

Wyoming Partners for Fish and Wildlife Program Activities for 2013

PFW Overview

This is a report of accomplishments and activities we implemented this past year to address PFW program goals of conserving habitat, broaden and strengthen partnerships, improve information sharing and communication, enhance our workforce, and increase accountability. These 5 major goals were identified within the national Vision Document for the Partners for Fish and Wildlife Program and put to work at the state level through the development of 5 year work plans or state level strategic plans. Our Wyoming PFW strategic plan was developed with the assistance of our many conservation partners and built on a watershed or landscape level platform which we call focus areas. Our annual report flows in a similar fashion as our strategic plan providing the reader a glimpse of what activities are taking place in Wyoming by an impressive team of conservation partners.

1.) Conserve Habitat

There are many challenges facing Wyoming private landowners and public land managers, primarily accelerated habitat fragmentation and loss from energy development, urban expansion and in general wildlands being converted to commercial uses. These challenges are being met by the broader conservation community as a large coordinated effort using a variety of traditional tools, including existing habitat restoration programs and long term conservation easements. In addition, building on advancements from the previous year's creative innovations, habitat conservation strategies are continually being developed to adapt conservation to an ever changing environment; examples provided in the report include the "top" to "bottom" of the watershed management approach taken on by partners of the Little Snake River Basin, stepped up landscape scale approach of the Wyoming Landscape Conservation Initiative and Refuge/Partners cooperative wetland projects.

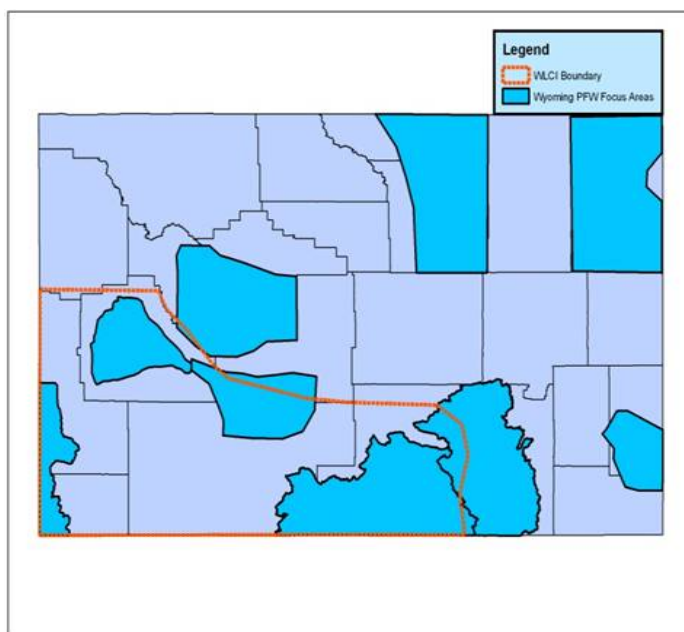
In 2013, Wyoming PFW program utilized a variety of Service dollars to restore, create, and enhance wildlife habitat on private and tribal lands, more than \$476,000 FWS program dollars were used to match \$2.6 million donated private, state and federal funds for a 5:1 match.

Wyoming PFW Cumulative Accomplishments 2013				
Habitat Type	2012 Accomplishments	2013 Accomplishments	FY 2012-2016 5 Yr Target	% 5-yr Goal Completed
Stream Enhancement (ft)	13,200	28,491	63,000	66%
Riparian Enhancement (miles)	2.5	10	119	10%
Wetland Restoration (acres)	530	600	1,125	100 %
Upland Enhancement (acres)	1,828	13,496	121,700	13%
Fish Passage/screens (units)	4	5	21	43%

Forecasting habitat restoration opportunities is complex with many variables including working within a framework of voluntary habitat restoration programs, individual landowner financial and economic situations, amount of public lands within a given focus area, and program budgets. What helps level the playing field is PFW staff longevity and retention, program delivery history and long term partner relationships contributes greatly to increasing project delivery efficiency.

