

# Teton County, Wyoming

## Community Wildfire Protection Plan

*Developed by the Teton Area Wildfire Protection Coalition*



Photos of the 2012 Horsethief Canyon Wildland Fire

## August, 2014

2014  
Teton County, Wyoming  
Community Wildfire Protection Plan

SIGNATURE AUTHORIZATION: My signature below verifies that I have reviewed and approved the Teton County Community Wildfire Protection Plan.

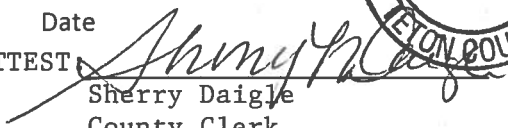


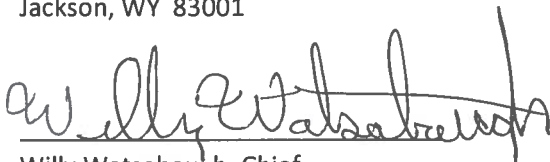
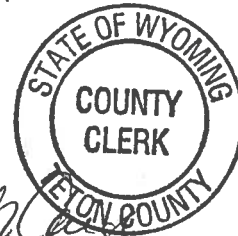
Hank Phibbs, Chair  
Board of County Commissioners, Teton County  
P.O. Box 1727  
Jackson, WY 83001

7/28/14

Date

ATTEST

  
Sherry Daigle  
County Clerk



Willy Watsabaugh, Chief  
Jackson Hole Fire / EMS  
P.O. Box 901  
Jackson, WY 83001

8/7/2014

Date



Bill Crapser, State Forester  
Wyoming State Forestry Division  
5500 Bishop Blvd  
Cheyenne, WY 82002

7/22/14

Date

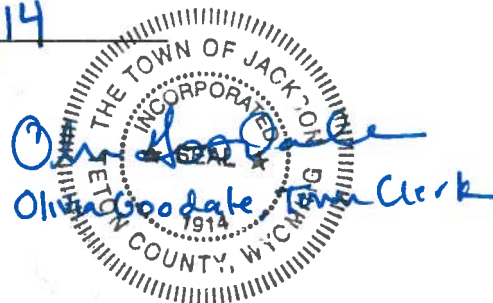


Mark Barron, Mayor  
Town of Jackson  
P.O. Box 1687  
Jackson, WY 83001

8/1/14

Date

Attest:



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Little Horsethief Fire, Teton County, WY. 2012. Photo: Florence McCall



## **Executive Summary**

Teton County communities have experienced significant wildfire seasons over the last quarter century. The historic 1988 fire season was followed by other active years with large fires in and around the local area. While fire is a natural process and plays an important role in ecosystem function in many vegetation types in this area, the effects of wildfires on private property and critical community infrastructure can be devastating. The Green Knoll Fire in 2001 and the Little Horsethief Fire in 2012 both threatened significant numbers of residences in Teton County, prompted evacuations of affected areas, and required significant amounts of firefighting resources to successfully manage. Preplanning through the Community Wildfire Protection Plan (CWPP) process, as well as mutual aid agreements, and interagency fire training was a critical element in the success of managing these fires.

The Teton County CWPP comprises all of Teton County including local, state, and federal land ownership as well as private lands. The plan highlights current and emerging wildfire hazards and describes treatment alternatives that may mitigate those problems. The CWPP defines wildland urban interface areas within Teton County, and provides a tool for landowners and managers at all levels to utilize in planning and prioritizing efforts to mitigate wildfire hazards.

Teton County completed its first original countywide CWPP in 2005. Teton Area Wildfire Protection Coalition (TAWPC), an interagency working group, determined in 2013 the original document needed revision. This 2014 Teton County CWPP document and all of the content completely replace the 2005 CWPP. The original 2005 CWPP was used in the creation of this 2014 CWPP as a historic and informational reference. The 2014 Teton County CWPP is designed to be a programmatic document that utilizes a new prioritization process that facilitates and maximizes fuels mitigation efforts within the County.

Successful implementation of this plan will reduce those negative impacts and lead to meeting one of the goals of National Cohesive Wildland Fire Management Strategy; creating fire adapted communities where developments and improvements in the wildland urban interface are more resistant to ongoing wildfire threats.

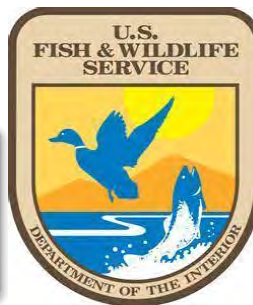
## **Collaboration**

Teton County has a long history of collaboration with regional partners. Following the wildland fires in the Greater Yellowstone Ecosystem of 1988, federal, state, and local agencies began development of projects and programs that attempted to meet the needs of each agency and the public at large.

In the summer of 2004, the Teton Area Wildfire Protection Coalition (TAWPC) was formed. This organization furthers collaborative efforts by bringing the citizen voice to the discussion. In addition to government partners' participation, individual citizens, local contractors, and representatives have joined TAWPC's work. Citizen participation has included Greg Nelson of Wilson. Participating organizations include the Jackson Hole Conservation Alliance, and Teton Science Schools- Conservation Research Center (TSS-CRC).

Current government partners involved in TAWPC and the revision of the CWPP include Teton County, Wyoming, Town of Jackson, Jackson Hole Fire/EMS, Bridger-Teton National Forest, Grand Teton National Park, Caribou-Targhee National Forest, Wyoming State Forestry Division, National Elk Refuge, Wyoming Game and Fish Department, Bureau of Land Management, Teton County Weed & Pest District, and Teton Conservation District.

Cooperating Agencies and Organizations:



## **Introduction**

The purpose of the CWPP is to provide a scientific, comprehensive resource for the citizens of Teton County to assist with mitigation efforts. The plan will also assist Teton County in identifying and prioritizing wildfire hazard areas for future treatment.

The CWPP identifies hazard areas and methods to address those hazards. The document is applicable to land management agencies, as well as landowners. At the landscape level, this document serves as a planning tool. At the parcel or individual homeowner scale, this document provides general, not specific, guidance. Hazards are identified from a landscape level. This provides guidance to citizens interested in implementation of small scale projects

TAWPC has taken on the role of developing the first revision of the Community Wildfire Protection Plan. The original document was signed into effect in August, 2005. TAWPC has held public meetings and outreach events preceding the revision of the CWPP. This process has allowed for public comment and participation, and fostered a collaborative environment to develop the document.

TAWPC followed a framework of several steps in revising the CWPP. The initial step was to reach out to the required decision makers, those being the state agency responsible for forest management, local fire authorities, and local government. Those agencies, respectively, are Wyoming State Forestry Division, Jackson Hole Fire/EMS, Teton County Board of County Commissioners, and the Mayor of the Town of Jackson. This group makes up the Core Team. Next, federal agencies were brought into the process. Their natural resource planning, on-the-ground expertise and fire management experience are vital to the development of the CWPP. Additionally, other stakeholders were engaged in the planning process. Many of these stakeholders were already participants in TAWPC, and they included non-governmental organizations and state agencies.

The TAWPC group then strategically created several subcommittees to develop content for sections of the CWPP. These groups developed a definition of wildland urban interface (WUI), created county-wide maps of the WUI in relation to critical human infrastructure, developed a framework of the content for the document, produced an Executive Summary, identified community hazard reduction priorities, and addressed other tasks.

TAWPC has held meetings to discuss and revise the CWPP. These meetings have included open meetings, where members of the public and organizations have attended and participated. TAWPC also held four open house events, where presentations have been offered, maps and resources have been on display, subject matter experts from TAWPC have been present to discuss the CWPP, and discussion with the public has taken place.



Below is a timeline of meetings and events in the development of the CWPP:

Date	Event
January 15, 2013	TAWPC public meeting
February 26, 2013	TAWPC public meeting
March 14, 2013	TAWPC public meeting
April 18, 2013	Open House held by TAWPC at Jackson Hole Middle School
August 08, 2013	TAWPC public meeting
December 17, 2013	TAWPC public meeting
January 15, 2014	TAWPC public meeting
February 26, 2014	TAWPC public meeting
March 20, 2014	Open House held by TAWPC at Center for the Arts, Jackson, WY
April 09, 2014	Open House held by TAWPC at Teton Basin Ranger District, Driggs, ID
April 09, 2014	Open House held by TAWPC at Teton Conservation District
April 23, 2014	TAWPC public meeting

The goal of TAWPC has been to have the CWPP signed by authorized signatories by May, 2014.

The idea for community-based forest planning and prioritization was given new and unprecedented impetus with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003. This landmark legislation includes the first meaningful statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction projects.

In order for a community to take full advantage of this new opportunity, it must first prepare a CWPP. Local wildfire protection plans can take a variety of forms, but HFRA outlined several minimum requirements for CWPPs:

1. Collaboration: A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.
2. Prioritized Fuel Reduction: A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
3. Treatment of Structural Ignitability: A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

### **Wildland Urban Interface**

The Wildland Urban Interface (WUI) is defined as: “The line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels” (NWCG, 2012).

The intent of a WUI boundary is to “define an area within or adjacent to private and public property where mitigation actions should occur to prevent damage and loss” (NWCG, 2009).

The WUI boundary for Teton County, Wyoming, was developed by the Teton Area Wildfire Protection

Coalition comprised of local land management agencies, land trust and conservation organizations, and contractors directly involved in wildland fire protection projects as well as citizens who represent the interests of the community. Capital improvements, houses, private land, significant utility and transportation corridors, and communication sites, are examples of structures and human developments this group is collectively concerned about in the event of a wildfire. The existence and vulnerability of these values relative to the surrounding landscape shape the WUI boundary. The vulnerability of identified lands within the WUI boundary is based on fuels, topography, weather patterns, natural barriers, and lessons learned from historic fires. In general, areas within the WUI boundary have the potential to support a wildland fire posing a direct threat\* to the values mentioned above. Defining the WUI boundary in this manner helps identify areas of concern to prioritize fuels reduction projects, community outreach & education efforts, and to help managers develop the appropriate (structure protection) response to an emerging fire incident.

\*Direct threat = land that has the potential to support a wildland fire that could reach values within 1 burn period under at least VERY HIGH weather/fuel conditions as determined by the National Fire Danger Rating System and remote automated weather stations in the surrounding area (See Appendix XX). The "reach" of a fire during a burn period is determined by subject matter experts utilizing: experience, historic weather and fire data, and fire modeling assessments completed in Teton County, WY.

## **Existing Situation**

### **Background and significance:**

The National Fire Plan initiatives following the 2000 fire season directed federal agencies to identify communities “within the vicinity of Federal lands that are at high risk from wildfire”. This was the first consistent effort to formally describe Wildland Urban Interface (WUI) areas across the nation. A list of Teton County’s communities meeting that definition were published in the Federal Register and became the beginnings of community based, interagency WUI planning in the local area.

Additionally, the realization that fuels reduction efforts needed to be made around residences and other developments in the wildland urban interface to improve their wildfire defensibility became more accepted. In addition to treating the lands around structures, Teton County began working towards adopting building code standards for the WUI in the late 1990’s, finally adopting the International Wildland-Urban Interface Code in 2008.

Since the original CWPP was published, many other examples from communities across the country have been prepared and shared. Additionally, various organizations such as the Western Governors Association, National Association of State Foresters, Society of American Foresters, National Association of Counties, the US Forest Service and several State Forestry entities reviewed existing CWPPs and developed tools and publications documenting successful collaborative efforts across the country and defining Best Management Practices in the development of a CWPP. These efforts were relied upon in the review of Teton County’s existing CWPP with an eye toward improvement. TAWPC was instrumental in working on this review and the publishing of a new Community Wildfire Protection Plan for Teton County.

## **Community Information:**

The following information is an abridged cultural and natural history of Teton County, from the Jackson Hole Chamber of Commerce web site:

“Wildlife has played an important role in the history of Jackson Hole. The abundant wildlife lured early explorers to the valley. The Native Americans came to hunt buffalo and other large game, and the first European and American visitors came to collect beaver pelts.

Before 1800, the only people who traveled into Jackson Hole were the Native American tribes who spent the summer months hunting the wildlife in the valley and the area surrounding it. Among the tribes that trailed through the valley were the Shoshoni, Crow, Blackfeet, Bannock, and Gros Ventre.

In 1803, Thomas Jefferson organized the Lewis and Clark Corps of Discovery expedition to explore the unknown territory of the Louisiana Purchase. The expedition traveled up the Missouri River and crossed the Rocky Mountains far to the north of Wyoming, in Montana, on their trip to the Pacific Ocean. During the return journey in 1806, John Colter, one of the members of the Expedition, headed back into the mountains to scout for a fur trading company. On a trip to the Crow, Colter probably entered Jackson Hole in the winter of 1807-8.

When other trappers followed Colter's example, Jackson Hole became one of the prime areas of interest. Most of the famous mountain men that trapped in the West in the early 1800's traveled the trails that crossed the valley: Jim Bridger, Jedediah Smith, William Sublette, and David Jackson were among them. But it was David Jackson who gave his name to the valley when he supposedly spent the winter of 1829 on the shores of Jackson Lake. For the mountain men, a "hole" indicated a high valley that was surrounded by mountains, and William Sublette, who was Jackson's partner in an early fur company, referred to the mountain valley along the Snake River as Jackson's Hole.

By 1845 the fur trade had drawn to a close because the silk hat had replaced the one made of beaver felt. Then, Jackson Hole reverted to the summer habitation of various Indian tribes and an occasional government expedition. The Hayden Surveys of 1871, 1872, and 1878 officially named many of the important landmarks.

As a part of the Hayden Expedition of 1871 and 1872, William Henry Jackson took the first photographs of the Teton Mountains and Yellowstone. His photographs were important evidence to help convince the federal government, in 1872, to protect the Yellowstone area as the world's first national park.

After the creation of Yellowstone, big game hunters and the first "dudes," including foreign royalty, visited the area. Again the abundant wildlife brought people and helped to spread the fame of beautiful Jackson Hole.

Since wildlife flourished in the valley, settlers hoped that domestic animals would flourish as well. By the late 1880's, they began to trail into the "Hole." Some of them followed the Gros Ventre River into the valley, and a brave few cleared a wagon route over Teton Pass, following the trail of Indians and mountain men. By the 1890's, the villages of Kelly, Wilson, and Moran had been born.

In the 1890's, cattle ranching became the major focus of the area, and with cattle ranching came a larger



and more permanent settlement. The town of Jackson was named in 1894 and acquired a plan for streets and major buildings in 1900. Some of the buildings and houses of that early era remain a part of Jackson today.

Concern for wintering elk began early in Jackson Hole. The severe winter of 1908-9 brought the concern to a head; thousands of elk were starving in the valley. The townspeople, with the help of the state of Wyoming, bought hay to help the animals through the winter, but the following winter was no better. Through the crusading efforts of Stephen Leek and his photographs, the U.S. Biological Survey Elk Refuge was established in 1912 with an allotment of one thousand acres. Today the National Elk Refuge, the direct descendant of the original refuge, contains nearly 25,000 acres and feeds over 7,000 elk every winter.

Women in Wyoming have been voting since 1869, when the legislature of Wyoming Territory met for the first time, the first government in the world to grant women full voting rights. But in 1920, the year the 19th Amendment to the U.S. Constitution gave women across the nation the right to vote, Jackson added to its legendary history by electing an all-female city council, the first anywhere in the United States.

In 1929, Grand Teton National Park was created and dedicated. The park at that time included the mountains in the Teton Range and a narrow strip of land that contained the major lakes at the base of the peaks. But that was enough to develop the tourism industry, which has now replaced cattle ranching as the primary economic base of Jackson Hole. In 1950, the park was enlarged to include the Jackson Hole National Monument, established in 1943. The rededicated park contains 52 square miles, acquired by John D. Rockefeller, Jr., during the 1930's and 40's. Grand Teton National Park now totals 485 square miles.

As the fame of Jackson Hole with its beautiful scenery and fascinating wildlife grew, more and more visitors found their way into the valley. The mild summers added river rafting and hiking and horseback riding to the allure of hunting and fishing in the valley. In 1937, valley residents built a ski tow at Teton Pass and winter sports were added to the valley's charm for visitors. In 1939, Snow King Resort, on the mountain above the town of Jackson, was the first ski facility in the state of Wyoming. Today three major ski areas have made Jackson Hole world famous for excellent skiing and winter sports. “

### **Topography, climate, watersheds:**

Teton County is the headwaters for several rivers, including the Snake River, Green River, and Yellowstone River. These rivers are subsequently major tributaries to the following major western rivers; respectively the Columbia River, Colorado River, and Missouri River. Mountain ranges in Teton County include the Gros Ventre, Teton, Absarokas, and Wyoming Ranges. Elevations at the valley floor range from approximately 6,100 to 6,300 feet, and the highest elevation is the Grand Teton, at 13,550 feet. Vegetation varies from alpine zones, to conifer forests, to sagebrush.

