

Montana Partners for Fish & Wildlife Program 2007-2011 Narrative Report

Introduction

In a perfect world, there would be enough time and money to address every conservation issue. Instead we face a growing list of imperiled species, habitat degradation, elevated risks to intact landscapes and shrinking budgets. These constraints demand an overall approach based on ‘conservation triage’ defined here as the prioritization of landscapes to which limited resources are allocated to maximize biological return on investment. Once seen as defeatist, conservation triage is now viewed as a new approach that targets limited resources at critical conservation issues. In contrast, providing palliative care to severely degraded landscapes tends to stretch limited resources even further. Indeed, the conservation paradigm has shifted in scale and practice from small and reactive to large and proactive.

Landscape planning has typically been a biological endeavor but the real key to implementing lasting conservation is working with people to ensure that socio-economic goals are compatible with biological goals. Community-based conservation originated in the 1980s in response to criticism of major organizations for designing and implementing conservation with little input from stake-holders. The rise of community-based conservation also resonated as agencies explored a related, but somewhat independent, trend away from top-down, regulatory-based and expert-driven resource management toward voluntary, incentive-based conservation with broad public and community inclusion in land management programs. Today, community-based conservation has evolved from a theoretical argument against actions that exclude humans to integrated approaches that embrace equally the societal and biological aspects of conservation.

The Montana Partners for Fish and Wildlife Program (MT PFW) began discussing the merits of community-based, landscape-level conservation and working strategically in conservation focus areas in the mid 1990’s. In 1999, MT PFW developed its first strategic plan using intact landscapes as one parameter for selecting conservation focus areas. In Fiscal Year 2007 the Montana Step-Down Strategic Plan refined the conservation planning process. The 2007 Plan identified geographic planning areas, selected priority focal species for each geographic planning area, analyzed biological models and incorporated other scientifically based conservation plans. Coordination with partners was a critical component of the planning process.

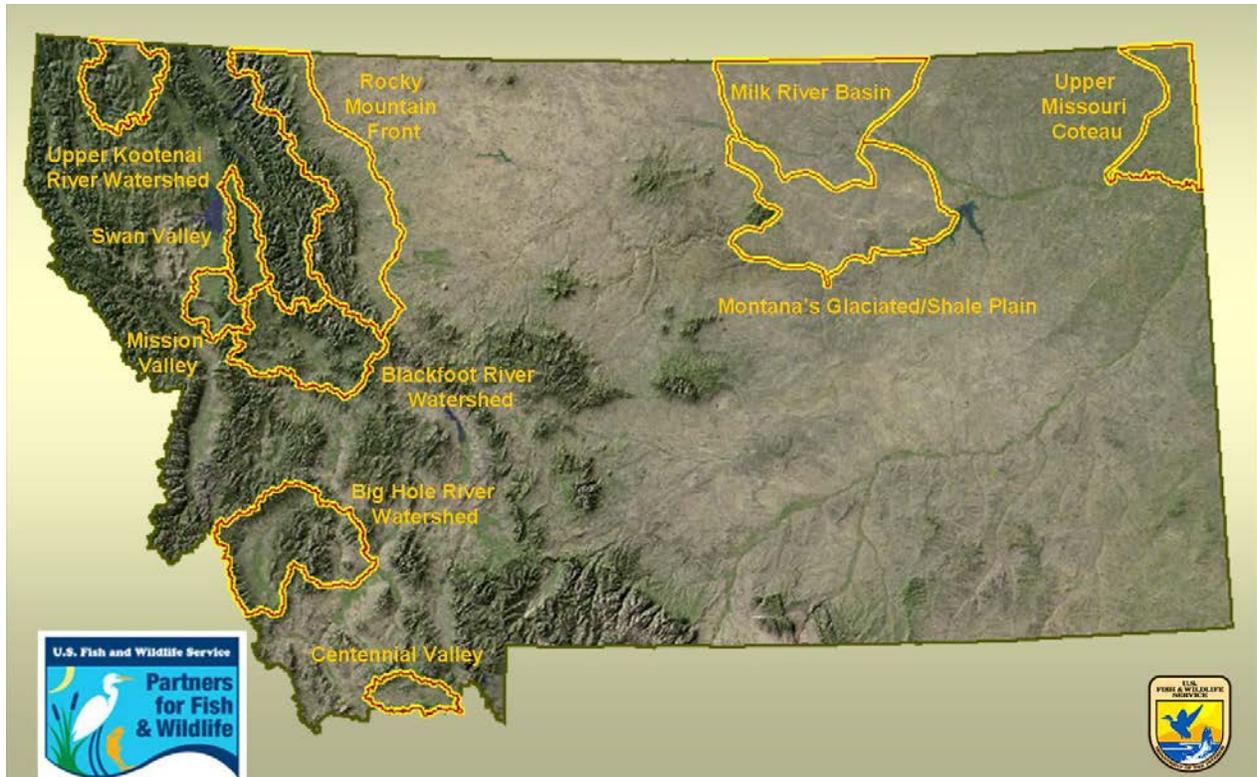
Selecting the right places to work using a biologically-based, thorough and systematic approach is critical to implementing community-based landscape conservation. We suggest that working in the right place using CFAs and other scientifically-sound strategies constitutes perhaps 20 percent of a recipe for success. Hiring the right people and aligning ourselves with the right partners and implementing the right projects, constitute the remaining 80 percent of this new conservation paradigm and its value in practice.

