

19 Year Summary 2005 to 2023





This report developed by Washakie County Firesmart in cooperation with:

Technical Forestry Services, LLC 6628 W Riverside Drive Casper, Wyoming 82604 www.wytfs.com

Table of Contents

Section

Page

Introduction
Years 2006 - 2010
2008 Park County CWPP
2010 Big Horn County CWPP Addendum
Bighorn Basin Firesmart Newsletter
Year 2011
Big Horn County Firewise 2011 Projects
2011 Muller Fuels Reduction Project
Year 2012 22 Big Horn County Firewise 22
Year 2013 22 Year 2014 24 Year 2015 25 Year 2016 25
Year 2017
Bower Defensible Space including pruning (before & after)
Annie Tolman Forest Products Sale (2018)
2018 Hazardous Fuels Planning
2018 Defensible Space Planning
2018 Public Outreach
2017 Community Assistance for Adjacent Lands (CAFA) Grant
Annie Tolman Fuels Reduction Project (ATFRP-051801 Phase I)
Year 2019
ATFRP-051801 (Phase I)
ATFRP-051901 (Phase II)
2019 Slash Burning
Study Defensible Space and Fuels Reduction Project

List of Figures

Figure 1. 2005 Big Horn County Mountain CWPP	8
Figure 2. The 2005 BHCMCWPP Operating Group	8
Figure 3. 2005 Big Horn County Mountain CWPP Base Map.	
Figure 4. Big Horn County Fire Occurrence Map 1980 to 2005	
Figure 5. Hazard rating results over a Big Horn County	
Figure 6. Triage training 7/19/10 for firefighters in Lovell, WY	13
Figure 7. Final Risk Rating of Communities-at-risk in Park County	
Figure 8. Base Map for the Big Horn County CWPP 2010 Addendum	15
Figure 9. Fuels treatments occurring within Big Horn County	
Figure 10. Sage Grouse Leks and Sensitive Plant Species within Big Horn County	16
Figure 11. George Wynn, Bighorn Basin Deputy Firesmart Coordinator	17
Figure 12. Issue #1 of the Bighorn Basin Firesmart Newsletter'	17
Figure 13. Issue #32 (Summer of 2019) of the Bighorn Basin Firesmart Newsletter	18
Figure 14. Cover page to the 2011 Hot Springs County CWPP	19
Figure 15. Base Map for the 2011 Hot Springs County CWPP.	20
Figure 16. Fuels treatments along the Globe Canal in Town of Lovell, WY	
Figure 17. Mueller Fuels Reduction before photo.	21
Figure 18. Mueller Fuels Reduction after photo	21
Figure 19. North Platte River Russian olive presentation, July 30, 2013 Douglas, WY	22
Figure 20. September 12, 2013 Greybull Standard article on Firewise program.	23
Figure 21. June 29, 2013, Firewise Picnic	23
Figure 22. Canyon Creek Village Firewise Community - June 18, 2016.	24
Figure 23. NE Corner Fuel Break pile burning, October 2016	25
Figure 24. NE Corner Fuel Break - Canyon Creek Country CAR (Before)	26
Figure 25. NE Corner Fuel Break - Canyon Creek Country CAR (After)	26
Figure 26. Harman Fuels Reduction Project (Before)	27
Figure 27. Harman Fuels Reduction Project (After)	27
Figure 28. Pile burning in the NE Corner Fuel Break of the Canyon Creek Country	28
Figure 29. Pile burning in the NE Corner Fuel Break	28
Figure 30. Community Wildfire Protection Plan Updates (CWPP)	
Figure 31. 2017 Bighorn Basin Firewise Annual Picnic. June 17, 2017	30
Figure 32. Bighorn Basin Firesmart Newsletter	30
Figure 33. Two recent Bighorn Basin Firesmart - Facebook pages	31
Figure 34. 2017 Firesmart Picnic announcement	
Figure 35. Defensible space treatment in the Middle Fork Powder River CAR (After)	33
Figure 36. Defensible space treatment in the Middle Fork Powder River CAR (Before)	34
Figure 37. Defensible space treatment in the Middle Fork Powder River CAR (After)	34
Figure 38. Cabin prior to defensible space fuels treatment	
Figure 39. Cabin after completing defensible space fuels treatment including pruning	34
Figure 40. Before photo of Block I in the Annie Tolman Forest Products Sale	35
Figure 41. After photo of Block I in the Annie Tolman Forest Products Sale	35

Figure 42. Before photo looking southeast from Unit Kb	36
Figure 43. After harvest of lodgepole pine stand	
Figure 44. Before photo of the Annie Tolman Forest Products Sale area (Block MC).	
Figure 45. After photo of the Annie Tolman Forest Products Sale area (Block MC)	
Figure 46. Product utilization	
Figure 47. May 11, 2018 North Bighorn River CWPP Operating Group	
Figure 48. Issue #27 – Cover page of the Spring 2018 Bighorn Basin Firesmart Newsletter	
Figure 49. Bighorn Basin Firesmart homepage at http://bighornbasinfiresmart.com/	
Figure 50. Flyer announcing the 2018 Bighorn Basin Firesmart picnic.	
Figure 51. Firewise Communities USA sign on USFS Road No 27	
Figure 52. Firewise Communities USA sign on Onion Gulch Road	
Figure 53. Fuels hazard reduction project	
Figure 54. ATFRP and OGRDFB 2020 project area Map	
Figure 55. Before photo of Block I in the ATFRP-051801 fuels treatment	
Figure 56. After photo of Block I in the Annie Tolman Forest Products Sale	
Figure 57. After photo of Unit J in the Annie Tolman Forest Products Sale	
Figure 58. ATFRP-051801 (Phase I) Project Map.	
Figure 59. Unit Hc project area aerial view on 2015 NAIP imagery before treatment	
Figure 60. Unit Hc project area aerial view on 2019 NAIP imagery after treatment	47
Figure 61. Unit Hc before treatment. TFS photo 8/22/2017	47
Figure 62. Unit Hc after treatment.	47
Figure 63. Summitt Forestry crew beginning work on the ATFRP-051901	48
Figure 64. ATFRP-051901 (Phase II) Project Map	
Figure 65. ATFRP-051901. Unit Ka before fuels reduction	49
Figure 66. ATFRP-051901. Unit Ka after fuels reduction treatment	49
Figure 67. Unit Ka slash burning within the ATFRP-051901	
Figure 68. Unit Kc-3 slash burning within the ATFRP-051901	
Figure 69. March 22, 2019 wildfire at Study property	51
Figure 70. Crews worked well into the evening to contain the fire	
Figure 71. No injuries reported and no structures were damaged.	
Figure 72. Drone image of wildfire extent at Study property. Study home in upper left of photo.	
Figure 73. Study defensible space Wildfire Mitigation Plan	
Figure 74. Study fuels reduction Wildfire Mitigation Plan	
Figure 75. Before image of Study home.	
Figure 76. After image of Study home.	
Figure 77. Before photo of the Study WMP fuels reduction project.	
Figure 78. After photo of the Study WMP fuels reduction project.	
Figure 79. Slash burning in 2021 with structure in the background. TFS Photo 2021	
Figure 80. Burning slash piles at the east entrance of the Canyon Creek Country subdivision. The	
photo November 7, 2022	56

List of Tables

Table 1. Federal grants awarded to Big Horn and Washakie Counties from 2005 to 2020	7
Table 2. Area in acres of fuels management in the Bighorn Basin	7
Table 3. Fuels treated in acres in Washakie County in Calendar-year 2018	33
Table 4. Fuels treated in acres in Washakie County in Calendar-year 2019	45
Table 5. 2017 Washakie County WSWUI Grant accomplishments for Calendar Year 2019	45
Table 6. Washakie Firesmart 2018 WSWUI Grant Accomplishments - 2023	64

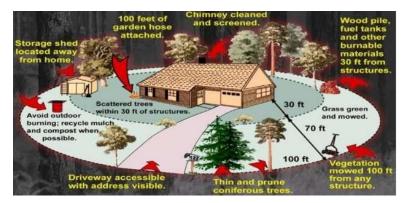


Cabin within fuels reduction project area in a Firewise Community in Washakie County, WY. Funding from the USDA Forest Service, Western States Wildland-urban Interface Grant program and administered by the Wyoming State Forestry Division and Washakie County.

Introduction

The Bighorn Basin Firesmart Program began in the fall of 2004 led by the efforts of the Wyoming State Forestry, District 3 forestry personnel and Brent Godfrey, Big Horn County Fire Warden (see Figure 2). County Commissioners in the Bighorn Basin supported efforts to secure funding from the USDA Forest Service through the 2001 National Fire Plan and the 2003 Healthy Forests Restoration Act. The program has since conducted planning, public outreach, and hazardous fuels mitigation project work for nearly 20 years in the Wyoming counties of Big Horn, Park, Hot Springs, and Washakie. The program is currently administered through the efforts of Washakie County. Since program inception in the fall of 2004 and through June 2023 a total of thirteen (13) Federal grants¹ have been awarded (see Table 1). The program has had the following accomplishments to date:

- Seven (7) Community Wildfire Protection Plans developed (including Updates)
- 419,821 acres assessed for hazardous fuels conditions²
- Over 1,300 acres of fuels treated in Communities-at-risk (CARs) (see Table 2)³
- Over 680 Structure Ignitability Assessments conducted
- Four (4) Landowner Forest Stewardship Plans (LFSP) developed
- 77 Defensible Space projects completed
- 171 communities assisted⁴
- 124 Technical Assistance service to landowners living in Communities-at-risk
- Fifty-five (55) public outreach events with groups
- 13,550 public outreach letters/brochures
- Thirty-six (36) newspaper/radio/TV outreach spots
- 196 mitigation training of public/volunteers
- 144 wildfire mitigation plans (WMP) developed



¹ In addition to the Federal grant funding, several state, county, private, and in-kind assistance has been made available to the Bighorn Basin Firesmart Program efforts.

² Includes land area from the Communities-at-risk from the four Counties in the Bighorn Basin as identified by the Operating Groups during the development of the seven CWPPs and updates.

^a Includes: Battle Cr. TS (2006) 400 ac; White Creek/Bear Gulch TS 2005 (198 ac); Meeteetse Creek TS 2005 (~300 ac).

⁴ Criteria for identifying Communities-at-risk (CARs) from Western Governors Association 3/01.