Wyoming Landscape Conservation Initiative (WLCI)

Initiated in 2008, the mission of WLCI is to implement a long-term science-based program to assess and enhance the quality and quantity of aquatic and terrestrial habitats at a landscape scale in southwest Wyoming while facilitating responsible energy development. The WLCI is an interagency working group of partners including government and non-government organizations which is then stepped down to Local Project Development Teams (LPDT) made up of local resource staff, conservation districts, landowners, county commissioners, and other interested parties tasked to identify important local landscape level resource issues and address these through cooperatively created projects. PFW staff contributes greatly to the success of WLCI by being the primary driver of private lands projects.



WLCI PFW Program Accomplishments		
Habitat Type	2013 Accomplishments	PFW WLCI Accomplishment FY 2008-13
Stream (ft)	12,672	99,096
Riparian (miles)	2.4	67.48
Wetland (acres)	416	1,647
Upland (acres)	1,227	45,230
Fish Passage/ Screens (units)	4	18

The following five PFW focus areas are associated with WLCI, the Bear River, Upper Green River, Upper Sweetwater/Red Desert, Laramie Plains, and Little Snake River/Upper North Platte. Tables below are a complete breakdown of habitat project acres and miles completed in FY2013, including the percent completed toward our 5 year habitat restoration goals set forth in our updated Wyoming PFW Strategic Plan 2012-2016.

Bear River Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	4,752	10,000	47.5%
Riparian Enhancement(miles)	1.2	0	10	12%
Wetland Restoration (acres)	405	346	500	150%
Upland Enhancement (acres)	550	0	2,000	28%
Fish Passage/screens (units)	1	1	8	25%

**Bear River Focus Area Wetland Enhancement
HabITS Project Numbers: 727232
Office Org. Code: 61820**

In October 2012, 259 acres of flood-irrigated wetland were enhanced by repairing and extending a low-level dike and installing 2 new water control structures. The project restored historically flooded acres to irrigation and also re-flooded significant acres that had not seen surface water in recent history, all for the benefit of wetland-dependent wildlife species and native hay crop production for the landowner. The wetlands in this area host a diverse mix of water depths and vegetation types and the resulting array of migratory and nesting waterbirds, waterfowl, and shorebirds. Some of the more abundant species that nest in and around this wetland include American avocet, black-necked stilt, greater sandhill crane, cinnamon teal, redhead duck, canvasback, and northern shoveler. White-faced ibis feed heavily in the area, and a broad array of species use the wetland as stopover migratory habitat, including very high numbers of northern pintail and Canada geese.

A unique aspect of the project was that Cokeville Meadows National Wildlife Refuge (CMNWR) provided labor and equipment to construct the project. A conservative estimate of the value of this contribution is \$50,000, based on what it would have cost to hire an outside contractor. The repaired dike also floods about 199 acres of Refuge land across the fence, an acreage that was not reported in HABITS since it is public land. By cooperating on this project the Refuge and PFW program benefited mutually and were able to maximize the benefit to the federal trust resource while minimizing cost for the American taxpayer.



Newly enhance wetland flooded in April



Newly flooded CMNWR land in foreground flooded by private land dike along fence



Willet utilizing the enhanced wetland in 2013

Upper Green River Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	10,000	0%
Riparian Enhancement(miles)	0	0	10	0%
Wetland Restoration (acres)	0	5	80	6%
Upland Enhancement (acres)	0	227	2,000	11%
Fish Passage/screens (units)	1	2	5	60%

**Upper Green River Focus Area Upland Enhancement
HabITS Project Numbers: 565244
Office Org. Code: 727150**

Aspen habitats in the West are some of the most valuable habitats in terms of wildlife abundance and diversity and have also suffered substantial declines in coverage over the last century. A common reason for aspen decline is a lack of forest over-story disturbance that allows more shade-tolerant conifers to begin taking over the aspen stand and reduces root suckering by the aspen clone. This is the primary cause of aspen decline on a private ranch in Sublette County, and in August 2013 PFW completed 220 acres of aspen/conifer clear-cut or selective conifer removal in aspen habitat. This project benefits migratory songbirds that utilize aspen such as dusky flycatcher, green-tailed towhee, and lazuli bunting. Greater sage-grouse also use the area as late brood-rearing habitat, benefiting as the treatment removes perch trees for predators and increases understory production.

