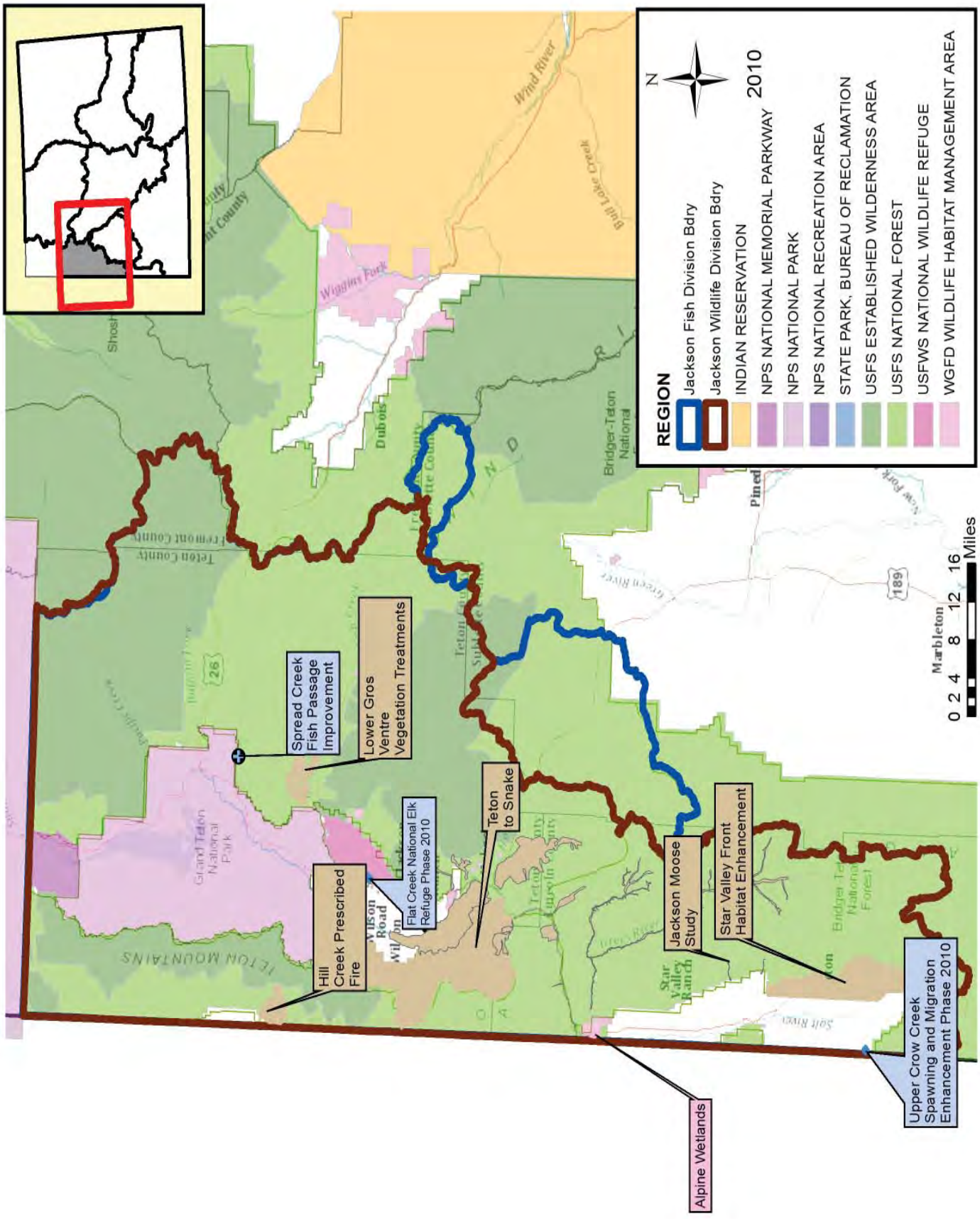
JACKSON REGION



JACKSON REGION HIGHLIGHTS

- 16 acres of wetlands were restored at South Park WHMA
- 8 water control structures were replaced at South Park WHMA and Alpine Wetlands
- 43 miles of elk fence were maintained on WHMA's and feedgrounds
- 60 acres of meadow were irrigated and mowed on Horse Creek WHMA
- Provided native Snake River fish access to an additional 8 miles of spawning and migrating habitat by replacing a headgate in tributary Spring Creek
- Replaced decaying irrigation infrastructure, restoring native fish access to over 45 miles of historic spawning and rearing habitat in Spread Creek
- Enhanced another 2 miles of stream and 4 miles of riparian habitat on upper Crow Creek
- Reduced hazards to anglers and wildlife along 2.5 miles of riparian area along Flat Creek
- 1,907 acres of Rx fire in Lower Gros Ventre
- 1,624 acres received Rx fires in Hill Creek

Hill Creek Prescribed Burn (Goal 2) - Steve Kilpatrick

The Teton Basin Ranger District of the Caribou-Targhee National Forest completed the second phase of the three phased Hill Creek prescribed burn and the Bradley Mountain prescribed burn during the fall of 2009. (Figures 1 and 2). The following partners contributed financially to the project: RMEF - $5,500; BTNF - $87,000.

The area consists of important moose, elk and mule deer transition/winter range and the main objective is to set back succession in aspen/conifer and mountain shrub communities. It is located along the base of the west side of the Tetons approximately six miles southeast of Driggs, ID. The treatment includes three burn units. The Darby Unit (1,583 acres) was completed in 2008 and the Rapid Creek Unit (1,624 acres) was completed in 2010. Approximately 85% of the Rapid Creek Unit received fire with a mosaic of intensity/severity levels. The remaining Hill Creek Unit (2,051 acres) is planned to be completed by September of 2012.

