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Wildlife Habitat Incentives Program

Montana State Plan Fiscal Year 2007



Le Conte's sparrow.

Introduction

The Montana State WHIP Plan is the result of a collaborative effort by the Wildlife and Wetlands Working Group of the State Technical Advisory Committee. This group considered input from local working groups as well as the objectives of existing wildlife conservation programs in the preparation of this plan. Its recommendations were reviewed by the full State Technical Advisory Committee. The Montana Comprehensive Fish and Wildlife Conservation Plan (MCFWCP) helped identify federally listed species and species of concern within existing WHIP focus areas.

Montana's Wildlife Habitat Incentives Program will:

- Provide technical, cost-share and education assistance to private landowners for implementation of wildlife habitat development plans in priority habitats through a collaborative partnership effort.
- Maintain, restore or enhance native riparian/instream native fish habitats and woody draws; native prairie and wetland habitats in Montana.
- Focus fish and wildlife habitat restoration/enhancement and management projects in targeted areas to address habitat requirements of Federally Listed Species, Species of Concern and other species and priority habitat types outlined in the MCFWCP and other conservation plans referenced in Appendix 2.
- Foster positive public attitudes towards wildlife through education; placing an emphasis on the WHIP “Youth for Wildlife” Program.

Montana State Objectives

State Objective 1: Maintain, restore, or enhance riparian/instream native fish habitats and woody draws.

Riparian and instream fish habitats are highly interrelated and represent one of the most degraded habitat complexes in Montana. It is estimated that 75% of all grazed, privately owned riparian areas are in need of some degree of restoration and management.

Experience has shown that grazing management, in combination with stream channel restoration when necessary, will restore functioning riparian habitat and fisheries. Healthy riparian vegetation provides clean, cool water, food and habitat structure required by salmonids as well as diverse habitat structure for a wide variety of birds, mammals, reptiles and amphibians.

The ephemeral draws of eastern Montana provide a microclimate which promotes the establishment of woody vegetation. These plant communities are composed of low to medium shrub species such as silver buffaloberry, chokecherry, juniper, ash, and box elder. These woody draws provide habitat diversity, thermal cover, forage, and nesting habitat that is important to many species of wildlife, particularly neotropical migratory and resident bird species.



Degraded riparian/fish habitat from unmanaged grazing.



Healthy riparian/fish habitat can be maintained or improved with grazing management.

State Objective 2: Maintain, restore or enhance native prairie habitats.

Since settlement, over 18 million acres of native prairie have been converted to other land uses in Montana. The majority of this involves conversion to cropland. Of the large, intact blocks of native prairie remaining in Montana, about 50% are in fair to poor condition.

Montana's native grasslands attract many birds, including grasshopper, Baird's, and vesper sparrows. These species have experienced dramatic population declines from 1966 to the present. Of all North American birds, those occupying grasslands are experiencing the steepest declines. Native grasslands are also critical habitat for such diverse species as sage grouse, sharp-tailed grouse, northern pintails and sage thrashers.



Native prairie provides diverse wildlife habitat.



The grasshopper sparrow, a neotropical migrant, depends on native prairie.

State Objective 3: Maintain, restore or enhance native wetland habitats.

The Montana Wetlands Council reports that the state has lost over 240,000 acres of depressional wetlands since settlement. This figure does not include wetland losses associated with riparian areas, wet meadows and springs, which are also significant. Montana's WHIP Plan expands the role of the private landowner in partnership wetland restoration efforts.

Wetlands provide critical habitat for a myriad of fish and wildlife. In Montana, wetlands are a vital habitat component for breeding waterfowl and other migratory birds and are also important habitat for such diverse species as grizzly bears and rare amphibians. Nearly 60 percent of Montana's threatened and endangered species rely on wetlands to meet all or part of their seasonal life cycle requirements. Game species such as white-tailed deer and pheasants are heavily dependent on wetlands, particularly during winter.



Partnership wetland restoration in Montana.

State Objective 4: Foster a positive public attitude about wildlife through information.