Teton County is characterized by long, cold winters, and a short growing season. January has an average mean temperature of 16.5 degrees F, July has an average mean temperature of 61.3 degrees F. The record High temperature was 98 degrees F on 8/19/1981, while the record low temperature was -50 F on 1/1/1979. There are approximately 60 frost free days per year in Teton County. In terms of precipitation, the average annual precipitation is 15.9 inches. Average annual snowfall is 74.7 inches. This data is from National Climatic Data Center from 1949 through 2005, courtesy of [www.mountainweather.com](http://www.mountainweather.com)

#### **Land ownership – general overview:**

Teton County consists of public and private lands. Within the borders of Teton County, the approximate number of acres for each jurisdiction is:

<b>Land Ownership</b>	<b>Square Miles</b>
<b>United States Government</b>	
United States Forest Service	2134.1
National Park Service	1907.7
Bureau of Land Management	4.1
United States Fish & Wildlife Service	38.6
<b>Wyoming</b>	
State of Wyoming	7.4
Wyoming Game & Fish Commission	1.3
<b>Local Government</b>	
Teton County School District #1	0.1
Teton County, Wyoming	0.5
Town of Jackson	0.5
<b>Private</b>	116.6
<b>Other</b>	5.6
<b>Total</b>	<b>4216.5</b>

### Completed Fuel Treatments to date:

All ownerships in Teton County have compiled completed projects on their lands or projects completed across multiple ownerships. All completed fuels projects in Teton County on private, state and federal lands have been mapped based on treatment type and ownership. Federal includes Grand Teton National Park, US Forest Service Bridger-Teton and Caribou-Targhee National Forests. See Maps in Attachment A.

The following is a breakdown of completed projects by treatment from 1999 to 2014:

<b>Federal (USFS Bridger-Teton NF and Caribou-Targhee NF, and Grand Teton NPS)</b>	<b>Acres</b>
Fuels Reduction (Treatments, Thinning, Pile Burning)	2,405.94
Prescribed or Managed Fire	24,713.75
<b>Private</b>	<b>Acres</b>
Fuels Reduction (Treatments, Thinning, Pile Burning)	608.37
Defensible Space Around Homes (about 1 acre for every home)	22.0
<b>Total Acres</b>	<b>27,750.06</b>

### Fire prevention and restrictions:

Fire prevention is the responsibility of numerous agencies in Teton County.

TAWPC members are cooperating to deliver consistent messages to the public.

Fire prevention is the responsibility of all who live or visit this area . Numerous agencies in Teton County coordinate fire prevention and education outreach efforts, providing a consistent message for the public:

Federal, State and Private lands have their own rules in regard to fire restrictions. For information on restrictions in Teton County visit the following websites:

Teton Interagency Fire:

[www.tetonfires.com](http://www.tetonfires.com)

Wyoming State Forestry Division for private land restrictions state-wide:

<https://sites.google.com/a/wyo.gov/wsfd-fire-information/fire-restrictions-map>

Wyoming Interagency Fire Restrictions:

[http://www.wy.blm.gov/wy\\_fire\\_restrictions/](http://www.wy.blm.gov/wy_fire_restrictions/)

Jackson Hole Fire/EMS: <http://www.tetonwyo.org/fire/>

**Preparedness:**

Participating agencies with wildland fire protection responsibilities within Teton County already collaborate regarding wildland fire response, coordinated dispatching of resources, training, fire prevention efforts, and prescribed fire and fuels management under a number of agreements and memoranda of understanding.

There are two parent agreements that are umbrella documents to support local interaction and sharing. They are the “Interagency Agreement for Wildland Fire Management, among the Bureau of Land Management, Bureau of Indian Affairs, and National Park Service of the Department of the Interior and the Forest Service of the Department of Agriculture, 2011-2015” and the “Interagency Cooperative Fire Management and Stafford Act Response Agreement – Wyoming, among United States Department of the Interior; Bureau of Land Management-Wyoming, National Park Service-Intermountain Region, Bureau of Indian Affairs-Rocky Mountain Region, US Fish and Wildlife Service-Mountain Prairie Region, the United States Department of Agriculture; Forest Service-Rocky Mountain and Intermountain Regions, and Wyoming State Forestry Division 2012”.

Under the authority of the Wyoming Cooperative Agreement, Annual Operating Plans are entered into among local cooperators further describing how fire management activities will be coordinated. In Teton County this is covered by the “Wildland Fire Management Annual Operating Plan” for District 4 of the Wyoming State Forestry Division.



## **Prioritized Fuels Reduction Treatments**

A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.

### **Teton County CWPP Project Priorities and Prioritization Methodology**

Please see “Methodology for Determining Priority of New Fuels Projects” in Appendix B. This form is for screening and prioritization by qualitative determinations and comparisons for the process of reviewing potential hazardous fuels reduction projects brought forward by stakeholders in Teton County.

#### **Background:**

One of Teton Area Wildfire Protection Coalition’s (TAWPC) primary missions is to serve the communities within Teton County as a group of subject matter experts representing community interests and values to ensure a proactive and focused approach to fuels management within Teton County as well as determining the prioritization of new fuels projects. To ensure a level and consistent approach to ranking County projects against each other the methodology described below will be used by TAWPC to determine individual project priorities.

The Teton County CWPP WUI boundary is to be used to help inform the planning process. It is not intended to be all inclusive or exclusive. The mapped WUI is based on the WUI definition (pages 8, 9) and provides a general starting point for identifying the majority of the WUI concerns for the County. There could be areas outside the current WUI boundary that warrant fuels mitigation work which is why TAWPC has identified a systematic approach by utilizing the following methodology to provide a fair but flexible process to meet the ever evolving WUI concerns.

TAWPC and the Teton County CWPP recognize that proper defensible space is the highest priority for protecting structures but also notes that work beyond that needs to occur to protect ingress and egress routes, other critical infrastructure and resource values and that federal land management agencies have the responsibility to minimize the potential of unwanted fires impacting other jurisdictions. The vegetation and landscape contained within Teton County has been shaped by the influences of wildland fire and all land management agencies represented within TAWPC recognize that this ecosystem is dependent on wildland fires. The CWPP does not aim to stop fire but rather mitigate fuels where necessary to protect those identified values which will facilitate allowing fire to play its role when possible within our backcountry and wilderness areas as directed by land management plans and other applicable legislation. We recognize that all of our tools (mechanical treatments, prescribed fire and wildland fire) must be put to work to reach our goals here in this CWPP. This recognition brings Teton County closer to becoming a truly “fire-adapted community”.

Federal land management agency’s fuels planning processes follow the regulations set forth by the National Environmental Protection Act (NEPA). Internal to each agency there are interdisciplinary teams that work to develop projects and move them forward through the planning process (NEPA).

Information set forth by this CWPP as well as information obtained by landscape assessments aid in determining project priorities. These agencies within Teton County have representatives serving on TAWPC. These representatives ensure information relative to fuels management within their jurisdictions is shared and input is obtained from TAWPC to further collaboration, planning efforts and coordination within Teton County.

Any fuels management projects occurring on federal lands including within the WUI will be consistent with all applicable laws and regulations. These laws and regulations will include the 1969 National Environmental Policy Act, 1964 Wilderness Act, 1984 Wyoming Wilderness Act, 1973 Endangered Species Act, 2001 National Fire Plan, 2003 Healthy Forest Restoration Act, as well as any other relevant policy.

An aggressive program of evaluating and implementing defensible space for structures will be the best approach to limit fire related property damage in the Wildland Urban Interface.

All subdivisions and properties that lay within the Wildland Urban Interface boundaries will be assessed on a property by property basis, using the Firewise, NFPA, structure assessment template.

All landowners will be contacted and offered a walk-through explaining the process and the assessment completed for their property. Materials will be available and suggestions offered to educate each landowner.

#### **Teton County Priority Areas:**

This 2014 version of the Teton County CWPP utilizes a new approach to prioritizing fuels management projects. The 2005 version focused on individual subdivisions; prioritizing and ranking those in terms of fire risk. This process was found to be inefficient as the fire risk was subjective and subdivisions did not always want to do any work in those areas identified as high risk. Researching other CWPPs across the west and CWPP guidance, we found that CWPPs can be site specific at the subdivision or town level or they can be more programmatic such as this document aims to be at the county level. This new prioritization process allows for new projects to be proposed at any time from any individual which will help accomplish more much needed fuels mitigation work within the County. This new prioritization process focuses on the defensible space as the highest priority and builds out from there noting the benefits of mutual fuels management efforts on adjacent lands. Site specific plans will address fuels management needs for each project brought forward.

Priority 1 areas: This area is composed of all private lands within the CWPP's mapped WUI and defensible space (first 300' from the structure) around federal structures within the CWPP's mapped WUI.

Recommended fuels treatments in the Wildland Urban Interface begin with Priority 1 areas. Priority 1 is the Structure Ignition Zone, the area from the perimeter of the structure out 300 feet from the structure. This zone is commonly referred to as the defensible space zone.

All treatments within area 1, the defensible space should follow Firewise principles developed by National Fire Protection Association (NFPA). See the Structure Ignitability section of this CWPP.

Priority 2 areas: This area is composed of federal lands and private lands beyond the first 300 feet from the structure within the CWPP's mapped WUI adjacent to highly valued resources and is defined as a ¼ mile buffer around the home ignitability zone and a ¼ mile buffer onto federal lands adjacent to private lands and a ¼ mile buffer adjacent to the defensible space around federal structures.

Priority 2 includes outlying properties beyond the 300 feet of the structure to property lines or subdivision boundaries and federal lands adjacent to private lands and federal structures. Prescriptions for these areas will include treatment of ladder fuels for conifers and other flammable shrubs and bushes should be pruned to 4 feet above the ground. Remove as much of the dense, dead & down fuels as possible. Spacing and groups of trees may be clustered to reduce the threat of fire moving into the crown space. Break up the continuity of flammable fuels with irrigated grass, rock gardens, or similar fire resistant landscape features.

Priority 3 areas: This area is defined as the remainder of the CWPP's mapped WUI and will include the lands beyond the ¼ mile buffer. Priority 3 areas are adjacent to a particular property or subdivision that fire may reach within 1 burn period.

Treatments in these areas should follow guidelines set forth by land management agencies such as the USFS, NPS, BLM, USFWS, Wyoming State Forestry Division, or local fire departments.

The treatments in this zone include any of the following: shaded fuel breaks, silviculture treatments designed to mitigate dense mortality caused from insect and disease epidemics and other hazardous fuels, prescribed fire treatments to reduce the continuity of fuels and/or the enhancement of fire resistant fuels such as aspen or green leaf type trees.

### **Teton County Project Priority List:**

#### Countywide:

1. Promote Firewise education to public residing with Teton County and target priority at-risk subdivisions.
2. Pursue more viable options for disposing of slash to better facilitate individual defensible space and other fuels mitigation efforts. Biomass reutilization options would be beneficial for the community.
3. Primarily through the collaboration and efforts of TAWPC, continue to work towards becoming a fire adapted community (See <http://www.fireadapted.org/resources/what-is-a-fire-adapted-community.aspx> for more information).
4. Improve access and ingress/egress for high risk areas through possible shaded fuel breaks along major travel routes.
5. Promote long term fuels management solutions.

#### Priority 1 Area projects:

1. Identify and implement defensible space projects for subdivisions and highly valued assets.
2. Improve access and ingress and egress into subdivisions within the WUI.
3. Implement a shaded fuel break to protect high risk subdivisions.
4. Create a management and wildfire mitigation plan for high risk private lands and structures.

#### Priority 2 Area projects:

Implement shaded fuel break and possibly prescribed burn projects where needed to minimize the potential of fires escaping off federal lands onto jurisdictions that do not want fire( i.e. private lands). Do this in conjunction with defensible space projects where possible.

These areas are where hazardous fuel reduction treatments would have significant benefit in slowing an advancing wildfire by reducing fire behavior and intensity. These areas were identified by the local wildfire professionals serving on the Teton CWPP Core Team and TAWPC. The areas selected for treatment should be based primarily off of major road systems, vegetation, and topography and focused on the creation of fuel breaks. The core team determined that it was more effective for landowners to focus on creating defensible space around their homes and to thin between homes and on community-owned lands within the community to be most effective in reducing wildfire hazards regardless if fuel breaks were present.

Fuel breaks provide larger openings and increased space between tree crowns (shaded fuel breaks) which will allow a fire in the crowns to drop to the ground or keep the crown fire isolated to a few trees, thus slowing the fire spread and decreasing fire intensity. Suppression crews have a better opportunity to suppress the fire when it is on the ground or isolated to a few trees, which allows for different strategies and tactics. In addition, the increased spaced between trees will allow fire retardant dropped from air tankers to pass through the tree crowns, land on the ground, and give ground crews the ability to reinforce fire line. The most effective fuel breaks are located in areas where they can be maintained and where additional treatment occurs between the fuel break and community or homes to provide seamless treatments.

Successful implementation for several of the identified treatment areas, primarily fuel breaks, will take coordination and collaboration from multiple property ownerships as most treatments involve private and federal lands. In addition, projects on federal lands will involve additional environmental clearance (NEPA) that will take some time to complete. Identifying the WUI on federal lands provides the land management agencies with additional criteria for prioritizing future treatments. Where CWPP and federal priorities overlap, land management agencies will begin prioritizing areas to focus on for beginning the NEPA process required to implement projects while local communities are working with individual landowners to solidify treatments on private lands. All treatments will involve a prescription and will be treated by a combination of hand or mechanical treatment and prescribed fire (broadcast and/or pile burning) will be incorporated into the treatments to the extent possible.





Completed fuels reduction project in the Wilson Front area west of Fall Creek Road. Note canopy spacing between trees, the removal of most ladder fuels, and minimal slash left on site.

### Priority 3 Area projects:

Consider mechanical treatments and prescribed burns to further mitigate the risk of fire impacted highly valued assets within the community. Identify areas prone for escaping the confines of federal lands and prioritize projects within those areas.

Similar activities to those described above in Priority 2 Areas would then occur in Priority Area 3.

### Specific Potential Private Land Projects:

The purpose of this section is give some specific areas cooperators and TAWPC have identified as possible hazardous fuels reduction projects and specific goals for cooperators to work towards in reducing losses from wildland fire in Teton County. The areas identified are on private lands only due the nature of processes required to implement projects on public and other federal lands.

These projects areas have been identified because they are potential hazardous fuels projects on private lands only that may meet the requirements of available funding, there is some level of interest in a project by the landowners, and these projects have possibilities to be attempted.

Interested private landowners or other stakeholders should review the “Methodology for Determining Priority of New Fuels Projects” in Appendix B and the “Funding Opportunities” in the Toolbox section of this CWPP for more information.

This list is not a guarantee or requirement to be completed as whole or part. These project areas have not been specifically identified on any WUI areas maps included in the CWPP. This does not preclude or exclude other unidentified private land projects from being proposed, funded or completed.

### Project Areas Identified:

1. Hidden Hills Subdivision - This subdivision has been identified for numerous treatments

including:

- a. Defensible space around homes/structure out to approximately 100 to 300 feet depending on topography and fuels composition near structures.
- b. General fuels reduction in area beyond 100 to 300 feet from structures to remove dead/down and diseased trees, thinning of overstory canopy in green trees, and removal of ladder fuels.
- c. Fuel breaks along roads as anchor points for fire suppression and to improve ingress and egress.
- d. Fuel breaks and reduction at the private property boundary of the subdivision with other ownerships to reduce the possibility of fire spreading into (or out) of the subdivision.

2. Game Creek- This WUI area has been identified for numerous treatments including:

- a. Defensible space around homes/structure out to approximately 100 to 300 feet depending on topography and fuels composition near structures.
- b. General fuels reduction in area beyond 100 to 300 feet from structures to remove dead/down and diseased trees, thinning of overstory canopy in green trees, and removal of ladder fuels.
- c. Fuel breaks along roads as anchor points for fire suppression and to improve ingress and egress.
- d. Fuel breaks and reduction at the private property boundary of the subdivision with other ownerships to reduce the possibility of fire spreading into (or out) of the subdivision.

