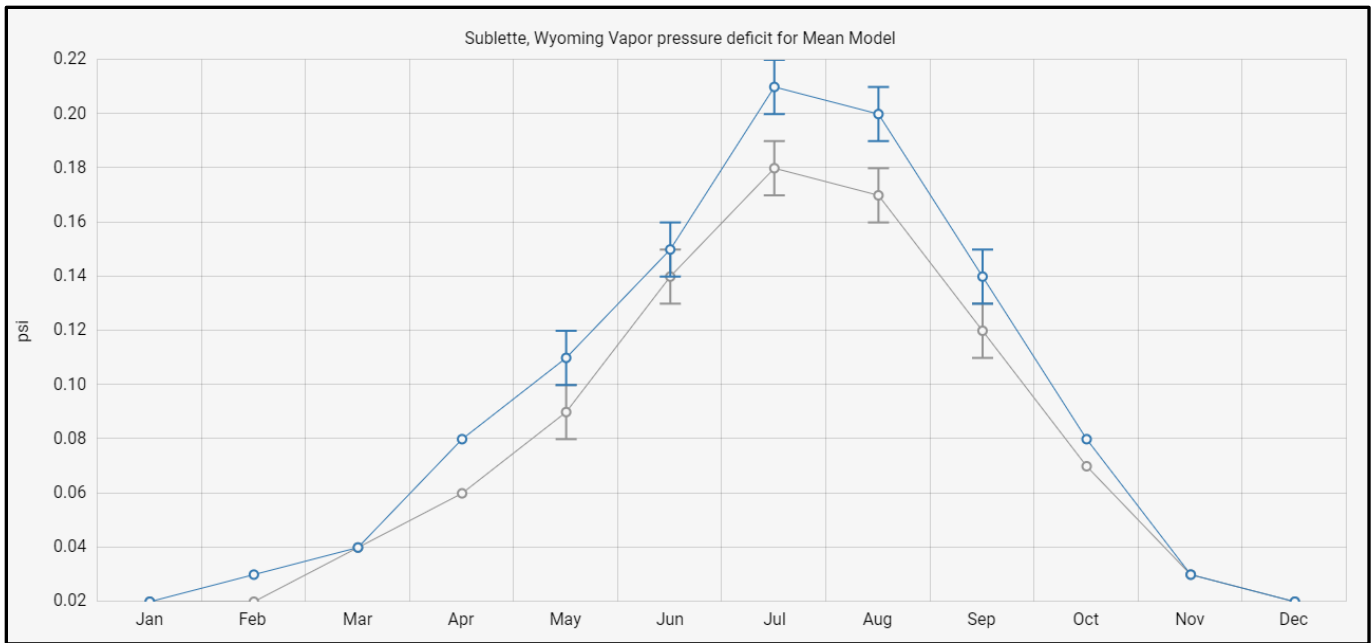
### 3.1 WEATHER AND CLIMATE

Weather in Sublette County is characterized by a typical continental climate with four distinct seasons and often significant daily and seasonal temperature ranges. Summer and fall can be short, with a typical temperature range of 70-80 degrees and cooler nights. Exceptionally dry and hot summers raise the temperatures in Sublette County to the low 90-degree range. The prevailing winds in the Wyoming Range during the summer are predominantly from the southwest and west and in the Wind River front range from the north. These winds can change 180° during the passage of thunderstorms or cold fronts during summer and fall. Summers are typically dry; monsoonal flow from Mexico and the southwest United States brings moist and unstable air, resulting in late afternoon thunderstorms fueled by daytime heating and lightning. The variable amount of moisture these storms bring dictates whether we see dry lightning with numerous fire starts or wet storms with fewer ignitions. The wetter storms often cause fewer fire starts but ones that lay down as “holdovers,” discovered days to weeks later.

In the past decade, increases in severe weather have resulted in significant fire growth on local fires, such as the 2012 Fontenelle, 2016 Cliff Creek, and 2018 Roosevelt Fires in Sublette County. According to the National Interagency Fire Center’s (NIFC) annual fire reports, we have seen record increases in yearly areas/acres burned throughout the western United States, compared to historical averages.

Recent research has examined decreasing summer precipitation, in combination with increasing vapor pressure deficits (VPD), as a driving factor of recent large fire growth in the western United States (Holden et al. 2018). Vapor pressure is a measure of the amount of water in the air (expressed by pressure in Pound per Square Inch or PSI) and significantly affects flash drought during arid summer/fall conditions. When VPD is higher, the air is hot and dry and draws more moisture from vegetation, water sources, and fuels available to burn. The U.S. Geological Survey graph in Figure 2 (USGS Climate Change Viewer) shows the expected Sublette County VPD increases for 2025-2049, compared to the average mean of an increase of 0.03 psi during the summer months. This increase is predicted to increase flash drought conditions, contributing to increased wildfire growth conditions.





**Figure 2. Sublette County Vapor Pressure Gradient predicted future decades.**

**Figure 2 Legend: (-o- 1981-2010, -o- 2025-2049).**

In June of 2021, the State of Wyoming launched a website resource [drought.wyo.gov](http://drought.wyo.gov) that uses data from multiple state and federal agencies to monitor drought conditions in Wyoming. There is a long-term prediction for increased precipitation in northwest Wyoming during spring and fall. However, the occurrence and amount of summer precipitation will be the critical determining factors of significant fire events affecting future Sublette County wildfire activity. In June of 2021, Sublette County was placed in the “D2” or “Severe Drought” category. The effects of severe drought in Sublette County will impact vegetation and wildfire risks during the summer and surface water availability for firefighting use (SCUF 2021).

### 3.2 VEGETATION AND FUELS CHARACTERISTICS

The four distinct vegetation communities in Sublette County are sagebrush/grass steppe, lodgepole pine forest, spruce/fir forest, and aspen forest. Much of the timber vegetation consists of conifer encroached old-aged aspen communities and mixed conifer tree stands.

Predominant vegetation types in the lower terrain of Sublette County are sagebrush/grass and mixed conifer with brush understory. Riparian areas are frequent within each vegetation type. Lower elevation fuels include a significant component of annual and perennial grasses. Higher elevations are often above the “tree line,” where slopes of continuous stands of mixed conifer give way to high elevation meadows and isolated stands of whitebark pine. Vegetation in these areas comprises perennial grasses, forbs, and low brush. Typical of many regions of the Intermountain West, evidence of insect infestations exists due to the recent insect and disease epidemics. Particularly evident are pine beetle outbreaks affecting lodgepole and whitebark pine stands.

Vegetation in the Wyoming range exhibits more areas of open sagebrush grass on the southern end, especially in the Hams Fork and LaBarge areas. These areas also include large riparian and aspen/shrub communities. Mixed conifer grows in substantial stands, including lodgepole pine, subalpine fir, Engelmann Spruce, and some Douglas-fir. Extensive past timber harvest units are evident at the mid to lower elevations throughout the mountain range.

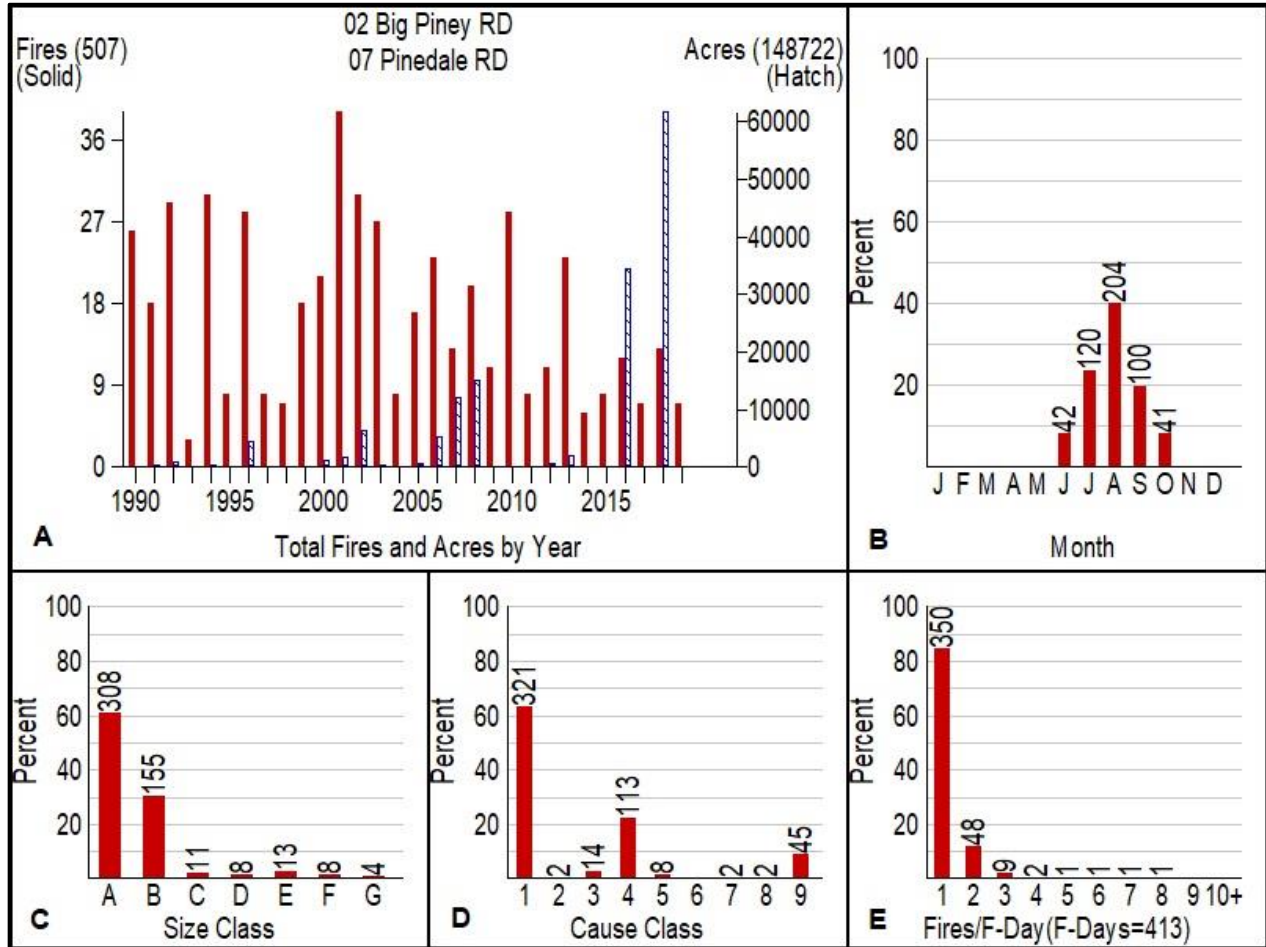
Large areas of sagebrush and grass occur along the “Pinedale Front” that borders the west side of the Wind River Mountain Range. These large areas of the continuous grass/shrub fuels provide a receptive fuel bed for large, fast-moving rangeland fires. In recent years, many native types of grass have been replaced by cheatgrass (*Bromus tectorum*) on the south and west-facing dry aspects. Further north in the Winds and higher elevation, there are more areas of aspen and conifer. These mid-elevation areas also include large meadows and deep canyons that may act as barriers to fire spread. The higher elevations have only scattered trees as the vegetation approaches the tree line.

Along with the high mortality in the lodgepole pine, a decrease in the aspen across the landscape is also occurring. Due to wildfire exclusion, aspen is now in danger of conifer competition and reducing root suckering, which stimulates aspen reproduction. Healthy aspen stands provide essential wildlife habitats and serve as a natural firebreak under low to moderate weather conditions. A higher diversity of tree age classes of aspen, whitebark pine, and lodgepole pine communities would improve the vitality of these vital forest resources.

### 3.3 FIRE HISTORY

Understanding historical fire occurrence and ignition sources are essential for predicting future fire frequency and behavior. Fire history analysis from federal agencies (USFS and BLM) indicates that large areas of the Bridger-Teton Forest and High Desert District burned during the mid-1700s and 1800s (Norman 2009). Fires in the early 1900s were much more limited based on successful suppression efforts. Land use patterns also changed the occurrence and intensity of fires as livestock grazing altered the amount of fine fuels (grass/forbs) in Sublette County. Throughout its history, Sublette County has experienced many wildfires on state and private lands in the lower terrain, and fires started in adjacent federal jurisdictions. Unfortunately, fire records are incomplete for fires started on private lands in Sublette County. The most recent large fires included the 2022 Sandy Fire (USFS), 2019 Boulder Fire (BLM), 2018 Roosevelt Fire (USFS), 2016 Cliff Creek Fire (USFS), and 2015 Fontenelle Fire (USFS). The Roosevelt Fire had the most significant impact with significant structure loss during a period of extreme fall fire weather. The maps in Appendix A show historic fire perimeters over decades starting in 1950 for each of the six battalion response areas in Sublette County (Figure 34, Figure 40, Figure 46, Figure 52, Figure 58, and Figure 64).

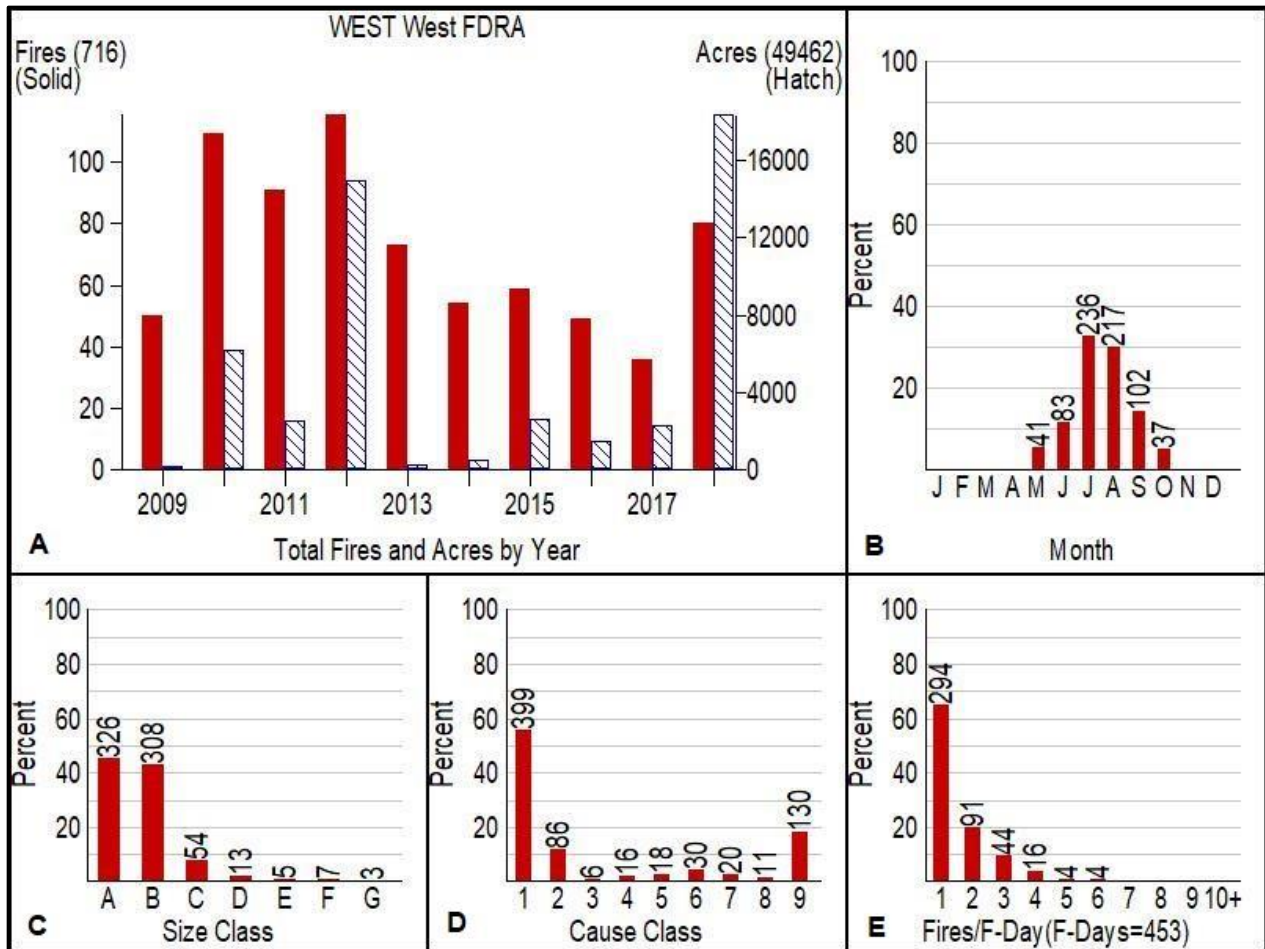
Typically, wildfires are human caused in western Wyoming or started by lightning with passing storms. These storms and resulting fires are possible between May and October, although most of the storms and fires occur from early July through the first week of September. The breakdown between fire causes is approximately 60% lightning to 40% human-caused for both the Bridger-Teton and BLM Pinedale Field Office (Figure 3 and Figure 4) Over one hundred abandoned campfires have been detected and extinguished in Sublette County annually in the past few years. The east side of the County and the Wind River Range see fewer fires annually than the Wyoming Range and west side.



**Figure 3. USFS fire occurrence summary 1990-2019 (source: FireFamilyPlus5).**

**USFS Fire Occurrence Explanation:**

- A. Total USFS fires (507) from 1990-2019. Fires per year in red, acres burned per year in blue hatch.
- B. Total number of fires (507) depicted per month of occurrence.
- C. Size Class of fires: A = 0-.25 acres; B = .26-9 acres; C = 10-99 acres; D = 100-299 acres; E = 300-999 acres; F = 1000-4999 acres; C = 5000+ acres.
- D. Fire Cause Class: 1 = Lightning; 2 = Equipment; 3 = Smoking; 4 = Campfire; 5 = Debris Burning; 6 = Railroad; 7 = Arson; 8 = Children; 9 = Misc.
- E. Fire duration (in days) for the 507 total fires.



**Figure 4. BLM fire occurrence summary 2009-2018 (source: BLM FDOP 2021).**

**BLM Fire Occurrence Explanation:**

- A. Total BLM fires (716) from 1990-2019. Fires per year in red, acres burned per year in blue hatch.
- B. Total number of fires (716) depicted per month of occurrence.
- C. Size Class of fires: A = 0-.25 acres; B = .26-9 acres; C = 10-99 acres; D = 100-299 acres; E = 300-999 acres; F = 1000-4999 acres; G = 5000+ acres.
- D. Fire Cause Class: 1 = Lightning; 2 = Equipment; 3 = Smoking; 4 = Campfire; 5 = Debris Burning; 6 = Railroad; 7 = Arson; 8 = Children; 9 = Misc.
- E. Fire duration (in days) for the 716 total fires.

## 4.0 WUI FIRE HAZARD AND RISK ASSESSMENT

### 4.1 COMMUNITIES AT RISK ASSESSMENT PROCESS

The 2016 CWPP listed sixteen Communities at Risk (CAR) throughout Sublette County. As part of the 2022 update, the core team visited forty subdivisions and assessed the fire hazards for each location. The CAR location included residential subdivisions, rural developments, commercial/industrial developments, and mixed-type areas. Two weeks were spent conducting field data and individual hazard assessments for each community.

Assessments were conducted using the Fire Hazard Severity Form found in Appendix B of the 2018 ICC International Wildland-Urban Interface Code. This is the same form previously in the NFPA 1144 Standards for Reducing Structure Ignition Hazards from Wildland Fire. The core team transferred this form into the ESRI ArcGIS online Survey123 program and utilized it on electronic devices for field data collection. The form and community evaluation include site access, types, and management of vegetation, percentage of defensible space in the community, site topography, ignition class of roofing and construction materials, fire protection water supply, and whether the utilities are installed above or below ground. Using the assessment form, each Community at Risk was given a hazard rating based on the pre-assigned value/scoring system for each feature that impacts the hazard level.

All Community at Risk Hazard Ratings were presented to the public during the six community workshops held in spring 2022. Feedback was obtained from the public participants, as well as land managers, elected officials, industry representatives, and SCUF Battalion members. All the hazard rating information was edited from these effective public interactions. The Fire Hazard Severity assessments are summarized and ranked by low/medium/high hazard found in the following tables in Section 4.2.

### 4.2 BATTALION RESPONSE AREAS/COMMUNITIES AT RISK HAZARD ASSESSMENT

#### 4.2.1 BATTALION RESPONSE AREAS

##### 4.2.1.1 BATTALION RESPONSE AREA 1 – PINEDALE

**Description:** Area consists of the town of Pinedale, the Cora Y Subdivision, and the Skyline Drive Corridor comprised of Riverside Subdivision, Fremont Lake structures, Sylvan Bay Summer Residences, Half Moon Lake lodge/Private, White Pine Ski Area, and Chambers Bay. Also included are the U.S. Forest Service, Wyoming State, and Bureau of Land Management lands and facilities. This is a large geographic area with moderate to high-density subdivisions and infrastructure. The complexity of wildfire in this Response Area may necessitate evacuation of some portions of or all of the area affected.

### **Critical Infrastructure/Values at Risk:**

- Medium to very high-density WUI communities and structures
- Watershed for drinking water: Upper and Lower Pine Creek and Fremont Creek
- Developed campground infrastructure
- Electrical transmission lines and communication sites
- Oil and gas/energy infrastructure

**Hazards:** Hazardous fuel loading outside of recently treated areas; significant quantities of willow and thick grass along river and creek bottoms; one-way-in, one-way-out access points to subdivisions; lack of fire hydrants and reliable natural water sources in areas; highest WUI population density in the county.

**Water Supply:** Main water is available at the Pinedale Battalion Station 1. Dry hydrants are located at:

- Redstone New Fork River Road (CR 23-204)
- Ehman Lane (CR 23-144) – Near Hwy 352 intersection
- Ehman Lane (CR 23-144)
- 50 Old Brazzill Ranch Road
- Sylvan Bay Summer Residences – Sunshine Loop Road
- 9522 US Hwy 191 – Sublette County Road & Bridge
- 150 Kitchen Ranch Road (Cora)

### **Recent Mitigation/Accomplishments:**

Skyline Wildland Urban Interface Fuels Reduction Project (2016 – 2022). USFS East Zone Fire Management project treated over 2,000 acres to mitigate fuels in the Skyline Drive Corridor to reduce fire risk. Treatments included mechanical tree thinning, whole log harvesting, and prescribe burning. This successful project is in the final stages of implementation and resulted in the following accomplishments:

- Successful collaboration between the USFS and SCUF for public education and outreach with residents and property owners in the project area.
- Adoption of Firewise, Ready, Set, Go! and Fire Adapted Community principles with the Sylvan Bay residential community and other communities in the project area.
- Effective coordination between the USFS, SCUF, and Sublette County Emergency Management to update Sylvan Bay summer Residences evacuation planning.
- Widened Skyline Drive Road vegetation corridor to White Pine Ski Resort.
- Created shaded fuel break on Skyline Drive to White Pine Ski Report.
- Completed fuels reduction treatments in areas between Fremont Lake Campground and Sylvan Bay Residences.
- Completed fuels reduction treatments in areas between Half Moon Lake and White Pine Ski Area.
- Widened Skyline Drive vegetation corridor from White Pine Ski Area to Elkhart Park.
- Created shaded fuel break from White Pine Ski Area to Elkhart Park on Skyline Drive.
- Improved Temporary Refuge Area locations at White Pine Ski Area and Elkhart Park.

**Evacuation Considerations:** The following are notification and evacuation order phases for the Pinedale Battalion 1 Response area. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

**Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.

**Evacuation Trigger:** If a fire escapes initial attack or spots within 1 mile of adjacent subdivisions and/or affected recreational areas.

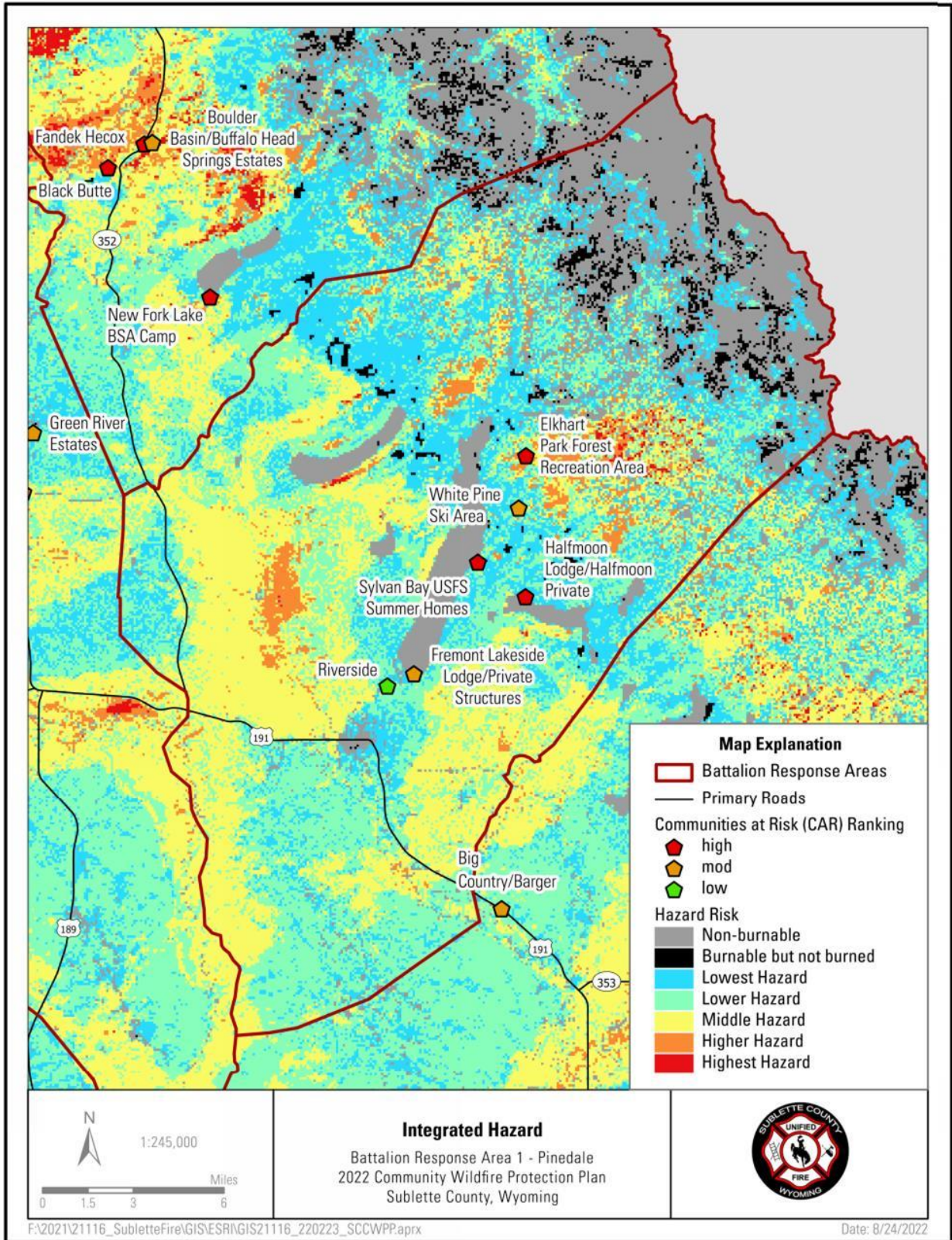
**Alert:** Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 6. Battalion 1 Communities at Risk.**

<b>Battalion Response</b>	<b>Community</b>	<b>C.A.R Hazard Rating</b>	<b>Opportunity</b>	<b>Challenge</b>
<b>1 Pinedale</b>				
	<b>Elkhart Park USFS</b>	<b>High</b>	<ul style="list-style-type: none"> <li>• Large trailhead asphalt parking as temporary refuge areas</li> <li>• Hardened trailhead infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Very high public recreation use area</li> <li>• Wood shake roof on one structure</li> <li>• Limited water source</li> </ul>
	<b>Sylvan Bay Summer Homes USFS</b>	<b>High</b>	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 1</li> <li>• Recent fuels reduction treatments</li> <li>• Dry hydrant on Sunshine Rd Pond/Dry hydrant at lot #19 pond</li> <li>• Two 8,000 gal. storage tanks – gravity flow</li> <li>• Potential for marine evacuation</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Steep access to upper homes/poor upper turn arounds</li> <li>• Dense road corridor vegetation</li> <li>• All utilities above ground/height of powerlines</li> <li>• Public use areas/abandoned campfires</li> </ul>
	<b>Halfmoon Lodge/ Halfmoon Private</b>	<b>High</b>	<ul style="list-style-type: none"> <li>• Proximity from Battalion Station 1</li> <li>• Wide roads access</li> <li>• Defensible space improvements</li> <li>• Predominantly class A roofing</li> <li>• Natural draft sites at lake boat launch and pond at upper lodge loop</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Areas of temporary refuge along roads at dispersed camp and boat launch areas</li> <li>• All utilities above ground</li> </ul>
	<b>Fremont Lakeside Lodge/Private Homes</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Proximity from Battalion Station 1</li> <li>• Wide and flat road access/good turn arounds</li> <li>• Large parking lots as temporary refuge areas at the lodge and USFS boat ramp</li> <li>• Class-A roofing for the majority of structures</li> <li>• Good lake draft site at the boat launch</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Heavily forested area beyond treatment units</li> <li>• All utilities above ground</li> </ul>
	<b>White Pine Ski Area</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Proximity from Battalion Station 1</li> <li>• Good road access/good turn arounds</li> <li>• Large parking lots as temporary refuge areas</li> <li>• Class-A roofing/ignition-resistant building materials at the lodge and private structures</li> <li>• Underground powerlines</li> <li>• Recent fuels reduction treatments</li> <li>• 12,000 gals. underground water tank at the lodge for interior sprinklers with fire apparatus connection</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> </ul>
	<b>Riverside Subdivision</b>	<b>Low</b>	<ul style="list-style-type: none"> <li>• Proximity from Battalion Station 1</li> <li>• Wide roads/Good access</li> <li>• Flat terrain</li> <li>• Most structures have Class-A roofing</li> <li>• Hydrant located at the end of Riverside Road</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• No weight limit sign on a private bridge</li> <li>• Above-ground powerlines</li> </ul>

The wildfire hazards for each battalion response area are displayed in the Integrated Hazard Maps, which follow each response area section. The Integrated Hazard combines two fire behavior modeling outputs into a single mapped characteristic. The first output is Landscape Burn probability which quantifies the likelihood of a fire occurring under a fixed set of weather and fuels moisture conditions. The second output is Fire Intensity Level which describes the intensity in flame length spreading across the landscape. Combining these two measures illustrate the fire hazards for the Battalion Response communities and are two sides of the risk assessment triangle discussed in Section 4.3.





**Figure 5. Integrated hazard map for Battalion Response Area 1 - Pinedale.**

#### **4.2.1.2 BATTALION RESPONSE AREA 2 – BIG PINEY/MARBLETON**

**Description:** Area consists of the towns of Big Piney and Marbleton, Middle Piney Summer Residences, Riley Ridge/Denbury/Deadline/Black Canyon/EOG Resources with high-value resources at risk, Calpet/Deerhills values at risk, Round Hill Ranch, Sleepy Hollow/Tanner, Wassenberg, and surrounding areas. Also included are the Bridger-Teton National Forest, the BLM, and Wyoming State Lands. This is a medium- sized geographic area with low to high-density WUI communities.

#### **Critical Infrastructure/Values at Risk:**

- Low to high-density WUI communities and structures
- Developed campground infrastructure
- High voltage transmission lines
- Electrical transmission lines and communication sites
- Oil and natural gas infrastructure
- Helium extraction plant infrastructure (supplies 25% of world's supply)
- Highway 189 closure (commerce)

**Hazards:** Steep and narrow road; Limited fire hydrants and reliable natural water sources; high WUI density; wind-driven fire potential. There are locked gates around the helium plants.

**Water Supply:** Main water is available at the Big Piney/Marbleton Battalion Station 2. Dry hydrants are located at:

- New Fork Bridge (CR 23-175) - Big Piney
- Cottonwood Ryegrass Road (CR 23-117) - Near Profit Rd. intersection

#### **Recent Mitigation/Accomplishments:**

Middle Piney Summer Residences (USFS): The 2012 Fontenelle Fire removed a significant amount of heavy wildland fuels to the south of the summer homes and in the Battalion 2 response area. The wildfire risk had been reduced due to recent burn scars and federal agency (USFS/BLM) fuel treatments.

Numerous BLM and USFS mechanical thinning, broadcast burn, mowing, and chemical herbicide (cheatgrass mitigation) treatments have been completed during the last two decades in the Wyoming Range front, in mapped WUI areas and surrounding critical values at risk.

**Evacuation Considerations:** The following are notification and evacuation order phases for the Big Piney/Marbleton Response area. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

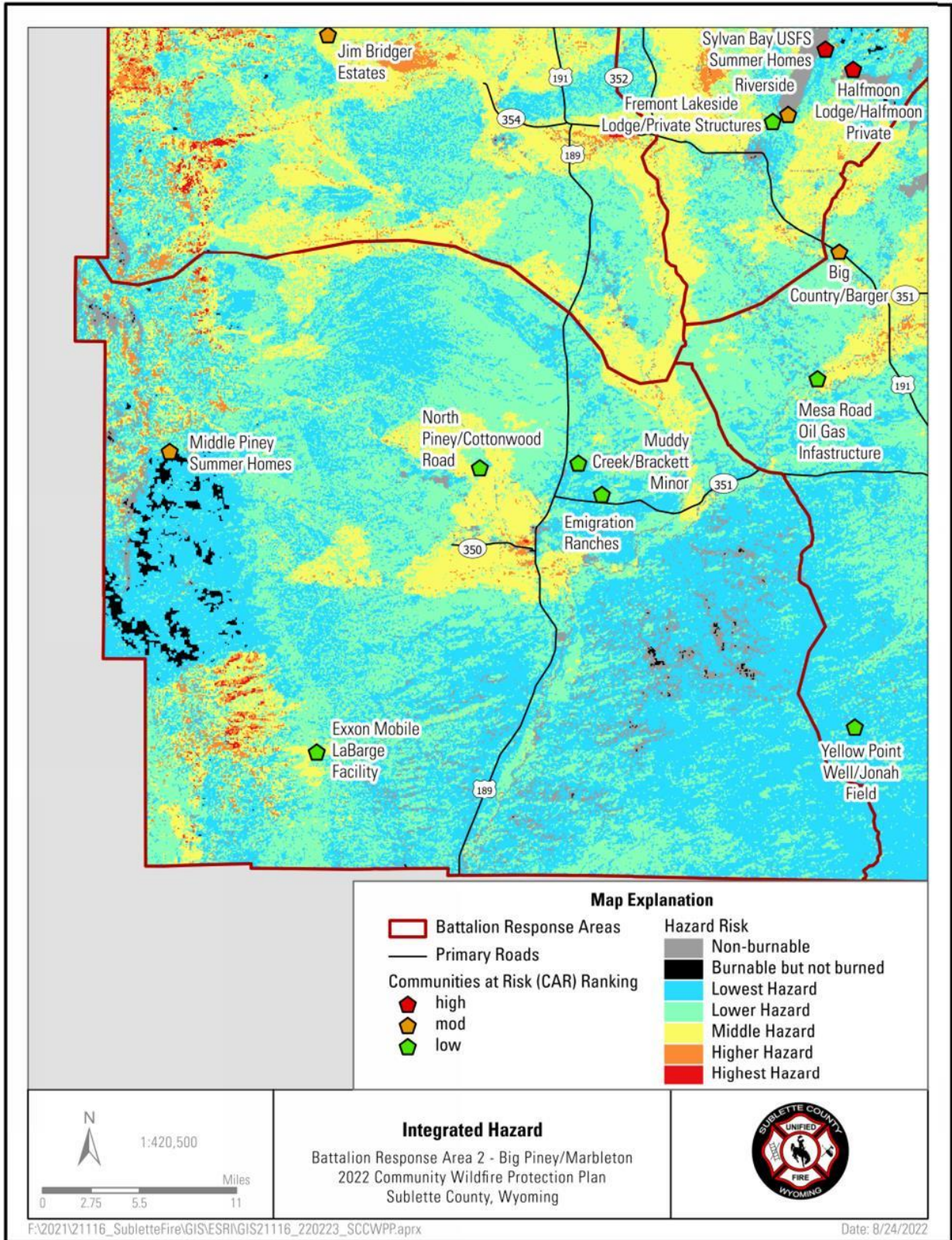
**Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.

**Evacuation Trigger:** If a fire escapes initial attack or spots within 1 mile of adjacent subdivisions and/or affected recreational areas.

**Alert:** Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 7. Battalion 2 Communities at Risk.**

Battalion Response	Community	C.A.R Hazard Rating	Opportunity	Challenge
2 Big Piney/Marbleton				
	Middle Piney Summer Residence USFS	Moderate	<ul style="list-style-type: none"> <li>Large trailhead asphalt parking as temporary refuge areas</li> <li>Flat terrain/South recently burned in Fontenelle Fire (2012)</li> <li>Moderate fuel loading</li> <li>Class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>Remote location from Battalion Station 2</li> <li>One-way in, one-way out access</li> <li>Limited water sources</li> </ul>
	Exxon Mobile LaBarge Facility (Black Canyon)	Low	<ul style="list-style-type: none"> <li>Two-way ingress and egress</li> <li>Flat terrain and light sage/grass fuel loading</li> <li>Recent fuels mitigation to the west (BLM)</li> <li>Ignition-resistant structures/facility</li> <li>Parking lots as an area of refuge</li> </ul>	<ul style="list-style-type: none"> <li>Remote location from Battalion Station 2</li> <li>Wood power transmission poles</li> </ul>
	North Piney/Cottonwood Road Subdivision	Low	<ul style="list-style-type: none"> <li>Proximity from Battalion Station 2</li> <li>Wide roads access/two-way ingress and egress to WY-143</li> <li>Flat terrain/Light sage/grass fuels</li> <li>Predominantly class A roofing</li> <li>Pastures and hay meadows as areas of refuge</li> </ul>	<ul style="list-style-type: none"> <li>Above-ground utilities</li> <li>Limited water source</li> <li>Wind-driven fire potential</li> </ul>
	Muddy Creek/Brackett Minor	Low	<ul style="list-style-type: none"> <li>Proximity from Battalion Station 2</li> <li>Wide roads access/two-way ingress and egress to WY-189</li> <li>Flat terrain/Light sage and grass fuels</li> <li>Predominantly class A roofing</li> <li>Pastures as areas of refuge</li> </ul>	<ul style="list-style-type: none"> <li>Limited water source</li> <li>Above-ground utilities</li> <li>Wind-driven fire potential</li> </ul>
	Emigration Ranches	Low	<ul style="list-style-type: none"> <li>Proximity from Battalion Station 2</li> <li>Wide roads access/two-way ingress and egress to WY-189</li> <li>Flat terrain/Light sage and grass fuels</li> <li>Predominantly class A roofing</li> <li>Pastures as areas of refuge</li> </ul>	<ul style="list-style-type: none"> <li>Limited water source</li> <li>Above-ground utilities</li> <li>Wind-driven fire potential</li> </ul>



**Figure 6. Integrated hazard map for Battalion Response Area 2 - Big Piney/Marbleton.**

### **4.2.1.3 BATTALION RESPONSE AREA 3 – BONDURANT**

**Description:** Area consists of the communities of Bondurant, Upper Hoback River, Rim Ranches/Summit Road, Packer/Miner Ranches, Hoback Ranches, Flying A Ranch, and the surrounding areas. Also included are the Bridger-Teton National Forest, BLM, and Wyoming State Lands. This vast geographical area has medium to high-density subdivisions within the interface.

#### **Critical Infrastructure/Values at Risk:**

- Medium to high-density WUI communities and structures
- Electrical transmission lines and communication sites
- Campground infrastructure
- Highway 189/191 closure (commerce)

**Hazards:** Single access points to remote communities; Limited fire hydrants and reliable natural water sources; Medium to high WUI population density; Wind-driven fire potential.

**Water Supply:** Water is available at the Bondurant Battalion Station 3. Dry hydrants are located at:

- 14256 US Hwy 189/191 – Bondurant Battalion Station #3
- 14161 US Hwy 189/191 - Bondurant
- 10 Spirits Winds Way

#### **Recent Mitigation/Accomplishments:**

Monument Ridge Vegetation and Recreation Management project (2019-2022 and ongoing). USFS East Zone Fire Management planned and is currently in the implementation stages for a combination of broadcast prescribe burn and mechanical thinning treatments west of the communities in Bondurant. The project's objective was to reduce surface fuel loading and increase tree canopy spacing on Forest Service lands in the Wildland Urban Interface along Monument Ridge.

The 2018 Roosevelt Fire occurred near Bondurant and was discovered by hunters while hiking near the headwaters of the Hoback River. A long-lasting fall pattern of high winds, low relative humidity, and unstable atmospheric conditions led to significant fire growth events. The Roosevelt Fire eventually burned 61,511 acres and created significant fuel break (burn scars) surrounding the Upper Hoback WUI and Hoback Ranches subdivision. More than 1,300 firefighters from across the United States responded to the fire and assisted in the management and control of the fire. The destruction from the fire constituted a major disaster, and the fire destroyed 55 primary homes and 72 secondary outbuildings.

Private parcel defensible space projects in Hoback Ranches and the Flying A Ranch (2011-2015). The Wyoming State Forestry Division accomplished 16 private parcel defensible space thinning projects in Hoback Ranches totaling 51.5 acres. The WSFD supported a 360-acre thinning project on the Flying A Ranch for defensible space fuels mitigation in 2013.

Hoback Fuel Break (2009-2013). The High Desert District Bureau of Land Management completed a fuel

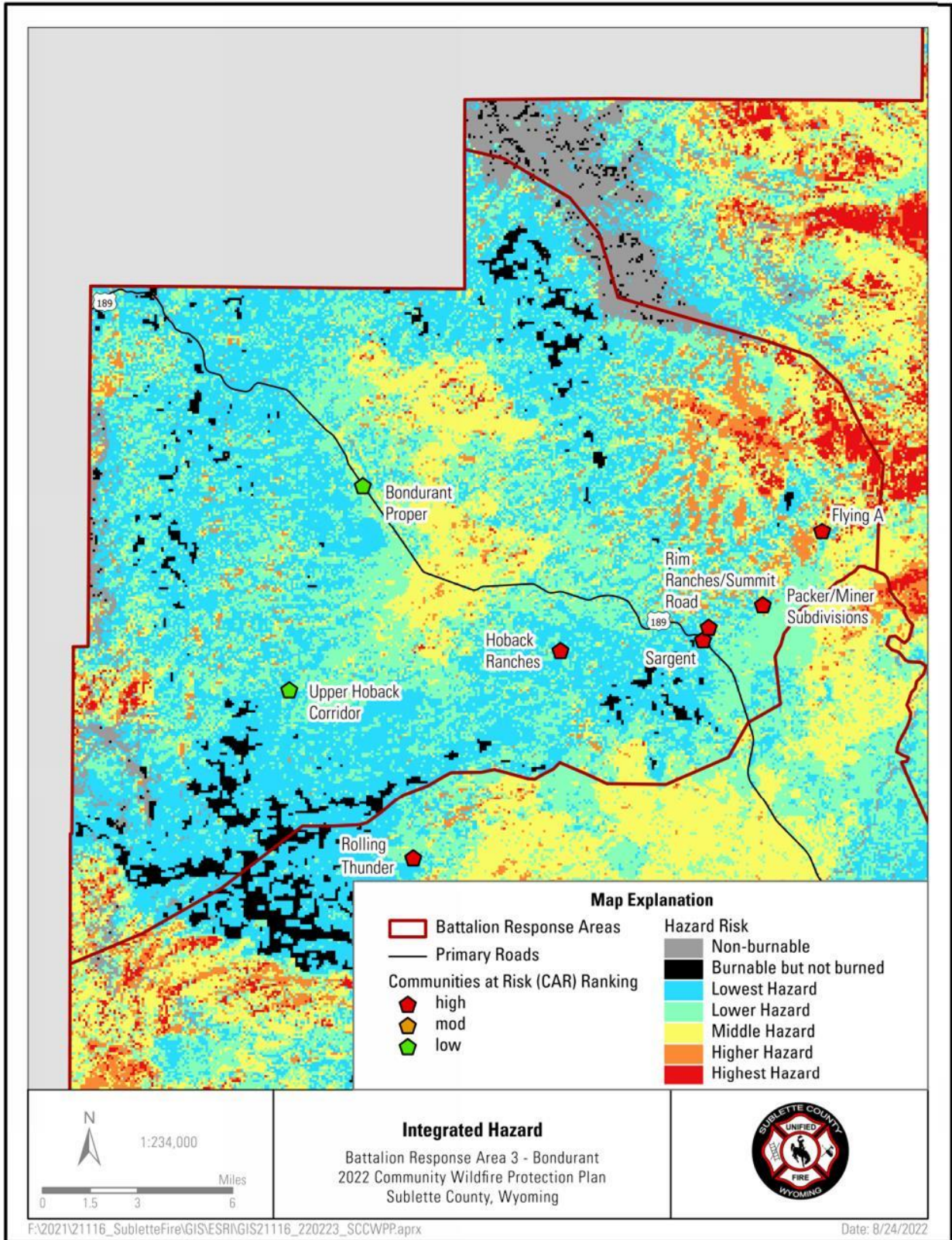
break to the south of Hoback ranches on over 110 acres. These treatments included thinning trees from below, hand piling, and prescribe burning. In 2020 the BLM treated 20,205 acres of cheatgrass with chemical applications to the west of the Hoback fuel break. SCUF submitted a WUI grant application in 2018 for Hoback Ranch defensible space work on 20 private parcels. This grant was not awarded funding.

**Evacuation Considerations:** The following are the Bondurant Response area's notification and evacuation order phases. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

- Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.
  
- Evacuation Trigger:** If a fire escapes initial attack or spots within 1 mile of adjacent subdivisions and/or affected recreational areas.
  