Often the general public does not understand the contributions private landowners make in providing fish and wildlife habitat. Many landowners are simply not aware of the compatibility of fish and wildlife habitat development with other farm and ranch enterprises. Informational efforts will illustrate that fish and wildlife interests and landowners have common goals. This will serve to further inform landowners of existing fish and wildlife habitat partnerships and collaborative efforts targeted at benefiting fish and wildlife resources in the agricultural landscape.

State Wildlife Priorities

Montana's wildlife priorities include the maintenance, restoration, and enhancement of native riparian/instream/woody draw habitats, native prairie and wetlands. The WHIP effort will focus on grazing management as a tool for habitat restoration and enhancement. Grazing management is a common thread affecting each of these habitats statewide.

Restoration and enhancement practices such as stream channel restoration, bank stabilization, wetland restoration and enhancement, and range seedings will be used to restore fish and wildlife habitat. NRCS will also provide expertise in upland and wetland management planning and contracting to the WHIP effort. In addition to NRCS, our partner agencies and organizations will contribute expertise in stream and wetland restoration and upland seedings for wildlife.



Degraded stream channels provide poor trout habitat.



Restored stream channels and healthy riparian vegetation provide diverse fish habitat

These wildlife priorities will be focused somewhat differently in three geographic areas of Montana (see Montana WHIP Focus Area Map). The WHIP ranking criteria reflects these differing priorities by geographic area as follows.



Intermountain WHIP Focus Area

- First priority: riparian and instream fish habitat
- Second priority: wetlands
- Third priority: native prairie habitat

Here, westslope cutthroat trout and fluvial arctic grayling are state species of special concern, and the bull trout has been listed as threatened under the Endangered Species Act. Seventy-five percent of remaining westslope cutthroat trout populations occur on only 5% of their historic range, primarily on federal land. Private land habitat improvements are necessary to expand this range and connect isolated genetic stocks.

Bull trout are secure in only 2% of the stream segments for which adequate population data exist. Fluvial arctic grayling were once native to the entire Missouri River drainage above the Great Falls in Montana. Grayling now occupy only the Big Hole River drainage, a fraction of their native range. Plans are in place to reintroduce grayling to former stream habitats throughout their original range.



Montana arctic grayling (inset) and westslope cutthroat trout; species of special concern.

The WHIP effort will combine with existing programs to help prevent the listing of these native trout species. A host of other species, including declining neotropical migrant birds, will benefit from riparian/instream restoration and enhancement. The focus on native bull trout, grayling and westslope cutthroat trout supplements the Future Fisheries Program (Montana Department of Fish, Wildlife and Parks), which funds projects that protect or enhance wild and native fisheries habitat in the Intermountain WHIP Focus Area. NRCS expertise in grazing management will fill a need not met by this program or others and will further supplement this effort in which riparian health is so critical. The Deerlodge-Beaverhead National Forest has developed a westslope cutthroat trout strategy and indicated an interest in WHIP as an additional source of assistance for native fisheries habitat improvement on private land. The WHIP habitat priorities in this Intermountain area will complement activities of the Governor's Bull Trout Restoration Team, the Governor's Westslope Cutthroat Steering Committee, the Intermountain West Joint Venture and Prairie Pothole Joint Venture, and the State Elk Management Plan.

The second priority habitat in the Intermountain area, wetlands; will complement existing Prairie Pothole Joint Venture and Intermountain Joint Venture activities under the North American Waterfowl Management Plan (NAWMP), Trout Unlimited Steering Committee, the Intermountain Joint Venture and Prairie Pothole Joint Venture, and the State Elk Management Plan. And the third habitat type, native prairie restoration, will benefit Columbian sharp-tailed grouse and sage grouse, both state species of special concern, and ground nesting neotropical migrant birds such as Le Conte's sparrow.

Prairie Pothole WHIP Focus Area

- First priority: wetlands
- Second priority: native prairie habitat
- Third priority: riparian/instream/woody draws

This will complement existing Prairie Pothole Joint Venture efforts emphasizing wetland restoration and development of upland nesting cover. Through the North American Wetlands Conservation Act (NAWCA), grants totaling \$15,433,082 have been made available for private lands wildlife habitat projects throughout the Prairie Potholes Joint Venture. WHIP funds will be an integral part of this focused effort. Restoration of native prairie will be

an important component of this habitat improvement project that will benefit a wide variety of ground-nesting neotropical migrants.