Project	Proj # & Task Code
Big Horn County Firewise 2005	NFP
Hot Springs County CWPP 2007	07-DG-11020000-005
Park County CWPP 2008	Park Co Joint Powers
Hot Springs County 2010 CWPP	FEMA
Big Horn County 2011 Firewise	11-DG-11020000-027
Big Horn County 2012 Firewise	12-DG-11020000-031
Washakie Co 2012 WSWUI Grant	12-DG-11020000-031
Washakie Co 2012 WSWUI Grant	12-DG-11020000-031
Washakie Co Firewise 2017 WSWUI	17-DG-11020000-040
Washakie Co - 2017 CAFA Grant	17-DG-11020000-047
Washakie Co 2018 WSWUI Grant	18- DG -11020000-050

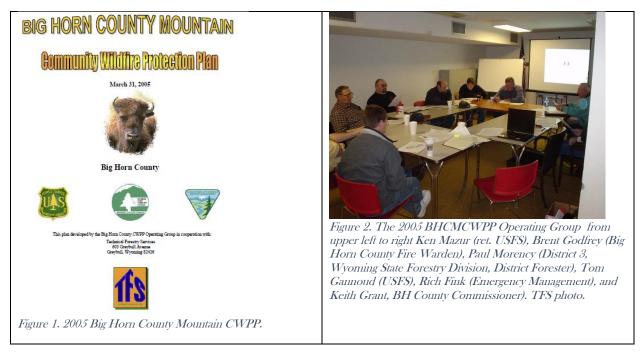
Table 1. Federal grants awarded to Big Horn and Washakie Counties from 2005 to 2020.

In additional to the grants shown above, other federal, state, and county funds and other in-kind, equipment, supplies, and private assistance, has gone toward projects in the Bighorn Basin including the development of CWPPs in Hot Springs and Park Counties.

 Table 2. Area in acres of fuels management in the Bighorn Basin under direct administration of Bighorn Basin Firesmart between 2005 and March 2020.

Bighorn Basin Fuels Management - 2005 to 2020 (3/31/20)				
Type of Treatment	Area Treated (acres)	County		
Fuels treatment	124	Big Horn		
Timber harvest	598	Big Horn		
Defensible space	53	Big Horn		
Fuel Break	5	Washakie		
Fuels Treatment	224	Washakie		
Defensible space	24	Washakie		
Timber harvest	300	Park		
TOTAL	1328			

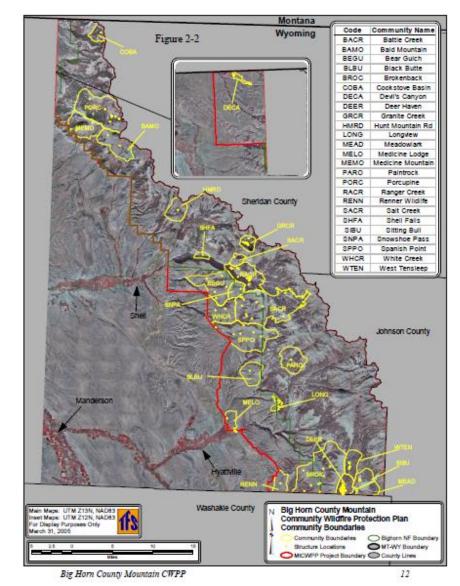
The initial grant funding came in response to the 2003 Healthy Forest Restoration Act and enabled the development of the 2005 Big Horn County Mountain Community Wildfire Protection Plan (CWPP); see Figures 1 and 2.



2005 Big Horn County Mountain CWPP

Through the 2005 CWPP efforts, we accomplished the following:

- 1. Several public meetings to inform the public of wildfire mitigation in Greybull and Ten Sleep;
- 2. Media and Public Service Announcements (PSAs) in the South Big Horn County News outlets (Basin Rustler and Greybull Standard); Lovell Chronicle; and Northern Wyoming Daily News (Worland);
- 3. Mailings to 155 property owners including a summary of the Home Evaluation Form completed for their structure, a brochure explaining recommended treatments for reducing fire hazards, and a cover letter explaining the CWPP in Big Horn County;
- 4. Flyers advertising the public meetings in Greybull and Ten Sleep.



5. Base Map of Communities-at-risk identified in the 2005 Big Horn County Mountain CWPP (see Figure 3).

Figure 3. 2005 Big Horn County Mountain CWPP Base Map.

- 6. Forest Vegetation And Fuels Data Gathered TFS personnel visited and assessed every structure of known location in the assessment area. Approximately 200 structures were assessed. At each structure a Home Evaluation Form was completed and a photo taken. A Microsoft Access Database was developed to contain the data set for these evaluations.
- 7. Began an annual reporting of Historical Fire Occurrence and Fire Cause Data in the Bighorn Basin on BLM and USFS land from 1980 until present (See Figure 4). Fires occurring on private, state, and county lands were identified by personal contacts with Paul Morency (Wyoming State Forestry Division, District 3 Forester, Brent Godfrey (Big Horn County Fire Warden) and private individuals.

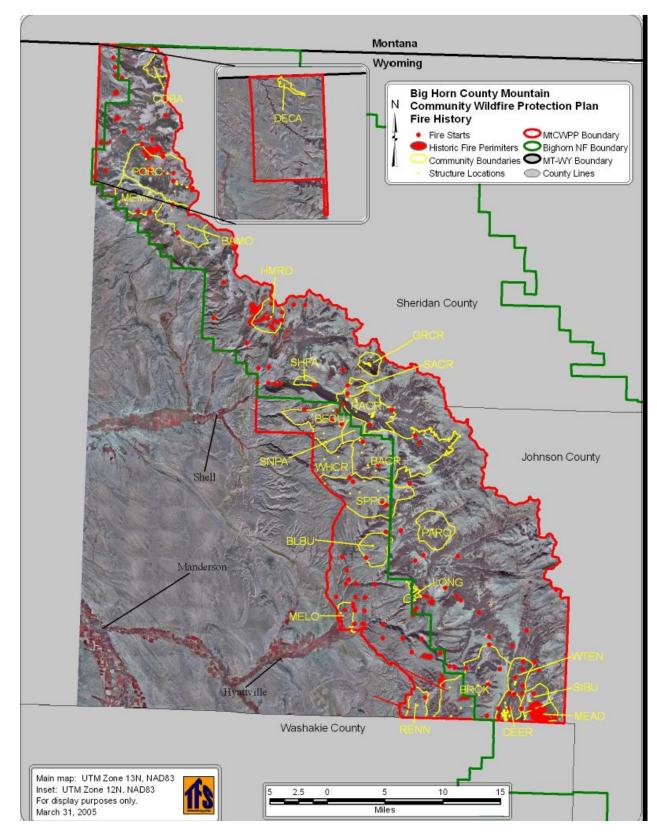


Figure 4. Big Horn County Fire Occurrence Map 1980 to 2005

8. In cooperation with the USDA Forest Service, Missoula Fire Sciences Laboratory, and the Big Horn County Operating Group, Big Horn County Firewise worked with both FARSITE and FLAMMAP (two software models that are being used by the USFS), in creating "fire scenarios" in the cabin areas within Big Horn County. This modeling allowed the Operating Group to identify hazard and risk across the landscape, assign risk ratings, and prioritize areas in need of fuels treatments.

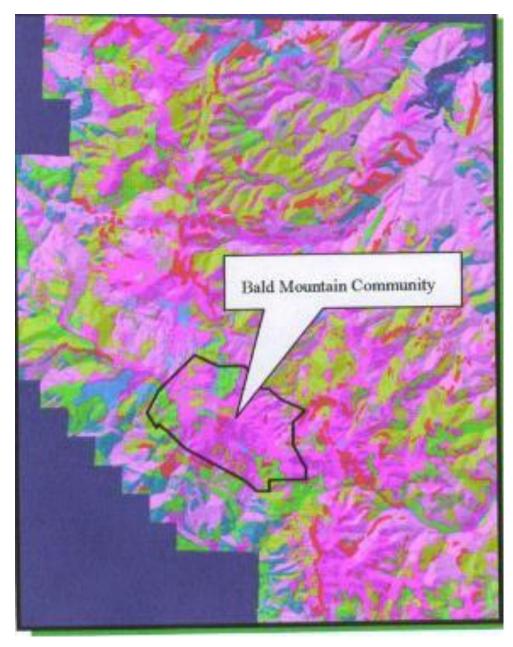


Figure 5. Hazard rating results over a Big Horn County landscape showing the Bald Mountain communities-at-risk (CAR) from the use of the FlamMap wildfire simulation model. The model uses various vegetation, topography, fuels, etc... datasets to determine how a wildfire will burn across a landscape.

Years 2006 - 2010

2008 Big Horn County Western States WUI-NFP Grant - Accomplishments

- Mailed 200 Firewise packets (175 Mountain cabin owners and 25 to OG members, agency members, and media); sent Public Service Announcement to: Greybull Standard, Lovell Chronicle, Basin Rustler, and N. Daily News; sent PSA to Greybull Chamber of Commerce members.
- Held Firewise Tour June 18 17, 2009 attendees including 7 cabin owners.
- Develop defensible space planning efforts in the Manderson, Lovell, and Hyattville areas 3 communities assessed.
- Held Lovell-Globe Canal Landowner Forum July 14 at the Lovell Fire Hall; in attendance: County Commissioner, Mayor, County Sheriff, State Senator and 50 landowners/volunteers.
- Coordinated with The Lovell Chronicle on public outreach concerning Firewise standards and fuels hazard WUI issues with the Town of Lovell.
- Finalized and obtained signatures for the Manderson and Greybull Wildfire Mitigation Plans. Coordinated with the Wyoming Honor Farm in Riverton for assistance from inmate crew to assist with hazardous fuels reduction work along the Bighorn River through the Town of Greybull.

Republican-Rustler Basin,WY Circ.1081 From Page: 8 12/3/2009 51021



Greybull Wildfire Mitigation Plan approved, inmates to help

By KARLA POMEROY

Big Horn County Commissioners approved the Greybull Wildfire Mitigation Plan Tuesday afternoon after a conference call with County Firewise Coordinator Chris Weydeveld.

Weydeveld. He said there is 25 acres around the Greybull bridge on Highway 16-20 that is dense with Russian olives and other vegetation, creating a fire hazard. In the plan, he states, "The Town of Greybull has been threatened by wildfire originating in the vegetation along the Big Horn River within the city limits of Greybull. One wildfire of note occurred in October 2007 and started near the north end of town."

County Fire Warden Brent Godfrey said he supported the plan and said if there had not been the resources available for the Dike Fire in 2007, there would have been severe damage to the north end of Greybull.

The plan proposes the use of a 20-man crew of inmates from the Wyoming Honor Farm in Riverton. Weydeveld said a similar crew worked in the county about three years ago and they travel to and from Riverton

each day. He said the plan needs approval of the county (which they did Tuesday), the Town of Greybull (Weydeveld said Mayor Frank Houk is in support of the plan) and the State Forestry Division. He said he hopes a crew could begin the first phase of reducing fire fuel in eight to 10 acres on both the north and south sides of the bridge. The objectives in the plan are listed as: • Completely eradicate Russian olive and

The objectives in the plan are listed as: • Completely eradicate Russian olive and tamarisk (salt cedar). Thin sagebrush, greasewood and rabbitbrush to a minimum of one crown width in distance between plants.

 Stumps of removed Russian olive and salt cedar will be treated with an appropriate herbicide within 15 minutes of cutting, Big Horn County Weed and Pest will be contacted for assistance.