- Alert:** Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 8. Battalion 3 Communities at Risk.**

Battalion Response	Community	C.A.R Hazard Rating	Opportunity	Challenge
<b>3 Bondurant</b>				
	<b>Sargent Subdivision</b>	<b>High</b>	<ul style="list-style-type: none"> <li>Flat terrain/Quick access from HWY-189</li> <li>Roosevelt burn scar to the west</li> <li>Understory thinning from Roosevelt Fire operations</li> <li>Mostly class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>Dead-end roads</li> <li>Timber fuel type</li> <li>Lack of HIZ defensible space</li> <li>Lack of water source</li> <li>Above-ground utilities</li> </ul>
	<b>Packer/Miner Subdivisions</b>	<b>High</b>	<ul style="list-style-type: none"> <li>Some aspen stands present</li> <li>Low structure density</li> <li>Pond for draft/dip site at Loomis Ranch</li> </ul>	<ul style="list-style-type: none"> <li>One-way in, one-way out access</li> <li>Remote access from Battalion 3 Station</li> <li>Dense fuels/Lack of HIZ defensible space</li> <li>Moderate to steep terrain</li> </ul>
	<b>Flying A</b>	<b>High</b>	<ul style="list-style-type: none"> <li>Flat terrain at the ranch</li> <li>Recent fuels reduction to the west and south</li> <li>Loop road/Turn arounds</li> <li>Low structure density/Class A roofing</li> <li>Areas of refuge in pasture/hayfields</li> </ul>	<ul style="list-style-type: none"> <li>One-way in, one-way out access</li> <li>Remote access from Battalion 3 Station</li> <li>Moderate to heavy fuels</li> <li>Lack of water source</li> <li>Above ground utilities</li> </ul>
	<b>Rim Ranches/ Summit Road</b>	<b>High</b>	<ul style="list-style-type: none"> <li>Easy access from HWY-189</li> <li>Cul-de-sac turn around</li> <li>Low structure density</li> <li>Class A roofing</li> <li>Underground utilities</li> <li>Area of refuge in pastures/hayfields</li> </ul>	<ul style="list-style-type: none"> <li>One-way in, one-way out access</li> <li>Moderate steep terrain</li> <li>Heavy fuel type</li> <li>Limited water source: pond on private</li> </ul>
	<b>Hoback Ranches</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>Two-way access: at risk from landslide</li> <li>Class A roofing</li> <li>Good defensible space from Roosevelt burn scars/Thinning operations</li> <li>Light to moderate fuels</li> <li>Underground utilities</li> </ul>	<ul style="list-style-type: none"> <li>Steep terrain</li> <li>Road accessibility/dead-end roads</li> <li>Limited natural water sources only</li> </ul>
	<b>Upper Hoback Corridor</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>Flat terrain/Good access road</li> <li>Driveway loops/Cul-de-sac turnarounds on private</li> <li>Roosevelt fire scars to west, south, north</li> <li>Good HIZ defensible space</li> <li>Mostly class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>Moderate fuels</li> <li>Limited water supply: natural draft sites</li> </ul>
	<b>Bondurant</b>	<b>Low</b>	<ul style="list-style-type: none"> <li>Quick access to Battalion Station 3/Water source</li> <li>Flat terrain</li> <li>Loops roads and cul-de-sacs on private</li> <li>Light to moderate fuels</li> <li>Good HIZ defensible space</li> <li>Mostly class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>Potential for wind-driven fire</li> <li>Above ground utilities</li> </ul>



**Figure 7. Integrated hazard map for Battalion Response Area 3 - Bondurant.**



#### **4.2.1.4 BATTALION RESPONSE AREA 4 - BOULDER**

**Description:** Area consists of the communities of Boulder, Barger/Big Country/High Meadows Subdivisions, Boulder Lake Ranch Estates, Big Sandy/Dutch Joe, Pocket Creek, East Fork Estates, Scab Creek, Sand Draw Industrial Park, including active gas fields from the Mesa Anticline to the bottom of the Jonah field, and the surrounding areas. Also included are the Bridger-Teton National Forest, the BLM, and Wyoming State Lands. This is a medium-sized geographical area with medium-density subdivisions within the interface.

#### **Critical Infrastructure/Values at Risk:**

- Medium-density WUI communities and structures
- Electrical transmission lines and communication sites
- Oil and gas infrastructure
- Campground infrastructure
- Highway 191 closure (commerce)
- Industrial Haz-Mat storage at Sand Draw

**Hazards:** Single access points to remote communities; Limited fire hydrants and reliable natural water sources; Low to high WUI density; wind-driven fire potential; Big Sandy corridor is a very high use public recreational use area.

**Water Supply:** Water is available at the Boulder Battalion Station 4 Dry hydrants located at:

- Boulder Lake Road (CR 23-125) – Near Hwy 353 intersection
- 11 Meander Lane – Boulder
- East Fork Big Sandy (CR 23-133) – Near Muddy Speedway intersection
- Boulder South Road (CR 23-106)

#### **Recent Mitigation/Accomplishments:**

The Bureau of Land Management and Sublette County Weed and Pest have treated a significant amount of the Wind River front range with chemical applications to mitigate cheatgrass fuel loading.

**Evacuation Considerations:** The following are the Boulder Response area's notification and evacuation order phases. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

**Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.

**Evacuation Trigger:** If a fire escapes initial attack or spots within 1

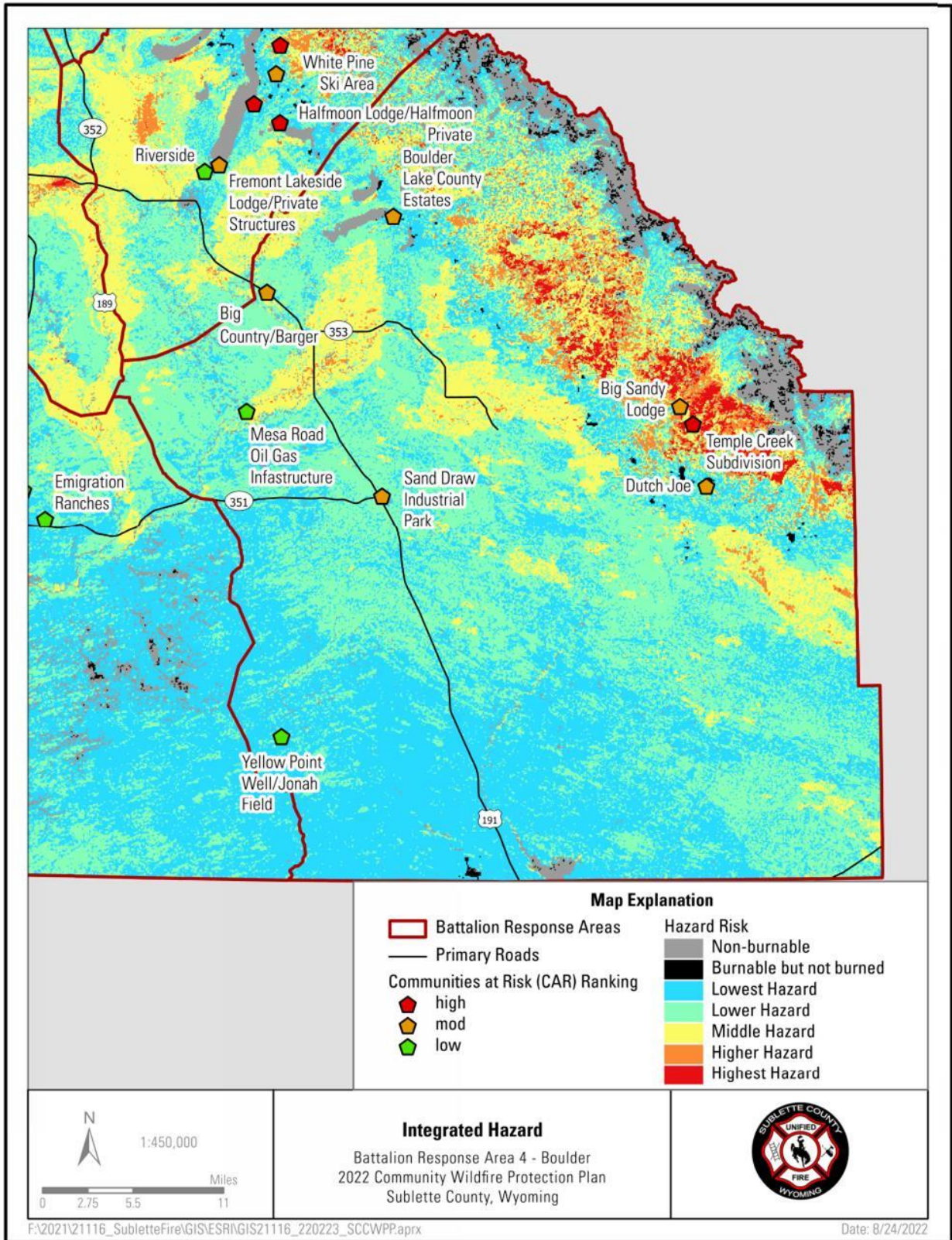
mile of adjacent subdivisions and/or affected recreational areas.

**Alert:**

Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 9. Battalion 4 Communities at Risk.**

<b>Battalion Response</b>	<b>Community</b>	<b>C.A.R Hazard Rating</b>	<b>Opportunity</b>	<b>Challenge</b>
<b>4 Boulder</b>				
	<b>Temple Creek Residences (USFS)</b>	<b>High</b>	<ul style="list-style-type: none"> <li>• Mostly class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>• Remote location/One-way in, one-way out</li> <li>• Heavy timber fuels</li> <li>• Lack of HIZ defensible space</li> <li>• Above ground utilities</li> <li>• Lack of defensible space</li> <li>• Lack of water source</li> <li>• Significant public use corridor</li> </ul>
	<b>Dutch Joe Guard Station (USFS)</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Loop road with a turnaround</li> <li>• Good HIZ defensible space</li> <li>• Class A roofing</li> <li>• Area of refuge to the south in meadows</li> </ul>	<ul style="list-style-type: none"> <li>• Remote location/One-way in, one-way out</li> <li>• Heavy timber fuels</li> <li>• Above ground utilities</li> <li>• Lack of defensible space</li> <li>• Lack of water source</li> <li>• Significant public use corridor</li> </ul>
	<b>Boulder Lake Ranch Country Estates</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Low structure density</li> <li>• Moderate surrounding fuels: aspen, pastures, and conifers</li> <li>• Defensible space</li> <li>• Class A roofing</li> <li>• Buried utilities in the subdivision</li> <li>• Dry hydrant with draft engine and 2,000 gals. water tank (private)</li> <li>• Natural draft sites</li> <li>• Areas of refuge in pastures</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out</li> <li>• Above ground feeder powerlines to subdivision</li> </ul>
	<b>Big Sandy Lodge</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Loop road with turn arounds</li> <li>• Low structure density</li> <li>• Good HIZ defensible space</li> <li>• Class A roofing</li> <li>• Refuge areas in open meadows</li> </ul>	<ul style="list-style-type: none"> <li>• Remote location/One-way in, one-way out</li> <li>• Heavy timber fuels</li> <li>• Above ground utilities</li> <li>• Lack of water source</li> <li>• Significant public use corridor</li> </ul>
	<b>Sand Draw Industrial Park</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Two or more access roads/Good access</li> <li>• Flat terrain</li> <li>• Low structure density</li> <li>• Moderate fuels</li> <li>• Class A roofing</li> <li>• Underground utilities</li> <li>• Wells with dry hydrants at two private sites</li> <li>• Good evacuation routes</li> </ul>	<ul style="list-style-type: none"> <li>• Hazardous material</li> <li>• Lack of water source</li> </ul>
	<b>Barger/Big Country/High Meadow Subdivisions</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 4</li> <li>• Flat to moderate terrain</li> <li>• Moderate sage/grass fuels</li> <li>• Below-ground utilities</li> <li>• Hydrant water sources: 550,000-gal tank at High Meadows</li> <li>• Good evacuation routes</li> <li>• Areas of refuge in roadside pullouts</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out</li> <li>• High-density structures</li> <li>• Above ground utilities at High Meadows</li> <li>• Natural gas infrastructure</li> <li>• Wind-driven fire potential</li> </ul>
	<b>Oil/Gas Infrastructure: Jonah Field and Mesa Road</b>	<b>Low</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• More than one road access/areas of refuge</li> <li>• Hardened sites</li> <li>• Light to moderate sage/grass fuels</li> <li>• Class A roofing</li> <li>• Lack of water sources</li> </ul>	<ul style="list-style-type: none"> <li>• Hazardous material</li> <li>• Wind-driven fire potential</li> </ul>



**Figure 8. Integrated hazard map for Battalion Response Area 4 - Boulder.**

#### **4.2.1.5 BATTALION RESPONSE AREA 5 – DANIEL**

**Description:** Area consists of the communities of Daniel, Roberts Road, Forty-Rod/Green River Ranches, Jim Bridger/Aspen Ridge, Thunder/Rolling Thunder Homes, Horse Creek, and the surrounding areas. Also included are the Bridger-Teton National Forest, Wyoming State Lands, and the BLM. This is a large geographical area with medium-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate the evacuation of some or all of the area.

#### **Critical Infrastructure/Values at Risk:**

- Low to medium-density WUI communities and structures
- Electrical transmission lines and communication sites
- Oil and gas infrastructure
- Campground infrastructure
- Highway 189 closure (commerce)

**Hazards:** Single access points to remote communities with steep, narrow roads; one-way in, one-way out access; Limited fire hydrants and reliable natural water sources; Low to medium WUI density; wind-driven fire potential.

**Water Supply:** Water is available at the Daniel Battalion Station 5. Dry hydrants are located at:

- 17 Walker Lane – Daniel Battalion Station #5
- Cottonwood Ryegrass Road (CR 23-117) – Near N. Cottonwood Rd. intersection
- 12994 US Hwy 189 - Daniel
- 239 Pape Road (CR 23-150) – Daniel Fish Hatchery

#### **Recent Mitigation/Accomplishments:**

Bureau of Land Management (Pinedale Field Office) has treated numerous WUI areas from 2016 to 2018: Ryegrass Mowing Project, Soapholes Mowing Project, Wyoming Front Mowing Project, and Invasive Species Removal treatments for cheatgrass throughout the response area.

**Evacuation Considerations:** The following are the Daniel Response area's notification and evacuation order phases. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

**Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.

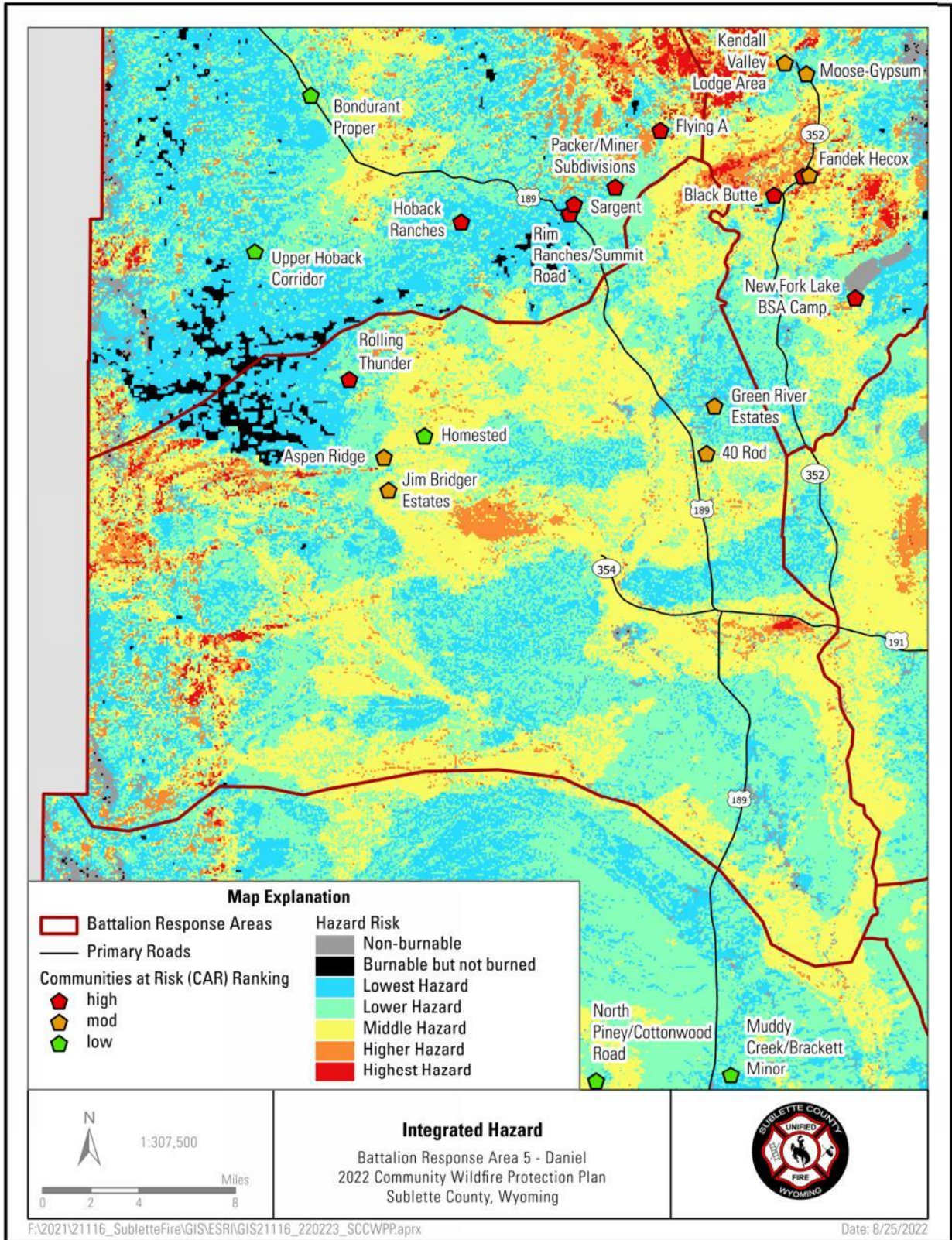
**Evacuation Trigger:** If a fire escapes initial attack or spots within 1 mile of adjacent subdivisions and/or affected recreational areas.

**Alert:**

Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 10. Battalion 5 Communities at Risk.**

Battalion Response	Community	C.A.R Hazard Rating	Opportunity	Challenge
<b>5 Daniel</b>				
	<b>Thunder/Rolling Thunder Subdivisions</b>	<b>High</b>	<ul style="list-style-type: none"> <li>• Two or more primary roads</li> <li>• Mostly class A roofing</li> <li>• Natural ponds along main road</li> <li>• Underground electrical utilities</li> <li>• Roosevelt fire scar to the west</li> </ul>	<ul style="list-style-type: none"> <li>• Steep and narrow roads</li> <li>• Steep terrain</li> <li>• Moderate to heavy timber fuel types</li> </ul>
	<b>Jim Bridger Estates</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Wide access road</li> <li>• Class A roofing</li> <li>• Below-ground electrical utilizes</li> <li>• Areas of refuge in pasturelands</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, One-way out access</li> <li>• Dense fuel types adjacent to upper homes</li> <li>• Lack of water source (2 private ponds)</li> </ul>
	<b>Aspen Ridge Subdivision</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Moderate sage/grass and aspen</li> <li>• Class A roofing</li> <li>• Pond water sources</li> <li>• Below-ground electric utilities</li> </ul>	<ul style="list-style-type: none"> <li>• Main road one-way in, one-way out</li> <li>• In development process</li> <li>• Lack of water source</li> </ul>
	<b>Green River Estates</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat to moderate terrain</li> <li>• Two or more access roads</li> <li>• Mix of Class A and C roofing</li> <li>• Light to moderate fuel types (sage/grass)</li> </ul>	<ul style="list-style-type: none"> <li>• Water source at Green River (draft only)</li> <li>• Large/expansive subdivision</li> <li>• Some narrow roads</li> <li>• Concern for wind-driven fire</li> </ul>
	<b>40 Rod Subdivision</b>	<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Two or more access roads; wide and good</li> <li>• Mostly class A roofing</li> <li>• Good defensible space</li> <li>• Light to moderate fuel types (sage/grass)</li> <li>• Area of refuge to the south – gravel pit</li> </ul>	<ul style="list-style-type: none"> <li>• Pond water source to the south (draft only)</li> <li>• Concern for wind-driven fire</li> </ul>
	<b>Homestead Subdivision</b>	<b>Low</b>	<ul style="list-style-type: none"> <li>• Flat terrain</li> <li>• Light sage/grass fuels</li> <li>• Good HIZ defensible space</li> <li>• Class A roofing</li> <li>• Below ground electric utilities</li> <li>• Areas of refuge in grass meadows</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of water source</li> </ul>



**Figure 9. Integrated hazard map for Battalion Response Area 5 - Daniel.**

#### **4.2.1.6 BATTALION RESPONSE AREA 6 – KENDALL VALLEY**

**Description:** Area consists of the communities of New Fork Lake/Boy Scout Camp, Red Cliff Bible Camp, Black Butte Subdivisions, Moose-Gypsum, Red Stone, Hecox/Fandek, Buffalo Head Springs Estates, Marsh Creek, Green River Lake corridor, and the surrounding areas. Also included are the Bridger-Teton National Forest, Wyoming State Lands, and the BLM. This is a large geographical area with high-density subdivisions within the interface. The complexity of fire(s) in this area may necessitate evacuation of some portion or all of the area.

#### **Critical Infrastructure/Values at Risk:**

- Low to high-density WUI communities and structures
- Communication sites
- Campground infrastructure
- Very high use public recreation corridor (Green River)

**Hazards:** Single access points to remote communities with steep, narrow roads; One-way in, one-way out access; Limited fire hydrants and reliable natural water sources; Low to high WUI population density; Green River corridor is a very high public use recreation area.

**Water Supply:** Water is available at the Kendall Valley Battalion Station 6. Dry hydrants are located at:

- Kendall Valley Battalion Station #6
- 4 River Road – Redstone Upper Green Subdivision

#### **Recent Mitigation/Accomplishments:**

Red Cliff Homes and Bible Camp: U.S. Forest Service funded a project for WUI hazardous fuels reduction completed in 2014. The project treated approximately two-hundred and forty-four acres surrounding the Red Cliffs/Bible Camp complex. The project's objective was to reduce hazardous fuels by thinning and piling conifer trees to reduce potential fire intensity in the wildland-urban interface areas. Contracted services and Forest personnel were employed to implement mechanical and prescribe burn treatments to achieve fuel reduction objectives and create a greater margin of safety for responders and the community residents.

New Fork Lake Homesites (planned 2022-23): Wyoming State Forestry Division (WSFD) WUI grant-funded for defensible space, fuel breaks, and fuels reduction. The project will encompass approximately thirty-seven acres over twelve lots with eleven homes. This is a cost-share grant between the WSFD and the homeowners. There is heavy fuel loading throughout the neighborhood with only one way in/out on poor roads. Heavy fuel loading existed on adjacent public lands to the east until the 2008 New Fork Fire scar, which mitigated some of the fuel concerns. Heavy recreation use at New Fork Lakes and the Boy Scout Camp provides a substantial risk for human-caused ignitions. Also, risk of a wind-driven grass/sage fire coming out of the southwest. Adjacent BLM fuel reduction will assist in reducing risk on that side of the neighborhood. Objectives are to 1) create/increase defensible space, 2) create fuel breaks along the southern and eastern boundaries of the community, and 3) reduce fuel loading along Moccasin Trail and Bootstrap Lane to provide for safer ingress/egress.



**Evacuation Considerations:** The following are the Kendall Valley Response area's notification and evacuation order phases. Final evacuation determinations will be made through coordination between the Incident Commander, Sheriff, and Sublette County Emergency Management. The following trigger points will activate both phases:

**Notification Trigger:** If a fire escapes initial attack or spots within 1.5 miles of adjacent subdivisions and/or affected recreational areas.

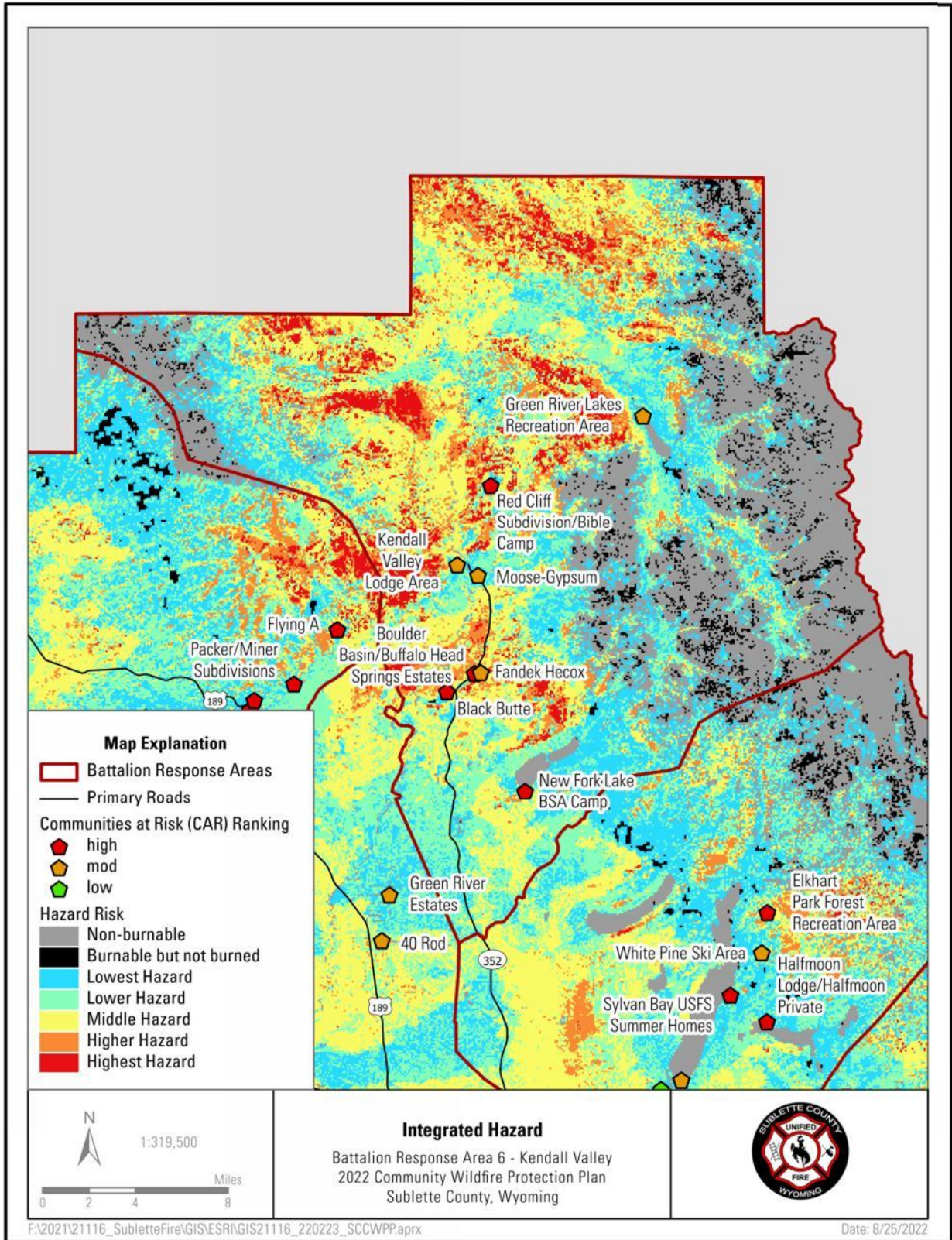
**Evacuation Trigger:** If a fire escapes initial attack or spots within 1 mile of adjacent subdivisions and/or affected recreational areas.

**Alert:** Any fire which burns in the area and exhibits extreme fire behavior, is tactically unsafe to fight, or poses an immediate threat to the area would trigger immediate evacuation.

**Table 11. Battalion 6 Communities at Risk.**

Battalion Response	Community	C.A.R Hazard Rating	Opportunity	Challenge
<b>6 Kendall Valley</b>				
	Red Cliff Homes/ Bible Camp	High	<ul style="list-style-type: none"> <li>• Class A roofing</li> <li>• Below ground electric utilities</li> <li>• Flat terrain in subdivision</li> </ul>	<ul style="list-style-type: none"> <li>• Remote access area</li> <li>• One-way in, one-way out access</li> <li>• Steep, long, and narrow access road</li> <li>• Heavy and dense timber fuel types</li> <li>• Lack of HIZ defensible space</li> <li>• Lack of water source</li> <li>• No good areas of refuge</li> </ul>
	Black Butte Subdivisions	High	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 6</li> <li>• Class A roofing</li> <li>• Below ground electric utilities</li> <li>• Natural water source</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Steep terrain</li> <li>• Heavy timber fuel types</li> <li>• Lack of HIZ defensible space</li> <li>• Limited areas of temporary refuge</li> <li>• Lack of water source</li> </ul>
	New Fork Lake Summer Residences/ Boy Scout Camp	High	<ul style="list-style-type: none"> <li>• Mostly flat, with good USFS road</li> <li>• Class A roofs</li> <li>• Natural water source from lake</li> <li>• Good open meadows and lake for safe zones</li> </ul>	<ul style="list-style-type: none"> <li>• Narrow roads within areas of concern</li> <li>• One-way in, one-way out</li> <li>• Heavy fuels</li> <li>• Mostly unmanaged area except immediate to some structures</li> <li>• BSA camp mostly older minimally maintained structures</li> <li>• Evacuation concerns if BSA camp is full</li> </ul>
	Boulder Basin/ Buffalo Head Springs Estate	High	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 6</li> <li>• Class A roofing</li> <li>• Area of moderate sage/grass and aspen</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Steep terrain</li> <li>• Narrow road</li> <li>• Heavy timber fuel type</li> <li>• Above ground utilities</li> <li>• Lack of water source</li> <li>• Limited areas of temporary refuge</li> </ul>
	Hecox/Fandek Subdivisions	Moderate	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 6</li> <li>• Low structure density</li> <li>• Good access and turn arounds</li> <li>• Light to moderate sage/grass fuels</li> <li>• Class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>• One-way in, one-way out access</li> <li>• Steep terrain</li> <li>• Narrow road</li> <li>• Dense fuels to the east</li> <li>• Above ground utilities</li> <li>• Lack of water source</li> <li>• Temporary refuge area at the highway</li> </ul>
	Kendall Valley Lodge Area	Moderate	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 6</li> <li>• Relatively flat with some wooded slopes above</li> <li>• Some mowed firebreaks in place</li> <li>• Class A roofs on most structures</li> <li>• Structures widely spread</li> <li>• Most electrical underground</li> </ul>	<ul style="list-style-type: none"> <li>• Narrow roads in places, not well maintained</li> <li>• Bridges are not suitable for heavy loads</li> <li>• Bug kill in the forest to the west</li> <li>• Willows to the road edge in the riparian area</li> </ul>
	Green River Lakes Recreation Area (USFS)	Moderate	<ul style="list-style-type: none"> <li>• Low structure density</li> <li>• Flat terrain</li> <li>• Natural water sources (Lake/River)</li> <li>• Hardened recreation infrastructure</li> <li>• Class A roofing</li> </ul>	<ul style="list-style-type: none"> <li>• Very remote area</li> <li>• High public use corridor</li> <li>• Evacuation concerns</li> <li>• Heavy timber fuel type to the west/south</li> </ul>
	Moose Gypsum Subdivision	Moderate	<ul style="list-style-type: none"> <li>• Proximity to Battalion Station 6</li> <li>• Light to moderate sage/grass fuels</li> <li>• Good HIZ defensible space</li> </ul>	<ul style="list-style-type: none"> <li>• Steep access areas</li> </ul>

Battalion Response	Community	C.A.R Hazard Rating	Opportunity	Challenge
			<ul style="list-style-type: none"> <li>• Class A roofing</li> <li>• Below ground electric utilities</li> <li>• Areas for temporary refuge</li> </ul>	



**Figure 10. Integrated hazard map for Battalion Response Area 6 - Kendall Valley.**

## 4.2.2 PUBLIC WORKSHOP PROCESS

A vital component of the CWPP process is public involvement and collaboration with community experts and stakeholder representatives during the process. A primary objective of this plan was to engage residents in hazard identification, preparedness, and prioritizing wildfire mitigation projects. Six public workshops were convened to gather comments and feedback from the public, cooperators, and SCUF Battalion members. Outreach was conducted through social media posts, direct emails, and a public invite postcard mailed to all Sublette County residents. The workshops were held in each Battalion Station between April and June 2022 to ensure the most community members were reached:



**Figure 11. Public workshop at Battalion Station 3 - Bondurant (photo source: TWMT, LLC).**

- 04/21/22 Battalion 6 (Kendall Valley)
- 04/28/22 Battalion 4 (Boulder)
- 05/05/22 Battalion 5 (Daniel)
- 05/19/22 Battalion 3 (Bondurant)
- 05/26/22 Battalion 1 (Pinedale)
- 06/02/22 Battalion 2 (Marbleton/Big Piney)

Topics for the meetings included potential fire behavior, hazards to communities at risk in each Battalion response area, wildfire preparedness and evacuation planning, and upcoming Forest Service fuels reduction projects. The public events were “working” meetings designed with two exercises to engage all participants in a public forum. One activity involved participants validating collected fire hazard severity information (Tables from Section 4.2) and maps, including values at risk for each Community at Risk. The second exercise presented the strategic action plan for community risk reduction, listed into specific categories such as defensible space treatments, fuels reduction projects, potential control line/fuel breaks, and water supply improvements. All community members, in addition to agency representatives and stakeholders, contributed substantive input to the development of the action plan by editing and adding future community risk reduction and planning projects. The 2022 CWPP update succeeded by providing an effective public mechanism for obtaining community input, validating collected data and potential hazards,

and developing a prioritized list of potential projects to mitigate areas of concern, fire hazards, and overall risk to communities.

### 4.3 WILDFIRE RISK ASSESSMENT

Conducting a Quantitative Wildfire Risk Analysis (QWRA) incorporates three primary components: 1) the likelihood of wildfires occurring (where wildfires are most likely to burn), 2) the intensity when a fire occurs (where wildfires are predicted to burn the hottest), and 3) the susceptibility of highly valued resources and assets at risk found in the landscape (Scott et al. 2013).

This Wildfire Risk Assessment was conducted in the **Interagency Fuels Treatment Decision Support System (IFTDSS)**, a cloud-based mapping and analysis program used to compute potential fire behavior characteristics on a landscape. The IFTDSS program integrates FlamMap, BehavePlus, Forest Vegetation Simulator, and Wind Ninja software. The IFTDSS tool models fire behavior and landscape burn probability while matching outputs in relation to areas of concern where communities and values at risk are located. The final Exposure Analysis to communities and values determines wildfire hazards and overall community risk.

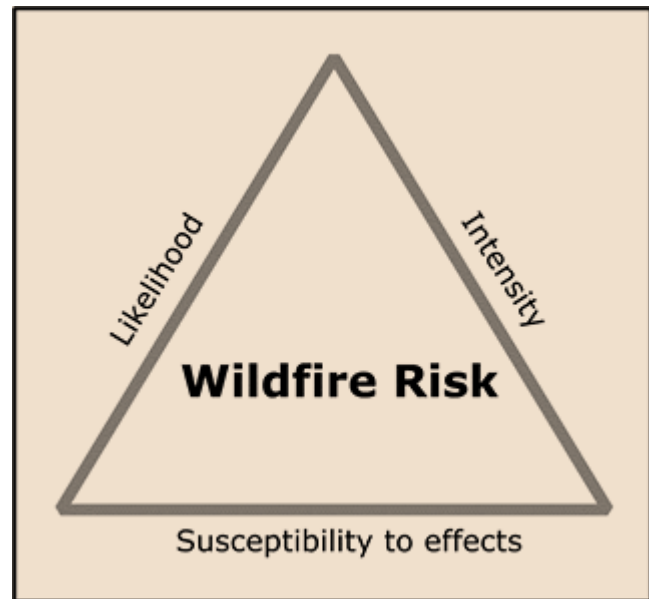


Figure 12. QWRA Components (source: Scott et. al).

The process involved creating two landscape analysis areas in Sublette County, modeling landscape burn probability, defining and evaluating the Highly Valued Resources and Assets (HVRA) based on an Exposure Analysis, and running the QWRA to assess the potential impacts fire has on the values at risk in Sublette County.

A QWRA process encompasses both the threats and benefits of fire in the landscape. There are resources on lands in Sublette County that may benefit from fire occurrence, such as wildlife habitats, fire-dependent plant species, and naturally functioning ecosystems that promote forest health. Fire is an integral component of the greater Yellowstone area and can have positive effects on this ecosystem. Naturally occurring wildland fire does play a role on the landscape, especially in the Bridger Wilderness, and under the right conditions. This CWPP and risk analysis did not consider these beneficial effects due to the populated WUI areas that were the primary focus of the study.

## **4.3.1 RISK ASSESSMENT METHODOLOGY**

### **4.3.1.1 LANDSCAPE ANALYSIS AREAS**

Due to the vast geographic area of Sublette County, two LANDFIRE landscape analysis areas were delineated for the wildfire risk assessment. LANDFIRE is a national remote sensing tool that provides vegetation and fuels data layers used as inputs for fire behavior models. The Sublette County west analysis area aligns mainly with the federal agency “Wyoming” Fire Danger Rating Area (FDRA), including the Wyoming mountain range and the lower valleys spanning east to U.S. Highway 191. This geographic area is relatively homogeneous concerning local climate, vegetation, topography, and fire occurrence. The “west landscape analysis area” includes historic weather from the Snider Remote Automated Weather System (RAWS). The Sublette County “east landscape analysis area” covers the area east of U.S. Highway 191 to the Wind River Range and the County line. The east landscape analysis area matches the “Wind River” FDRA and includes historic weather from Halfmoon and Anderson RAWS. Fire occurrence and behavior differ between the two areas. Analyzing them separately allows more accurate wildfire behavior and hazard modeling with localized weather, climate, and topography for each analysis area.

Data for all fire behavior modeling and the Qualitative Wildfire Risk Assessment was obtained from LANDFIRE 2014 layers. This landscape data set was edited for recent vegetation disturbances, including the 2016 Cliff Creek Fire, 2018 Roosevelt Fire, 2019 Boulder Fire, Skyline WUI treatments, Monument WUI treatments, BLM fuels treatments, and WY State Forestry Treatments, and USFS timber sales. The disturbance edit methods for this process can be found online at the IFTDSS website (IFTDSS 2021).

### **4.3.2 BASELINE MAP AND COMMUNITY “VALUES AT RISK” INVENTORY**

Numerous fuel reduction and hazard mitigation projects have been accomplished during the past three decades in Sublette County. The 2016 CWPP used a comprehensive approach to identify and prioritize hazardous fuels reduction treatment projects on federal and non-federal lands. The narrative for recently accomplished projects can be found in Section 4.2 for each SCUF response area. The maps in Appendix A show the accomplishments throughout the County within each battalion response area (Figure 35, Figure 41, Figure 47, Figure 53, Figure 59, and Figure 65). Treatment projects on the landscape are depicted by mechanical thinning, chemical treatments (cheatgrass), and prescribe burning.

In this risk assessment four categories of Highly Valued Resources and Assets (HVRA), or “values at risk,” have been identified and incorporated on the “baseline” values at risk map (Appendix A). These critical values include human communities/structure density, campgrounds, oil/gas infrastructure, communications infrastructure, and municipal watersheds. For the Quantitative Wildfire Risk Assessment, these values at risk were not weighted equally in the calculations. The core interagency steering team collaborated during a workshop to determine the relative importance of each value in relation to each other (Table 12).

**Table 12. Values at Risk inventory and relative importance.**

<b>Value at Risk (HVRA) *</b>	<b>Relative Importance</b>	<b>Sub-Category</b>	<b>Relative Importance</b>
<b>Communities:</b> Human Communities/ Structure Density  (1 km <sup>2</sup> = 247 acres)	<b>100</b>	Housing Unit Density (structures/km <sup>2</sup> )	
		Very High (741 – 100,000)	100
		High (124 – 741)	100
		Med-High (50 – 123)	90
		Medium (25 – 49)	90
		Low (13 – 24)	90
		Very Low ( $\leq$ 12)	90
<b>Utilities/Energy Infrastructure</b>	<b>90</b>	Communication Sites	100
		Power Distribution Lines	100
		Transmission Lines	100
		Oil/Gas Wells	85
		Pipelines	40
<b>Investment Infrastructure</b>	<b>90</b>	Developed Campgrounds (USFS/BLM)	90
		Buildings	100
<b>Municipal Watersheds:</b> Fremont Creek Lower Pine Creek Upper Pine Creek	<b>40</b>	Low Complexity	N/A
		Moderate Complexity	N/A
		High Complexity	100

**\* National HVRA data is available from Enterprise Data Warehouses and utilized in WFDSS, IFTDSS, and the National Wildfire Risk Assessment for Forest Service Lands (Dillon 2020). The above data has been cross-referenced with data used in the Scott et al., Teton Interagency Fire Quantitative Wildfire Risk Assessment, Methods, and Results publication.**



### 4.3.3 FIRE BEHAVIOR MODELING

#### 4.3.3.1 WEATHER, TOPOGRAPHY, AND FUELS

Fire behavior is driven by the combination of **weather** (wind, relative humidity, temperature, and atmospheric stability), **topography** (terrain features including steepness and aspect of slopes, gullies, or box canyons), and **fuels** (type, continuity, and density of surrounding vegetation), in addition to flammable structures across a landscape. Surface fires spread according to the direction and speed of the wind and the steepness of a slope, and active tree crown fire spreads rapidly and involves surface and canopy fuels and spreads from tree to tree through the canopy.

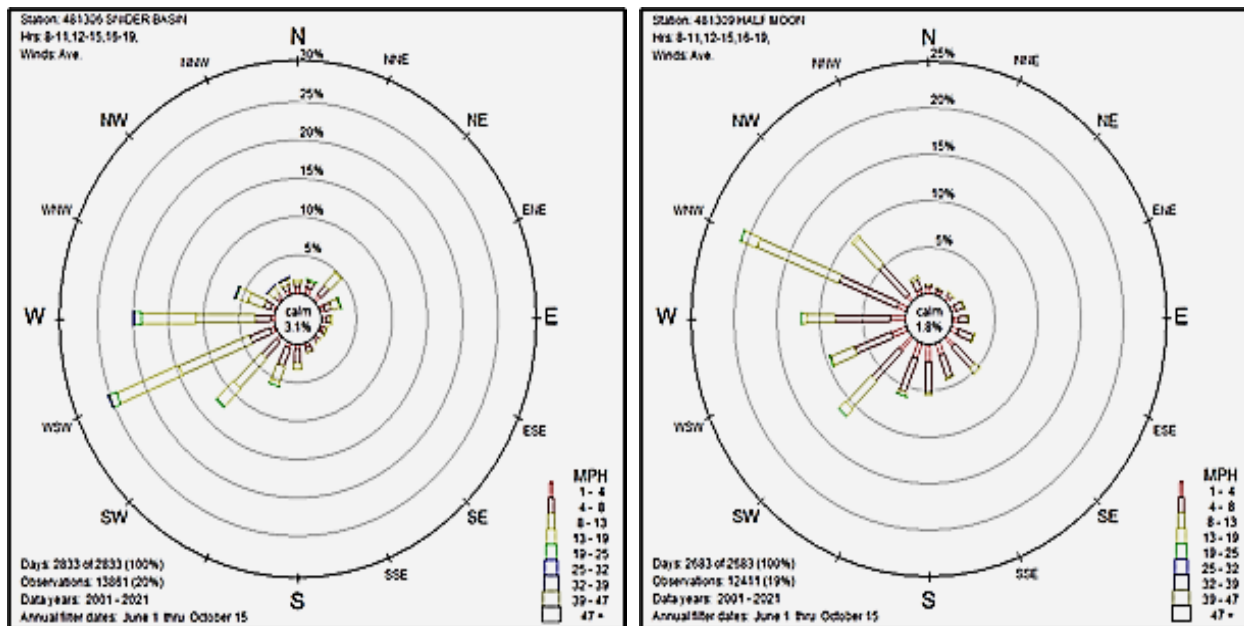
Crown fires are more difficult to control and have more severe effects than a surface fire due to higher spread rates, increased fire intensity, and increased probability of spot fires igniting ahead of the fire front. Lofted embers from all burning materials are the leading cause of home ignitions. Addressing this ember problem is key to homeowner and community fire mitigation efforts.



Figure 13. Wildland fire component triangle (source: NWCG).

#### 4.3.3.2 HISTORICAL WINDS

Hourly sustained winds data for 24 hours from June through October were obtained from the Snider, Half Moon, and Anderson RAWS. Snider and Halfmoon are within Sublette County and were chosen to represent winds/weather for the Sublette west and east landscape analysis areas influenced by the Wyoming and Wind River ranges, respectively. The BLM Anderson RAWS is located approximately 5.5 miles east of the Sublette County line, west of South Pass. The Wind Rose charts in Figure 14 are graphical representations of historical wind direction and speed over two decades for Snider and Halfmoon. The recorded mean speed for both locations ranged from 8.4 to 11.6 mph. The average windspeed for Anderson was 15.8 for the same period (1998-2021). The average wind speed for all RAWS was 11.9 mph for the three stations. Snider and Halfmoon stations were weighted higher due to their location in Sublette County and their representation of the two landscape analysis areas. As a result, 12.0 mph was utilized in all fire behavior calculations using WindNinja gridded winds to model complex topographic effects on the wind. The predominant wind direction for Snider was WSW (250° azimuth), WNW (290° azimuth) for Half Moon, and W (270°) for Anderson RAWS.



**Figure 14. Wind rose charts for the Snider (left) and Halfmoon (right) remote automated weather stations (source: FireFamilyPlus5).**

#### **4.3.3.3 TOPOGRAPHY AND VEGETATION**

Sublette County is characterized by two significant mountain ranges that run north to south, with the Wyoming Range flanking the west and the Wind River mountains on the east. Elevations throughout the county vary considerably from 5,944 to 12,875 feet above sea level. Slope differs considerably, with steep terrain that can significantly influence fire behavior as fire typically spreads at faster rates uphill. Variable aspects influence vegetation and seasonal moisture levels, with south aspects receiving more solar radiation and consisting of drier soils and drought-tolerant vegetation. North aspects are shaded and favor conifers with moister soil and duff composition. Vegetation and fuels transition at the mid and lower elevations in the Wyoming and Wind River fronts. The expansive lowlands consist primarily of sagebrush/grass, large riparian areas along the Green River, and smaller tributaries. The BLM lands are dominated by Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*) and blue bunch wheatgrass (*Pseudoroegneria spicata*). These large areas of continuous light and flashy vegetation provide a receptive fuel bed for potentially fast-moving range fires. Fire behavior in this fuel type can be dynamic and interrupted based on the amount of seasonal animal grazing on grasslands. Climbing up in elevations for both ranges, you find increased Aspen (*Populus tremuloides*) trees, mixed conifer stands, and intermixed sage/grass meadows. As a result of high elevation topography, many fires in the Pinedale Front burn up into the higher rock terrain. Many fires that start in the Wyoming Range spread east and north, often off federal lands and onto County and Private parcels at the lower elevations.

#### **4.3.3.4 FUEL MOISTURE AND MODELS**

The Basic Landscape Fire Behavior modeling was conducted using the same fuel moisture scenarios for both landscape analysis areas (west/east). Fuel moisture inputs represented typical fire season summer/fall peak weather conditions (Table 13). Fire modeling was conducted in IFTDSS to evaluate the potential of

flame length associated with fireline intensity, spread rates, and crown fire for the entire county. Explanation of each fire behavior parameter and model results follow and are presented with their associated maps.

**Table 13. Dead and live fuels moisture content values and weather used for fire behavior modeling.**

<b>Energy Release Components (ERC) Percentile</b>	<b>1-hour</b>	<b>10-hour</b>	<b>100-hour</b>	<b>Live Herbaceous</b>	<b>Live Woody</b>	<b>Windspeed Gridded</b>
<b>90<sup>th</sup></b>	4%	5%	6%	60%	100%	12 mph
<b>97<sup>th</sup></b>	3%	4%	5%	45% (4/5 cured)	80% (4/5 cured)	12 mph
<b>Winds for the west landscape analysis area: WSW at 250° (Snider RAWS)</b> <b>Winds for the east landscape analysis area: WNW at 290° (Halfmoon/Anderson)</b> <b>Crown Fire Method: Scott and Reinhart at 100% foliar moisture</b> <b>Fuel moisture conditioned for extreme conditions (July 2007)</b>						

The Landscape Burn Probability analysis includes conditional flame length, burn probability, and integrated hazard outputs. The Burn Probability and Hazard model is based on worst-case fire conditions during the Roosevelt Fire, with higher average wind speeds, including gusts. This was modeled for the worst-case fire scenario with the same fuel moisture conditions for the west/east landscape analysis areas.

