

## Wyoming Partners for Fish and Wildlife Program Activities for 2014

### **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 in a large coordinated effort using a variety of traditional tools, including habitat restoration programs and long term conservation easements. In addition, habitat conservation strategies are continually being developed to adapt conservation to an ever changing environment; examples provided in the report include utilizing a by-product of energy development (ground water) to fill construct wetlands as well as a couple project examples highlighting collaborative landscape scale efforts of federal, state and local agencies working across ownership boundaries for the benefit of large range species such as sage grouse and mule deer.

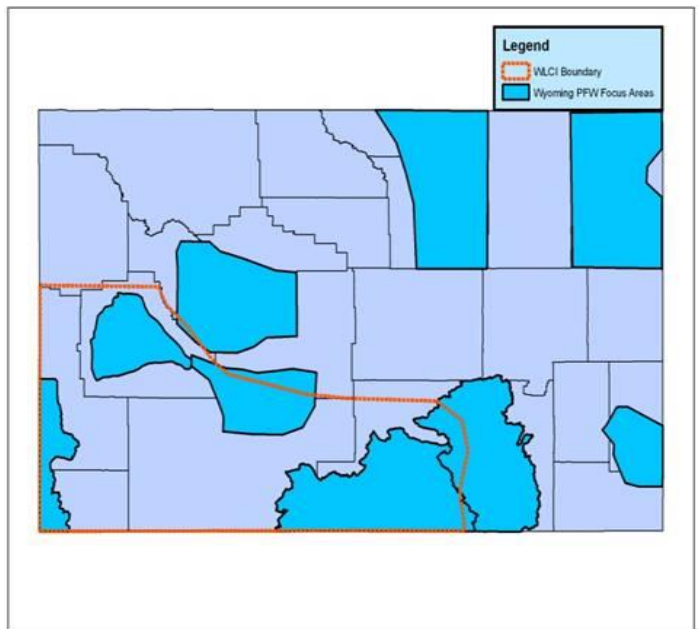
In 2014, Wyoming PFW program utilized a variety of Service dollars to restore, create, and enhance wildlife habitat on private and tribal lands, more than \$73,000 FWS program dollars were used to match \$533,000 donated private, state and federal funds for a 6:1 match.

<b>Wyoming PFW Statewide Activities - Cumulative Accomplishments 2014</b>				
<b>Habitat Type</b>	<b>2014 Accomplishments</b>	<b>2012-14 Accomplishments</b>	<b>FY 2012-2016 5 Yr Target</b>	<b>% 5-yr Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>0</b>	<b>28,491</b>	<b>63,000</b>	<b>66%</b>
<b>Riparian Enhancement (miles)</b>	<b>30.6</b>	<b>43.1</b>	<b>119</b>	<b>37%</b>
<b>Wetland Restoration (acres)</b>	<b>356</b>	<b>1,486</b>	<b>1,125</b>	<b>131 %</b>
<b>Upland Enhancement (acres)</b>	<b>26,660</b>	<b>41,984</b>	<b>121,700</b>	<b>35%</b>
<b>Fish Passage/screens (units)</b>	<b>1</b>	<b>10</b>	<b>21</b>	<b>48%</b>

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.



<b>WLCI PFW Program Accomplishments</b>		
<b>Habitat Type</b>	<b>2014 Accomplishments</b>	<b>PFW WLCI Accomplishment FY 2008-14</b>
<b>Stream (ft)</b>	<b>0</b>	<b>99,096</b>
<b>Riparian (miles)</b>	<b>10.5</b>	<b>77.98</b>
<b>Wetland (acres)</b>	<b>225</b>	<b>1,872</b>
<b>Upland (acres)</b>	<b>4,356</b>	<b>51,458</b>
<b>Fish Passage/ Screens (units)</b>	<b>1</b>	<b>19</b>

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 FY2014, including the percent completed toward our 5 year habitat restoration goals set forth in our updated Wyoming PFW Strategic Plan 2012-2016.