The emphasis on wetlands in the Prairie Pothole WHIP Focus Area provides grazing management expertise and supplemental funding in concert with ongoing efforts under the NAWMP. Three Prairie Pothole Joint Venture project areas, Northeast Montana, Beaver Creek and Lonesome Lake, are within this focus area. The recent NAWCA grant provided funding and technical assistance for private lands wildlife habitat improvement projects. WHIP priorities will compliment this program and expand technical assistance, particularly in the area of grazing management. Program priorities also complement the goals of the Montana Wetland Conservation Strategy, the National No Net Loss policy for wetlands and the Bureau of Land Management Wetland Strategy.



Restoration of wetland complexes; a Montana WHIP goal.

Northern Great Plains WHIP Focus Area

- First priority: native prairie habitat
- Second priority: riparian/instream/woody draws
- Third priority: wetlands

Conversion of native prairie habitats to cropland and hay land has destroyed and fragmented more habitat than any other practice. Poor grazing management has also contributed significantly to the decline of many sagebrush/grassland obligate species. These species depend on long term viability with diversity of plants over a wide landscape. Restoration and management of these native prairie habitats will hopefully reverse the decline of many of these species such as sage grouse, swift fox, and piping plover.

Riparian areas which include woody draws because of their similarity in functions and values are very important in the Northern Plains Focus Area of eastern Montana. They comprise less than 9% of the land base but are some of the most productive and important ecosystems. They provide more vegetative structure and plant community diversity than the surrounding ecosystems. Wildlife use is disproportionately higher in these areas than any other type of habitat in eastern Montana.

The wetlands predominately found in the Northern Great Plains Focus Area are associated with riverine systems. Surface water is present for extended periods, especially



Proper grazing management: the key to healthy native prairie.



Wildlife and livestock are compatible with grazing management planning.

early in the growing season, or may persist throughout the growing season. In some cases, water is absent at the end of the growing season or surface water does not flow continuously, as when loss from evaporation or seepage exceeds the available stream flow. The subsurface water is important to improve ponding characteristics of wetland complexes vital in providing quality habitat for waterfowl, shorebirds, wading birds, and neo-tropical birds, while also supporting an increase in plant community diversity. Nearly 60% of Montana's threatened and endangered species rely on wetlands for all or part of their seasonal needs.

Program Interaction

These WHIP state wildlife priorities complement existing conservation programs throughout Montana. The goals and objectives of the following plans and strategies have been reviewed and determined to be consistent with the Montana WHIP Plan:

- Montana Comprehensive Fish and Wildlife Conservation Strategy (Montana Department of Fish, Wildlife and Parks).
- Montana Partners for Fish and Wildlife Implementation Plan (U.S. Fish and Wildlife Service).
- North American Waterfowl Conservation Act.
- Montana Natural Heritage Program Species of Special Concern Report.
- Partners in Flight Strategy.
- Habitat Montana: Upland Gamebird Habitat Enhancement Program, Montana Waterfowl Stamp Program (Montana Department of Fish, Wildlife and Parks).
- Existing watershed plans.
- Threatened and Endangered Species Recovery Plans (i.e., black-footed ferret, interior least tern, Rocky Mountain wolf, piping plover).

The Montana State WHIP Plan is statewide in extent. However, as described above, three general habitat type categories—instream/riparian/woody draws, native prairie, wetlands—are prioritized in differing order within each of the three geographic areas of the state.

Partnerships

Montana has a well established track record for partnership wildlife habitat and wetland restoration projects. NRCS routinely works with a variety of agencies and groups in implementing projects including the U.S. Fish and Wildlife Service's - Partners for Fish and Wildlife Program; the Montana Department of Fish, Wildlife and Parks - Upland Gamebird Habitat Enhancement and Waterfowl Stamp Programs; Ducks Unlimited; Trout Unlimited; and Pheasants Forever. The Blackfoot Challenge, a locally

driven effort to restore wildlife habitat and fisheries as well as to preserve an agricultural lifestyle, has received national recognition. NRCS has been an active participant in this effort through conservation programs.