**Table 14. Dead/live fuels moisture values and weather used for Burn Probability, Integrated Hazard, and Risk models.**

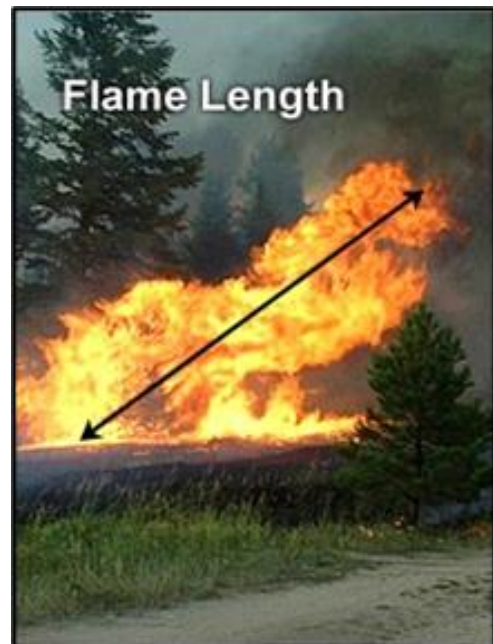
<b>Problem fire analysis</b>	<b>1-hour</b>	<b>10-hour</b>	<b>100-hour</b>	<b>Live Herbaceous</b>	<b>Live Woody</b>	<b>Windspeed Gridded</b>
<b>Roosevelt 09/20-27/18</b>	3%	4%	5%	45% (4/5 cured)	80% (4/5 cured)	20 mph
<b>Winds for the west landscape analysis area: WSW at 250° (Snider RAWS 09/20-27/2018 1300)</b> <b>Winds for the east landscape analysis area: WNW at 290° (Snider RAWS 09/20-27/2018 1300)</b> <b>Crown Fire Method: Scott and Reinhart at 100% foliar moisture</b> <b>Spotting: 20%</b> <b>Fuels moisture conditioned for extreme conditions eight hr. burn period (September 2018)</b>						

The following Standard Fire Behavior Fuel Models (Scott and Burgan 2005) were utilized in the Basic Fire Behavior and Landscape Burn Probability models (listed as a percentage of the total analysis area):

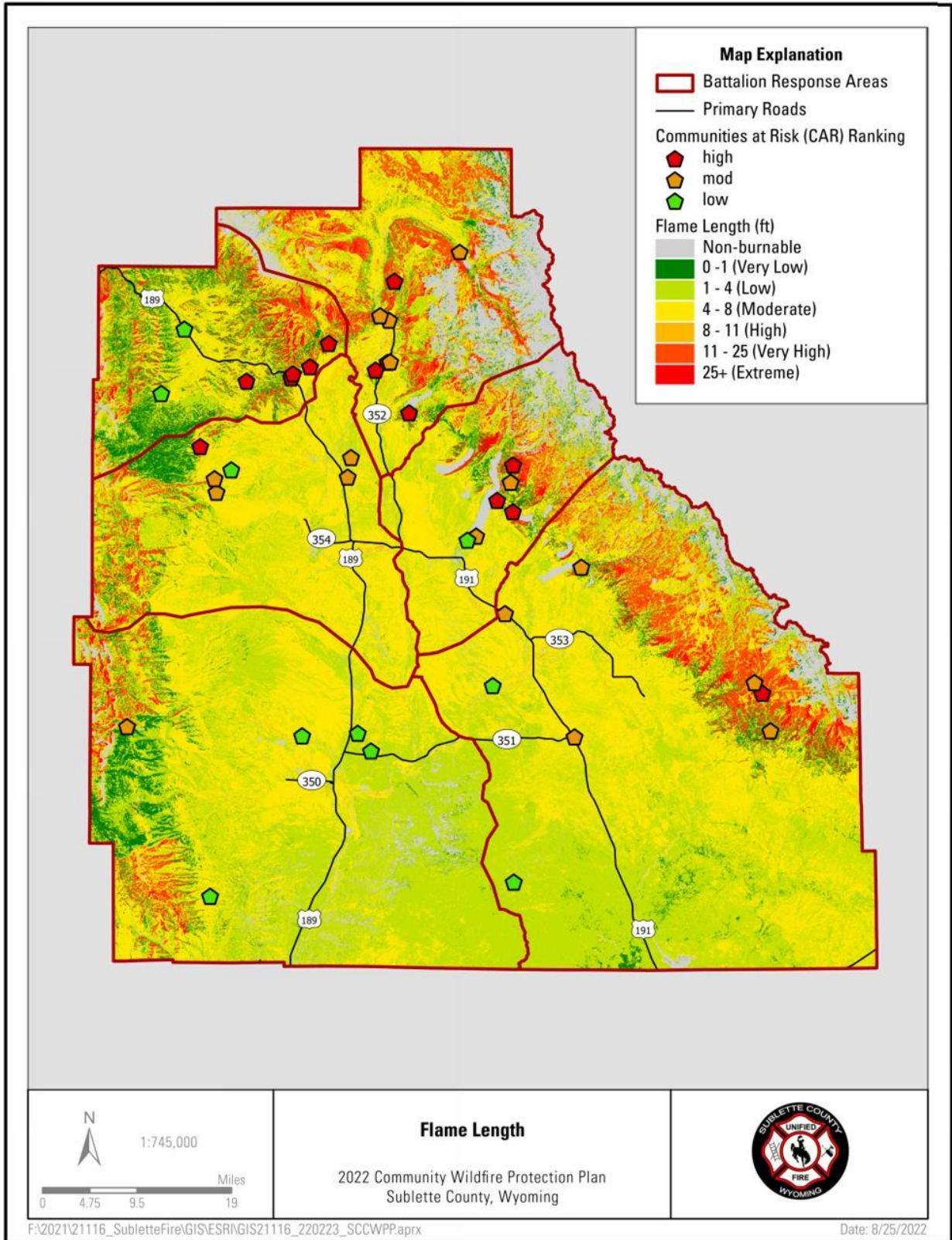
- GR1 (Short, Sparse, Dry Climate Grass) = 9%
- GR2 (Low Load, Dry Climate Grass) = 9%
- GR4 (Moderate Load, Dry Climate Grass) = 1%
- GS1 (Low Load, Dry Climate Grass-Shrub) = 21%
- GS2 (Moderate Load, Dry Climate Grass-Shrub) = 31%
- SH2 (Moderate Load, Dry Climate Shrub) = 3%
- TU1 (Low Load, Dry Climate Timber-Grass-Shrub) = 6%
- TU5 (Very High Load, Dry Climate Timber-Shrub) = 10%
- TL1 (Low Load, Compact Conifer Litter) = 1%
- TL3 (Moderate Load, Conifer Litter) = 3%
- TL4 (Small Downed Logs) = 1%
- NB (Nonburnable) = 5%

#### **4.3.3.5 FLAME LENGTH**

Flame length measures the expected flame length of a potential fire. It is the distance measured from the average flame tip to the middle of the flaming zone at the base of the fire (Figure 15). It is measured on a slant when the flames are tilted due to wind and slope effects. Flame length is influenced by weather, topography, and fuels. It is an indicator of fire intensity and is often used to estimate how much heat the fire generates. Since flame length describes the intensity of a fire, it follows that when measurements are low, firefighters and machinery can get close to the flame front. When lengths are high, these resources must be positioned further away. Flame lengths that exceed four feet mean that hand crews cannot safely control the fire. The map in Figure 16 shows over 48% of the Sublette would likely be exposed to flame lengths that would exceed ground-based firefighter defenses and capabilities, typically under high fire danger conditions.



**Figure 15. Flame length measurement.**  
(source: NWCG).



**Figure 16. Flame length map for Sublette County.**

#### **4.3.3.6 FIRE RATE OF SPREAD**

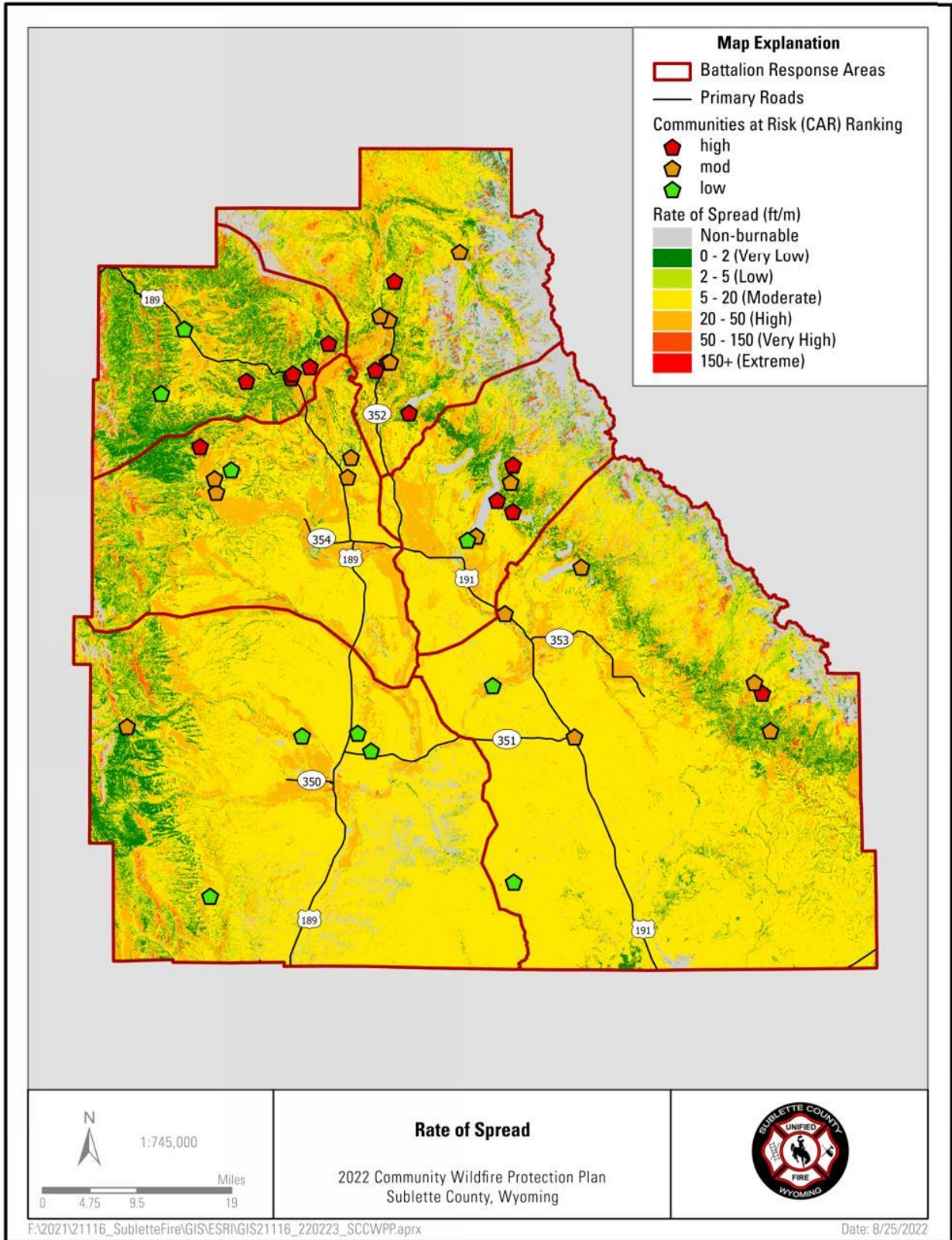
The rate of spread is a measure of the expected rate of spread of a potential fire front over time. The rate of spread is highly influenced by wind and terrain. This measurement represents the maximum rate of spread of the fire front. The measurement is based on a measurement called a chain (equal to 66 feet). Chains per hour roughly equate to feet per minute (for example, a fire moving twenty chains/hour will be moving approximately twenty feet per minute). Figure 18 shows the rate of spread for Sublette County.

A fire's rate of spread also factors into the tactics and resources deployed to suppress it. Very low spread rates mean that firefighters can safely attack the fire from all directions or spend time mitigating fuels and vegetation around structures. A fire moving very quickly may only be safely attacked from the rear and sides while the fire front is allowed to burn to a road or some other barrier, and firefighters may not have time to mitigate hazards around structures (NWCG 2021). Aircraft use, such as helicopters with water buckets and airplanes that drop fire retardant on vegetation, is critical for slowing down rapid-fire spread.

Predictions about rates and direction of a fire's spread also influence emergency responders and the Sheriff's decisions about public safety. One example is determining areas for immediate evacuation (GO! stage) versus those that may only be on alert (SET stage).



**Figure 17. 2016 Cliff Creek Fire (photo source: U.S. Forest Service).**



**Figure 18. Rate of spread map for Sublette County.**

Fireline intensity and flame length are widely used to relate visible fire characteristics and interpret general suppression strategies. There are several ways of expressing fireline intensity. A visual indicator of fireline intensity is the flame length and rate of spread (Rothermel 1983). These fire behavior classes and suppression interpretations are familiar to firefighters and are widely accepted as an intuitive communications tool. Table 15 compares fireline intensity, rate of spread, flame length, and fire suppression difficulty interpretations for responding fire resources.

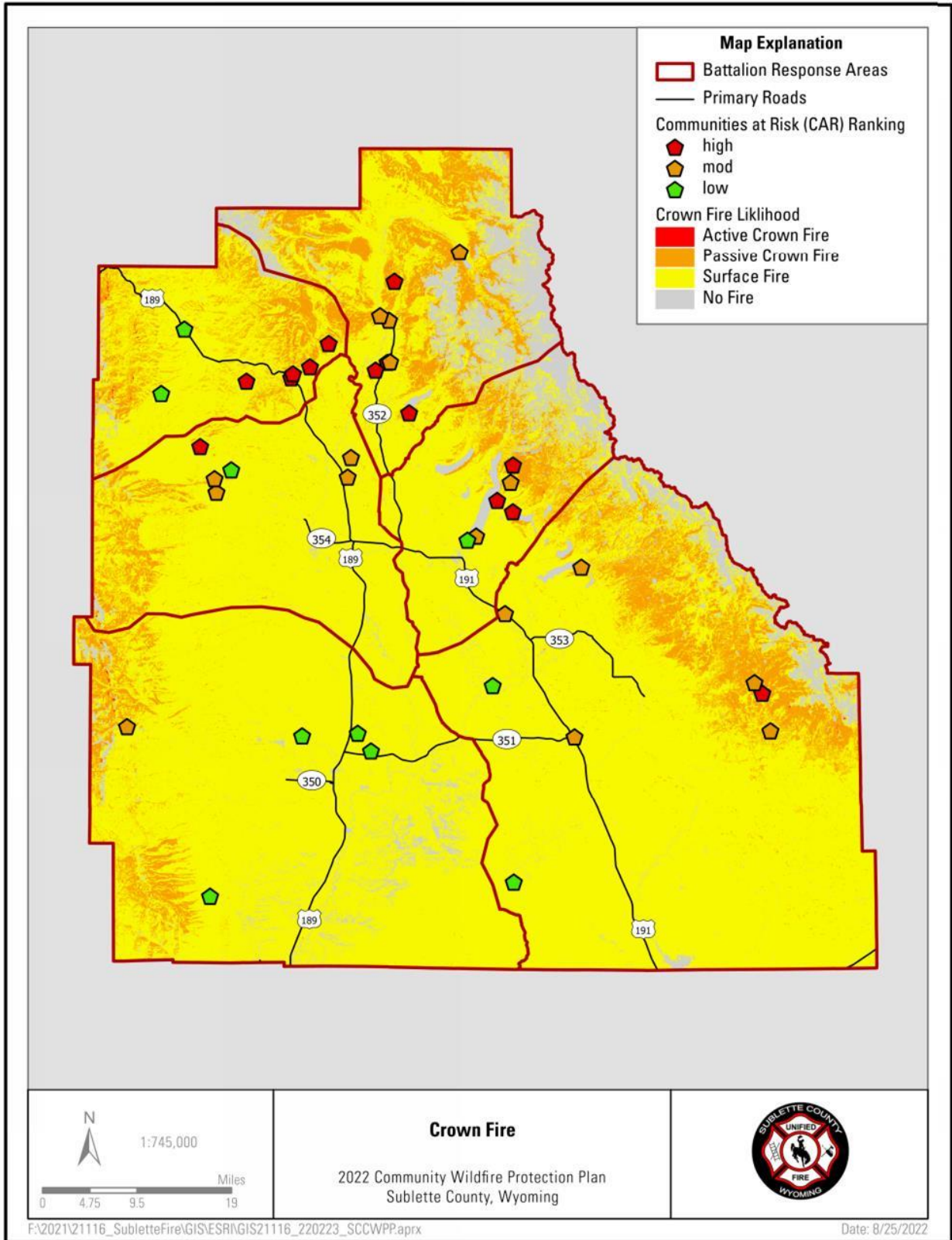
**Table 15. Fire behavior suppression interpretations.**

<b>Fire Intensity</b>	<b>Rate of Spread</b>	<b>Flame Length</b>	<b>Fire Suppression Interpretation</b>
<b>Low</b>	0 – 5 chains/hr.	Less than 4 feet	<ul style="list-style-type: none"> <li>• Direct attack at head and flank with hand crews possible.</li> <li>• Hand tools and handlines should stop fire spread.</li> </ul>
<b>Moderate</b>	5 – 20 chains/hr.	4 - 8 feet	<ul style="list-style-type: none"> <li>• Fires are too intense for a direct attack on the head by persons using hand tools.</li> <li>• Handline cannot be relied on to stop fire spread.</li> <li>• Equipment such as bulldozers, engines, and retardant aircraft can be effective.</li> </ul>
<b>High</b>	20 – 50 chains/hr.	8 - 11 feet	<ul style="list-style-type: none"> <li>• Fires may present serious control problems such as torching, crowning, and spotting.</li> <li>• Control efforts at the fire head are likely ineffective.</li> <li>• This fire would require indirect attack methods.</li> </ul>
<b>Very High/Extreme</b>	50 – 150 chains/hr.	Greater than 11 feet	<ul style="list-style-type: none"> <li>• Crowning, spotting, and significant fire runs are probable.</li> <li>• Control efforts at the head are likely ineffective.</li> <li>• This fire would require indirect attack methods.</li> </ul>

#### **4.3.3.7 CROWN FIRE**

Crown fire is defined by NWCG 2021 as fire that advances to the top (crown) of trees or shrubs and is independent of surface fire activity. Crown fire was modeled in IFTDSS and classified as *passive crown fire*, independent of group tree torching, *surface fire*, or *active crown fire* where surface and crown fire energy are linked. Abundant research confirms that embers (burning firebrands) that are lofted from a crown fire may ignite fires up to three miles away during extreme fire behavior and very high winds. Crown fires and long-range spotting concern fire responders, particularly under these conditions and with homes built in the WUI. Embers can travel far ahead of the fire front and quickly ignite combustible materials on or adjacent to homes and structures. Figure 19 shows the crown fire modeling for Sublette County.

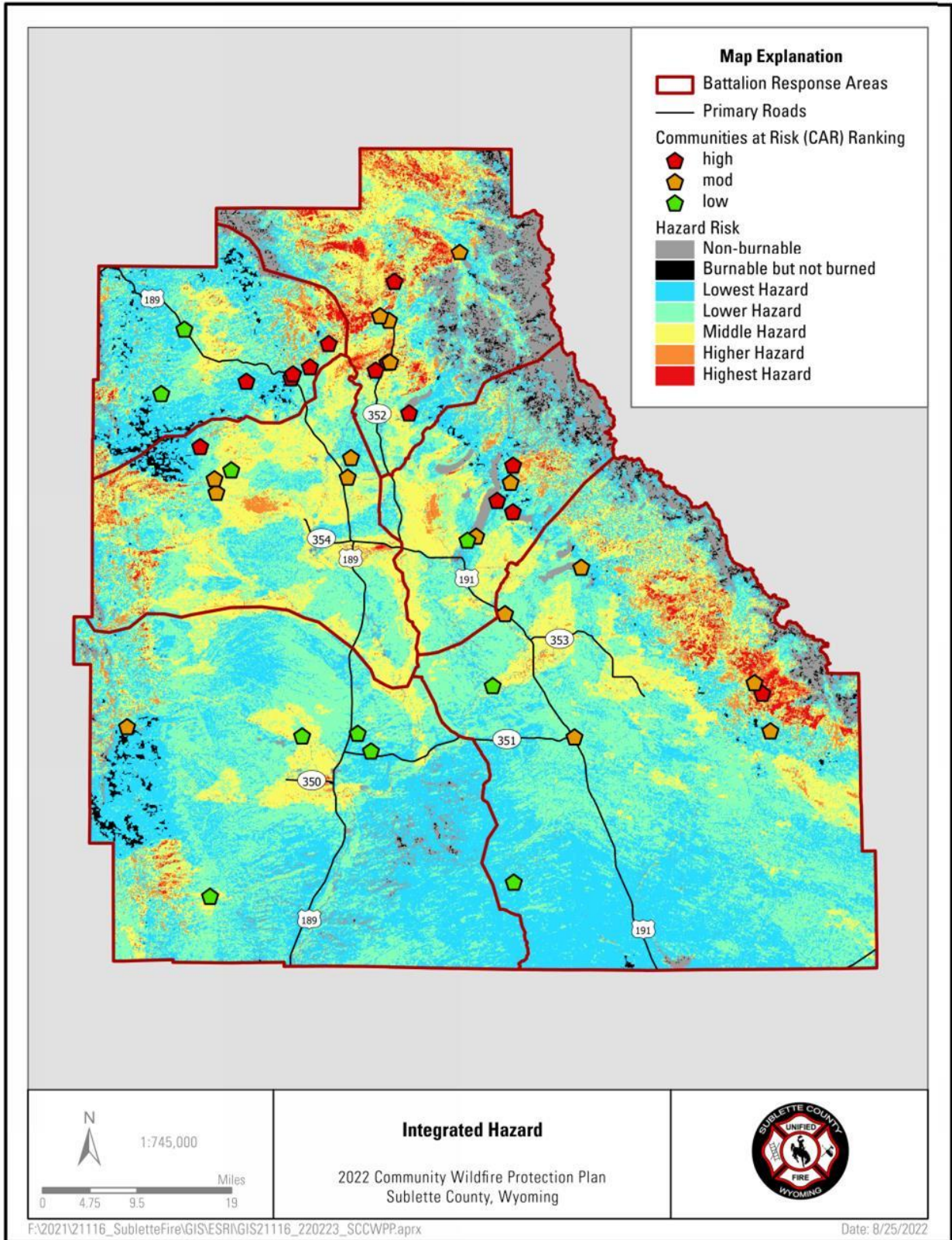




**Figure 19. Crown fire potential for Sublette County.**

#### **4.3.4 VALUES EXPOSURE ANALYSIS**

The third component of the Risk Assessment triangle is the susceptibility of the values at risk to the effects of wildfire. The goal is to identify and quantify the vulnerability of Highly Valued Resources and Assets (HVRA) identified and mapped in Sublette County during the hazard assessment process. The Exposure Analysis is an assessment of wildfire hazards – likelihood and fire intensity – where these values at risk are located. It integrates the wildfire hazards results with the HVRA relative importance rankings discussed in Section 4.3.2 and each HVRA’s response to a wildfire calculated for each value at risk in the model. The results of the exposure analysis are the Integrated Hazard maps for each Battalion Response Area displayed in Section 4.3 and the County Hazard map in Figure 20 below.

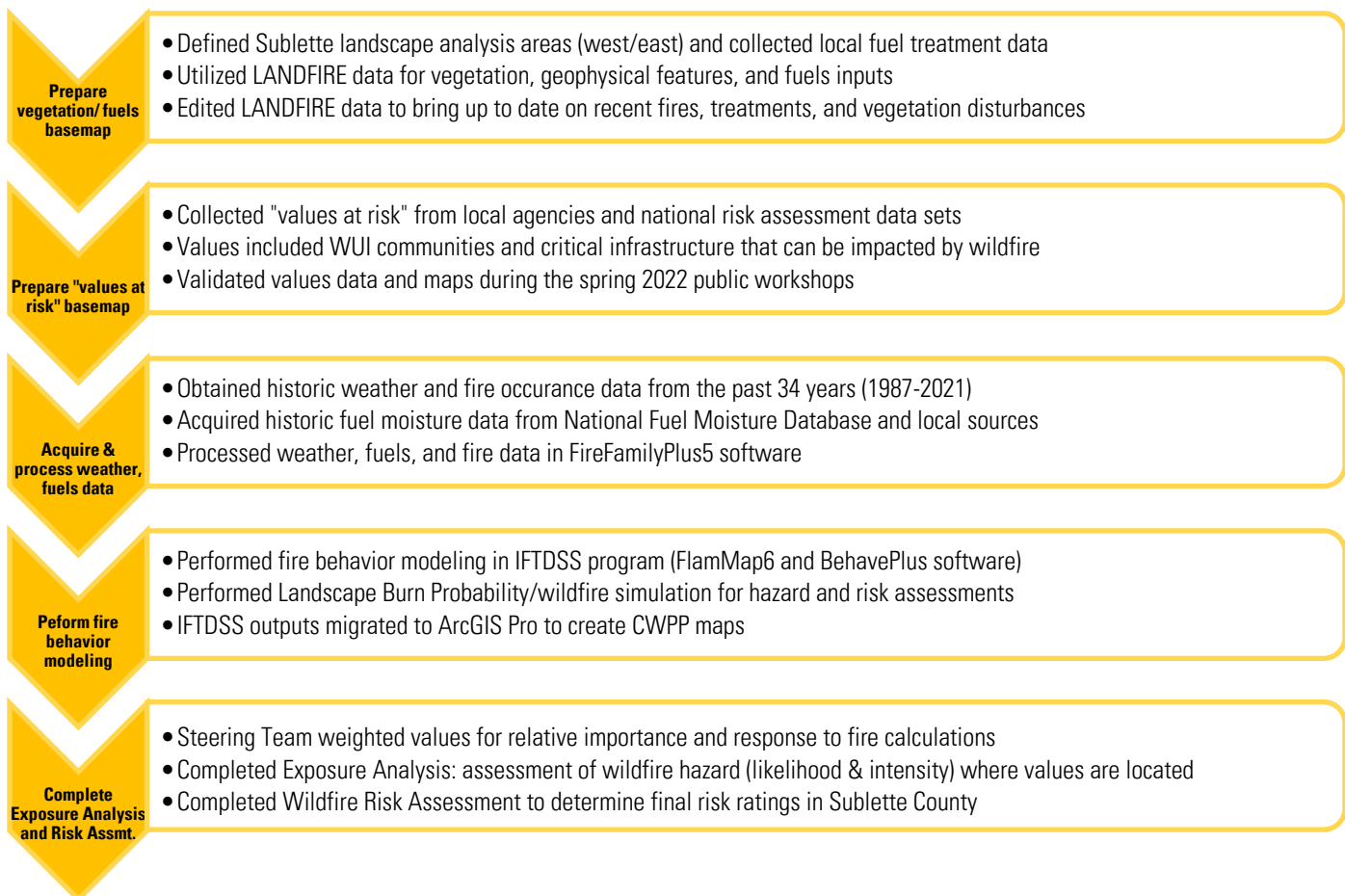


**Figure 20. Integrated hazard map for Sublette County.**

### 4.3.5 FINAL SUBLETTE COUNTY WUI CAR HAZARD/RISK RATINGS

In the context of wildfire hazard, the term “hazard” refers to the presence of vegetation fuels, defined by volume, type, condition arrangement, and location that determines the degree of ease of ignition and resistance of control (NFPA 1143). Final hazard rankings for the Communities at Risk also consider site access, defensible space, topography, building materials, utilities, and fire protection water supplies. The term “risk” is the chance, low to high, that any hazard will contribute damage or loss to a value at risk (asset). A value at risk can be any private or public resource, including property, structures, natural/cultural resources, community infrastructure, and other critical community values. The purpose of approaching the assessments at the community/subdivision level is to identify fire hazards and risks and highlight areas requiring mitigation and more detailed planning in the Action Plan. The Quantitative Wildfire Risk Assessment process is illustrated in the Table 16 workflow. Appendix A shows the WUI Accomplishments and past treatments within each of the six battalion response areas (Figure 37, Figure 43, Figure 49, Figure 55, Figure 61, and Figure 67).

**Table 16. The wildfire risk assessment process employed in the CWPP process.**



The CAR assessment process resulted in a hazard ranking from low - high for each of the forty communities evaluated during the field assessment process (Section 4.1). The final risk rating was determined by overlaying these communities geographically with the following data layers, with each layer weighted for a

final score to determine low, moderate, and high-risk ratings: flame length (20%), rate of spread (20%), crown fire (10%), integrated hazard (20%), structure density (10%), CAR hazard rating (20%). All communities ranked in the moderate to high final risk category (Table 17).

**Table 17. Final CAR hazard and risk ratings.**

<b>HIGH Hazard</b>	<b>Values at Risk</b>	<b>RISK Rating</b>
Temple Creek Residences	Residential structures	<b>HIGH</b>
Elkhart Park Recreation Area	USFS recreation infrastructure	<b>HIGH</b>
Sargent Subdivision	Residential structures	<b>HIGH</b>
Red Cliff Subdivision/Bible Camp	Residential/commercial structures	<b>HIGH</b>
Packer/Miner Subdivisions	Residential structures	<b>HIGH</b>
Black Butte Subdivisions	Residential structures	<b>HIGH</b>
Flying A Ranch	Residential/commercial structures	<b>HIGH</b>
Boulder Basin/Buffalo Head Springs Estate	Residential structures	<b>HIGH</b>
New Fork Residences/Boy Scout Camp	Residential/commercial structures	<b>HIGH</b>
Sylvan Bay Residences	Residential structures	<b>HIGH</b>
Rim Ranches/Summit Road	Residential structures	<b>HIGH</b>
Halfmoon Lodge/Private Structures	Residential/commercial structures	<b>HIGH</b>
Thunder/Rolling Thunder Subdivisions	Residential structures	<b>HIGH</b>
<b>MODERATE Hazard</b>	<b>Values at Risk</b>	<b>RISK Rating</b>
Green River Lake Lodge	USFS structures/outfitter	<b>MODERATE</b>
Jim Bridger Estates	Residential structures	<b>HIGH</b>
Kendall Valley lodge	Residential/commercial structures	<b>MODERATE</b>
Hoback Ranches	Residential structures	<b>MODERATE</b>
Hecox/Fandek Subdivisions	Residential structures	<b>HIGH</b>
Middle Piney Summer Residences	Residential structures	<b>MODERATE</b>
Aspen Ridge Subdivision	Residential structures	<b>HIGH</b>
Green River Ranch Estates	Residential structures	<b>MODERATE</b>
Dutch Joe Guard Station	USFS administration structures	<b>MODERATE</b>
Boulder Lake Country Estates	Residential structures	<b>MODERATE</b>
Big Sandy Lodge	Commercial structures	<b>HIGH</b>
Moose Gypsum Subdivision	Residential structures	<b>MODERATE</b>
Fremont Lake Lodge/Private Structures	Residential/commercial structures	<b>MODERATE</b>
40 Rod Subdivision	Residential structures	<b>HIGH</b>
White Pine Ski Area	Residential/commercial structures	<b>MODERATE</b>
Sand Draw Industrial Area	Residential/commercial structures	<b>MODERATE</b>
Big Country/Barger Subdivisions	Residential structures	<b>HIGH</b>
<b>LOW Hazard</b>	<b>Values at Risk</b>	<b>RISK Rating</b>
Upper Hoback Corridor	Residential/commercial structures	<b>MODERATE</b>
Riverside Subdivision	Residential structures	<b>MODERATE</b>
Homestead Subdivision	Residential structures	<b>MODERATE</b>
N. Piney/Cottonwood Road Subdivisions	Residential structures	<b>MODERATE</b>
Muddy Creek/Brackett Minor Subdivisions	Residential structures	<b>MODERATE</b>
Exxon Mobile LaBarge Facility (B. Canyon)	Gas infrastructure	<b>MODERATE</b>
Mesa Road Gas Infrastructure/Private Homes	Gas infrastructure/residents	<b>MODERATE</b>
Emigration Ranches	Residential structures	<b>MODERATE</b>
Bondurant	Residential/commercial structures	<b>HIGH</b>
Yellow Point Well/Jonah Field Infrastructure	Gas infrastructure	<b>MODERATE</b>

**Implications to all communities and values at risk:** Sublette County residents should expect the potential for fire intensity and spread that can challenge firefighter suppression efforts at any location. Conditions can contribute to extreme fire behavior, putting citizens at risk and causing considerable damage to property and structures. The Exposure Analysis and final Risk Assessment show community threats and adverse exposure to values due to wildfire. For this reason, any preparedness and mitigation actions that the community and each resident can take to become more fire aware and prepared for a wildfire will help if a wildfire should occur.

#### **4.3.6 MAP AND GEOSPATIAL PRODUCTS**

Sublette CWPP maps were created in the ESRI ArcGIS Pro software version 3.0. Fire behavior and burn probability data layers were analyzed in IFTDSS software version 3.4 and exported to ArcGIS as vector files (point, line, polygon) and raster data (matrix of pixels organized into grids) representing information such as flame length. The core team coordinated with Greenwood Mapping, Inc., where the final CWPP map layers are hosted in the Sublette County, WY MapServer online under the *2022 CWPP* layer tab:

<https://greenwoodmap.com/sublette/mapserver/>

The Community at Risk hazards assessments and structure protection plans were designed in the ArcGIS Survey123 application. The core team created the forty structure protection plans in the SCUF ESRI online profile. The team also created a Wildfire Risk Overview assessment form in the SCUF Survey123. This homeowner parcel-level risk assessment tool can be the primary geospatial tool to start a Wildfire Risk Reduction Program in Sublette County.

# 5.0 MITIGATION MEASURES AND STRATEGIES TO REDUCE RISK

## 5.1 WILDFIRE PREPAREDNESS AND EVACUATION PLANNING

### 5.1.1 HAZARDOUS FUEL REDUCTION TREATMENTS

The primary purpose of the Healthy Forest Restoration Act of 2003 is to provide federal land managers with the ability to streamline government procedures and move rapidly to use scientifically supported fuel treatment and restoration methods on federal forests (HFRA 2003). The fuel reduction treatments recommended in Section 6.0 Action Plan are scalable and can be implemented at the federal/state landscape, subdivision, or individual private parcel level. The following types and methods of treatment descriptions were presented to the public and stakeholders during the 2022 community meeting workshops in Sublette County. These treatments emphasize fuel risk reduction benefits, in addition to improving forest health, wildlife habitat, and watershed conservation.

#### 5.1.1.1 DEFENSIBLE SPACE

It is strongly recommended that individual homeowners remove flammable vegetation within the Home Ignition Zones (HIZ) for any identified structure. The NFPA Firewise Home Ignition Zones are described in detail in Section 5.1.2. These fuels treatments are fire protection actions that can take place on any property providing the critical point of defense from an approaching wildfire or an escaping structure fire. In simplest terms, adequate space between structures and flammable vegetation allows firefighters a safe working area to attack an oncoming wildfire. Defensible Space is the best element of fire protection for individual property owners



**Figure 22. Non-defensible space – before (photo source: TWMT LLC)**



**Figure 21. Defensible space – after. (photo source: TWMT LLC)**

### **5.1.1.2 POTENTIAL CONTROL LINES**

Removal of sagebrush/grass, shrubs, and understory vegetation/debris alongside roads, property boundaries, and natural barriers can create a fuel break or a control line for firefighters to work off of or to better allow firefighters to access an area. A control line is a term for all constructed or natural barriers used to control a spreading wildfire, in this case vegetation is removed alongside both sides of any identified road at a width determined by vegetation type and fuels loading. These potential control lines intend to limit fire spread from locations adjacent to the road and provide a critical tactical area for local fire responders to engage in fire control and holding operations.

### **5.1.1.3 ROADSIDE VEGETATION MANAGEMENT**

Similar actions as described for potential control lines - vegetation roadside clearing along roadways and driveways for safe access/egress during emergency incidents and effective evacuation. Areas of concern in Sublette County include the Big Sandy, New Fork Lake area and Green River recreation corridor.



**Figure 23. Roadside vegetation maintenance/potential control line (photo source: USFS).**



#### **5.1.1.4 SHADED FUEL BREAK**

A shaded fuel break is created in strategic timber stands of varying width, depending on fuel load, topography, and expected fire behavior to reduce fire behavior and to help firefighters engage fire safely. It is a specific type of fuel break in which some degree of tree canopy cover remains. These are typically linear treatments adjacent to control features, such as roads, ridgelines, and rivers. They can vary in width, typically 100-400 feet, where overstory and understory vegetation is reduced to decrease fire intensity and provide for effective fire suppression efforts.



**Figure 24. Shaded fuel break (photo source: USFS).**

#### **5.1.1.5 HAZARDOUS FUEL REDUCTION**

##### **(THIN, PILE, BURN AND GROUND-BASED MECHANICAL TREATMENTS):**

Fuels created by mechanical pruning, tree thinning, or shrub thinning that are piled by hand. Small diameter trees are thinned out, and the remaining trees are pruned from below to remove ladder fuels. Hand-built piles are burned during months with adequate precipitation, and smoke can be effectively dispersed. This has been accomplished with success by the USFS and BLM at numerous locations in Sublette County. The most recent project took place on Monument Ridge, west of Bondurant. Mechanized equipment can be mounted with various mowing, mulching, and masticating heads for larger-scale vegetation mitigation, roadside thinning, and maintenance treatments.

#### **5.1.1.6 TIMBER HARVEST/COMMERCIAL THINNING**

Larger diameter trees are thinned and utilized as a commercial product. Cut trees are yarded to landings and hauled to mills. Tree cutting is accomplished by machines such as a track-mounted feller-buncher or hand cut with chainsaws. Yarding is usually ground-based; woody debris created by tree cutting would be piled by hand/machine and burned or transported to a Biomass Utilization/Co-Generation facility.

#### **5.1.1.7 NEIGHBORHOOD THINNING/CHIPPING**

Subdivision and parcel level vegetation cutting, thinning, and pruning. The vegetative materials are through mechanized chippers and hauled away.

#### **5.1.1.8 HERBICIDE TREATMENTS**

Application of herbicides to target invasive and non-native annual grass species that competes with native vegetation, such as cheatgrass (*Bromus tectorum*). Sublette County Weed & Pest District has a very successful program for treating cheatgrass and other invasive species on sagebrush rangelands.

### **5.1.1.9 PRESCRIBE FIRE (BROADCAST BURNING)**

The objectives are to reduce potential wildfire behavior using mixed-severity fire to create a mosaic of burned and unburned areas. Prescribe burns are also utilized for wildlife habitat improvement.

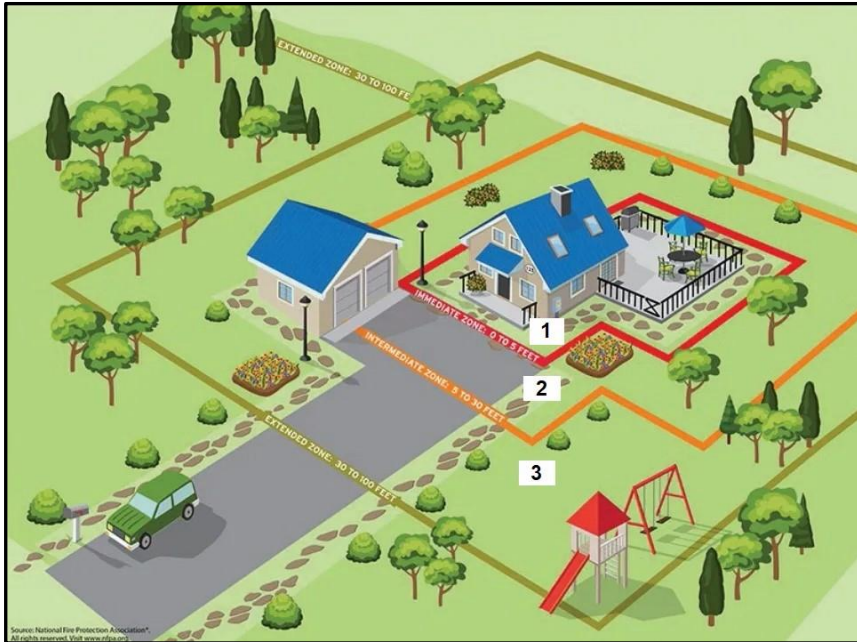
### **5.1.1.10 BIOMASS UTILIZATION/COGENERATION**

Biomass cogeneration (combined heat and power) uses waste wood and horticultural materials as fuel. Cogeneration is the simultaneous production of electricity and heat using a single primary fuel. Sublette County is researching a pilot cogeneration plant's feasibility and viability to support the local forest products industry.

## **5.1.2 REDUCING STRUCTURE IGNITABILITY**

To prevent structure loss from a wildfire, homeowners can take two critical steps to reduce structure ignitability through **home hardening** and **improving defensible space**. Reducing structural ignitability depends largely on homeowner education and following through on actions and responsibilities to protect their property. Homes in the WUI area are considered fuel available to burn and can ignite and burn by meeting the parameters for ignition and combustion (Cohen 2008). Structures (fuel) may be ignited by burning firebrand ignition (embers) and from direct flames as well as radiant and convection heating. Embers can ignite structures by landing on flammable materials located *on or adjacent* to a home or building or by entering the home through small entry points. Preparing for a wildland fire by creating hardened homes and defensible space around the house has proven to be an effective strategy for reducing structure loss. The two main factors affecting a structure's ability to survive a wildfire are the exterior building materials and the amount of defensible space surrounding the structure within 100 feet to 200 feet of the structure, known as the Home Ignition Zone (HIZ) (Cohen 2008). The following strategies occur in the HIZ, which includes the structure and the space immediately surrounding the system.

The following link has an excellent, short video explaining how fire embers and direct flames ignite structures: <https://www.youtube.com/watch?v=9TLUBKI-hE8>



**Figure 25. NFPA Home Ignition Zones (HIZ).**

The **Home Ignition Zone** (National Fire Protection Association 2018) has three zones of vulnerability:

1. **Immediate Zone** (0-5 feet from home, including the home). This is the most vulnerable area to fire embers
2. **Intermediate Zone** (5-30 feet from home). Use careful landscaping to reduce the continuity of fuels and slow fire down.
3. **Extended Zone** (30-100+). Space and prune trees and vegetation to keep flames

smaller and lower to the ground.

### **5.1.2.1 HOME HARDENING**

Embers can ignite structures by landing on flammable materials such as wood shake roofs, accumulation of leaves/debris on roof valleys and gutters, combustible decks, or entering the home through vents or structural openings. Many of the following actions are taken to limit embers igniting burnable materials and entering your home.

#### **Home Hardening Actions:**

- Replace or repair any loose or missing roof shingles that could catch embers.
- Replace older wood shake roofs with higher fire-resistive rating, including asphalt composition, tile, metal, or Boral steel/stone coated roof assembly.
- Replace wood siding with more fire-resistive products, including cement plank siding, stucco, stone, masonry, or synthetic "poly-ash" exterior cladding materials.
- Reduce embers that can pass through the attic, roof, and foundation vents by installing 1/8-inch x 1/8-inch metal, non-corrosive metal screening (1/16-inch metal screening is more effective).
- Construct decks with heavy timber, dense wood (such as Ipe), or UL/ASTM fire-rated materials.
- Enclose areas under the deck completely.
- Install multi-pane or tempered glass windows.
- Avoid combustible lattices, trellises, or other decorative features.
- Clean roof and gutters of leaves, debris, and pine needles that could catch embers.



**Figure 26. Attic fire started from roof/gutter debris and wildland fire (photo source: SCUF).**

**Recommendation:** Consider installing 1/8<sup>th</sup> or 1/16<sup>th</sup> inch mesh screening on all lower foundation, eave, and gable vents in your home. Several companies have developed fire-resistant vents for the home (Figure 27). The technology utilizes two vent design features: 1) A physical design that prevents embers from entering by way of small diameter holes and angles of entry and 2) An intumescent (a substance that swells with heat exposure) coating that expands when flame/radiant heat reaches critical temperatures, creating a “firewall”:

**Embers Out:** <https://www.embersout.com>

**Vulcan Technologies:** <https://www.vulcantechologies.com>

**Brandguard Vents:** <https://www.brandguardvents.com>



**Figure 27. Flame and ember resistant vents.**

### 5.1.2.2 DEFENSIBLE SPACE

#### **Immediate Zone Actions** (0-5 feet from home):

- Establish and maintain a five-foot non-combustible buffer around the home, including the vegetation and removal of firewood before fire season (store firewood >30 feet from the house).
- Ensure no flammable materials or accessories are connected to the house that could ignite the home if on fire.
- Clear leaves, needles, and debris in this zone regularly.
- Do not store materials under decks and porches or alongside the house.
- Replace combustible bark mulch with river rock, stone/gravel, or pavers (Figures 28 and 29).
- Landscape material should be irrigated and have a low combustibility
- Patio furniture should be non-combustible, and cushions should be kept in the garage of sealed container
- This zone is the most vulnerable to lofted ember and firebrands. It is also the area you can spend the least effort and investment to be successful



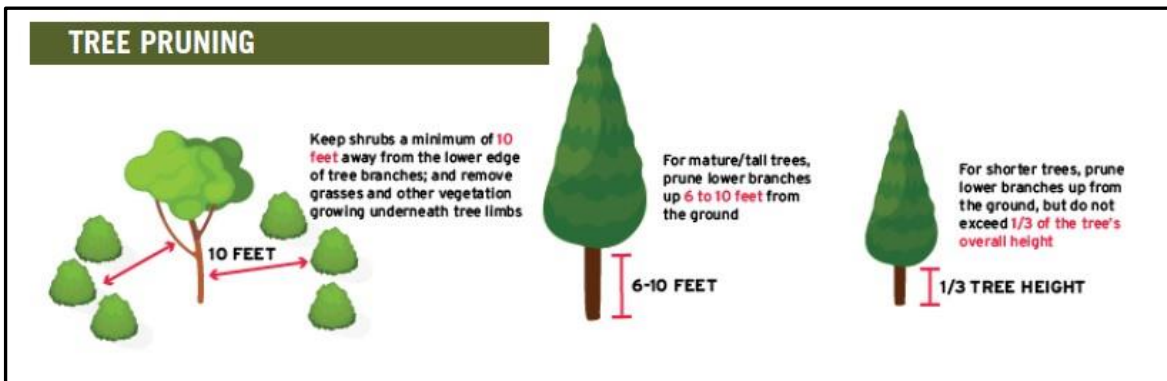
**Figure 28. Non-combustible foundation material.**



**Figure 29. Combustible foundation material.**

**Intermediate Zone Actions** (5-30 feet from home):

- Create fuel breaks with driveways, walkways/paths, patios, and decks.
- Keep lawns and native grasses mowed to a height of four inches.
- Remove ladder fuels (vegetation under trees) so a surface fire cannot reach the tree crowns. Prune trees up to six to ten feet from the ground; shorter trees do not exceed 1/3 of the overall tree height (Figure 30).
- Remove dead and down fuels
- Space trees to have a minimum of eighteen feet between crowns with the distance increasing as the slope increases.
- Tree placement should be planned to ensure the mature canopy is no closer than ten feet to the edge of the structure.
- Trees and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation.



**Figure 30. Tree pruning specifications (source: NFPA).**

### Extended Zone Actions (30-100+ feet from home):

- Goal for this zone is not to eliminate fire but to interrupt the fire's path and keep flames smaller and on the ground.
- Remove dead and down fuels: logs, dead plant, and tree materials
- Dispose of heavy accumulations of ground litter and debris.
- Remove small conifer trees growing between mature vegetation.
- Remove vegetation adjacent to storage sheds or other outbuildings in this zone.
- Trees 30 to 60 feet from the home should have at least twelve feet between canopy tops.
- Trees 60 to 100 feet from the home should have at least six feet between the canopy tops.

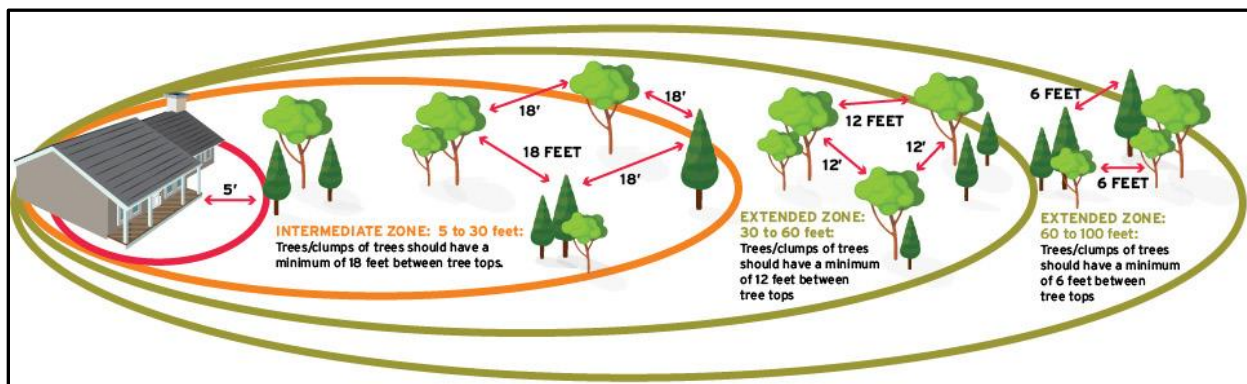


Figure 31. Tree spacing specifications (source: NFPA).