 All woody vegetation will be removed from the site or chipped and scattered on the ground on site.
 The treated areas will be monitored

 The treated areas will be monitored annually to maintain a forest floor clear of down and dead woody vegetation and to remove any Russian olive and salt cedar that becomes re-established.

- Prepared and mailed 150 cabin owner letters with <u>Protecting Your Home</u> from Wildfire and <u>The Mountain Pine Beetle</u> booklets included.
- Held Firewise public workshop in Lovell on June 3, 2010, aimed at providing residents along the Globe Canal with information on creating and maintaining defensible space.
- Held Public Firewise Meeting at Big Horn Mountain Lodge on Aug 6, 2010 which included five landowners and 15 wildland firefighting personnel (USFS, WSFD, BLM and County officials). Completed structure and defensible space assessments on two cabins in the Deerhaven and Sitting Bull cabin groups. Contacted seven local newspapers to post a public service announcement regarding Firewise Public Meeting.
- Public outreach correspondence to 7 newspapers and 25 fire personnel and OG members re: Aug 6 public meeting.
- Mike Bournazian, Wyoming State Fire Trainer, assisted with a landowner Firewise workshop in Lovell on June 3, 2010
- Mr. Bournazian provided a firefighter training event on structure triage in Lovell July 19, 2010 (see Figure 10).



Figure 6. Triage training 7/19/10 for firefighters in Lovell, WY

2008 Park County CWPP

A Community Wildfire Protection Plan (CWPP) was developed for Park County in 2008 identifying communities-at-risk within the County and making recommendations for reducing the threat of wildfire into the Wildland-urban Interface (see Figure 6).

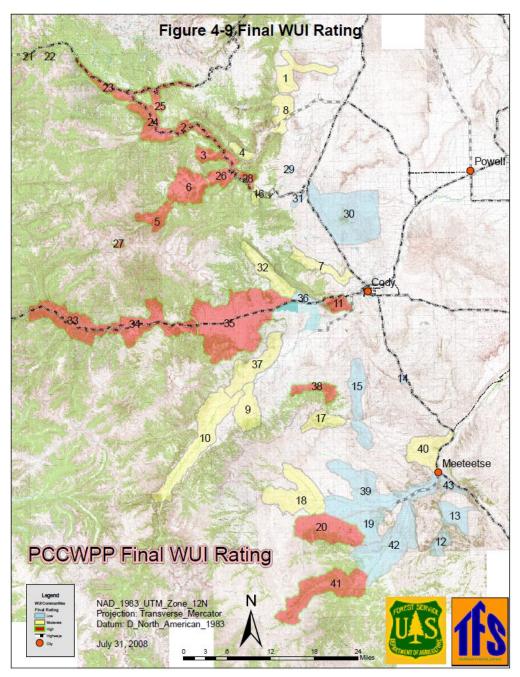


Figure 7. Final Risk Rating of Communities-at-risk in Park County as determined through the Community Wildfire Protection Plan (CWPP) process in the 2008 Park County CWPP.

2010 Big Horn County CWPP Addendum

The Firewise Coordinator worked with the County Fire Warden to organize an interagency CWPP Update Operating Group that convened on four separate occasions throughout 2009. Through these discussions the Big Horn County CWPP 2010 Addendum was developed (see Figure 7, 8 and 9). This document does the following: identifies recommendations for the improvement of wildfire suppression services; identifies and prioritizes communities-at-risk in the WUI areas of Big Horn County *not previously identified*; prioritizes specific project areas in need of physical fuels treatments; and describes the framework for a public outreach program with the goal of Firewise education.

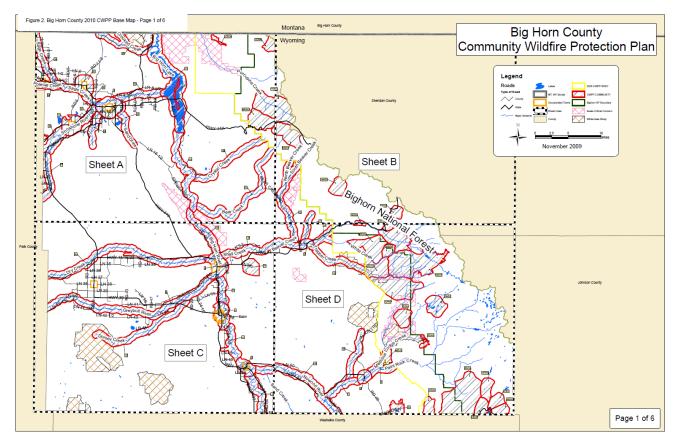


Figure 8. Base Map for the Big Horn County CWPP 2010 Addendum showing mountain CARs from the 2005 CWPP and additional CARs included in the 2010 Addendum.

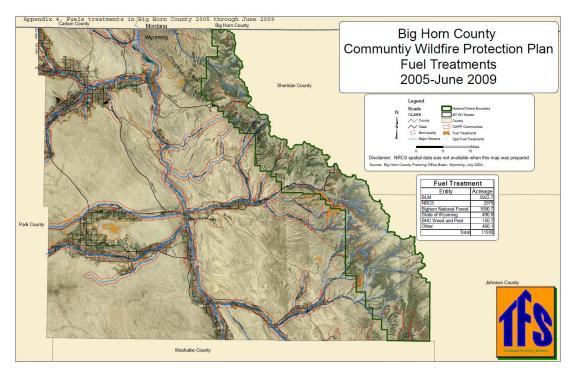


Figure 9. Fuels treatments occurring within Big Horn County between 2005 and 2009.

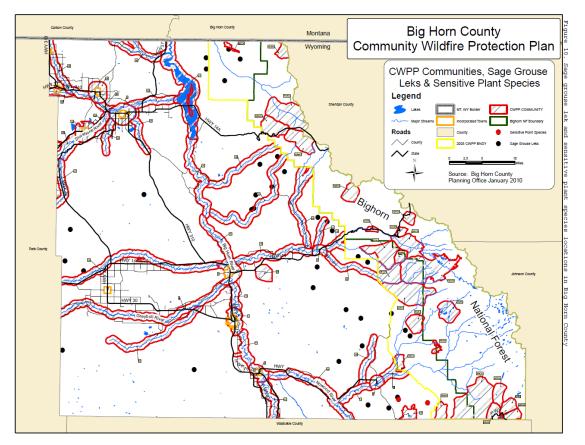


Figure 10. Sage Grouse Leks and Sensitive Plant Species within Big Horn County. This figure appears in the Big Horn County CWPP 2010 Addendum

Bighorn Basin Firesmart Newsletter

In May 2010 retired US Forest Service and Navy Veteran George Wynn was hired as the Deputy Firesmart Coordinator for Bighorn Basin Firesmart (see Figure 11). George had served as



Figure 11. George Wynn, Bighorn Basin Deputy Firesmart Coordinator and Editor of the Bighorn Basin Firesmart Newsletter.

Forester with the U.S.D.I. Bureau of Indian Affairs, Northern Cheyenne Agency, Montana from 1976 until 1988, then as Forester with the USDA Forest Service in Oregon working in silviculture and timber planning until his retirement in 2009. George spent much of his tenure at the Malheur National Forest working with forest health, opening up ponderosa pine stands in dry areas. The goal was the conversion of true fir forest stands back to the historically occurring ponderosa pine. This type conversion was accomplished through the use of timber harvest, timber stand improvement (thinning), and prescribed fire. Often managing an annual budget of one million dollars, George also saw the planting of thousands of acres of seedlings in large areas deforested by wildfire.

In addition to providing expert consultation on all aspects of forest management and wildfire mitigation activities, including the

development of Wildfire Mitigation Plans for properties throughout the Bighorn Basin, George has been the creator and editor-in-chief of the Bighorn Basin Firesmart Newsletter since its inception in the fall of 2010 to present (see Figure 12 and 13).

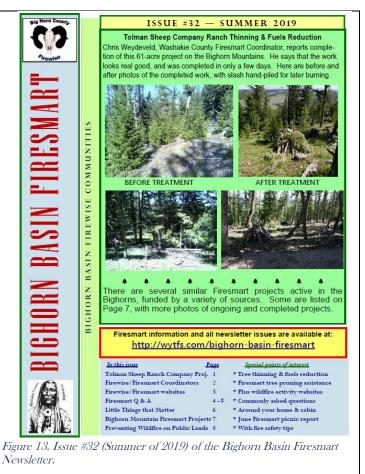


Figure 12. Issue #1 of the Bighorn Basin Firesmart Newsletter'

The Newsletter is developed quarterly basis and informs readers on upcoming Firesmart events as well as a host of other information relating to wildfire, forest management, and wildfire mitigation. Some of the many topics featured in the Newsletter over the past ten years include: Home Firewise Evaluation Form (Fall 2010); Creating Defensible Space protect a home from wildfire (Spring 2011 Fall 2011 Spring 2013) Winter 2018); Home Ignition Zone (Winter 2015); Tips on effective hand piling woody debris (Summer 2011 Spring 2017); Be Ember Aware (Summer 2011 Fall 2014 Summer 2018); How to Prune a Tree (Fall 2011 Fall 2018); Examples of Completed Firewise Projects (Fall 2011 Winter 2012 Fall 2018 Winter 2019 Summer 2019); Firewise Driveways and Road Clearance (Winter 2012); Fire resistant plants and landscaping (Winter 2012); Negative effects on soil from wildfire (Fall 2016); Spring Spraying of Pine Trees (Bark beetle protection) (Winter 2018); Ladder Fuels - keeping

fire out of tree crowns (Spring 2013); How to reduce risks from a wildfire in a community (Fall 2013) (Winter 2014); Becoming a Firewise Community (Fall 2013) (Winter 2014); Role of Fire in Wyoming Forests (Winter 2015); Ready, Set, Go! Program (Spring 2017); Firewise and Your Vehicles (Winter 2014); Timber Thinning Basics (Winter 2014) Fall 2017); Firewise and Fences (Spring 2014); Firewise and Mulch (Fall 2014); Fire Fundamentals (Fall 2014); Firewise Preseason Checklist (Spring 2013); Red Flag Warnings (what they mean) (Summer 2015); Proper Equipment Operation (How to do it in a Firewise manner) (Summer 2015); Firewise and Eaves (The bad and the good) (Spring 2016); Firewise and Gutters (Summer 2016); Preparing Your Home Against Wildfire (Spring 2019); What to do when a wildfire occurs (Summer 2017); Roof and Chimney Clearance (Summer 2017); Examples of Bad Landscaping (homes that won't survive) (Summer 2017); Examples of Good Landscaping (Summer 2017);

Aspen in the Bighorns (Managing for aspen) (Fall 2017); The structural ignitability project (Fall 2017); Bark Beetle Pheromones (To repel bark beetles) (Winter 2018); Drones & Wildfires Don't Mix (A new firefighting safety issue) (Winter 2018); Wildfire **Evacuation Planning (Winter 2012)** (Spring 2018 Summer 2018); Fuelbreak Design and Function (Spring 2018); Roof Watering (To do it or not) (Summer 2018); Financial preparation for wildfire (Insurance review, & home inventory) (Fall 2018); NOAA Weather Alert **Radios** (Features, sources, and cost) (Winter 2019); the Wyoming State Forestry Division (What the WSFD does) (Winter 2019); Proper Firewood Storage (Summer 2016): Safe Grilling Tips (Summer 2016); Firewise and Propane Tanks (Fall 2016); Protecting Wyoming's Forest (The "Don't Move Firewood" program) (Winter 2019); Breaking up vegetation fuels (Vertically



and horizontally) (Spring 2019); North Bighorn River Fuels Reduction Project (Spring 2018).