Mechanical treatment was chosen for this project due to practical considerations and inability to implement prescribed fire in a timely manner. The high cost of mechanical treatment required a broad array of cash partners for the project to be assembled including the landowner, Wyoming Wildlife & Natural Resource Trust, Rocky Mountain Elk Foundation, Wyoming Governor's Big Game License

Coalition, and the Pinedale Anticline Project Office. A total of \$210,000 has been secured to match the \$26,000 contributed by the PFW Program.



Treatment area, October 2011 (Before)



Clear-cut treatment, August 2013 (After)



Sage-grouse chick in treatment area, July 2013

Laramie Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	7,000	0%
Riparian Enhancement(miles)	0	1.73	30	6%
Wetland Restoration (acres)	0	0	100	0%
Upland Enhancement (acres)	0	130	70,000	0%
Fish Passage/screens (units)	0	0	1	0%

Laramie Plains Upland and Riparian Project
HabITS Project Numbers: 726727
Office Org. Code: 61820

During the summer of 2013, fence was installed to create a 96.4 acre pasture along Willow Creek in Albany County, Wyoming. Historically, this area was part of a 3,500 acre pasture that was seasonally grazed by 600 head of cattle. A common problem in the west is the lack of infrastructure (fence and water) to manage large landscapes effectively. In this case, there are enough acres to support the numbers of livestock being run but the lack of fencing and water availability congregated livestock along Willow Creek during the hot season of use which degraded the riparian area. Limiting season long cattle access to the riparian area will allow the riparian plant community to recover and provide the wildlife cooperators a way to better utilize upland forage within the original pasture. The Laramie Rivers Conservation District, a valued partner, will monitor vegetation and assist with the development of a grazing management plan that benefits the 23.6 acres riparian area while maintaining the health and vigor of the adjacent 72.8 acres of upland within the newly created pasture. This project has direct benefits for several grassland and riparian dependent songbirds and shows great promise for improving Preble's Meadow Jumping Mouse habitat, an endangered species which historically occurred in this area.