**Recommendation:** All landowners and communities within the mapped Sublette County WUI boundaries follow mitigation measures outlined in [Section 5.1](#) to reduce structure ignitability (home hardening) and improve defensible space through vegetation mitigation in the Home Ignition Zones. These actions will provide areas for fire responders to safely engage wildland fire while protecting your

### 5.1.3 WUI COMMUNITY PREPAREDNESS – A FIRE ADAPTED COMMUNITY APPROACH

One of the key focus areas of the National Cohesive Wildland Fire Manage Strategy is to create fire-adapted communities (FAC) that are more informed, prepared, and resilient to wildfires. Online sources describe a FAC as “a human community consisting of informed citizens collaboratively planning and taking action to coexist with fire safety.” The success of building this type of community depends on resident involvement and consistent participation of community members. The following are FAC strategies that can be adopted at the county and neighborhood levels.

#### 5.1.3.1 WILDFIRE NEIGHBORHOOD AMBASSADOR PROGRAM

A program that has been very successful for the Teton Area Wildfire Protection Coalition and Alpine Area Wildfire Protection Coalition has been the establishment of a Wildfire Neighborhood Ambassador Program. Both of these programs focus on engaging residents to help motivate their neighbors, provide for

continuous collaboration with agency personnel and residents and offer a comprehensive approach to creating community fire adaptation at the grassroots level.

For more information on starting a Wildfire Neighborhood Ambassador Program, contact Bobbi Clauson, Fire Prevention Specialist, Jackson Hole Fire/EMA at [bclauson@tetoncountywy.gov](mailto:bclauson@tetoncountywy.gov) and Chuck Butterfield, Chair – Alpine Area Wildfire Protection Coalition, at [chuck@y2consultants.com](mailto:chuck@y2consultants.com). Or by visiting <https://www.wildfireadapted.org/> under the Volunteer tab.

**Recommendation:** Establish a Wildfire Neighborhood Ambassador Program that focuses on engaging residents to help motivate their neighbors, continuously interact with interagency partners, and offer a community approach to becoming more fire adapted.

Key to success for building a wildfire Neighborhood Ambassador Programs includes:

- Identify a “Neighborhood Ambassador” who motivates others and coordinates with and disseminates information to community residents.
- Provide a SCUF point of contact for Ambassadors who have questions and need guidance.
- Develop a training program for Ambassadors focusing on homeowner education, mitigation opportunities, unified community fire adaptation messaging, funding mechanisms, and engagement schedules.
- Hold consistent meetings and training at a location and time when engaged citizens are more likely to attend.

### ***5.1.3.2 WILDFIRE RISK REDUCTION PROGRAM***

Developing a risk reduction program for home wildfire site visits is another program to help move communities towards becoming more fire adapted. A Wildfire Risk Overview is a parcel-level assessment of the Home Ignition Zone. An Agency representative walks around a property with a homeowner and identifies actions that can be taken to improve home hardening and defensible space. A comprehensive risk mitigation plan is created for the homeowner to take risk mitigation steps and provide eligibility for cost-share funding opportunities. Information regarding a County administered Wildfire Risk Reduction Program can be found at <https://www.tetonconservation.org/wildfire-risk-management> or by contacting Robb Sgroi, Teton Conservation District, at [robb@tetonconservation.org](mailto:robb@tetonconservation.org)



### **5.1.3.3 DEFENSIBLE SPACE COST-SHARE**

A defensible space cost-share program can be created and administered at the county level and supported through Western States WUI or Coalitions & Collaboratives, Inc. grant funding mechanisms. A defensible space cost-share program is designed to reimburse qualifying homeowners for partial costs of defensible space projects on private parcels. Matching grant funding can be made available for voluntary vegetation management work recommended to a homeowner from the Wildfire Risk Overview of the home ignition zone. This incentive program strategically engages community residents in mitigation. Contact Robb Sgroi, Teton Conservation District.

**Recommendation:** Develop a Sublette County Wildfire Risk Reduction Program that offers Wildfire Risk Overviews and a risk reduction Cost-Share Program to help landowners reduce the risk of property damage from wildfires and improves safety through collaboration with neighbors, Sublette County Unified Fire, and other cooperating agencies.

### **5.1.3.4 WUI MITIGATION COORDINATOR POSITION**

Consider adding a WUI Mitigation Coordinator position within the Sublette County Unified Fire organization. This specialist will manage community wildfire risk reduction programs and coordinate closely with community members and cooperators to implement the CWPP. This is a key leadership position to establish and maintain collaborative partnerships through capacity building to expand the local mitigation efforts and community engagement. This position will lead and coordinate on the ground actions for effective wildfire risk reduction in Sublette County.

**Recommendation:** Consider adding a WUI Mitigation Coordinator position within the Sublette County Unified Fire organization. This specialist will manage community wildfire risk reduction programs and coordinate closely with community members and cooperators to implement the CWPP.

### **5.1.3.5 FIRE ADAPTED COMMUNITY SELF-ASSESSMENT TOOL**

The Fire Adapted Communities Learning Network created the FAC Self-Assessment Tool to help communities assess their fire adaptation efforts and to plan and track their activities to become more fire prepared. The Tool is a PDF document/checklist (<https://fireadaptednetwork.org/resources/fac-assessment-tool/>) that contains a series of questions designed to help community members:

- Identify their community's values at risk
- Identify their community's capacity to implement FAC actions
- Assess any gaps or limitations in funding, resources, partnerships, and workforce/volunteers
- Prioritize future fire adaptation actions
- Complement other work plans
- Increase understanding of long-term community fire adaptation needs

### **5.1.4 STRUCTURE PROTECTIONS PLANS**

Structure Protection Plans were developed for each Community at Risk listed in the tables found in Section 4.2 Battalion Response Areas/Communities at Risk Hazard Assessment. These plans are located in the cloud based ESRI ArcGIS online (AGOL) Survey123 program. They are geospatial documents in the Sublette County Unified Fire ESRI profile and can be edited and updated in the Surevy123 application.

Each plan's content includes:

- Parcel lot address map
- Driving directions
- Closest fire response
- Development type
- Entrance photos
- Safety considerations
- Community hazards
- Structure information
- Vegetation and fuels
- Evacuation planning
- Minimum fire protection equipment list
- Defense category (triage decision)

The structure protection plans were designed for two audiences. One is general information intended for review and implementation during non-emergency periods by local protection authorities. The second is to provide an incoming Complex Incident Management Team with accurate and valuable information to help reduce the time required to establish plans to protect the structural assets within the identified area. The plans can be updated in the field on an electronic device or in the SCUF AGOL Survey123 profile by the CIMT during assignments in Sublette County. Individual Structure Protection Plan can be exported as a Word or PDF version for further dissemination.

### **5.1.5 EVACUATION PLANNING**

Sublette County has limited disaster response resources, with State and Federal resources being hours to days away. Sublette County Emergency Management works year-round to coordinate and plan for likely disasters and significant hazards in the County. They recommend preparedness planning in advance, revisiting plans/updating plans periodically, and training in response strategies and procedures. Additional information can be found on the Sublette County Emergency Management website, which has its Facebook link and an Alert Center where you can view all alerts and emergencies in your area.

### **5.1.5.1 NOTIFICATIONS**

**AlertSense** is the Sublette County Emergency Notification System. It is designed to keep residents connected with critical public information. AlertSense allows fire, police, and other emergency response agencies to issue emergency alerts to warn citizens of events such as the need for immediate evacuation, crime/imminent danger, and local area emergencies. It is critical that all residents sign up for the AlertSense service and also own a National Oceanic and Atmospheric Agency (NOAA) All-Hazards Weather Radio that can receive Emergency Alert System (EAS) notifications.

**Recommendations:** Sign up to **AlertSense** at:

<https://public.alertsense.com/SignUp/publicUser.aspx?regionID=1075>

**If you would like to receive SMS texts, text your zip code to 38276.**

This is a free service to Sublette County residents in which emergency voice/text alerts will come through with the CallerID displayed: (307) 200-4366. If you would like to hear the last message repeated, simply dial the CallerID number shown on your phone.

**Purchase and learn to use the NOAA All-Hazards Weather Radio** that connects to the nationwide EAS network designed to inform and give instructions to the public before, during, and after disasters.

### 5.1.5.2 READY, SET, GO! PROGRAM

The Ready, Set, Go! (RSG!) program is managed by the International Association of Fire Chiefs (IAFC). It provides agencies with tools and resources to help residents understand wildfire risks and steps to prepare and evacuate if called for by local officials. Sublette County has adopted the RSG! program and its evacuation language was successfully used during the 2016 Cliff Creek and 2018 Roosevelt Fires. The CALFire general pictograph (Figure 32) is a good summary tool for understanding the RSG! levels.

**GET READY, GET SET, GO!**  
Wildfire Is Coming. Are You Ready?

GET PREPARED FOR WILDFIRE BEFORE IT STRIKES BY FOLLOWING THE READY, SET GO! GUIDE:

**BEING READY**

- 100 FT**: CREATE DEFENSIBLE SPACE: 100-FEET OF DEFENSIBLE SPACE IS REQUIRED AROUND YOUR HOME. LEARN HOW TO MAINTAIN THE TWO ZONES OF DEFENSIBLE SPACE NEEDED.
- UP TO 1 MILE**: HARDEN YOUR HOME: FLYING EMBERS CAN DESTROY HOMES UP TO A MILE FROM WILDLAND AREAS. LEARN HOW TO PROTECT AND HARDEN YOUR HOME FROM A WILDFIRE THREAT.

**GETTING SET**

- 1. WHAT**
- 2. HOW**
- 3. WHO**
- 4. WHEN**
- PREPARE YOUR HOME AND FAMILY FOR THE POSSIBILITY OF HAVING TO EVACUATE.
- CREATE A WILDFIRE ACTION PLAN.
- ASSEMBLE AN EMERGENCY SUPPLY KIT.
- FILL OUT A FAMILY COMMUNICATION PLAN.

**BEING READY TO GO**

- PRE-EVACUATION STEPS: PREPARE BOTH THE INSIDE AND OUTSIDE OF YOUR HOUSE FOR EVACUATION. GET THE CHECKLISTS.
- REVIEW YOUR EVACUATION PLAN CHECKLIST.
- GO!** EVACUATION STEPS: WHEN IMMEDIATE EVACUATION IS NECESSARY, GET READY TO GO!
- ENSURE YOUR EMERGENCY SUPPLY KIT IS IN YOUR VEHICLE.
- COVER-UP TO PROTECT AGAINST HEAT AND FLYING EMBERS. WEAR LONG PANTS, LONG SLEEVE SHIRT, HEAVY SHOES/BOOTS, CAP, DRY BANDANNA TO COVER FACE, GOGGLES OR GLASSES. 100% COTTON IS PREFERABLE.
- LOCATE YOUR PETS AND TAKE THEM WITH YOU.

**ONE LESS SPARK** ONE LESS WILDFIRE

**CAL FIRE**

FOR MORE INFORMATION VISIT:  
[READYFORWILDFIRE.ORG](http://READYFORWILDFIRE.ORG)  
#READYFORWILDFIRE

Figure 32. Ready, Set, Go! summary.

### **5.1.5.2.1 RSG! (EVACUATION) STAGES**

**READY (Level 1)** stage is a year-round status in Sublette County and begins with property owners acting now. A READY alert is never issued in the County as all residents should be ready for wildfire events and ready to evacuate at any time. Preparing includes having an evacuation plan, signing up for **AlertSense**, assembling your emergency “**Go Kits**,” making your home more fire-resistant, and improving defensible space and landscaping to protect your home.

**SET (Level 2)** stage is an advisory from Sublette County that means there is a wildfire threat to your community and that you must be prepared to evacuate at a moment’s notice. As fire approaches, you prepare by gaining information regarding the fire, monitoring the fire conditions and weather, considering evacuation needs for pets, alerting family and neighbors, and making all inside and outside preparations. During the SET stage, dress in appropriate clothing, ensure “Go Kits” are ready, and remain close to your home while staying hydrated. **Leave if you need extra time or feel your life is in danger, as systems can fail during disasters, and you may not receive the GO! order.** If you leave your home for work, school, or run errands while your neighborhood is in the SET stage, assume that your community may be put into the GO! stage while you are away and may not be able to return.

During the SET stage, you should gather and have with you the **6 Ps of Evacuation**:

- People and pets
- Papers, phone numbers, and essential documents
- Prescriptions, vitamins, and eyeglasses
- Pictures and irreplaceable memorabilia
- Personal computers (data on hard drive/thumb drive/cloud drive)
- Plastic (credit cards, ATM cards, and cash)

**GO! (Level 3)** stage is an alert to EVACUATE IMMEDIATELY and GO!. This will be sent by **AlertSense**, a service that gives you the best chance for survival. Act early to avoid fire truck congestion on roads and travel safely to the assembly area. Fire can be fast and unpredictable; there may not be time for officials to issue a GO! order, or the systems to relay that order may be destroyed by the fire. **If you ever feel your life is in danger, do not wait for a GO! order; evacuate immediately!**

### 5.1.5.2.2 BEFORE AND DURING AN EVACUATION

<b>ALWAYS:</b>
<b>Communications</b>
<input type="checkbox"/> Keep your cell phone fully charged.
<input type="checkbox"/> Notify an out-of-area contact of your phone number, location, and status. Update regularly.
<input type="checkbox"/> Leave a note with your contact info and out-of-area contact taped to the refrigerator or inside a front window.
<input type="checkbox"/> Check on or call neighbors to alert them to prepare at the first sign of fire.
<b>On your person</b>
<input type="checkbox"/> Dress in long sleeves and pants; heavy cotton or wool is best, regardless of temperature.
<input type="checkbox"/> Wear full-coverage glasses/goggles, leather gloves, and head protection if available.
<input type="checkbox"/> Cover faces with a dry bandanna or scarf over an N95 respirator. Tie long hair back.
<input type="checkbox"/> Carry a headlamp and flashlight (even during the day).
<input type="checkbox"/> Carry car keys, wallet, ID, cell phone, and a spare power source.
<input type="checkbox"/> Drink plenty of water; stay hydrated.
<input type="checkbox"/> Put "Go Kits" in your vehicle.
<b>Pets and animals</b>
<input type="checkbox"/> Locate your pets and place them in carriers immediately. You will not be able to catch them when the fire approaches.
<input type="checkbox"/> Be sure your pets wear tags or are registered with microchips.
<input type="checkbox"/> Place carriers (with your pets) near the front door, with fresh water and extra food.
<input type="checkbox"/> Prepare livestock transportation and storage; consider moving animals to a safe location early before evacuation is ordered.
<b>IF TIME ALLOWS:</b>
<b>Inside the house</b>
<input type="checkbox"/> Shut all windows and doors (interior too) and leave them unlocked.
<input type="checkbox"/> Remove combustible window shades and curtains and close any shutters.
<input type="checkbox"/> Move furniture to the center of the room, away from windows.
<input type="checkbox"/> Leave indoor and outdoor lights on.
<input type="checkbox"/> Shut off HVAC and ceiling fans.
<b>Outside and in the neighborhood</b>
<input type="checkbox"/> Place combustible outdoor items (patio furniture, toys, doormats, trash cans, etc.) in the garage or 30 feet away from structures (optional: place in a pool).
<input type="checkbox"/> Connect garden hoses with squeeze-grip nozzles to outdoor spigots for use by firefighters.
<input type="checkbox"/> Fill water buckets and place them around outside the house, especially near decks and fences.
<input type="checkbox"/> Clean your gutters and clear leaves away from the house.
<input type="checkbox"/> Back your car into the driveway, loaded, with doors and windows closed.
<input type="checkbox"/> Prop open fence and side gates.

- Place ladder(s) at the corner(s) of structures for firefighter access.
- Seal attic and ground vents with pre-cut plywood or metal covers (even duct tape will protect from ember entry) if time allows.
- Patrol your property and monitor conditions. Leave if spot fires ignite or conditions change.

**WHEN YOU LEAVE**

- Leave immediately if ordered.
- Tie a white cloth or put a sign stating "Evacuated" on your front door or entrance to your home so responders know you have evacuated.
- Do not wait for an evacuation order if you feel unsafe or conditions change; leave early if unsure.
- Assist elderly or disabled neighbors.
- Carpool with neighbors to reduce traffic.
- Take only essential vehicles with adequate fuel.
- In your car, turn on headlights, close windows, turn on inside air and AC, and tune to the local radio.
- Drive slowly and defensively - be observant.
- Stay informed on current road status, closures, and hazards.
- Follow your designated evacuation route or choose the safest route away from the fire.

**IF YOU ARE TRAPPED**

- If roads are impassable or you are trapped: take shelter in a building, car, or an area devoid of vegetation; stay far from vegetation; look for wide roads, parking lots, or road cul-de-sac.
- If trapped, you are better protected inside a building or vehicle.
- Do not abandon your car on the road if the passage is impossible. If you must leave your car, park it off the road and consider other options for shelter.
- Evacuate on foot only as a last resort.
- Do not evacuate uphill or into open-space areas with unburned vegetation.
- Remain calm – panic leads to poor decision-making.

**Recommendation:** Prepare a Wildfire and Emergency “Go Kit” kit in advance for each family member and keep it easily accessible. Plan to be away from your home for an extended period. Each person should have their own Go Kit. Store the kit in a backpack or roller suitcase:

- Bandana, N95 respirator, goggles, leather gloves, long shirt/pants (cotton or wool), boots.
- Flashlight and headlamp with spare batteries.
- Extra car keys, credit cards, cash.
- Map(s) of the area, marked with two evacuation routes (if possible).
- Prescription medications.
- Extra eyeglasses or contact lenses.
- First aid kit.
- Battery-powered radio and extra batteries.
- Copies of important documents (birth certificates, passports, insurance policies, etc.).
- Pet food and water, leashes, pet supplies, and medications.
- Water – one gallon per person, per day
- Food – non-perishable, easy-to-prepare items
- Sanitation and personal hygiene item supplies.
- Change of clothing.
- Spare chargers for cell phones, laptops, etc.
- Easily carried valuables.
- Family photos, small heirlooms, and other irreplaceable items.
- Personal computer data and digital information backups on hard drives and/or disks.
- During a “Red Flag” fire warning, or Very High Fire Danger, ensure a full tank of gas.

For more detailed information about how to create a Go Kit for your family or workplace visit The Red Cross Website.



# 6.0 ACTION ITEMS AND RECOMMENDATIONS

## 6.1 PUBLIC WORKSHOP ACTION ITEMS

The CWPP Public Workshop Action Items (Table 19) include projects established from the six public workshops held in early 2022. The project items listed are direct suggestions from community residents, stakeholders, and steering team members. The items are divided by Battalion response areas and a miscellaneous category that does not fit into these area groupings. Each recommendation falls under the following mitigation objectives (Table 18) and is outlined individually in Table 19. The thirty recommendations that follow and Appendix H. Detailed Action Plan, provide greater detail regarding the strategies, prioritization, and next steps to move towards implementation on the ground and at the programmatic level.

**Table 18. Action plan mitigation objectives.**

Public/Community Outreach & Education	Evacuation Planning & Preparation	Wildfire Planning & Preparedness
Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Assessments	Prescribe Burning/Vegetation Management
Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation/Vegetation Management
Water Supply Improvement	Other Mitigation Type	Timber Harvest/Vegetation Management

**Table 19. CWPP public workshop action items.**

Agency	Project Name/Title	General Location	Battalion Response Area	Priority	Project Type	Primary Mitigation Objective
SCUF	Sublette County Fire/Fuels Module	Sublette County Unified Fire	Battalion 1 Pinedale	Medium	Other Mitigation	Wildfire Preparedness and Planning
SCUF	2022 CWPP Monitoring	Sublette County	Battalion 1 Pinedale	Medium	Other Mitigation	Wildfire Preparedness and Planning
SCUF	Wildfire Risk Overview Program	Sublette County Private Parcels	Battalion 1 Pinedale	High	HIZ Defensible Space	Public and Community Outreach/Education
SCUF	Pinedale Airport Water Supply	Pinedale Airport (PNA)	Battalion 1 Pinedale	High	Water Supply Improvement	Water Supply Improvements
SCUF	Sylvan Bay Evac. Plan/Notification Tree	Sylvan Bay Residences	Battalion 1 Pinedale	Medium	Evacuation Planning	Evacuation Planning and Preparation
WSFD	Pine Creek Hazardous Fuels Thinning	Pine Creek Private Lands	Battalion 1 Pinedale	Medium	Other Mitigation	Fuels Mitigation/ Vegetation Management
BLM	Wyoming Range Mule Deer Treatments	Wyoming Range	Battalion 2 Big Piney/Marbleton	Medium	Broadcast Burn	Prescribe Burning/ Vegetation Management
BLM	Finley Ranch Fuels Break	South/West of Finley Ranch	Battalion 2 Big Piney/Marbleton	Medium	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management
USFS	McDougal Gap Road Corridor	FS Road	Battalion 2 Big Piney/Marbleton	Medium	Roadside Clearance/Pot. Control Line	Evacuation Planning and Preparation
USFS	Expanded Firewood Program	Big Piney Ranger District	Battalion 2 Big Piney/Marbleton	Medium	Other Mitigation	Fuels Mitigation/Vegetation Management
USFS	Finley Ranch Fuel Break	South/West of Finley Ranch	Battalion 2 Big Piney/Marbleton	Medium	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management
SCUF	Emigrant Subdivision Water Supply	Emigrant Subdivision	Battalion 2 Big Piney/Marbleton	Medium	Water Supply Improvement	Water Supply Improvements
SCUF	Town of Marbleton Water Supply	Marbleton	Battalion 2 Big Piney/Marbleton	High	Water Supply Improvement	Water Supply Improvements
SCUF	Muddy Creek Water Supply	Town Yard Tank/Muddy Standpipe	Battalion 2 Big Piney/Marbleton	Medium	Water Supply Improvement	Water Supply Improvements
WSFD	Finley Ranch Fuel Break	Finley parcel (High Lonesome)	Battalion 2 Big Piney/Marbleton	Medium	Shaded Fuel Break	Fuels Mitigation/ Vegetation Management

Agency	Project Name/Title	General Location	Battalion Response Area	Priority	Project Type	Primary Mitigation Objective
USFS	Pinedale RD East Rim 2025	Upper Green, Rim, Jack Dell	Battalion 3 Bondurant	High	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management
USFS	Pinedale RD East Rim 2025	Focus treatment west of Flying A	Battalion 3 Bondurant	High	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management
SCUF	Elkhorn/Black Powder Ranch Water Supply	Northern Bondurant Valley	Battalion 3 Bondurant	High	Water Supply Improvement	Water Supply Improvements
SCUF	Bondurant Post Office Water Supply	Central Bondurant	Battalion 3 Bondurant	High	Water Supply Improvement	Water Supply Improvements
SCUF	Kilgore Creek Water Supply	Upper Hoback	Battalion 3 Bondurant	High	Water Supply Improvement	Water Supply Improvements
SCUF	Hoback Ranch/Fisherman's Water Supply	Hoback Ranches	Battalion 3 Bondurant	High	Water Supply Improvement	Water Supply Improvements
WSFD	Flying A/Packer Miner/Rim Firewise Activities	East Rim Communities	Battalion 3 Bondurant	High	Other Mitigation	Public and Community Outreach/Education
USFS	Pinedale RD Big Sandy 2023	Big Sandy Road Corridor	Battalion 4 Boulder	High	Roadside Clearance/Evac. Route	Evacuation Planning and Preparation
USFS	Temple Creek Firewise Activities	Temple Creek Permit Residents	Battalion 4 Boulder	Medium	Other Mitigation	Public and Community Outreach/Education
SCUF	Barger Water Supply	Barger Subdivision	Battalion 4 Boulder	High	Water Supply Improvement	Water Supply Improvements
SCUF	Sand Draw Water Supply	Sand Draw Industrial Park	Battalion 4 Boulder	Medium	Water Supply Improvement	Water Supply Improvements
SCUF	Boulder Lake Estate Firewise Activities	Boulder lake Estates	Battalion 4 Boulder	Medium	Other Mitigation	Public and Community Outreach/Education
SCUF	WY Front Range Firewise Activities	Round Hill to High Lonesome	Battalion 4 Boulder	Medium	Other Mitigation	Public and Community Outreach/Education
WSFD	Irish Canyon Fuels Reduction	Irish Canon Private	Battalion 4 Boulder	Medium	HIZ Defensible Space	Fuels Mitigation/ Vegetation Management
WSFD	Boulder Lake Estates Fuels Reduction	Private parcels/Road corridor	Battalion 4 Boulder	Medium	Neighborhood Thinning/Chipping	Fuels Mitigation/ Vegetation Management
USFS	Big Piney RD Big Piney Roads Trails 2024	Horse Creek, Piney Creek, Cottonwood Creek	Battalion 5 Daniel	Medium	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management

Agency	Project Name/Title	General Location	Battalion Response Area	Priority	Project Type	Primary Mitigation Objective
SCUF	Warren Bridge Water Supply	Green River-Warren Bridge	Battalion 5 Daniel	High	Water Supply Improvement	Water Supply Improvements
SCUF	Green River Estates Water Supply	Green Rover Estates Subdivision	Battalion 5 Daniel	High	Water Supply Improvement	Water Supply Improvements
SCUF	Jim Bridger, Thunder, Rolling Thunder, Gr. River Estates Firewise	Western Daniel Communities	Battalion 5 Daniel	Medium	Other Mitigation	Public and Community Outreach/Education
BLM	New Fork Lake Fuels Reduction	West New Fork Lake Residences	Battalion 6 Kendall Valley	Medium	Fuels Reduction/Thin, Pile, Burn	Fuels Mitigation/ Vegetation Management
USFS	Boulder Basin Road Potential Control Line	Boulder Basin Road Corridor	Battalion 6 Kendall Valley	Low	Roadside Clearance/Pot. Control Line	Wildfire Preparedness and Planning
SCUF	New Fork Water Supply	New Fork Lake Parking Area	Battalion 6 Kendall Valley	High	Water Supply Improvement	Water Supply Improvements
SCUF	Kendall Valley Water Supply	West Kendall Valley	Battalion 6 Kendall Valley	High	Water Supply Improvement	Water Supply Improvements
SCUF	Happy Trails Subdivision Water Supply	Hammock Drive	Battalion 6 Kendall Valley	High	Water Supply Improvement	Water Supply Improvements
SCUF	Buffalo Head Springs Water Supply	Buffalo Head Springs Subdivision	Battalion 6 Kendall Valley	High	Water Supply Improvement	Water Supply Improvements
SCUF	Red Cliff Firewise Activities	Red Cliff Subdivision	Battalion 6 Kendall Valley	Medium	Other Mitigation	Public and Community Outreach/Education
SCUF	New Fork Firewise Activities	New Fork Subdivision	Battalion 6 Kendall Valley	Medium	Other Mitigation	Public and Community Outreach/Education
BLM	PFO Cheatgrass Treatments	WY Range/Wind River Range		High	Chemical Treatment/Cheatgrass	Fuels Mitigation/ Vegetation Management
USFS	2019 Blowdown Fuels Reduction	Wind River Front		Medium	Other Mitigation	Fuels Mitigation/ Vegetation Management
USFS	Post Fire Salvage Logging	Sublette County		Medium	Other Mitigation	Fuels Mitigation/ Vegetation Management
SCUF	Develop Subdivision/HOA Evacuation Plans	Sublette County		High	Other Mitigation	Evacuation Planning and Preparation
SCUF	Develop a Wildfire Neighborhood Ambassador Program	Sublette County		High	Other Mitigation	Public and Community Outreach/Education

Agency	Project Name/Title	General Location	Battalion Response Area	Priority	Project Type	Primary Mitigation Objective
SCUF	Create a Wildfire Risk Reduction Program	Sublette County		High	HIZ Defensible Space	Public and Community Outreach/Education
SCUF	Develop a Defensible Space Cost-Share Program for landowners	Sublette County		High	HIZ Defensible Space	Public and Community Outreach/Education
SCUF	Complete FAC Self-Assessment Tool for Communities at Risk	Sublette County		Medium	Other Mitigation	Public and Community Outreach/Education
SCUF	Consider a WUI Mitigation Coordinator Position	Sublette County		High	Other Mitigation	Wildfire Preparedness and Planning
SCUF	Biomass Debris Burn Area Identification/Develop neighborhood chipping program	Sublette County		Low	Other Mitigation	Public and Community Outreach/Education
SCUF	Plan Interagency WUI community Field Visits (Duty Officers)	Sublette County		Medium	Other Mitigation	Wildfire Preparedness and Planning
SCUF	WUI Building Code Adoption	Sublette County		High	Other Mitigation	Wildfire Preparedness and Planning
WSFD	Timber Harvests/Good Neighbor Authority	Various community locations		High	Other Mitigation	Timber Harvest/ Vegetation Management
MULTI	S. Cottonwood/Beaver Road Improvements	S. Cottonwood/Beaver Roads		Medium	Roadside Clearance/Pot. Control Line	Timber Harvest/ Vegetation Management

## 6.2 ACTION PLAN RECOMMENDATIONS

Specific recommendations for this CWPP are summarized below. These are opportunities for action to be implemented by local agencies, communities, and individual property owners. Particular opportunities for all entities to collaborate across boundaries are critical to the success of comprehensive implementation. All recommendations aim to 1) improve effective wildfire response, 2) create fire-adapted communities, and 3) foster and maintain resilient landscapes to reduce community risk.

### 6.2.1 RECOMMENDATIONS FOR SCUF TO IMPROVE SAFE AND EFFECTIVE WILDFIRE RESPONSE

**Recommendation 1:** Seek opportunities to fund one Type 1 water tender at each Battalion Fire Station with a 1,000 GPM flow rate and 3,000-gallon tank capacity. Ensure standardized requirements are met for apparatus and associated water handling equipment, as described in the 2021 SCUF Strategic Plan.

**Recommendation 2:** Pursue grant funding and financial assistance to develop and improve water supplies throughout the County. Continue efforts to partner with private landowners willing to work in agreement to access local water sources, construct dry hydrants, and develop additional water storage capacity. The priority areas were identified by stakeholders and the public and are listed in the Action Plan (Table 19). These locations include Emigrant Subdivision, Town of Marbleton, Muddy Creek, Elkhorn/Black Powder Ranch, Bondurant Post Office, Kilgore Creek, Hoback Ranch Estates/Fisherman's Creek, Barger Subdivision, Sand Draw, Warren Bridge, Green River Estates, New Fork Lake, Kendall Valley, Happy Trails Subdivision, and Buffalo Head Springs. The water supply delivery system must be available 365 days a year and provide 250 GPM for a two-hour duration within five minutes of the arrival of the first apparatus. If a community uses a dry hydrant or suction supply point, ISO may need certification of the water capacity available during a 50-year drought cycle. Many state and local governments have geological engineers or hydrologists who can provide that information.

**Recommendation 3:** Consider establishing and funding a SCUF Fuels/Suppression Module (hand crew) that can cut brush and remove trees to increase access, reduce hazardous fuels, and provide defensible space. The Module can also respond to initial and extended attack wildfires, prescribe burns, and work on projects that improve forest health in locations throughout the county. Proposals would need to include requirements and funding for staff, salaries, housing, vehicles, electronic devices, project/fire equipment, training, and personnel protective equipment.

**Recommendation 4:** Coordinate with the Pinedale Airport to seek water supply improvements at this municipal aviation facility. Additional water system storage and delivery infrastructure can support fire protection at the airport and adjacent communities and support wildland firefighting aviation operations positioned at the airport. Improved capabilities will improve helicopter water delivery and mobile retardant bases supporting Heliwells or single-engine air tankers. The goal is to decrease turn-around times for aircraft supporting fires in the greater Pinedale area and Sublette County. Recommend coordination between the Airport Manager and USFS/BLM Aviation Officers to set up pre-use/pre-season agreements for fire season preparedness.

**Recommendation 5:** Consider opportunities and strategies to procure and use Unmanned Aircraft Systems (drone technology) for fire protection and emergency response.

## **6.2.2 RECOMMENDATIONS FOR FEDERAL AGENCIES TO IMPROVE SAFE AND EFFECTIVE WILDFIRE RESPONSE**

**Recommendation 6:** Continue with interagency collaboration to identify Potential Operational Delineations (POD) and Potential Control Lines/Locations (PCL) across all jurisdictional boundaries. PODs are a spatial wildfire planning framework that divides the landscape into manageable units that bring together operational fire responses to constrain the spread and size of fires (Caggiano et al. 2020). PODs consist of a network of preidentified Potential Control Lines by fire managers that correspond with roads, ridgelines, waterbodies, and other landscape features that provide safe and effective control locations due to their strategic locations and lack of fuel.

**Recommendation 7:** BLM High Desert District (HDD) continues to staff a wildland engine temporarily in Pinedale when fire danger indices warrant apparatus movement to the north. Consider a full-time staffed wildland engine stationed at this location in the future as fire load demands.

## **6.2.3 RECOMMENDATIONS FOR SCUF TO CREATE FIRE-ADAPTED COMMUNITIES**

**Recommendation 8:** Consider adopting a WUI Building Code ordinance for Sublette County that addresses ignition-resistant building materials, subdivision design, fire protection water supply, and vegetation measures for defensible space in the Home Ignition Zone.

**Recommendation 9:** Consider adding a WUI Mitigation Coordinator position within the Sublette County Unified Fire organization. This specialist will manage community wildfire risk reduction programs and coordinate closely with community members and cooperators to implement the CWPP.

**Recommendation 10:** Continue to develop homeowner and community programs that increase education and awareness about reducing structural ignitability (home hardening) and defensible space as outlined in Section 5.1.2. Partner with neighborhoods located in the WUI to work towards becoming more fire adapted or Firewise communities.

**Recommendation 11:** Encourage communities to establish a Wildfire Neighborhood Ambassador Program that focuses on engaging residents to help motivate their neighbors, continuously interact with interagency partners, and offer a community approach to becoming more fire adapted. Key to success for building a wildfire Neighborhood Ambassador Programs includes:

- Identify a “Neighborhood Ambassador” who motivates others and coordinates with and disseminates information to community residents.
- Provide a SCUF point of contact for Ambassadors who have questions and need guidance.
- Develop a training program for Ambassadors focusing on homeowner education, mitigation opportunities, unified community fire adaptation messaging, funding mechanisms, and engagement schedules.

**Recommendation 12:** Seek grant funding and financial assistance to develop a Sublette County Wildfire Risk Reduction Program that offers Wildfire Risk Overviews to identify parcel-level fire hazards and to assist landowners with private property fuels reduction projects. Consider cost-share incentives for landowners that provides financial assistance for mitigation work in the Home Ignition Zones.

**Recommendation 13:** Encourage individual homeowners to remove flammable vegetation within the Home Ignition Zones (HIZ) for any identified structure (Section 5.1.1.1). Wildfire mitigation at the parcel level is ultimately the responsibility of the individual property or homeowner. Expand education and outreach campaigns that emphasize mitigation efforts in the Home Ignition Zones for residents. Educate homeowners about defensible space concepts and reducing structural ignitability.

**Recommendation 14:** Work with communities to identify debris burn pile locations for defensible space and community thinning activities. Seek financial assistance to develop and support community chipper programs to encourage vegetation mitigation work and handle activity debris in addition to burn piles.

**Recommendation 15:** Collaborate amongst interagency partners and community stakeholders to plan and implement projects listed in the CWPP Action Plan and Recommendations. The Sublette County Forest Collaborative and Teton/Alpine Area Wildfire Protection coalitions are excellent examples and frameworks of the type of coordination and cooperation needed to meet this strategy.

**Recommendation 16:** Continue to educate and prepare communities with an emphasis on the Ready, Set, Go! Program, AlertSense notification service, and preparing for evacuations as outlined in Section 5.1.5; Encourage community-level planning and drills for evacuation preparedness.

**Recommendation 17:** Support the development of community-level wildfire preparedness and evacuation plans (local CWPP) that address community preparedness, local fuels mitigation, and detailed evacuation planning for WUI subdivisions, HOA's, and communities. Prioritize these locally scaled plans for the high-hazard communities at risk identified in this CWPP.

**Recommendation 18:** Develop increased capacity within Sublette County Unified Fire in partnership with agency cooperators to strategically engage communities in wildfire risk mitigation. This could be a WUI Mitigation Coordinator, a Sublette County Forest Collaborative subcommittee, or a separate entity with the charter to better engage Sublette County residents in home hardening improvements (building materials, vents, etc.) and defensible space implementation in the home ignition zone.

**Recommendation 19:** Seek out and implement neighborhood coordination events such as National Community Wildfire Preparedness Day (1<sup>st</sup> Saturday in May), neighborhood "chipper days" to remove thinning debris, and evacuation drill training exercises.

## **6.2.4 RECOMMENDATIONS TO FOSTER AND MAINTAIN RESILIENT LANDSCAPES TO REDUCE COMMUNITY RISK**

**Recommendation 20:** Implement landscape-scale hazardous fuels reduction and vegetation management treatments, as described in Section 5.0, for the following high-priority at-risk areas. All project areas were



selected based on fire behavior/hazard modeling, fuel types, fire history, and values at risk and are listed in priority order. These three project areas allow interagency collaboration and the building of strong community partnerships. The Forest Service is in the pre-planning stages for several large landscape areas with plans to treat the most significant number of forest acres. Site-specific National Environmental Policy Act (NEPA) analysis will be required. The final analysis for federal treatments will allow adjacent communities to apply for funding opportunities to complete mitigation work on private parcels. The USFS analysis and project plans will serve as a strong anchor point for matching work to be completed on adjacent lands. Cooperation with the County, State, BLM, and private landowners will build on the success of the Forest Service initiatives.

Grant funding examples include the Western States Wildland Urban Interface (WSWUI) and Hazardous Fuels (Community Assistant Adjacent to National Forest Lands), administered through the Wyoming State Forestry Division. Also, consider Good Neighbor Authority grants for private lands adjacent to federal projects. The Good Neighbor Authority may allow the Forest Service and WY State Forestry Division to work under an agreement to accomplish hazardous fuels reduction work across federal and private boundaries.

- **The Rim to the Upper Green Valley (East Rim).** This project would be led by the USFS and funded by federal fuels program resources. The communities at risk served are Rim Ranches, Packer Creek Ranch, Flying A Ranch, Kendall Valley Lodge, and the Upper Green communities. The vegetation management treatments proposed would focus on reducing hazardous fuels and potential fire intensity in the project area. Private landowners can seek grant assistance through WSFD to match work proposed on adjacent federal lands.
- **Big Sandy Road Corridor/Irish Canyon.** This project would be led by USFS and funded by the federal fuels program accounts. The at-risk communities include Big Sandy Lodge, Temple Creek Subdivision, Dutch Joe Guard Station, a significant recreation use corridor, and communities in the Irish Canyon to Pocket Creek areas. Site-specific National Environmental Policy Act (NEPA) analysis will be required. Treatments should aim to decrease fire intensity in forested areas west of the Big Sandy corridor, adjacent to identified values at risk, and improve roadside clearance and potential control lines. Recommend defensible space and community fuel reduction treatments on adjacent private parcels. Landowners can seek grant assistance through WSFD to match work proposed on adjacent federal lands. Seek opportunities to complement the Big Sandy Road corridor vegetation management treatments with comprehensive interagency evacuation planning for this high-use recreation area and Firewise activities for the Big Sandy Lodge and Temple Creek Subdivision. Seek FEMA grant opportunities for evacuation planning efforts and roadside corridor improvements.
- **Cheatgrass Mitigation Treatments.** Continue to foster federal agency partnerships with Sublette County Weed and Pest to fund Cheatgrass treatments throughout the county. This has been a tremendous success, and continuing with prevention, early detection, and chemical herbicide application is a high priority for treating invasive and non-native grass species.

- **Wyoming Mule Deer Treatments.** Recommend High-Desert District BLM continues with broadcast prescribe burn treatments in the Wyoming range. These provide multiple project objectives for wildlife habitat improvement and fuel reduction.
- **Expanded Firewood Program.** Big Piney and Pinedale Ranger Districts consider expanding firewood collection opportunities for the general public and commercial vendors on forest lands.
- **Post Fire Salvage Timber Harvesting.** USFS and BLM seek strategies, opportunities, and funding to support post-fire timber harvesting and vegetation management treatments.
- **2019 Blowdown Event Fuels Reduction.** USFS seeks strategies, opportunities, and funding to mitigate fuel accumulation from this 2019 wind event. Continue cooperating with the Sublette County Forest Collaborative and Regional Office to consider broadcast burning or fuel reduction treatments.

**Recommendation 21:** Implement community-scale hazardous fuels reduction and vegetation management treatments, as described in Section 5.0, for the following moderate to high-risk priority areas. Grant funding opportunities on private lands are the same as in Recommendation 20.

- **Kendall Valley Private and State Lands.** SCUF and WSFD coordinate fuels reduction treatments (Section 5.1.1) on private lands in partnership with the USFS and BLM for lands adjacent to the federal jurisdictions. Communities at risk include Black Butte Subdivisions, Boulder Basin/Buffalo Head Estates, Hecox, Fandek, Moose Gypsum Subdivision, and New Fork Lakes Homesites/BSA. Neighborhood fuel reduction activities in these communities should include roadside clearing, fuel reduction/thinning, debris chipping, and defensible space improvement in the home ignition zones.
- **Sylvan Bay/Temple Creek/Fremont Lake Recreation Residences.** These are also known as summer homes and are private structures authorized under a special use permit through the local USFS Ranger District. Recommend coordination with the permit administrators and community leaders to ensure that defensible space specifications outlined in the permits are followed. Seek grant opportunities to match past and future projects completed by the Forest Service in adjacent areas.
- **Sargent Subdivision/Rim Ranches-Summit Road:** SCUF and WSFD coordinate with HOA and homeowners to plan and implement community hazardous fuels thinning and defensible space treatments. Parcels adjacent to USFS east Rim project may qualify for WUI grant opportunities.
- **Thunder/Rolling Thunder Subdivisions:** Collaborate with WSFD and consider a fuel break across multi-ownership boundaries including private parcels and State Lands.
- **Jim Bridger Estates:** Collaborate with WSFD and consider a fuel break across multi-ownership boundaries including private parcels and State lands.
- **Bolder Lake Country Estates/Big Country-Barger/Green River Estates:** Collaborate with USFS/BLM and consider a fuel break across multi-ownership boundaries including private parcels and federal boundaries.
- **Red Cliff Bible Camp.** Encourage ongoing defensible space mitigation to improve on past Forest Service fuels reduction projects surrounding the Red Cliff developments.

- **Finley Ranch (High Lonesome).** Consider collaboration between the USFS, BLM, and WSFD to establish a shaded fuels break south and west of the Ranch in this multi-jurisdictional location. Encourage the landowner to build on recent successful hazardous fuels thinning on private land.
- **Wyoming Front Range Communities.** Encourage defensible space mitigation for homeowners and neighborhood thinning in the Jim Bridger, Thunder, Rolling Thunder, Green River Estates, and Forty Rod communities. Recommend the same Firewise activities for ranches and rural developments north of Middle Piney Road to Daniel Merna Road.
- **Pine Creek (Pinedale).** Consider collaboration between WSFD and private landowners along the Pine Creek forested riparian corridor for hazardous fuels reduction and defensible space mitigation on private parcels.
- **Boulder Lake Estates.** Encourage defensible space mitigation and hazardous fuels reduction in the community. Consider neighborhood thinning, chipping, and road corridor vegetation improvements.

**Recommendation 22:** Consider road corridor improvements in the following areas for safe access/egress for emergency responders, safe public evacuations, and potential wildfire control lines to stop the spread of wildfires. Implement roadside fuel mitigation and vegetation thinning treatments.

- **Horse Creek/Piney Creek/Cottonwood Creek/Beaver Creek.** Big Piney Ranger District, USFS jurisdiction and project lead. Collaborate with Sublette County Road and Bridge Department to match federal treatments on connected county road sections.
- **Sylvan Bay/Temple Creek Residences.** Coordinate between USFS permit administrator, HOA, and east Zone Fire Management to assess and plan road clearance treatments to mitigate roadside fuels and vegetation and improve community evacuation processes.
- **McDougal Gap Road Corridor.** Big Piney Ranger District, USFS jurisdiction and project lead. Recommend road corridor vegetation treatments.
- **Boulder Basin Road.** Pinedale Ranger District, USFS jurisdiction and project lead. Consider road corridor thinning treatments to utilize Boulder Basin Road as a potential control line to protect Kendal Valley communities at risk.

## 6.2.5 ADDITIONAL RECOMMENDATIONS FOR SCUF, EMERGENCY MANAGEMENT, AND COUNTY

**Recommendation 23:** Consider organizing and leading summer WUI community field visits to at-risk communities with interagency Duty Officers, Battalion Chiefs, crew Captains, and neighborhood representatives (HOA or Wildfire Ambassador). These are excellent opportunities to assess response opportunities/challenges and to build situational awareness before potential wildfire events.

**Recommendation 24:** Seek funding and host risk mitigation training courses such as NFPA, *Assessing Structure Ignition Potential from Wildfire*, or the *Community Wildfire Mitigation Best Practices Training*, a national level training from the USFS and Coalition & Collaboratives, Inc.

**Recommendation 25:** Consider inviting a Community Mitigation Assistant Team (CMAT) before or during a wildfire event to Sublette County. CMATs work closely with local fire departments, land management

agencies, Incident Management Teams, and community leaders to identify mitigation opportunities before fire impacts the community. CMAT teams recently mobilized with success to Lincoln and Teton Counties. More information can be found online at CMAT.

**Recommendation 26:** Seek financial assistance to purchase fuels mitigation ground-based equipment. Consider procuring mechanical chippers with support equipment, and motorized equipment that can be mounted with various mowing, mulching, and masticating heads for larger-scale vegetation removal. Also include powered and nonpowered hand tools such as chainsaws, loppers, hand pruners, and hand trimmers.

**Recommendation 27:** Continue to identify and evaluate WUI fire hazards by collecting, analyzing, and maintaining the information within geospatial databases. Seek funding and training opportunities for SCUF staff to utilize ESRI ArcGIS Online applications such as AGOL, Field Maps, Survey 123, Story Maps, and Dashboards.

**Recommendation 28:** Track accomplishments, especially areas and acres treated, and recognize achievements. Use the CWPP Monitoring Strategy to assist with project tracking and adapt projects listed in the Action Plan. Use monitoring tracking to provide regular feedback internally and externally. Modify and update the Action plan to better position Sublette County for funding opportunities and to move mitigation forward with all partners. The 2008 publication *CWPP Evaluation Guide* is a good tool. It provides guidance for evaluating and monitoring accomplishments to ensure the document maintains its relevance and effectiveness over time (see Reference Cited, University of Oregon, 2008).

**Recommendation 29:** Continue successful efforts to improve alert notifications and evacuation planning at community levels. Collaborate with Tip Top Search and Rescue, SCUF, and federal partners to create neighborhood-scale evacuation maps with designated primary/secondary evacuation routes, assembly areas, and temporary refuge areas for the public and responders. Work with communities and HOAs to improve roadway clearance and vegetation along evacuation routes. Provide enhanced guidance and support for evacuating pets and livestock and conduct community evacuation drills with interagency partners and community leaders.

**Recommendation 30:** Continue with research and economic analysis for the feasibility of developing a biomass cogeneration facility to promote biomass recovery and support the local forest products industry. Engage with the WY Business Council, WSFD, and federal land management agencies as recommended in the 2016 Wyoming Forest Biomass Conference: Final Report and Proceedings. Seek funding opportunities and financial assistance to conduct a feasibility study to develop a pilot cogeneration plant and woody biomass recovery program in Sublette County and support surrounding county and federal forest health activities.