Since its inception in fall 2010, the Newsletter has reached over 500 residents, agency personnel, and those working in the Wildland-urban Interface with over 12,000 newsletters having been sent. The most recent Newsletter and all previous Newsletters are now available on the Bighorn Basin Firesmart website and Facebook Pages at: <u>Bighorn Basin Firesmart webpage</u> and <u>Bighorn Basin Firesmart Facebook</u>.

The Firewise Program in the Bighorn Basin accomplished the following in 2011: One (1) Community Wildfire Protection Plan developed; a total of 76,740 acres assessed for hazardous fuels conditions; 275 residences/businesses assessed; two (2) Landowner Stewardship Plans (LFSP) developed; 31 communities assisted³; four (4) public outreach events; Eight (8) contacts with groups with workshops; three (3) public outreach letters/brochures provided; 1,500 Firesmart Newsletters sent; two (2) newspaper/radio/TV outreach spots.

Hot Springs County CWPP

The Hot Springs County Community Wildfire Protection Plan (CWPP) was developed in 2011. This document addresses the communities-at-risk (CARs) and the associated "wildland-urban interface" (WUI) in Hot Springs County as defined by the Hot Springs County Community Wildfire Protection Plan Operating Group (OG). Thirty-one communities were identified as being "at-risk" to wildfire and are identified on the HSCCWPP Base Map. The process used to classify these communities involved a *relative comparison* assigning risk ratings of high, moderate, and low. Classification criterion includes: fire hazard, fire occurrence, and community layout (see Figure 14 and 15).

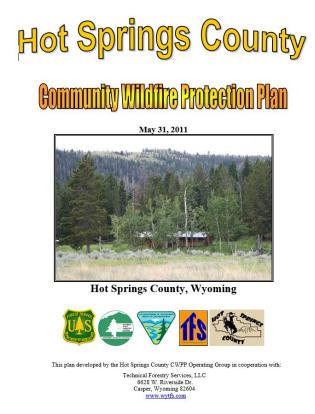


Figure 14. Cover page to the 2011 Hot Springs County CWPP.

⁵ As defined by Western Governors Association 3/01

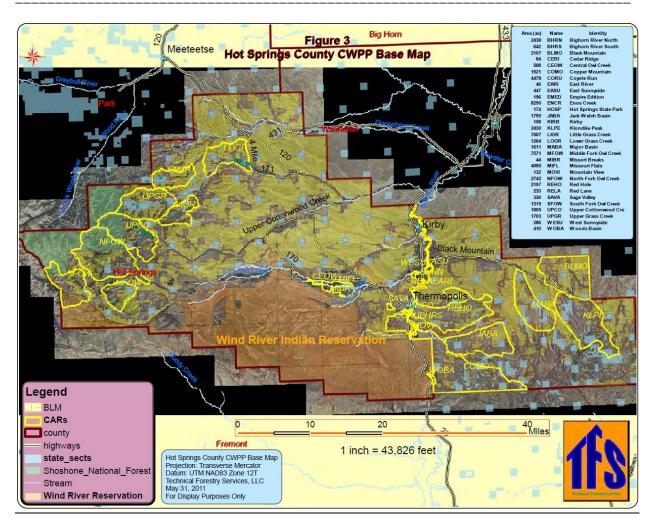


Figure 15. Base Map for the 2011 Hot Springs County CWPP.

Big Horn County Firewise 2011 Projects

Through the Big Horn County Firewise Western States WUI NFP Grant program there were 11 Wildfire Mitigation Plans, 40 Technical Assists and three workshop/educational events developed in Federal FY 2011.

One of the Wildfire Mitigation Plans (WMP) was the Globe Canal WMP. This planning effort involved over 40 ownerships located along the Globe Canal through the Town of Lovell. Years of unmanaged vegetation resulted in a hazardous fuels complex threatening homes and lives.

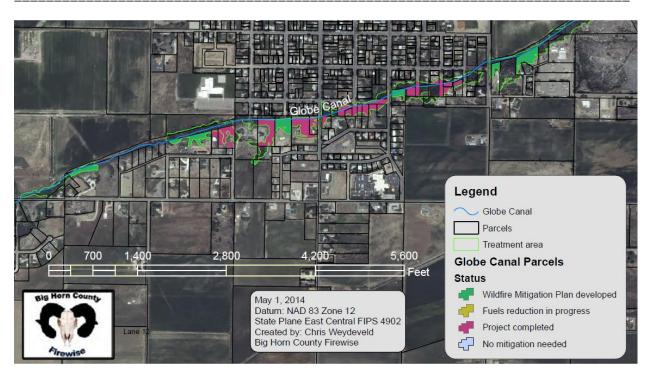


Figure 16. Fuels treatments along the Globe Canal in Town of Lovell, WY

2011 Muller Fuels Reduction Project

The Mueller WMP was developed to treat five (5) acres of hazardous fuels treatment and three (3) acres of defensible space treatments, at a ranch headquarters property at the base of Shell Canyon along Trapper Creek in Big Horn County (see Figures 17 and 18).



Big Horn County Firewise

During 2012 through the Big Horn County Firewise Western States WUI NFP Grant program there were 21 Wildfire Mitigation Plans prepared, 15 Technical Assists and five (5) workshop/educational/Firewise picnic events, and 1,500 Firesmart Newsletters sent.

Year 2013

Accomplishments in 2013 are as follows:

- Presentation on Bighorn Basin Russian olive fuels treatments was given in Douglas, WY to 40 attendees from around the state of Wyoming (see Figure 19).
- Six (6) Technical Assistance Reports completed for property owners in the WUI
- Three (3) public outreach media releases (see Figure 20).
- An introductory Firesmart Newsletter sent to approximately 50 recipients in Washakie County and 1,500 in Bighorn County;
- News media articles focusing in general on Firewise were published in the Bighorn Basin communities, Casper, Cheyenne, Worland and other statewide online and print newspapers;
- An annual Firewise Picnic and public outreach was held (see Figure 21).



Figure 19. North Platte River Russian olive presentation, July 30, 2013 Douglas, WY.

Invasive plants influence fire, outcompete natives in burn scars

(Editor's note: The following story appeared in the Aug. 10 issue of the Wapoming Lipestock Roundup. It was submitted to the Standard by Chris Weydeveld, Firewise coordinator for Big Horn County, who asked that it be published as a benefit to local readers. The WLR granted the paper's request to republish the article.)

"We are starting to see fires earlier in

Wevdeveld. "Salt cedar could be found in arrangement." horticultural catalogs as early as the 1820s. They were sold in nurseries in California around 1856 and were used extensively around 1856 and were used extensively as windbreaks and for stream bank added. "Ladder fuels are how the fire stabilization."

stabilization."
The popularity of these plants has increased their prevalence in the western states. Werdeveld said that at subty conducted in 2005 found that, out of 42 species that were found along rivers, sail codar and Russian olive ranked as the third and fourth most in womine. After the blam, eith order and common species. "Russian olive and salt cedar have not

reached their maximum potential range, he continued. They have the ability to expand into more areas. With changing global temperatures, these invasive species

INFLUENCE ON FIRE

"It is becoming the norm to see nine or 10 million acres burned in wildhres each year," Weydeveld elaborated. "Fires are getting harder to fight. We are seeing heavier fuels building up and, at the same time, budgets are getting cut, so there are not as many firefighters battling the fires."

"We are starting to see fires earlier in the season and seeing them burn longer, Chris Weydeveld, Firewise coordinator for Washakie and Big Horn Counties, said at the North Platte Russian Olive Control Workshop held July 30 in Douglas. "We are and in wildlife habitat near river systems." In his presentation, Weydeveld examined Russian olive and salt cedar presence as a threat to riparian area vegetation and as a damaging fuel in forest fires.

"Fuels are the source of energy that drives the firm," he continued, "Fire behavior "Russian of lows were brought into the United States during the 1908;" explained which include fuel type, fuel availability and

"Surface fuels are the fine, flashy fuels the fire transfers from the surface to aerial fuels."

During his presentation, Weydeveld showed images of regrowth from a recent fire in Wyoming. After the blaze, salt cedar and Russian olive trees began regrowing after only a few months. It was not long before they dominated the area while the native

are expanding farther north and into higher elevations." There have been reports that cottonwoods flourish after a fire, but I did not see that following the 2008 Dike Fire along the that displace vegetation and compete heavily for resources.

8 **Greybull Standard** Thursday, September 12, 2013

REMOVAL OF INVASIVE SPECIES

Weydeveld suggests the removal of the invasive species to improve vegetative health and decrease the risk as a fire hazard. Burning the plant will only aid regrowth, so landowners must look to chemical means to remove them.

An effective method for removal is cutting the tree down and then applying a diluted broadleaf herbicide to the stump within 15 minutes of cutting the tree down. "A combination that has worked well is

one part Element, or triciopyr, to three parts basal bark oil," Weydeveld said. "If applied within the 15 minute window to a debris-free stump, there is an 80 percent efficacy. Herbicides containing glyphosate, such as Roundup, will also work." "For the 20 percent that do sprout from the

root crown, it is important that landowners go back the following fall and apply a foliar spray on the returning sprouts," he added. Weydeveld also cited September to early October as the best time to remove the trees.

"September is the ideal time because that is when the plants take much of the energy from the leaves and branches and pulls it down into the roots," he explained, "When the herbicide is applied during that time, it is pulling it down into the roots as well."

"This is also an ideal time because it is cooler than earlier in the summer. Hot temperatures can cause the herbicide to volatilize and evaporate into the air," he elaborated. "This can cause damage to aerial portions of desirable vegetation." The herbicides can be obtained from Weed

and Pest offices across the state. "Every county in Wyoming has a Firewise

coordinator that will come to a property and conduct a fire fuels hazard analysis free of charge," said Weydeveld. "They will also give recommendations on how to make the area more defendable in case of a fire.

The Russian Olive Workshop was sponsored by Pathways to Water Quality, Wyoming Game and Fish Department, Wyoming State Forestry, Dow Agrosciences and Upper North Platte River Weed Management Area.

Figure 20. September 12, 2013 Greybull Standard article on Firewise program.



