

# Wyoming Partners for Fish and Wildlife Program Activities for 2012

## PFW Overview

### 1. Conserve Habitat

Wyoming PFW program utilizes a variety of Service dollars to restore, create, and enhance wildlife habitat on private and tribal lands. In FY2012, more than \$460,000 of these dollars were used to match \$2.5 million donated private, state and federal funds. While the majority of Partners Projects continue to be implemented in designated focus areas, all but one habitat project was completed within the Wyoming Landscape Conservation Initiative (WLCI) priority area of southwestern Wyoming or tribal lands of the Wind Rivers Reservation (WRR).

Wyoming PFW Cumulative Accomplishments 2012			
Habitat Type	2012 Accomplishment	FY 2012-2017 5 Yr Target	% 5-yr Goal Completed
Stream Enhancement (ft)	13,200	63,000	21%
Riparian Enhancement (miles)	0	119	0%
Wetland Restoration (acres)	530	1,125	47 %
Upland Enhancement (acres)	1828	121,700	2%
Fish Passage/screens (units)	4	21	19%

Forecasting habitat restoration opportunities in a rapidly changing landscape from intensive energy development, rural population growth and subdivisions, changing climate and prolonged drought conditions is a challenge. WYPFW will continue to work creatively with its partners to enhance existing and explore new funding sources and project opportunities as a means to buffer declining habitats against these threats. As a starting point, the 2012-2017 Wyoming PFW habitat activity planning targets were developed by using the previous five years body of accomplishments with refinements based on an assortment of factors including changes in workforce capacity, priority shifts

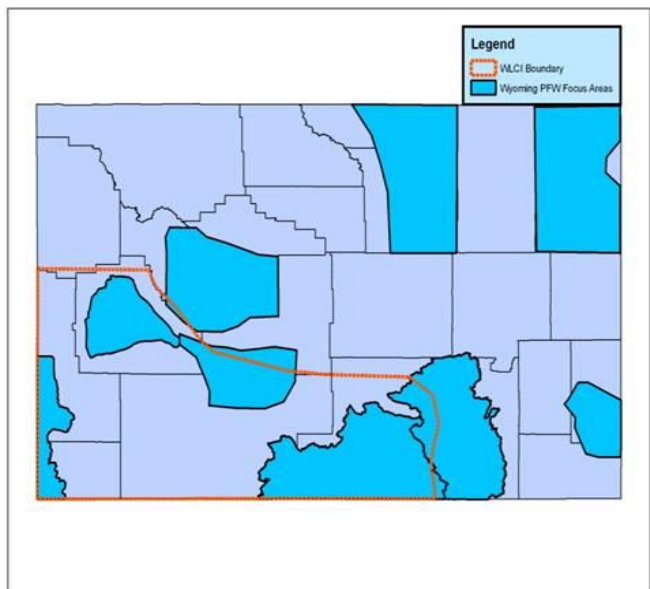
of funding partners and landowners as well as subtle changes in accomplishment tracking procedures. In the table below, three categories increased including stream, upland, and fish passage, while wetland and riparian targets dropped slightly from the 2007-2011 targets.

Wyoming PFW Activities			
Habitat Type	FY 2007-2011 Yr Targets	FY 2012-2017 Yr Targets	+/- Target Change %
Stream (ft)	46,200	63,000	+ 36%
Riparian (miles)	163	119	-27%
Wetland (acres)	1,270	1,125	-11%
Upland (acres)	87,409	121,700	+39%
Fish Passage/ Screens (units)	0	21	+

Increasing upland acreage goals is primarily a reflection of new partner initiatives like the Natural Resource Conservation Service's (NRCS) Sage Grouse Initiative bringing significant dollars to the table for increased workforce capacity and project funding opportunities. Fish passage and stream restoration work has steadily become a PFW mainstay activity fueled in part by projects which commonly address costly aging irrigation infrastructure replacements for which partnerships are well suited to execute. What sets the consistency stage in this somewhat dynamic world of abundant partners, managing a voluntary participatory program, and cyclical funding streams is PFW's continued focus on trust resource species and dedicated staff with the technical skill-set to drive project delivery.