In 2007, this comprehensive, multi-step approach initially identified 18 potential MT PFW conservation focus areas. Final selection was completed by in-depth analysis of the 18 areas using the following filters; public/private land patterns, proximity to FWS field stations, existing

community-based partnerships, intact landscapes, and threats. This led to the selection of 10 Conservation Focus Areas encompassing 11% of the private lands in Montana.

The following narrative, photos, and tables show the results of this approach over the last five years. For the period 2007-2011, the MT PFW Program worked with 250 landowners to restore over 6,400 wetland acres, 160 miles of in-stream/riparian habitat and 52,000 upland acres.

Montana PFW 2007-2011 Focus Areas



Conservation Delivery

Progress in meeting our 5-year strategic plan habitat targets in each conservation focus area are summarized below.

BLACKFOOT RIVER WATERSHED			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	563	150	375%
Upland (Acres)	8,200	3,200	256%
Riparian (Miles)	64	18	355%
Fish Passage (Units)	11	0	

Example Project: Jacobson Spring Creek
Focus Area: Blackfoot Valley
HabITS Project Number: 45770
Office Org Code: 61810

Restoring Jacobsen Spring Creek, a key tributary to the North Fork of the Blackfoot River, represents one MT PFW project where the elements of Strategic Habitat Conservation (SHC): Biological Planning; Conservation Design; Conservation Delivery, and Biological Monitoring were followed. The project is described below.

Biological Planning & Conservation Design: The Blackfoot Watershed is one of ten primary Core Areas within the Clark Fork Recovery Unit described in the USFWS Bull Trout Recovery Plan. In the early 1990's, a Hierarchical Stream Restoration Prioritization Plan was completed for the entire Blackfoot Watershed. The Plan addressed five distinct sections of the Blackfoot River and 182 tributary Streams. Prioritization included cataloging and evaluating the limiting factors for native fish recruitment in all 182 tributaries. This assessment provides a roadmap for practitioners to strategically target on-the-ground projects to address the limiting factors and maximize biological outcomes for native fish. Other limiting factors such as in-stream flows, water temperature and water quality are also evaluated.

The Bull Trout Recovery Plan established specific population objectives for the greater Clark Fork Recovery Unit including the Blackfoot Watershed. Those objectives are: **“Abundance criteria will be met when all ten Core Areas have at least 5 local populations totaling more than 100 adult bull trout. In each of the ten Core Areas, the total adult bull trout abundance, distributed among local populations, must exceed 1,000 fish.”**

Specifically, the Blackfoot River Watershed has the following bull trout population objectives: **“Five Core Area spawning tributaries with at least 50 bull trout redds (1 redd equals approx. 2.0 - 2.5 adults) in a connected system with a total population of 1,000 fish.** The North Fork of the Blackfoot River, including Jacobsen Spring Creek, falls in one the five Core Area Spawning tributary systems.

Prior to habitat restoration activities commencing, bull trout population monitoring revealed that no spawning tributary in the Blackfoot River Watershed met the objective of 50 redds. Furthermore, only 8 bull trout redds were documented in the North Fork of the Blackfoot River.