Figure 21. June 29, 2013, Firewise Picnic at the Willow Park Group Area on the Bighorn National Forest on the Big Horn and Washakie County line. Fifty cabin owners, volunteer firefighters, county fire wardens, USFS and WSFD personnel were in attendance.



This announcement run in the WNDN once in each. month of Sept., Oct. & Nov, 2013

Year 2014

- Five (5) Wildfire Mitigation Plans prepared, eighteen (18) Technical Assists and three (4) workshop/educational events during FY 2014 including a CWPP Operating Group Meeting.
- Two (2) Bighorn Basin Firesmart Newsletters sent to approximately 1,500 recipients;
- Successfully applied for and received a designation in the Firewise Communities USA/Recognition Program for the Canyon Creek Country subdivision (see Figure 22).



Figure 22. Canyon Creek Village Firewise Community – June 18, 2016. Two (2) Firewise Communities in the Bighorn Basin received re-certifications for each of the years 2014, 2015, 2016, 2017, 2018, and 2019. Above pictured recognition of. TFS Photo.

• One (1) Landowner Forest Stewardship Plan (475 acres); one (1) hazardous fuels treatment project completed (6.5 acres); ten (10) Wildfire Mitigation Plans prepared; seventeen (17) Technical Assists; and four (4) workshop/educational events during 2015 including a CWPP Operating Group Meeting.

In addition there were four (4) Bighorn Basin Firesmart Newsletters sent to approximately 4,800 recipients.

Year 2016

- Fifty (50) slash piles burned (see Figure 23);
- Two (2) hazardous fuels treatment projects completed, Northeast Corner Fuel break (see Figure 24 and 25) and Harman (see Figures 26 and 27) for a total of 6.5 acres.
- Three (3) Wildfire Mitigation Plans prepared and three (3) Technical Assists;
- Three (3) workshop/educational events during 2016 including a CWPP Operating Group Meeting, Firewise Picnic, and a Society of American Foresters meeting presentation and field visit (approximately 100 persons reached in 2016 public meetings);
- Cooperation with USDA Forest Service, USDI BLM, State of Wyoming, private entities, and municipalities in a collaborative approach at strategically planning and implementing fuels treatments across land ownership boundaries;
- Two (2) Firewise Communities re-certifications;
- Three (3) Bighorn Basin Firesmart Newsletters sent to approximately 3,000 recipients (see Figure 32);



Figure 23. NE Corner Fuel Break pile burning, October 2016.

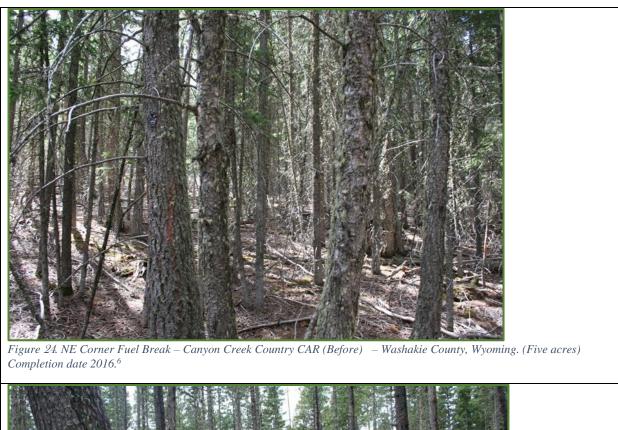




Figure 25. NE Corner Fuel Break – Canyon Creek Country CAR (After) – Washakie County, Wyoming. (Five acres) Completion date 2016.

⁶ Washakie County was awarded a 2017 CAFA Grant with which the Washakie County Firewise program and Washakie County Fire are implementing the 100 acre Annie Tolman Fuels Treatment Project immediately adjacent to the NE Corner Fuel Break to the east on private property. Expected completion date for that project is September 2021. The combination of the above described projects, numerous defensible space projects within the 30



Figure 26. Harman Fuels Reduction Project (Before) – Bluff Canal CAR (5 miles south of Worland, WY Washakie County). Five (acres) 2016 Completion date.



Figure 27. Harman Fuels Reduction Project (After) - Bluff Canal CAR (5 miles south of Worland, WY Washakie County). Five acres. 2016 Completion date.

- Developed a 2017 CWPP Update for Washakie County (see Figure 30);
- Conducted assessments of 350 structures within Washakie County⁷
- Cooperated directly with USDA Forest Service, USDI BLM, State of Wyoming, private entities, and municipalities in a collaborative approach at strategically planning and implementing fuels treatments across land ownership boundaries;
- Three (3) Firewise Communities re-certifications;
- Twenty-five (25) slash piles burned (see Figures 28 and 29).

homes/cabins in the Canyon Creek Country subdivision, and past USFS NFP funded fuels projects, has put this highest ranked at-risk community in a much greater position for reduced risk in the event of threat from wildfire.

⁷ Additional funding from the Wyoming State Forestry Division through the USDA Forest Service 2012 WSWUI NFP Grant Program facilitated the implementation of this Structure Ignitability Assessment effort for both Washakie and Big Horn Counties.

- Fifteen workshop/educational events including six (6) CWPP Operating Group Meetings; four (4) Firewise Picnics (see Figures 31 and 34);
- Three (3) Bighorn Basin Firesmart Newsletters sent to approximately 3,750 recipients (see Figure 32).
- Bighorn Basin Firesmart Facebook page created (see Figure 33).



Figure 28. Pile burning in the NE Corner Fuel Break of the Canyon Creek Country CAR. Local CCC resident, Russ Kaness, on hand as a volunteer. November 21, 2016.



Figure 29. Pile burning in the NE Corner Fuel Break of the Canyon Creek Country CAR. November 21, 2016.

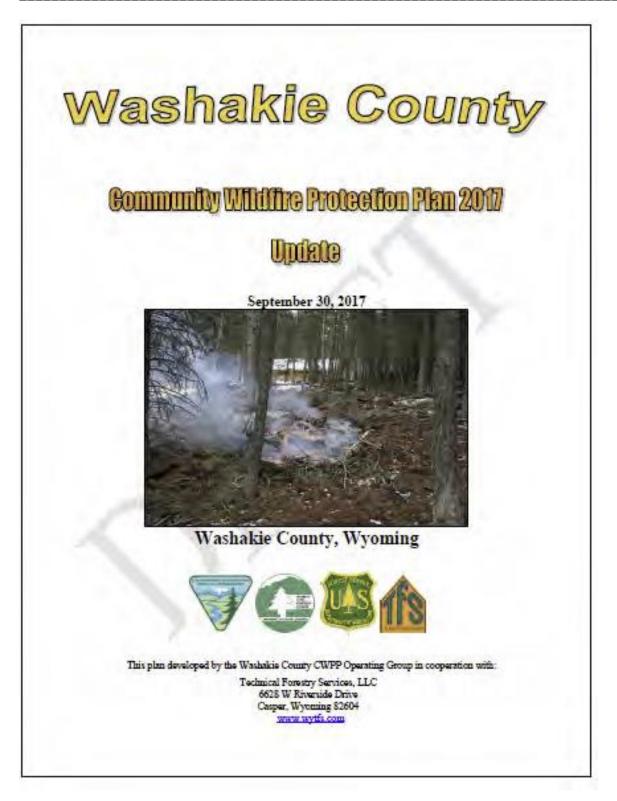


Figure 30. Community Wildfire Protection Plan Updates (CWPP) were developed for both Big Horn and Washakie Counties in 2017.



Figure 31. 2017 Bighorn Basin Firewise Annual Picnic, June 17, 2017 – Willow Park Group Area, Bighorn National Forest. Chris Kocher, Washakie County Fire Warden (center) and Joy Hill, Big Horn County Planner (right) pictured with Washakie and Big Horn County WUI residents.



Figure 32. Bighorn Basin Firesmart Newsletter

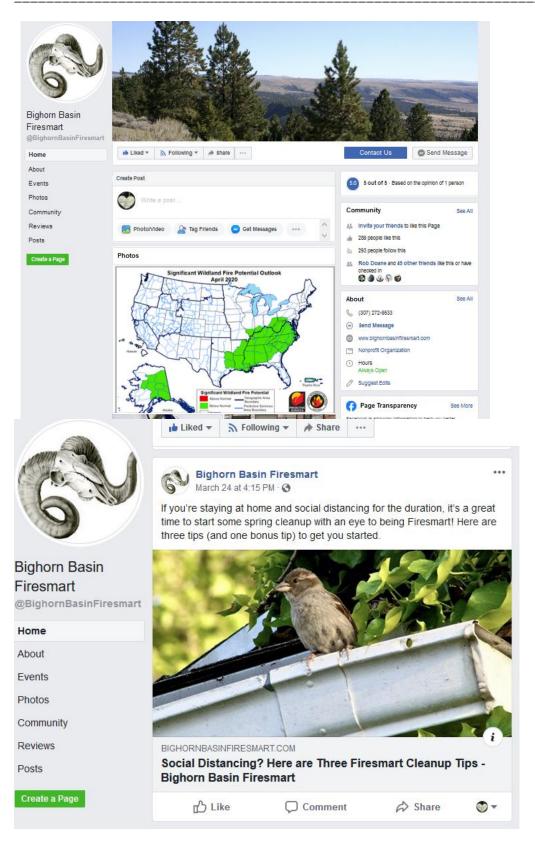


Figure 33. Two recent Bighorn Basin Firesmart - Facebook pages



If your Washakie County cabin, or Wildland Urban Interface rural home needs a WILDFIRE MITIGATION PLAN, contact Washakie County Firewise, at (307) 333-1098, Firewise@wytfs.com, or 6628 W. Riverside Drive, Casper, Wyoming 82604. Requests will be kept on file, if funding as not available for this task in 2017.



The South Bighorn Mountain Cabin Firewise Picnic is <u>June 17th</u>, 2017, at the Willow Park Group Area mapped below. Activities start at 11 A.M. To get the head count right for the caterer, please RSVP tcrt@bresnan.net, or phone 307-587-6122, if you plan on attending.

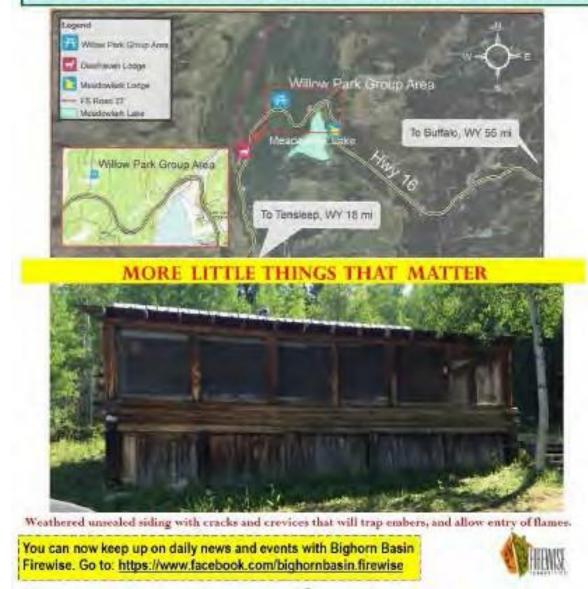


Figure 34. 2017 Firesmart Picnic announcement

In addition to the fuels treatments listed in the table below, accomplishments in 2018 include; three (3) Wildfire Mitigation Plans prepared; four (4) Technical Assists; and three (3) workshop/educational events, including a CWPP Operating Group Meeting, Firesmart picnic, and an Annual Workday. Three (3) Firewise Communities, USA were re-certified, the Bighorn Basin Firesmart Website created (Figure 49), and 1,500 Firesmart Newsletters sent.