### 6.3 MONITORING STRATEGY

An essential step to identifying a CWPP's impact on a community is evaluating outcomes and monitoring accomplishments. The Healthy Forest Restoration Act does not include specific requirements for assessing and revising Community Wildfire Protection Plans (University of Oregon 2008). However, establishing a monitoring strategy to track progress and accomplishments will ensure a dynamic plan that can further project implementation, identify grant funding opportunities, and update the Action Plan.

**Recommendation:** Consider the Action Plan a living document that can be updated biennially before wholesale CWPP revision. Follow the 2008 publication, CWPP Evaluation Guide guidance for evaluation and monitoring accomplishments to ensure the document maintains its relevance and effectiveness over time.

The 2008 publication, Community Wildfire Protection Plan Evaluation Guide, provides a framework for communities to follow to evaluate how well they have met their community plan's goals and objectives. Essential considerations for strategic monitoring include:

- Track accomplishments and identify the extent to which CWPP goals have been met.
- Examine collaborative relationships and their contributions to implementation, including existing cooperators and new partners.
- Identify needed community and homeowner outreach and education programs (i.e., Wildfire Neighborhood Ambassador Program).
- Identify a process for maintenance of the CWPP Action Plan (CWPP steering team or Sublette County Forest Collaborative subcommittee).
- Identify actions and priority Action Plan projects that have not been implemented and why; set a course for future implementation and funding opportunities to update the Action Plan.

The following action item review form is provided in the 2008 CWPP Evaluation Guide. It can be used to track projects in the 2022 Sublette County CWPP, evaluate whether new actions are needed, re-prioritizing existing efforts, and identify significant accomplishments or challenges since plan approval.

**Table 20. Action item review form.**

Action Item	Priority	Objective Addressed	Status (Completed, In progress, Accomplished)	Successes	Challenges	Partners	Follow-up (New action item? Funding change?)

## REFERENCES CITED

- 108<sup>th</sup> Congress-Senate. 2003 Healthy Forest Restoration Act. Committee on Agriculture, Nutrition, and Forestry. 5 p.
- Barkley, Yvonne C.; Schnepf, Chris; Cohen, Jack. 2005. Protecting and Landscaping Homes in the Wildland-Urban Interface. 16 p.
- Baylis, P. and J. Boomhower. 2021. Mandated vs. Voluntary Adaptation to Natural Disasters: The Case of U.S. Wildfires. Working Paper 29621, National Bureau of Economic Research. Cambridge, MA. 1-4 p.
- Caggiano, Mike; Dallas, Dan; O Connor, Kit. 2020. When the fire starts: A science-based framework for risk-based incident response. Connected Science, September 2020. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 2 p
- Cohen, Jack D. 2008. The wildland Urban Interface Fire Problem, A consequence Of the Fire Exclusion Paradigm. Forest History Today. 23-24 p.
- Casper Interagency Technical Group. 2021. Casper Interagency Dispatch, Interagency Fire Danger Operating Plan. Casper, WY. L-62-63 p.
- Dillon, Gregory. 2020. Results and Application of the National Wildfire Risk Assessment. In Hood, Sharron, et al. 2018. Proceedings of the Fire Continuum-Preparing for the Future of Wildland Fire. 2018. Missoula, MT. 252-257 p.
- Headwaters Economics. 2022. A Profile of Wildfire Risk for Sublette County, WY. Economics Profile System. Bozeman, MT. 407 p. Information available online: <https://headwaterseconomics.org/natural-hazards/wildfire-risk-report/>
- Holden, Zachary A.; Swanson, Alan; Luce, Charles H.; Jolly, Matt W.; Maneta, Marco; Oyler, Jared W.; Warren, Dyer A.; Parsons, Russell; Affleck, David. 2018. Proceedings of the National Academy of Sciences Sep. 2018, vol. 115 (36); DOI: 10.1073/pnas. E8351, E8352-55 p.
- Interagency Fuels Treatment Decision Support System (IFTDSS). 2021. Wildland Fire Management RD&A, DOI. Disturbance Edit Rule Technical Documentation: [IFTDSS LANDFIRE Edit Rules](#)
- International Code Council, Inc. 2017. International Wildland-Urban Interface Code (IWUI) - 2018. Rotary Club Hill, IL. vii p.
- National Fire Protection Association. 2021. Outthink Wildfire, Wildfire Actions Policies. NFPA Wildfire Division. Quincy, MA. Policy 1 & 2. Information available online: <https://www.nfpa.org/wildfirepolicy>
- National Fire Protection Association. 2018. NFPA Code 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire. Technical Committee on Wildfire and Rural Fire Protection. Boise, Idaho. 9-24 p. HIZ information available online at: <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Preparing-homes-for-wildfire>

National Fire Protection Association. 2018. NFPA Code 1143, Standard for Wildland Fire Management. Technical Committee on Wildfire and Rural Fire Protection. Boise, Idaho. 5-6 p.

National Wildfire Coordinating Group. 2021. Fire Behavior Field Reference Guide, PMS 437. Fire Behavior Subcommittee. Fuels/Surface Fire Sections. Boise, Idaho.

Rothermel, R., and P. Andrews. 1982. Charts for Interpreting Wildland Fire Behavior Characteristics. Gen Tech Rep. INT-131, USDA, FS, Intermountain Range and Experiment Station, Ogden, UT. 1-3 p.

Scott, Joe H. and Robert E. Burgan. 2005. Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model. Gen Tech. Rep. RMRS-GTR-153. Fort Collins, CO; U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Scott, Joe H.; Thompson, Mathew P.; Calkin, David E. 2013. A Wildfire Risk Assessment Framework for Land and Resource Management. FMRS-GTR-315. USDA Forest Service, Rocky Mountain Research Station, 2-5 p.

Sublette County Unified Fire. 2021. Draft Strategic Plan 2021-2031. Pinedale, Wyoming.

Thompson, Matthew P.; Bowden, Phil; Brough, April; Scott, Joe H.; Gilbertson-Day, Julie; Taylor, Alan; Anderson, Jennifer; Haas, Jessica R. 2016. Application of wildfire risk assessment results to wildfire response planning in the southern Sierra Nevada, California, USA. *Forests*. 7(3): 64.

University of Oregon. 2018. Community Wildfire Protection Plan Evaluation Guide. Prepared by Resource Innovations Institute for a Sustainable Environment. 4-5,21 p.

# APPENDICES

## APPENDIX A: SUBLETTE COUNTY COMMUNITY WILDFIRE PROTECTION PLAN ADDITIONAL MAPS

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# BATTALION RESPONSE AREA 1 – PINEDALE

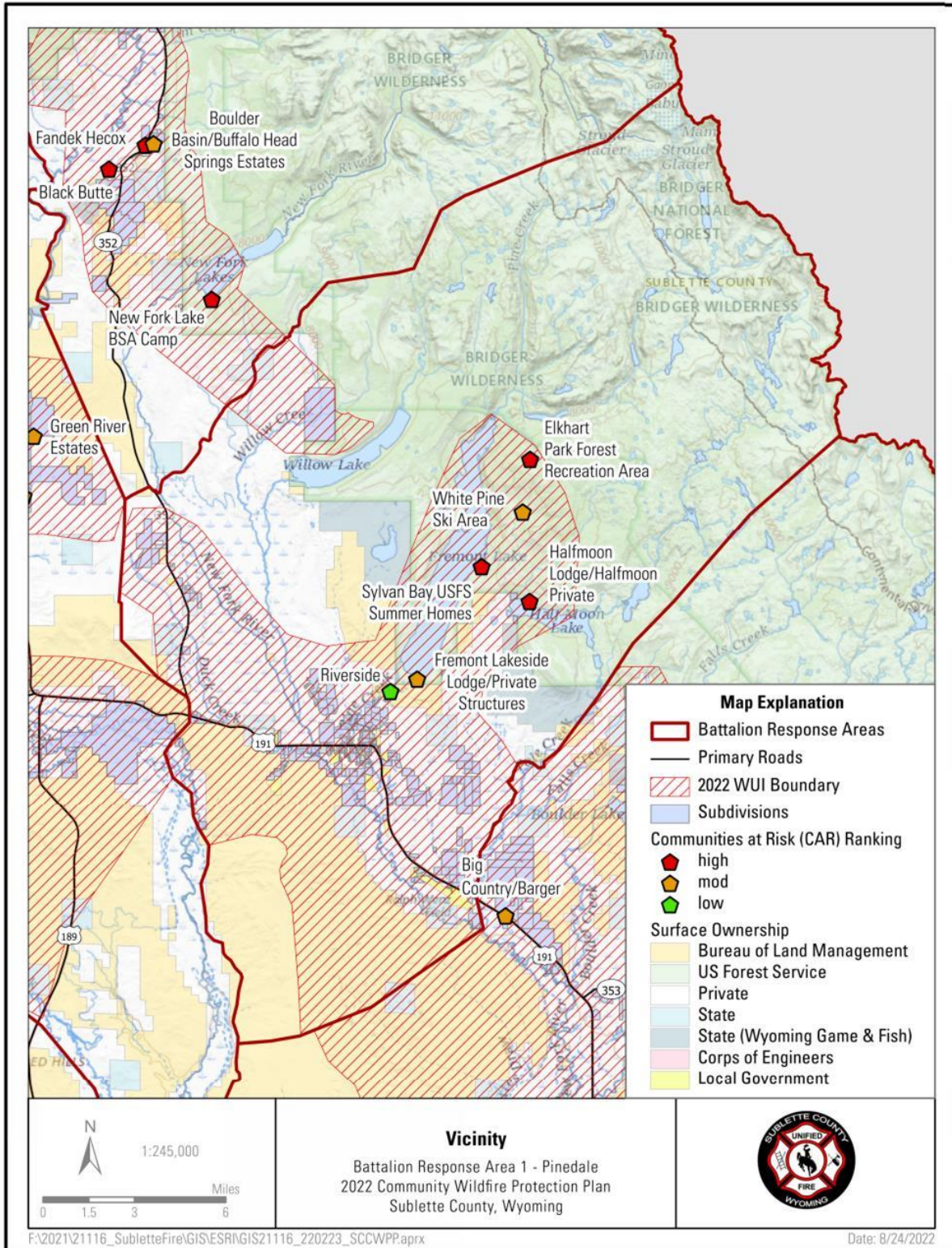
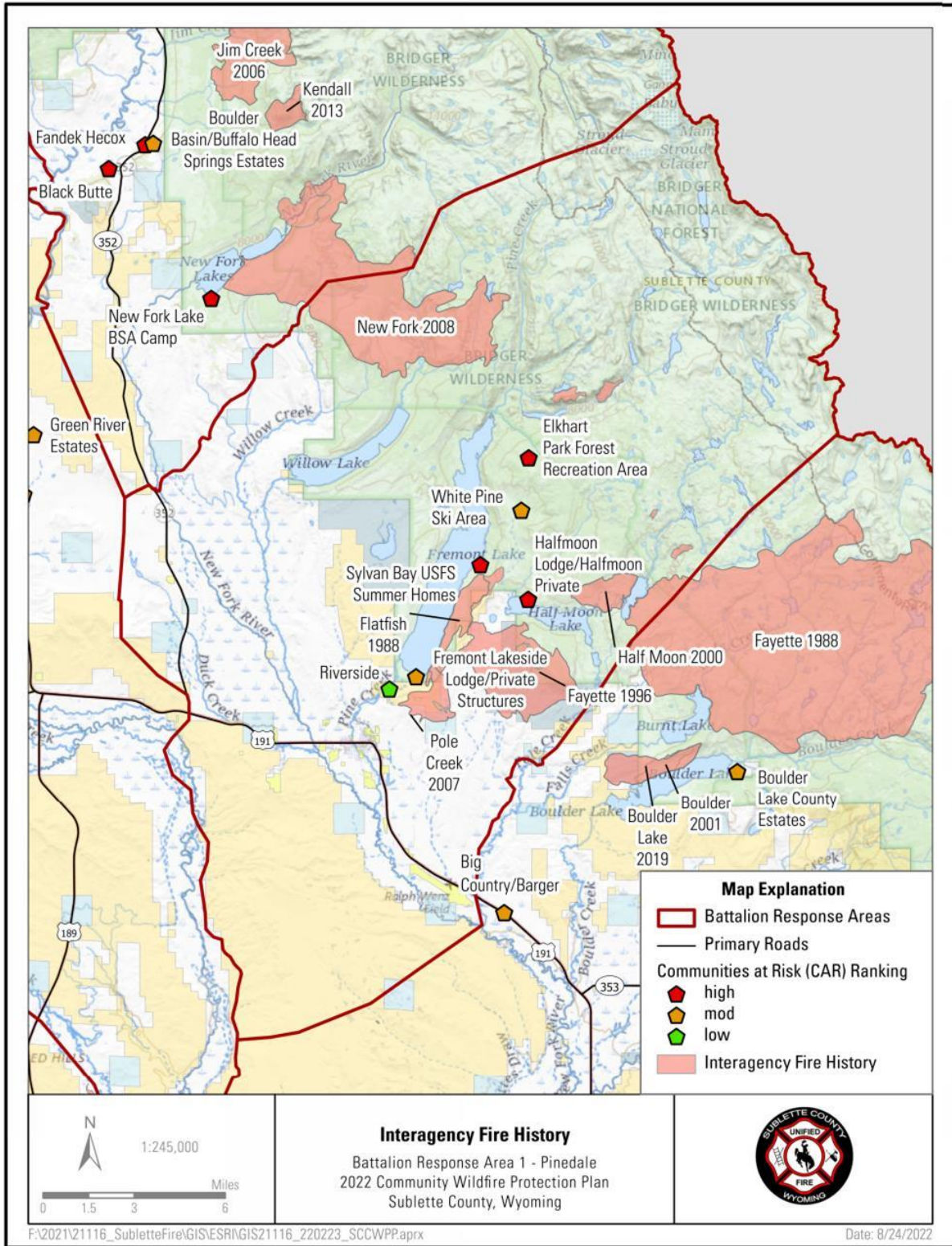
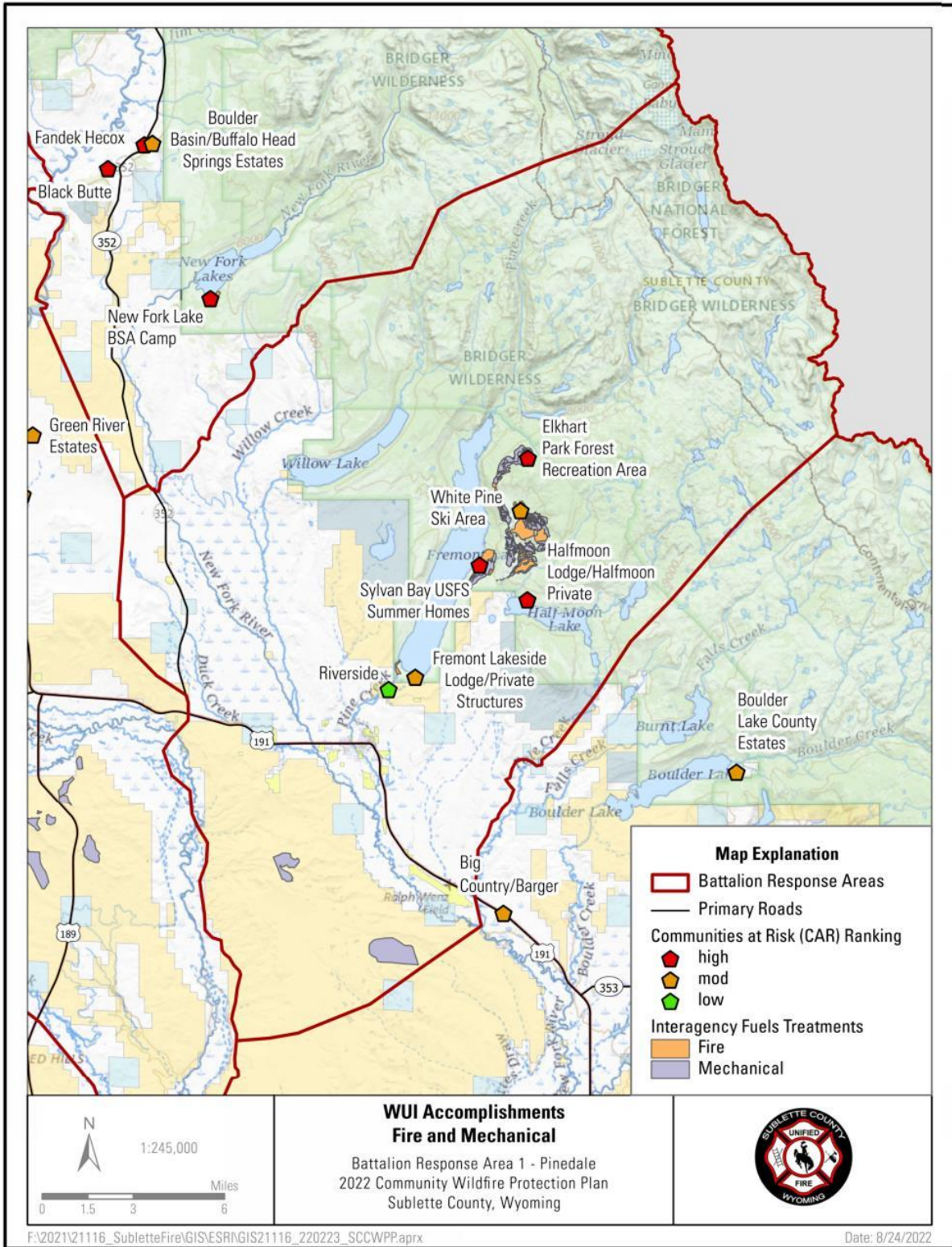


Figure 33. Vicinity of Battalion Response Area 1 - Pinedale.



**Figure 34. Fire history for Battalion Response Area 1 - Pinedale. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**



**Figure 35. WUI Accomplishments Fire and Mechanical Treatments for Battalion Response Area 1 - Pinedale.**

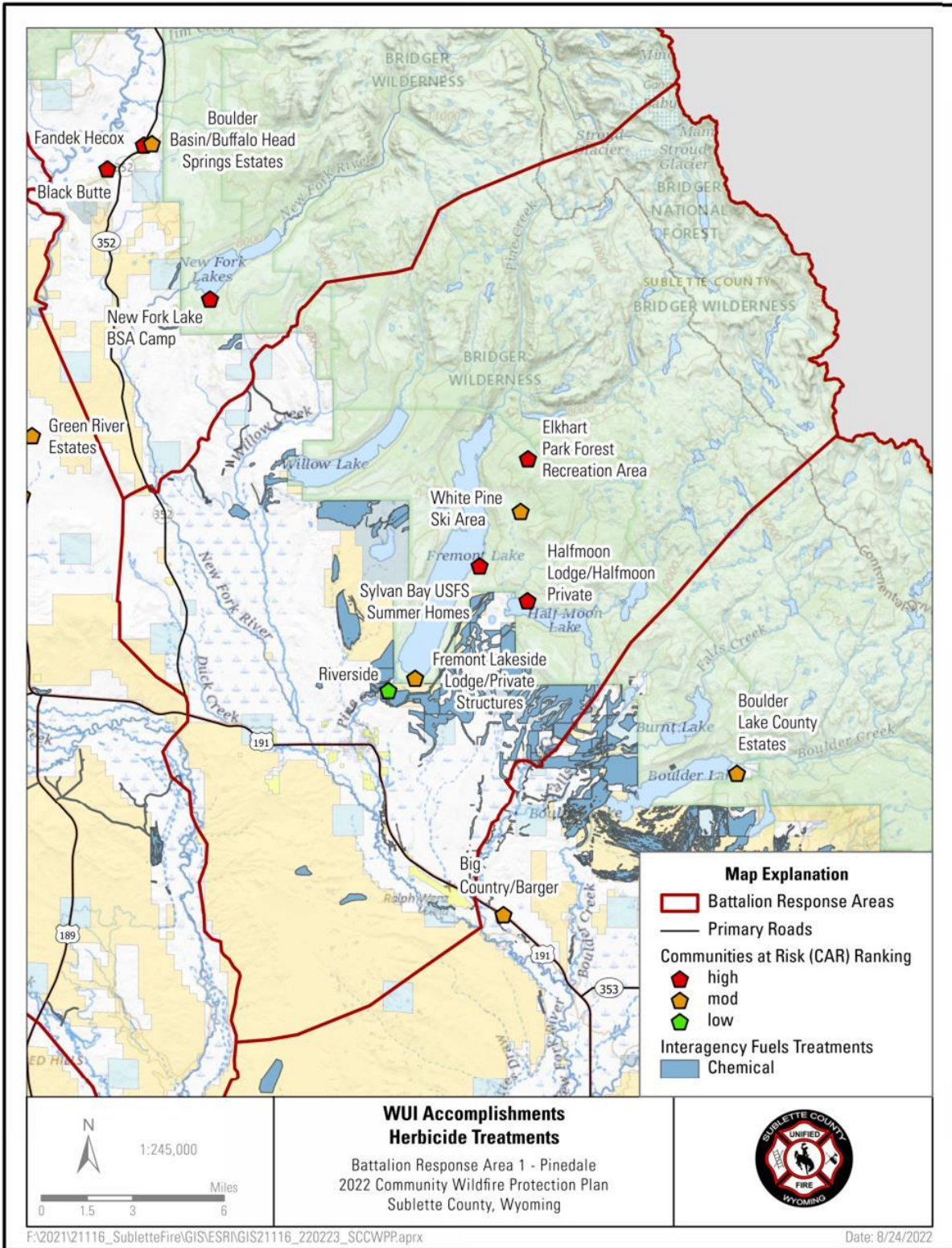
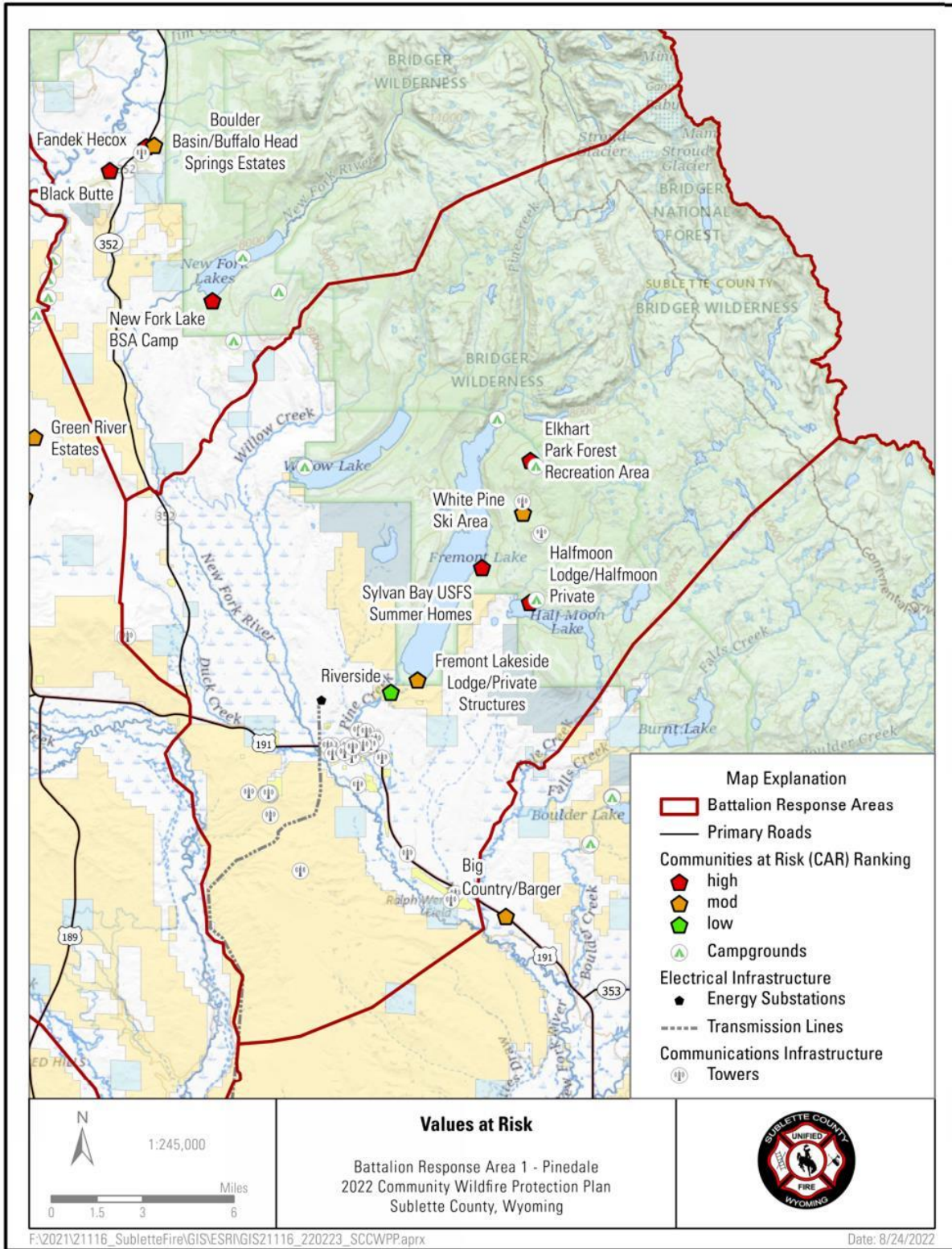
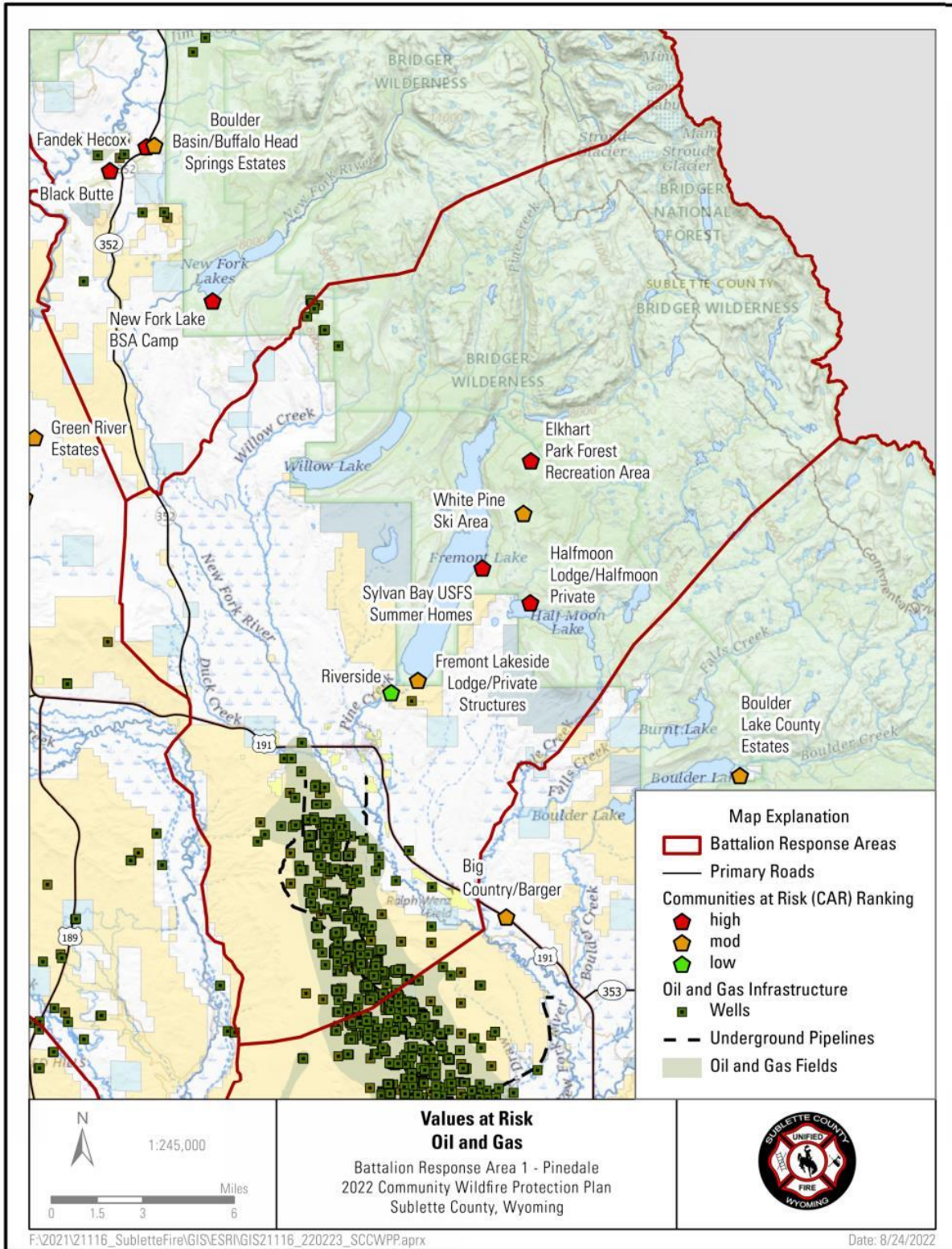


Figure 36. WUI Accomplishments Chemical Treatments for Battalion Response Area 1 - Pinedale.



**Figure 37. Values at risk for electrical and communication infrastructure for Battalion Response Area 1 - Pinedale.**



**Figure 38. Values at risk for oil and gas infrastructure for Battalion Response Area 1 - Pinedale.**

# BATTALION RESPONSE AREA 2 – BIG PINEY/MARBLETON

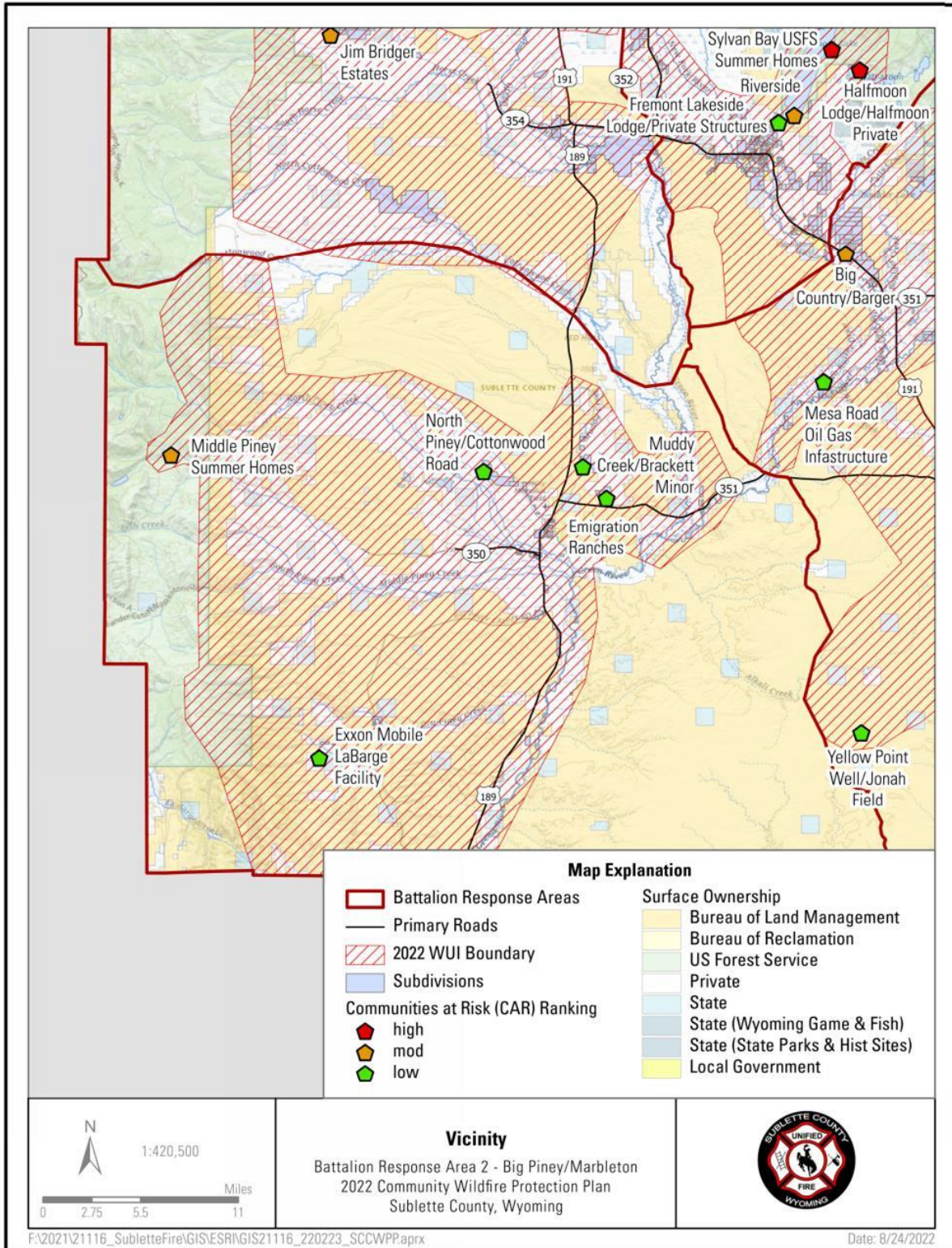
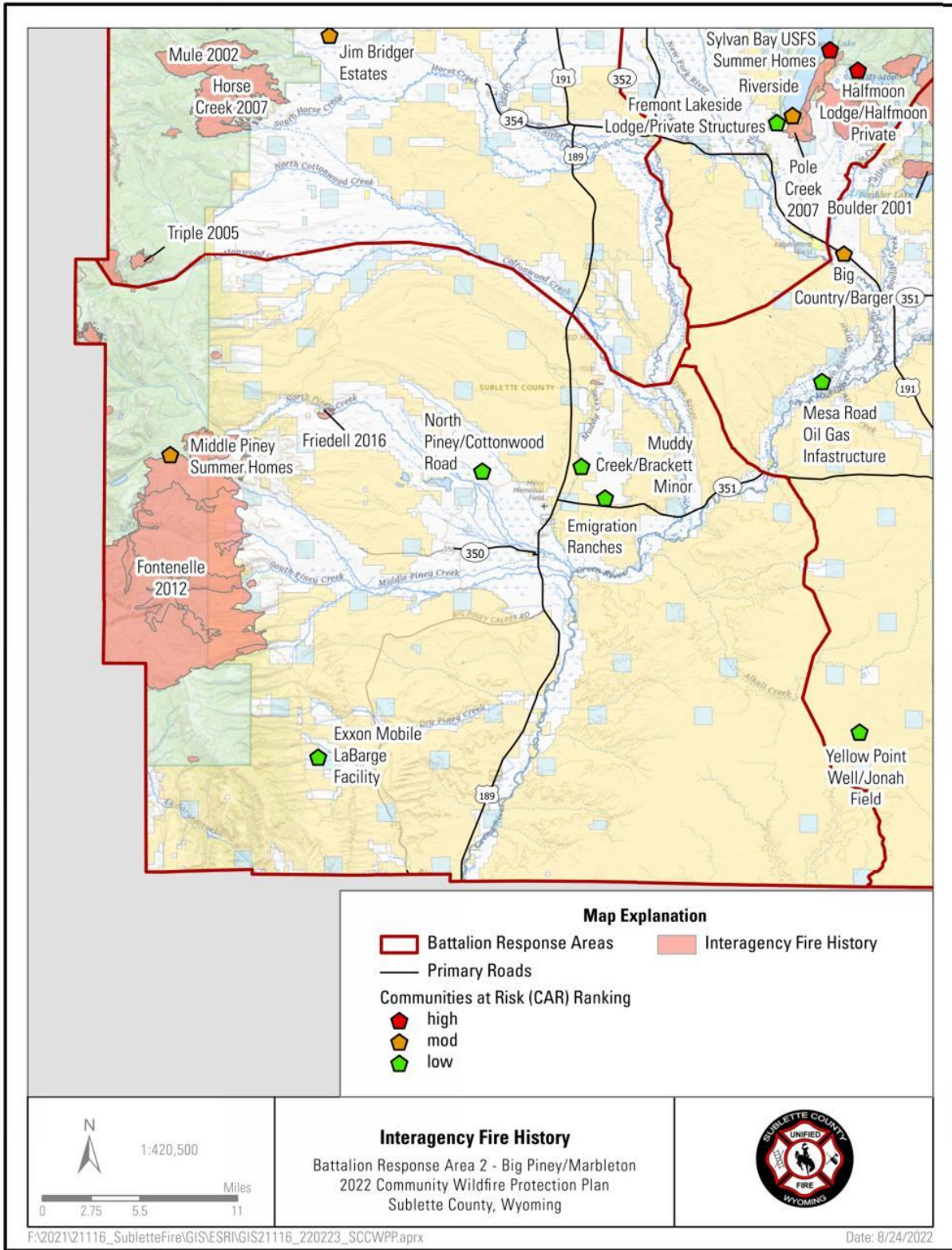
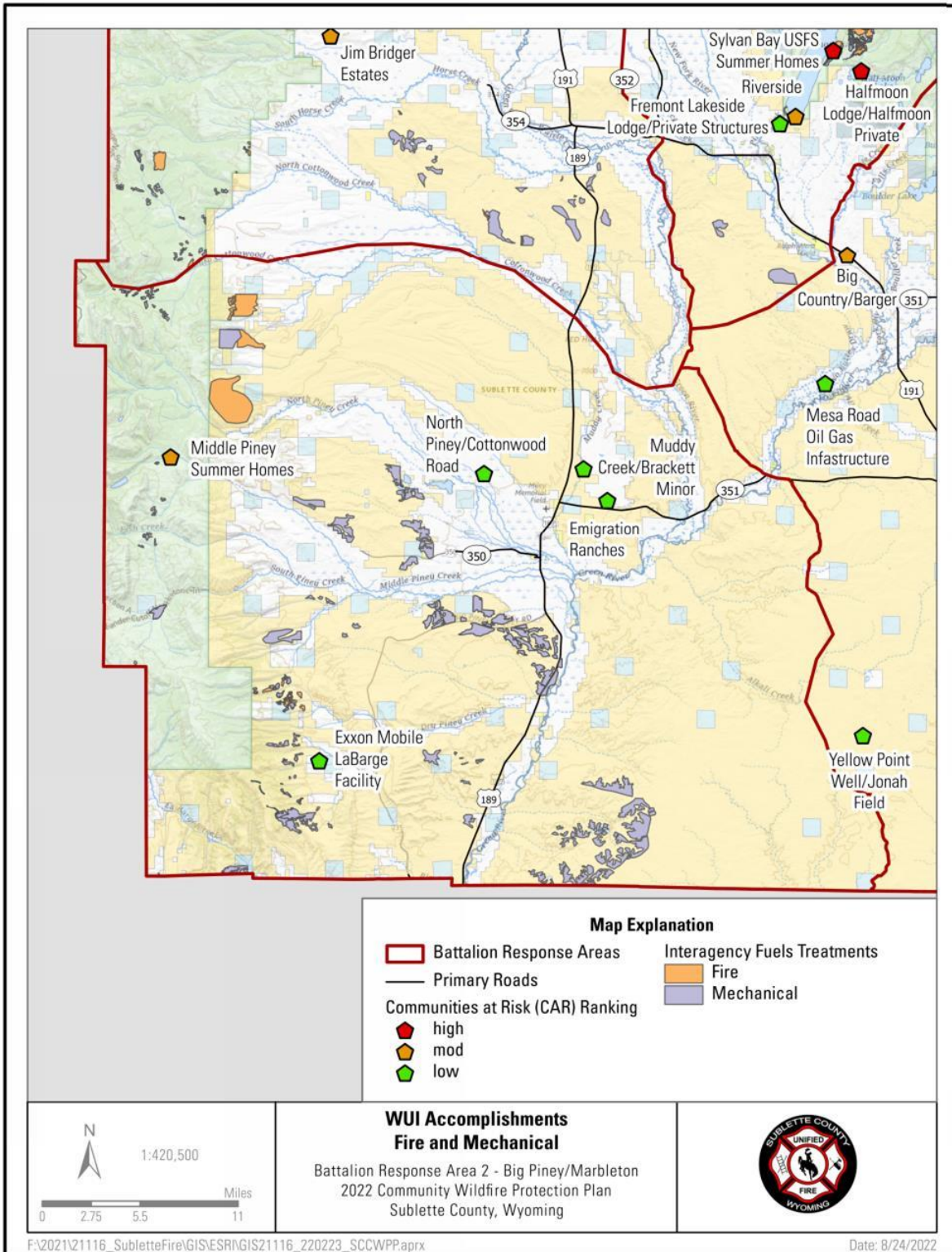


Figure 39. Vicinity of Battalion Response Area 2 – Big Piney/Marbleton.

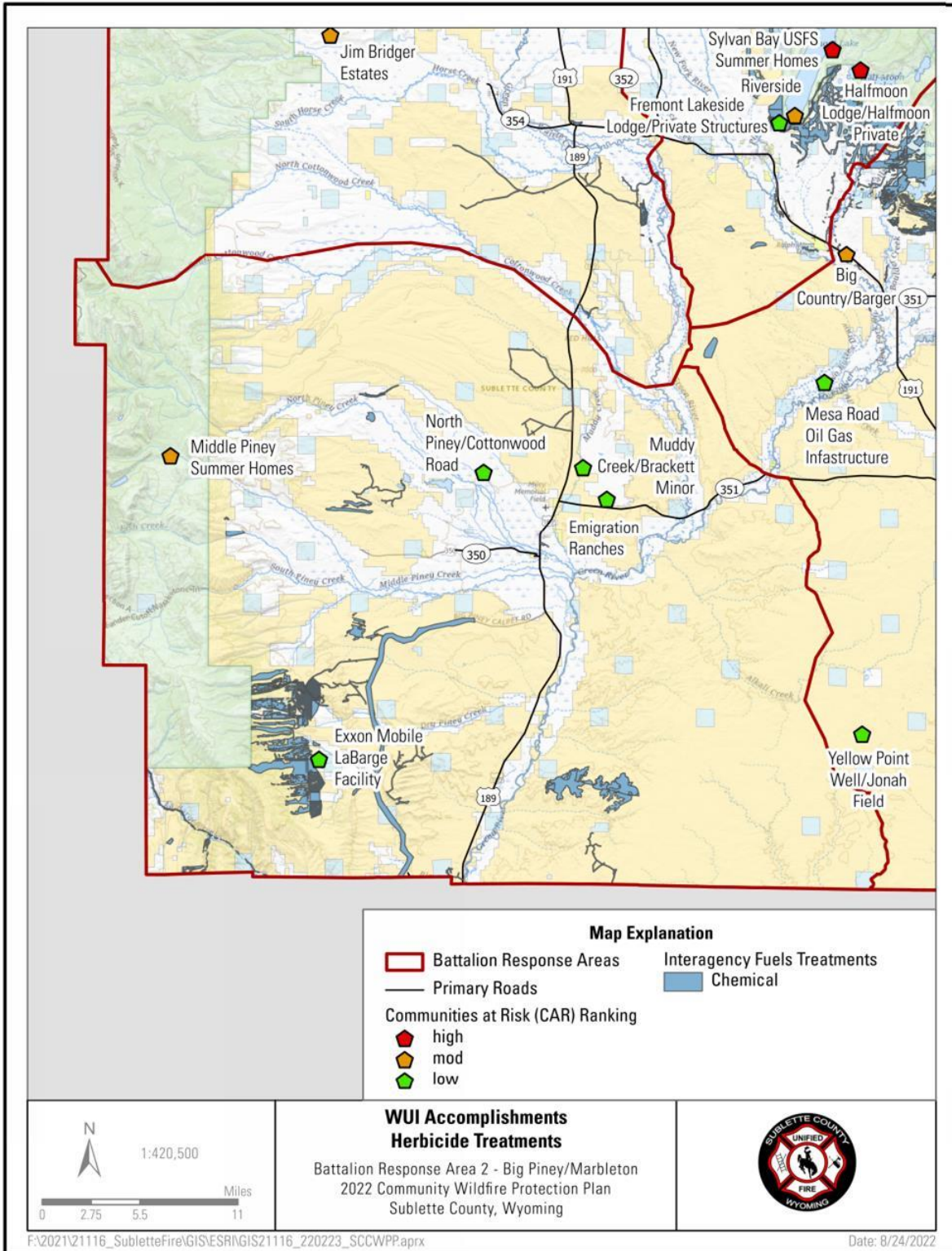


**Figure 40. Fire history for Battalion Response Area 2 – Big Piney/Marbleton. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**