Conservation Delivery: Based on thorough conservation design and biological planning, objectives for Jacobsen Spring Creek were established by the restoration team. They included restoring in-stream habitat, enhancing riparian areas, reducing water temperatures and enhancing fish connectivity to the North Fork and main stem of the Blackfoot River.

Habitat accomplishments on Jacobsen Spring Creek include:

- 6.7 miles of in-stream habitat restoration
- 8.9 miles of riparian habitat restoration
- 880 acres of upland enhancement through managed grazing

It should be noted that every private landowner in the North Fork watershed has implemented some type of habitat restoration or habitat management project on their property. These projects include fish screens on all five irrigation ditches, five water conservation agreements to maintain in-stream flows, restoration of five spring creeks and two basin-fed streams entering the North Fork, grazing management systems on all but one tributary (over 20 landowners), and conservation easements on 80% of the private land.

Above: Jacobsen Spring Creek before restoration. USFWS Photo

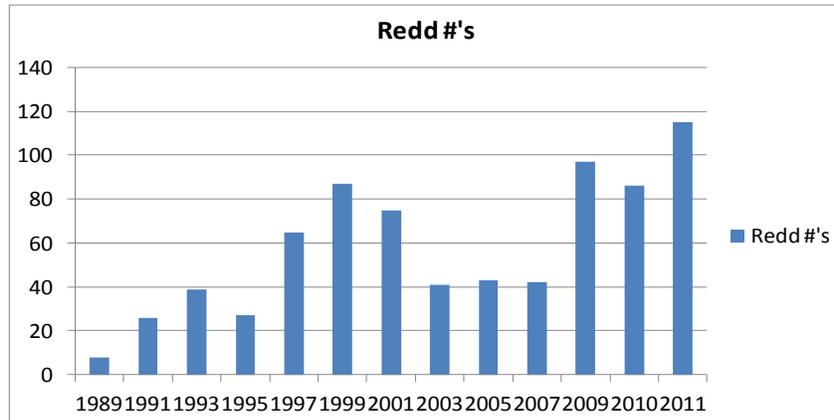
Below: Jacobsen Spring Creek after restoration. USFWS Photo

Monitoring: Project and biological monitoring is a high priority in the Blackfoot River Watershed. Monitoring activities are coordinated by Montana Fish, Wildlife and Parks and Trout Unlimited. Every habitat project is monitored for at least five years. Parameters include; habitat condition assessments, flow rates, water temperature, genetics, species abundance and species composition. Bull trout redd surveys are completed every year. Juvenile bull trout surveys are conducted every two years. The five primary reaches on the Blackfoot River are assessed every two years to assess overall change in species composition. Comprehensive monitoring reports are published every two years.

The following graph depicts bull trout redds in the North Fork Blackfoot River during the period 1989-2011. By 2011, North Fork bull trout redds totaled 118 (172 - 215 adults). Readers will note that total redds fell below 50 in the period 2003-2007. The watershed experienced severe

drought during those four years and spawning rates declined dramatically. Interestingly, even in drought years, the total number of redds still far-exceeded the pre-restoration redd number (8).

Bull Trout Redd #'s NF BF



In conclusion, after twenty-one years of strategic restoration and management activities (1990 – 2011) monitoring has documented that the Blackfoot River Watershed has three core tributaries with at least 50 redds. The total adult bull trout population is estimated to be approximately 500 adult fish. These numbers show that conservation practitioners working in the Blackfoot River Watershed have met the bull trout redd goal established in the USFWS Bull Trout Recovery Plan.

ROCKY MOUNTAIN FRONT			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	193	75	257%
Upland (Acres)	9,682	4,500	215%
Riparian (Miles)	6	10	60%
Fish Passage (Units)	0	0	

Example Project: Invasive Species Control
 Focus Area: Rocky Mountain Front
 HabITS Project Number: 568745
 Office Org Code: 61810

Use of biological control agents for invasive terrestrial plant management is an important component of an integrated weed management program. Along Montana’s Rocky Mountain Front (RMF), MT PFW uses program funds and technical assistance to help landowners expand the use of biological control agents for control of noxious weeds. Working in partnership with agencies, organizations, and landowners, biological control has made a significant impact on the reduction of leafy spurge, *Euphorbia esula*. Biological control of spotted knapweed, *Centaurea maculosa*, is less dramatic but plants are showing reduced vigor and seed production all along the RMF. Biological control insect releases are enhancing native grasslands and important riparian corridors across the RMF