### **Treatment of Structural Ignitability**

A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

Please see the “Home Ignition Zone Assessment and Inspection” forms found in Appendix C. These forms are the county standards for reviewing structures to note issues and make suggestions on improvements. These forms require training and have different objectives in their utilization.

### **Recommendations for Reducing Structural Ignitability - Home Ignition Zone**

Reducing structural ignitability and preventing the loss of property in the event of a wildland fire is a high priority in Teton County. Efforts to reduce structural ignitability can be separated into building materials and vegetation management (defensible space around structures and large scale fuels reduction projects). Public education campaigns designed to raise awareness and move those who are aware to action to reduce hazardous fuel loads within the home ignition zones and beyond complement the regulatory efforts of Teton County. The county has taken steps to address development in wildfire hazard areas by developing and adopting codes and regulations through the land use and building processes (See “Mitigation” section of the Toolbox for more information on Regulation).

In order to identify and understand methods for increasing a structure’s ability to survive a wildfire it is important to first understand how structures burn during a wildland fire. Homes ignite and burn by meeting the parameters for ignition and combustion (Cohen 2008). Structures may be ignited by



firebrands, which are embers that are lofted through the air from a moving flame front or by radiant or convection heating. Firebrands can ignite structures by landing on flammable materials either on or surrounding a structure. Firebrands are particularly detrimental to structures with flammable building materials including wood shake roofs. Accumulations of flammable materials in roof valleys, in gutters, or directly adjacent to the structure can significantly increase a structure’s vulnerability.

The two main factors affecting a structures 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 (Cohen 2008). The home ignition zone typically is located on private property, which requires property owners to recognize the hazards, take ownership and responsibility of the hazards, and mitigate the hazardous fuels to a level that will increase the survivability of the structure.

### **Building Materials**

- Replace older shake roofs with those of a higher fire resistive rating including asphalt composition, tile or metal roof assembly.
- Replace wood siding with a more fire resistive cement product including cement, stucco, cement plank siding, stone or masonry.
- Screen attic, roof, foundation and eave vents openings with 1/8" metal screens.
- Enclose areas under decks completely.
- Windows should be double-paned or tempered glass.
- Follow all regulation found in the Teton County's Fire Code Resolution and any other law/regulations.

For more information visit <http://www.firewise.org>,

### **Defensible Space**

Educational campaigns are encouraged to be in place to raise awareness and encourage homeowners to implement defensible or survivable space. Defensible space should be encouraged around all structures in Teton County on all ownerships.

Professionals listed in this document under "Technical Assistance Providers" offer on-site consultations for wildfire hazard assessments and site specific defensible space recommendations. Defensible space is the area around a structure where the vegetative fuels have been modified to reduce intensity and behavior of a wildfire towards the structure, and away from the structure if the structure is on fire. The primary purpose of defensible space is to improve the structure's ability to survive a wildfire in the absence of firefighter intervention. Firefighters may use defensible space to work to protect a structure during a wildland fire event. Defensible space is an effort to reduce structure ignitability but is not a guarantee a structure will survive during a wildfire.

Minimum defensible space recommended by WSFD is 100 feet from a structure on a flat property. A greater distance may be required on steep slopes. Defensible space should increase with increasing topography as fire moves easily uphill preheating vegetative fuels. Defensible space consists of three zones: Zone 1 is closest to the structure and is the most heavily modified zone, usually 0 to 30 feet from the structure. Zone 1 recommendations include but are not limited to:

- Remove all flammable vegetation within 3 to 5 feet of the structure.
- Remove any tree branches hanging over structures that will drop needles or other debris onto roofs, gutters, or decks.
- Do not plant vegetation underneath eaves or roof lines.
- Move firewood piles further than 30 feet from the structure during wildfire season.

- Plant fire resistant vegetation and maintain during fire season

Zone 2 is where the vegetation is modified to reduce the intensity of an oncoming fire, or create speed bumps through the vegetation approaching the structure. Recommendations in this zone include but are not limited to:

- Remove all ladder fuels
- Provide a minimum crown spacing between trees of 10 feet between crowns on a flat property, greater distance on a slope
- Prune trees to a height approximately 8 to 10 feet above the ground
- Provide a minimum shrub spacing of 2 ½ times the height of the shrub between shrubs
- Prune shrubs to remove contact with ground fuels
- Keep grasses mowed
- Remove all dead material



Zone 3 is a transition zone toward a more traditional vegetation management style to meet landowner objectives while working with principles of stewardship. Recommendations include but are not limited to:

- Thinning to remove suppressed and overstocked trees while promoting and maintaining healthy vigorous trees
- Limit vegetation combinations that contain ladder fuels to isolated clumps.
- Reduce shrub densities to promote healthy growth and reduce density and continuity through the zone.

- Snags (dead standing trees) should only remain if they do not pose a safety hazard.

Firewood should be stacked along the contour or above the structure, but not below. Firewood should be stacked a minimum of 30 feet from the structure and should be separated from other flammable vegetation. Flammable vegetation and other materials should not be stored under decks. It is also important to reduce hazardous fuels and create defensible space along driveways to improve firefighter access to homes and to maintain escape routes.

## **Toolbox**

This toolbox is a compilation of information for helping cooperating agencies and citizens of Teton County overcome the wildland fire hazardous fuel reduction issues. All maps found in the toolbox below can also be viewed electronically and in more detail in the Appendices. These tools include:

- Maps Overview
- Technical Assistance Providers
- Education and Outreach Organization
- Regulations
- Educational Tools and Program
- Wildfire Mitigation Plans
- Funding Opportunities

## **Maps Overview**

All maps for this CWPP have been included in Appendix A. Maps were made cooperatively by several agencies with input from the public, non-profit, federal, state and local governmental agencies. Maps that have been included as part of the CWPP are:

- County Base Map
- Fire History
- Completed Fuels Reduction Projects from 1999 to 2014 in Teton County
- Fire Behavior (Flame Length, Rate of Spread, and Crown Fire)
- CWPP WUI areas (countywide proposed areas)

## **County Base Map**

The County Base Map highlights important features that would be used throughout the CWPP process to determine community boundaries, fuel treatment priorities, etc. The base map features:

- Major Roads by Type
- Streams and Lakes
- Fire Station Locations
- Public Land Ownership
- Town/Incorporated Area Boundaries

## **Fire Behavior**

The follow was used to generate all the fire behavior related maps for Teton County:

Weather used for fire behavior modeling: The 90<sup>th</sup> percentile weather was used to represent a NFDRS adjective rating of Very High which correlates with an ERC above 54. The ERC of 54 is equivalent to the break between High and Very High fire danger.



These are the conditions that create wildland fire conditions that are resistant to control efforts that we are most worried about.

Approximately 80% percent of the large fires (greater than 100 acres) on the Jackson Ranger District occurred when the ERC (G) was above 54 (90th percentile) or greater.

The Grand Teton RAWs was used to verify weather parameters used for this analysis.

The following summary captures the methodology and inputs used for the fire behavior modeling assessment completed for Teton County's CWPP:

FlamMap was the fire behavior program used for the modeling. FlamMap is a fire behavior mapping and analysis program that computes potential fire behavior characteristics (spread rate, flame length, fireline intensity, etc.). For more information on this model, go to:

<http://www.firemodels.org/index.php/national-systems/flammap>

Landscape data were acquired from the LANDFIRE project. LANDFIRE is a national project that provides and maintains over 20 geo-spatial layers (e.g. vegetation, fuel, topography, disturbance, etc.) used for fire behavior modeling. For more information on LANDFIRE data, go to: <http://www.landfire.gov/>

Weather parameters used for the modeling scenario were chosen based on past fire history and local historical weather data. The 90<sup>th</sup> percentile weather at the Grand Teton Remote Automated Weather Station (RAWs) was used to represent a National Fire Danger Rating System (NFDRS) adjective rating of Very High. For more information on NFDRS, go to: [www.nwcg.gov/pms/pubs/MasterGaining.pdf](http://www.nwcg.gov/pms/pubs/MasterGaining.pdf)

The 90th percentile was determined as the most appropriate weather break point based on the following considerations:

- Most fires occurring in Teton County do not tend to escape initial attack efforts until conditions rise above the 90th percentile. These are the conditions that create the wildland fires that are resistant to control efforts and that therefore cause the most concern.
- Approximately 80% percent of the fires larger than 100 acres on the Jackson Ranger District occurred when the weather was at or above the 90<sup>th</sup> percentile or greater.

This fire behavior assessment focused on rate of spread, flame length, and crown fire activity. Those three fire behavior characteristics are the most important considerations for determining the fire hazard and the effectiveness of suppression resources.



## **Technical Assistance Providers**

Technical assistance providers available for technical input and assistance to private landowners, businesses and other stakeholders in Teton County:

Jackson Hole Fire/EMS: Kathy Clay, Fire Marshal, PO Box 901, Jackson, WY 83001, 307-732-8506, [kclay@tetonwyo.org](mailto:kclay@tetonwyo.org)

Teton Conservation District: Robb Sgroi, Fuels Mitigation Coordinator, 420 W. Pearl Ave, PO Box 1070, Jackson, WY 83001, 307-733-2110, [robb@tetonconservation.org](mailto:robb@tetonconservation.org)

Wyoming State Forestry Division (WSFD): Brook Lee, District Forester, PO Box 1678, Pinedale, WY 82941, 307-367-2119, [brook.lee@wyo.gov](mailto:brook.lee@wyo.gov)

US Forest Service, Bridger-Teton National Forest, Jackson and Buffalo Ranger Districts: Lesley Williams-Gomez, North Zone Fire Prevention, PO Box 1689, Jackson, WY 83001, 307-739-5424, [lwilliams@fs.fed.us](mailto:lwilliams@fs.fed.us) \*

National Park Service, Grand Teton National Park: Traci Weaver, Fire communications/Education, 307-739-3692, [traci\\_weaver@nps.gov](mailto:traci_weaver@nps.gov) \*

Private forestry consultants and non-profits -contact Teton Conservation District or Wyoming State Forestry Division for more information

\* Typically the USFS and NPS refer technical requests to WSFD or local fire departments. They do attend community meetings, participate in presentations, and in CWPP processes. WSFD staff, Teton Conservation District staff, and private foresters and consultants also provide assistance with technical forestry and forest management.

## **Outreach and Education Organization**

The Teton Area Wildfire Protection Coalition has developed an Outreach and Education subcommittee to organize hazardous fuels mitigation efforts in Teton County. The education and outreach in Teton County will be a unified effort across all agencies to use the same or similar educational tools. All educational materials will be centered on principles of Firewise publications developed by NFPA.

Additionally, a collaborative effort will be made by TAWPC and others to provide workshops, seminars, or public meetings to keep the public informed of any new materials or changes in programs, or additions and changes to the overall CWPP.

Teton County is surrounded by public lands that are largely undeveloped and a source of untreated vegetative fuels. Teton community members have recently been impacted by unwanted wildfires which started on both public and private lands in the last 15 years. Many community partners and stakeholders are aware of the need and benefits consistent, collaborative and timely efforts in fire prevention can provide the community. Teton Interagency associates and fire partners coordinate fire

prevention efforts during summer fire season within Teton County, Grand Teton National Park and the Bridger-Teton National Forest. These efforts include website updates and fire information, fire danger rating signs, fixed fire prevention sign location messages, roving patrols in high emphasis areas, aerial detection flights, joint public service announcements and interagency fire prevention campaign development. Collaboration during community events, fairs, fund raisers, private home inspections, homeowner association meetings and interagency defensible space workshops have been used to educate the public on defensible space. Information is being provided to landowners on how they can reduce the threat from wildland fire to their home and property.

Collective and individual efforts among the partners provide education in fire prevention and fire ecology education with training in public and private schools, non-profit organizations, private citizens/landowners, the Greater Yellowstone Interagency Visitor Center, Grand Teton National Park concessionaires and local and visiting volunteer groups on year round bases.

## **Regulations**

Teton County has adopted a number of strategies to protect life and property from the effects of uncontrolled wildland fire. The promulgation, adoption and enforcement of codes and regulations are one such strategy. Jackson Hole Fire/EMS enforces the International Fire Code, the International Wildland-Urban Interface Code and the Teton County Fire Protection Resolution for New Subdivisions. Each code is intended to mitigate the risk of fire to property in slightly different ways.

These regulations influence the design of infrastructure and structures within interface areas. Codes address both the fire resistance of structures in the interface, as well as the ignitability of the structures. Those structures built or intended to be built within an extreme hazard area must rise to the highest level of interior and exterior protection. Furthermore, these codes allow the County to require that vegetation be managed in proximity to structures as well as across each subdivision.

The purpose of the Teton County Fire Protection Resolution for New Subdivisions is to ensure adequate emergency access/egress and a stable and adequate fire fighting water supply.

<http://www.tetonwyo.org/fire/docs/Prevention%20Docs/FireCodeResolution20130507.docx>

The purpose of the International Fire Code is to establish the minimum requirements necessary to provide a reasonable level of life safety and property protection from the hazards of fire, explosion and dangerous conditions in new and existing buildings, structures and premises and to provide safety to fire fighters and other emergency responders during emergency operations.

The purpose of the International Wildland –Urban Interface Code is to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels.

The current International Fire Code and International Wildland-Urban Interface Code version adopted by the Town of Jackson and Teton County are the 2012 versions. The Jackson Hole Fire/EMS Fire Prevention Bureau is responsible for Code Enforcement for the Town of Jackson and Teton County. The

National Park Service adopted the International Wildland-Urban Interface Code in 2006.

<http://publicecodes.cyberregs.com/icod/iwuic/IC-P-2012-000011.htm?bu2=IC-P-2012-000019>

To protect homes within the Wildland Urban Interface, whether homes are within a subdivision or not, fire department resources require access, good road surfaces, proper turning radius, grades that are not too steep, bridges that support emergency vehicle weight loads and are wide enough for those vehicles, turn-around areas for vehicles, overhead clearances, and driveways into private properties providing access features as well. Subdivisions are required, per Teton County Fire Protection Resolution for New Subdivisions 2012 Edition

(<http://www.tetonwyo.org/fire/docs/Prevention%20Docs/FireProtectionResolution20130507.pdf> ), to have fire protection water supply reflective to the number of houses to be included within the subdivision.

The fire code official establishes the maximum grade allowance based on the fire department's apparatus per the International Fire Code 2012 Edition (503.2.7). To maintain consistency throughout the county, the grade allowance for homes not within a subdivision, within or not within the Wildland Urban Interface, shall mirror the Teton County Fire Protection Resolution for New Subdivisions 2012 Edition. Compromised fire department access will delay and during seasonal events, may prevent emergency access, therefore requiring additional fire protection measures be taken for the structure.

### **Educational Tools and Programs**

The TAWPC group determined a uniform message was critical for public education. The NFPA Firewise Communities program, Ready, Set, GO! program, and tools produced by Wyoming State Forestry Division, University of Wyoming Extension Service, and Teton Interagency Fire were determined to be effective and easy to access education and outreach tools.

NFPA Firewise Communities:

<http://www.firewise.org/>

The Firewise Communities/USA Recognition Program is a process that empowers neighbors to work together in reducing their wildfire risk. The purpose of the program is not to say a community is "immune" or "resistant" to wildfire. The community that meets the criteria recognizes as a group that they are in an area that wildfires may have impacted or will impact in the future. The community is making efforts to educate its members and taking actions to mitigate its issues. The program has national and local tools for education and outreach.



### Ready, Set, GO!:

<http://www.wildlandfirersg.org/>

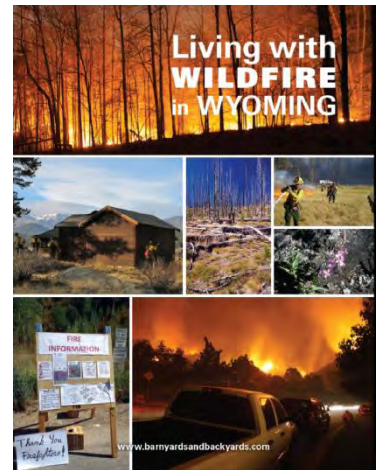


The Ready, Set, Go! (RSG) Program, managed by the International Association of Fire Chiefs (IAFC), seeks to develop and improve the dialogue between fire departments and the residents they serve. The program helps fire departments to teach individuals who live in high risk wildfire areas and the WUI how to best prepare themselves and their properties against fire threats. The RSG! Program tenets help residents be Ready with preparedness understanding, be Set with situational awareness when fire threatens, and to Go, acting early when a fire starts.