<b>Bear River Focus Area</b>				
<b>Habitat Type</b>	<b>FY 2012-14 Accomplishments</b>	<b>FY 2014 Accomplishments</b>	<b>FY 2012-2016 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>4,752</b>	<b>0</b>	<b>10,000</b>	<b>47.5%</b>
<b>Riparian Enhancement(miles)</b>	<b>1.2</b>	<b>0</b>	<b>10</b>	<b>12%</b>
<b>Wetland Restoration (acres)</b>	<b>977</b>	<b>226</b>	<b>500</b>	<b>195%</b>
<b>Upland Enhancement (acres)</b>	<b>550</b>	<b>0</b>	<b>2,000</b>	<b>28%</b>
<b>Fish Passage/screens (units)</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>38%</b>

**Bear River Focus Area Wetland Enhancement**  
**HabITS Project Numbers: 769966**  
**Office Org. Code: 61820**



In October 2013, 186 acres of flood-irrigated wetland were enhanced by repairing low-level dikes and installing 5 new water control structures. These wetlands, seasonally flooded for grass hay production, border Cokeville Meadows National Wildlife Refuge to the north, south, east, and west. Long-term degradation of the irrigation infrastructure from high-water events and erosion threatened the long-term stability of the wetlands.

This parcel of private land is in an especially important position on the landscape relative to

Cokeville Meadows NWR and provides habitat for many species of breeding and migratory wetland-dependent birds such as American bittern, American avocet, black-necked stilt, greater sandhill crane, cinnamon teal, redhead duck, canvasback, northern shoveler, northern pintail, and white-faced ibis. The wetlands are also within 5 miles of 4 greater sage-grouse leks and provide mesic late-summer brood-rearing habitat for sage-grouse.



Wilson's phalarope, American widgeon, and cinnamon teal on enhanced wetland in June 2014

For the second consecutive year, Cokeville Meadows NWR contributed significant resources to a Partners for Fish & Wildlife Program project in the area. The Refuge donated 2 water control structures and extensive heavy-equipment time and operator labor to this project. Finding sufficient earthfill to refurbish dikes can be difficult in this area. A unique aspect of this project was that the Union Pacific Railroad hauled 15,000 yds<sup>3</sup> of excess fill from nearby construction project into place for our project at no cost. The assistance from Cokeville Meadows NWR and Union Pacific Railroad dramatically reduced PFW project costs and enabled us to accomplish much more than would have otherwise been possible.

<b>Upper Green River Focus Area</b>				
<b>Habitat Type</b>	<b>FY 2012-14 Accomplishments</b>	<b>FY 2014 Accomplishments</b>	<b>FY 2012-2016 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0%</b>
<b>Wetland Restoration (acres)</b>	<b>5</b>	<b>0</b>	<b>80</b>	<b>6%</b>
<b>Upland Enhancement (acres)</b>	<b>227</b>	<b>0</b>	<b>2,000</b>	<b>11%</b>
<b>Fish Passage/screens (units)</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>60%</b>

<b>Laramie Focus Area</b>				
<b>Habitat Type</b>	<b>FY 2012-14 Accomplishments</b>	<b>FY 2014 Accomplishments</b>	<b>FY 2012-2016 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>0</b>	<b>0</b>	<b>7,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>	<b>1.73</b>	<b>0</b>	<b>30</b>	<b>6%</b>
<b>Wetland Restoration (acres)</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0%</b>
<b>Upland Enhancement (acres)</b>	<b>130</b>	<b>0</b>	<b>70,000</b>	<b>0%</b>
<b>Fish Passage/screens (units)</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0%</b>

<b>Little Snake River/Upper North Platte Focus Area</b>				
<b>Habitat Type</b>	<b>FY 2012-14 Accomplishments</b>	<b>FY 2014 Accomplishments</b>	<b>FY 2012-2016 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>11,616</b>	<b>0</b>	<b>20,000</b>	<b>59%</b>
<b>Riparian Enhancement(miles)</b>	<b>1.48</b>	<b>0</b>	<b>35</b>	<b>4%</b>
<b>Wetland Restoration (acres)</b>	<b>83.3</b>	<b>0</b>	<b>75</b>	<b>111%</b>
<b>Upland Enhancement (acres)</b>	<b>1,854</b>	<b>1,854</b>	<b>25,000</b>	<b>10%</b>
<b>Fish Passage/screens (units)</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>60%</b>