Working on noxious weed control in a cooperative conservation approach, The U.S. Fish and Wildlife Service is an active member of the RMF Weed Roundtable. The Roundtable is a collaborative effort involving 11 public agencies including federal, state, and local governments; the Blackfeet Tribal government, 3 conservation organizations, 4 county weed districts, 2 watershed groups, and many private landowners to coordinate integrated weed management activities along the RMF. The Weed Roundtable started as a means to communicate on noxious weed issues and projects. It has grown into a collaborative venture for cooperating on and supporting projects of mutual interest; and in 2011, the Roundtable became an official 501(c)(3), non-profit organization.

In 2006, The Nature Conservancy and MT DNRC, working closely with the Weed Roundtable and the Partners Program, secured a USFWS Challenge Cost Share grant. A Montana Conservation Corp crew was hired for two weeks to help establish field insectary sites on private and state lands. MCC crews then assisted MT PFW staff with distribution and education on biological control to landowners from the South Fork of the Dearborn north to the Birch Creek watershed. Additional funding in subsequent years helped solidify this project, and 2012 will be the 9th season for collection and redistribution of leafy spurge beetles. Some landowners no longer request insects due to the success of previous releases, while others are requesting assistance for the first time. To date, approximately **2.75 million leafy spurge beetles** have been collected at field insectary sites and moved to spurge infestations on the RMF.

MCC releasing leafy spurge beetles in the Dearborn River watershed. USFWS Photo

Positive impacts of leafy spurge beetles on spurge patch (after). USFWS Photo

UPPER KOOTENAI RIVER WATERSHED			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	79	50	158%
Upland (Acres)	1,688	1,000	168%
Riparian (Miles)	4	15	27%
Fish Passage (Units)	3	0	

Example Project: Grave Creek Restoration

Focus Area: Kootenai

HabITS Project Number: 44636

Office Org Code: 61810

The Upper Kootenai River Watershed MT PFW Conservation Focus Area is an international watershed encompassing nearly 18,000 square miles of northwest Montana, British Columbia, and Alberta. The Kootenai River headwaters reside in British Columbia and the river flows 485 miles through the steep mountain terrain and agricultural flat land. The watershed contains important fluvial and adfluvial populations of bull trout (T). The Upper Kootenai is a designated core area for the recovery of bull trout listed in the USFWS Bull Trout Recovery Plan. The area is also home to healthy populations of westslope cutthroat trout, grizzly bears (T), gray wolves, wolverines, Canada lynx, and migratory birds.

The Grave Creek watershed is located south of the town of Eureka, Montana. Grave Creek is a tributary to the Tobacco River. Grave Creek supports an important bull trout fishery and provides habitat for other native fish, including westslope cutthroat trout.

The goals of the Grave Creek restoration project were to restore proper form and function to the in-stream channel, adjacent riparian habitat and floodplain zone. Targeted focal species for the project were bull trout and westslope cutthroat trout.

Grave Creek habitat accomplishments include:

- 8,200 feet of in-stream channel restoration
- 20 acres of riparian habitat restoration
- Re-vegetation of riparian and floodplain areas with containerized cottonwood, willow, red-osier dogwood, chokecherry, and birch
- Installation of 9,000 feet of portable electric fence to protect riparian areas from domestic livestock and wild ungulate browsing

Project partners include; private landowners, MFWP, Kootenai River Network, NRCS, MT DEQ, Lincoln County Conservation District, Glen Lake Irrigation District, Cinnabar Foundation, Friends of Grave Creek Alliance and NFWF Foundation.

Grave Creek Pre-Restoration USFWS Photo

Grave Creek Project Post Restoration. USFWS Photo

Bull trout redd counts 1995 – 2011 for Grave Creek and Wigwam River, tributaries to Lake Koocanusa, Montana.