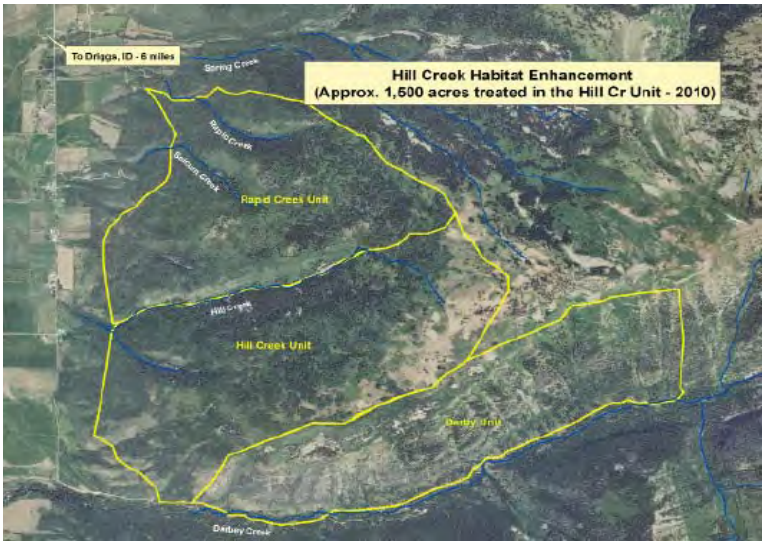


Figure 1. Location of the Hill Creek prescribed burn.


Figure 2. Implementation of the Hill Creek prescribe burn.

Spring Creek Headgate Fish Passage (Goal 2) – Lara Sweeney Gertsch

The spring creeks of the Snake River watershed are integral to the natural recruitment of native Snake River cutthroat trout for a fishery of national and regional importance. Levees and flood irrigation have changed the structure and function of the river and its spring creeks. Partnerships with private landowners, WGFD, WHFW, Teton County Conservation District, WWNRT, and conservation groups were initiated to re-establish the function of these spring creeks and enhance fisheries habitats.

Spring Creek, south of Jackson, is critical Snake River cutthroat trout spawning habitat and is entirely located on private lands. The reach of Spring Creek of most concern was upstream of the confluence with Blue Crane Creek and downstream of the Spring Creek Headgate. The work for this stream reach was separated into two concurrent projects: channel enhancement and passage restoration. The Spring Creek Channel Enhancement Project addressed the degraded channels with objectives to narrow stream width, add spawning gravel, construct instream structures, and dredge sediment accumulations. This project was initiated in December 2009 (See 2009 SHP Annual Report) and finished when the headgate project was complete on February 19th, 2010.

The second concurrent project was the Spring Creek Headgate Fish Passage Project. The objectives were to restore and maintain access to spawning habitats within Spring Creek. The Spring Creek irrigation headgate was in disrepair and needed to be replaced. The headgate acted as a barrier, excluding downstream native fish assemblages from eight miles of spawning habitat. A new headgate structure, which included a fish ladder, was designed by the landowner, with assistance of the WGFD. The prefabricated concrete structure was delivered in four pieces (Figure 3). A 30 metric ton trackhoe was brought in to place the headgate sections. During construction, the stream was diverted into a historically abandoned oxbow. The concrete segments were fit together and leveled as they were placed in the streambed. The project was completed on February 19, 2010 (Figure 4). With the headgate work concluded, spawning gravels were strategically placed in seven areas downstream. The ladder was monitored and the sod matting was planted during the 2010 spawning season.

Figure 3. Spring Creek Headgate prefabricated concrete structure prior to installation. The prefabricated concrete forms were fit together as they were placed in the streambed.

Figure 4. Spring Creek Headgate structure installed. The fish ladder is on the west bank of the structure (bank opposite the cottonwood tree).

Lower Gros Ventre Vegetation Treatments (Goal 2) - Steve Kilpatrick

The Jackson Interagency Habitat Initiative (JIHI) lower Gros Ventre treatment (16,684 acres) was initiated in 2005. Phase I focus was on site-specific ignitions to benefit bighorn sheep and elk. Managers also avoided burning large continuous patches of sagebrush to minimize negative impacts to greater sage grouse. Phases I & II (2007-2009 Rx burning) produced a nice mosaic of burned and unburned areas with approximately 2,922 acres receiving fire (Figure 5 and 6).

Phase III was initiated in the fall of 2010 with funding from the following: RMEF- $14,000; Wyoming Wild Sheep Foundation - $10,000; WGBGLC $10,000; and the WWNRT $50,000. Approximately 1,907 acres received prescribed fire in a mosaic of varying severity/intensity.

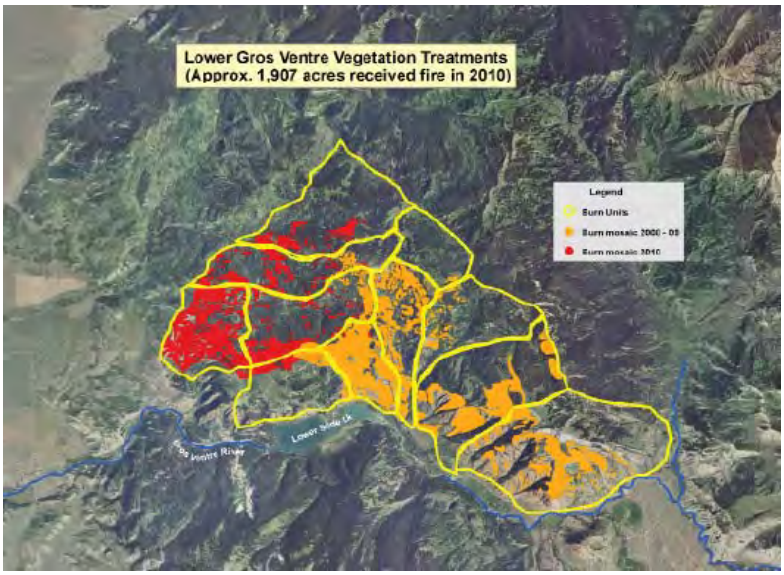


Figure 5. Lower Gros Ventre burn mosaic.