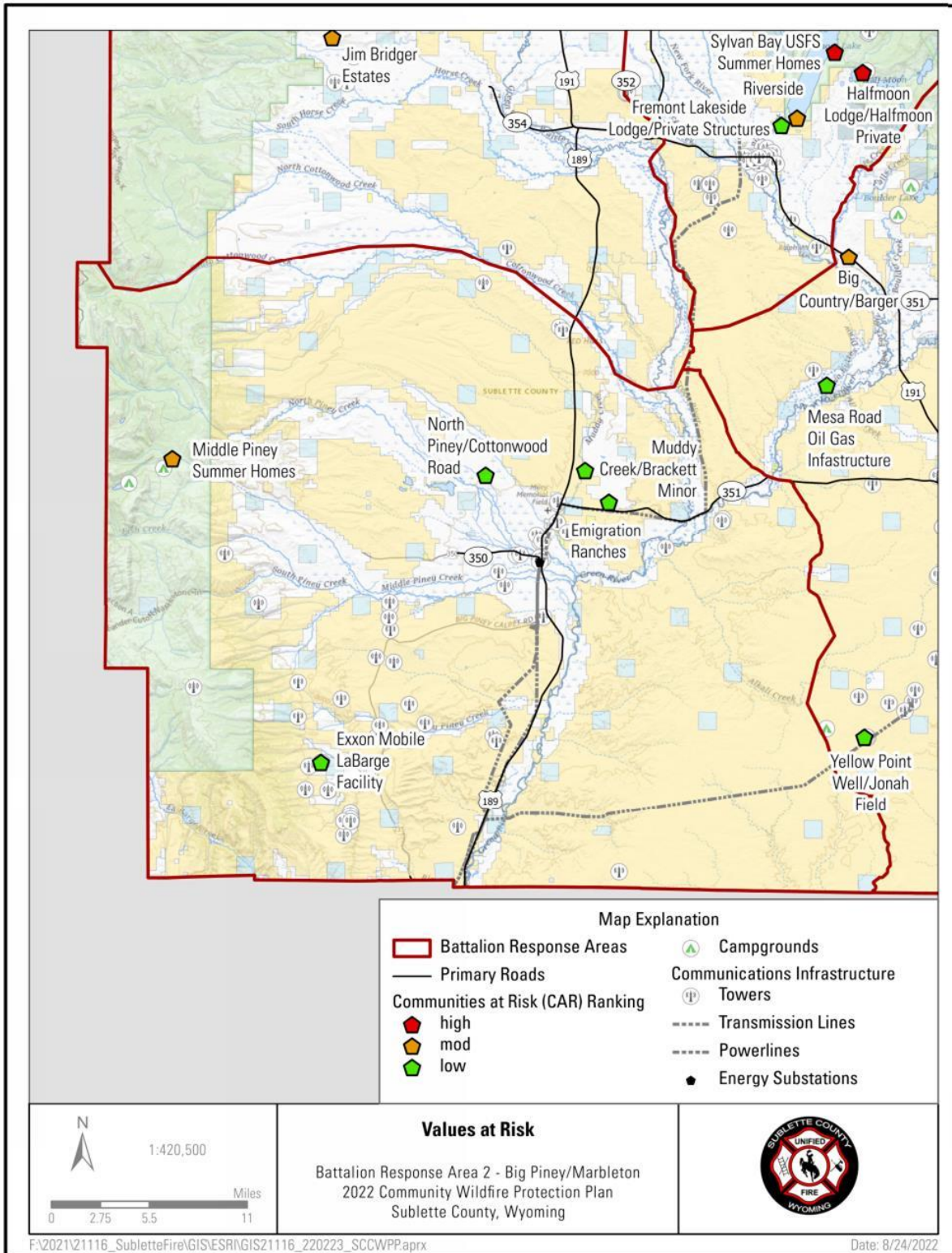




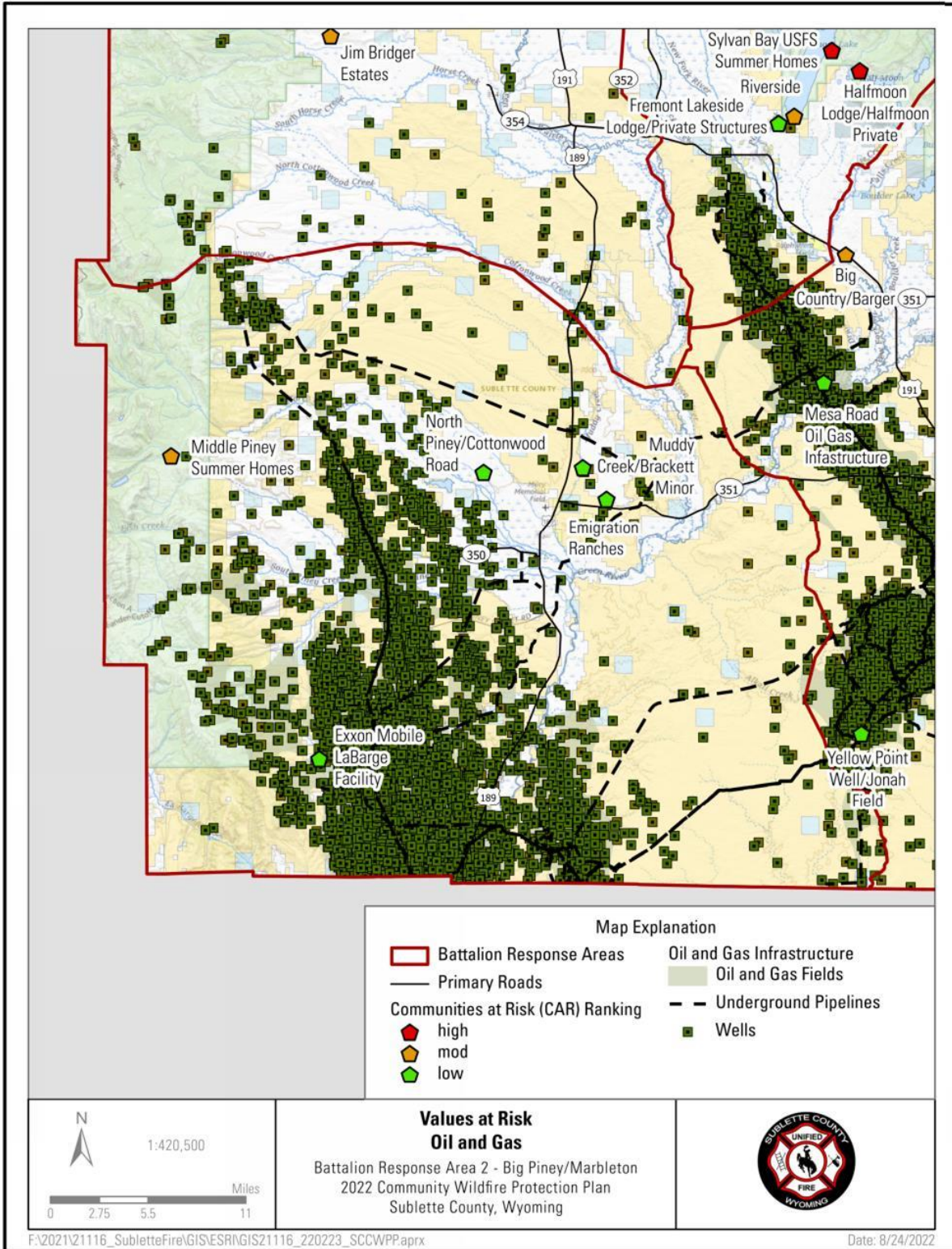
**Figure 41. WUI Accomplishments for fire and mechanical treatments for Battalion Response Area 2 - Big Piney/Marbleton.**



**Figure 42. WUI Accomplishments for chemical treatments for Battalion Response Area 2 - Big Piney/Marbleton.**



**Figure 43. Values at risk for campgrounds, electrical, and communication infrastructure for Battalion Response Area 2 - Big Piney/Marbleton.**



**Figure 44. Values at risk for oil and gas infrastructure for Battalion Response Area 2 - Big Piney/Marbleton.**

# BATTALION RESPONSE AREA 3 – BONDURANT

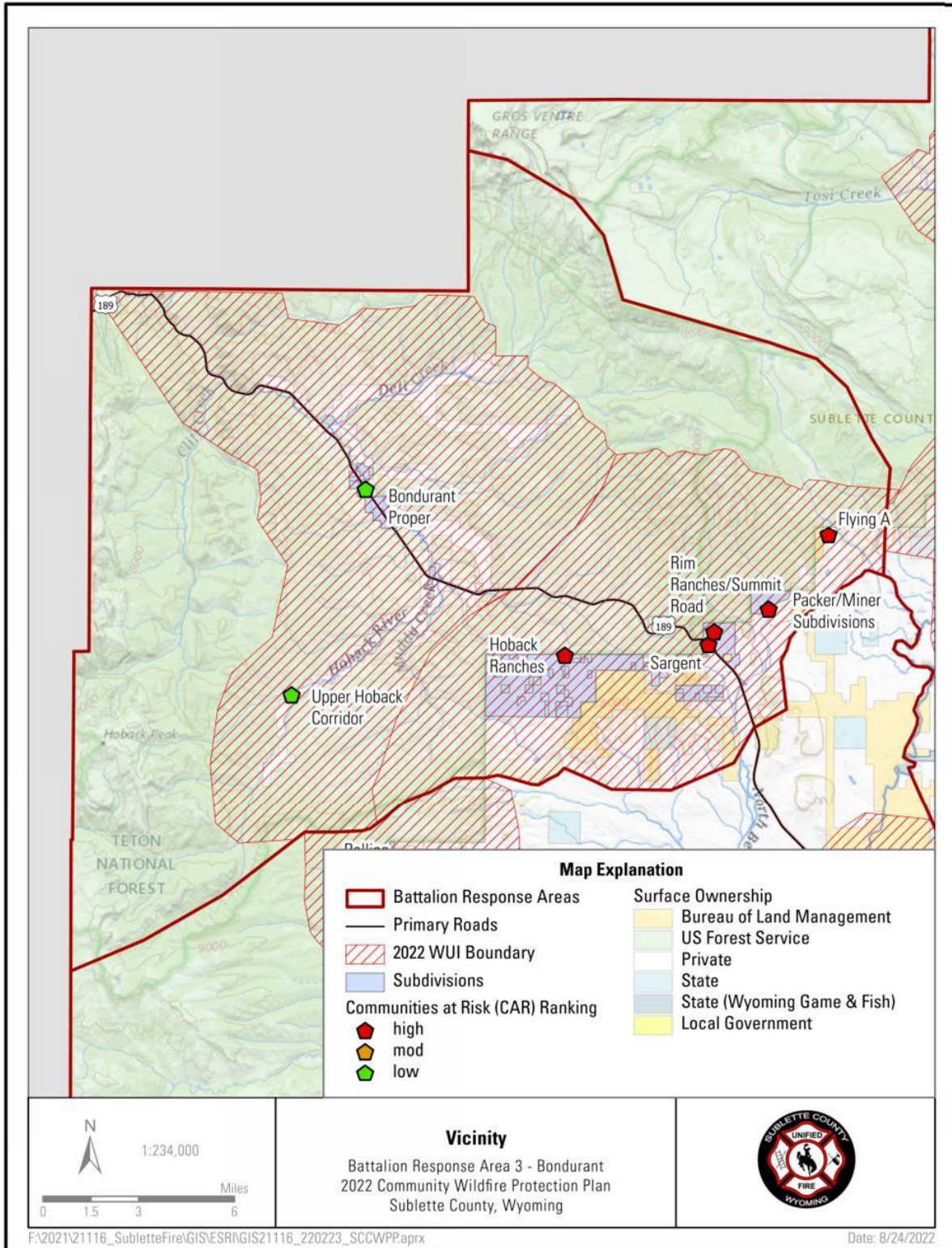
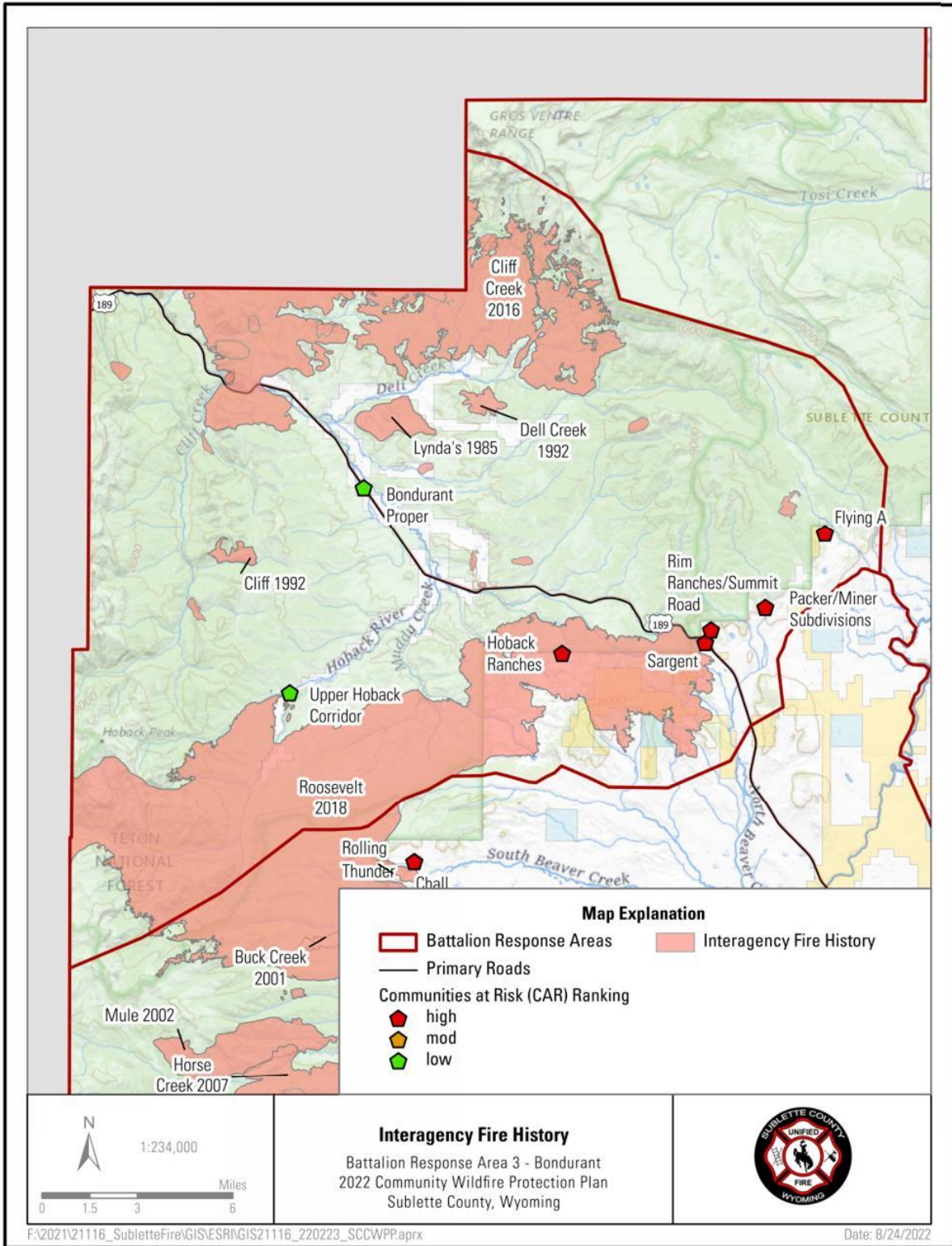
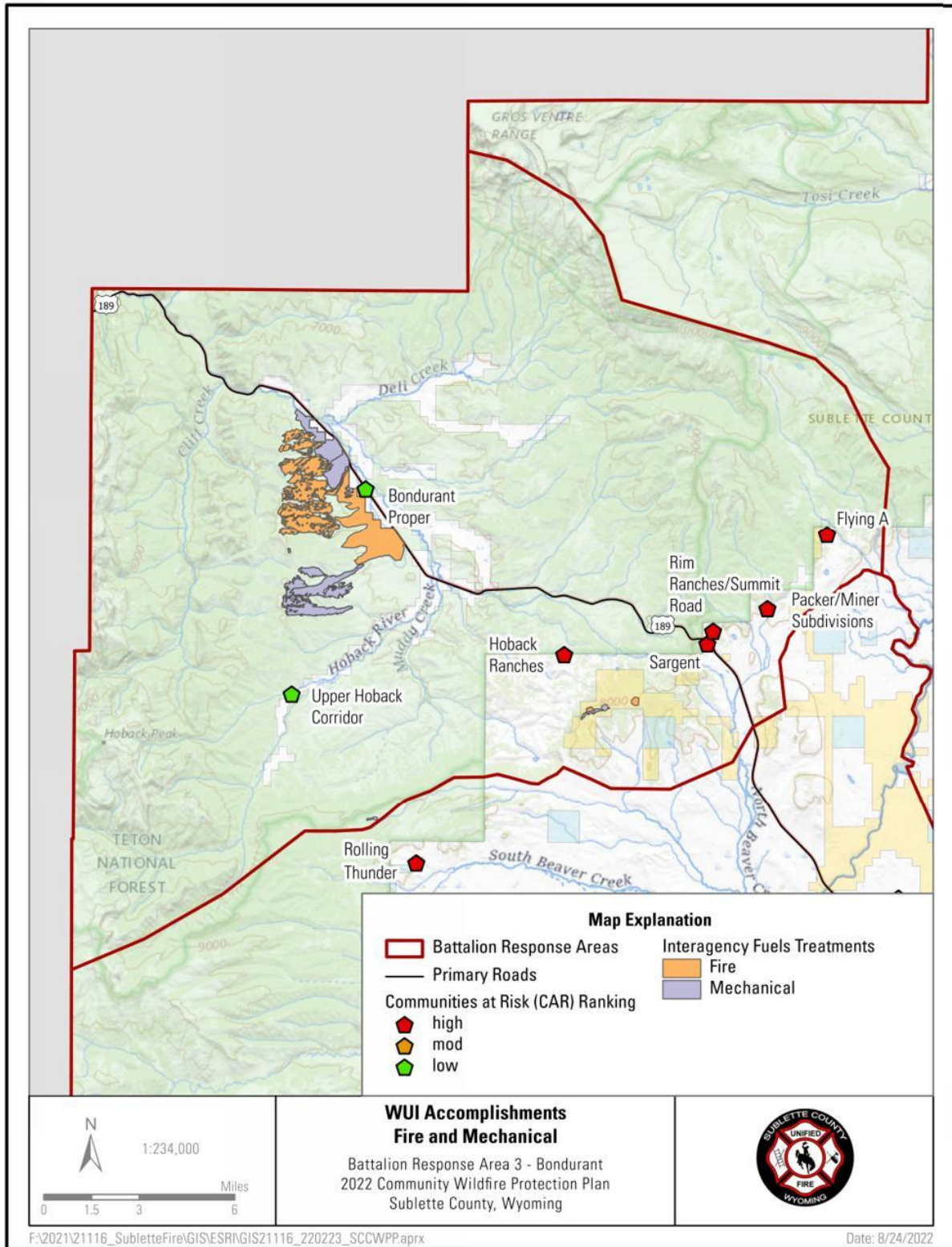


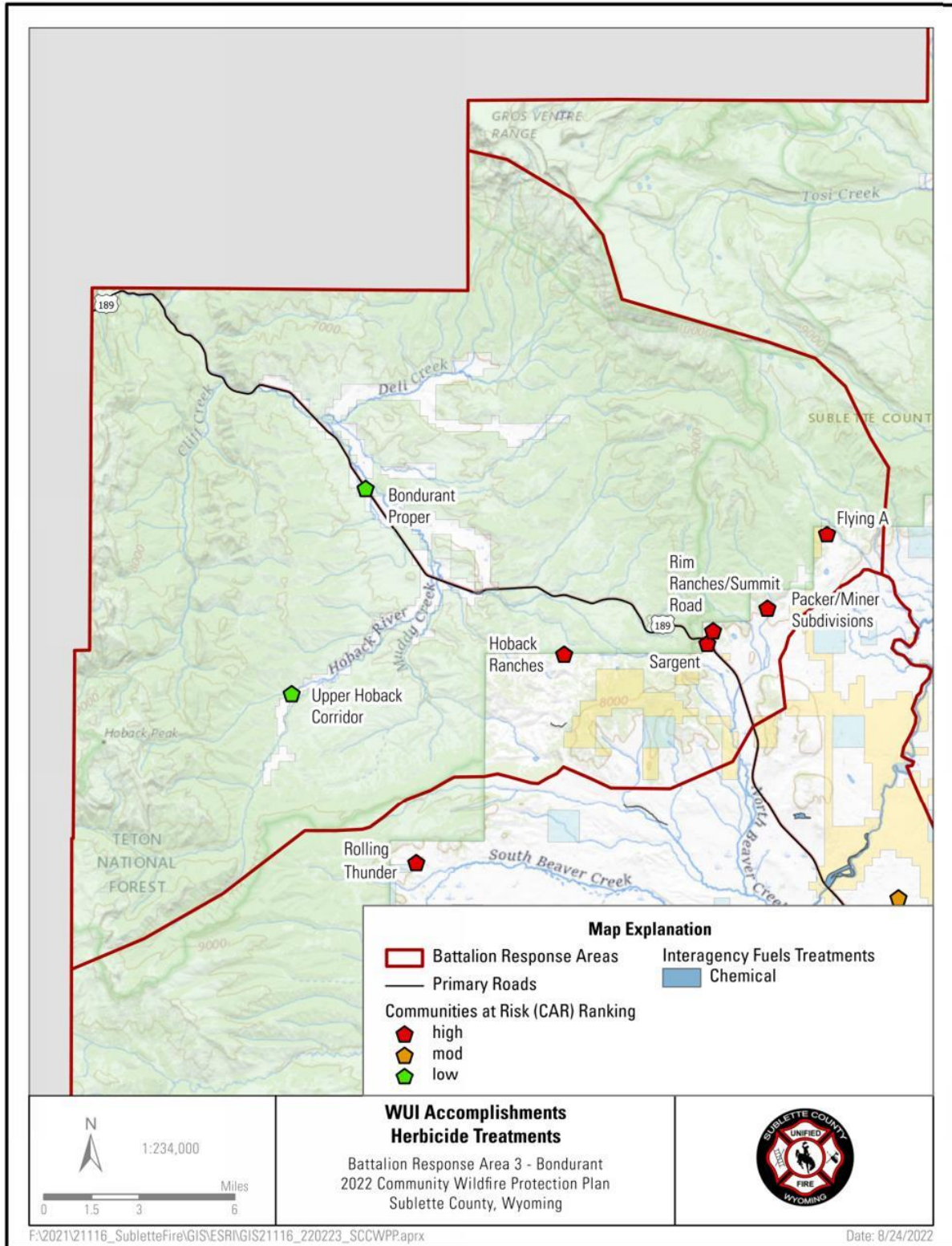
Figure 45. Vicinity of Battalion Response Area 3 – Bondurant.



**Figure 46. Fire history for Battalion Response Area 3 – Bondurant. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**

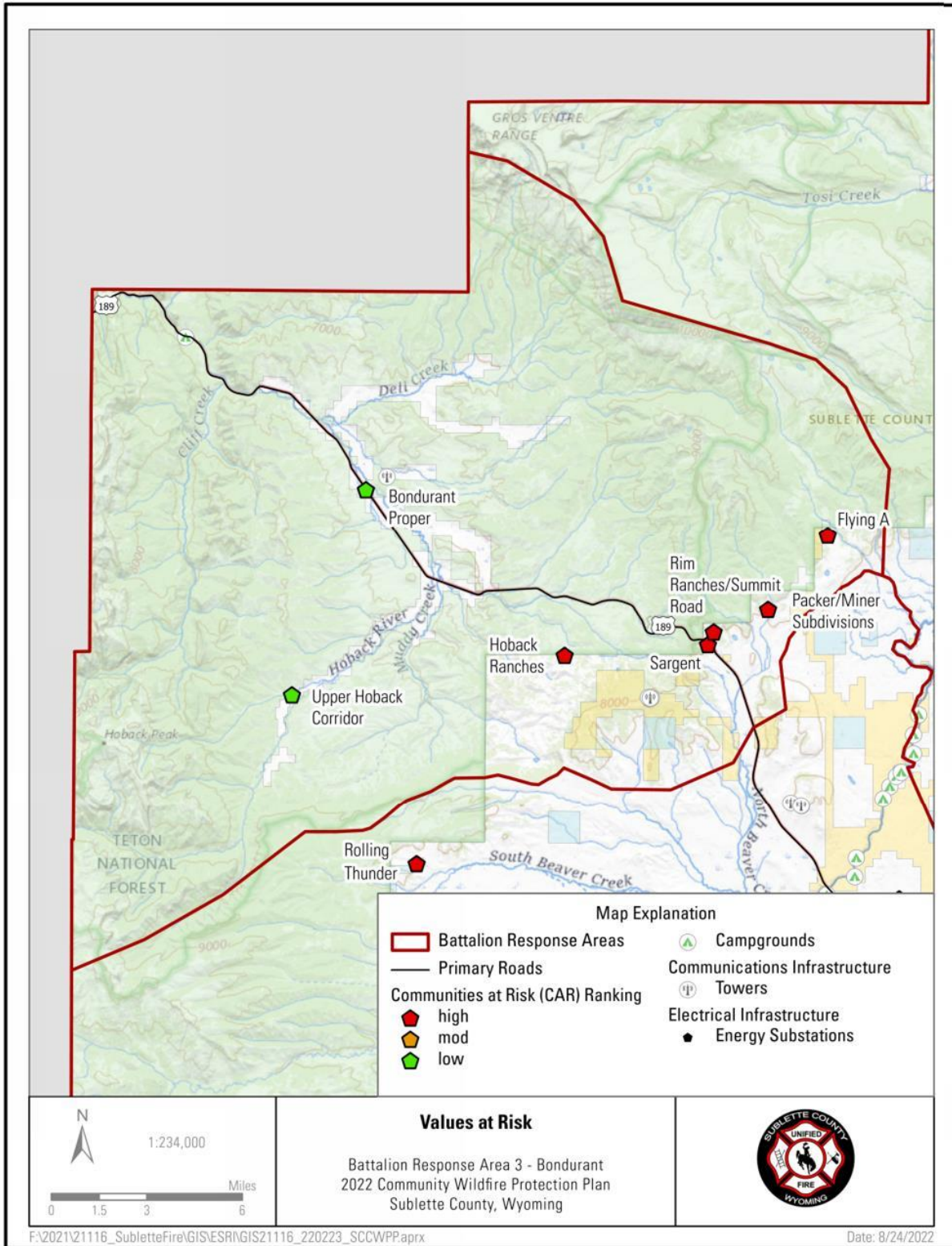


**Figure 47. WUI Accomplishments for fire and mechanical treatments for Battalion Response Area 3 – Bondurant.**

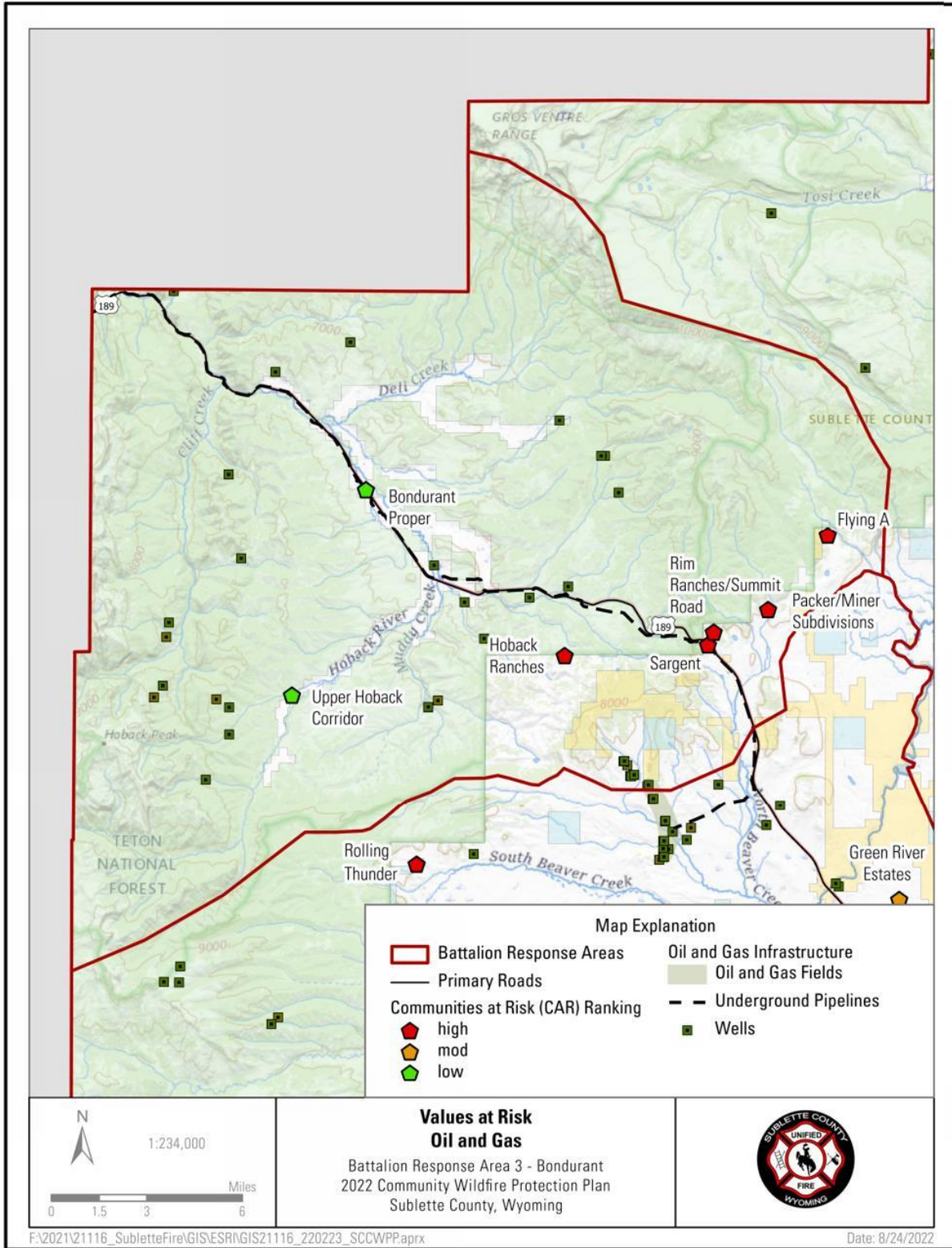


**Figure 48. WUI Accomplishments for chemical treatments for Battalion Response Area 3 – Bondurant.**





**Figure 49. Values at risk for campgrounds, electrical, and communication infrastructure Battalion Response Area 3 – Bondurant.**



**Figure 50. Values at risk for oil and gas infrastructure Battalion Response Area 3 – Bondurant.**

# BATTALION RESPONSE AREA 4 – BOULDER

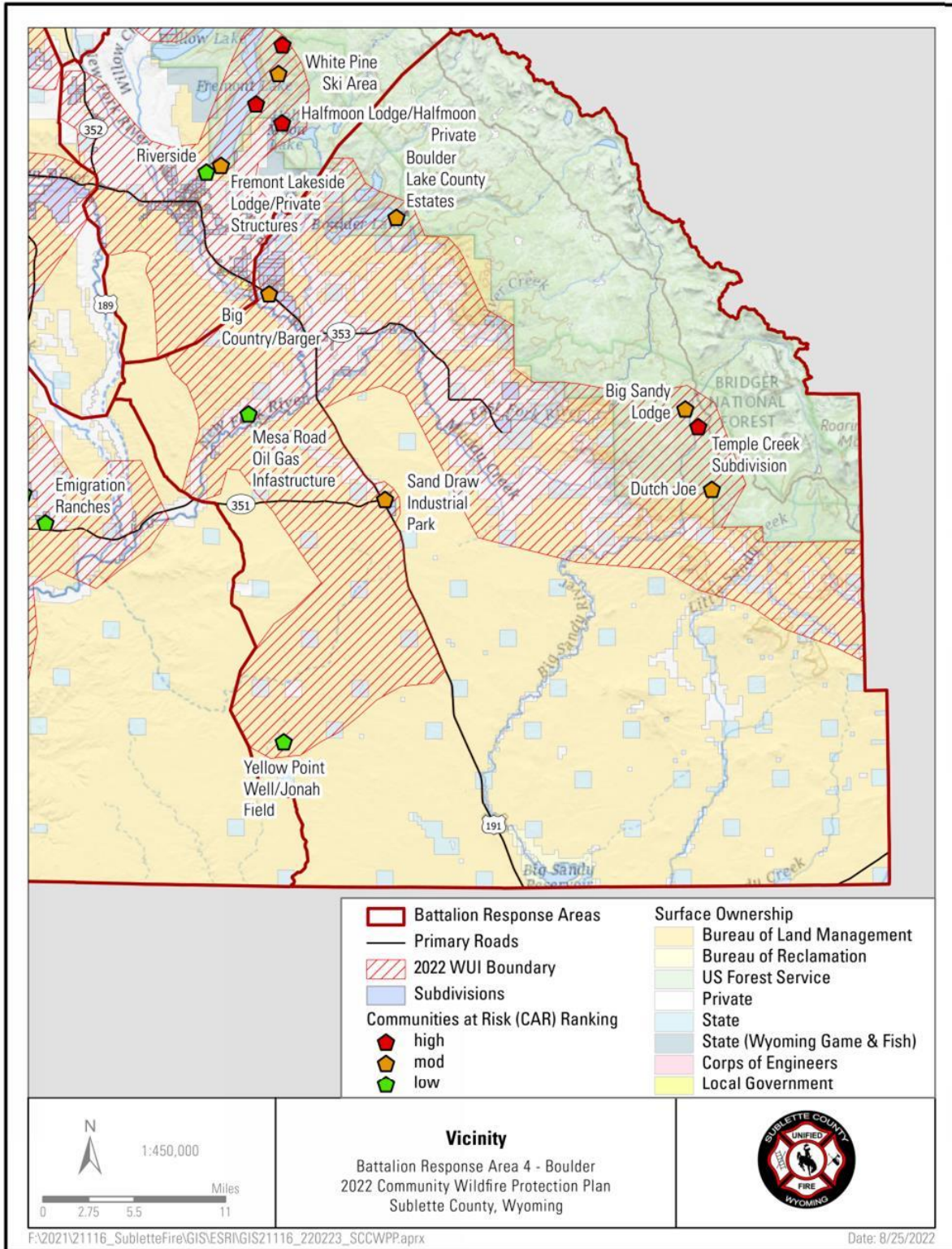
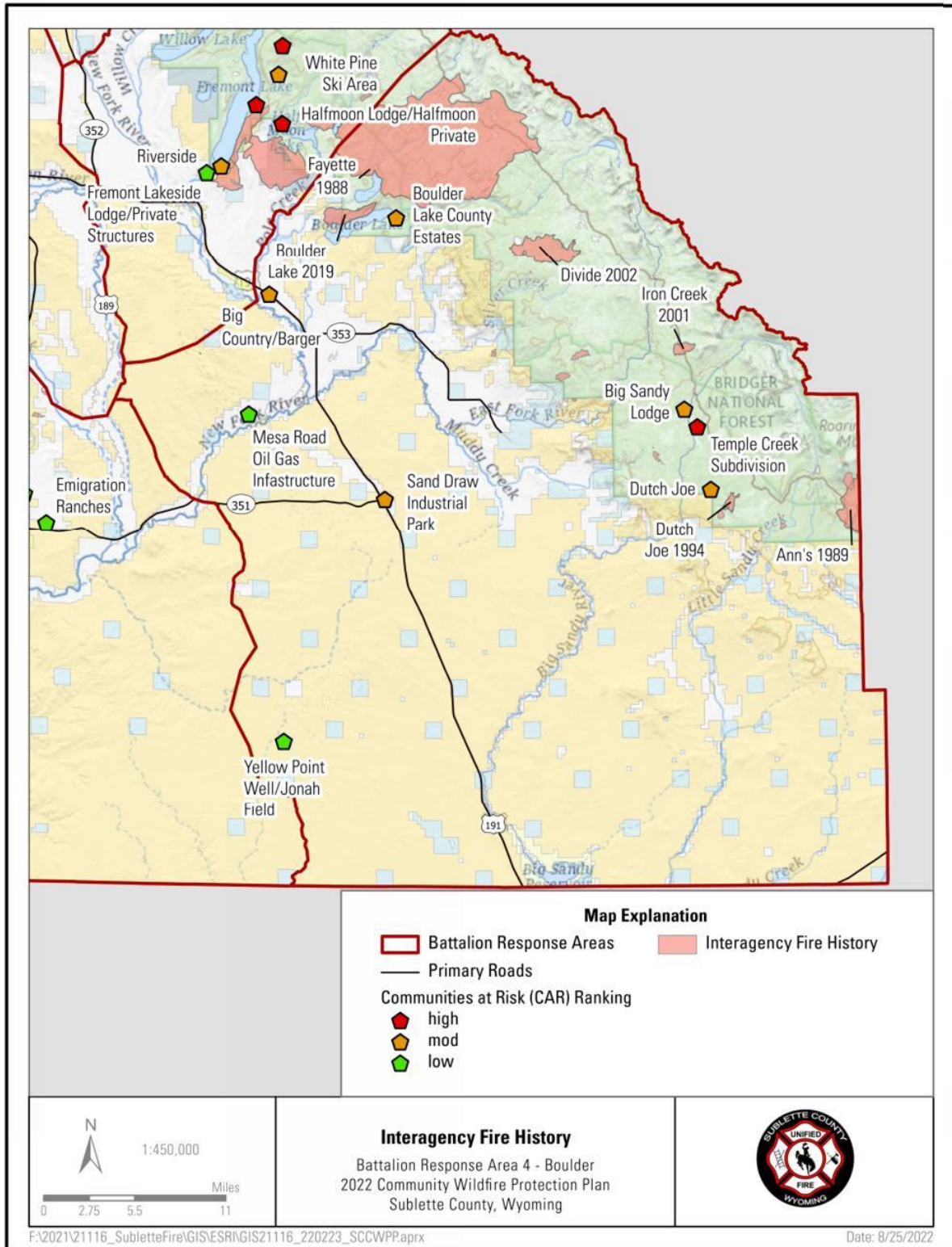
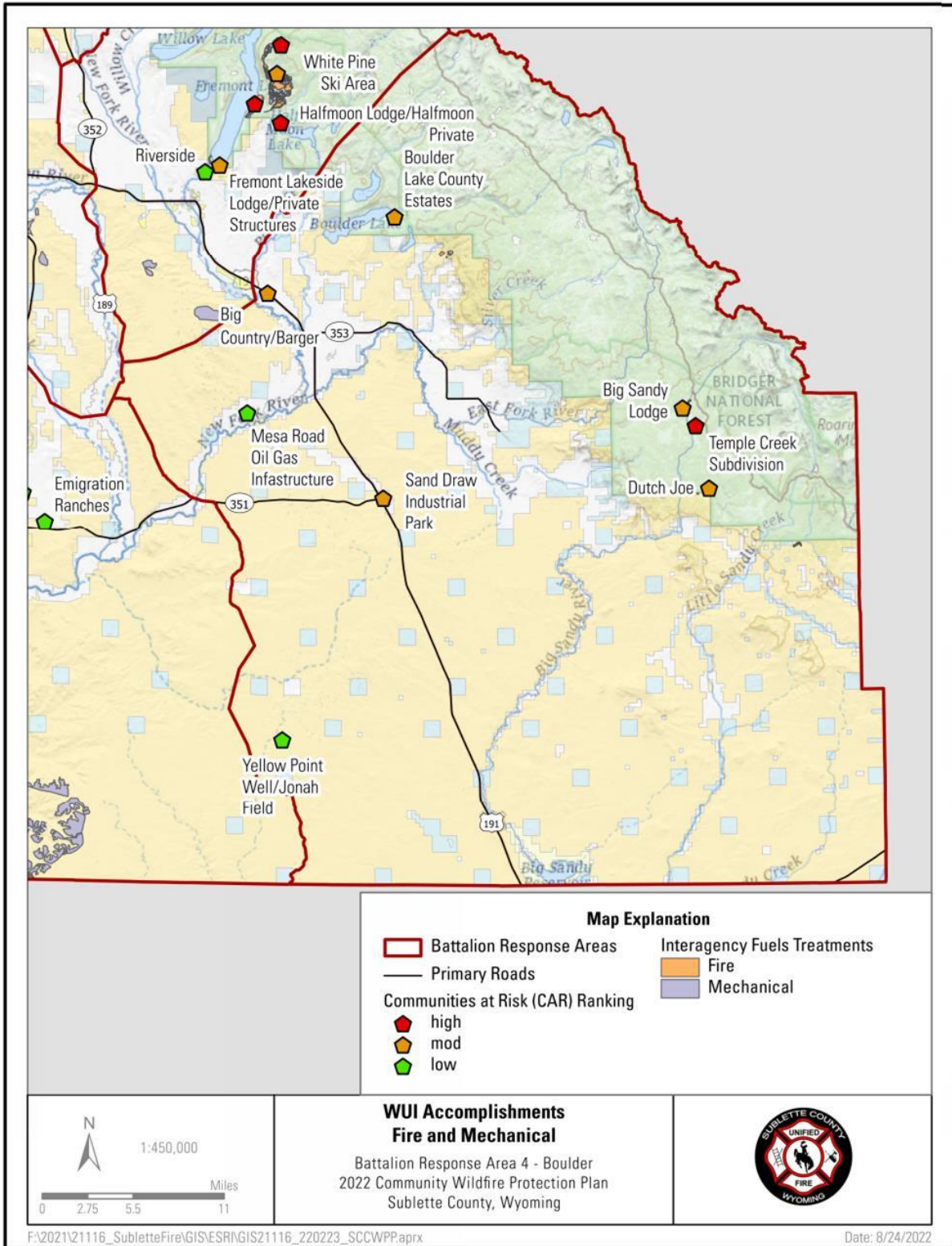


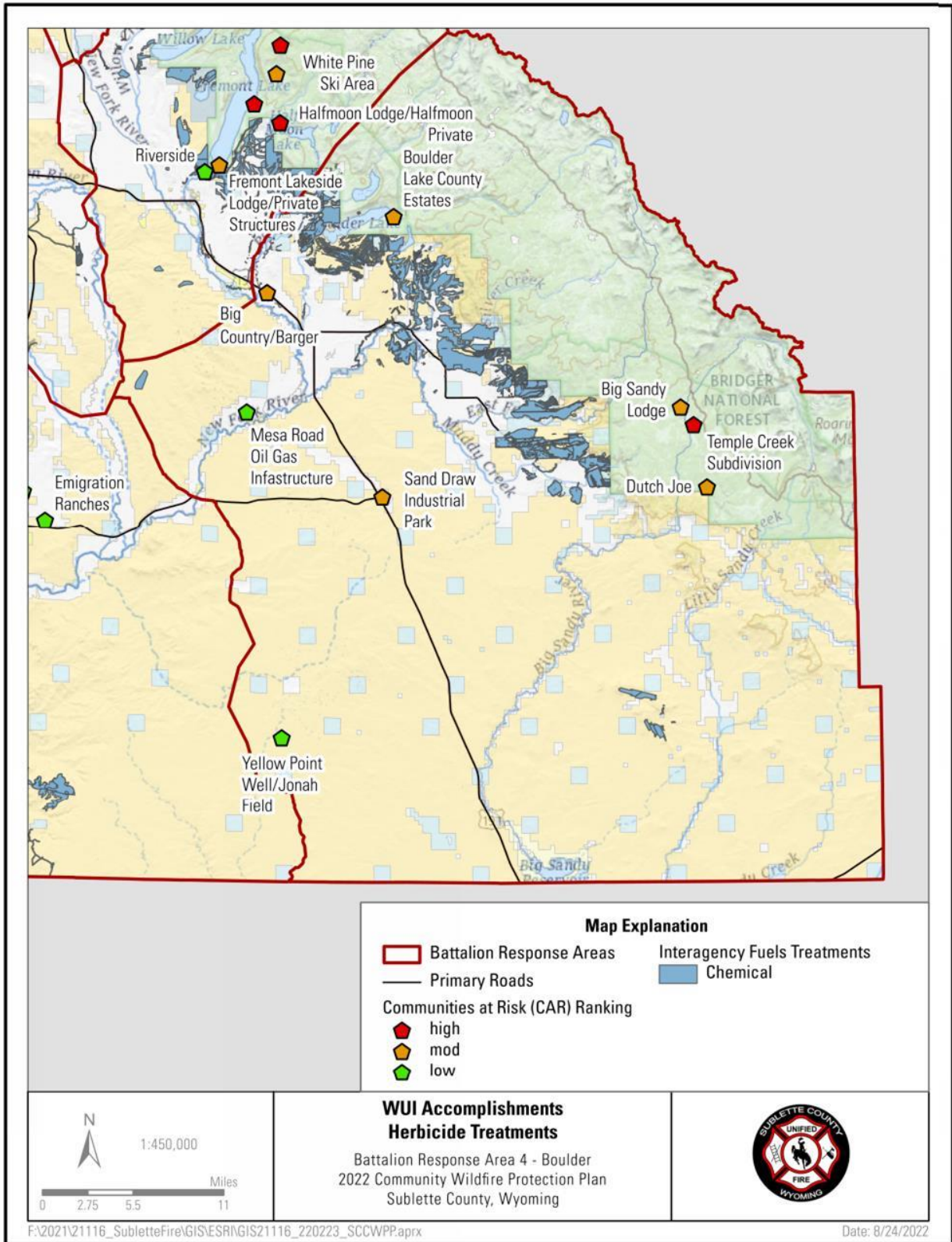
Figure 51. Vicinity of Battalion Response Area 4 – Boulder.