Landowner overview

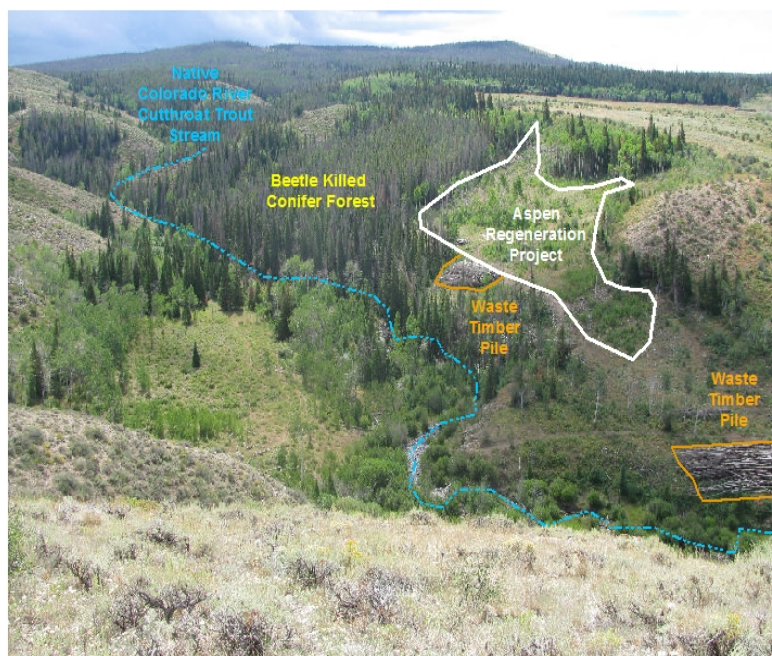


Riparian fence

Little Snake River/Upper North Platte Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	3,696	7,920	20,000	59%
Riparian Enhancement(miles)	0	1.48	35	4%
Wetland Restoration (acres)	83.3	0	75	111%
Upland Enhancement (acres)	0	0	25,000	0%
Fish Passage/screens (units)	0	2	5	40%

Little Snake River Basin Upland, River and Riparian Project
HabITS Project Numbers: 726629
Office Org. Code: 61820

Little Snake River Watershed is one of the best examples of watershed or landscape level projects in Wyoming. Over the past dozen years, numerous conservation interests were pulled together by the local conservation district to address the health of the watershed. The landscape is diverse, characterized by sage steppe habitats at lower elevations and dense conifer forest mountain tops, all being intricately tied together by a ribbon of green riparian habitat. Despite complexities driving area ecology and management within these mixed private and publicly owned landscapes, conservation through well established partnerships enables effective landscape level planning and implementation to take place. The scale and complexity of the watershed permits multifaceted projects that protect and enhance a wide variety of critical habitats within the roughly 250,000 acre watershed while providing economic opportunities for local communities.



Mixed private/public ownership with several ongoing projects

With the dominant land use of the watershed being rangelands anchored to small rural communities, long term habitat conservation must work hand-in-hand with both to be effective. A recent project near the headwaters of the East Fork of Savery Creek demonstrates the complexity of managing mixed ownership lands over multiple habitat types and resource concerns. The outcomes from this project directly benefitted the upper and lower watershed, a story of beetle killed coniferous forests, aspen regeneration, and in-stream habitat enhancements.

Beetle Killed Conifer Forest

A plague of the west in recent year, large expanses of beetle killed conifer forests. The transition from initial beetle outbreak, timber die off and subsequent re-colonization of early succession plants takes

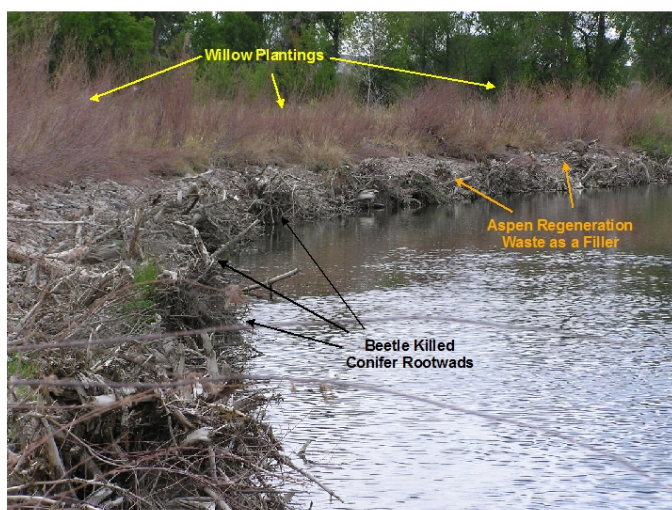
time. During this period habitat quality is reduced and the dead timber stands present a significant threat of catastrophic wildlife fire to local agricultural operations and surrounding communities. To help speed up the healing process, select clear cutting of dead stands and thinning of live stands within this project area helped restore much needed surface and groundwater to local streams benefitting native fishes like Colorado cutthroat trout. Timber sales help diversify the financial portfolio of landowners and support the local economy, while non-marketable timber was used to restore stability to rivers downstream.