#### A. 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.



The WLCI includes all or portions of five PFW focus areas, including the newly added Little Snake/Upper North Platte focus area. Recognized for its diverse plant and animal communities the Little Snake/Upper North Platte focus area is the transition point between the Southern and Northern Rockies in Wyoming. Recently dedicated as a flagship or landscape level project area by the WLCI group, PFW biologists have been actively restoring a variety of habitats in these valleys since 1999. PFW contributes greatly to the success of WLCI by being the primary driver of private lands projects. The project below was completed prior to the initiation of WLCI. However, with the power of partnership an additional 6,500ft of channel restoration was completed in 2008.

Habitat Type	PFW FY 2008-2012 WLCI Accomplishment
Stream (ft)	86,423
Riparian (miles)	66
Wetland (acres)	1,231
Upland (acres)	44,003
Fish Passage/screens (units)	14

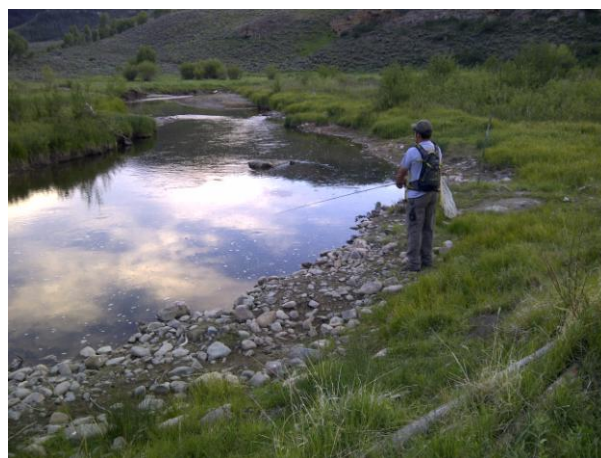
**Stream Restoration Project**  
**HabITS Project Numbers: 39666**  
**Office Org. Code: 61820**



2006 Savery Creek Restoration Project (Before)



2007 Savery Creek Restoration Project (After)



2012 Savery Creek Restoration Project (After)



The proceeding five PFW focus areas are associated with WLCI including 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 FY2012, including the percent completed toward our 5 year habitat restoration goals set forth in the most recent updated Wyoming PFW Strategic Plan.

<b>Bear River Focus Area</b>			
<b>Habitat Type</b>	<b>FY 2012 Accomplishments</b>	<b>FY 2012-2017 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>0</b>	<b>10,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>	<b>1.2</b>	<b>10</b>	<b>12%</b>
<b>Wetland Restoration (acres)</b>	<b>405</b>	<b>500</b>	<b>81%</b>
<b>Upland Enhancement (acres)</b>	<b>550</b>	<b>2,000</b>	<b>28%</b>
<b>Fish Passage/screens (units)</b>	<b>1</b>	<b>8</b>	<b>12%</b>

**Upland and Wetland Project**  
**HabITS Project Numbers: 565244**  
**Office Org. Code: 61820**

Seventeen acres of wetland enhancements associated with a Wildlife Extension Agreement were completed in October 2011. As is common in the Bear River valley, historic river oxbows on this property are the lowest points on the landscape and ranchers have traditionally built low level dikes to hold irrigation water, which creates a diverse mix of shallow (< 1 ft. deep) water in the “meadows” and deeper (2-4 ft. deep) water in the “sloughs”. Two existing dikes were refurbished with new water control structures and one new dike and structure were installed on irrigated Bear River floodplain wetland. The updated infrastructure allows more acres to be flooded during irrigation season, with the majority of the wetland < 1 foot deep. In addition, the water control structures allow the landowner to extend the season of water for the benefit of wildlife, while maintaining traditional early August haying and fall grazing activities. After 1 season, the wetlands are already being utilized by a wide variety of shorebirds, waterbirds, and waterfowl.