Table 3. Fuels treated in acres in Washakie County in Calendar-year 2018. The Summerford-Huss WMP defensible space project was implemented using cost-share funding through the 2017 WSWUI Grant. The other projects listed were treated with the assistance of the Washakie County Firesmart program but did not receive direct cost-share funding. All fuels treatment projects accomplish the following: reduction in stand density to a minimum of 20-foot crown spacing, removal of dead and down woody materials, reductions in vertical fuel continuity (ladder fuels).

Project Name	Community -at-risk (CAR)	Total Area (ac)	Fuels Treated (ac) 2018	Fuel Break (ac) 2018	Slash piled or removed (ac) 2018	D-space treated (ac) 2018
Summerford-Huss WMP	MFPR	1.0	0.0	NA	1.0	1.0
Baugh Cabin WMP*	CCC	1.0	0.0	NA	1.0	1.0
Tolman Forest Products Sale*	CCC	97	53.5	0.0	53.5	NA
CCC Inter-lot Fuels Treatment*	CCC	~100	1.0	0.0	1.0	0.0
Bower Cabin WMP*	CCC	1.0	0.0	1.0	1.0	1.0
Fauver WMP	NBRI	1.0	1.0	0.0	1.0	0.0
ATFRP 051801 (Phase I)	ONGU	17.5	17.5	0.0	0.0	0.0

Summerford-Huss Cabin WMP

Defensible space work completed at the Middle Fork Powder River CAR in southeast Washakie County (see Figures 35, 36 and 37).



Figure 35. Defensible space treatment in the Middle Fork Powder River CAR (After) in southeast Washakie County. TFS Photo July 2018



Figure 36. Defensible space treatment in the Middle Fork Powder River CAR (Before) TFS Photo Aug 2013.

Figure 37. Defensible space treatment in the Middle Fork Powder River CAR (After) . TFS Photo July 2018.

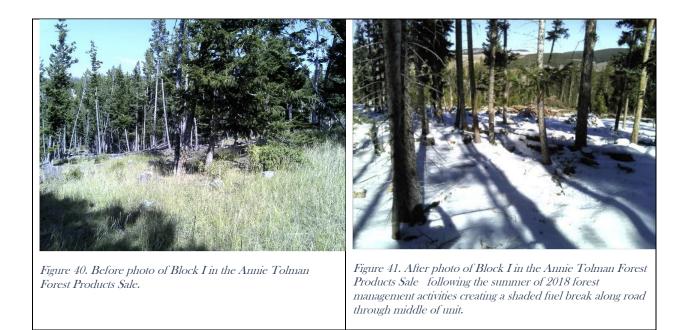
Bower Defensible Space including pruning (before & after)

Defensible space work completed in the Canyon Creek Country CAR Washakie County **1.0 acre** completed including pruning (see before and after photos Figures 38 and 39).



Annie Tolman Forest Products Sale (2018)

Firesmart Coordinator implemented sale layout, preparation and administration (Block I) forest management activities at the NW area of the Tolman Ranch property near the Canyon Creek Country CAR property line. **17.5 acres of forest products harvested and utilized** (see Figures 40 and 41).



Firesmart Coordinator implemented sale layout, preparation and administration (Blocks MC and LP) forest management activities at the NW area of the Tolman ranch property against the Canyon Creek Country CAR property line. **36 acres harvested and utilized** (see Figures 42 and 43 – Unit L and Figures 44, 45 and 46 - Block MC).



Figure 42. Before photo looking southeast from Unit Kb into the 3 acre Unit L. Prior to harvest this stand consisted of doghair growth of lodgepole pine (Pinus contorta). TFS photo 8/22/17.



Figure 43. After harvest of lodgepole pine stand in Unit L. A clearcut harvest method was implemented to achieve management goals for this unit. TFS photo 10/17/18



Figure 44. Before photo of the Annie Tolman Forest Products Sale area (Block MC). Landowner Dani Rice surveys the area prior to harvesting. TFS Photo July 2018.

Figure 45. After photo of the Annie Tolman Forest Products Sale area (Block MC) . TFS Photo Aug 2018



2018 Hazardous Fuels Planning

North Bighorn River Fuels Reduction Project planning including the establishment of a CWPP Operating Group and a February 2, 2018 and May 11, 2018 OG meeting at the Worland Fire Hall at which 15 agency and other fire personnel were in attendance (see Figure 47).



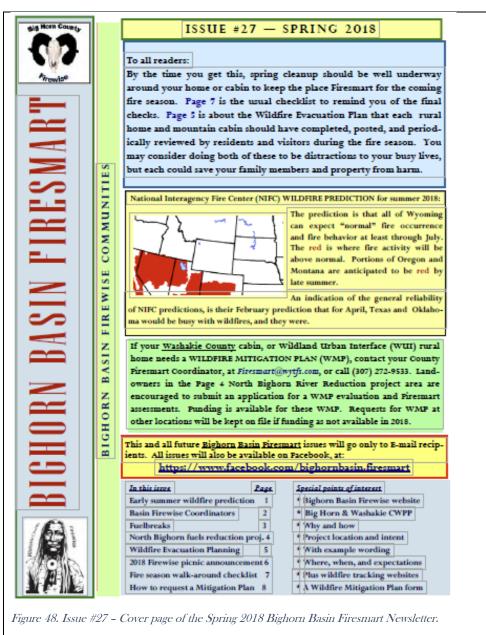
Figure 47. May 11, 2018 North Bighorn River CWPP Operating Group meeting at the Worland Fire Hall. State, County, Federal and at-large stakeholders attended to discuss strategies for addressing the hazardous fuels conditions in the North Bighorn River CAR from the Highway 20/16 bridge in Worland north to county line.

2018 Defensible Space Planning

Tolman Mountain Shop WMP (signed 7/7/2018); Jamie Fauver WMP (signed 7/19/2018) 7.5 acres; Mazlowski WMP developed for the North Bighorn River CAR (un-signed) 41.5 acres

2018 Public Outreach

Published Winter (#26), Spring (#27), Summer (#28), and Fall (#29) issues of the Bighorn Basin Firesmart Newsletter and sent to approximately 1,500 residents, agency personnel and other interested parties in the Bighorn Basin and around the state of Wyoming (see Figure 48).



Worked with private web page developer Wild Moon Services to develop the Bighorn Basin Firesmart webpage, Facebook page, and promote Firesmart awareness programs, Ready Set Go! Program and assist in emergency response within Washakie County (see Figure 49).



Do You Have a Plan?



Do you live or have a cabin in Washakie County?

If so, you're eligible to get a free Wildfire Mitigation Plan for your property AND you may be eligible for cost-sharing funds. You can click here to download a fillable PDF of our application form or you can contact us to have one sent to you.

Important Information

on the Spruce Budworm in the Bighorns In recent years, spruce budworm activity has increased in all counties in the Wyoming Bighorn Mountains and foresters and land managers are growing concerned. Read

About Bighorn Basin Firesmart



We do education and outreach for those living and working in wildfire-prone areas of the Bighorn Mountains and Bighorn Basin of Central Wyoming. Read more here.





Slash pile burning and other burning is something many folks in the wildland urban interface (WUI) do this time of year as part of regular property maintenance. Here is some valuable information for everyone in the WUI. Read more...





Click here to sign up for our quarterly Firesmart newsletter, filled with seasonal information you can use.

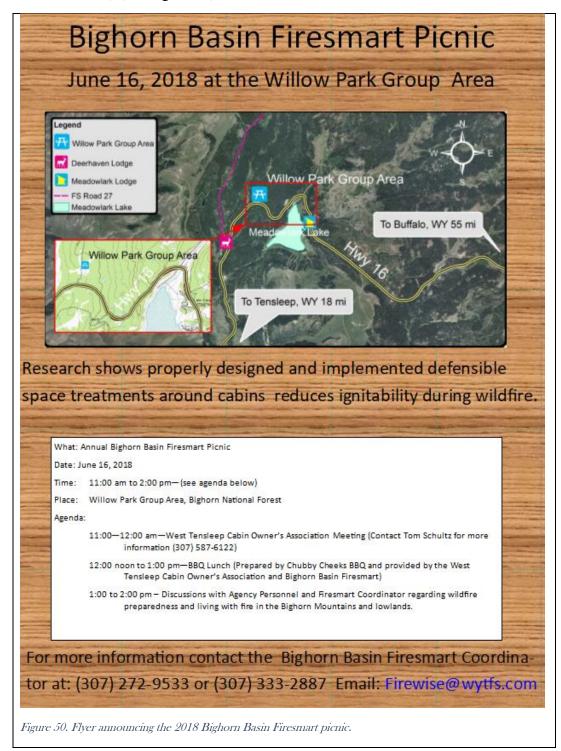
Save the Date!



Landowner Field Day Friday, June 26, 2020 9 a.m. - 2 p.m. Inchauspe Property in the Bighoms Stay tuned to this page for more information. All landowners in Washakie and Big Hom Counties are invited!

Figure 49. Bighorn Basin Firesmart homepage at <u>http://bighornbasinfiresmart.com/</u>

Hosted the 2018 Firesmart Picnic at the Willow Park Group Area in the Bighorn National Forest on June 16, 2018; agency personnel from the USFS, State and County agencies made presentations on wildfire preparedness and hazardous fuels reduction principles in the WUI (40 persons in attendance) (see Figure 50).



Coordinated the re-certification of three communities into the Firewise Communities USA program for 2018-2019. The Communities-at-risk of Canyon Creek Country, Canyon Creek Village and the West Tensleep Cabin Owners Association were all re-certified as Firewise Communities USA (see Figure 51 and 52).



Figure 51. Firewise Communities USA sign on USFS Road No 27 leading into the West Tensleep CAR in Big Horn County, Wyoming.



Figure 52. Firewise Communities USA sign on Onion Gulch Road leading into the Canyon Creek Country CAR in Washakie County, Wyoming.

Participated in public outreach at the Canyon Creek Country CAR Annual Work Day August 11, 2018 (see Figure 53).



Figure 53. Fuels hazard reduction project implemented by community members from the Canyon Creek Country 2018 Annual Workday on August 11, 2018. TFS Photo.