Figure 6. Bighorn Sheep utilizing the Lower Gros Ventre Rx burns, 2010.

Prescribed burning conditions 2010 were equally excellent to those in 2009. Managers took advantage of the excellent burn windows with implementation activities lasting for over a month and allowed October snow falls to extinguish the last of the fires. As in 2009, a variety of challenging weather events kept managers vigilant throughout the month-long implementation phase.

Public relations were again a high priority and BTNF staff did an excellent job of keeping the public updated and informed during implementation. FS personnel established public relations stations along the Gros Ventre road and patrolled it regularly entertaining questions and discussing the project with those interested. A group of graduate students from the Teton Science Schools also provided an interpretive tour of the site. FS and WGFD personnel gave a presentation on fire ecology and the project to a group of approximately 20 guests at the Gros Ventre River Ranch.

Spread Creek Fish Passage (Goal 2) - Lara Sweeney Gertsch

The Spread Creek Dam is located within the BTNF approximately 1/4 mile south of the TNP boundary and north of the town of Jackson. The dam and infrastructure was built in 1967 and showed a need for significant repair. The concrete diversion was originally designed only for irrigation deliveries and there were no allowances for upstream fish passage through the structure. As constructed, the total vertical drop across the structure was approximately 3.5 feet. In the subsequent 43 years, the formation of a scour hole downstream of the structure increased the hydraulic drop to as much as 9 feet. Wyoming TU partnered with WGFD, GTNP, BTNF, and water users Triangle X Ranch and Moosehead Ranch, to modernize the irrigation infrastructure while removing a fish barrier.

The Spread Creek Dam blocked Snake River cutthroat trout and native non-game fish from migrating out of the mainstream Snake River and accessing over 45 miles of historic spawning and rearing habitat in the middle and upper portions of Spread Creek. The objectives of the Spread Creek Fish Passage Project are to restore native fish access to the diverse habitats in headwater reaches and improve irrigation delivery systems. Detailed objectives included:

- Removing the Spread Creek Dam and appurtenant headgates (Figure 7).
- Re-grading of the stream channel to natural elevations and to allow fish passage through the old dam site (Figure 8).
- Installing of three rock weirs to maintain the elevation necessary to divert water at the new upstream point of diversion. The rock weirs were designed to allow fish to either migrate over or through to ensure access to upper Spread Creek habitats.
- Modernize the irrigation infrastructure including new headgates, sediment basin, pipe (both from the headgate to splitter box and under Spread Creek to deliver water to the south ditch), and splitter box.

Figure 7. Crews removing the 1964 Spread Creek Dam, a barrier to upstream migration for Snake River cutthroat trout and native non-game fish.

Figure 8. Re-grading of the Spread Creek channel to allow fish passage through the old dam site.

Construction was completed in mid-December 2010. Once the snow is gone in spring 2011, the partners will discuss operations of the new facilities and opportunities for revegetation and monitoring.

Upper Gros Ventre Habitat Enhancement (Goal 2) - Steve Kilpatrick

The JIHI habitat managers continue to conduct assessments and plan for treatments within the Upper Gros Ventre (Figure 9). A 2007 habitat inventory was used to habitat type a 29,612 acre area between Slate Creek and Cottonwood Creek. Certain elements necessary for NEPA have been initiated and the WGFD provided a $15,000 grant to the BTNF for NEPA development.

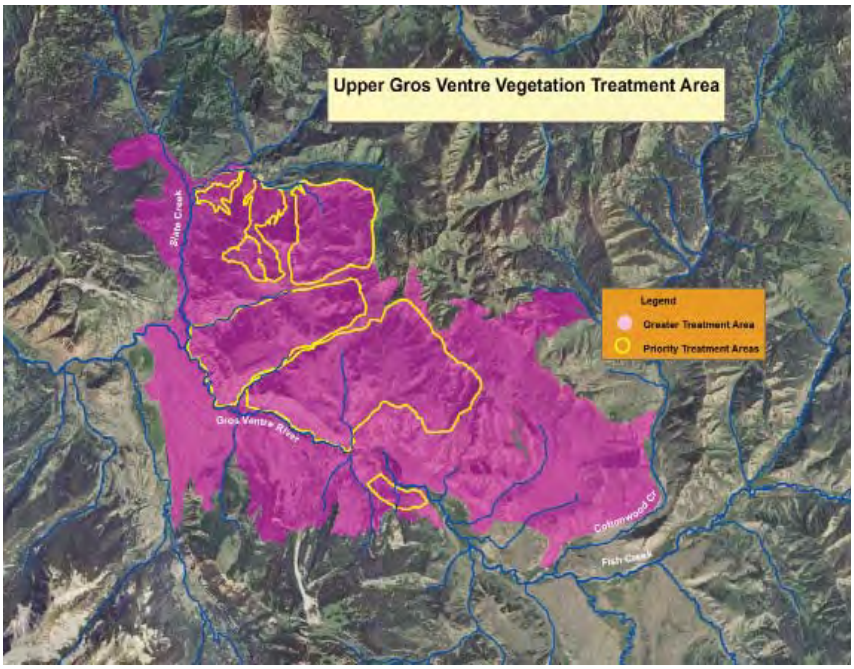


Figure 9. Upper Gros Ventre Habitat Enhancement Area.

