

LANDER REGION

HABITAT PROJECTS

Lander Front Habitat Improvement Project

Work began on the landscape scale mule deer winter range improvement project. Funds were obtained from multiple agencies and organizations totaling \$481,226. A contractor was hired to remove 970 acres of juniper and has already completed 665 (Figure 1). He will resume work next spring to complete the contract and will continue working until funds are exhausted. The statewide Habitat and Access Maintenance Crew completed sagebrush mowing on 70 acres on the Hansen Ranch. Spike was purchased for the 2,300-acre treatment, however permits were not completed in time to apply the herbicide in 2007. Application will occur in 2008. The two water developments also have not begun due to incomplete paperwork and will be completed in 2008. Transects were established on treatment areas and will be read again 1, 3 and 5 years post-treatment.



Figure 1. Before and after photos of the juniper removal treatment.

In February, 860 acres of sagebrush was mechanically treated by mowing in the Government Draw area, south of Hudson, WY (Figure 2). This was the second year of the project for the primary benefit for sage grouse. Continued monitoring has shown positive new growth on previously treated areas of mowed sagebrush. Mowing is slated to continue in the winter of 2008.



Figure 2. Sagebrush mechanically treated by mowing in the Government Draw area, south of Hudson, WY.

- About 850 Christmas trees were sunk in Ocean Lake to provide fish habitat and stabilize sediments.
- Over 100 fish were captured in the Firehouse Meadows Diversion on Bear Creek.
- Over 150 fish were captured in East Fork and Wiggins Diversions in two days of sampling.
- 375 acres were pitted on Whiskey Basin WHMA.
- 665 acres of juniper were treated.
- Hansen conservation easement was completed on the North Fork of Popo Agie Creek.
- Funding obtained and projects underway for mule deer habitat improvements.

WILDLIFE HABITAT MANAGEMENT AREAS

Whiskey Basin WHMA

The statewide Habitat and Access Maintenance crew range pitted 375 acres on the Whiskey Basin WHMA (Figure 3). The goal of the pitting is to increase snow and water retention to increase herbaceous production. Transects will be established in fall 2008 inside and outside of the treatment to determine if the pitting accomplished the goal.

The 2006-2007 over winter herbaceous utilization was 59%, the highest in three winters. Fall herbaceous production was 291 pounds/acre, down from 323 in 2006.

Trail Lake meadow was reseeded following a debris flow event in July. This effort should result an increase in palatable forage for area bighorn sheep.



Figure 3. Range pitting on the Whiskey Basin WHMA.

Spence/Moriarity and Inberg/Roy WHMA's

Herbaceous production on both the Spence/Moriarity and Inberg/Roy was a dismal 108 pounds/acre, half of the 211 pounds/acre in 2006 and a sixth of the 2005 production. The 2006-2007 over winter utilization was 46% on Spence/Moriarity and 65% on Inberg/Roy. Utilization has been well over 60% 4 of the last 6 years on Inberg/Roy. With the Wiggins Fork elk herd currently at the high end of the 6,000-7,000 objective (6,938), the expected over winter use will be high and perhaps detrimental to plant survival. Depending on the severity of the winter, we anticipate elk moving onto private property on the East Fork and onto the reservation, possibly causing damage issues.

Bear Creek and Wiggins Fish Entrapment on Inberg/Roy and Spence/Moriarity WHMA's

Evaluated techniques to investigate fish loss to irrigation system on Inberg/Roy and Spence/Moriarity WHMA's summer 2006. New modified fish traps were purchased following design modifications learned during the summer 2006. In 2007, fish trapping began mid-May and continued until irrigation stopped in August on the four irrigation diversions out of Bear Creek. All of these diversions are on WGFD WHMA's and WGFD controls all the water rights on these 4 diversions (Figure 4).