Stream	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10 Year average	Most recent year Percent of 10 year average
Grave Creek		24	42	52	85	87	131	156	173	102	153	118	166	170	55	102	51	125	40.9
Clarence Creek		5	6	13	39	9	29	38	52	29	32	22	42	27	24	9	10	29	35.0
Blue sky Creek		6	1	1	10	1	13	5	20	10	9	8	0	10	8	9	3	8	36.6
Grave Drainage Total		35	49	66	134	97	173	199	245	141	194	148	208	207	87	120	64	161	39.7
Wigwam River (B.C.)	247	500	581	673	838	1186	1477	1881	2043	2106	635	2285	1850	1827	1567	1114	1198	1651	72.6
Wigwam River (U.S.)		12	17	6	21	9	19	11	10	27	7	13	33	6	8	4	8	13	63.0
Wigwam Drainage Total	247	512	598	679	849	1195	1496	1892	2053	2133	642	2298	1883	1833	1575	1118	1206	1663	72.5
Wigwam and Grave Creek	247	547	647	745	983	1292	1669	2091	2298	2274	836	2446	2091	2040	1662	1238	1270	1825	67.9

UPPER MISSOURI COTEAU			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	1,325	1,000	132%
Upland (Acres)	8,652	18,000	48%
Riparian (Miles)	8.1	20	41%
Fish Passage (Units)	0	0	

Example Project: Lee Wetland Restoration & Grazing System
 Focus Area: Upper Missouri Coteau
 HabITS Project Number: 49402
 Office Org Code: 61810

The Lee Family owns a diverse agricultural operation in Sheridan County, Montana. This project entailed repairing three dams and restoring a 15 acre drained wetland. Work was completed in 2009. These projects lie within a large block (1,156 A) of native mixed grass prairie. This native prairie had been chronically over-grazed in a season-long, single pasture grazing system. Through EQIP, NRCS designed a prescribed rotational grazing system. Five pastures were developed by installing cross-fences, water pipelines, and stock tanks. The new upland management prescription enhances both wetland and upland habitats. Key wetland plants, such as spike rush, sedges and grasses degraded by the historic grazing management practices will recover. Improved grassland habitat will provide enhanced nesting cover for both waterfowl and upland nesting song birds (Sprague's Pipit, Grasshopper Sparrow, and Baird's Sparrow).

Above: Drained wetland basin on the Lee Tract (before restoration). USFWS Photo

Below: Restored wetland basin on the Lee Tract (after restoration). USFWS Photo

SWAN VALLEY			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	12	30	40%
Upland (Acres)	0	640	0%
Riparian (Miles)	1.8	2	90%
Fish Passage (Units)	1	0	

Example Project: Heekin Wetland Restoration
Focus Area: Swan River Valley
HabITS Project Number: 58822
Office Org Code: 61810

The Heekin project entailed the restoration of a 12 acre semi-permanent wetland. This basin was ditched and drained during the 1940's for agricultural production. The project included fill removal, ditch plug and installation of a water-control structure.

The restored wetland was rested for two growing seasons. The Swan Ecosystem Center, in conjunction with USFWS, planted native grasses on all disturbed sites associated with restoration and worked cooperatively with the landowner to control noxious weeds within the restoration area. This project will benefit the following priority species; trumpeter swans, lesser scaup, American widgeon, mallard, black terns, sandhill cranes and grizzly bears.

Above: Heekin Wetland before restoration, 8/28/2009. USFWS Photo

Below, Heekin Wetland after restoration, 5/25/2010. USFWS Photo

GLACIATED/SHALE PLAINS			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	190	100	190%
Upland (Acres)	4,993	5,000	99%
Riparian (Miles)	2.3	1	230%
Fish Passage (Units)	0	0	

Example Project: Longhorse Wetland Restoration
 Focus Area: Glaciated/Shale Plains
 HabITS Project Number:
 Office Org Code: 61810

The Glaciated/Shale Plains Focus Area, an extensive region in north central Montana, is characterized by undulating plains dominated by sagebrush-steppe and mixed-grass native prairie. Large river systems include the Milk and Missouri Rivers with smaller prairie streams and accompanying riparian habitat are scattered through drier uplands. Moderate to high densities of pothole-type wetlands are scattered across the focus area. Black-tailed Prairie Dogs are abundant. Key migratory bird species found in the focus area include; Mountain Plover, Burrowing Owl, Greater Sage Grouse, Ferruginous Hawk, Chestnut-collared Longspur, Sprague's Pipit and Long-Billed Curlew. Livestock production and farming are the primary land-uses.