### UW Extension Wildfire Resources:

<http://www.uwyo.edu/barnbackyard/resources/wildfire.html>

University of Wyoming Extension and Barnyards and Backyards teamed up with wildfire preparedness agencies in Wyoming to generate several resources for private landowners that could be impacted by wildfires. The most useful resource available is the recent 2013 “Living with Wildfire in Wyoming” publication.



### Teton Interagency Fire – Education and Prevention Information:

[www.tetonfires.com](http://www.tetonfires.com) or <http://gacc.nifc.gov/egbc/dispatch/wy-tdc/education-prevention.html>

All entities and agencies conveying this fuels mitigation and wildfire preparedness information in Teton County will make every attempt to use this information and cooperate with Teton Area Wildfire Protection Coalition.

### Teton County Emergency Management:

<http://www.tetonwyo.org/em>

“Our mission is to minimize loss of life, personal injury, and damage to property and the environment from disasters, natural or manmade.” This site provides sign up information for Nixle text/email alerts.

### Jackson Hole Fire/EMS:

<http://www.tetonwyo.org/fire/>

“The mission of Jackson Hole Fire/EMS is the protection of life and property from the adverse effects of fires, medical emergencies and exposures to man-made and/or natural dangerous conditions.”

Town of Jackson Municipal Government:

<http://townofjackson.com/>

Additional tools are available through the International Society of Arboriculture (ISA) at <http://www.isa-arbor.com/>, as well as the Trees are Good site at <http://www.treesaregood.com/>

Finally, the Tree Care Industry Association has resources available at <http://tcia.org/>

### **Wildfire Mitigation Plans**

Available to private home and landowners in Teton County are written recommendations for, home ignition zone mitigation, hazardous fuels reduction prescriptions, and wildfire preparedness in a professionally prepared Wildfire Mitigation Plan. Plans are prepared by Jackson Hole Fire/EMS, Teton Conservation District and WSFD at the request of the landowner. Goals and objects, property description, recommendations and general “Firewise” related information is included in the plan.

Wildfire Mitigation Plans to individual property owners are encouraged address specific plant species, topography and the spatial arrangement of fuels across the local landscape in a written prescription.

### **Funding Opportunities**

Funding for wildfire mitigation and forest health improvement work is a challenge. With the absence of a wood products market most costs associated with wildfire mitigation and forest health activities are out of pocket expenses that the landowner or local governments have to cover. There are public funding options available through different agencies to offset some of the out of pocket expenses associated with management activities.

Funding opportunities are usually competitive and the trend is to offer funding for landscape scale projects that support collaboration across agencies, property boundaries, jurisdictions, and those projects that can leverage additional funding sources. Some grant programs require support for wood products or require a wood product be produced. There are several newer agency initiatives from the USDA Forest Service and the Natural Resources Conservation Service (NRCS) focused on these types of projects. Completion of the Teton County CWPP will aid in the opportunity for participation in landscape scale project initiatives. The CWPP process has enabled continued success of collaborative partnerships and strengthened working relationships.

Most funding opportunities require the applicant to pay for all the costs up front and then be reimbursed up to 50% of the eligible project costs. Some grants are a 50% match through either hard cash or in-kind work. Other opportunities include cost-share programs with limits for certain activities, such as a treatment cost per acre. All details are identified in the respective grant application packages.

Although some federal agencies may directly award money to applicants, most of the federal money is

awarded through the state forestry agency, Wyoming State Forestry Division. Grant funding from the USFS is awarded to the WSFD for sub-awarding to successful applicants. Other federal agencies including the Federal Emergency Management Agency (FEMA) provide money through Wyoming Homeland Security state office. Each grant program contains specifications that need to be met.

The WSFD federal grant programs include funding opportunities targeted for communities located in the WUI. Programs such as Western State Wildland Urban Interface (National Fire Plan) from the USFS have provided funding streams as cost-share for communities and landowners. Offered by the WSFD in partnership with the USDA Forest Service, the WSWUI Grant Program offers financial assistance for projects addressing three key issues: physical fuels reduction in high priority WUI areas through an establish cost-share program, planning for wildfire preparedness, and education/outreach efforts in the WUI. At the time of this revision, WSFD is working with Teton Conservation District to deliver this program to residents in Teton County.

<http://www.tetonconservation.org/programs/wildland-urban-interface-wui-grants.php>

In addition to the WSWUI federal grant program, WSFD offers the Community Assistance Funding on Adjacent Lands (CAFA) Grant from the USDA Forest Service Intermountain Region 4. CAFA offers financial assistance to treat adjacent non-Federal lands to protect communities when hazardous fuels reduction activities are planned on USDA Forest Service National Forest System (NFS) lands. Adjacent lands may be those that share a physical boundary with or are within proximity to show a clear risk. Timing between project initiation on NFS lands and non-federal lands should be planned to achieve benefits from proximity and treatment effectiveness. Project costs may include all costs allowable and necessary to plan and implement the projects on non-federal land only. Interested parties with proposals for the CAFA grant program should review the “Appendix B: Methodology for Determining Priority of New Fuels Projects Form” and then discuss them at the public Teton Area Wildfire Protection Coalition meetings and with Wyoming State Forestry Division.

As either the WSWUI or CAFA program become available through Wyoming State Forestry Division, information, applications and Requests for Proposals are available on the Fuels Mitigation Program website:

<https://sites.google.com/a/wyo.gov/wsfd-fire-information/fuels-mitigation>

The NRCS offers a variety of funding opportunities. These opportunities vary greatly by location, available funding in Wyoming, and applicants must meet several requirements such as agriculture production, annual income or revenue, and sometimes be willing to create easements.

<http://www.nrcs.usda.gov/wps/portal/nrcs/site/wy/home/>

The FEMA also offers grant opportunities at a national level. The most related program that can be used for hazardous fuels reduction and wildfire preparedness is the FEMA Pre-Disaster Mitigation Program. FEMA can award these projects directly to a county government or non-profit entity. Applicants must work with Wyoming Office of Homeland Security to apply.

<http://www.fema.gov/pre-disaster-mitigation-grant-program>

### **Evacuation Planning for Wildland Fire**

Teton County government and Jackson Hole Fire/EMS have created a “Teton County Fire Evacuation Plan”. The Teton County CWPP will refer to the document as a stand-alone source for specific information regarding evacuation. Any guidance and direction in regards to evacuation will be referenced by the existing “Teton County Fire Evacuation Plan”.

<http://www.tetonwyo.org/fire/docs/FireEvac%20EditforWebsite.pdf>

## **Conclusion**

### **Sustaining CWPP Efforts**

The CWPP process has resulted in a document which is both a plan and a tool, and is a comprehensive resource for the citizens and cooperating agencies of Teton County. Through the collaborative process many ideas were captured during community meetings. The Teton County CWPP identifies solutions to try to overcome the obstacles facing the residents of Teton County.

Implementing and sustaining the CWPP is the key to its success. The CWPP process encourages citizens to take an active role as fuel treatment strategies continue to be developed and prioritized. Maintaining the momentum created by this process is critical to successful implementation and ongoing efforts. All cooperating agencies are committed to supporting fire protection and emergency services within the County and surrounding areas. It is important that the County continue to provide support in maintaining hazard assessment information and emergency management coordination. Stakeholders will implement recommended actions by working with fire authorities, community organizations, private landowners, and public agencies.

Building these partnerships is necessary in identifying and prioritizing measures to reduce wildfire hazards. Maintaining this cooperation is a long-term effort that requires the commitment of all parties involved. It is crucial that citizens take an active role in identifying needs, developing strategies, and implementing solutions to address hazards, and participating in fire prevention and mitigation activities.

### **Monitoring and Evaluation**

As wildfire hazard reduction efforts continue to be implemented over time, and the characteristics of WUI zones change, neighborhoods should reassess and update the findings of the CWPP. All CWPPs are meant to be living documents that change in response to the changing conditions, values, and needs of the communities. With these changes, action items may be reprioritized or added. Cooperating agencies to this document and communities should be responsible for periodic CWPP monitoring and evaluation. This can be accomplished through regular meetings, public involvement, coordination with other County partners and stakeholders. Evaluation can include analysis of the effectiveness of past mitigation projects as well as recent wildfire suppression efforts, if applicable. This ongoing effort helps determine whether the CWPP goals and objectives are being met. Ultimately, the large majority of the responsibility lies with the community and individual private home and landowners. It is in the best interest of these local stakeholders to follow through and help implement the CWPP for the benefit to their communities.

### **Updating**

The Teton County CWPP is a living document, and like all CWPPs needs to be reviewed annually and updated as needed. The plan will be updated with stakeholder input and core team approval. Any updates will be changed to digital copies stored on agency and public websites as soon as possible.

### **Plan Review and Approval**

The 2003 Healthy Forest Restoration Act of 2003 requires that the CWPP be formally adopted by the Core Team and signed by the agency representatives indicated on the signature page. The final draft of



the revision was presented to the revision Core Team for comment before signing. The core team has also ensured that the plan meets the Healthy Forest Restoration Act of 2003 prior to final signing by State and County officials required to sign the plan.

Signatures indicate approval of the contents and guidance of this Teton County Community Wildfire Protection Plan.

## **Glossary**

**American Recovery and Reinvestment Act of 2009 (ARRA):** The Recovery Act -- commonly referred to as the "stimulus package" was passed by Congress and signed into law by President Obama in 2009 to jump-start the economy and to create and save jobs. The Act specifies appropriations for a wide range of federal programs, and increased or extended certain entitlement programs. The legislation also provided tax credits for individuals and businesses.

**Community Wildfire Protection Plan (CWPP):** CWPPs can take a variety of forms, based on the needs of people involved in their development. CWPPs may address issues such as 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. It also can lead community members through valuable discussions regarding management options and implications for the surrounding watershed. The language in HFRA provides maximum flexibility for communities to determine the substance and detail of their plans and the procedures they use to develop them.

**Crown Fire Activity (CFA):** A crown fire is a forest fire that spreads along treetops

**Federal Annual Operating Plan (AOP):** A document describing the coordination of fire management activities amongst cooperators.

**Federal Register:** The Office of the Federal Register informs citizens of their rights and obligations, documents the actions of Federal agencies, and provides a forum for public participation in the democratic process.

**Firewise:** NFPA's Firewise Communities Program is intended to serve as a resource for agencies, tribes, organizations, fire departments, communities and residents across the United States who are working toward a common goal: reduce the loss of lives, properties, and resources to wildland fire by building and maintaining communities in a way that is compatible with our natural surroundings.

The Firewise Communities approach emphasizes community responsibility for planning in the design of a safe community as well as effective emergency response, and individual responsibility for safer home construction and design, landscaping and maintenance.

**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. Fuels treatments achieve site-specific fire and resource management objectives under approved land use plans and with full compliance to NEPA and other regulatory statutes.

**International Association of Fire Chiefs:** The International Association of Fire Chiefs represents the leadership of firefighters and emergency responders worldwide; our members are the world's leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public safety policy. Since 1873, the IAFC has provided a forum

for fire and emergency service leaders to exchange ideas, develop professionally and uncover the latest products and services available to first responders.

**International Fire Code:** 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:** Contains provisions addressing fire spread, accessibility, defensible space, water supply and more for buildings constructed near wildland areas.

**National Cohesive Wildland Fire Management Strategy:** In response to requirements of the Federal Land Assistance, Management, and Enhancement (FLAME) Act of 2009, the Wildland Fire Leadership Council (WFLC) directed the development of the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy).

The Cohesive Strategy is a collaborative process with active involvement of all levels of government and non-governmental organizations, as well as the public, to seek national, all-lands solutions to wildland fire management issues.

The Cohesive Strategy is being implemented in three phases, allowing stakeholders to systematically develop a dynamic approach to planning for, responding to, and recovering from wildland fire incidents. This phased approach is designed to promote dialogue between national, regional and local leadership.

**Healthy Forests Restoration Act (HFRA):** On December 3, 2003, President Bush signed the historic and bipartisan Healthy Forests Restoration Act into law. The Healthy Forests Restoration Act is the central legislative component of the Healthy Forests Initiative.

The legislation contains a variety of provisions aimed at expediting the preparation and implementation of hazardous fuels reduction projects on federal land and assisting rural communities, States and landowners in restoring healthy forest and watershed conditions on state, private and tribal lands. It also authorizes large-scale silvicultural research, the acquisition of conservation easements and the establishment of monitoring and early warning systems for insect and disease outbreaks.

**National Environmental Policy Act (NEPA):** NEPA is the basic national law for protection of the environment, passed by Congress in 1969. It sets policy and procedures for environmental protection, and authorizes Environmental Impact Statements and Environmental Assessments to be used as analytical tools to help federal managers make land management decisions.

**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 all courses in the National Fire Curriculum.

National Fire Danger Rating System: A uniform fire danger rating system that focuses on the environmental factors that control the moisture content of fuels.

National Fire Plan: The National Fire Plan (NFP) was developed in August 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires while ensuring sufficient firefighting capacity for the future. The NFP provides technical, financial, and resource guidance and support for wildland fire management across the United States. The Department of Agriculture (USDA) and the Department of Interior work together to implement the five key points addressed by the NFP: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

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

Remote Automated Weather Station (RAWS): There are nearly 1,500 interagency Remote Automated Weather Stations (RAWS) strategically located throughout the United States. Weather data assists land management agencies with monitoring air quality, rating fire danger, and providing information for research applications. Most of the stations owned by the wildland fire agencies are located where they can monitor fire danger. RAWS units collect, store, and forward data to a computer system at the National Interagency Fire Center (NIFC) in Boise, Idaho. Fire managers use RAWS data to predict fire behavior and monitor fuels; resource managers also use data to monitor environmental conditions.

TAWPC: Teton Area Wildfire Protection Coalition

Teton County Fire Protection Resolution: A Resolution formally known as the Teton County Fire Protection Resolution For New Subdivisions.

It is the purpose of this Resolution that, through the application of the County's authority to review and approve residential and commercial subdivisions and planned unit developments, adequate fire protection measures be required in all such developments in order to protect the public health, safety and welfare. This purpose shall be achieved through the implementation of the fire protection provisions of this Resolution in the form of fire department access design; fire lane design; adequate year round water supply; sprinkler provisions; plan review submittal; and fire resistive roof coverings and building materials for all residential subdivisions, all commercial subdivisions, and all residential subdivisions or planned unit developments with commercial areas. It is further the purpose of this Resolution that all provisions herein be subject to Fire Department review and approval prior to installation.

## **References**

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[http://www.jacksonholechamber.com/jackson\\_hole\\_wyoming/jacksons-history.php](http://www.jacksonholechamber.com/jackson_hole_wyoming/jacksons-history.php)

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Society of American Foresters, March 2004. **Preparing a Community Wildfire Protection Plan, A handbook for Wildland-Urban Interface Communities.** 12 p.

Western Governors Association, et al. August 2011. **Community Guide to Preparing and Implementing a Community Wildfire Protection Plan.** 26 p.