Aspen Regeneration

With the removal of disturbance factors like fire, the natural tendencies of plant succession is to replace old growth stands of aspen with monotypic stands of conifers. Restoring a healthy mosaic of grass, shrub and forest through selective logging practices helped maintain important habitats for a variety of wildlife species, including northern goshawk and Columbian sharptail. Aspen restoration was conducted in conjunction with beetle kill conifer removal.

Toe Wood from Waste Timber

Residual wood slash, root balls from fallen beetle kill trees, or undesirable wood species, are used to restore lower reaches of the Little Snake River. Waste wood is incorporated into “Toe Wood” which helps to stabilize un-vegetated stream banks by forming a protective cover, creating roughness which reduces the erosive force of water, and redirects river energy away from banks. The most important aspect of incorporating woody material into stream restoration projects is increased fish habitat and improved invertebrate diversity and production.



Woody material harvested from private land in the upper watershed of the Little Snake River Basin was integrated into a river stabilization project within the lower portion of the watershed.

Wind River Reservation (WRR) – Tribal Trust Responsibilities

The Wyoming Partners for Fish and Wildlife Program was co-located within the Lander Fish and Wildlife Conservation Office (FWCO) in 1998. That same year, a Memorandum of Understanding (MOU) was signed between the Shoshone and Arapaho Tribes and USFWS PFW to work cooperatively on a variety of habitat projects with priority given to tribal significant species.

Wind River Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	15,840	5,000	316%
Riparian Enhancement(miles)	0	6.72	20	33%
Wetland Restoration (acres)	42.64	183	300	75%
Upland Enhancement (acres)	0	12,142	10,000	121%
Fish Passage/screens (units)	2	1	2	150%

Wind River Stream Restoration Project
HabITS Project Numbers: 7258425
Office Org. Code: 61820

In early September, the Eastern Shoshone and Northern Arapaho Tribes along with the FWS restored 4,700 feet of Meadow Creek that had migrated into an old irrigation ditch and primitive road causing extensive erosion and down cutting within a large head water spring or peat fen wetland. Stream restoration was straightforward; a small earthen plug at the junction of the two channels was installed redirecting the water down a very short section of newly constructed channel activating the historic channel. This project will benefit Tribal designated priority species including Yellowstone cutthroat trout and mountain whitefish. With the first phase complete, a second round of restoration planning is underway that will restore the peat fen as well as measures needed for restoring/maintaining a conservation population of Yellowstone cutthroat trout.



Stream restoration project overview



Fen down-cutting from ditch and uncontrolled flow (Before)



Creek flowing down road (Before)



First pulse of water in historic channel



Salvaged fish from dewatered irrigation ditch



Dry channel prior to work being completed



One hour after flow was initiated

Swan Re-introduction Alkali Lake - WWR
HabITS Project Numbers: 666505
Office Org. Code: 666318

On September 10, 2013 after many years of constructing habitat for trumpeter swans the birds finally found a home on the Wind River Reservation. Our strong relationship and partner support from the Eastern Shoshone and Northern Arapaho Tribes, Lander FWCO, Wyoming Wetland Society (WWS), Wyoming Game and Fish Department (WYGF) and Greater Yellowstone Trumpeter Swan Working Group (GYTSWG) enabled us to fast track a restoration/ reintroduction plan and subsequent swan release for the Wind River Reservation. In the early scoping process, it was determined that the first reintroduction efforts were to be conducted within wetland complexes of the Little Wind River watershed. This segment of watershed contains more than 3,000 acres of wetland habitat with an estimated ability to maintain a three breeding pair's minimum. The search for reintroduction sites was focused in and around several PFW projects that were built with the "thought" of someday having swans. Several suitable locations were reviewed by WYGF and WWS staff, it was determined that Alkali Lake would be the best location for this first round of releases. Alkali Lake restoration project was a featured PFW 25th anniversary project in Region 6. The site had all the right ingredients for swans, including appropriate water depths, constructed nesting islands, large beds of submergent vegetation, and relative isolation from human disturbance. A site bonus was an adult male trumpeter swan already locked into this location and had returned for a second year. This was the perfect setup, an adult on site that can bond with the youngsters and teach them necessary survival skills. On release day, five 70 day old cygnets were released and soon bonded with the adult male. The reintroduction participation was kept to a small affair with a very special guest list including Tribal Council members, Tribal Wardens, past and present FWS staff, WWS staff, landowners and a local honors class. The release went off perfectly and six trumpeter swans can now be seen in the valley.