The WHIP State Plan expands on this established partnership base to implement cost effective habitat improvements. Partnerships will be used to leverage funds, share technical expertise, develop projects and monitor results. The plan will strengthen existing partnerships and will also result in productive new alliances (Table 1 summarizes the partner contributions to the program).

Table 1. Partner Contributions to WHIP Plan

Partner	Habitat Objective	Wildlife Objective	WHIP Focus Area	Implementation	Type of Contribution
U.S. Fish and Wildlife Service					
Partners for Fish and Wildlife Program	Wetlands, Native Prairie, Riparian Instream	Migratory Birds	All	Cooperative Agreement	FA/TA
North American Waterfowl Management Plan	Wetland Restoration	Waterfowl/ Shorebirds	Prairie Pothole, Intermountain	Cooperative Agreement	FA
Montana Department of Fish, Wildlife and Parks					
Future Fisheries Improvement Program	Riparian and Instream	Native and Wild Fisheries	Intermountain	Cooperative Agreement	FA/TA
Upland Gamebird Habitat Enhancement Program	Native Prairie	Upland Gamebirds	All	Cooperative Agreement	FA/TA
Waterfowl Stamp Program	Shallow Water for Wildlife	Waterfowl	All	Cooperative Agreement	FA/TA
Montana Department of Environmental Quality					
319 Water Quality Program	N/A	N/A	All	Cooperative Agreement	FA
Montana Department of Natural Resources and Conservation					
223 Grant Program	Case by Case	Case by Case	All	Cooperative Agreement	FA
Riparian Grant Program	Case by Case	Case by Case	All	Cooperative Agreement	FA
Montana Grazinglands Conservation Initiative	Grazinglands	Livestock-Wildlife Interactions Demos	All	Cooperative Agreement	FA
Ducks Unlimited	Wetlands and Grasslands	Waterfowl	All	Contribution Agreement	FA
Trout Unlimited	Riparian/Instream	Native and Wild Fisheries	Intermountain	Cooperative Agreement	FA
Pheasants Forever	Upland Prairie, Riparian	Upland Gamebirds	All	Cooperative Agreement	FA/TA
Rocky Mountain Elk Foundation	Native Prairie, Riparian	Big Game	Intermountain and Northern Great Plains	Cooperative Agreement	FA
Conservation Districts	All	All	All	Cooperative Agreement	TA

FA = Financial Assistance.
TA = Technical Assistance.

State Ranking Criteria

The Montana State Ranking Criteria were developed by the Wildlife and Wetlands Working Group of the State Technical Advisory Committee in consideration of local input from around the state and with the review of the State Technical Advisory Committee. The criteria address ecological, economic and social considerations for each of the WHIP Focus Areas. State wildlife objectives, particularly the restoration of native habitats, are emphasized; as well as the three general habitat priorities in each WHIP Focus Area.

Measuring Program Success

Baseline and follow-up wildlife habitat assessments will be completed using Montana's Wildlife Habitat Assessment Guides (WHAG) for the appropriate land use. For stream corridor projects, we will use the Montana NRCS Riparian Assessment Form. Habitat Evaluation Procedures (U.S. Fish and Wildlife Service) will be used when a particular wildlife species is the project focus (i.e. sharp-tailed grouse habitat restoration). Baseline wildlife habitat assessments will be completed during the development of the Wildlife Habitat Development Plan. Follow-up assessments will be completed the year all essential practices are installed and the year of contract expiration. Monitoring will include establishment of permanent photo points. Photos will be taken of baseline conditions and during all subsequent follow-up activities. Status reviews will be conducted annually until all required practices are installed and the year of contract expiration. The following information will be collected:

1. Maintenance of previously applied practices,
2. Comparison of planned and actual conditions,
3. The improvement in wildlife habitat compared to baseline conditions.