2017 Community Assistance for Adjacent Lands (CAFA) Grant

Washakie County was awarded a 2017 CAFA Grant (Community Assistance for Adjacent Lands or Stevens Grant) in 2017. This grant is intended for activities addressing hazardous fuels conditions on private lands adjacent to values-at-risk and that border federal lands. The Onion Gulch/Canyon Creek Country is an area in Washakie County that has numerous seasonal homes and cabins and that borders both USDA Forest Service and USDI Bureau of Land Management administered lands. Figure 54 is a map showing the various project work in this area in the past 10 years. Accomplishments in Calendar Year 2018 are as follows:

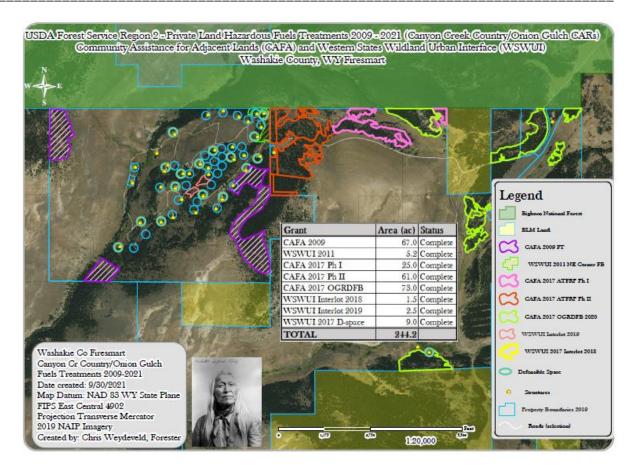


Figure 54. ATFRP and OGRDFB 2020 project area Map showing areas that have been treated for hazardous fuels through 2023.

Annie Tolman Fuels Reduction Project (ATFRP-051801 Phase I)

Unit I fuels treatment area completed (see Figures 55 and 56). Machine sequence of 17.5 acres commercial thinning of spruce-fir mixed-age forest with 15' crown spacing; 17.5 acres of hand slash piling of small diameter slash and 17.5 acres of machine piling at landings; 17.5 acres of biomass removal and product utilization in the form of sawlogs, post and poles and firewood. Local contractor employing four workers accomplished contract work. Harvested and utilized **17.5 acres of forest products.**



Figure 55. Before photo of Block I in the ATFRP-051801 fuels treatment.



Figure 56. After photo of Block I in the Annie Tolman Forest Products Sale and ATFRP-051801 fuels treatment.

Year 2019

In addition to the fuels treatments in the table below, accomplishments in 2019 include; nine (9) Wildfire Mitigation Plans prepared; ten (10) Technical Assists; one (1) Defensible space projects completed; 69.25 acres of fuels reduction projects (see Table 4); three (3) workshop/educational events during 2019 including a public outreach "Firesmart Day", Firesmart picnic, and an Annual Workday. Three (3) Firewise Communities, USA were re-certified; 1,800 Firesmart Newsletters sent; 289 persons reached with outreach regarding the Ready, Set, Go! Program.

Table 4. Fuels treated in acres in Washakie County in Calendar-year 2019. The Tolman Mountain Shop WMP defensible space project was implemented using cost-share funding through the 2017 WSWUI Grant. The ATFRP-051901 Phase II project was treated with funding through the 2017 Washakie County CAFA Grant. All fuels treatment projects accomplish the following: reduction in stand density to a minimum of 20-foot crown spacing, reductions in horizontal fuel continuity (dead and down woody materials), and reductions in vertical fuel continuity (ladder fuels).

Project Name	Community -at-risk (CAR)	Total Area (ac)	Fuels Treated (ac) 2019	ппег вгеяк	Slash piled or removed (ac) 2019	D-space treated (ac) 2019
Tolman Mountain Shop WMP	ONGU	1.0	0.0	NA	1.0	1.0
ATFRP 051901 (Phase II) ⁸	ONGU	61.0	68.5	0.0	68.5	0.0
ATFRP 051901 (Phase I)9	ONGU	7.25	7.25	0.0	7.5	0.0

Table 5 below reflects additional annual accomplishments through the 2017 WSWUI Grant through 2019.

Table 5. 2017 Washakie County WSWUI Grant accomplishments for Calendar Year 2019.

Grant Number:	Year				
17-DG-11020000-040; CFD #10.664	2019				
GOALS (target number stated in grant)	ACCOMPLISHMENTS				
B. Hazardous Fuels Planning					
a. 15 Wildfire Mitigation Plans (WMPs)	9				
C. Public Outreach					
a. Firesmart Newsletter (750 recipients annually)	1800				
b. Firewise Workshops (3 annually)	3				
c. Firewise Communities certified (1-3)	3				
d. Promotion of Ready Set Go! Program (persons)	289				
e. Technical Assists	10				
e. Coordination with emergency responders and assistance in improving response times.	2				
f. Structure ignitability assessments	50				

⁸ 61 acres ATFRP-051901 (All units)

 $^{^{\}circ}$ 4.5 acres ATFRP-051801 (Unit H); 3.0 acres ATFRP-051801 Unit J

ATFRP-051801 (Phase I)

Unit J fuels treatment area completed (see Figures 58). Machine sequence of 3.0 acres clear-cut of lodgepole pine; 3.0 acres of hand slash piling of small diameter slash and; 3.0 acres of biomass removal and product utilization in the form of sawlogs, post and poles and firewood (see Figure 57). Local contractor employing four workers accomplished contract work. Harvested and utilized three (**3.0**) acres of forest products.



Figure 57. After photo of Unit J in the Annie Tolman Forest Products Sale July 2019. This is a three-acre block that consisted of dense, mature lodgepole pine. Prescription was to clearcut and pile slash. USFS forest land in background was selectively harvested lodgepole approximately 10 years prior to photo.

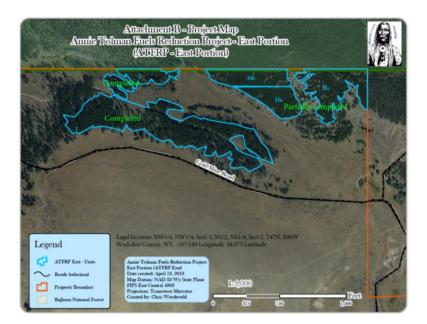


Figure 58. ATFRP-051801 (Phase I) Project Map. See Figures 59 and 60 for a description of area partially completed on Units Ha, Hb, and Hc.

ATFRP-051801 (Phase I) – Firesmart Coordinator conducted inspection and approval of contract work on Unit H at the NE area of the Tolman Ranch property. Contractor completed **4.25 acres of the total 20-acre unit** in summer of 2019. The remainder of the project will be included in the 2020 OGRdFB Project (see Figures 59, 60, 61 and 62). Treatment included a combination of hand sequence of thinning and hand piling and the use of a skid steer with mastication cutting head resulting in mulch.

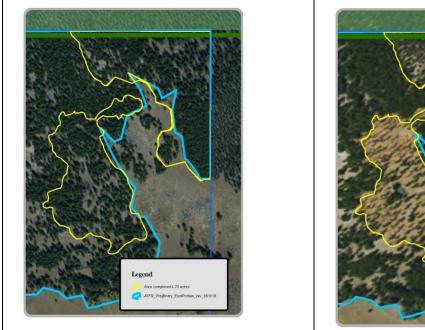


Figure 59. Unit Hc project area aerial view on 2015 NAIP imagery before treatment.

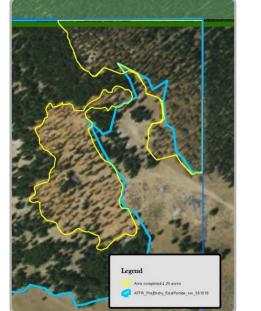


Figure 60. Unit Hc project area aerial view on 2019 NAIP imagery after treatment.



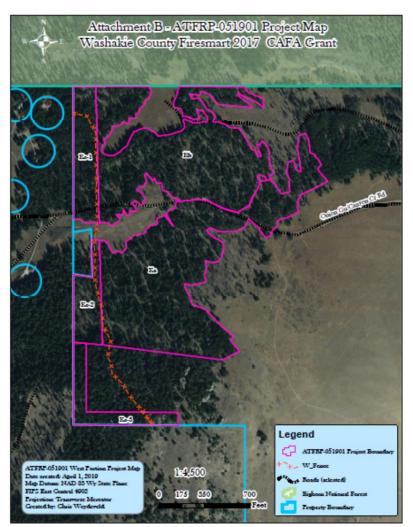
Figure 62. Unit Hc after treatment. TFS photo 7/24/2019. Treatment was completed with a machine masticator.

ATFRP-051901 (Phase II)-

Completed the layout, advertisement, bid process, award, administration, inspections and project approval for Phase II (ATFRP-051901) of a 61-acre hazardous fuels reduction project within the Tolman ownership (see Figure 64 – Project Map). The project was advertised in the spring of 2019 and awarded to Summitt Forestry out of Oregon. Summitt supported a 20-person crew in August 2019 and completed the entire project to specifications in five days (see Figures 63, 64, 65 and 66).



Figure 63. Summitt Forestry crew beginning work on the ATFRP-051901, Unit Kc-1 in August 2019.



reduction.

Figure 64. ATFRP-051901 (Phase II) Project Map. Entire project area completed in the summer of 2019.



Figure 66. ATFRP-051901. Unit Ka after fuels reduction treatment summer of 2019.

2019 Slash Burning

ATFRP-051901 (Phase II) – Firesmart Coordinator burned approximately 350 slash piles in October and December of 2019 on approximately 30 acres within the project area (see Figure 67 and 68).



Figure 68. Unit Kc-3 slash burning within the ATFRP-051901 (Phase II) project area. December 2019.

Study Defensible Space and Fuels Reduction Project

On 3/22/2019 at approximately 3:00 pm, the Worland Fire Department and surrounding area firefighters were called to a fire approximately five miles south of Worland on U.S. Highway 20 for a report of a fire ignited by fireworks.



Figure 69. March 22, 2019 wildfire at Study property in dense Russian olive, cottonwood, shrubs and cured grasses.

The fire burned through approximately five acres of dense fuels and threatened structures in the area.



Figure 70. Crews worked well into the evening to contain the fire. Study home in center-right background.



Figure 71. No injuries reported and no structures were damaged.



Figure 72. Drone image of wildfire extent at Study property. Study home in upper left of photo.

The homeowner, Doug Study, was told of the Firesmart program by Fire Chief and County Fire Warden Chris Kocher. Soon after, Mr. Study contacted the Firesmart Coordinator and completed an application for a Wildfire Mitigation Plan and Cost-share assistance to complete a Defensible space and fuels reduction project on his property (see Figures 73 and 74).