Honor Kids



Learning to hold a Swan



Swan Team



Newly released swans



Shoshone Tribal Chairman providing words of encouragement



Released cygnets bonding with Adult

Un-staffed or secondary focus areas

Our conservation partners continue to advance habitat restoration and improvement within the remaining 3 dedicated focus areas. The State Wetland Working Group has made the Goshen Hole and Bear River Complex top priority areas for waterfowl habitat improvement and capacity building. We will continue to explore avenues to assist with the man-power shortfall that exists for all our partners in un-staffed focus area and support project development on a “as need” basis.

Goshen Hole Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	0	0%
Riparian Enhancement(miles)	0	0	1	0%
Wetland Restoration (acres)	0	0	30	0%
Upland Enhancement (acres)	0	0	200	0%
Fish Passage/screens (units)	0	0	0	0%

Black Hills Mixed Grass Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	0	0%
Riparian Enhancement(miles)	0	0	1	0%
Wetland Restoration (acres)	0	0	10	0%
Upland Enhancement (acres)	0	0	500	0%
Fish Passage/screens (units)	0	0	0	0%

Powder/Tongue River Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	1,000	0%
Riparian Enhancement(miles)	0	0	2	0%
Wetland Restoration (acres)	0	0	20	0%
Upland Enhancement (acres)	0	0	2000	0%
Fish Passage/screens (units)	0	0	0	0%

Upper Sweetwater/Red Desert Focus Area				
Habitat Type	FY 2012 Accomplishments	FY 2013 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	0	0	10,000	0%
Riparian Enhancement(miles)	0	0	10	0%
Wetland Restoration (acres)	0	0	10	0%
Upland Enhancement (acres)	0	0	10,000	0%
Fish Passage/screens (units)	0	0	0	0%

Projects completed outside of PFW focus areas

While the majority of Partners projects can be found within designated focus areas, high value restoration opportunities still come to us from time to time outside our priority area polygons. This year, 65 wetland acres and approximately 1,000 acres of sage steppe habitat were improved outside of these lines representing 11% and 7% of the total PFW work completed within their respective categories. For many reasons this is a likely trend to continue, for instance to avoid drawing a ring around the whole state our selection process of targeting the best of the best for multiple federal trust species leaves us with focus areas that overlay only about 31% of the state designated sage grouse core areas. As a target species for PFW, high quality sage grouse projects outside focus areas will be considered for program assistance.

	PFW FY 2013 Accomplishment
Stream (ft)	0
Riparian (miles)	0
Wetland (acres)	65
Upland (acres)	999.6
Fish Passage/screens (units)	0

2. Broaden and Strengthen Partnerships

The sharing of restoration and partnership expertise between stakeholders is an important driver in the success of PFW restoration efforts. The working knowledge and technical expertise contributions of Partners Program staff continues to be an integral component in individual partnership project success as well as a restoration and conservation technique driver of change statewide. As new initiatives come on-line, shared positions have improved project coordination between the agencies at the field level, increased project initiation rates, as well as serving to bridge the gap between funding programs and partners.