Fiscal Year 2007 NRCS Funding Request

Partner agencies and groups are committed to providing at least a 1:1 match with WHIP Financial Assistance (FA) funds for projects throughout the state. Montana NRCS would also continue to fund the Contribution Agreement with the Montana Department of Fish, Wildlife and Parks to retain the shared area biologist position located in the Glasgow Area Office. With this existing agreement the agency would continue to coordinate the existing partnership of WHIP projects throughout Montana, in cooperation with existing staff and the Montana Department of Fish, Wildlife and Parks.

Fiscal Year 2007 NRCS Funding Request

Technical Assistance (TA)	Financial Assistance (FA)
\$121,000	\$550,000

This funding request is based on implementation of 10 projects in each of the three WHIP Focus Areas at an average of about \$20,000 in WHIP FA funds per project. Partner contributions will match WHIP cost-share 1:1. In the event that project costs average less than \$20,000, the goal is to implement more projects and maintain the 1:1 partner match.

Available Matching Resources, Fiscal Year 2007**

Partner	TA	FA
U.S. Fish and Wildlife Service		
Partners for Fish and Wildlife Program	■	■
NAWCA Grant	■	■
Montana Department of Fish, Wildlife and Parks		
Future Fisheries Improvement Program	■	■
Upland Gamebird Habitat Enhancement	■	■
Waterfowl Stamp Program	■	■
Montana Department of Environmental Quality		
319 Water Quality Program		■
Montana Department of Natural Resources and Conservation		
223 Grant Program		■
Riparian Grant Program		■
Montana Grazing Lands Conservation Initiative	■	■
Ducks Unlimited	■	■
Trout Unlimited		■
Pheasants Forever	■	
Rocky Mountain Elk Foundation		■
Conservation Districts	■	

**Partners are committed to a 1:1 match with WHIP funds on each project.

Program Implementation

Montana's WHIP State Plan will be implemented as a partnership effort. Primary partners involved in project planning and implementation include NRCS, U.S. Fish and Wildlife Service, Montana Department of Fish, Wildlife and Parks, Conservation Districts, Pheasants Forever, Trout Unlimited, and Ducks Unlimited. Biologists from WHIP partner agencies and private groups will collaborate in training NRCS Field Office personnel, conservation district representatives, and the public. WHIP project proposals will be evaluated and ranked by NRCS with an interdisciplinary team of district conservationists, biologists, and other necessary disciplines. The preferred alternative for WHIP implementation involves use of TA funds to maintain the shared Area Office biologist position located in Glasgow. Area biologists will continue to work with the state biologist, program specialist, and partners to build cooperative projects which provide at least a 1:1 match with WHIP funds. If budget considerations do not allow for the area biologist positions, the state biologist, and field/area office staff will work with partners to implement WHIP.

The following summarizes personnel available from cooperating agencies and groups for WHIP implementation:

Agency	Personnel
NRCS	1 WHIP Program Specialist 4 Area Biologists
U.S. Fish and Wildlife Service	8 Biologists
NRCS/Montana Department of Fish, Wildlife and Parks (MT FWP)	1 Area Biologist (Contribution Agreement Position)
MT FWP	15 Biologists
Ducks Unlimited	1 Biologist
Trout Unlimited	1 Biologist
Pheasants Forever	1 Biologist

NRCS Public Affairs Staff will coordinate an accelerated information program to further publicize WHIP. This will include radio interviews, newspaper articles, fact sheets, and related materials.

Primary NRCS conservation practices for WHIP implementation include, but are not limited to, the following:

- 645 Wildlife Upland Habitat Management.
- 644 Wildlife Wetland Habitat Management.
- 657 Wetland Restoration.
- 643 Restoration and Management of Rare or Declining Habitats.
- 395 Fish Stream Improvement.
- 612 Tree and Shrub Establishment.
- 528 Prescribed Grazing.
- 314 Brush Management.
- 582 Open Channel.
- 472 Use Exclusion.
- 580 Streambank and Shoreline Protection.

A variety of other practices will be used to supplement implementation of WHIP.