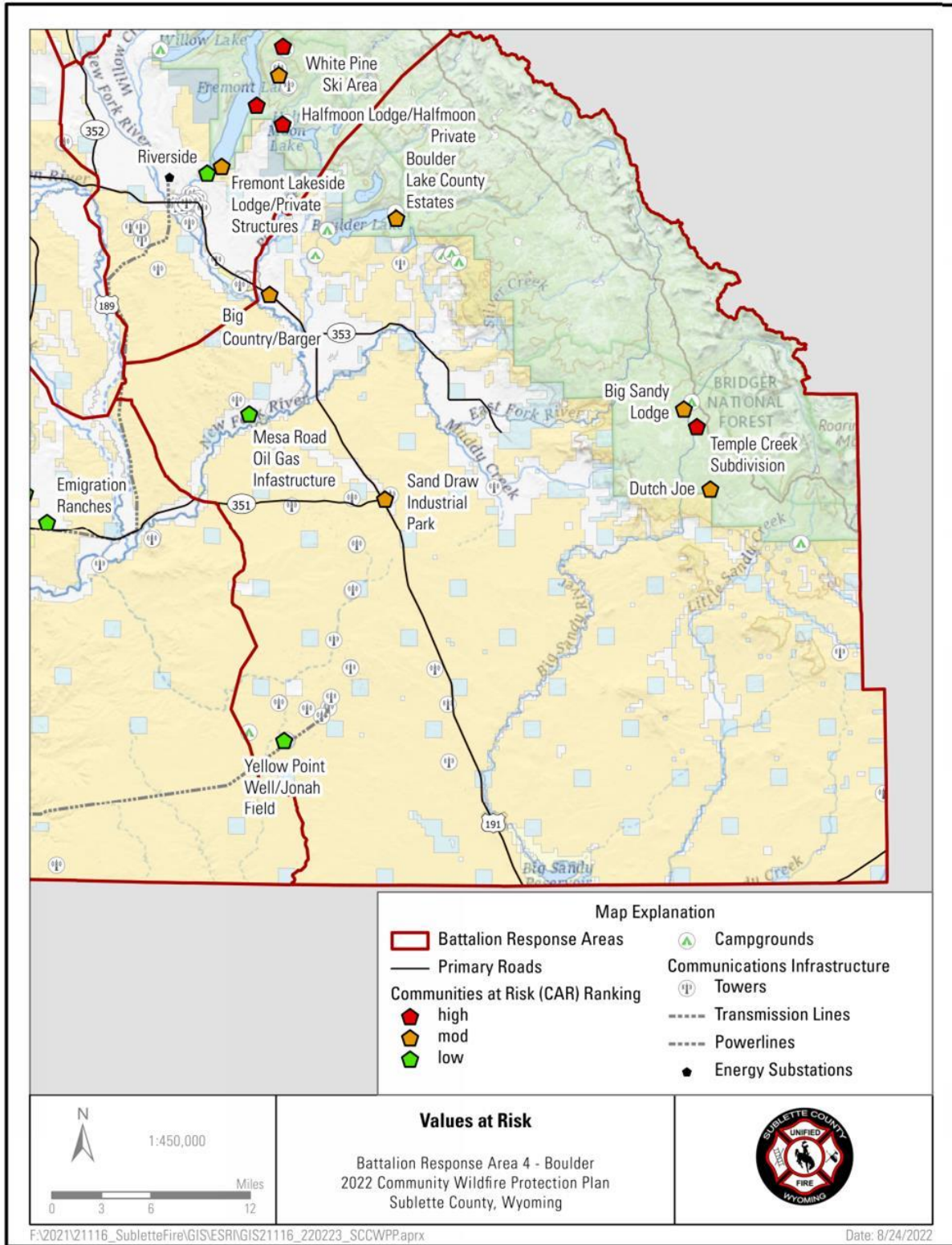
**Figure 52. Fire history for Battalion Response Area 4 – Boulder. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**



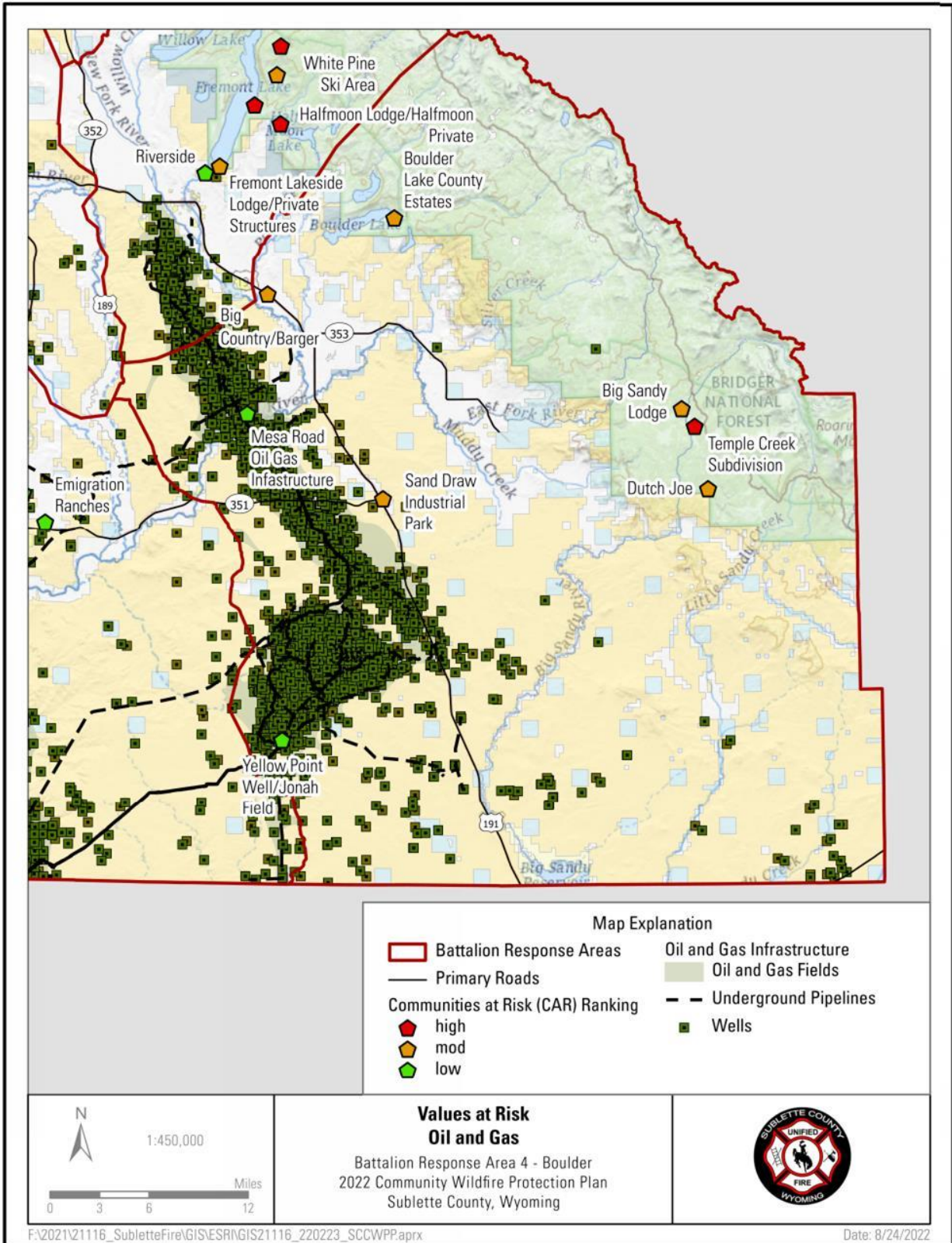
**Figure 53. WUI Accomplishments for fire and mechanical treatments for Battalion Response Area 4 – Boulder.**



**Figure 54. WUI Accomplishments for chemical treatments for Battalion Response Area 4 – Boulder.**



**Figure 55. Values at risk for campgrounds, electrical, and communication infrastructure for Battalion Response Area 4 – Boulder.**



**Figure 56. Values at risk for oil and gas infrastructure for Battalion Response Area 4 – Boulder.**



# BATTALION RESPONSE AREA 5 – DANIEL

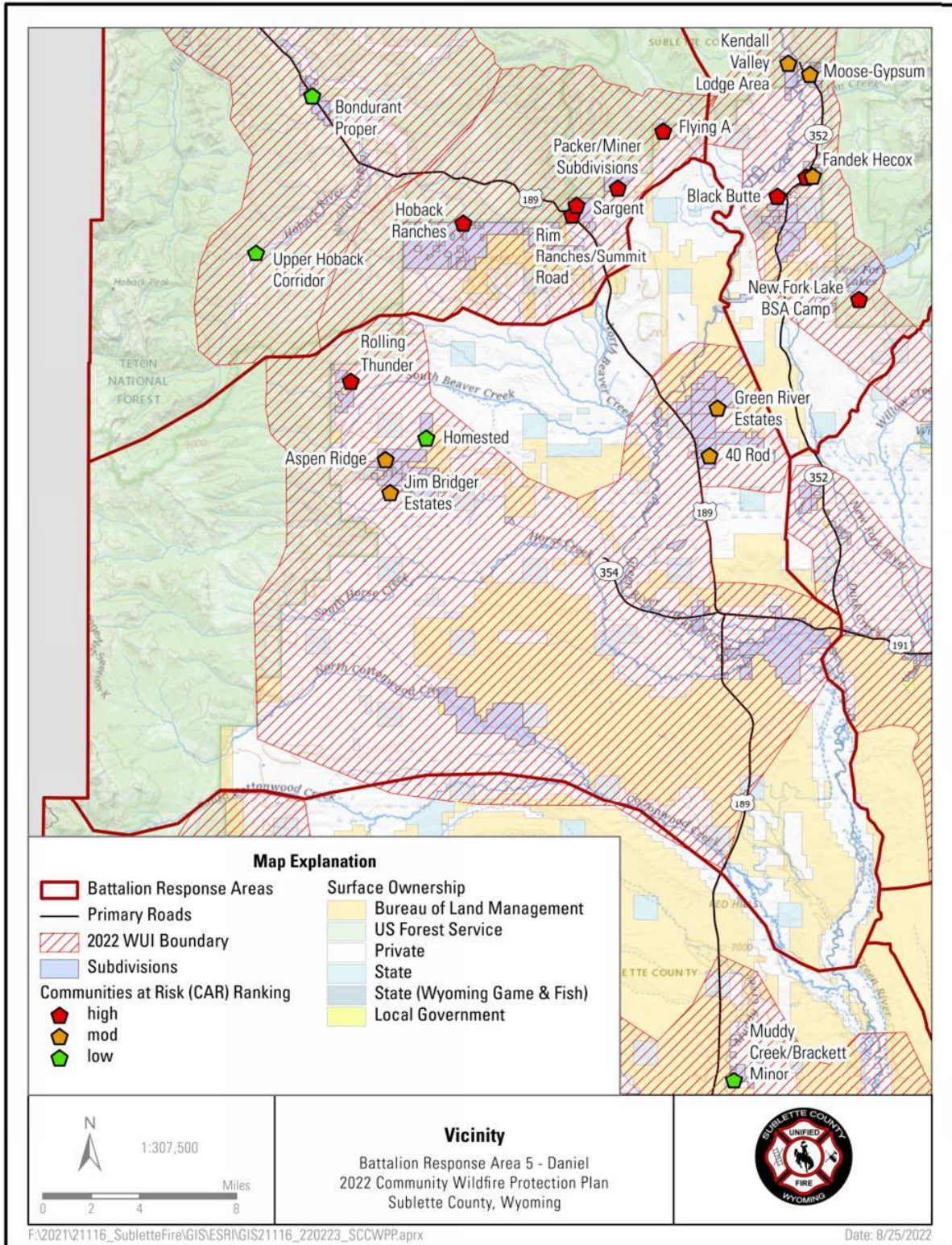
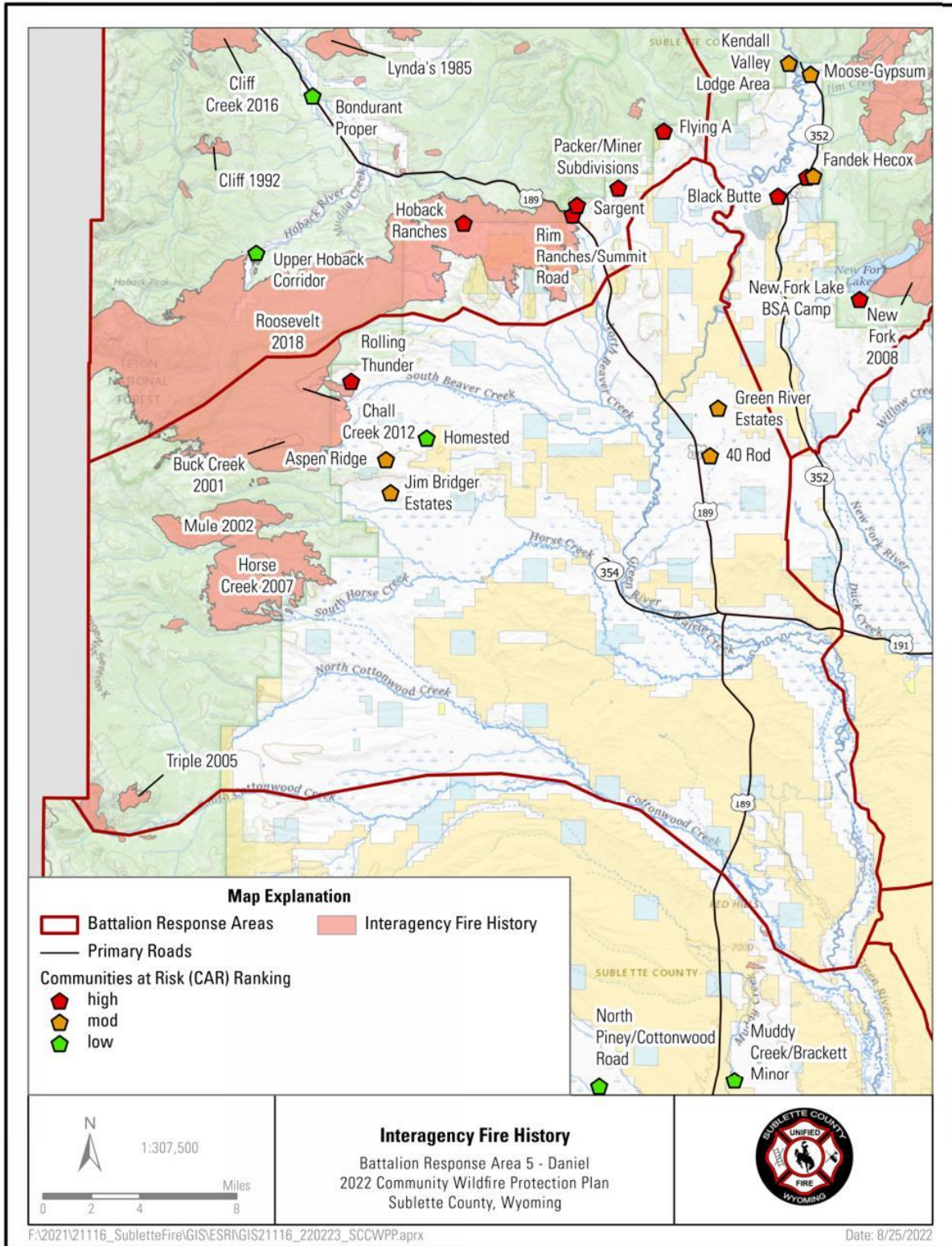
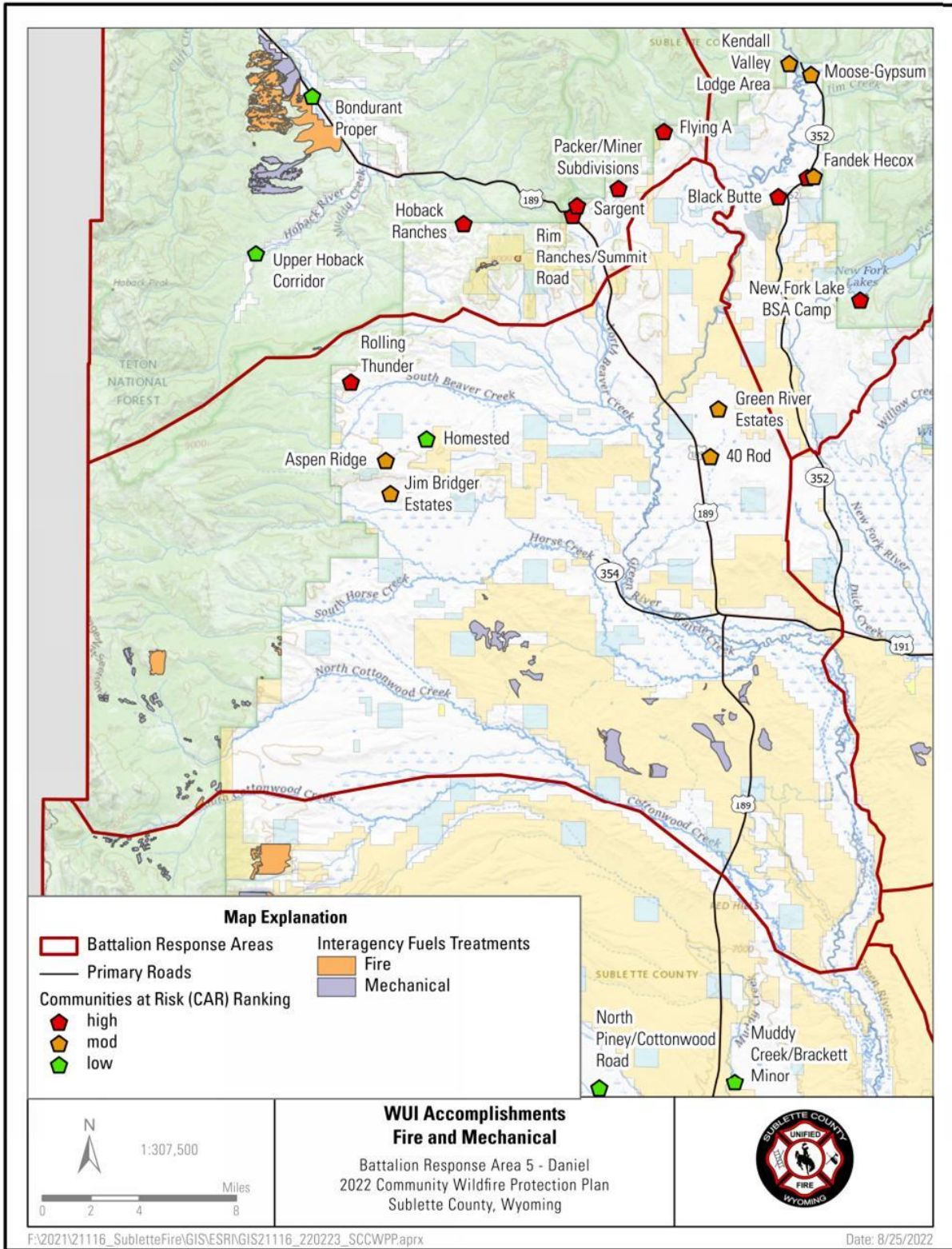


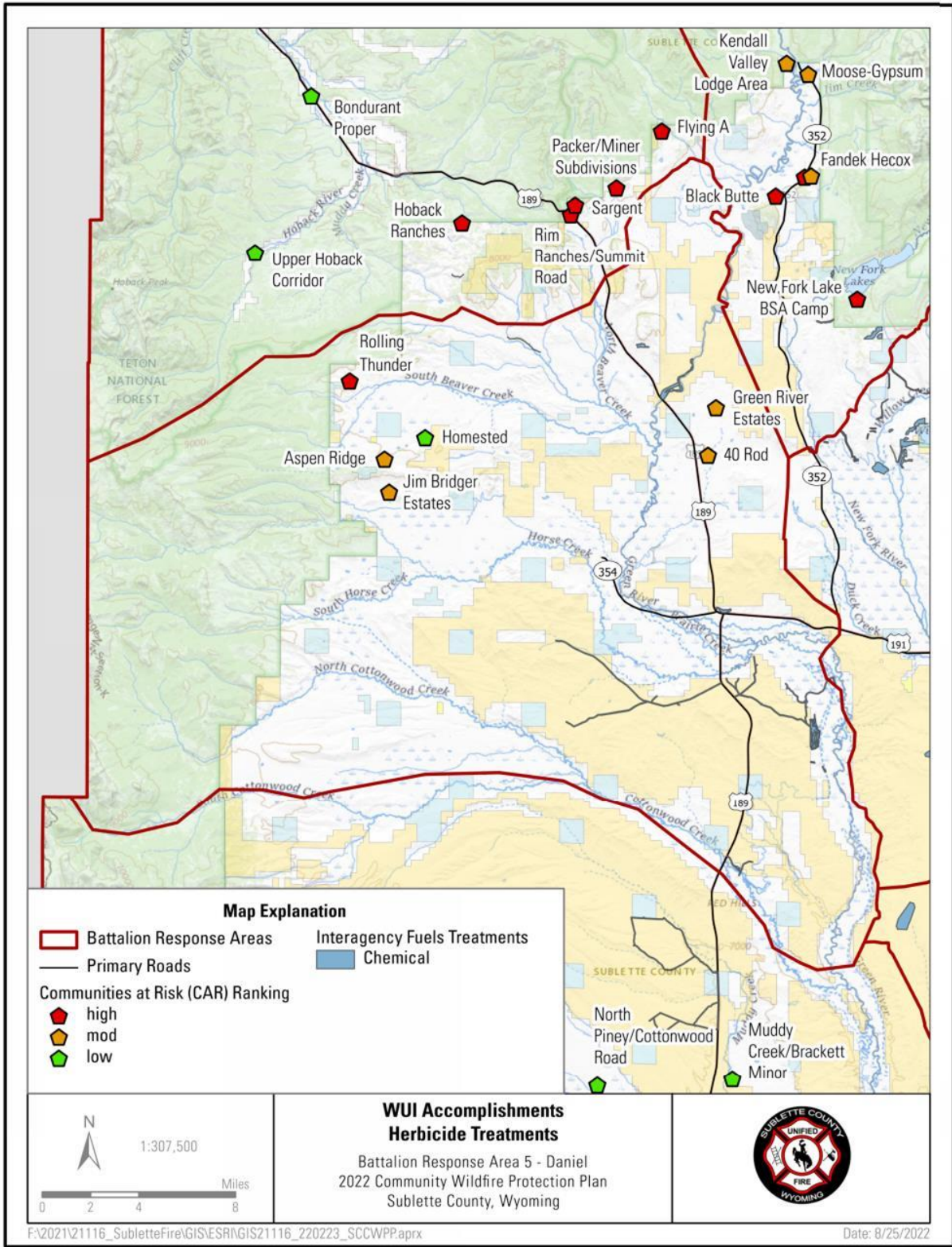
Figure 57. Vicinity of Battalion Response Area 5 – Daniel.



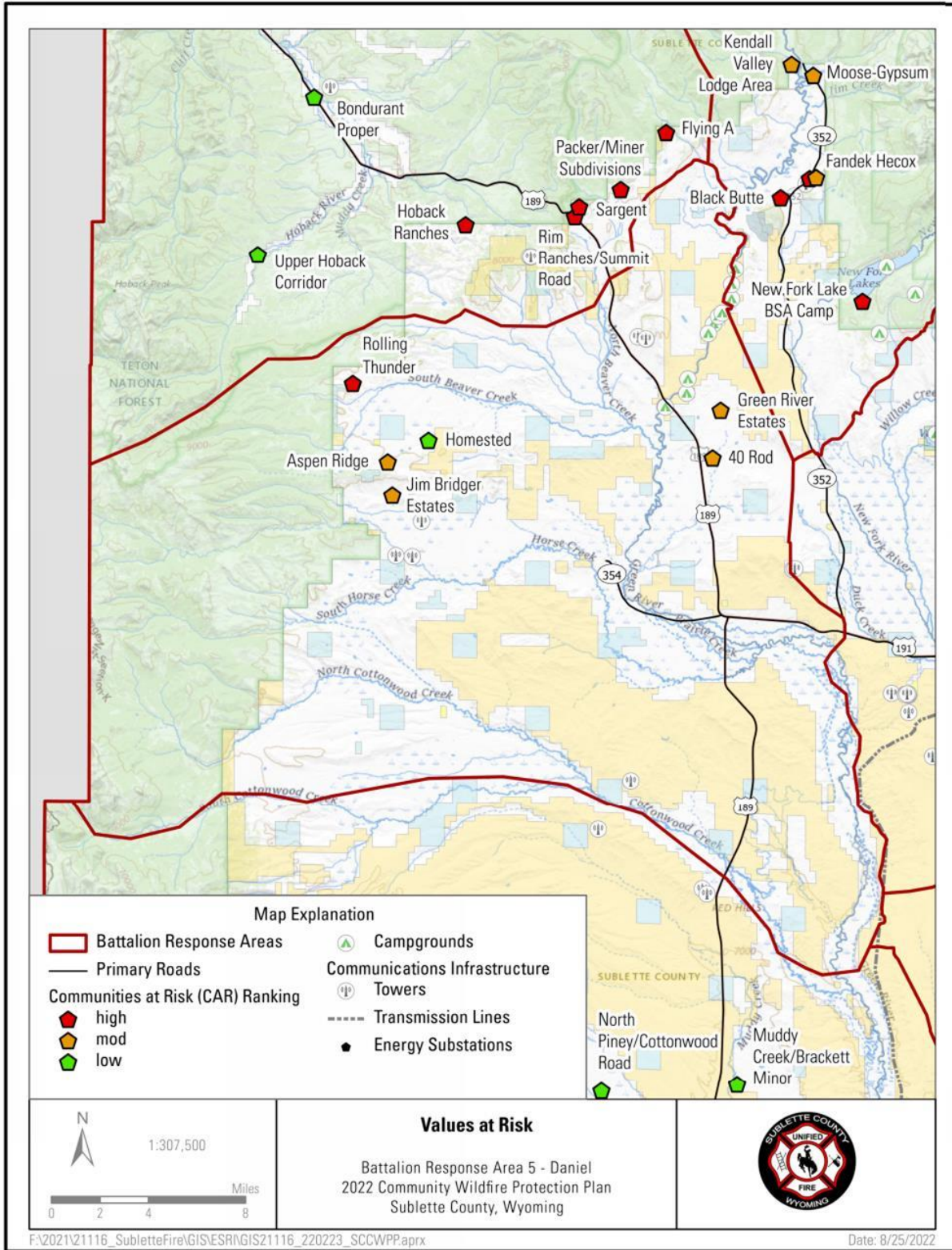
**Figure 58. Fire history for Battalion Response Area 5 – Daniel. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**



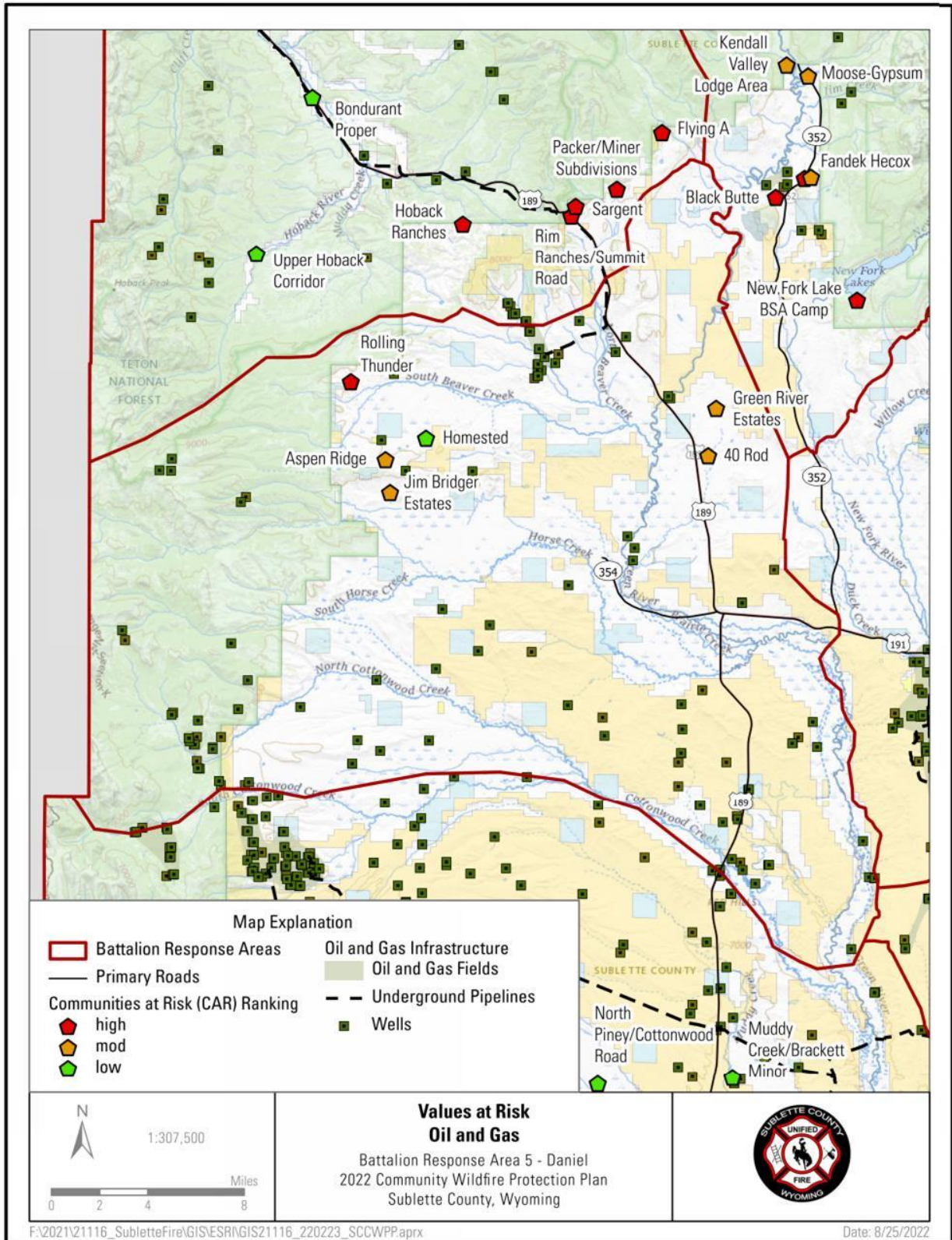
**Figure 59. WUI Accomplishments for fire and mechanical treatments for Battalion Response Area 5 – Daniel.**



**Figure 60. WUI Accomplishments for chemical treatments for Battalion Response Area 5 – Daniel.**



**Figure 61. Values at risk for campgrounds, electrical, and communication infrastructure for Battalion Response Area 5 – Daniel.**



**Figure 62. Values at risk for oil and gas infrastructure for Battalion Response Area 5 – Daniel.**

# BATTALION RESPONSE AREA 6 – KENDALL VALLEY

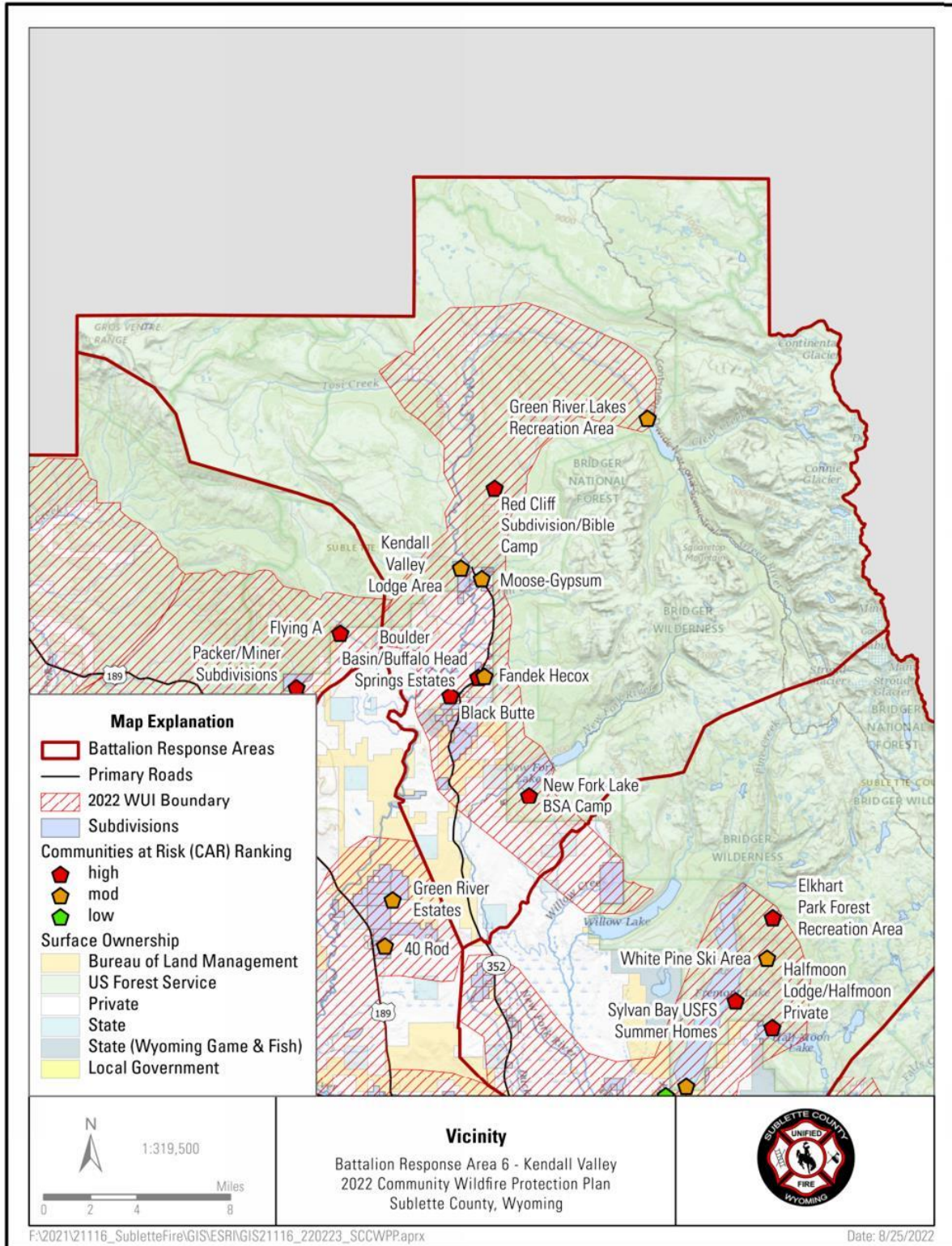
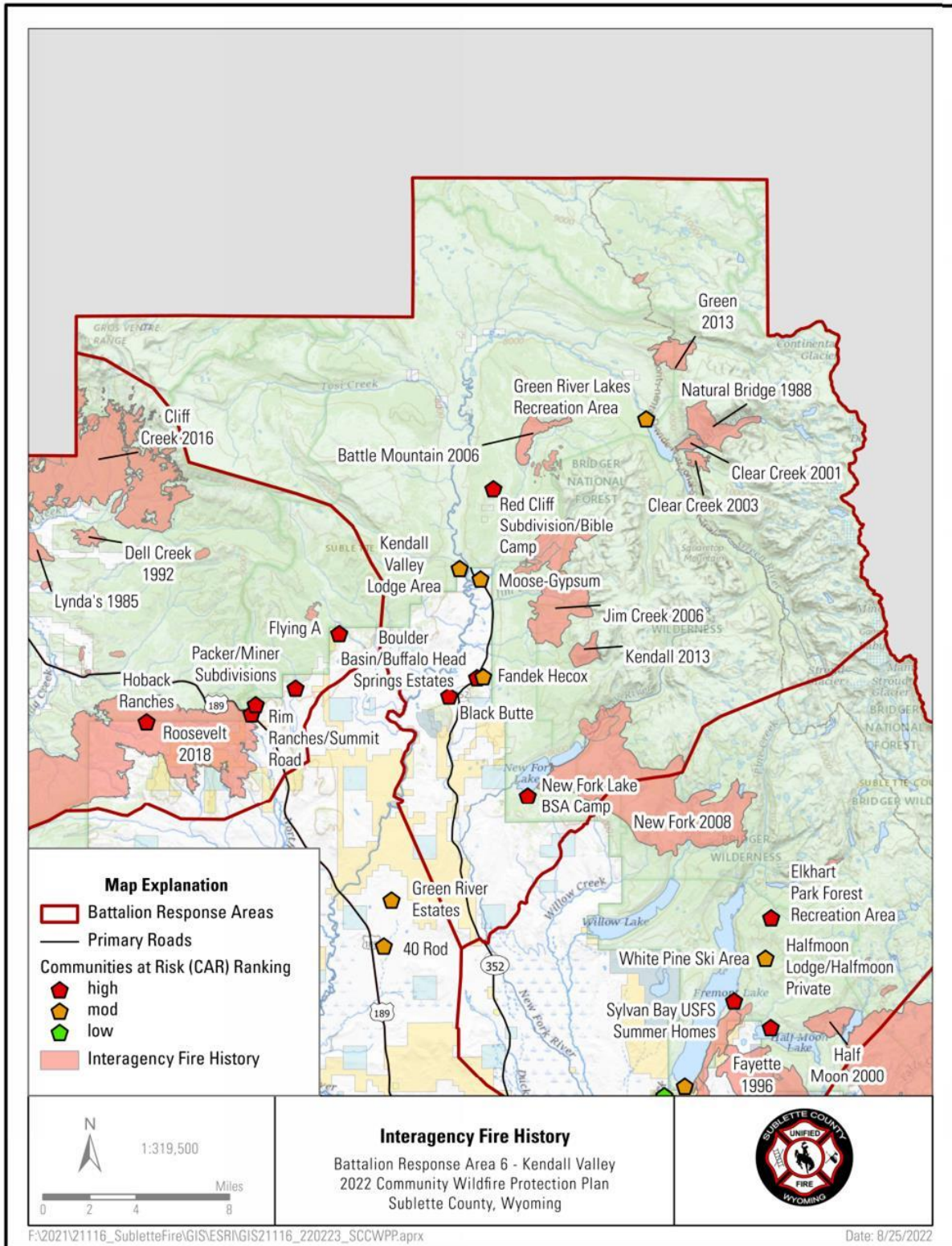
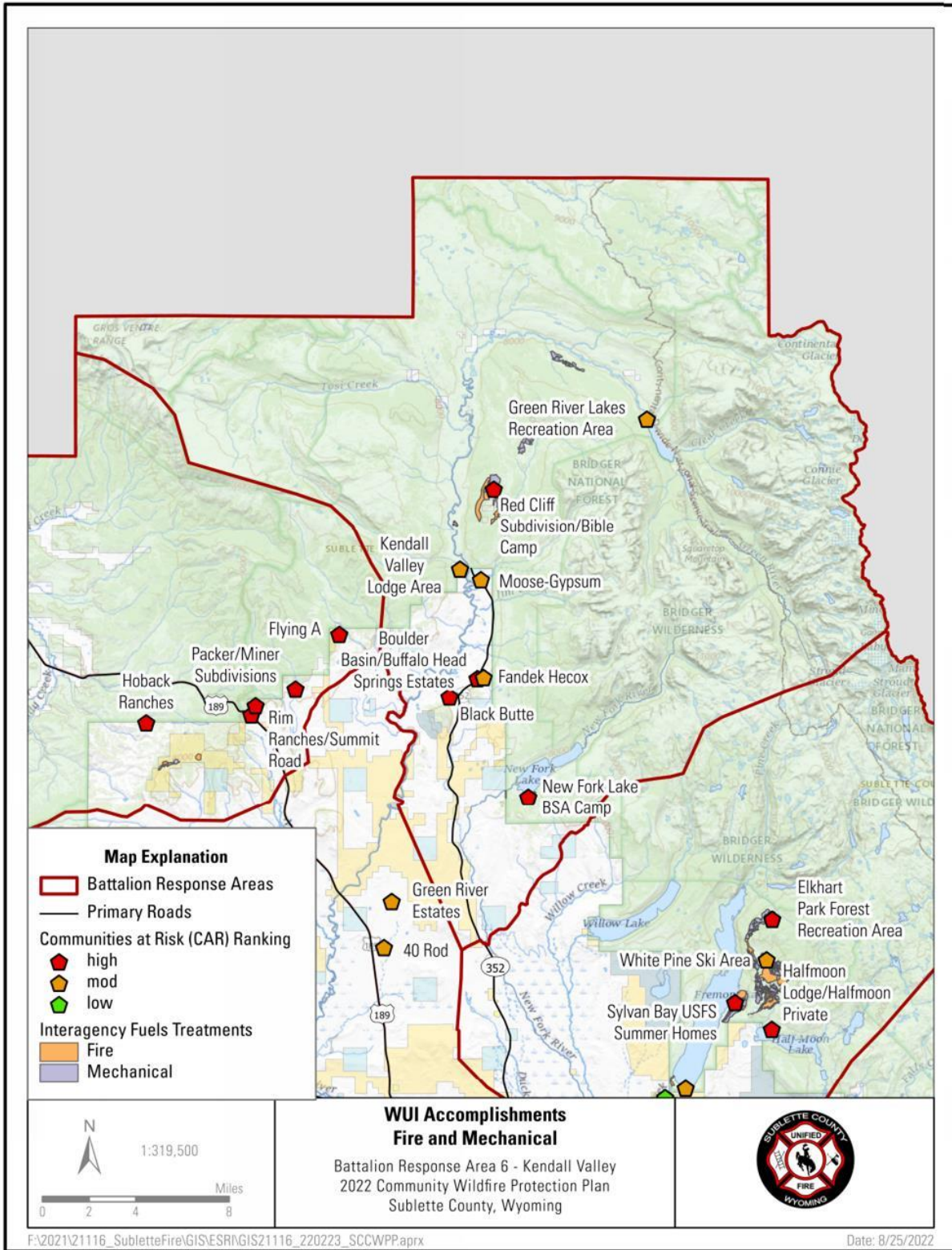


Figure 63. Vicinity of Battalion Response Area 6 – Kendall Valley.

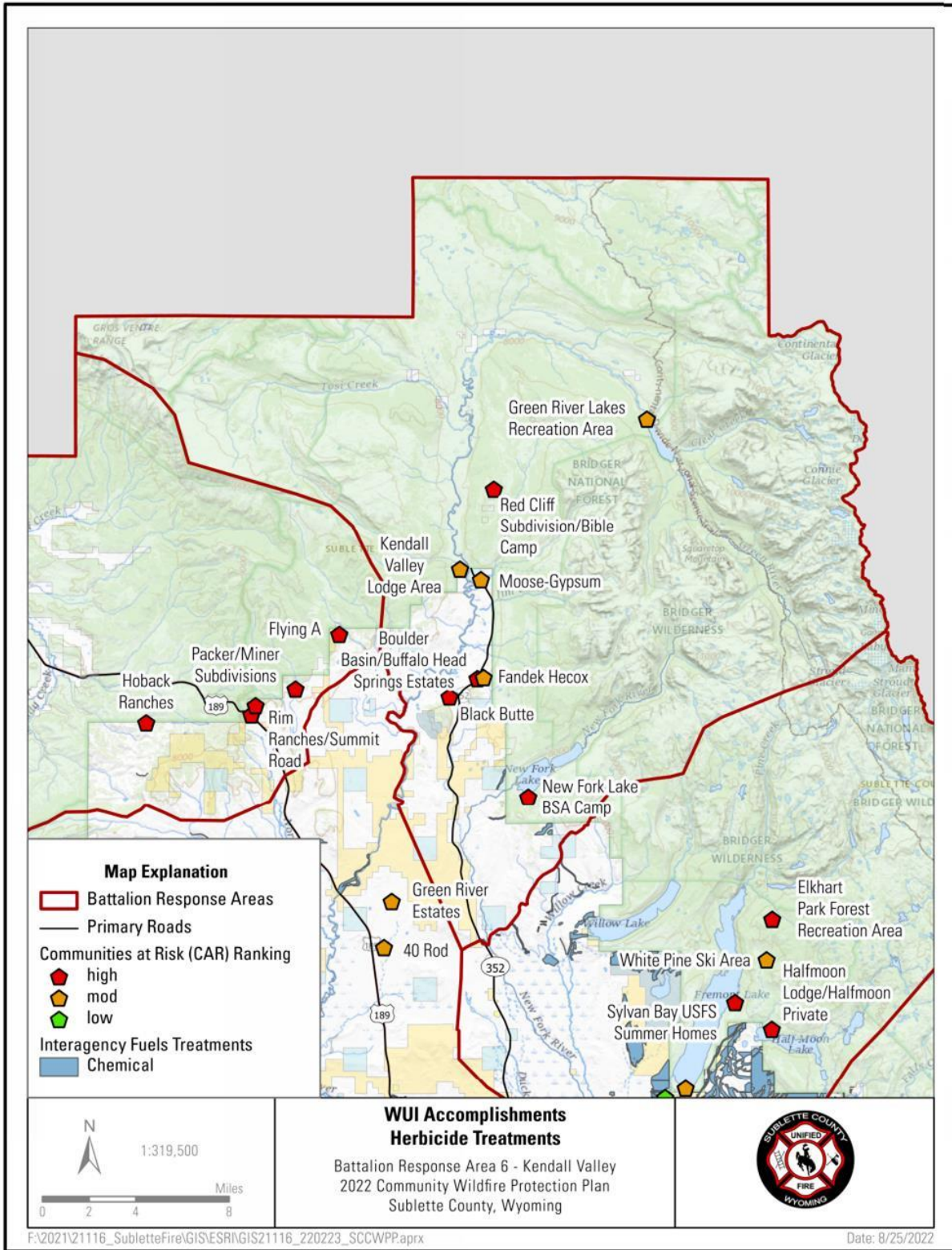


**Figure 64. Fire history for Battalion Response Area 6 – Kendall Valley. Only fires over 150 acres since 1980 are labeled and fire history is accurate to July 2021.**

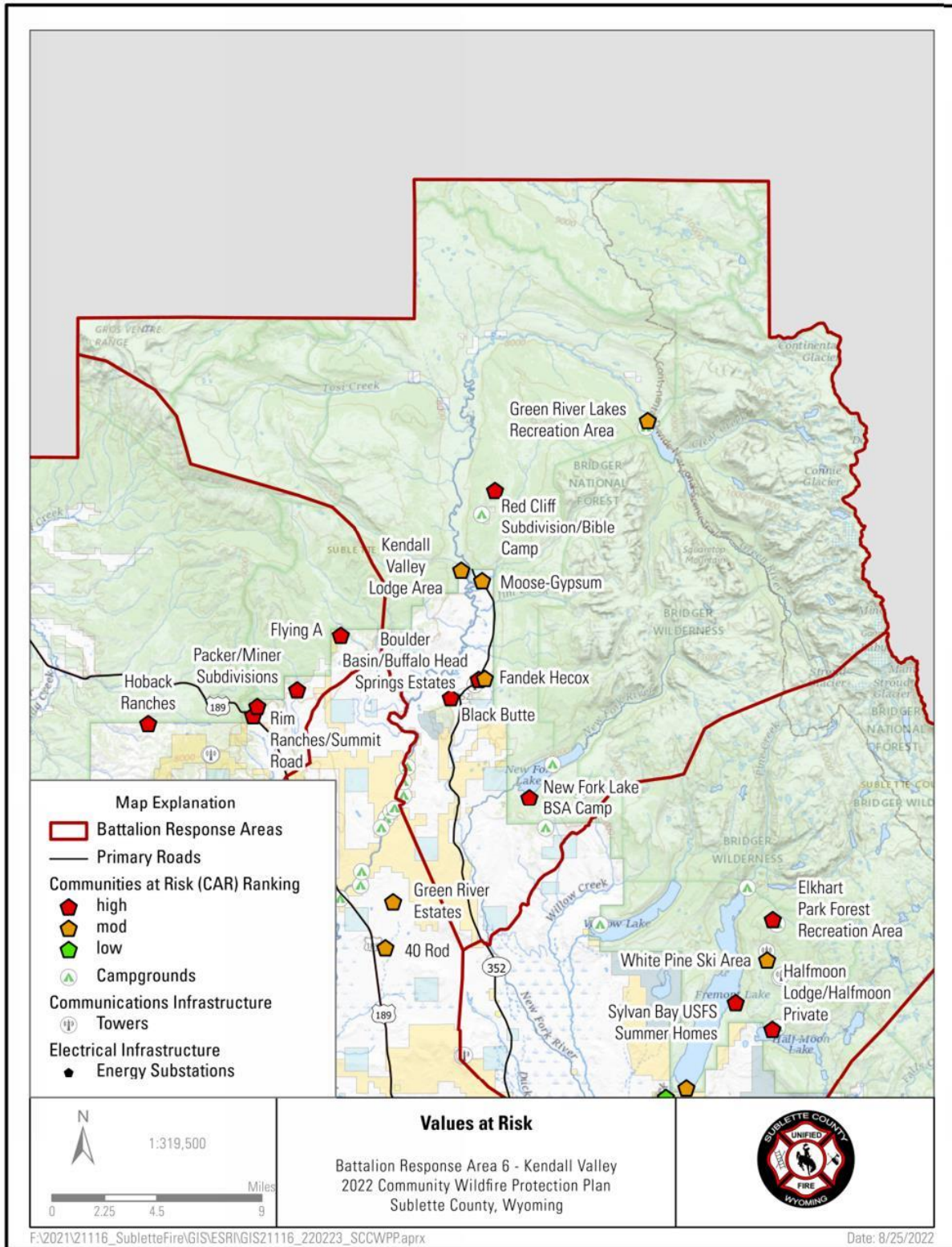




**Figure 65. WUI Accomplishments for fire and mechanical treatments for Battalion Response Area 6 – Kendall Valley.**



**Figure 66. WUI Accomplishments for chemical treatments for Battalion Response Area 6 – Kendall Valley.**



**Figure 67. Values at risk for campgrounds, electrical, and communication infrastructure for Battalion Response Area 6 – Kendall Valley.**

# APPENDIX B: FIRE HAZARD SEVERITY FORM, 2018 CC-IWUI CODE.

## APPENDIX C

### FIRE HAZARD SEVERITY FORM

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

**User note:**

**About this appendix:** Appendix C, while not part of the code, can become part of the code (replacing Table 502.1) when specifically included in the adopting ordinance. Its purpose is to provide an alternative methodology to using Table 502.1 for analyzing the fire hazard severity of building sites using a pre-assigned value/scoring system for each feature that impacts the hazard level of a building site. Included in the evaluation are site access, types and management of vegetation, percentage of defensible space on the site, site topography, class of roofing and other construction materials used on the building (existing or to be constructed on the site), fire protection water supply, and whether utilities are installed above or below ground.

<b>A. Subdivision Design Points</b>		<b>C. Topography</b>	
1. Ingress/Egress		8% or less	1__
Two or more primary roads	1__	More than 8%, but less than 20%	4__
One road	3__	20% or more, but less than 30%	7__
One-way road in, one-way road out	5__	30% or more	10__
2. Width of Primary Road		<b>D. Roofing Material</b>	
20 feet (6096 mm) or more	1__	Class A Fire Rated	1__
Less than 20 feet (6096 mm)	3__	Class B Fire Rated	5__
3. Accessibility		Class C Fire Rated	10__
Road grade 5% or less	1__	Nonrated	20__
Road grade more than 5%	3__	<b>E. Fire Protection—Water Source</b>	
4. Secondary Road Terminus		500 GPM (1892.5 L/min)	
Loop roads, cul-de-sacs with an outside turning radius of 45 feet (13 716 mm) or greater	1__	hydrant within 1,000 feet (304.8 m)	1__
Cul-de-sac turnaround	2__	Hydrant farther than 1,000 feet (304.8 m) or draft site	2__
Dead-end roads 200 feet (60 960 mm) or less in length	3__	Water source 20 min. or less, round trip	5__
Dead-end roads greater than 200 feet (60 960 mm) in length	5__	Water source farther than 20 min., and 45 min. or less, round trip	7__
5. Street Signs		Water source farther than 45 min., round trip	10__
Present	1__	<b>F. Existing Building Construction Materials</b>	
Not present	3__	Noncombustible siding/deck	1__
		Noncombustible siding/combustible deck	5__
		Combustible siding and deck	10__
<b>B. Vegetation (IWUIC Definitions)</b>		<b>G. Utilities (gas and/or electric)</b>	
1. Fuel Types		All underground utilities	1__
Light	1__	One underground, one above ground	3__
Medium	5__	All above ground	5__
Heavy	10__		
2. Defensible Space		<b>Total for Subdivision</b>	
70% or more of site	1__	Moderate Hazard	40–59
30% or more, but less than 70% of site	10__	High Hazard	60–74
Less than 30% of site	20__	Extreme Hazard	75+

2018 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE®

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**INTERNATIONAL CODE COUNCIL®**

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## **APPENDIX C: FIRE-RESISTIVE PLANTS AND LANDSCAPING**

When considering fire-smart landscaping, there are no fireproof plant materials. All vegetation is potential fuel for the fire, and any plant materials can burn when conditions are dry, hot, and windy. When planning your landscape, use the characteristics of fire-resistive and fire-prone plants along with site characteristics such as slope, aspect, hardiness zone, and amount of precipitation to choose plant materials suitable for your site (Barkley 2005). Defensible space landscaping practices can significantly impact whether a plant ignites rather than the type of plant selected. Vegetation pruning, regular maintenance, and debris cleanup are essential landscaping practices in home ignition zones.