Additional cover-board assessments and snowshoe hare pellet counts were conducted in 2010 to refine treatment recommendations and assess compliance with the Canada lynx forest plan amendment. Numerous areas

proposed for treatment have met or surpassed the horizontal cover-board threshold of 48%. However, relatively low densities of pellets were found in most of these. Managers have planned a field trip involving the USFS, USFWS and WGFD in early 2011 to review and assess data sets, review on-site conditions and make final recommendations relative to treatments.

Upper Crow Creek Spawning and Migration Enhancement Phase 2010 (Goal 2) – Lara Sweeney Gertsch

Crow Creek is a tributary to the Salt River. The WGFD is working with landowners, NRCS and Star Valley Conservation District to promote watershed function and ecosystem integrity by enhancing the quality and diversity of aquatic habitats. Enhancing Snake River cutthroat trout spawning and migration and habitat function in Salt River tributaries is an ongoing watershed effort. The Upper Crow Creek Spawning and Migration Enhancement Phase 2010 Project objectives are to provide sustainable pools, overhead cover, spawning habitats and migration routes for native Snake River cutthroat trout.

The project is located 4 miles southwest of Fairview and approximately ½ mile east of the Idaho Stateline. The first two phases of the Upper Crow Creek Spawning and Migration Enhancement Project were installed during the falls of 2008 and 2009. Two rock cross-vane structures, two barb structures and six tree revetments were placed to enhance overhead cover and maintain stream form. Washed gravels were added for spawning habitat. Pools were excavated to enhance meander pattern and improve trout habitat.

Upper Crow Creek Spawning and Migration Enhancement Phase 2010 is directly downstream of the first two phases. This reach is enrolled in the WGFD's Private Land Public Wildlife Program for angler access. Currently, the stream has minimal habitat diversity. There are few pools and riffles, and little overhead cover. The stream bottom and spawning gravels are inundated with sediment. Installing instream rock habitat structures, dredging sediments, building riparian fence, planting streambank willows, creating water gaps, and installing a new water well and pipelines are planned.

Figure 10. Boy Scouts of America planting willows on upper Crow Creek.

Work began during the spring of 2010. Boy Scouts harvested willows from another stream in the watershed in May. After three weeks of preparing the cuttings, the scouts planted approximately 300 willows along the Crow Creek streambanks (Figure 10). In September, twelve rock structures were installed and dredging was used to stabilize and restore the form of the meandering stream. The riparian fences were completed and all gates were mounted. This fencing assists three different landowners to manage their horse pastures with a rest/rotation system. In 2011, livestock will be excluded from the riparian pasture with the exception of water gaps. The off-stream water well, pipeline and trough are planned to be in place by October 2011. When the pipeline, trough and well system is complete, the water gaps will be removed and replaced by gates. The livestock will be excluded until tree and shrub planting have become established or after five years of grazing rest.

Teton to Snake Project (Goal 2) - Steve Kilpatrick

The Jackson Ranger District (BTNF) is proposing to conduct prescribed burning, non-commercial and commercial thinning to modify potential fire behavior, set back succession and enhance aspen communities across 87,000 acres in the Jackson area. This includes important wildlife habitats along the west side of the Snake River from Teton Village to south of Hoback Junction (Figure 11). Fire suppression has moved the landscape toward an advanced vegetation succession state with decreased age-class diversity. Vegetation age-class diversity

generally results in increased landscape stability and resistance to catastrophic events associated with fire, disease and insect infestations.

A minimum of 198 fires were suppressed within the project area between 1953 and 2007 (an average of 4 fires/year). Moreover, four fires were suppressed within the project area in 2010 (Figure 12).

We support the Forest Service's approach to manage fuels and protect human developments utilizing a more fine-scaled mosaic of vegetation manipulations. We also support using limited mechanical treatments and prescribed fires to allow the return of more natural fire regimes, especially within the Palisades Wilderness Study Area. The proposed treatments will generally enhance habitats for wild ungulates, especially moose, if juxtaposition and optimal amounts of thermal cover and foraging areas are managed for. It should also be noted that old growth and climax vegetation communities are providing valuable habitats for many of our designated Species of Greatest Conservation Need within the project area. Thus, we encourage managers to design the project so it strikes the best balance between meeting fuels reduction objectives and maintaining/enhancing wildlife habitat for the suite of species occurring within the area.

Public scoping has been completed, including comments from the WGFD, and additional planning/evaluations are needed prior to a record of decision which is scheduled for the fall of 2011. A proposal for NEPA funding support from the WGFD has been submitted ($24,027).

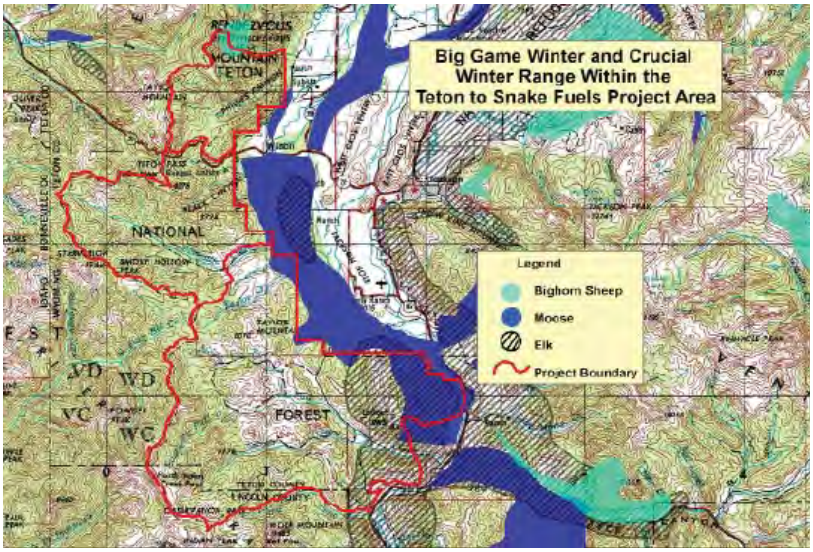


Figure 11. Designated big game winter, summer and transitional ranges adjacent to and within the Teton to Snake Fuels Management Area.