Fiscal Year 2006 Wildlife Habitat Improvement Projections

Montana WHIP Objective	Acres of Conservation Management Systems Contracted	Habitat Value Percent Improvement when System Implemented*
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Intermountain Focus Area

Wetland Restoration and Management	20	10
Native Prairie Habitat Restoration/Management	1,042	16
Riparian/Instream Fisheries Habitat Restoration	802	26

Prairie Pothole Focus Area

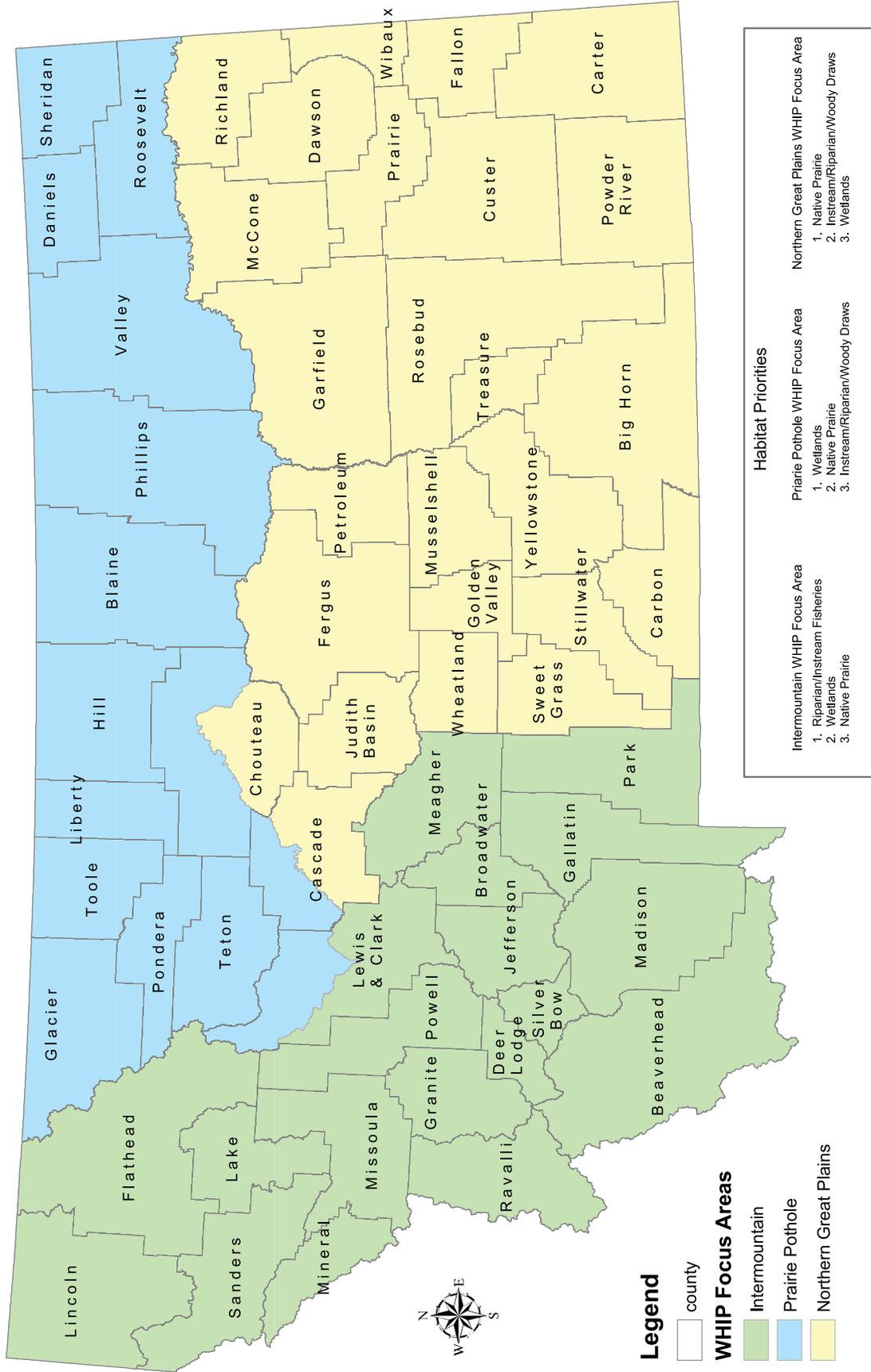
Wetland Restoration and Management	-	-
Native Prairie Habitat Restoration/Management	646	65
Riparian/Instream Fisheries Habitat Restoration	-	-