At the upper diversion (Elk Trap Meadows), four fish were lost into the irrigation ditch in over 600 hours of sampling. No fish were lost in the Dennison diversion in over 600 hours of sampling. The Dennison diversion has a trash screen installed and it is cleaned daily, which has the additional benefit of stopping fish loss into this diversion. At the third diversion, Firehouse

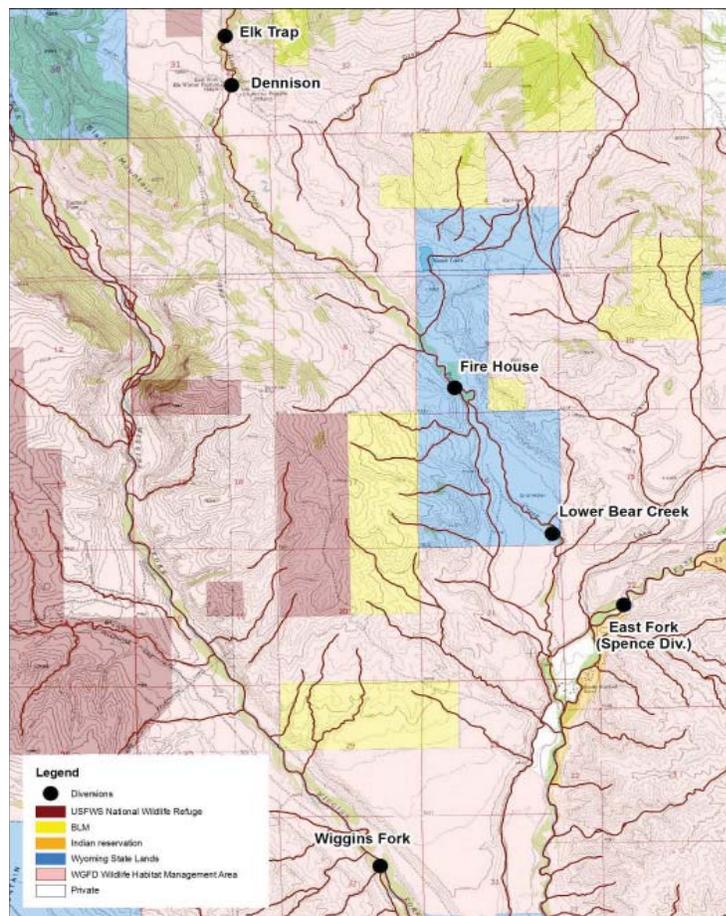


Figure 4. Locations of diversions investigated

Meadows, fish loss was significant with over 100 fish lost in the 600 hours of sampling. Losses included some large, 8 inch plus, Yellowstone cutthroat trout. For the lowest diversion, there were 100's of suckers and dace lost, but only three Yellowstone cutthroat trout.

Once Bear Creek irrigation stopped, the traps were moved to the East Fork and Wiggins Fork diversions to refine sampling techniques for these diversions. There was as many fish caught in 2 days of sampling at the Spence Diversion out of East Fork Wind River as was lost in the entire season of sampling of Bear Creek diversions. For 2008, larger traps will be needed and they will need to be checked every few hours. Proposals were developed to modify the lowest two diversions on Bear Creek and the Spence Diversion on East Fork Wind River. These potential projects will require further engineering and design work.

Ocean Lake Fish Habitat Enhancement Project

Assistance was provided to a group of 18 sportsmen for the placement of approximately 850 discarded Christmas trees on the ice at Ocean Lake. The goal of 500 trees was exceeded when a local supermarket donated over 300 trees that could not be sold because they were too dry. The trees are placed in groups on the ice and wired to 6-inch diameter by 12-inch long concrete cylinders. At ice-off, the trees sink to the bottom where they will hopefully enhance fish habitat and encourage stabilization of lake sediments. This annual activity started in 1990.

Since the WGFD, under Cooperative Agreement No. 14-06-600-1013, manages the BOR lands in and around Ocean Lake, they requested that we hold any permits for habitat enhancement work. Application for a new 404 permit was made with the COE in late 2007 and authorization of the project under Nationwide Permit 23 was approved through November 28, 2009.