FOREST STEWARDSHIP DEFENSIBLE SPACE - WILDFIRE MITIGATION PLAN For: Doug & Kristina Study	FOREST STEWARDSHIP WILDFIRE MITIGATION PLAN For: Doug & Kristina Study
The second	Example of hand the scale previous results that would be executed in the Wyonniky Weed and Previous Results of the Results of
weed list. NOTE: Tais property is within the South Bighorn River Community-strict (SBRI CAR) Tabs community is compactized a high priority for factor reatments in the Washade Commy 2017 Community community for argostized a high priority for factor reatments in the Washade Commy 2017 Community Wildfree Protection IP and Update (2017 WC/WPP). The project area is considered at high risk of wildfree Bight and the structure of the structure home and address instructures within the CBy of Worland.	NOTE: This property is within the South Rightener River Community-arched (SIRI C-04), Tabi community is cargorized a high priority for rules' provident in the Wissiake Course 2017 Community Wildlife Providential Wardshife (SIP), The project work to considered at high risk of wildfire that could, Janconstructed haveness houses and other structures within the City of Verante.
Chris Wyderell <u>10/15/2019</u> Chris Weydereld, Washakie County Firesmart Coordinator Date	Chris Neydeveld 9/30/2019 Chris Weydeveld Washakie County Firesmart Coordinator Date
Brian Augult 19/19/2019 Wyoming State Forestry Division Date	Wyoming State Forestry Division This Forest Stewarkship – Fire Miligian Plan, prepared at my request reflects objectives This Forest Stewarkship – Fire Miligian Industry and the present of the state
This Forest Stewardship – Fire Mitigation Plan, prepared at my request reflects abjectives that I have for my property and commins implementation recommendations that bave been reviewed with me in more thous objectives.	This Forest Stewardship - The Mitginian Plan, performed at my request rejection of the performance of the pe
Property Owner D Date	Property Owner Date
Figure 73. Study defensible space Wildfire Mitigation Plan	Figure 74. Study fuels reduction Wildfire Mitigation Plan

After approval of the cost share applications by Firesmart Coordinator and Wyoming State Forestry Division Forester, the landowner hired a fuels reduction contractor. The landowner contributed in-kind labor and equipment.

The projects were completed in February 2020 (Figures 75, 76, 77 and 78).



Figure 75. Before image of Study home. TFS Photo November 2019



Figure 76. After image of Study home. TFS Photo0 January 2020.

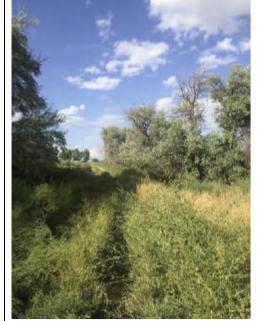


Figure 77. Before photo of the Study WMP fuels reduction project. TFS photo. September 26 2019



Figure 78. After photo of the Study WMP fuels reduction project. Piles will be burned and forest products utilized at a later date. TFS photo. January 2020



Figure 79. Slash burning in 2021 with structure in the background. TFS Photo 2021.



Figure 80. Burning slash piles at the east entrance of the Canyon Creek Country subdivision. TFS photo November 7, 2022

Accomplishments on the Washakie County Firesmart, 2017 CAFA Grant Grant #: 17-DG-11020000-047, CFDA #10.664 (Annie Tolman Fuels Project) are as follows:

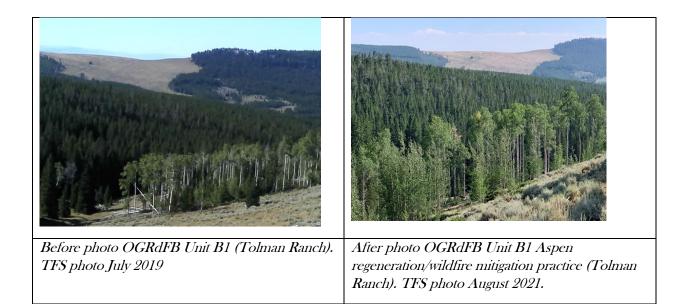
One hundred and fifty-nine (159) acres of fuels reduction was accomplished on the Annie Tolman Fuels Project (see attached Project Area Map). The grant application initially proposed a target area of 102 acres. Due to favorable bids and, after completion of the Onion Gulch Road Fuels Break Project in September 2021, the Annie Tolman Fuels Reduction Project has achieved 159 acres of fuels reduction constituting a net benefit of 57 acres treated.

Treatment included a combination of mechanical and conventional forest harvest, hand sequence of thinning and hand piling, and the use of a skid steer with mastication cutting head resulting in a mulch layer. This project area is bordered by a Firewise USA Community-at-risk with over 30 structures in the Wildland-urban Interface (WUI).¹⁰

In June 2020 the 73 acre Onion Gulch Road Fuel Break Project (OGRdFB) was awarded to Summitt Forestry, a forestry contracting firm from Oregon. Summitt Forestry completed project work in the summer of 2021. The following before and after photos show the project work on the OGRdFB in the summer of 2021.

¹⁰ See previous SF-PPR reports to show project work in the years 2017-2020.







Before Photos – OGRdFB Unit C (Michelena Ranch) 2019 TFS Photo



After Photos – OGRdFB Unit C (Michelena Ranch)August 4, 2021 TFS Photo



Before Photos – OGRdFB Unit C (Michelena Ranch) 2019 TFS Photo



After Photos – OGRdFB Unit C (Michelena Ranch)August 4, 2021 TFS Photo



Tolman Unit E3 OGRdFB Before photo-TFS Photo (2019)



Unit E3 OGRdFB After photo. TFS Photo (2021)



Unit E3 OGRdFB Before photo. TFS Photo (2019)

Unit E3 OGRdFB After photo. TFS Photo (2021)



OGRdFB Unit H (on center right of photo) following the 2021 fuels reduction treatments conducted under the 2017 Washakie County Firesmart – Annie Tolman Fuels Project - CAFA Grant. TFS Photo September 2021.



OGRdFB Unit H aspen regeneration treatment/wildfire mitigation (foreground of photo) as part of the 2021 fuels work conducted under the 2017 Washakie County Firesmart – Annie Tolman Fuels Project CAFA Grant. TFS Photo Sep. 2021.

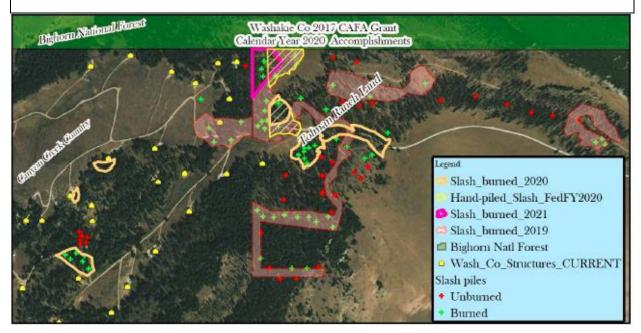
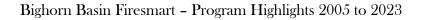


Fig. C-1. Slash burned in the Annie Tolman Fuels Reduction Project area. Some piles remain from the 2021 project and will be burned during the winters of 2022 – 2023.



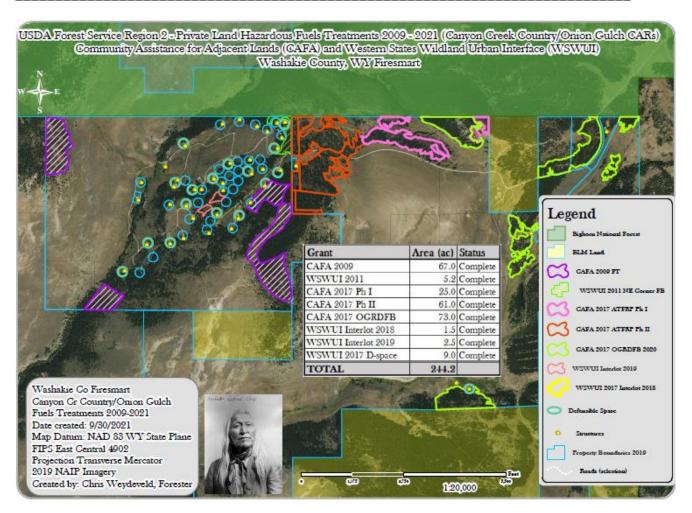


Fig. C-2. Completed fuels treatment projects in the Onion Gulch-Canyon Creek Country project area between 2009 and 2021.

<u>2022</u>

Table 6. Washakie Firesmart 2018 WSWUI Grant Accomplishments - 2023

Grant Number: 18-DG-11020000-050; CFD #10.664	Year	Year	Year	Year	Year	TOTAL
	2019	2020	2021	2022	2023	
GOALS						
A. Hazardous Fuels Treatments						
a. Defensible Space Projects (10)		0	1	1	7	9
b. Fuels Treatments (100 acres) NBRI & SBRI		0	2	46.71	0	48.71
c. Fuels Treatments (other Washakie Co CARs) (0)		0	1.25	54.1	54.5	109.85
B. Hazardous Fuels Planning						
a. Wildfire Mitigation Plans (WMPs) 10		5	15	9		37
C. Public Outreach						
a. Firesmart Newsletter (750 recipients annually)		1800	1800	1800	1200	8,400
b. Firewise Workshops (3 annually)		0	0	0		3
c. Firewise Communities certified (3 annualy)		3	3	2	3	14
d. Promotion of Ready Set Go! Program (persons)		250	250	250	250	1,289
e. Coordination with emergency responders and assistance in improving response times.		1	1	0	0	4
f. Structure ignitability assessments		9	13	5	0	77

1. Hazardous Fuels Treatments

Washakie County continues to see increases in hazardous fuels in the form of invasive species, Russian olive and tamarisk, along the Bighorn River corridor. This fuels complex presents difficulties for emergency response personnel due to access issues. Much of this river corridor occurs in the presence of values-at-risk in the form of homes, farms and ranches. In 2023 a total of 54.5 acres of fuels treatment projects (WINCH2022) were made possible through this grant as part of a County-wide effort to treat fuels along the river and reduce the chances of catastrophic wildfire threatening life and other values-at-risk.



Before photo of the WINCH2022 Fuels Reduction Project. A dense concentration of Russian olive and tamarisk can be seen in the background of photo. November 8, 2022. TFS Photo.



After photo following fuels treatment during which Russian olive and tamarisk was removed by contractor with funding and technical support from the USDA Forest Service, Washakie County Fire, Washakie County Weed & Pest, Wyoming State Forestry Division and the Wyoming Wildlife Natural Resources Trust Fund. May 25, 2023. TFS Photo.



Before photo of the WINCH2022 Fuels Reduction Project. A dense concentration of Russian olive and tamarisk can be seen in the background of photo. November 8, 2022. TFS Photo.



After photo following fuels treatment during which Russian olive and tamarisk was removed by contractor with funding and technical support from the USDA Forest Service, Washakie County Fire, Washakie County Weed & Pest, Wyoming State Forestry Division and the Wyoming Wildlife Natural Resources Trust Fund. May 25, 2023. TFS Photo.

More 2022 fuels treatment projects on the Bighorn River, Washakie County, Wyoming...



After photo of Bower Fuels Reduction Project March 1, 2022