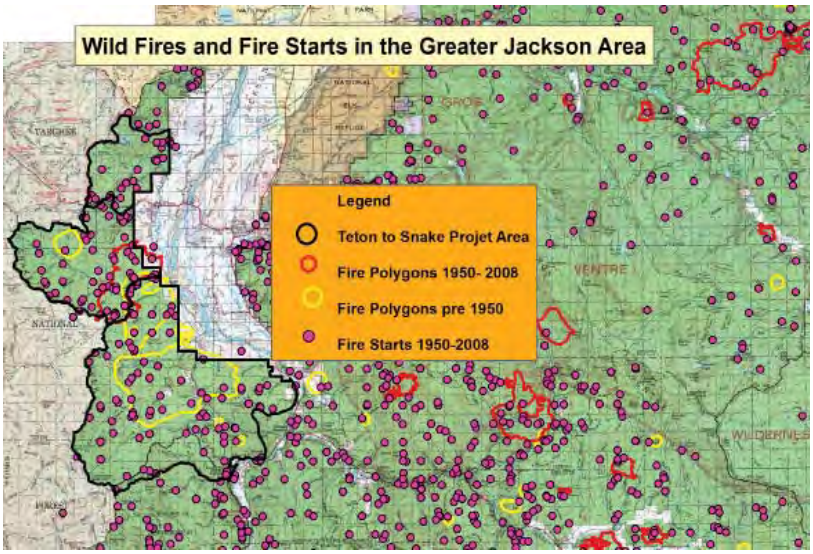


Figure 12. Historically, fire has played a major role in molding vegetation communities surrounding Jackson and the Teton – Snake project area. The pre- 1950 fires in the project area occurred in 1931 and 1934, resulting in stand regeneration which generally lasts for 80-110 years in this area.

Flat Creek National Elk Refuge Phase 2010 (Goal 3) - Lara Sweeney Gertsch

Flat Creek is a spring fed and irrigation augmented stream that originates north of the town of Jackson, runs through town and ends at the Snake River south of town. This stream is integral to Jackson Hole and the natural recruitment of native trout for the Snake River, a fishery of national importance. In addition, Flat Creek on the National Elk Refuge (NER) provides a walk in catch and release trophy Snake River Cutthroat trout fishery. Flat Creek's proximity to town, public access and large average fish size make it one of the most popular creeks in Wyoming.

In 1983 a large habitat restoration project was initiated on Flat Creek by WGFD, NER and Jackson Hole Chapter of Trout Unlimited. The treatments narrowed Flat Creek, stabilized banks, increased cover, and tied up excess sediment in bars and streambanks. Twenty-seven years later, some of these structures still function in stabilizing

Flat Creek while others create hazards for anglers. In 2009, 2.5 miles of creek were visually assessed, 760 photos of structures and 29 historical photo repeats were taken. A map, summary and evaluation of the inventory were presented to NER personnel. The partners concluded that angler safety, increasing brook trout numbers and decreasing function of the stream structures were significant issues. Angler safety was identified as the highest priority and was planned to be addressed first.

The objective of the Flat Creek NERS Phase 2010 is to reduce hazards to anglers and wildlife along the stream. Old structures were anchored using T-posts and cables along the stream banks. Due to natural freeze and thaw over 27 years, several T-posts are six to eight inches out of the ground. During the summer months grass obstructs the view of these posts (Figure 13). This presents a hazard to anglers walking the banks. In addition, cables attached to these posts are often exposed. Finally, a dilapidated and unsafe angler foot bridge was identified as not repairable and aesthetically objectionable (Figure 14).

A contract has been awarded to remove exposed hardware on the banks. In addition, the Habitat and Access section of the WGFD removed the Flat Creek Foot Bridge in July. Phase 2011 will address the unstable instream structures. Future goals are providing habitat for all age classes of trout, moving Flat Creek toward stability, and identifying options for enhancing Snake River cutthroat trout populations.

Figure 13. Exposed T-post along the banks of Flat Creek present a hazard to angler and wildlife.

Figure 14. Flat Creek Foot Bridge, a dilapidated and unsafe angler foot bridge was removed by the Habitat and Access Crew.

Jackson Moose Research – Phase II (Goal 5) - Steve Kilpatrick

Phase I of the Jackson moose research, "Resource selection and population dynamics of Shira's moose (*Alces alces shirasi*) in northwest Wyoming" by Scott Becker, UW Coop. Unit was completed in 2008. Becker's findings and conclusions were:

- Moose wintering in the Buffalo Valley exhibit low reproductive potential illustrated by low twinning rates, reproductive pauses, in-utero loss over winter, possible nutritional deficiencies and relatively low parturition rates.
- The nutritional quality of available forage may be the most important determinant in limiting population growth over the past 20 years. Moose populations may have slowly declined in response to gradually declining habitat quality over this time period.

Phase II, "Habitat condition, diet, and nutritional quality of available forage: implications for a declining moose population in northwest Wyoming" is near completion. Janess Vartanian, Master of Science Candidate, U.S. Geological Survey, Wyoming Cooperative Fish and Wildlife Research Unit, Department of Zoology and Physiology, University of Wyoming should be completing her thesis in the spring of 2011. Over 40 moose were individually followed as a part of their research (Figure 15).