Site 1, May 2012 Completed Restoration



Site 2, September 2012 Re-flooded

<b>Upper Green River Focus Area</b>			
<b>Habitat Type</b>	<b>FY 2012 Accomplishments</b>	<b>FY 2012-2017 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>		<b>10,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>		<b>10</b>	<b>0%</b>
<b>Wetland Restoration (acres)</b>		<b>80</b>	<b>0%</b>
<b>Upland Enhancement (acres)</b>		<b>2,000</b>	<b>0%</b>
<b>Fish Passage/screens (units)</b>	<b>1</b>	<b>5</b>	<b>20%</b>

<b>Upper Sweetwater/Red Desert Focus Area</b>			
<b>Habitat Type</b>	<b>FY 2012 Accomplishments</b>	<b>FY 2012-2017 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>		<b>10,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>		<b>10</b>	<b>0%</b>
<b>Wetland Restoration (acres)</b>		<b>10</b>	<b>0%</b>
<b>Upland Enhancement (acres)</b>		<b>10,000</b>	<b>0%</b>
<b>Fish Passage/screens (units)</b>		<b>0</b>	<b>0%</b>

<b>Laramie Focus Area</b>			
<b>Habitat Type</b>	<b>FY 2012 Accomplishments</b>	<b>FY 2012-2017 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>		<b>7,000</b>	<b>0%</b>
<b>Riparian Enhancement(miles)</b>		<b>30</b>	<b>0%</b>
<b>Wetland Restoration (acres)</b>		<b>100</b>	<b>0%</b>
<b>Upland Enhancement (acres)</b>		<b>70,000</b>	<b>0%</b>
<b>Fish Passage/screens (units)</b>		<b>1</b>	<b>0%</b>

<b>Little Snake River/Upper North Platte Focus Area</b>			
<b>Habitat Type</b>	<b>FY 2012 Accomplishments</b>	<b>FY 2012-2017 Goal</b>	<b>% 5-year Goal Completed</b>
<b>Stream Enhancement (ft)</b>	<b>3,696</b>	<b>20,000</b>	<b>19%</b>
<b>Riparian Enhancement(miles)</b>		<b>35</b>	<b>0%</b>
<b>Wetland Restoration (acres)</b>	<b>83.3</b>	<b>75</b>	<b>111%</b>
<b>Upland Enhancement (acres)</b>		<b>25,000</b>	<b>0%</b>
<b>Fish Passage/screens (units)</b>		<b>5</b>	<b>0%</b>

**River and Riparian Project**  
**HabITS Project Numbers: 570064**  
**Office Org. Code: 61820**

The Little Snake River contributes to the Colorado River System and contains several state designated aquatic species of concern including Colorado River cutthroat trout, bluehead and flannelmouth suckers and roundtail chub. Channel incision, loss of hydrology and lack of connectivity to historic flood prone areas are significantly impacting in-stream channel habitats and backwater sloughs/oxbow nursery habitats required by these species. A decrease in the surrounding water table has also contributed to the loss of adjacent cottonwood and willow communities. A coalition of partners came together on this first of many projects making up a total of seven miles within the lower Snake River restoration project area. In-stream habitat work included the installation of toe-wood and rock structures to narrow and elevate channel bottom which improved cover, temperature regimes, and aquatic invertebrate production on over 3,000ft of channel. Approximately 13.1 acres of nursery habitat was re-established for native fishes and the surrounding 76 acre riparian/wetland dependent plant community that lies within the ranch were enhanced by elevated water tables.