Red Canyon WHMA

Herbaceous production on the Red Canyon WHMA was 394 pounds/acre, up slightly from 386 pounds/acre in 2006. Over winter utilization has not been determined in recent years, but appears to be light to moderate.

The Red Canyon WHMA has been part of the Nature Conservancy's Red Canyon Ranch CRM since its inception in 1994. This summer, the CRM held a workshop for all interested parties to determine the future goals and management of the ranch. After much discussion and a tour, we determined that the CRM has had an enormous benefit to all of the pastures involved, particularly riparian areas. Lander Region personnel decided to allow the ranch to graze the irrigated meadows on the WHMA every other year and become more involved in the partnership.

Chain Lakes WHMA

The Ladder Livestock Company (Patrick and Sharon O'Toole) grazed Chain Lakes WHMA from December 15th, 2006 to April 15th, 2007 with 1,200 head of sheep. A herder was present during the entire use period and did an excellent job moving the sheep throughout the WHMA. There appeared to be very little overuse. The O'Toole's signed a new five-year contract, starting in December 2007. In lieu of payment for the 2007-2008 winter use, they will be resting the Little Powder Mountain BLM allotment in crucial mule deer winter range near Baggs.

Red Rim WHMA

Herbaceous production on the Red Rim WHMA was 216 pounds/acre, down from 291 in 2006. The 2006-2007 over winter use was 65%, however the use was high because some cattle trespassed throughout the winter. Lichen transects, both on and off the WHMA, were read in June. The BLM currently has not analyzed the data.

Funding was obtained from the Southcentral Sage-grouse Working Group, Water for Wildlife (WFW) and WGFD Trust Fund to improve two watering facilities. A contractor will be selected and work will begin to convert windmills to solar panels in 2008. Funding applications were also sent to the WWNRTB, WGFD Trust Fund and WLCI to complete numerous infrastructure and habitat improvements. The WWNRTB approved \$30,000 for weed treatment, reseeding and well improvements that will be conducted in 2008.

Revisions to the WHMA Habitat Management Plan were made in 2007 and will be completed in 2008.

Grazing on the WHMA occurred from March 20 to June 4 with 400 cow/calf pairs by Duane Rodewald. In return for use on the WHMA, Mr. Rodewald rested a pasture that was treated with Spike the previous year. The livestock grazing rest on that pasture was done to enhance sage-grouse nesting and brood rearing habitat and pronghorn winter range.

Sand Mesa and Ocean Lake WHMA's

\$50,000 was obtained from the BOR to treat saltcedar on the Sand Mesa and Ocean Lake WHMAs. Five photo points were established along Five-mile Creek to document the treatment effects. The Honor Farm will be treating the saltcedar with a basal bark application starting in January 2008.

During the spring of 2007, one of the three pivot sprinklers was replaced at Sand Mesa and work was started on replacing the remaining two pivots. All three pivots will be replaced by the spring of 2008. These pivots will facilitate improved farming efficiency resulting in increased habitat and hunting quality.

OTHER ACCOMPLISHMENTS

- The Lander Aquatic Habitat Biologist assumed the lead role in the Lander Field Office BLM RMP revision.
- Planned for repairing gabion structures in Cottonwood Drain near the Muddy Creek WHMA. This project was delayed due to the weather and will be rescheduled for 2008.
- Assisted with Yellowstone cutthroat trout and Colorado River cutthroat trout conservation planning and mapping updates.
- Participated on an Ocean Lake Watershed Steering Committee to create a watershed plan for Ocean Lake.
- Contacted multiple landowners along the Wind River around Dubois to continue the stream improvement project started on the Old Mill Public Fishing Area.
- Participated in the Red Canyon Ranch and Tony Malmberg CRMs.
- Participated in the Lander BLM RMP revision.