The primary objective of phase II is to characterize the condition and nutritional quality of seasonal habitats in the north Jackson Moose Herd Unit. An important secondary objective is to determine if moose demographic performance (i.e., survival and reproductive success) is reduced in areas of poor habitat condition or quality. The specific objectives are as follows:


Figure 15. Over 40 moose were individually followed.

1. Characterize moose habitat condition (i.e., browsing intensity) in winter and summer;
2. Compare the nutritional quality of winter and summer browse, and evaluate the factors that influence forage quality (i.e., wildfires);
3. Evaluate the influence of habitat condition and forage quality on cow survival, pregnancy, parturition, and calf survival of collared moose from both phases of the study; and
4. Characterize the timing of moose calf mortality and develop indices of predator use and diet in order to increase our knowledge of the potential influence of wolf and bear predation on calf survival.

A summary of the information and results will be reported in the 2011 SHP report. Her Thesis should be available from the University of Wyoming following completion and acceptance in Spring 2011.

Teton Bighorn Sheep Research (Goal 5) - Steve Kilpatrick

Assistance was provided to Alyson Courtemanch, Master of Science Candidate, USGS, Wyoming Cooperative Fish and Wildlife Research Unit, Department of Zoology and Physiology, University of Wyoming. Aly's project is "Resource selection, seasonal distribution, movement and recruitment of bighorn sheep in the Teton Range of northwest Wyoming". The project was initiated during the 2007-2008 winter and will continue through July 2010.

The Teton Range bighorn sheep herd, known as the Targhee Bighorn Sheep Herd, resides year-round at high elevation in Grand Teton National Park (GTNP) and on the BT and Caribou-Targhee National Forests. It is Wyoming's smallest and most isolated native "core" herd consisting of a remnant population of perhaps 100-150 sheep. The population's future is tenuous owing to its small size, likely isolation and the combined effects of loss of historic winter ranges, habitat alteration due to fire suppression and threats posed by increasing recreation in and near important seasonal ranges.

Substantial progress has been made to address the threats to the long-term survival of the herd by Teton Range Bighorn Sheep Working Group members. Disease concerns were significantly reduced with retirement of the last remaining domestic sheep allotment in the Teton's in 2005. Since 2001, the park has implemented seasonal closures of sheep winter ranges to reduce disturbance impacts during this stressful period. Work on genetic concerns is ongoing. Uncertainties still remain regarding the current and historical distribution of the sheep herd, recent and historical impacts to sheep habitat, and whether bighorn sheep avoid areas of human activity. Specifically, managers are concerned about proposed expansion of developed recreation along the park boundary and potential impacts to bighorn sheep winter ranges and travel corridors. Consequently, there is a critical need to quantitatively assess the habitat selection patterns of this isolated sheep herd. Much of the information has been obtained through information collected from collared bighorn sheep.

The primary objectives of this study are to:

1. Compile and map historic sheep distribution using historical data sources;
2. Document locations, characteristics, and use patterns for seasonal habitats and movement corridors;
3. Quantitatively assess the habitat selection patterns of the herd (in winter and summer);
4. Quantitatively assess avoidance of winter habitats by bighorn sheep due to human recreation (i.e. skiing);
5. Evaluate the effects of retiring domestic sheep allotments on the Teton Range bighorn sheep herd;
6. Determine lamb production and lamb survival to mid- summer for radio-collared adult female sheep; and
7. Analyze bighorn sheep nutrition in the Teton Range during summer;
8. Determine causes of mortality for radio-collared bighorn ewes throughout the study period;
9. Provide community education on bighorn sheep and the project in the form of public presentations, written materials, local media, website, etc.

2010 - Summer and winter data were collected through the 2009-2010 winter and through July 15, 2010 at which time the collars fell off (Figure 16). Aly is working on data analysis and hopes to complete her thesis summer 2011.

Figure 16. Twenty bighorn sheep collars were retrieved in the Teton's (Dr. Matt Kauffman, Dr. Seth Newsone).

In addition, the report will be summarized in the 2011 SHP. Genetic information from this study is being shared with the University of Montana which was contracted by GTNP to determine the genetic variability and population genetic structure of the Targhee and Jackson bighorn sheep herds. The University of Montana is conducting genetic analysis on 156 fecal and 29 tissue samples from the Targhee and Jackson herds. The following is a summary of their results.

- Significant genetic differentiation between Teton and Jackson herds, and North and South. Teton bands
- Genetic evidence for movement of one ewe from North and South Teton band
- Reduced genetic variation in both Teton Bands
- Low level of genetic differentiation among bands in the Jackson herd
- Strong evidence for a bottleneck in the North Teton band

Management Implications/Recommendations are:

- Consider translocation of unrelated sheep in the Teton Range, balancing risk of disease introduction with fitness increases from gene flow
- Consider the North and South Teton bands as separate management units (for harvest)
- Continue managing the Jackson herd as one genetic unit: though the bands could be demographically independent

The final thesis for the above study is expected in early to mid 2011.

Star Valley Front Habitat Enhancement (Goal 5) - Steve Kilpatrick

The Greys River Ranger District of the BTNF is proposing to implement prescribed burn treatments within a 24,963 acre area along the Star Valley Front (Figure 17). The area is east of Afton, and extends from Smoot north nearly to Turnerville. The main purposes of the burn are to:

(1) create a balance of age classes in the mountain shrubland, big sagebrush, aspen, and conifer woodlands
(2) improving the vigor of vegetation on mule deer and elk winter and transition range
(3) reduce fuel loading along the national forest-private land interface.