The Glaciated/Shale Plains Focus Area encompasses about 2.5 million acres. Land ownership is a checkerboard of public and private lands. Charles M. Russell National Wildlife Refuge lies at the southern boundary of the Focus Area and BLM manages numerous large allotments. The Matador Ranch, a 60,000 acre preserve owned by The Nature Conservancy, lies in the heart of the focus area. Private ownership is dominated by large working ranches. Ownership is 37% private and 63% public lands.

Longhorse wetland restoration project (83 acres) on TNC's Matador Ranch. TNC Photo

BIG HOLE RIVER WATERSHED			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	2,197	110	1997%
Upland (Acres)	11,335	46,000	25%
Riparian (Miles)	58	43	135%
Fish Passage (Units)	9	0	

Example Project: Rock Creek Restoration

Focus Area: Big Hole
HabITS Project Number: 40926
Office Org Code: 61810

Rock Creek historically flowed into the Big Hole River approximately three miles upstream of the town of Wisdom, Montana. Rock Creek was once an important spawning and rearing tributary for fluvial Arctic grayling. In the early 1980's, over 60 grayling per mile were documented in Rock Creek. In 1990 changes to the irrigation system dewatered Rock Creek and eliminated connectivity between Rock Creek and the Big Hole River. Grayling populations declined rapidly and by 1994 grayling were extirpated from the stream. In 2005, design alternatives were developed to restore the connectivity between Rock Creek and the Big Hole River. The restoration team determined that the preferred alternative was to reactivate a historic channel braid of Rock Creek. Three private landowners worked with biologists to restore Rock Creek. In 2007, 2.5 miles of an abandoned channel was restored to reference conditions and Rock Creek was re-connected to the Big Hole River.

In addition to restoring connectivity, restoration efforts have included increasing the pool quality and frequency, stabilizing stream-banks with sod mats, planting native willow species, installing riparian fence, implementing grazing management and developing an in-stream flow conservation plan (Figures 1-3). After addressing limiting habitat factors through restoration and management, Arctic grayling were introduced in to Rock Creek using remote site incubators in 2010 and 2011. After 18 years, Arctic grayling are back in Rock Creek (Figure 4). Restoration efforts will continue in 2012 with the installation of a stock water system, and 3 new irrigation diversions with fish ladders.

Above. Rock Creek before restoration. USFWS Photo

Above. Rock Creek channel during construction. USFWS Photo

Below. Restored Rock Creek channel in 2008. USFWS Photo

Fluvial Arctic grayling. Photo by Mark Conlin.

Riparian fence was installed on over 4 miles of Rock Creek. USFWS Photo

Rock Creek Arctic grayling catch per unit effort from Montana Fish, Wildlife and Parks electrofishing surveys from 1978-2011. Arctic grayling captured in 2010 and 2011 were developed in remote site incubators using gametes from the Big Hole fluvial brood reserve.

MILK RIVER BASIN			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	468	1,000	47%
Upland (Acres)	33	1,500	2%
Riparian (Miles)	0	0	
Fish Passage (Units)	0	0	

The Milk River Basin Focus Area, located in north central Montana, is part of a larger landscape known locally as the “Hi-Line.” The region is bordered on the south by the Milk River Watershed and on the north by Prairie Canada. This focus area has relatively high densities of palustrine wetlands and large tracts of mixed-grass native prairie. Ranching and farming are the primary land-uses. Oil and gas production is increasing throughout the focus area.

Prior to European settlement, this “sea of grass” was inhabited by bison, pronghorn, elk, grizzly bears, gray wolves, swift fox, and black-tailed prairie dogs along with a myriad of grassland birds. Today, the Milk River Focus Area remains a critically important landscape for numerous Federal Trust Species. Black-tailed Prairie Dogs and Greater Sage Grouse are common. The focus area provides critical habitat for a number of declining migratory bird species including; Long-billed Curlew, McCowan’s Longspur, Chesnut-collared Longspur, Sprague’s Pipit, and Baird’s Sparrow. Recent radio-telemetry studies show that the Milk River Basin is a key corridor for Greater Sage Grouse and Pronghorn Antelope during seasonal migrations. Canadian populations of sage grouse and pronghorn were documented migrating south through the Milk River Basin Focus Area to escape harsh winter conditions in 2011.

The Milk River Basin Focus Area encompasses about 2.5 million acres. Land ownership is a mixture of private land, National Wildlife Refuge lands (Bowdoin NWR) and Waterfowl Production Areas, BLM, State School Section lands and private non-profit conservation lands. Ownership is comprised of 65% private land and 35% public land.