## **Appendices**

**Appendix A: Maps**

**Appendix B: Methodology for Determining Priority of New Fuels Projects Form**

**Appendix C: Home Ignition Zone Assessment and Inspection Forms**

**Appendix D: Links**

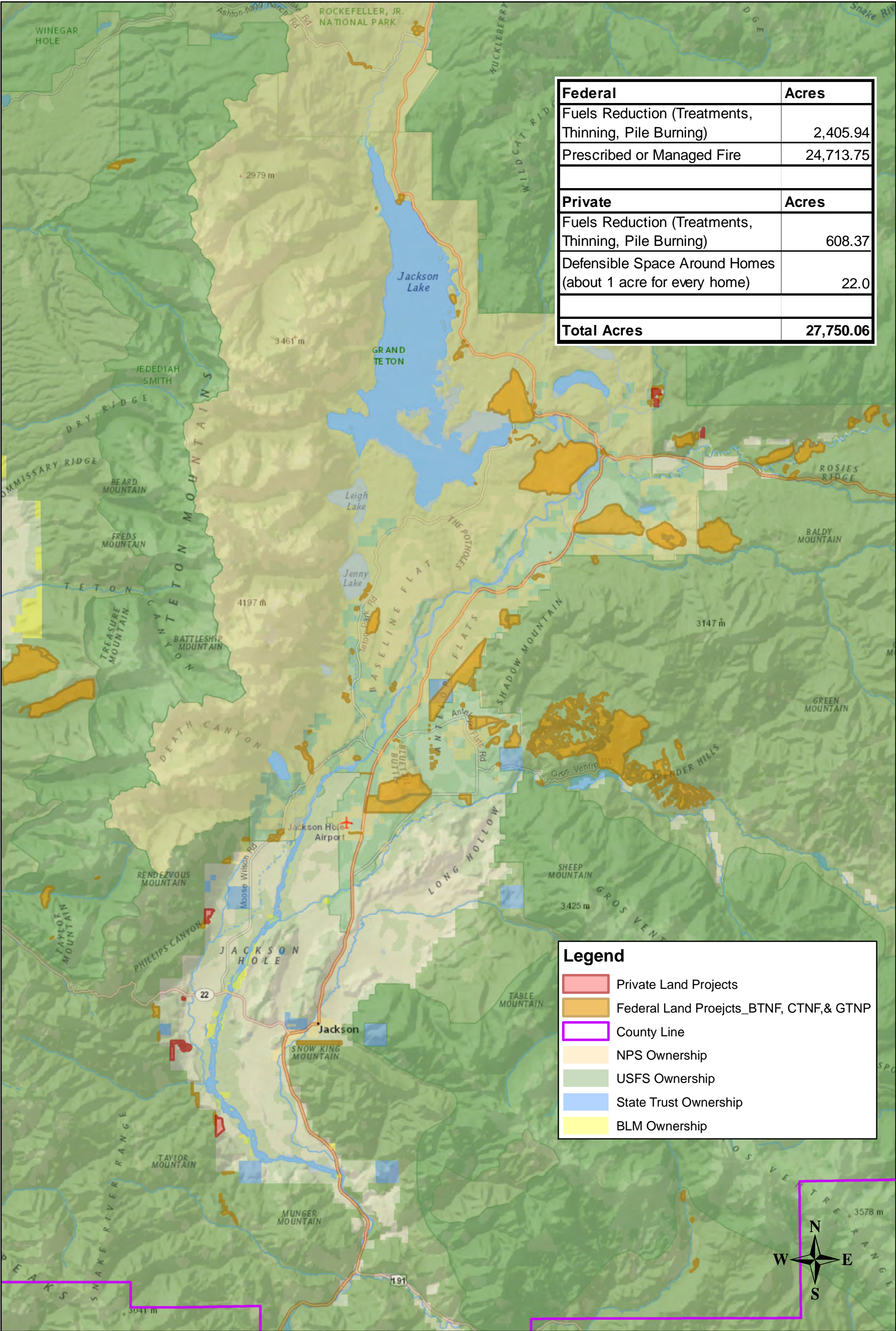
## **Appendix A:**

### **Maps**



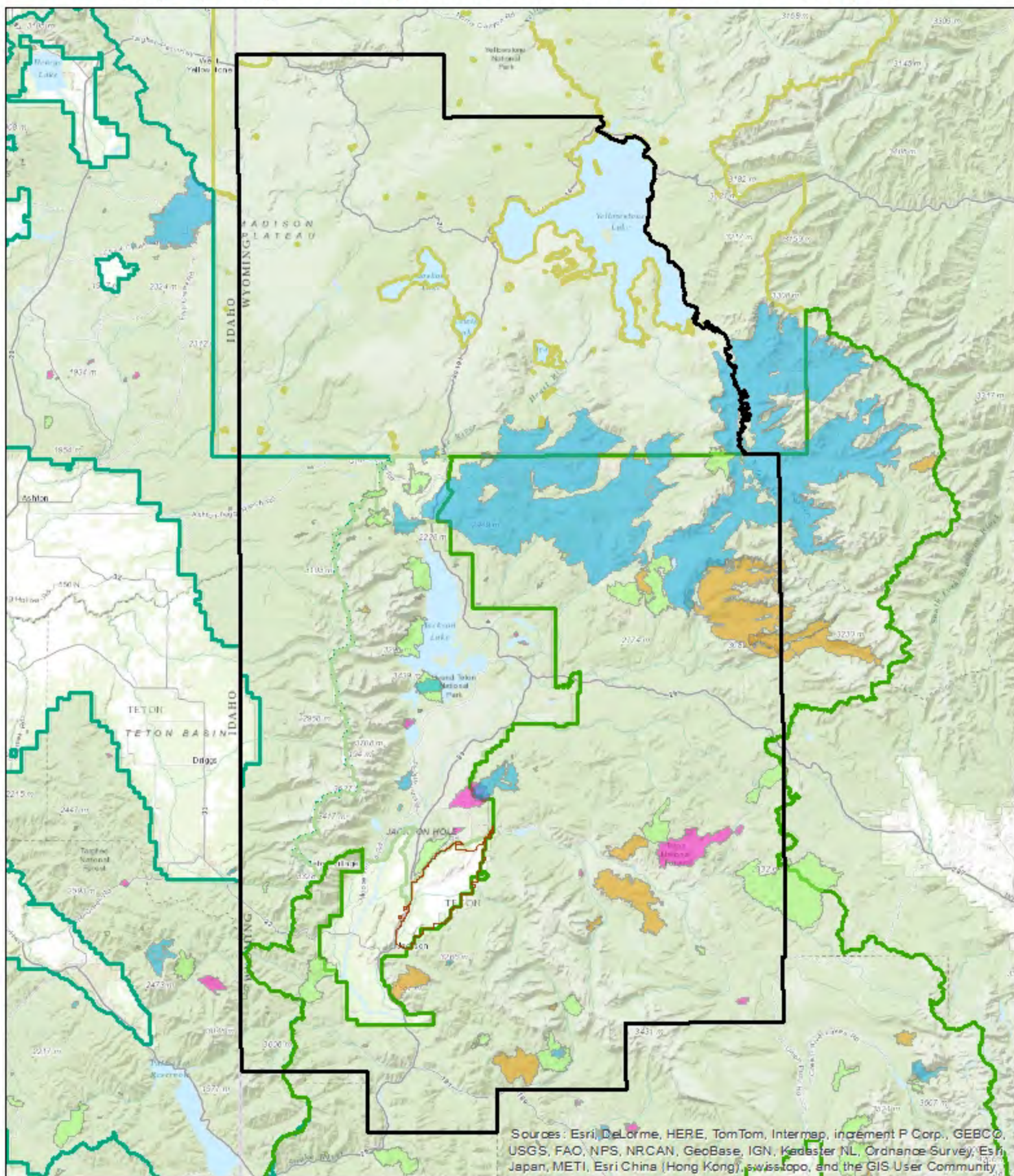


# Teton County Completed Fuels Reduction Projects 1999 to 2014





# Teton County Wyoming Community Wildfire Protection Plan 2014: Fire History 1980-2013



0 5 10 20 Miles

## Legend



Teton County, WY

## Large fire history

Decade



2010



2000



1990



1980



National Elk Refuge



Bridger-Teton National Forest



Grand Teton National Park



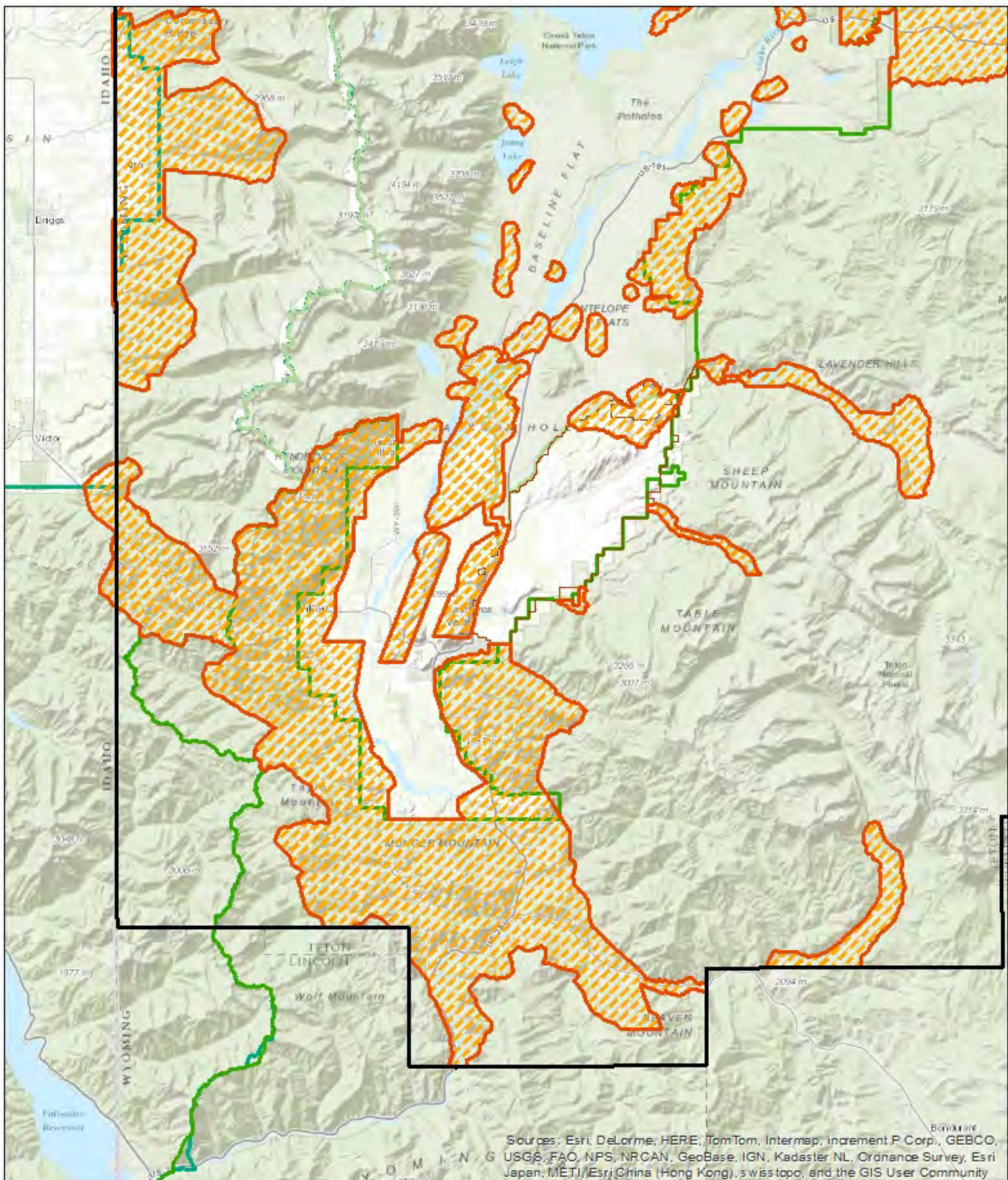
Caribou-Targhee National Forest



Yellowstone National Park



# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014

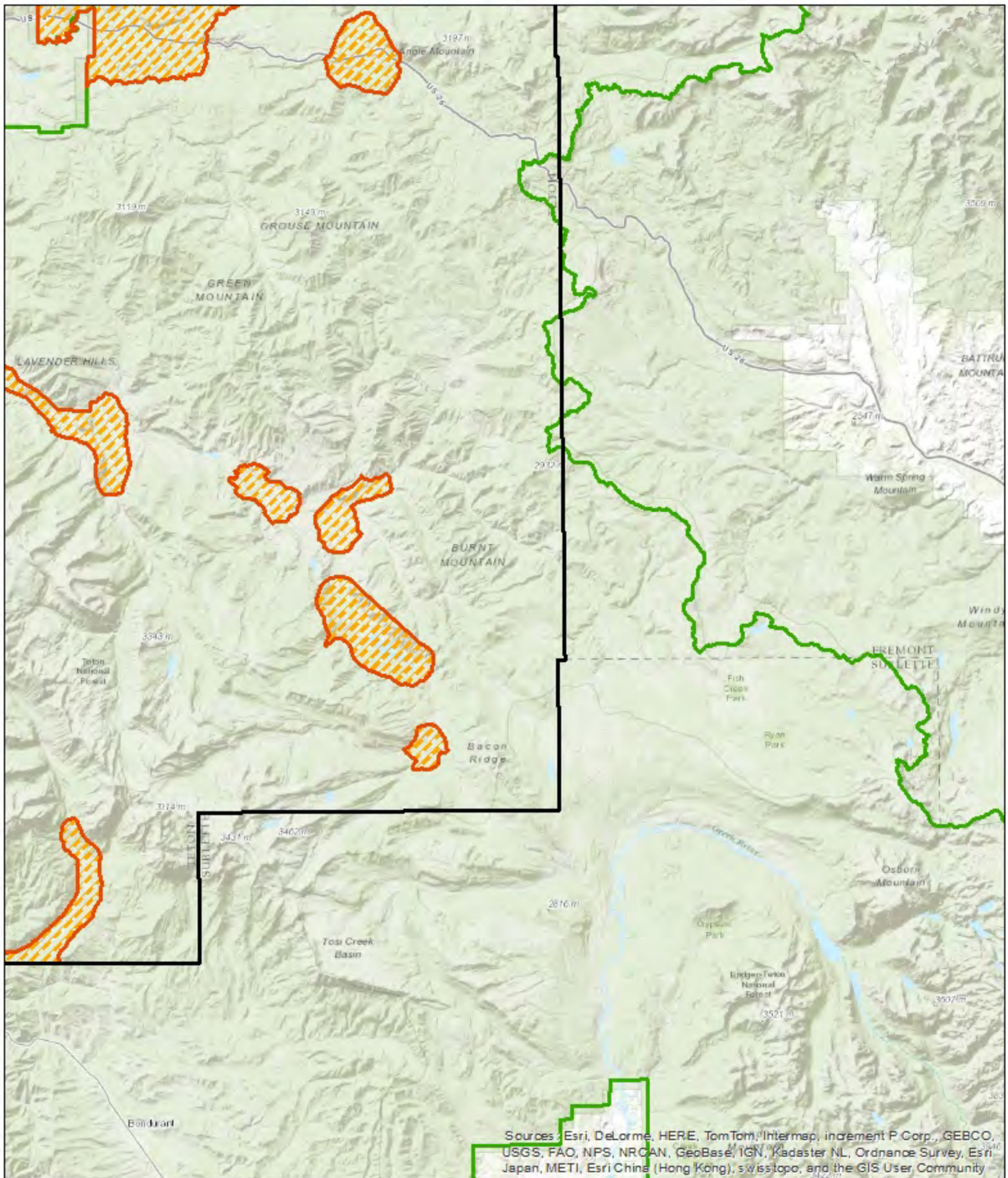


## Legend

	Teton County, WY		National Elk Refuge
	Teton County proposed WUI		Bridger-Teton National Forest
			Grand Teton National Park
			Caribou-Targhee National Forest
			Yellowstone National Park



# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014



0 3 6 12 Miles



## Legend



Teton County, WY

Teton County proposed WUI



National Elk Refuge

Bridger-Teton National Forest

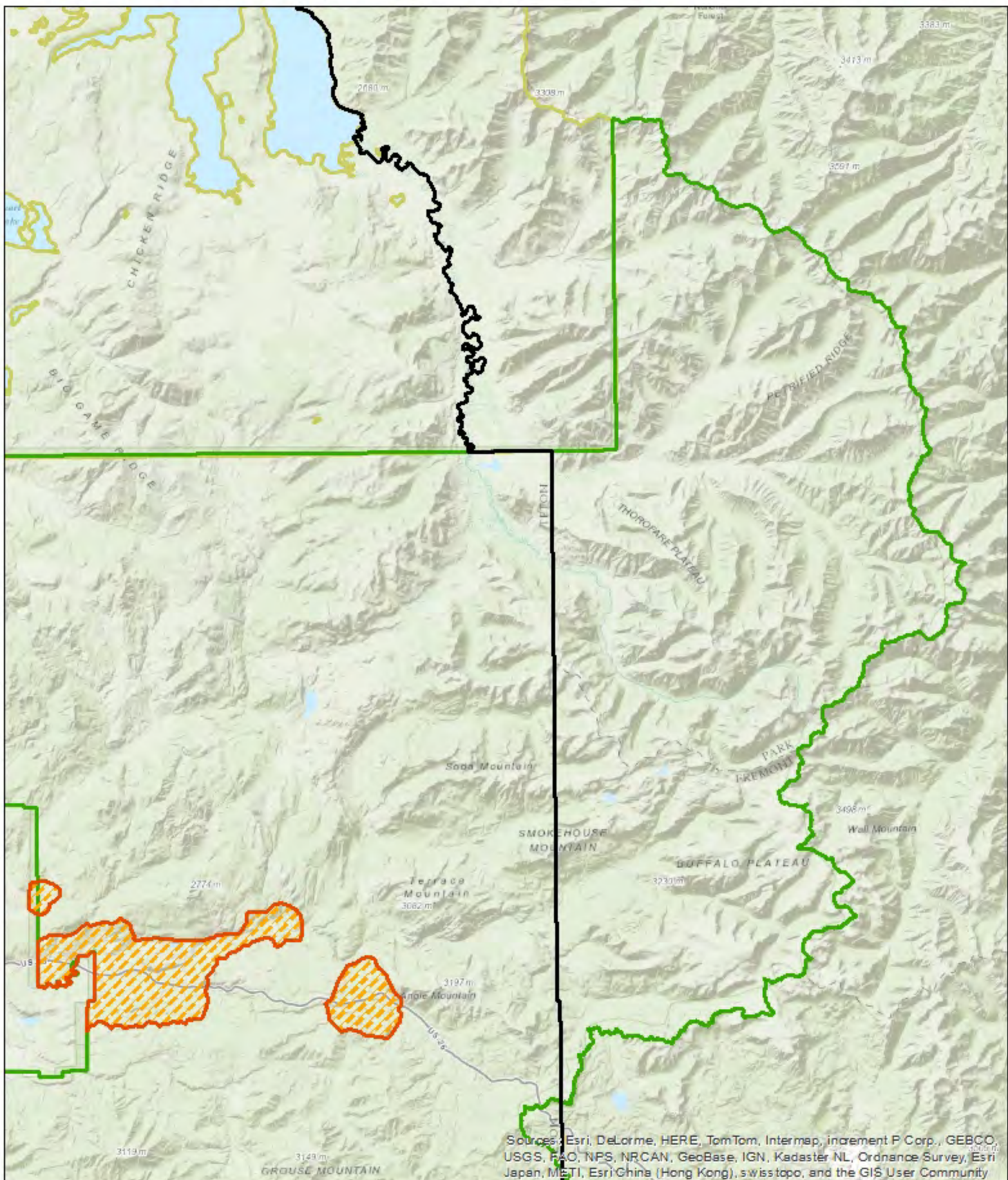
Grand Teton National Park

Caribou-Targhee National Forest

Yellowstone National Park



# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014



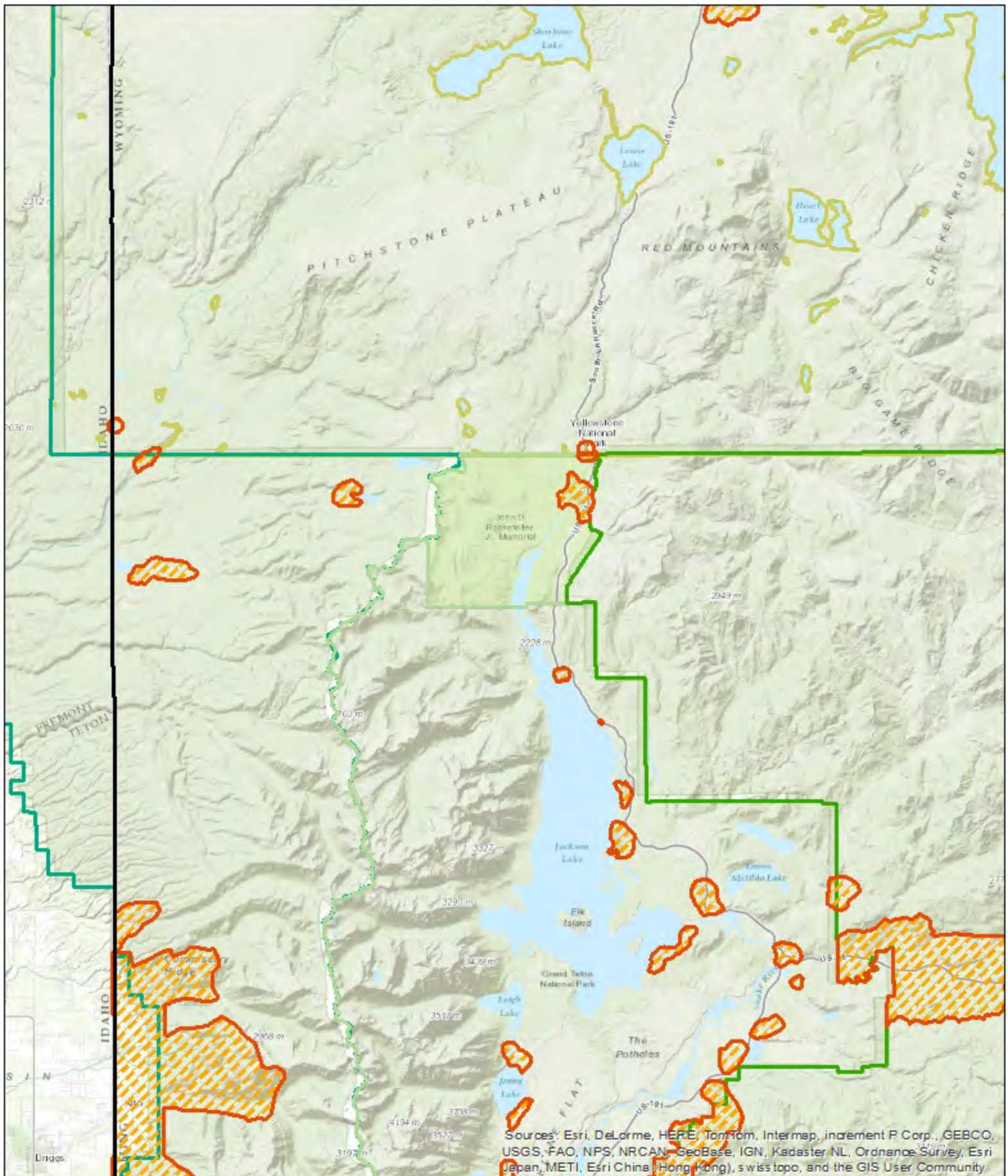
Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

## Legend

	Teton County, WY		National Elk Refuge
	Teton County proposed WUI		Bridger-Teton National Forest
			Grand Teton National Park
			Caribou-Targhee National Forest
			Yellowstone National Park

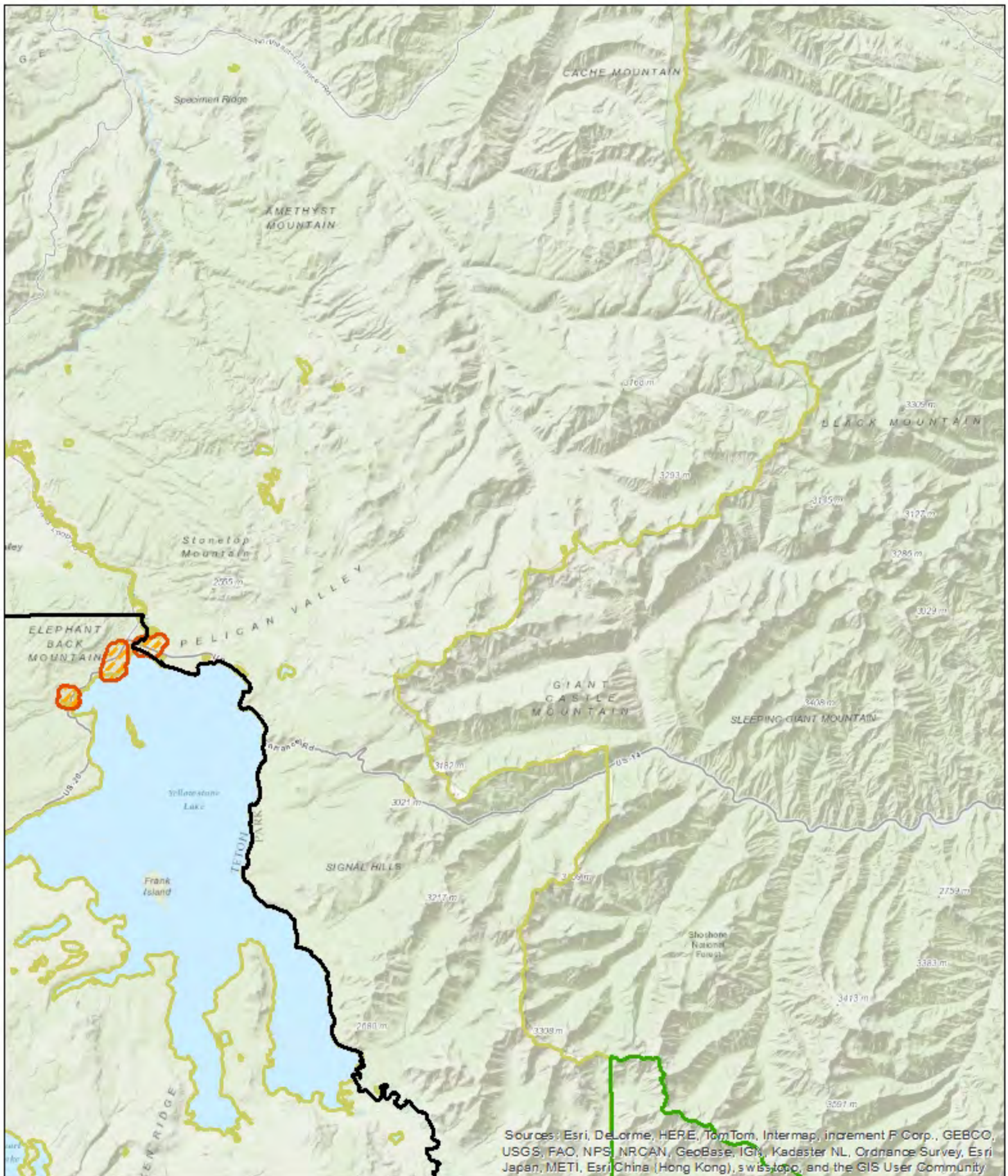


# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014





# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014



0 3 6 12 Miles



## Legend



Teton County, WY

Teton County proposed WUI



National Elk Refuge

Bridger-Teton National Forest

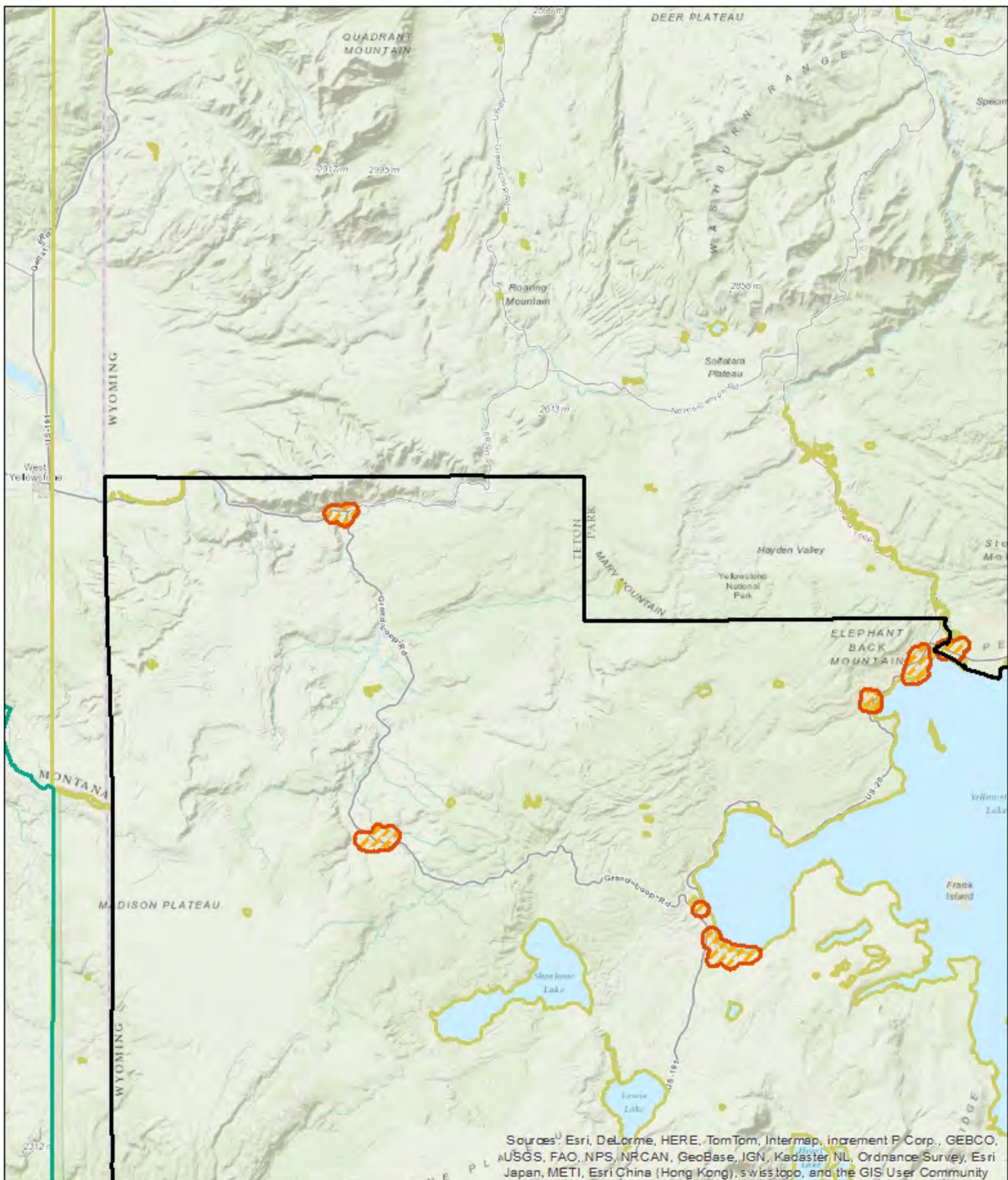
Grand Teton National Park

Caribou-Targhee National Forest

Yellowstone National Park



# Teton County Wyoming Community Wildfire Protection Plan Proposed Wildland Urban Interface (WUI) 2014

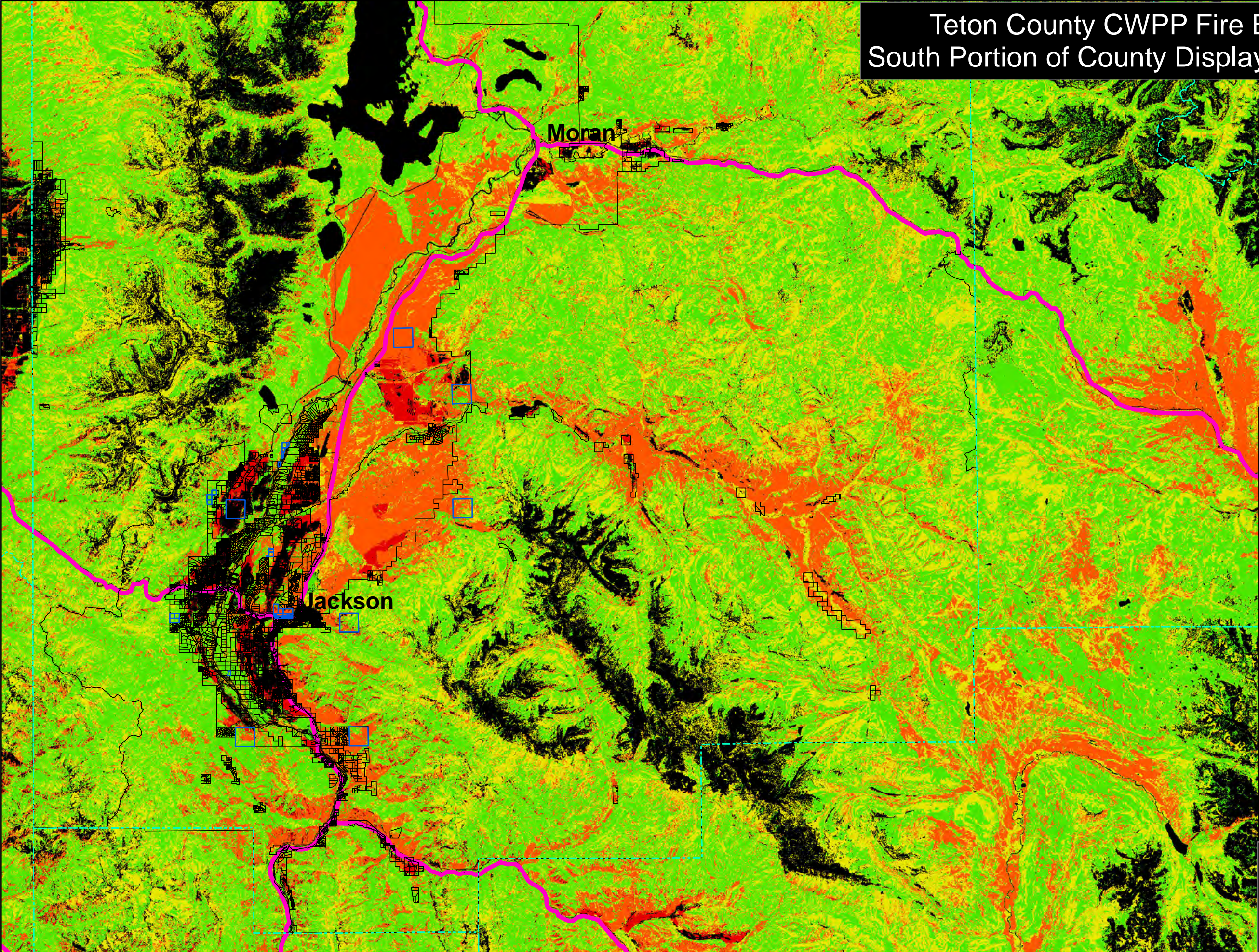


Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swiss topo, and the GIS User Community