The following list of fire-resistant plants have traits including 1) little or no seasonal accumulation of dead leaves, 2) non-resinous, oily wood and leaves, and 3) a higher moisture content of leaf (Source: Alpine Area Wildfire Protection Coalition/Chuck Butterfield):

## FIRE-RESISTANT GRASSES

**Table 21. Fire-resistant grass species.**

Species	Common Name	Comments
<i>Phleum alpinum</i>	Alpine timothy	Bunchgrass, prefers meadows, bogs, streambanks
<i>Juncus arcticus ssp. littoralis</i>	Baltic rush	Rhizomatous, occurring from wet desert to subalpine zones, saline or alkaline sites
<i>Leymus cinereus</i>	Basin wildrye	Tall large bunchgrass, plant widely spaced well away from structures
<i>Carex utriculata</i>	Beaked sedge	Wet areas, stream sides, pond edges
<i>Eleocharis rostellata</i>	Beaked spikerush	Grasslike, wet to moist alkaline to saline areas
<i>Elymus glaucus</i>	Blue wildrye	Moist habitats, shade tolerant, tall
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass	Does well on drier sites, forms bunches
<i>Calamagrostis canadensis</i>	Bluejoint reedgrass	marshy, moist areas such as streambanks or woodlands
<i>Elymus elymoides</i>	Bottlebrush squirreltail	Dry sites, very drought tolerant
<i>Danthonia californica</i>	California oatgrass	Dry to moist sites
<i>Elymus canadensis</i>	Canada wildrye	Tall, plant away from structures
<i>Achnatherum nelsonii</i>	Columbia needlegrass	Dry to moist sites
<i>Eleocharis palustris</i>	Common spikerush	Rhizomatous, alkaline tolerant wetland plant
<i>Glyceria striata</i>	Fowl mannagrass	Thrives along stream banks and in marshy ground
<i>Bromus ciliatus</i>	Fringed brome	Prefers moist soils, but will tolerate dry soils
<i>Equisetum hyemale</i>	Horsetail	Wet open woods, riparian zones of streams and rivers, shores of lakes and ponds
<i>Festuca idahoensis</i>	Idaho fescue	Drier hills
<i>Achnatherum hymenoides</i>	Indian ricegrass	Drier hills
<i>Koeleria macrantha</i>	Junegrass	Does well in moist or dry
<i>Achnatherum lettermanii</i>	Lettermans needlegrass	Dry to moist sites
<i>Bromus carinatus/marginatus</i>	Mountain brome	Do not confuse with smooth or meadow brome
<i>Poa fendleriana</i>	Mutton bluegrass	Tolerates wide array of habitats, drought tolerant
<i>Carex nebrascensis</i>	Nebraska sedge	Wet areas, stream sides, pond edges
<i>Hesperostipa comata</i>	Needle and thread	Drier hills
<i>Calamagrostis rubescens</i>	Pine reedgrass	Forms medium sized bunches from creeping rhizomes, does not flower regularly
<i>Danthonia spicata</i>	Poverty oatgrass	Drier hills
<i>Phalaris arundinacea</i>	Reed canarygrass	Prefers moist sites, tall, rhizomes, plant away from structures, get only native seed
<i>Glyceria grandis</i>	Reed mannagrass	Rhizomatous, on banks of streams, marshes and wet places
<i>Festuca saximontana</i>	Rocky Mountain fescue	Higher elevation sandy to gravelly soils
<i>Distichlis spicata</i>	Saltgrass	Alkaline or saline wet areas
<i>Poa secunda</i>	Sandberg bluegrass	Small low growing grass, very drought tolerant
<i>Muhlenbergia asperifolia</i>	Scratchgrass	Alkaline or saline wet areas. Limited availability.

<b>Species</b>	<b>Common Name</b>	<b>Comments</b>
<i>Elymus trachycaulus</i>	Slender wheatgrass	Dry to moist sites, forms small bunches
<i>Trisetum spicatum</i>	Spike trisetum	Moist sites, higher elevations
<i>Elymus lanceolatus ssp. riparius</i>	Streambank wheatgrass	Wet to moist areas, spreads by rhizomes
<i>Elymus lanceolatus ssp. lanceolatus</i>	Thickspike wheatgrass	Drought tolerant, spreads by rhizomes
<i>Deschampsia cespitosa</i>	Tufted hairgrass	Moist to slightly dry sites
<i>Achnatherum occidentale</i>	Western needlegrass	Dry to moist sites
<i>Pascopyrum smithii</i>	Western wheatgrass	Drought tolerant, spreads by rhizomes, blueish

## FIRE-RESISTANT FORBS

**Table 22. Fire-resistant forb species.**

Species	Common name	Flower Color	Comments
<i>Triglochin maritima</i>	Arrowleaf	Greenish	Moist to wetlands, alkaline to saline
<i>Balsamorhiza sagittata</i>	Arrowleaf balsamroot	Yellow	Needs wide spacing
<i>Arenaria congesta</i>	Ball-head sandwort	White	Small flowers, foliage can be prickly
<i>Linum lewisii</i>	Blue flax	Blue	Select for native seed over horticultural
<i>Aconitum columbianum</i>	Columbian monkshood	Deep blue/purplish	Stream sides, moist forest areas
<i>Perideridia gairdneri</i> ssp. <i>borealis</i>	Common yampah	White	Important Native American plant
<i>Heracleum maximum</i>	Cow parsnip	White	Moist/wet sites, tall, large plant
<i>Artemisia ludoviciana</i>	Cudweed sagewort	Grey/unremarkable	Spreads by rhizomes, silvery foliage
<i>Grindelia squarrosa</i>	Curlycup gumweed	Yellow	Good firebreak species, resinous & sticky
<i>Chaenactis douglasii</i>	Dusty maiden	Cream	Seed hard to find
<i>Pulsatilla patens</i>	Eastern anemone	Purplish	Flowers early, produces featherlike seeds
<i>Maianthemum racemosum</i>	False Solomon's Seal	White	Has an extensive root system it spreads by once established
<i>Chamerion angustifolia</i>	Fireweed	Purple	Comes in after fire/clearing, tall, rhizomes
<i>Erigeron spp.</i>	Fleabane	Various	Several species, low growing
<i>Oenothera villosa</i>	Hairy evening primrose	Yellow	Can get to 4 foot tall
<i>Heterotheca villosa</i>	Hairy false goldaster	Yellow	Drought tolerant
<i>Campanula rotundifolia</i>	Harebells	Blue	Drought tolerant, likes well-drained soil
<i>Arnica cordifolia</i>	Heartleaf arnica	Yellow	Ground cover in forest communities
<i>Machaeranthera canescens</i>	Hoary tansyaster	Blue	Late blooming, good for highly disturbed sites
<i>Sisyrinchium idahoense</i>	Idaho blue eyegrass	Blue/violet (white)	Small iris-like plant
<i>Antennaria microphylla</i>	Littleleaf pussytoes	White/pinkish	Good ground cover, drier open sites
<i>Zizia aptera</i>	Meadow zizia	Yellow	Moist areas in forests and along streams and ponds
<i>Wyethia amplexicaulis</i>	Mulesears	Yellow	Prefers rocky and moister soils
<i>Agastache urticifolia</i>	Nettleleaf Giant Hyssop	Purple	Best in sage/shrublands, tall plant
<i>Helianthella uniflora</i>	One-flower helianthella	Yellow	Single flower as name indicates
<i>Agoseris aurantiaca</i>	Orange agoseris	Orange	Also called mountain dandelion
<i>Anemone multifida</i>	Pacific anemone	Reddish/varies	Produces featherlike seeds
<i>Anaphalis margaritacea</i>	Pearly everlasting	White	Good groundcover
<i>Geum triflorum</i>	Prairie smoke	Reddish	Purple featherlike seeds
<i>Mimulus lewisii</i>	Purple monkeyflower	Purple/rosy-red	Sun/shade-moist
<i>Antennaria rosea</i>	Rosy pussytoes	White/pinkish	Good ground cover, drier open sites



Species	Common name	Flower Color	Comments
<i>Ipomopsis aggregata</i>	Scarlet gilia	Red	Biennial or short-lived perennial
<i>Mimulus guttatus</i>	Seep monkeyflower	Yellow	Moist places, short lived perennial
<i>Heliomeris multiflora</i>	Showy goldeneye	Yellow	Short-lived perennial, gravelly soil
<i>Lupinus sericeus</i>	Silky lupine	Purple	Fixes nitrogen in soil
<i>Antennaria parvifolia</i>	Small-leaf pussytoes	White/pinkish	Good ground cover, drier open sites
<i>Sedum lanceolatum</i>	Spearleaf stonecrop	Yellow	Succulent ground cover, green-red leaves
<i>Apocynum androsaemifolium</i>	Spreading dogbane	Pinkish	Has a milky sap
<i>Maianthemum stellatum</i>	Starry false lily of the valley	White	Has an extensive root system it spreads by once established
<i>Geranium viscosissimum</i>	Sticky geranium	Purple	Pretty, but name says it all
<i>Eriogonum umbellatum</i>	Sulphur-flower buckwheat	Yellow/reddish	Semi-woody, but low growing
<i>Lupinus argenteus</i>	Tailcup lupine	Purple/blueish	Fixes nitrogen in soil
<i>Delphinium occidentale</i>	Tall larkspur	Purple	Poisonous to cattle, open woodland areas
<i>Crepis acuminata</i>	Tapertip hawksbeard	Yellow	Hard to find seed
<i>Oenothera caespitosa</i>	Tufted evening primrose	Yellow	Also called gumbo lily
<i>Linnaea borealis</i>	Twinflower	Pink	Shady to dense forest understory
<i>Penstemon cyananthus</i>	Wasatch penstemon	Blue	Wide array of growth sites
<i>Symphyotrichum ascendens</i>	Western aster	Blue/white	Variable habitat, spreads by rhizomes
<i>Clematis occidentalis</i>	Western blue virginsbower	Light blue/purple	Woody trailing or climbing vine
<i>Fragaria virginiana</i>	Wild strawberry	White	Groundcover, small fruits
<i>Eriophyllum lanatum</i>	Woolly sunflower	Yellow	Grey hairy foliage, well drained soils
<i>Achillea millefolium</i>	Yarrow	White/varies	Non-white plants are horticultural varieties
<i>Nuphar lutea ssp. polysepala</i>	Yellow water-lily	Yellow	Aquatic plant grows in shallow water

## FIRE-RESISTANT SHRUBS

**Table 23. Fire-resistant shrub/tree species.**

Species	Form	Common Name	Comments
<i>Arctostaphylos urva-ursi</i>	Shrub	Bear berry	Good ground cover shrub
<i>Salix bebbiana</i>	Shrub	Bebb willow	Large shrub, streambanks, marshes, ditches, transitional areas
<i>Spiraea betulifolia</i>	Shrub	Birchleaf spirea	Good survival rates, rootstalks, mid-height shrub
<i>Salix boothii</i>	Shrub	Booth's willow	Streambanks, marshes, ditches, transitional areas
<i>Prunus virginiana</i>	Shrub	Chokecherry	Good fruit and wildlife shrub, will spread
<i>Symphoricarpos albus</i>	Shrub	Common snowberry	Aggressive spreader, berries are poisonous
<i>Salix exigua</i>	Shrub	Coyote willow	Streambanks, marshes, ditches, transitional dry areas, aggressive
<i>Chrysothamnus viscidiflorus</i>	Shrub	Douglas rabbitbrush	Does well in disturbed areas
<i>Betula nana</i>	Shrub	Dwarf birch	Short, margins of streams and in moist places
<i>Artemisia frigida</i>	Shrub	Fringed sagewort	Drier areas, good ground cover
<i>Salix geyeriana</i>	Shrub	Geyer willow	Streambanks, marshes, ditches, transitional areas
<i>Ribes aureum</i>	Shrub	Golden currant	Good fruit shrub
<i>Vaccinium membranaceum</i>	Shrub	Mountain huckleberry	Prefers well drained, higher acidity soils
<i>Symphoricarpos oreophilus</i>	Shrub	Mountain snowberry	Spreading growth form, berries are poisonous
<i>Rosa nutkana</i>	Shrub	Nootka rose	Prickles, larger than Woods rose
<i>Paxistima myrsinites</i>	Shrub	Oregon boxleaf	Low growing evergreen groundcover,
<i>Mahonia repens</i>	Shrub	Oregon grape	Several varieties varying in height
<i>Ribes lacustre</i>	Shrub	Prickly black currant	Spiny, moist to wet areas, hard to find
<i>Sambucus racemosa</i>	Shrub	Red elderberry	Deep, well-drained, fertile, moist soils
<i>Cornus sericea</i>	Shrub	Redosier dogwood	Moist and shaded areas
<i>Spiraea splendens</i>	Shrub	Rose meadowsweet	Small, moist edges and rock outcrops
<i>Ericameria nauseosa</i>	Shrub	Rubber rabbitbrush	Larger shrub, does well in disturbed areas
<i>Shepherdia canadensis</i>	Shrub	Russet buffaloberry	Moist to dryish shaded areas
<i>Amelanchier alnifolia</i>	Shrub	Saskatoon serviceberry	Good wildlife plant
<i>Dasiphora fruticosa</i>	Shrub	Shrubby cinquefoil	Prefers moister sites
<i>Shepherdia argentea</i>	Shrub	Silver berry	Branches somewhat spinescent
<i>Ribes viscosissimum</i>	Shrub	Sticky currant	Sticky leaves, fruits are not palatable
<i>Rubus parviflorus</i>	Shrub	Thimbleberry	Spreads by rhizomes, creates large clumps, fruits
<i>Lonicera involucrata</i>	Shrub	Twinberry	Best in moist to wet soil in full sun to full shade.
<i>Amelanchier utahensis</i>	Shrub	Utah serviceberry	Good wildlife plant
<i>Ribes cereum</i>	Shrub	Wax currant	Good fruit shrub
<i>Ribes inerme</i>	Shrub	Western gooseberry	Stem has prickles, good fruit shrub
<i>Rosa woodsii</i>	Shrub	Woods rose	Stem has prickles

<b>Species</b>	<b>Form</b>	<b>Common Name</b>	<b>Comments</b>
<i>Populus balsamifera ssp. trichocarpa</i>	Tree	Black cottonwood	River and stream areas, sprouts, tall and fast growing
<i>Populus angustifolia</i>	Tree	Narrowleaf cottonwood	Sprouts, wide range of well drained soils
<i>Populus tremuloides</i>	Tree	Quaking aspen	Forms a colony from spreading roots
<i>Alnus incana</i>	Tree/Shrub	Alder	Prefers riparian/moist areas
<i>Crataegus douglasii</i>	Tree/Shrub	Black hawthorn	Thorns, sprouts, good wildlife species
<i>Crataegus rivularis</i>	Tree/Shrub	River hawthorn	Like black hawthorn just more water tolerant
<i>Acer glabrum</i>	Tree/Shrub	Rocky Mountain Maple	Bright red leaves in fall
<i>Betula occidentalis</i>	Tree/Shrub	Water birch	Riparian, large multi stemmed shrub with several spreading trunks
<i>Sorbus scopulina</i>	Tree/Shrub	Western mountain ash	Attractive fall berries

## APPENDIX D: TIPS FOR CONDUCTING A SAFE AGRICULTURAL BURN

Agricultural and debris pile burns can get out of control when spring or fall dry and windy conditions arise, requiring an emergency response from Sublette County Unified Fire. SCUF advises the public to get the most up-to-date weather forecast before conducting any burn. If a planned burn escapes, you could be liable for civil or criminal charges based on damages and firefighting costs. Follow these tips for conducting a safe burn:

### 1. **Call the National Weather Service: 800-211-1448**

You can call the Weather service any time of day or night, any day of the week. The weather can play a pivotal role in whether your burn is successful or not. Light winds in the morning can become strong in the afternoon in the blink of an eye. The National Weather Service can tell you if that is likely to happen on the day you would like to burn, and we can help you find a safer day if necessary.

NATIONAL WEATHER SERVICE – RIVERTON

<https://www.weather.gov/riw/agburning>

### 2. **Call the Sublette County Dispatch non-emergency phone number: 307-367-4378, #6.**

By first calling the authorities, you ensure that your burn is legal and that it is not unnecessarily taxing resources. The sheriff and your local fire department do not want to field calls about your burn and have them turn into a false alarm.

### 3. **Talk to Your Neighbors.**

Let them know your plans as a matter of safety and courtesy.

### 4. **Establish Firebreaks.**

Create firebreaks by raking or plowing around the area you want to burn. Keep that area free of vegetation and wide enough to protect what you do not want to be damaged outside the burn area.

### 5. **Ready Water and Equipment.**

Have a reliable water source available. Line up your hand tools such as rakes and shovels in advance and have them readily available for all participants.

### 6. **Plan Before Burning.**

Begin with the areas that pose the greatest threat of becoming difficult to control. By beginning here, your fire is at its smallest size when it enters the highest fuel loads. Always try and burn into the wind; this slows the rate of spread and makes the fire easier to control. Locate burn piles greater than 50 feet from any structure.

### 7. **Control the Fire!**

Stay with the fire at all times. You may be liable for damage caused by your fire. Have plenty of helpers on hand. More people are helping = more control. Keep debris piles small. Large piles generate enough heat to damage nearby trees, power lines, and structures. Do not hesitate to call 911 if the fire gets out of hand. The longer you wait, the bigger the fire will be when help does arrive! When finished, ensure that the fire is completely out. Numerous fires break out each year when smoldering areas are left behind. Make sure that your fire is out cold.

**Remember: Your fire is your responsibility!**

**APPENDIX E: SUBLETTE COUNTY DRY HYDRANT LOCATION LIST**

<b>Sublette County Dry Hydrant Locations</b>							
Verified inspections: 08/09/2022							
Location format: Degrees, Minutes, Seconds							
Size	Coupling	Location Description	Latitude	Longitude	Elevation (feet)	State Permit #	Nearest Community
6"	Male NH	Redstone New Fork River Rd (CR 23-204)	N 42° 51' 46"	W 109° 53' 54"	7178	34132	Pinedale
4.5"	Male NH	Ehman Lane (CR 23-144) - Near Hwy 352 Intersection	N 42° 54' 10"	W 109° 58' 10"	7253	34115	Pinedale
6"	Male NH	Ehman Lane (CR 23-144)	N 42° 53' 45"	W 109° 54' 23"	7245	34110	Pinedale
6"	Male NH	50 Old Brazzill Ranch Rd	N 42° 50' 23"	W 109° 50' 19"	7181		Pinedale
6"	Female NH	Sylvan Bay Summer Homes - Sunshine Loop Road	N 42° 57' 3"	W 109° 46' 51"	7692		Pinedale
4.5"	Male NH	9522 US Hwy 191 Sublette County Road & Bridge	N 42° 48' 50"	W 109° 49' 57"	7126		Pinedale
6"	Male NH	Boulder Lake Road (CR 23-125) - Near Hwy 353 Intersection	N 42° 45' 1"	W 109° 40' 32"	7071		Boulder
6"	Female NH	11 Meander Lane - Boulder	N 42° 44' 55"	W 109° 42' 21"	7022		Boulder
4.5"	Male NH	East Fork Big Sandy (CR 23-133) - Near Muddy Speedway Intersection	N 42° 36' 59"	W 109° 30' 18"	7156	34111	Boulder
4.5"	Female NH	Boulder South Road (CR 23-106)	N 42° 41' 2"	W 109° 44' 13"	6922		Boulder
6"	Male NH	New Fork Bridge (CR 23-175) - Big Piney	N 42° 34' 4"	W 109° 55' 48"	6811	34112	Marbleton
6"	Female NH	Cottonwood Ryegrass Rd (CR 23-117) - Near Profit Rd Intersection	N 42° 47' 13"	W 110° 16' 20"	7456	34114	Marbleton
6"	Male NH	Cottonwood Ryegrass Rd (CR 23-117) - Near N. Cottonwood Rd Intersection	N 42° 50' 25"	W 110° 18' 9"	7457	34116	Daniel
6"	Male NH	12994 US Hwy 189 - Daniel	N 42° 51' 58"	W 110° 4' 17"	7200		Daniel
6"	Male NH	17 Walker Lane - Daniel Fire Station #5	N 42° 53' 54"	W 110° 4' 24"	7312		Daniel
6"	Male NH	239 Pape Road (CR 23-150) - Daniel Fish Hatchery	N 42° 55' 45"	W 110° 7' 38"	7356	34113	Daniel
6"	Male NH	14161 US Hwy 189/191 - Bondurant	N 43° 11' 2"	W 110° 23' 41"	6689		Bondurant
6"	Male NH	10 Spirit Winds Way	N 43° 12' 30"	W 110° 24' 23"	6593		Bondurant
6"	Male NH	14256 US Hwy 189/191 - Bondurant Fire Station #3	N 43° 12' 7"	W 110° 24' 25"	6616		Bondurant
6"	Female NH	150 Kitchen Ranch Road - CL Bar Ranch	N 42° 56' 43"	W 110° 0' 21"	7380		Cora
6"	Male NH	4 River Road - Redstone Upper Green Subdivision	N 43° 13' 11"	W 110° 0' 35"	7648		Cora

# APPENDIX F: SUBLETTE COUNTY UNIFIED FIRE WATER USAGE AGREEMENT FORM

It is understood by the property owner(s) and the Sublette County Unified Fire (hereinafter called the SCUF) that this agreement is subject to the following conditions:

1. The private property to be accessed by the SCUF is described as follows:  
\_\_\_\_\_
2. \_\_\_\_\_
2. The property owner(s) are permitted to terminate this agreement at any time.
3. Neither this agreement nor any right or duty in whole or in part by the property owner(s) under the agreement will be assigned, delegated, or subcontracted without the written consent of the property owner(s).
4. All items placed on the property of the owner(s) by the SCUF will remain the property of the SCUF. If this agreement is terminated, the property owner(s) will permit the SCUF adequate time to remove said SCUF property and return the land to its natural state.
5. Any and all debris that is created by and during the establishment of the water site will be disposed of by the SCUF.
6. No cutting or trimming of trees will be done on the property of the owner(s) unless the SCUF states that such cutting is/will be necessary to provide uninterrupted and clear travel to the site; however, in no case will such cutting be actually completed without prior approval of the owner(s).
7. The property owners will maintain the area covered by this agreement in a safe condition at all times. This maintenance will also include the groundskeeping around the site.
8. The SCUF agrees to save, hold harmless, defend, and indemnify the property owner(s) against any and all liability claims, costs of whatever kind and nature, for injury and death of any person or persons, and for loss or damage to any property occurring in connection with or in any way incidental to or arising out of the occupancy, use, service, operation, or performance of work in connection with this agreement or omissions of SCUF's employees, agents, or representatives.
9. The property owner(s) as well as any heirs, executors, administrators, and assigns do hereby release, forever discharge and hold harmless the SCUF and any officer, agent, or employee thereof of any liability at law to any person, firm, or legal entity for any act of omission, or any injuries, damages, or deaths claimed to have arisen from accessing the water site unless the act of omission amounts to willful misconduct by any member of the SCUF. This waiver is entered into for and in consideration of the water site and access roadway. The sufficiency of this consideration is acknowledged by the property owner's(s') signature(s) below.
10. The property owner(s) grant the rights to the SCUF to enter the property cited in this to access the water site, obtain water for firefighting purposes, and provide public fire protection for the nearby communities.
11. The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties, and the venue shall be the 9th Judicial District, Sublette County, Wyoming. Any federal claims shall be submitted to the United States District Court of Wyoming.
12. Sublette County and the SCUF do not waive sovereign immunity by entering into this Agreement and specifically retains immunity and all defenses available to them as sovereigns pursuant to Wyo. Stat. § 1-39-101 *et seq.*, and all other applicable laws.

\_\_\_\_\_

Owner

\_\_\_\_\_

\_\_\_\_\_

SCUF

\_\_\_\_\_

\_\_\_\_\_

Owner

\_\_\_\_\_

\_\_\_\_\_

Date

\_\_\_\_\_

## APPENDIX G: GLOSSARY

**Aerial fuels:** Standing and supported live and dead combustibles, not in direct contact with the ground and consisting mainly of foliage, twigs, branches, stems, cones, bark, and vines: typically used in reference to the crowns of trees.

**Canopy:** The forest cover of branches and foliage formed by tree crowns.

**Chain:** A measurement of 66 feet used to measure distances in the field. This term is derived from an old unit of measurement (80 Chains = 1 mile).

**Chimney:** A topographical feature such as a narrow drainage on a hillside or the upper end of a box canyon that could channel wind, smoke, or flames up the slope; acting as a fireplace chimney would draw smoke and heat upward.

**Class A Roof:** Effective against severe fire test exposures, as classified by the Universal Building Code (UBC). Under such exposures, roof coverings of this class are not readily flammable, afford a higher degree of fire protection to the roof deck, do not slip from position, and are not expected to produce flying ember brands.

**Class B Roof:** Effective against moderate fire test exposures, as classified by the Universal Building Code (UBC). Under such exposures, roof coverings of this class are not readily flammable, afford a moderate degree of fire protection to the roof deck, do not slip from position, and are not expected to produce flying brands.

**Class C Roof:** Effective against light fire test exposure, as classified by the Universal Building Code (UBC). Under such exposures, roof coverings of this class are not readily flammable, afford a measurable degree of fire protection to the roof deck, do not slip from position, and are not expected to produce flying brands.

**Commercial Thinning:** A silviculture treatment that "thins" out an overstocked stand by removing trees that are large enough to be sold as poles or fence posts. It is conducted to improve the health and growth rate of the remaining crop trees.

**Community Wildfire Protection Plan (CWPP):** CWPPs can take various forms based on the needs of people involved in their development. CWPPs may address wildfire response, hazard mitigation, community preparedness, and structure protection. The process of developing a CWPP can help a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface.

**Conifer:** Cone-bearing trees with needles or scale-like leaves, usually evergreen, producing commercial wood known as "softwoods."

**Crown Fire / Crowning:** A form of extreme wildland fire behavior consisting of fire that advances from top to top of trees or shrubs and is mostly independent of a surface fire. Crown fires are sometimes classed as running or dependent to distinguish the degree of independence from surface fire.

**Deciduous:** Perennial plants are typically leafless for some time during the year. Aspen trees are deciduous.

**Defensible Space:** An area within the perimeter of a parcel, development, neighborhood, or community where basic wildland fire protection practices and measures are implemented, providing the critical point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires. The perimeter used herein is the area encompassing the parcels proposed for construction and development, excluding the physical structure itself. The site is characterized by establishing and maintaining emergency vehicle access, emergency water reserves, street names, building identification, and fuel modification measures. In simplest terms, it is adequate space between structures and flammable vegetation that allows firefighters a safe working area to attack an oncoming wildfire. Defensible Space is the best element of fire protection for individual property owners.

**Dripline:** The outer leaves on a tree define its dripline, and the ground within the dripline is known as the drip zone, also defined as the area defined by the outermost circumference of a tree canopy.

**Eave Opening:** A vent located in an eave or soffit which allows airflow into the attic and/or walls of a structure. The eave is any part of your roof that sticks out over the side of the structure. The soffit covers the underside of the space created by an eave.

**Escape Route:** A preplanned and understood route firefighters take to retreat from an unsafe or fire threatened area and move to a safety zone or other low-risk area.

**Extreme Fire Behavior:** A level of fire behavior that ordinarily precludes firefighting methods involving a direct attack on the fire. One or more of the following is usually involved: high rate of spread, prolific crowning and/or spotting, presence of fire whirls, strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically, sometimes dangerously.

**Fire Adapted Community (FAC):** The National Wildfire Coordinating Group defines a fire-adapted community as “A human community consisting of informed and prepared citizens collaboratively planning and taking action to coexist with wildland fire safely.” Fire adapted communities are knowledgeable, engaged communities where actions of residents and agencies in relation to infrastructure, buildings, landscaping, and the surrounding ecosystem lessen the need for extensive protection actions and enable the communities to safely accept fire as part of the surrounding landscape.

**Firebrands:** Flaming or glowing fuels lofted into the air during intense burning by strong upward convection currents. Also referred to as airborne embers.



**Fire Break:** A natural or constructed fuel-free barrier used to stop or check fires that may occur or to provide a control line from which to work.

**Fire front / Flame front:** The part of a fire within which continuous flaming combustion occurs. Unless otherwise specified, the fire front is assumed to be the leading edge of the fire perimeter.

**Fire Dependent:** Requiring one or more fires of varying frequency, timing, severity, and size to achieve optimal conditions for population survival or growth.

**Fire Hazard Mitigation:** Various methods by which existing fire hazards can be reduced in a particular area, such as fuel breaks, non-combustible roofing, spark arresters, etc.

**Fire Management:** The activities concerned with protecting people, property, and forest areas from wildfire and the use of prescribed burning for the attainment of forest management and other land use objectives, all conducted in a manner that considers environmental, social, and economic criteria.

**Fire Suppression:** All activities concerned with controlling and extinguishing a fire following its detection.

**Firewise:** A National Fire Protection Association (NFPA) program encouraging local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others in the effort to protect people and property from wildfire risks.

**Flash Drought:** The rapid onset or intensification of drought. It is set in motion by lower-than-normal precipitation rates, accompanied by abnormally high temperatures, winds, and radiation.

**Flame Height:** The average height of flames as measured vertically up and down. It may be less than flame length if the flames are angled horizontally, backward, or forward.

**Flame Length:** The distance measured from the average flame tip to the middle of the flaming zone at the base of the fire. It is measured on a slant when the flames are tilted due to wind and slope effects. Flame length is an indicator of fireline intensity.

**Fuel:** Any living or dead material that will burn.

**Fuel Break:** An existing barrier or change in fuel type (to one that is less flammable than that surrounding it) or a wide strip of land on which the native vegetation has been modified or cleared that act as a buffer to fire spread so that fires burning into them can be more readily controlled and often selected or constructed to protect a high-value area from fire.

**Fuel Break:** An existing barrier or change in fuel type (to one that is less flammable than that surrounding it) or a wide strip of land on which the native vegetation has been modified or cleared that act as a buffer to fire spread so that fires burning into them can be more readily controlled and often selected or constructed to protect a high-value area from fire.

**Fuel Treatment:** Any vegetation manipulation and/or removal/modification of wildland fuels to reduce the likelihood of ignition, to reduce potential fire intensity and spread rates, to lessen potential damage and resistance to control, or to limit the spread and proliferation of invasive species and diseases.

**Fuel Management:** The act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means or by fire in support of land management objectives.

**Fuel Reduction Area:** An area similar to a fuel break but not necessarily linear, in which fuels have been reduced or modified to reduce the likelihood of ignition and/or reduce fire intensity, thereby lessening potential damage and resistance to control.

**Home Ignition Zone (HIZ):** An area including the home and its immediate surroundings within which burning fuels could potentially ignite the structure; usually considered an area extending out roughly 100-200 feet from the house. The HIZ is often used to describe the area in which home hardening and fuel modification measures should be taken to protect the home.

**International Association of Fire Chiefs (IAFC):** The International Association of Fire Chiefs represents the leadership of firefighters and emergency responders worldwide; members are leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public safety policy.

**International Fire Code (IFC):** The IFC contains regulations to safeguard life and property from fires and explosion hazards. Topics include general precautions, emergency planning and preparedness, fire department access and water supplies, automatic sprinkler systems, fire alarm systems, special hazards, and the storage and use of hazardous materials.

**International Wildland-Urban Interface Code (IWUI Code):** Contains provisions addressing fire spread, accessibility, defensible space, water supply, and more for buildings constructed near wildland areas.

**Ladder Fuels:** Fuels that provide vertical continuity between the surface fuels and crown fuels in a forest stand, thus contributing to fire moving upward in trees and to crown fires.

**National Fire Protection Association (NFPA):** A private, non-profit organization dedicated to reducing fire hazards and improving fire service.

**National Wildfire Coordinating Group (NWCG):** A group formed under the direction of the Secretaries of Agriculture and the Interior that includes representatives of the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, U.S. Fish and Wildlife Service, and National Association of State Foresters. The group's purpose is to handle coordination and effectiveness of wildland fire activities and provide a forum to discuss and resolve issues and problems of substantive nature. NWCG is the certifying body for courses, guides, and manuals in the National Fire Curriculum.

**Prescribed Burning:** Controlled application of fire to wildland fuels, in either their natural or modified state, under certain conditions of weather, fuel moisture, soil moisture, etc. as to allow the fire to be confined to a predetermined area and at the same time to produce results to meet planned land management objective.

**Rate of Spread ROS:** The linear rate of advance of a fire front in the direction perpendicular to the fire front.

**Ready, Set, Go! (RSG!):** A program managed by the International Association of Fire Chiefs seeking to develop and improve the dialogue between fire departments and residents. The program helps fire departments teach individuals in high-risk wildfire areas how to best prepare themselves and their properties against fire threats.

**Saddle:** A depression, dip or pass in a ridgeline; significant in wildland firefighting because winds may be funneled through a saddle, causing an increase in wind speed.

**Safety Zone:** An area essentially cleared of flammable materials used by firefighters to escape unsafe or threatening fire conditions. Safety zones are greatly enlarged areas in which firefighters can distance themselves from threatening fire behavior without having to take extraordinary measures to shield themselves from fire/heat.

**Shaded fuel break:** A fuel break built in a timbered area where the trees within the break are thinned and limbed up to reduce crown fire potential yet retain enough crown canopy to provide shade, thereby making a less favorable microclimate for surface fires.

**Silviculture:** The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands. Silviculture entails the manipulation of forest and woodland vegetation in stands and on landscapes to meet the diverse needs and values of landowners and society on a sustainable basis.

**Snag:** A standing dead tree or part of a dead tree from which the smaller branches have fallen.

**Stand:** A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

**Spot Fire / Spotting:** Fires ignited beyond control lines or outside the perimeter of a fire by firebrands (embers) landing on and among flammable material. Spot fires/spotting are a form of extreme fire behavior typically resulting from high wind conditions.

**Structure protection:** A defensive strategy in wildland firefighting in which firefighters are assigned to evaluate, prepare and, when possible, defend structures/homes that a wildfire may threaten.

**Structure triage:** Evaluating and sorting structures/homes into categories based on their relative likelihood of surviving a wildland fire threat (*defensibility*). Triage decisions are based on multiple factors and conditions occurring during an actual fire - weather, fire behavior, home ignition potential, defensible

space, presence of escape routes, and availability of firefighting resources, among others - with the goal of doing the best with the resources available.

**Surface fuels:** Fuels lying on or near the ground surface, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low-lying live vegetation (shrubs/grass).

**Thinning:** A cutting made in an immature crop or stand primarily to accelerate diameter increment, but also, by the suitable selection, improve the average form of the tree that remains.

**Torching:** The burning of the foliage of a single tree or a small group of trees from the bottom up. Sometimes, also called candling. Torching is an extreme form of fire behavior, similar to but less extreme than crowning in that crowning affects more significant numbers, even entire stands of trees.

**Wildland-Urban Interface or Wildland-Urban Intermix (WUI):** The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Although **Interface** is the more general, more commonly used term, it technically refers to the area where development and wildlands meet. **Intermix** indicates the presence of wildland vegetation/fuels intermingled throughout the developed area.

**Windbreak:** A strip of trees or shrubs maintained mainly to alter wind flow and microclimates in the sheltered zone, usually ranch buildings.

**APPENDIX H: DETAILED ACTION PLAN**

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
<b>HIGH Hazard Communities</b>	Risk Rating												
<b>Temple Creek Residences</b>	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Ensure homeowners follows summer residence permittee defensible space requirements	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Recommend road corridor thinning (shrubs/timber) 20 ft. on both side of FS 862/862A roads.	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with USFS to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote Forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>Elkhart Park Recreation Area</b>	(High Risk)	Educate Forest Users on Wildfire Prevention, Preparedness, and Evacuation	Prepare evacuation plan to manage forest visitors	Prepare wildfire response plan to manage forest visitors	N/A	N/A	Recently completed with Skyline Drive Project implementation	N/A	Track accomplishments, goals met, & follow-up actions	N/A	N/A	Recommend blow down fuels reduction project on USFS lands	
<b>Sargent Subdivision</b>	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Consider roadside thinning - mow sage/grass 10-15 ft. on both sides of Sargent Lane	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Red Cliff Subdivision/Bible Camp	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a Camp wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Consider roadside thinning - small diameter tree and ground fuel removal 20 ft. on both Sides of Red Cliff, Bible Camp, & Old Tie Hack Roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Packer/Miner Subdivisions	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador; Actions recommended prior to new construction	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Consider vegetation fuel break on parcels adjacent to USFS boundary; Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on Lots; Reduce vegetation density; Consider roadside thinning - small diameter tree and ground fuel removal 20 ft. on both Sides of subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Black Butte Subdivisions	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Coordinate with WSFD and BLM to plan/implement ground-based timber thinning on private lots, BLM & State lots to reduce tree density, reduce hazardous fuels, & promote forest health. This is an area of opportunity for a multi-agency & private landowner collaboration project	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD and BLM to plan/implement ground-based timber thinning on private lots, BLM & State lots to reduce tree density, reduce hazardous fuels, & promote forest health. This is an area of opportunity for multi-agency/private collaboration	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Flying A Ranch	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Consider vegetation fuel break on parcels adjacent to USFS boundary; Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on Lots; Reduce vegetation density; Consider roadside thinning - mow sage/grass 10-15 ft. on both sides of Flying A Ranch Road.	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
<b>Boulder Basin/Buffalo Head Springs Estate</b>	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on Lots; Reduce vegetation density; Consider roadside thinning - remove small diameter trees & ground fuels 20 ft. on both sides of subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>New Fork Residences/Boy Scout Camp</b>	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Ensure homeowners follows summer residence permittee defensible space requirements	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Consider vegetation fuel break on parcels adjacent to USFS boundary; Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on Lots; Reduce vegetation density; Consider roadside thinning - remove small diameter trees & ground fuels 20 ft. on both sides of subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation



Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Sylvan Bay Residences	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Ensure homeowners follows summer residence permittee defensible space requirements	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Recommend road corridor thinning -remove small diameter trees & ground fuels 20 ft. on both sides of all subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Rim Ranches/Summit Road	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Consider vegetation fuel break on parcels adjacent to USFS boundary; Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on Lots; Reduce vegetation density; Consider roadside thinning - remove small diameter trees, ground fuels & mow sage/grass 20 ft. on both sides of all subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health; These treatments can match proposed USFS project treatments in adjacent areas	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Halfmoon Lodge/Private Structures	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Inform and prepare employees/guests for wildfire evacuation planning	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Recommend road corridor thinning on all private and USFS roads - thin small diameter trees and ground fuels	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Thunder/Rolling Thunder Subdivisions	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break on private parcels and adjacent State parcel - collaborate with WSFD; Enhance defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on State parcel west of private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>MODERATE Hazard Communities</b>	<b>Risk Rating</b>												
Green River Lake Lodge	(Moderate Risk)	N/A	Prepare evacuation plan to manage forest visitors	Prepare a wildfire response plan to manage forest visitor evacuation	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes	N/A	N/A	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning around structures; Recommend road corridor thinning by mowing	N/A	N/A	Educate Forest Visitors on Wildfire Evacuation Planning

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
								CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments		sage/grass 10-15 ft. on both side of area roads			
<b>Jim Bridger Estates</b>	<b>(High Risk)</b>	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break on private parcels and adjacent State parcel to the west - collaborate with WSFD; Enhance defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>Kendall Valley lodge</b>	<b>(Moderate Risk)</b>	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Inform and Prepare Employees/Guests for Evacuation Planning; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Hoback Ranches	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Update community fire preparedness & evacuation plan/ notification tree	Update community Fire Preparedness & Evacuation Plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Hecox/Fandek Subdivisions	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Recommend road corridor thinning by mowing sage/grass 10-15 ft. on both side of community roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Middle Piney Summer Residences	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant	Ensure homeowners follows summer residence permittee defensible space requirements	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Ensure homeowners follows summer residence permittee defensible space requirements	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce	N/A	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
					program for replacement					vegetation density			residents remove flammable, dead, & dying vegetation
<b>Aspen Ridge Subdivision</b>	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Recommend road corridor thinning by mowing sage/grass 10-15 ft. on both side of subdivision roads	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>Green River Ranch Estates</b>	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break (sage/grass) on private parcels adjacent to BLM boundary; Enhance defensible space thinning up to 200 ft. to property boundary;	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Dutch Joe Guard Station	(Moderate Risk)	N/A	N/A	Inform and prepare employees/guests for wildfire evacuation planning	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	N/A	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; continue to thin fire hazardous trees & ground fuels on USFS lot	N/A	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Boulder Lake Country Estates	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Consider community fuel break on parcels adjacent to USFS boundary; Enhance defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density; Recommend road corridor thinning - remove small diameter trees, ground fuels & mow sage/grass 20 ft. on both sides of all subdivision roads	Analyze water suppression system & improve as necessary	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Big Sandy Lodge	(High Risk)	N/A	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct Lodge evacuation drills	Inform and Prepare Employees/Guests for Evacuation Planning; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	N/A
Moose Gypsum Subdivision	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along roads and driveways	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Most lots are sage/grass fuel type	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Fremont Lake Lodge/Private Structures	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community/ Lodge wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Inform and prepare employees/guests for wildfire evacuation planning; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
40 Rod Subdivision	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along roads and driveways	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
White Pine Ski Area	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Inform and prepare employees/guests for wildfire evacuation planning; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Recently Accomplished with Skyline Drive Fuels Project.	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Sand Draw Industrial Area	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along roads and driveways	Analyze water suppression system & improve as necessary	N/A	N/A



Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Big Country/Barger Subdivisions	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break (sage/grass) on private parcels adjacent to BLM; Enhance defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along all roads and driveways (10-15 ft.)	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Low Hazard Communities	Risk Rating												
Upper Hoback Corridor	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density on private lots adjacent to USFS boundary; Recommend road corridor thinning - mow sage/grass 10-15 ft. on both sides of WY 23-174 roads and private driveways	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Riverside Subdivision	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Consider hazardous fuels tree thinning and sage/grass mowing on private lots adjacent to BLM boundary	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Homestead Subdivision	(Moderate Risk)	Educate landowner on home hardening and defensible space actions; Most of this subdivision is undeveloped agricultural parcels	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	N/A	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along road and driveways	Summer water source (pond) present	N/A	N/A
N. Piney/Cottonwood Road Subdivisions	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density along subdivision roads and driveways by mowing	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
										sage/grass 10-15 ft. on both sides			
<b>Muddy Creek/Brackett Minor Subdivisions</b>	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Consider hazardous fuels sage/grass mowing fuel break (10-15 ft.) on private lots adjacent to BLM boundary	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
<b>Exxon Mobile LaBarge Facility (B. Canyon)</b>	(Moderate Risk)	N/A	Develop a wildfire evacuation plan; Identify Temporary Refuge Areas; Conduct emergency response drills	Develop a wildfire preparedness & evacuation plan	N/A	N/A	N/A	N/A	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Continue to reduce vegetation density along BLM border	Analyze water suppression system & improve as necessary	N/A	N/A
<b>Mesa Road Gas Infrastructure/Private Homes</b>	(Moderate Risk)	N/A	Develop a wildfire evacuation plan; Identify Temporary Refuge Areas; Conduct emergency response drills	Develop a wildfire preparedness & evacuation plan	N/A	N/A	N/A	N/A	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce	Analyze water suppression system & improve as necessary	N/A	N/A

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
										vegetation density			
Emigration Ranches	(Moderate Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Consider hazardous fuels sage/grass mowing fuel break (10-15 ft.) on private lots adjacent to BLM boundary	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Bondurant	(High Risk)	Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots adjacent to USFS boundary	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health - focus on lots adjacent to USFS lands	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Yellow Point Well/Jonah Field Infrastructure	(Moderate Risk)	N/A	Update emergency response and evacuation plan	Update emergency response and evacuation plan	N/A	N/A	N/A	N/A	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Continue to	Analyze water suppression system & improve as necessary	N/A	N/A

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
										mow sage/grass along all Jonah Field roads and access driveways			
<b>Communities Not Rated</b>													
<b>Town of Marbleton</b>		Educate landowners on home hardening and defensible space actions	Update Town emergency response and evacuation plan	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Mow sage/grass along roadsides and driveways 10-15 ft. to reduce vegetation density and prevent fires	Analyze water suppression system & improve as necessary; Install water storage tank(s)/cistern(s) and improve water delivery infrastructure;	N/A	
<b>Elkhorn/Black Powder Ranch (Included above in Bondurant CAR)</b>		Educate landowners on home hardening and defensible space actions	Develop a wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots adjacent to USFS boundary to reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	
<b>Kilgore Creek (included in Upper Hoback Corridor)</b>		Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
					program for replacement			WRO/HIZ Assessments		density on private lots adjacent to USFS boundary; Recommend road corridor thinning - mow sage/grass 10-15 ft. on both sides of WY 23-174 roads and private driveways			
<b>Warren Bridge (listed above as Green River Estates)</b>		Educate landowners on home hardening and defensible space actions	Develop a wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break (sage/grass) on private parcels adjacent to BLM boundary; Enhance defensible space thinning up to 200 ft. to property boundary;	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	
<b>Kendall Valley</b>		Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Coordinate with WSFD and BLM to plan/implement ground-based timber thinning on private lots, BLM & State lots to reduce tree density, reduce hazardous fuels, & promote forest health.	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
Happy Trails Subdivision (Cora)		Educate landowners on home hardening and defensible space actions; Identify a wildfire neighborhood ambassador	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a community wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable, dead, & dying vegetation
Finley Ranch (High Lonesome)		Educate landowners on home hardening and defensible space actions	Develop a community wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce vegetation density by mowing sage/grass along boundary with BLM and WY State lands	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	
Pocket Creek Ranch		Educate landowners on home hardening and defensible space actions	Develop a wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend fuel break on private parcels adjacent to BLM; Enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots to reduce tree density, reduce hazardous fuels, & promote forest health	Encourage & support Firewise USA recognition; Conduct & support community chipper days to assist residents remove flammable,

Communities at Risk	Risk Rating	Public/Community Outreach & Education	Evacuation Planning & Preparedness	Wildfire Planning & Preparedness	Reducing Structural Ignitability	Wildfire Risk Overviews/HIZ Improvements	Prescribed Burning/Vegetation Management	Defensible Space Improvements	CWPP Monitoring	Fuels Mitigation Vegetation Management	Water Supply Improvement	Timber Harvest Vegetation Management	Other Mitigations
										vegetation density			dead, & dying vegetation
<b>Daniel/Merna Road</b>		Educate landowners on home hardening and defensible space actions	Develop a wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots; Reduce roadside and driveway vegetation by mowing sage/grass 10-15ft on both sides	Install water storage tank(s)/cistern(s) and improve water delivery infrastructure	N/A	
<b>Pine Creek (Pinedale)</b>		Educate landowners on home hardening and defensible space actions	Develop a wildfire & evacuation plan; Identify Temporary Refuge Areas; Conduct community evacuation drills	Develop a wildfire preparedness & evacuation plan; Provide incentives for residents to take action	Follow home hardening recommendations found in CWPP Section 5.1.2; Adopt WUI building codes; Inventory wood/shake roofs & consider matching grant program for replacement	Conduct parcel-level Wildfire Risk Overviews/HIZ Assessments; Recommend actions to reduce wildfire risk	Support debris pile burning with identified sites; Support pile burning, and broadcast prescribe burning to reduce fuels.	Conduct parcel-Level Wildfire Risk Overviews/HIZ Assessments.; Implement defensible space actions found In CWPP Sec. 5.1.2.2 and WRO/HIZ Assessments	Track accomplishments, goals met, & follow-up actions	Recommend enhanced defensible space thinning up to 200 ft. to property boundary; Thin fire hazardous trees & ground fuels on lots along Pine Creek to reduce vegetation density	Analyze water suppression system & improve as necessary	Coordinate with WSFD to plan/implement ground-based timber thinning on private lots and parcel north of American Legion Park to reduce tree density, reduce hazardous fuels, & promote forest health	