North American Wetland Conservation Act (NAWCA) funding has been an important conservation delivery funding source for habitat projects in the Milk River Basin. We expect this trend to continue. A Standard Grant proposal submitted for the 2012 funding cycle recently received the highest score in the Nation.



The Milk River Basin contains excellent wetland and native prairie habitat. USFWS Photo

MISSION VALLEY			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	982	500	196%
Upland (Acres)	159	10,000	2%
Riparian (Miles)	12	30	40%
Fish Passage (Units)	3	0	

Example Project: The Adams Diversion and Pipeline Project

Focus Area: Mission Valley

HabITS Project Number: 45770

Office Org Code: 61810

Modifying the Adams diversion structure and delivery ditch was a cooperative project between a private landowner, the Confederated Salish and Kootenai Tribes (CSKT), and MT PFW Program. This project is one of many being undertaken by CSKT in a comprehensive effort to restore the Jocko River Watershed. This multi-year restoration effort is aimed at improving

fisheries and wildlife habitats that have been degraded by a century of impacts from housing development, transportation corridors, grazing, agricultural production and timber harvest.

This project occurred on private land along Valley Creek, which is the largest tributary within the lower reach of the Jocko River Watershed. Valley Creek historically provided spawning and rearing habitat for bull trout (T) and westslope cutthroat trout.

Valley Creek was degraded by excessive ditch leakage, annual ditch maintenance, and an inefficient irrigation diversion structure. To alleviate these negative influences, a new diversion structure was installed along with 3,700' of 12" corrugated pipe in a previously open irrigation delivery ditch. The diversion structure included the construction of an in-stream rock cross vane that allows for irrigation diversions and provides adequate fish passage during low flows. Installation of a headgate at the head of the ditch regulates water use by irrigators. Irrigation withdrawals from Valley Creek have decreased significantly because of improved efficiency in the ditch system. The new system vastly improves irrigation efficiency by reducing leakage and excessive evapo-transportation. The project has increased in-stream flows, lowered stream temperatures, improved riparian conditions, restored channel morphology, and improved fish passage in Valley Creek.

Above: Adams diversion before restoration. USFWS Photo

Below: Adams diversion after restoration. USFWS Photo

Above – Bull trout, one of the species benefitting from the Jocko restoration project. National Geographic Photo

CENTENNIAL VALLEY			
Habitat Type	FY 2007-2011 Accomplishments	FY 2007-2011 Goal	% 5-year Goal Completed
Wetland (Acres)	500	150	333%
Upland (Acres)	7,943	10,000	79%
Riparian (Miles)	4.6	15	31%
Fish Passage (Units)	0	0	

Example Project: Hellroaring Creek Restoration

Focus Area: Centennial Valley

HabITS Project Number: 567612

Office Org Code: 61810

This project restored 5,200 feet of Hellroaring Creek. Historically, this perennial stream provided spawning habitat for adfluvial Arctic grayling. Hellroaring headwaters at the highest point in the Missouri River drainage and is the primary water source for Red Rock Lakes NWR.

The stream suffered from decades of season long livestock grazing which eradicated woody vegetation from the riparian corridor. The project included stream bank re-sloping, minor in-stream channel work, and extensive willow transplants.

Hellroaring Creek before Restoration, 2005 USFWS Photo

Hellroaring Creek after Restoration. 2011 USFWS Photo

Adfluvial Arctic grayling. Photo by Mark Conlin.

Broaden and Strengthen Partnerships

Robust conservation delivery relies on productive partnerships. The MT PFW staff is fully engaged in strengthening partnerships. Between FY2007-11, we leveraged over \$9 million in non-PFW funds for habitat delivery. Key partners include, MFWP, TNC, TU, DU, PF, The Arctic Grayling Recovery Program, Kootenai River Network, Blackfoot Challenge, Partners for Conservation, Big Hole Watershed Committee, Rancher Stewardship Alliance, Swan Ecosystem Center, Rocky Mountain Front Weed Round-table, NRCS, county conservation districts, Native American tribes, numerous private foundations and private landowners.