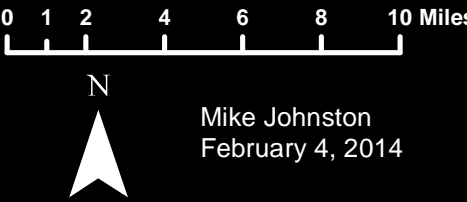


Teton County CWPP Fire Behavior Maps  
South Portion of County Displaying Rate of Spread



- Legend**
- County Boundary
  - State Land
  - Teton CO Parcel Data

- Highway
- Rate of Spread**  
**Chains Per Hour**
- Unburnable
  - 0 - 5
  - 5 - 20
  - 20 - 40
  - 40 - 80
  - 80+

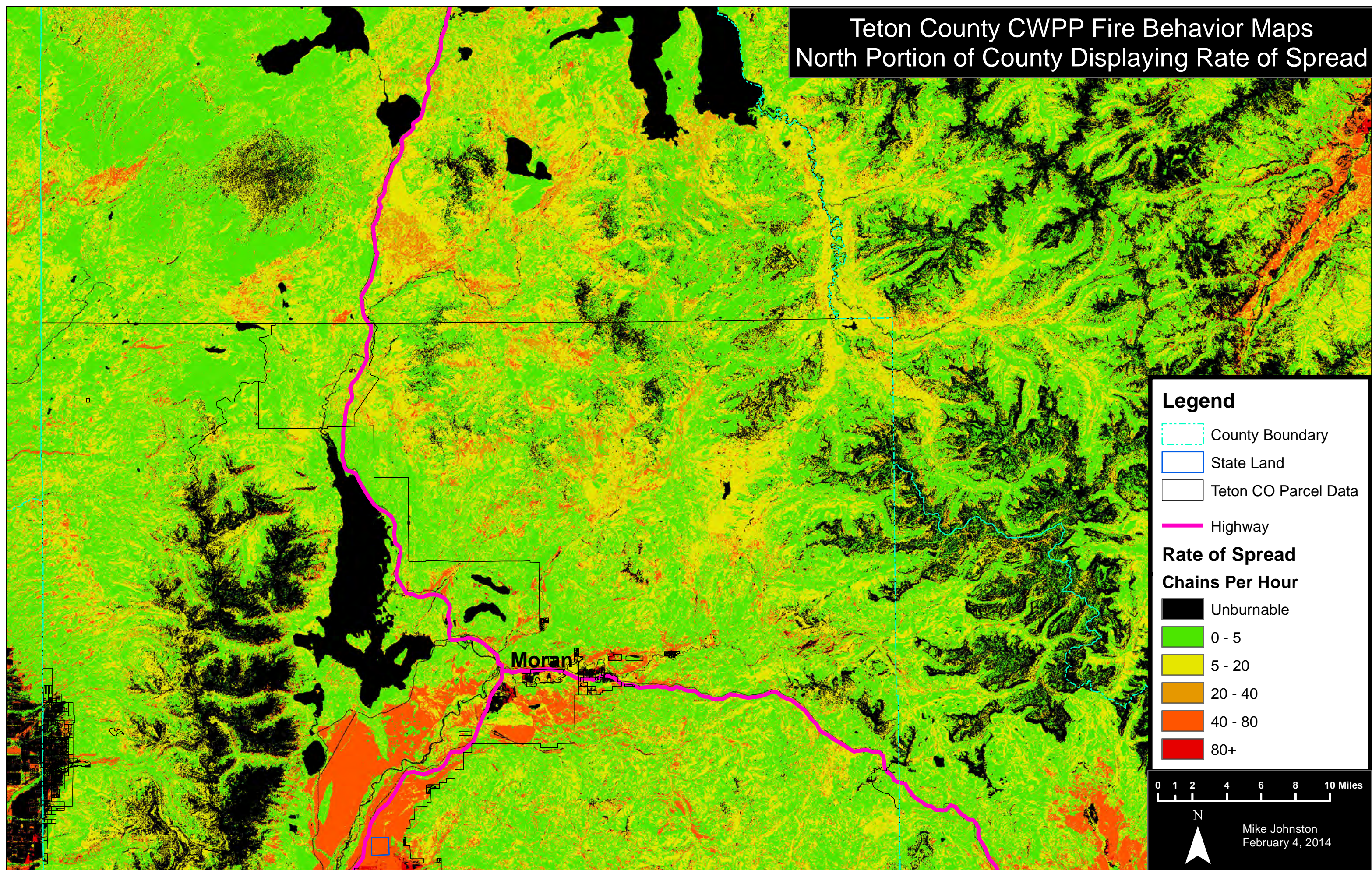


Mike Johnston  
February 4, 2014



# Teton County CWPP Fire Behavior Maps

## North Portion of County Displaying Rate of Spread



**Legend**

- County Boundary
- State Land
- Teton CO Parcel Data
- Highway

**Rate of Spread**  
**Chains Per Hour**

- Unburnable
- 0 - 5
- 5 - 20
- 20 - 40
- 40 - 80
- 80+

0 1 2 4 6 8 10 Miles

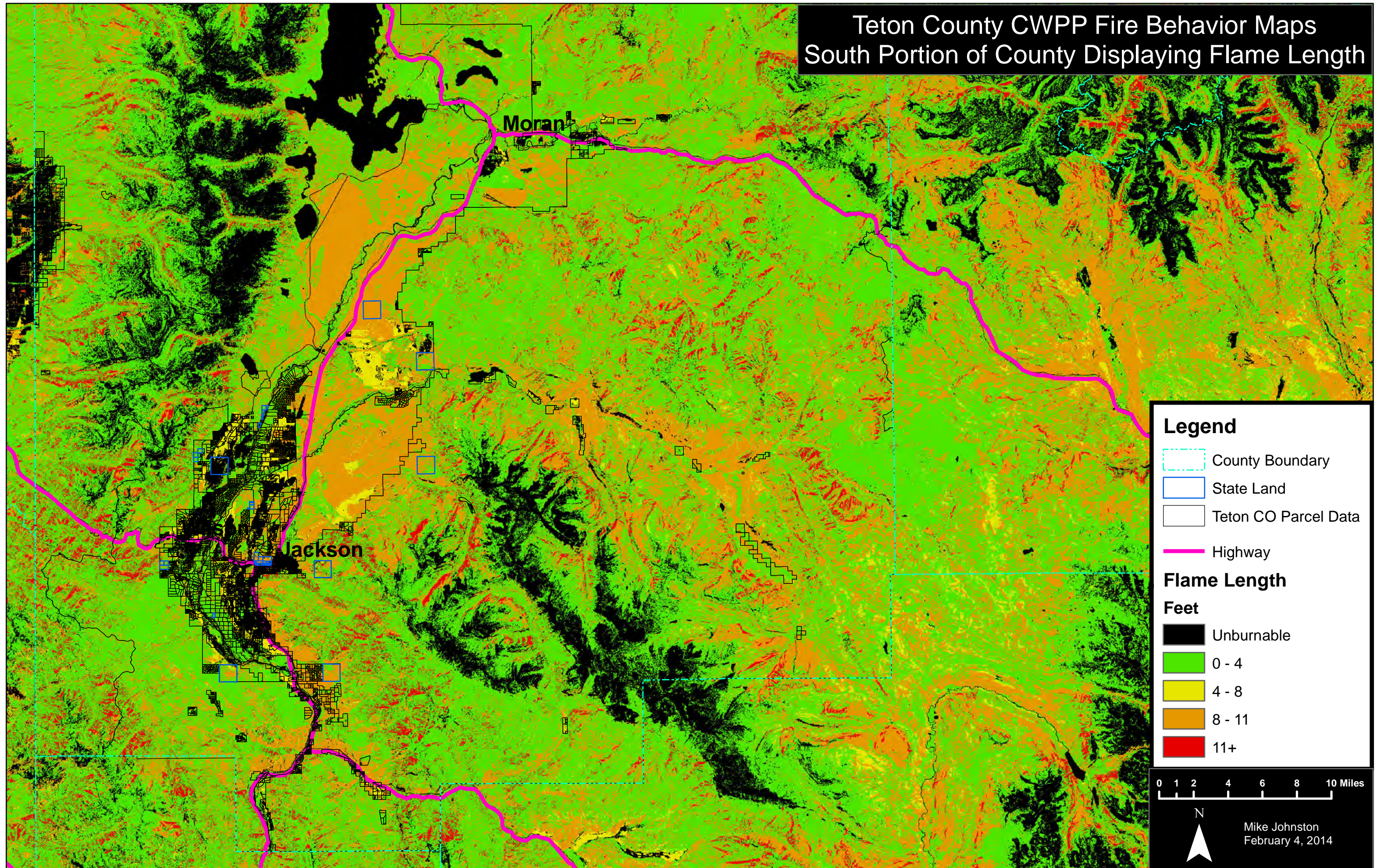
N

Mike Johnston  
February 4, 2014



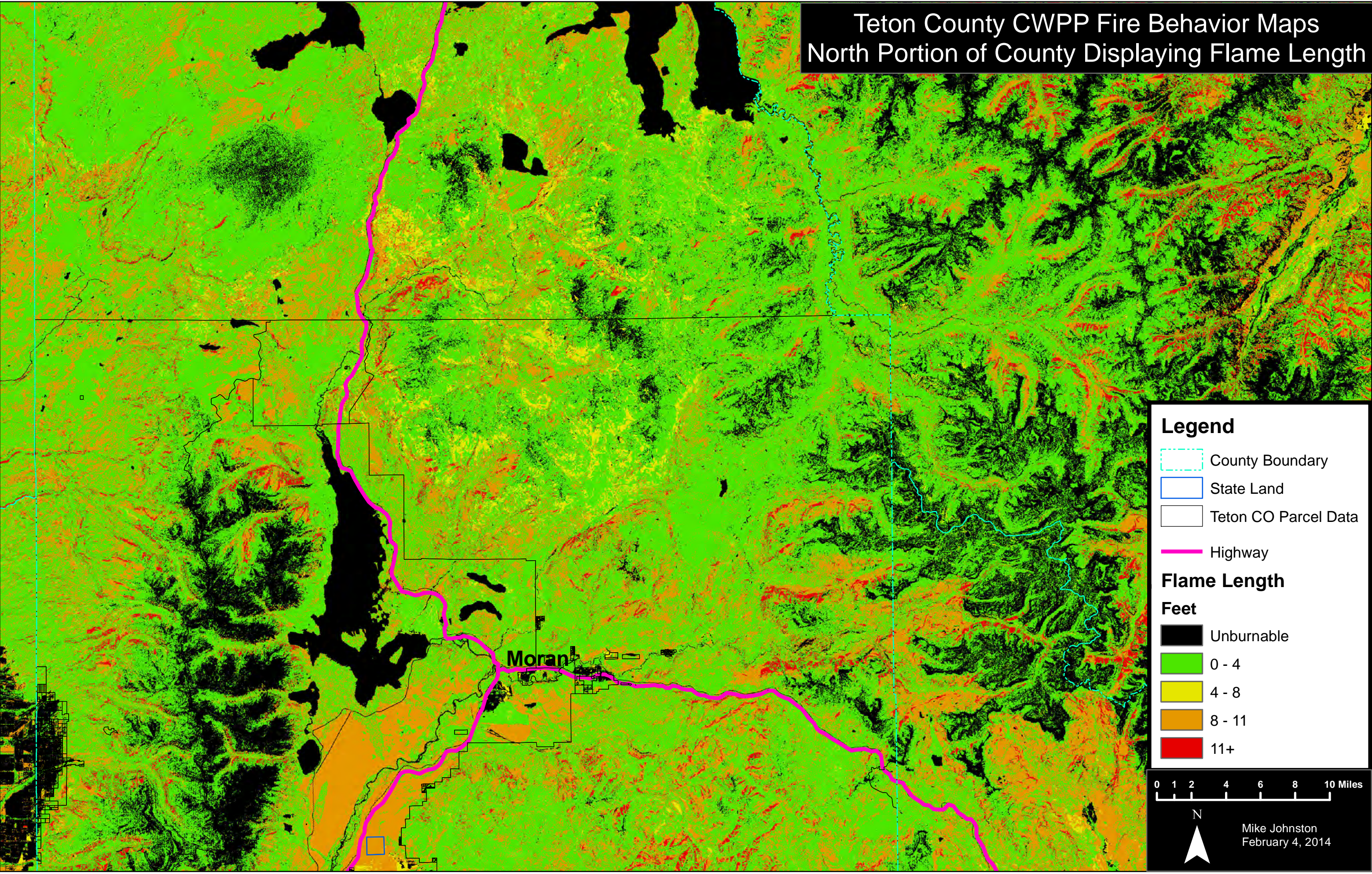
# Teton County CWPP Fire Behavior Maps

## South Portion of County Displaying Flame Length





Teton County CWPP Fire Behavior Maps  
North Portion of County Displaying Flame Length



- Legend**
- County Boundary
  - State Land
  - Teton CO Parcel Data

Highway

**Flame Length**

- Feet**
- Unburnable
  - 0 - 4
  - 4 - 8
  - 8 - 11
  - 11+

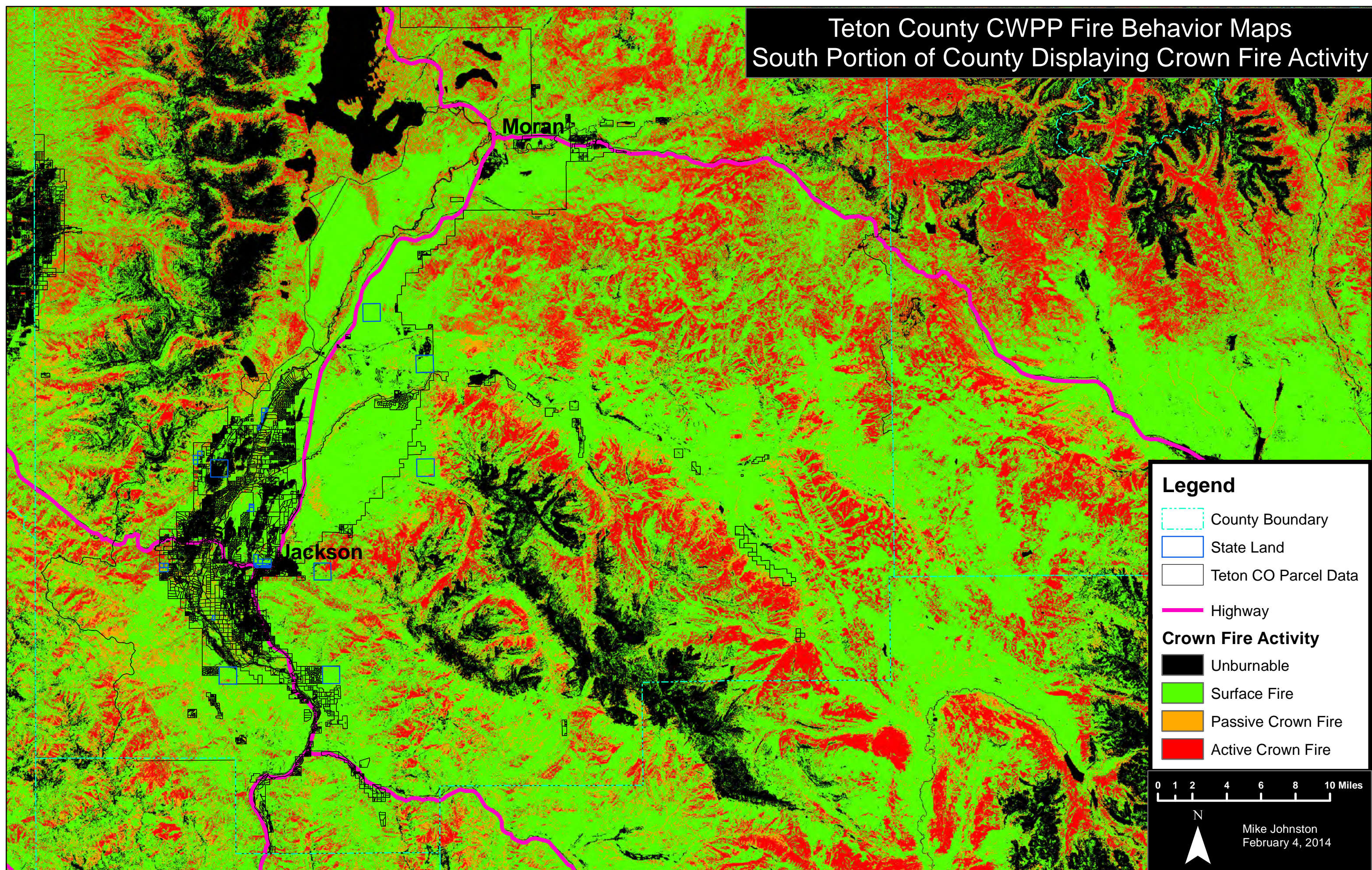
0 1 2 4 6 8 10 Miles



Mike Johnston  
February 4, 2014



Teton County CWPP Fire Behavior Maps  
South Portion of County Displaying Crown Fire Activity