**Little Snake /Upper North Platte River Focus Area**  
**Upland Enhancement**  
**HabITS Project Numbers: 770451**  
**Office Org. Code: 61820**

A landscape scale project southeast of Saratoga, Wyoming, the Chad Allotment is a recently completed habitat improvement project in cooperation with the USFWS, BLM, Saratoga-Encampment-Rawlins



Conservation District and the Wyoming Game and Fish Department. This collaborative effort improved rangeland conditions on a private ranch of 1,854 acres and on 2,312 acres of adjacent state and federal lands. By constructing much needed livestock grazing infrastructure (i.e. watering and pasture fencing) to create an eight pasture system within this large landscape of public and private grazing allotments now allows for greater management flexibility including rest from seasonal use and grazing deferment.



Newly Constructed Fence

The project area lies entirely within a designated greater sage grouse core area identified in the Office of Governors Executive Order 2011-5. Livestock management objectives are targeted to improve habitat for nesting and brood rearing greater sage grouse and improving mule deer crucial winter range.



Chad Allotment Sage Steppe Habitat

### Wind River Reservation (WRR) – Tribal Trust Responsibilities

The Wyoming Partners for Fish and Wildlife Program State Office 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 to work cooperatively on a variety of habitat projects with priority given to tribal significant species. Since that time, coordination efforts have been streamlined to allow project development and signatory authority at the Tribal Water Engineer and Tribal Game and Fish Department Directors expediting project agreement development. This arrangement provides USFWS with added input from Tribal Resource Offices as well as allowing a more flexible scheduling of annual joint council meetings to update both councils on potential projects, plans and opportunities.

Wind River Focus Area				
Habitat Type	FY 2012 - 14 Accomplishments	FY 2014 Accomplishments	FY 2012-2016 Goal	% 5-year Goal Completed
Stream Enhancement (ft)	15,840	0	5,000	316%
Riparian Enhancement(miles)	26.87	20.15	20	134%
Wetland Restoration (acres)	314.5	131.5	300	105%
Upland Enhancement (acres)	34,446	22,304	10,000	344%
Fish Passage/screens (units)	3	0	2	150%

**Wind River Bighorn Draw Wetland and Upland Improvement**  
**HabITS Project Numbers: 665669**  
**Office Org. Code: 61820**

As a request of the Wind River Tribes, PFW reviewed potential wetland restoration/enhancement potential on Big Horn Draw utilizing produced water from Winkelman Dome Oil Field. The oil field operators forecasted favorable long term flows of suitable water quantity and quality to allow the development of a 131.5 acre wetland complex consisting of enhanced natural and established wetlands. Three wetlands were created by repairing a series of low-level dikes totaling 71.5 surface acres. In addition, a small reservoir or junction was constructed at the top of the watershed to allow managers to split flows between the created wetlands and a 60 acre playa basin. A side-effect of perennial produced water flows in a normally ephemeral draw was the development of several significant head-cuts as the channel adjusted to the increasing flows. Installing the wetlands helped correct channel incision and protected the existing riparian/wet meadow habitat from a lowering of local water tables. PFW provided all phases of project development, including on-the-job training of Tribal contractor and crew on construction techniques making it possible for the company to work on future projects of similar nature.



Newly constructed reservoir/junction box to split produced water flows into two different drainages.



Water being directed towards wetland creations.

As a component of habitat monitoring, water quality will be monitored monthly by the participating energy company. Produced water is treated water and approved for release. However, water in contact with area formations of Cretaceous shale's and limestone can pose a threat of selenium leeching and concentrating in wetlands necessitating additional water monitoring as an extra safeguard.