Northern Plains Focus Area

Wetland Restoration and Management	123	70
Native Prairie Habitat Restoration/Management	10,795	50
Riparian/Instream Fisheries Habitat Restoration	232	50

* Habitat value improvement determined utilizing Wildlife Habitat Assessment Guide.

Montana WHIP Focus Areas



Appendix 2

Coordinated Wildlife Habitat Restoration/ Management in Montana

Recent efforts by various public and private entities have produced a number conservation plans valuable for focusing WHIP technical and financial assistance on the most critical wildlife resource needs. For example, the “Partners in Flight Draft Bird Conservation Plan, Montana,” identifies five habitats most in need of conservation action as well as 14 “Priority 1” bird species associated with those habitats. The Draft Partners in Flight Plan further provides a discussion of specific conservation actions needed to benefit a given bird species. Other conservation plans (i.e., the Montana Department of Fish, Wildlife and Parks Comprehensive Fish and Wildlife Conservation Strategy) identify priority habitats and all associated priority wildlife species, including reptiles and amphibians, fish, birds and mammals.

These conservation plans can be used to assure that WHIP technical and financial assistance is used to address the most important and immediate habitat needs of the targeted wildlife species.

In general, these conservation planning efforts have targeted the same priority habitats as does the WHIP State Plan: native prairie/shrub-steppe, wetlands, and riparian/in-stream habitats. In addition, the following priority habitats have been identified by our partners: dry forest, burned forest, aspen, cedar-hemlock, boreal (spruce-fir) forest, and high elevation (alpine) lands. When funds are available in excess of those needed for the three priority WHIP habitats, these additional habitats should receive extra attention during the conservation planning effort.

The following tables list the priority habitats and associated priority species for conservation action identified by a number of existing planning documents which are cited at the end of this section.

Priority Habitats and Associated Priority Wildlife Species for Conservation Action

Table 1. Grassland/Shrub-Steppe Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
Milk snake Smooth green snake Western hognose snake		Mallard Northern pintail American wigeon Lesser scaup Blue-winged teal Mountain plover Long-billed curlew Wilson’s phalarope Upland sandpiper Marbled godwit Ferruginous hawk Swainson’s hawk Golden eagle Prairie falcon Greater sage grouse Columbian sharp-tailed grouse Burrowing owl Eastern bluebird Sage thrasher Sprague’s pipit Loggerhead shrike Baird’s sparrow Brewer’s sparrow McCown’s longspur Chestnut-collared longspur Dickcissel Lark bunting Bobolink	Dwarf shrew Spotted bat Great Basin pocket mouse Hispid pocket mouse Black-tailed prairie dog White-tailed prairie dog Black-tailed jack rabbit Pygmy rabbit Black-footed ferret Gray wolf American bison

Priority Habitats and Associated Priority Wildlife Species for Conservation Action

Table 2. Riparian/Instream Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
Spiny softshell Snapping turtle	Blue sucker Paddlefish Pallid sturgeon White sturgeon Pearl dace Sicklefin chub Sturgeon chub Trout perch Shortnose gar Sauger Burbot West slope cutthroat trout Yellowstone cutthroat trout Fluvial arctic grayling Bull trout Columbia redband trout	Harlequin duck Wood duck Common goldeneye Barrow's goldeneye Bald eagle Swainson's hawk American peregrine Black-billed cuckoo Yellow-billed cuckoo Vaux's swift Calliope hummingbird Rufous hummingbird Black swift Lewis's woodpecker Red-naped sapsucker Williamson's sapsucker Cordilleran flycatcher Willow flycatcher Alder flycatcher Cassin's kingbird Northern rough-winged swallow Eastern bluebird Veery Red-eyed vireo Black and white warbler MacGillivray's warbler Lazuli bunting	Dwarf shrew Eastern red bat Townsend's big-eared bat Meadow jumping mouse