Toe-wood Structures and Willow Plantings



Toe-wood and Rock Vane Structures

**B. 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 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 2012-2017 Goal	% 5-year Goal Completed
Stream Enhancement (ft)		5,000	0%
Riparian Enhancement(miles)		20	0%
Wetland Restoration (acres)	42.64	300	14%
Upland Enhancement (acres)		10,000	0%
Fish Passage/screens (units)	2	2	100%



**River Fish Passage Project**  
**HabITS Project Numbers: 666505**  
**Office Org. Code: 61820**

The Wind River Tribes and USFWS worked cooperatively to restore fish passage on 30 miles of the Little Wind River by installing fish passable irrigation structures on Ray and Coolidge irrigation diversions. A fish screen was also installed on Ray Canal to prevent annual entrainment losses of 450,000 fish. The Little Wind River prior to about 1930 provided excellent Yellowstone cutthroat trout, ling and mountain whitefish spawning and rearing habitat. Today there are 4 major fish passage obstructions that isolate trout and other native fish populations into 4 separate reaches of river, with the lower reaches being no longer suitable habitat for the native trout. Modification to Coolidge Diversion with a fish ladder opened an 20 miles in the South and North Fork drainages of the Little Wind River while removal of the Ray canal dam opened an additional 10 miles of the South Fork drainage.



Fish Ladder – Coolidge Canal Diversion



Adjusting Flow



Fish Screen – Ray Canal



Fish Ladder – Ray Canal Diversion

### C. 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 Goshen Hole Focus area and support project development on a “as need” basis.

Goshen Hole Focus Area			
Habitat Type	FY 2012 Accomplishments	FY 2012-2017 Goal	% 5-year Goal Completed
Stream Enhancement (ft)		0	0%
Riparian Enhancement(miles)		1	0%
Wetland Restoration (acres)		30	0%
Upland Enhancement (acres)		200	0%
Fish Passage/screens (units)		0	0%

Black Hills Mixed Grass Focus Area			
Habitat Type	FY 2012 Accomplishments	FY 2012-2017 Goal	% 5-year Goal Completed
Stream Enhancement (ft)		0	0%
Riparian Enhancement(miles)		1	0%
Wetland Restoration (acres)		10	0%
Upland Enhancement (acres)		500	0%
Fish Passage/screens (units)		0	0%

Powder/Tongue River Focus Area			
Habitat Type	FY 2012 Accomplishments	FY 2012-2017 Goal	% 5-year Goal Completed
Stream Enhancement (ft)		1,000	0%
Riparian Enhancement(miles)		2	0%
Wetland Restoration (acres)		20	0%
Upland Enhancement (acres)		2000	0%
Fish Passage/screens (units)		0	0%

### D. Projects completed outside of PFW focus areas

As landscapes and associated fish and wildlife resources experience pending changes, PFW recognizes subtle priority shifts are in order from time to time. Project and partner development outside designated focus areas are tracked which will help determine future changes in scope of exiting focus areas as well as potential new ones.

Habitat Type	PFW FY 2012 Accomplishment
Stream (ft)	0
Riparian (miles)	0
Wetland (acres)	0
Upland (acres)	695
Fish Passage/screens (units)	1



## 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. Farm Bill Program expenditures for SGI in WY total more than 72 million dollars in FY11-12.

## 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 Wyoming Landscape Conservation Initiative Science Workshop, TNC Annual Meeting, 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.



Little Snake River Tour – June 2012

Especially with larger landscape or watershed scale projects like the Little Snake River, using site tours works very well for bringing new partners on-line as well as maintaining exiting partnerships. In FY2012, field tours were held in several locations around the state within PFW focus areas including Little Snake River Valley, Bear River Valley, and Wind Rivers. Invitations to participate are extended to local, state and federal stakeholder providing a great platform to learn about new restoration techniques, network with other resource professionals and even provide project input. Since our projects are on private lands, this may be the only opportunity for some of our partners to walk and celebrate these projects.



Several media opportunities presented themselves this year with our local Network affiliates. Three sessions were taped and aired about ongoing wetland and river restoration efforts on the Wind River Reservation (WRR) and another generalist session on the benefits of wetlands. This is a good example of delivering cross program messages and benefits of the whole Service.

Filming WRR Alkali Lake wetland project and PFW 25<sup>th</sup> Anniversary

#### **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. In FY12, PFW staff completed trainings in Applied River Morphology, River Restoration Design and attended a sagebrush steppe science forum.

#### **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.



Wetland Assessment (NRCS and TNC Staff)



Landowner Project Review – Savery Creek