Burn units are currently being drafted to treat areas in crucial mule deer winter range recommended by WGFD in the mid 1980s. Burn units will be treated on a rotational basis given the importance of the habitat for wintering mule deer, elk, and moose. This area comprises the largest crucial winter range on the BTNF. It is within SHP terrestrial enhancement priority area and nearby aquatic enhancement area and ranks high. Project planning, in cooperation with WGFD, will continue through the 2010-2011 winter and field data collection will be completed in the summer of 2011 (goshawk surveys in many burn units is already completed). Project implementation is planned for 2012. A WGFD grant for $67,500 has been approved to conduct and implement NEPA associated activities.

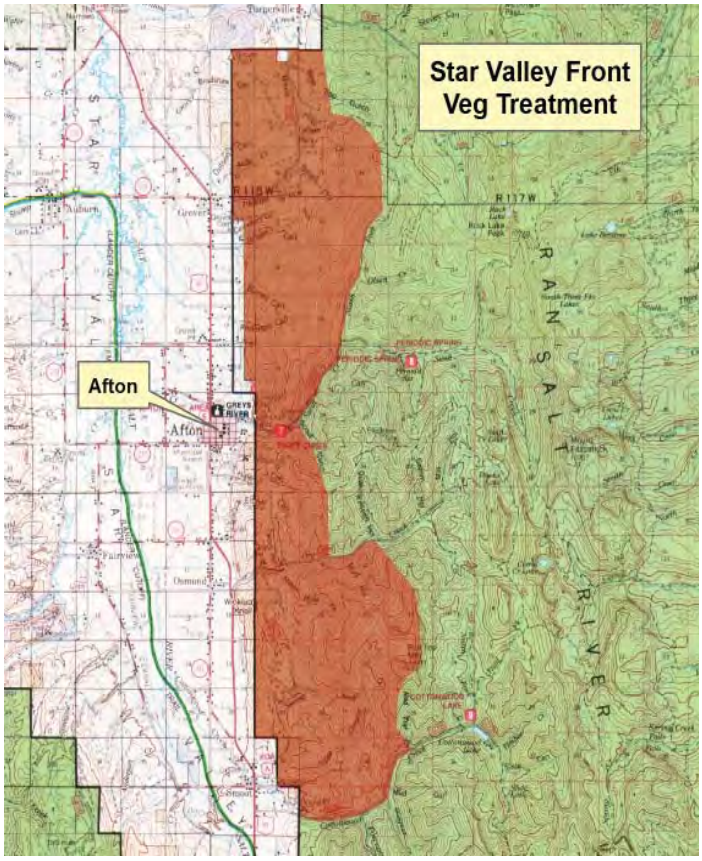


Figure 17. Star Valley Front treatment area.

Sublette Moose Herd Unit Habitat Assessment (Goal 5) - Steve Kilpatrick

TSS was contracted to conduct an assessment of habitat conditions within important seasonal ranges of the Sublette and Lincoln moose Herd Units. Poor habitat conditions are generally believed to have contributed to poor herd productivity within these herd units in recent years.

The project goal was to develop a habitat assessment with management recommendations for enhancing and conserving important moose winter/yearlong habitats associated with the two herd units. During 2010, TSS assessed and mapped approximately 46,705 and 60,235 acres within the Sublette and Lincoln Herd Units, respectively (Figure 18). Patch habitat mapping of willow and aspen communities, line transects, and extensive photo-documentation were used for this habitat assessment.

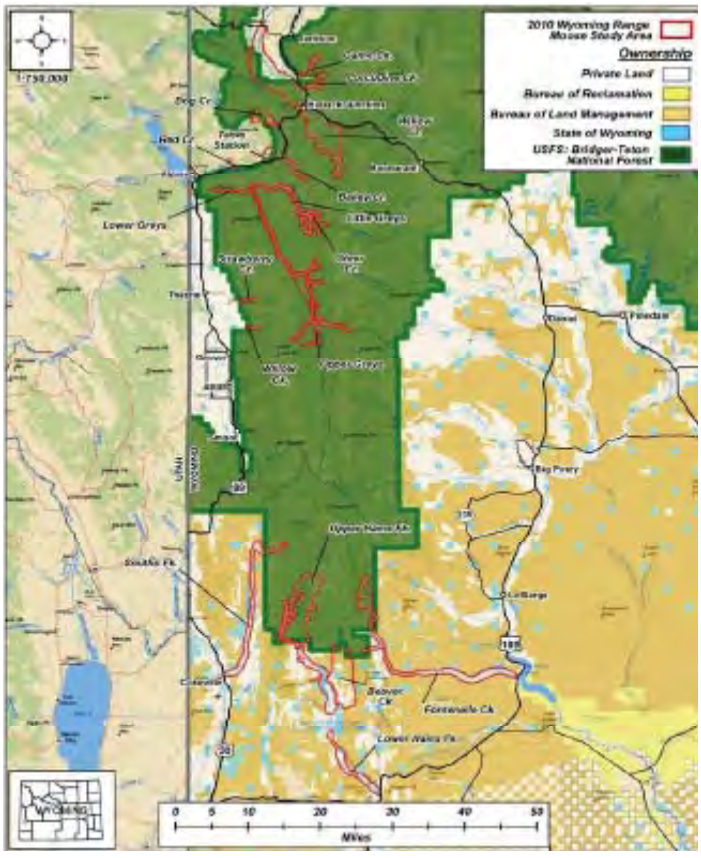


Figure 18. Habitat assessment locations for the Sublette and Lincoln moose Herd Units, 2010.

The assessment report is being finalized and should be in the summer of 2011. The report includes assessment data and recommendations and is coupled with an extensive excel and GIS based dataset which is linked to field data collected, transects, photo points and patch recommendations. The final report will include discussion of the current habitat conditions and recommended management alternatives and enhancement ideas to improve moose habitat for portions of the Sublette and Lincoln moose herds. In general, the assessment found overall willow habitats to be in a relatively healthy state. However, some specific areas exhibited inadequate willow regeneration and/or regeneration that is unable to escape the browsing zone due to elevated herbivory

levels by wild and domestic ungulates. Aspen communities within the study area were composed of stands in all categories of risk to loss. Advanced successional stages, lack of natural fire, and excessive herbivory by wild and domestic ungulates are the major factors contributing to some aspen communities being at high risk levels. Patch level management recommendations included evaluation of livestock grazing, prescribed fire, mechanical thinning, willow plantings, and conservation easements.