Priority Habitats and Associated Priority Wildlife Species for Conservation Action

Table 3. Wetlands Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
Northern leopard frog Boreal toad Great Plains toad Coeur d' Alene salamandar		Common loon Horned grebe Western grebe American white pelican American bittern Whooping crane Sandhill crane Snowy egret Cattle egret Trumpeter swan Snow goose Greater white-fronted goose Mallard American wigeon Blue-winged teal Cinnamon teal Wood duck Redhead Canvasback Greater scaup Lesser scaup Barrow's goldeneye Common goldeneye Ring-necked duck Yellow rail Piping plover American golden plover Snowy plover Black-necked stilt White-faced ibis American avocet Whimbrel Long-billed curlew Marbled godwit Hudsonian godwit Solitary sandpiper Sanderling Buff-breasted sandpiper Western sandpiper Wilson's phalarope Red knot Ruddy turnstone Long-billed dowitcher Short-billed dowitcher Forster's tern Arctic tern Caspian tern Black tern Interior least tern Franklin's gull Sedge wren LeConte's sparrow Nelson's sharp-tailed sparrow Bobolink	Arctic shrew Dwarf shrew Northern bog lemming

Priority Habitats and Associated Priority Wildlife Species for Conservation Action

Table 4. Dry Forest Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Northern goshawk Blue grouse Flammulated owl Broad-tailed hummingbird Lewis' woodpecker Dusky flycatcher Cordilleran flycatcher Cassin's kingbird Pygmy nuthatch Brown creeper Townsend's solitaire	Pallid bat Spotted bat

Table 5. Burned Forest Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Black-backed woodpecker Olive-sided flycatcher	

Table 6. Cedar-Hemlock Forest Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Brown creeper	

Table 7. Aspen Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Ruffed grouse Red-naped sapsucker	

Table 8. Boreal Forest (spruce-fir) Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Blue grouse Northern hawk owl Vaux's swift Black swift Hammond's flycatcher Boreal chickadee Brown creeper	Northern bog lemming Canada lynx Gray wolf Grizzly bear

Table 9. Alpine Habitat Priority Wildlife Species

Amphibians-Reptiles	Fish	Birds	Mammals
		Black rosy finch Gray-crowned rosy finch	Hoary marmot

Once an on-site wildlife habitat assessment has been completed and the target wildlife species are identified, NRCS conservationists can utilize the conservation plans cited in this section to help identify needed conservation actions. These can then be matched to available FOTG practice standards and specifications to implement effective habitat restoration, enhancement, creation and management.

For example, assume that NRCS is developing a conservation plan on a unit in north-central Montana's mixed grass prairie. The ecological site inventory reveals a relatively low condition native range with a declining trend and conifer encroachment is identified as an issue on a portion of the range unit. The Wildlife Habitat Assessment Guide for rangeland results in a score less than 0.5 (does not meet Quality Criteria). Communication with NRCS and Montana Department of Fish, Wildlife and Parks biologists suggests that Baird's sparrow is the primary target wildlife species and the landowner agrees to consider the habitat needs of this sparrow in the management plan. Page 37 of the Partners in Flight Draft Bird Conservation Plan – Montana summarizes the habitat needs of Baird's sparrow: medium vegetative structure, low (less than 25%) woody cover and relatively abundant litter. The following table summarizes habitat issues identified in the Partners in Flight Plan and the available NRCS FOTG conservation practices for addressing these issues.

Management Issue	NRCS FOTG Practice
Conversion to crop/pasture	550 – Range Seeding
Poorly controlled grazing (low litter cover)	528 – Prescribed Grazing (e.g. Deferred or Rest Rotation)
Lack of historic fire regime	338 – Prescribed Burning
Shrub and tree encroachment	314 – Brush Management

A similar process could be used for a non-bird wildlife species using the Montana Department of Fish, Wildlife and Parks Comprehensive Fish and Wildlife Conservation Strategy.

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Westslope cutthroat trout, page 4: USDA Forest Service.
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