**Legend**

- County Boundary
- State Land
- Teton CO Parcel Data
- Highway

**Crown Fire Activity**

- Unburnable
- Surface Fire
- Passive Crown Fire
- Active Crown Fire

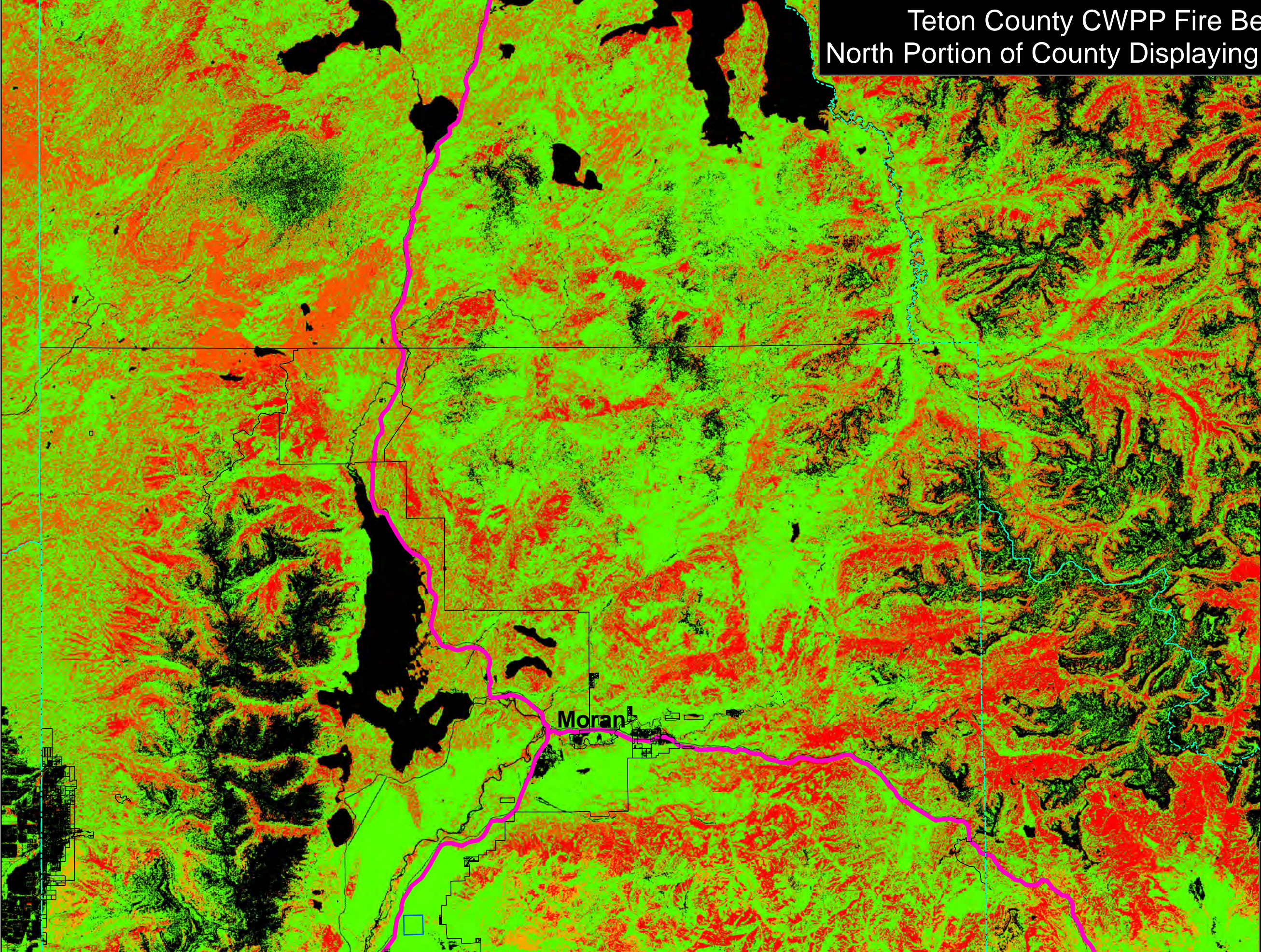
0 1 2 4 6 8 10 Miles

N

Mike Johnston  
February 4, 2014



Teton County CWPP Fire Behavior Maps  
North Portion of County Displaying Crown Fire Activity



**Legend**

- County Boundary
- State Land
- Teton CO Parcel Data
- Highway

**Crown Fire Activity**

- Unburnable
- Surface Fire
- Passive Crown Fire
- Active Crown Fire

0 1 2 4 6 8 10 Miles

N

Mike Johnston  
February 4, 2014



## **Appendix B:**

### **Methodology for Determining Priority of New Fuels Projects Form**

## Methodology for Determining Priority of New Fuels Projects

#	Questions:	Determination	Notes
1.	Does the project reside within Teton County's mapped WUI as defined by the CWPP? If not, will the project reduce hazardous fuels near a value that meets Teton County's WUI definition as defined by the CWPP? If yes to either question then proceed to the next question for private land projects. If no, consider redesigning the project to align with the CWPP.		
2.	Does the project align with priorities set forth within the CWPP? If yes then proceed to the next question.		
3.	For NFP Hazardous Fuels grants applications, match requirements will need to be met. Yes or No? Yes go to Question # 5, no to next question.		
4.	For Community Protection Program Grant, the project must be planned in conjunction with US Forest Service programs, projects and staff necessary to meet the grant program requirements. Yes or No? Yes, proceed. If no, STOP and consider another grant opportunity.		
5.	Fuels assessment question – Is the hazard high, moderate or low? (Consider potential Flame lengths, crown fire activity and ROS collectively. See Fire Behavior maps in Appendix A of the CWPP)		
6.	Will the project have multijurisdictional benefits that help to meet landscape scale fuels management goals?		
7.	Structure assessment question – Is the hazard high, moderate or low?		
8.	Will the project benefit a single entity or several; high (more than 10 or a whole subdivision) moderate (2 – 10 structures) low (1 structure)?		
9.	Does the project leverage matching funds from multiple entities to reduce cost per-acre costs?		
10.	Does the project have built benefits to help the local economy? Low, Moderate or High.		
11.	Does the project proposal have sufficient mitigation measures in place to reduce adverse effects to resource values (Wildlife and fishery Habitat, scenery, special areas such as wildernesses, etc.)?		
12.	Are there any controversial issues being brought forward from any TAWPC representatives that warrant consideration before approving the project? (Jurisdictional concerns, resource concerns including impacts to wildernesses, wildlife habitat, etc.)		
13.	Does the TAWPC group move to recommend the project by consensus?		
<b>*Questions 1 - 4 are screenings questions</b>			
<b>**Info gained from Questions 5 - 13 are used to determine project prioritization.</b>			
This form is to be used for all Teton County fuels projects seeking grant opportunities. This form could also be used to facilitate discussions when reviewing any other fuels projects as well.			



## **Appendix C:**

### **Home Ignition Zone Assessment and Inspection Forms**

## HOME IGNITION ZONE ASSESSMENT MITIGATION GUIDE

Date of Assessment: \_\_\_\_\_ Property Address: \_\_\_\_\_ Resident Name: \_\_\_\_\_ Property Owner: \_\_\_\_\_

	ASSESSMENT ITEMS	MITIGATION RECOMMENDATIONS
<b>1.</b>	<b>OVERVIEW OF SURROUNDINGS:</b>	
	How is the structure positioned in relationship to severe fire behavior?	
	Type of Construction	
<b>2.</b>	<b>CHIMNEY TO EAVES:</b>	
	Inspect the roof – noncombustible? Shingles missing? Shingles flat with no gaps?	
	Gutters – present? Noncombustible?	
	Litter on roof, in gutters and crevices:	

<b>3.</b>	<b>EAVES TO FOUNDATION:</b>	
	Attic, eave, soffit vents, and crawl spaces:	
	Inspect windows and screens – metal screens? Multi-paned windows? Pictures windows facing vegetation?	
	Walls and attachments: noncombustible? Will they collect litter?	
	Decks (combustible materials?)	
	Fences:	
	Flammable material next to or under the structure:	
	Combustible materials near or on the structure where walls meet roof or decking surfaces:	
	Crawl space, attic vents, soffits:	
	Nooks and crannies and other small spaces: All appear to be in excellent condition and protected.	
<b>4.</b>	<b>FOUNDATION TO IMMEDIATE LANDSCAPED AREA:</b>	

	Landscaped (Managed) vegetation – separation distances, maintenance, plan selection; Firewise landscaping zones?		
	Propane Tanks:		
	Vehicle and RV use and parking, including lawn mowers, etc.:		
5.	<b>IMMEDIATE LANDSCAPED AREA EXTENT OF THE HOME IGNITION ZONE:</b>		
	Inspect vegetation clearance and crown separation:		

**JH Fire/EMS****WILDLAND URBAN INTERFACE STRUCTURE ASSESSMENT - 2013**

Date: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Contact Mailing Address: \_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

Owner:            Y                      N      Was Homeowner Present?                      Y                      N

If No, what is relation? \_\_\_\_\_

Lot Acreage : \_\_\_\_\_ acres

**Overview of Surroundings**

Pick One {	Topography affecting fire behavior 0-5 pts	
	History of high fire occurrence 0-5 pts	3
	Unusually severe weather and dry winds 0-5 pts.	3
	Local weather and prevailing winds 0-5 pts	3
	Separation of structure on adjacent property as fuels 0-5	
	Light vegetation 5 pts	
	Medium - light brush and trees 10 pts	
	Heavy fuel type 15 pts	
	Slash fuel type 15 pts	
	Building setback from slope >30 ft-1pt <30ft-5 pts	
	Utilities 1 underground, 1 above-3pts both above- 5pts	
	<b>Total</b>	

Slight      Moderate      Significant      Severe

**Chimney to Eaves**

Nonrated roof 50 pts	
Ventilation Soffits w/o metal mesh or screening- 20 pts	
Gutters combustible? - 5 pts	
Litter/debris on roof in gutters                      Y                      N	
<b>Total</b>	

Slight      Moderate      Significant      Severe

**Building Construction**

Fire resistive siding and deck	<b>low</b>
Ignition resistive siding, combustible deck	<b>medium</b>
Combustible siding and deck	<b>high</b>

**Foundation to immediate landscaped area (within 30 ft of structure)**

Pick One {	Separation of structures < 30 ft - 5 pts	
	Light fuels- grasses 15 pts	
	Medium brush small trees- 20 pts	
	Heavy dense brush, timber 25 pts	
	Slash 30 pts	
	Slope 5-9 % 1 pt	
	Slope 10-20% 4 pts	

Pick One	Slope 21-30%-7 pts	
	Slope 31- 40 %- 10 pts	
	Slope > 41%- 15 pts	
	Combustible fences and attachments- 15 pts	
<b>Total</b>		

Slight      Moderate      Significant      Severe

**Immediate landscape to Extent of structure ignition Zone**

Pick One	No- fuel modification< 30 ft- 15 pts	
	No fuel modification 30 -70 ft- 7 pts	
	Seperation of structures < 30 ft- 5 pts	
	Grass fuels-5 pts	
Pick One	Medium fuels- 5 pts	
	Heavy fuels- 15 pts	
	Slash fuels- 20 pts	
	Topography: slope 5-9%- 1 pt	
Pick One	Slope 10- 20%- 2pts	
	Slope 21- 30%- 3pts	
	Slope 31-40%- 6 pts	
	Slope 41%- 10 PTS	
	No fuel modification- 71- 100 ft- 5 pts	
<b>Total</b>		

Slight      Moderate      Significant      Severe

**Additional considerations:**

Address visible?	<b>Y</b>	<b>N</b>
Turnaround at house?	<b>Y</b>	<b>N</b>
Unacceptable	Acceptable	Marginal

Length of driveway approx. feet w/ notes:

**Significant Hazards:**

**Hazard scale:**

- 0-14- Slight
- 15-29 Moderate
- 30-49 Significant
- 50+- Severe

**Assessment conducted by:**

**Overall property Rating:**

Additional Comments:

## Appendix D:

### Links

Federal Emergency Management Agency

<http://www.fema.gov/pre-disaster-mitigation-grant-program>

Firewise

<http://www.firewise.org/>

Firewise- Fire Adapted Community

<http://fireadapted.org/resources/what-is-a-fire-adapted-community.aspx>

FlamMap

<http://www.firemodels.org/index.php/national-systems/flammap>

International Society of Arboriculture

<http://www.isa-arbor.com/>

International Wildland-Urban Interface Code

<http://publicecodes.cyberregs.com/icod/iwuic/IC-P-2012-000011.htm?bu2=IC-P-2012-000019>

Jackson Hole Fire/EMS

<http://www.tetonwyo.org/fire/>

Teton County Fire Protection Resolution for New Subdivisions

<http://www.tetonwyo.org/fire/docs/Prevention%20Docs/FireCodeResolution20130507.docx>

JHFEMS- Teton County Fire Evacuation Plan

<http://www.tetonwyo.org/fire/docs/FireEvac%20EditforWebsite.pdf>

LANDFIRE

<http://www.landfire.gov/>

Mountain Weather

<http://www.mountainweather.com/>

National Fire Danger Rating System

<http://www.nwcg.gov/pms/pubs/MasterGaining.pdf>

Natural Resources Conservation Service

<http://www.nrcs.usda.gov/wps/portal/nrcs/site/wy/home/>

NWCG 2012

[http://www.nwcg.gov/pms/pubs/iibmh2/pms902\\_appendix\\_c\\_201208.pdf](http://www.nwcg.gov/pms/pubs/iibmh2/pms902_appendix_c_201208.pdf)

NWCG 2009

<http://www.nwcg.gov/general/memos/nwcg-024-and-a-2010.pdf>



Ready, Set, Go!

<http://www.wildlandfirersg.org/>

Teton Conservation District

<http://www.tetonconservation.org/programs/wildland-urban-interface-wui-grants.php>

Teton County Emergency Management

<http://www.tetonwyo.org/em>

Teton Interagency Fire

<http://gacc.nifc.gov/egbc/dispatch/wy-tdc/index.html>

Town of Jackson Municipal Government

<http://townofjackson.com/>

Trees are Good

<http://www.treesaregood.com/>

Tree Care Industry Association

<http://tcia.org/>

University of Wyoming Extension

<http://www.uwyo.edu/barnbackyard/resources/wildfire.html>

Wyoming State Forestry Division

<http://wsfd.wyo.gov/>

Wyoming State Forestry Division fire restrictions

<https://sites.google.com/a/wyo.gov/wsfd-fire-information/fire-restrictions-map>

WSFD grant programs

<https://sites.google.com/a/wyo.gov/wsfd-fire-information/fuels-mitigation>

Wyoming Interagency Fire Restrictions

[http://www.wy.blm.gov/wy\\_fire\\_restrictions/](http://www.wy.blm.gov/wy_fire_restrictions/)