Four partnership planning positions were established in Wyoming to assist NRCS with the delivery of the Sage Grouse Initiative (SGI). These range ecologists conduct rangeland and wildlife assessments, identify resource concerns and landowner objectives, develop plans to address those concerns and objectives, and implement plan strategies using a variety of cost-share programs. In Wyoming, SGI and its partners use a wide array of conservation practices designed to improve and protect sage-grouse habitat and native rangelands, including conservation easements, sustainable grazing systems, invasive plant species removal and other identified threats. A few examples of work completed in FY13 by our jointly funded SGI positions, in addition to conducting range assessments on a single large ranch (over 200,000 acres) and developing management recommendations, the Medicine Bow Rangeland Specialist provided a range monitoring protocol refresher courses for four cooperators who have a recently enrolled 91,000 acres into SGI. Similarly, Fremont County SGI position conducted baseline range inventories on over 52,000 acres with the development of range management recommendations. Our investment in SGI has been producing much needed rangeland and wildlife planning. We are at a point now of implementing many of these recommendations.

3. Improve Information Sharing and Communication

Wyoming PFW continues to work through traditional avenues of USDA State Technical Committee meetings, local USDA work groups, and various partner coordination functions as well as giving presentations on habitat restoration techniques and habitat project updates at several gatherings of professionals including science workshops, Wind River Tribal Council and Bear River Task Force. PFW maintains a place in the classroom through local science fair judging and participating in a variety of youth outdoor classroom experiences held around the state. PFW staff members routinely attend interagency meetings within their respective work areas which include representation from local county commissioners to congressional staffers providing a good forum for periodic program updates. Being part of an office team, they make themselves available to their duty station (Evanston Forest Service and Laramie

NRCS/Laramie Rivers Conservation District) as a valued biological resource.

Partner for Conservation and Private Lands Partners Day – 2013



In 2013, Private Lands Partners Day was hosted by Little Snake River Conservation District, Partners for Conservation, and Region 6 Partners for Fish and Wildlife Program in Baggs, Wyoming. This two day event brought in conservation partners and landowners from around the United States and local Wyoming area to discuss and share their personal experience about efforts to conserve rural working landscapes and the fish and wildlife species that depend on them.



District Manager providing project overview – Reddy Diversion

On opening day, tour and discussions were focused on watershed scale conservation in action with examples of unique private-public partnerships conserving rangeland, forest and water to benefit agriculture and wildlife. Top to bottom management in this case works and works well, a hallmark of the Little Snake River Basin Project.



PFW Biologist Mindy Meade providing project overview – Weber Project

Day two was a full day work session with private landowner success stories, current issues impacting agriculture and fish/wildlife resources, and wrapping up with a session on effective outreach.



Outreach workshop

4. Enhance our Workforce

Wyoming PFW continues to build on a strong technical assistance foundation delivering habitat conservation effectively by improving workforce capacity when necessary and improve existing technical and leadership skills of staff to meet the needs of our conservation partners and trust resource responsibilities. Staff works closely with conservation partners providing restoration guidance on a variety of habitat projects within their dedicated work areas, including project designs and permitting, project cost analysis, and appropriate construction methodologies.

5. Increase Accountability

Wyoming PFW primarily monitors projects in three areas: structural function, habitat response, and biological benefits. Structural evaluations examine performance and design objectives for practices such as in-stream rock/ log structures or wetland water control structures. Habitat response is principally focused on expected outcomes like plant community health, wetland function, or constructed stream features. Biological monitoring takes the form of species composition and quantity data collection. In accordance with our strategic plan objective, Wyoming PFW conducted a status review on approximately 5% of active projects focusing mainly on structural function and habitat response.

Our partners contributed significantly to project monitoring efforts from fish surveys to vegetation monitoring. A good example of our partners assisting PFW, vegetation monitoring has become easier utilizing "Sample by Life or "Sample Point" plant monitoring protocols to determine vegetation response to prescribed grazing changes. In 2013, several of our partners have added improved macro plant community monitoring by incorporating inexpensive high resolution Gigapan Technology to document changes in plant communities. These high resolution imagery can be stitched together to provide a single panoramic image that identifies large scale community trends or individual photos from the collection can be zoomed in to determine plant composition at a specific location.



Panoramic of PFW Project Laramie Plains
HabITS Project Numbers: 726727