Horse Creek WHMA Irrigation (Goal 2) - Matt Miller

The lower meadow on the Horse Creek WHMA was irrigated in 2010. Approximately 60 acres on the elk feedground got multiple coverings of water from June through August (Figure 19).

Figure 19. Irrigation on Horse Creek WHMA.

South Park WHMA Wetland Restoration (Goal 2) - Mat Miller

The eastern developed wetland on South Park WHMA was restored in 2010. The islands and shoreline were excavated in 2009. In 2010 over 10,000 bare root sedges and rushes were planted in the newly excavated areas (Figures 20 and 21). Native seed was also planted on the upland excavated areas. WGFD also set in place 36 pieces of wetland sod that had a mix of rushes and sedges. The water control structures were replaced with Agri Drain boards which are much more precise and easier/safer to operate. An informational kiosk was placed in front of the wetland to inform the public of the important role wetlands play in Teton County.

Figure 20. 10,000 bare root sedges and rushes planted on South Park WHMA.

Figure 21. Aerial photograph showing the treated wetland on South Park WHMA.

Alpine Wetland Restoration (Goal 2) - Matt Miller

The Alpine Wetland Restoration project was started in 2010. With cooperation from the BOR the WGFD pulled out eight water control structures on the wetlands that were old and dysfunctional (Figure 22). Five new structures were placed along with new PVC piping (Figure 23). The other three water control structures will be replaced in the spring of 2011. The new water control structures will allow for precise and safe water level manipulation.

Figure 22. Removing water control structure.

Figure 23. Replacing water control structures.

Horse Creek WHMA Mowing (Goal 2) - Matt Miller

The lower meadow on Horse Creek WHMA was mowed in 2010. Approximately 60 acres were mowed (Figure 24) with the goal of removing the tall and decadent grasses and having fresh protein-rich new growth come up in the fall for elk before feeding operations begin.

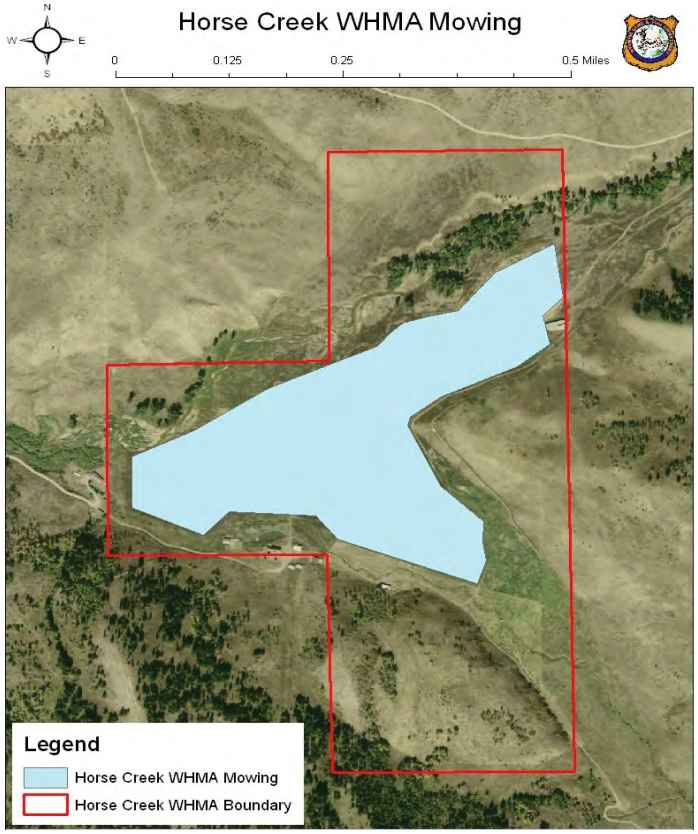


Figure 24. Mowed area on Horse Creek WHMA.

Elk Fence Maintenance (Soda Lake WHMA, Greys River WHMA, South Park WHMA, Muddy Creek Feedground, and Horse Creek WHMA) - Matt Miller

Nearly 43 miles of elk fence was maintained by the Habitat and Access Crew in the Jackson and Pinedale areas. Fences were walked and rode on horseback or 4-wheeler (Figure 25). All downed trees on the elk fence were removed and holes or damages in the fences repaired (Figure 26).

Figure 25. Replacing a section of elk fence on the Soda Lake WHMA .

Figure 26. Replacing a section of elk fence and installing a new gate on Greys River WHMA elk fence.

Weiner Creek Burn (Goal 2) - WLCI

The burn will restore aspen habitat in important elk calving areas for the Afton herd. Treatment of these key areas will improve aspen health and benefit wildlife through the larger area. This project benefits aspen habitat restoration on one of the most important elk calving areas for the Afton herd and important for aspen-dependent species, transition and winter range for elk, mule deer, and moose east of Alpine, transition and winter range for mule deer and elk of crucial winter range just east of Smoot, and sagebrush, aspen, meadow, and willow habitat on transition range for mule deer and elk 30 miles up the Grey's River. The Weiner Creek burn was completed with 1500 acres treated and 30,000 acres assessed. Partners include BLM, BTNF, WGFD, NPS, RMEF, WWNRT, Wyoming Sportsmen for Fish and Wildlife, Star Valley Conservation District, and Western Wyoming RC&D.