We aggressively seek new funding opportunities. FY2007-11, we attracted the following new funding partners for habitat projects: EPA, MT DEQ, Defenders of Wildlife, Park County, the National Forest Foundation, The Trumpeter Swan Society, Montana Association of Conservation Districts, Montana State University, Cinnabar Foundation and American Wildlands.

Accomplishment Type	FY2007-11	2007-2011 Goal	%Completed
# of Landowner Agreements	245	290 or 55/year	85%
Staff Days of Technical Assistance	1,955 staff days	1,700 staff days (340 S.D/yr.)	115%
% of non-FWS funds leveraged	1:6.7 (\$1.43M 1121 : \$9.6 Million non-FWS)	1:1.7/year	394%

Improve Information Sharing and Communication

The FY2007-2011 Information Sharing and Communication accomplishments are summarized below. We believe that on-the-ground conservation delivery and strong partnerships are tied to rigorous internal and external communication. USFWS and DOI leadership appear to support this premise based on the number of requests we receive for field tours, high-level briefings, meetings, workshops and media events. Highlights from 2007-11 include; tours for DOI Secretary's Kempthorne and Salazar, the 2010 USFWS Directorate Meeting, the 2009 NWR Refuge Chiefs Meeting, the 2010 R6 Refuge Project Leaders Meeting, field tours for the House Appropriations Minority Staff, the America's Great Outdoors inaugural Listening Session, a field tour of the Big Hole Valley and Upper Kootenai Watershed MT PFW Focus Areas for the National Chief of the PFW Program, a tour of the Swan Valley for the R6 Regional Director, a field tour of the Swan and Blackfoot Valley's for the FHC Assistant Director, Washington and Regional PFW/Coastal staff field staff, a presentation to the Advanced Refuge Managers Academy on community-based, landscape-level conservation success stories, and a field tour of south Phillips County with regional office leadership. This list does not include "routine" information sharing between MT PFW field biologists and watershed groups, weed districts, conservation districts, NRCS State Technical sub-committees, joint venture steering committees and other entities.

Left: Tamara McCandless tours the Big Hole Focus Area, May 7th 2010 with project partners from the Big Hole Watershed Committee and Montana DNRC.

Accomplishment Type	2007-2011 Accomplishment	2007-2011 Goal	% Goal Completed
Participate in Landowner meetings	179	75	238%
Enter into new Coop Agreements	10	10	100%
Sponsor Landowner tours	25	10	250%
Assist in NCTC Courses as instructors	9	5	180%
Host MFWP Coordination Meetings	14	5	280%
Participate in NRCS State Tech. Com. mtgs.	15	12	125%
Participate in Congressional Mtgs./Tours	14	10	140%
Provide MT PFW Program Updates to WO & RO Staff	28	10	280%
Conduct MT PFW Staff Meetings	9	10	90%
Facilitate media events	16	10	160%
Complete school field trips	15	10	150%

Enhance Our Workforce

FY2007-2011 activities related to Enhancing our Workforce are summarized below.

Accomplishment Type	2007-2011 Accomplishment	2007-2011 Goal	% Goal Completed
MT PFW field staff acquire 40 hours of training/yr.	All MT PFW field staff completed at least 40 hrs. of training/year	40 hrs./year/employee	100%
Staff and mentor new field biologists in the Glaciated Shale Plains and Swan River Valley	We continued our agreement with the Inter-Mountain Joint Venture to fund a cooperative field biologist position in the Swan Valley in FY11. We also worked with IWJV, NRCS and MACD to establish 5 Sage Grouse Initiative shared positions in Montana. This represents 6 additional conservation delivery practitioner positions in MT	2 new positions	300%
Recognize exceptional MT PFW Program field staff	8 MT PFW staff members were recognized for exemplary performance in FY11	NA	NA

Increase Accountability

FY2007-2011 activities under the “Enhance our Workforce” category are summarized below

Accomplishment Type	2007-2011 Accomplishment	2007-2011 Goal	% Goal Completed
By 2011 develop site specific plans for each staffed MT PFW Focus Area	2	8	25%
Use GIS technology to map MT PFW projects	All FY09, 10 & 11 projects were mapped	100%	100%
Create GIS layer of all MT PFW habitat projects by 2011	Not completed	100%	0%
By 2011, conduct one biological assessment of each MT PFW Focus Area	4 (Blackfoot, Big Hole, Kootenai & Swan)	100%	40%