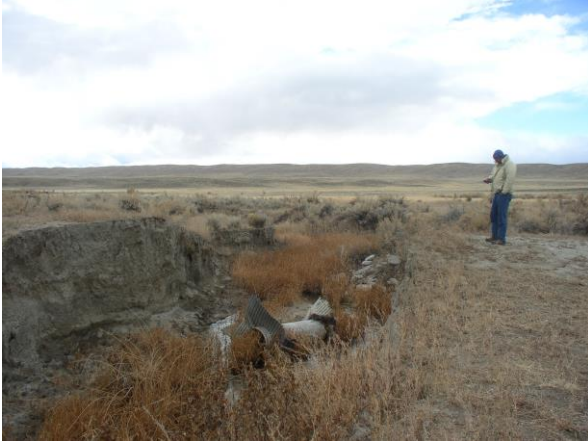


(Before) Playa basin primarily dry 7 out of 10 years.



(After) Produced water provides improved management options.





**(Before) Head-cut and failed primary spillway.**



**(After) Repaired dike with head-cut correction**



**Tribal Construction Company installing water control structures.**



**(After) Repaired dike.**



**Wetland establishment using produced water**

Another goal of this project was to add water to Range Unit 19A improving livestock distribution. The range unit encompasses 32,800 acres of which these wetlands effectively serve approximately 22,000 acres. The unit is considered core area sage grouse habitat containing three Leks.



During construction sage grouse were commonly seen using the wet meadow habitat created by the produced water.

### Un-staffed or secondary focus areas

Our conservation partners continue to advance habitat restoration and improvement within un-staffed focus areas of Goshen Hole, Black Hills Mixed Grass, and Powder Tongue River. 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.

### Project Completed Outside of PFW Focus Areas

While the majority of PFW projects can be found within designated focus areas, high value restoration opportunities come to us from time to time outside our priority area polygons. This year, approximately 7.7 miles of riparian/wet meadow habitat and 4,358 sage steppe acres were improved outside of these lines representing 24% and 16% of the total PFW work completed within their respective categories. The program remains flexible enough to incorporate projects that target high priority focal species with large ranges such as sage grouse.

Projects completed outside of PFW focus areas	PFW FY 2014 Accomplishment
Stream (ft)	0
Riparian (miles)	7.7
Wetland (acres)	0
Upland (acres)	4,356
Fish Passage/screens (units)	0

### Outside PFW Focus Areas – Sage Steppe Project

**HabITS Project Numbers: 769350**

**Office Org. Code: 61820**

The first of several planned livestock water developments have been completed on a large ranch that will be implementing a rest-rotation grazing system in sage-steppe habitat of southwest Wyoming. The first water development serves 4,358 acres of private land in a single pasture. The pasture also serves an additional 3,442 acres of BLM land in this landscape of checkerboard ownership, but those acres have not been reported in our HABITs system since they are public land. The livestock operator has agreed to implement a grazing plan and is enrolled in the NRCS Sage-Grouse Initiative beginning in 2015. A large portion of the ranch is State of Wyoming core area for greater sage-grouse. Besides its



importance to sage-grouse, the property provides important breeding habitat for other sage-dependent species and critical winter habitat for mule deer and pronghorn antelope.



## **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.

## **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 several Fish and Wildlife agency and conservation partner annual meetings like the CO-UT-WY State Agency Joint Aquatic Resource Coordination meeting in Steamboat Springs, CO. PFW staff members routinely attend local 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, PFW staff members make themselves available to their duty station (Evanston Forest Service and Laramie NRCS/Laramie Rivers Conservation District) as a valued biological resource. PFW staff was able to work closely with a local tribal contractor on several wetland projects teaching construction techniques that can now be transferred to other projects to help diversify the work portfolio of the tribally owned

company. 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.

In 2014, Intermountain West Joint Venture held its annual board meeting in Pinedale, Wyoming. PFW staff participated in project tours and presented a section on capacity building.



PFW Biologist David Kimble Providing Project Overview – IWJV Board Meeting

#### **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. In FY14, we initiated the development of a formal project monitoring protocol with expectations to be completed in early FY15.