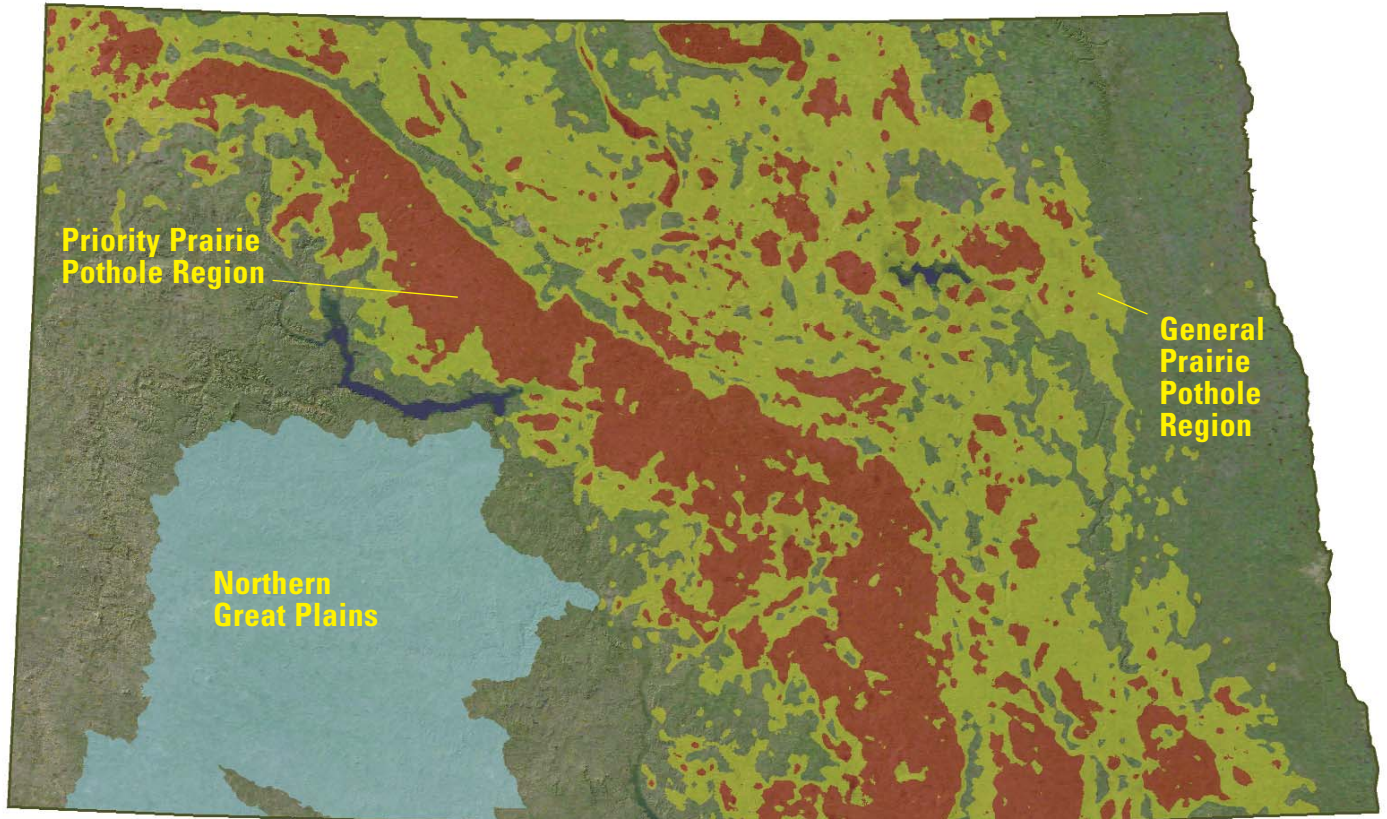
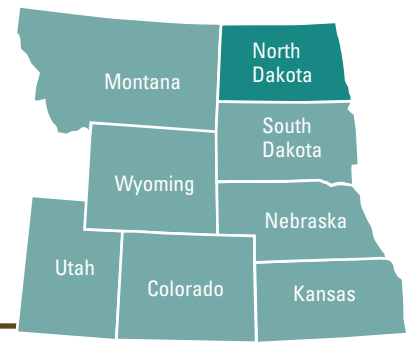


# North Dakota



*North Dakota Partners Program Conservation Focus Areas*

## Introduction

The Prairie Pothole Region (PPR) is legendary as North America's foremost producer of ducks. North Dakota, the top duck producing state in the nation, lies in the heart of this region. Wetland densities in North Dakota commonly reach as high as 100-150 basins per square mile, making it not only an important breeding area for ducks, but also a key breeding and migration area for over 70 wetland-dependent migratory bird species. With over 90% of North Dakota lands in private ownership, the North Dakota Partners Program is one of the Service's most important

programs to restore and maintain habitat for migratory bird populations in the Central Flyway.

Since 1987, the Partners Program has matched federal funds with donated private funds and North American Wetland Conservation Act grants to restore, create, and enhance wildlife habitat on more than 200,000 acres of private land in the state (equal to 312 square miles). While the majority of Partners Program projects are implemented in strategically focused areas of important habitat, the program boasts projects in all 52 counties of North Dakota, in cooperation with over 2,000

farmers and ranchers, who themselves have donated over \$0.5 million in direct payment and hands-on work to develop new habitat and to initiate conservation-oriented agricultural practices that benefit wildlife.

The Partners Program is limited only by the amount of funding necessary for projects and the personnel to accomplish them.

## Partnership Involvement in Plan Development

The Partners Program coordinated efforts with other federal and state

agencies, major nongovernmental organizations, and stakeholder partners who have been involved in the Partners Program Strategic Plan to date. The Partners Program also involved the Service's Ecological Services, Realty, and Fisheries divisions in the Partners Program focus area determination process. Input provided by the combined expertise of these external and internal partners contributed to the Partners Program's identification of focus areas for North Dakota.

### The Prairie Pothole Region of North Dakota

The Prairie Pothole Region is legendary in its continental importance to waterfowl and other migratory birds. Its uniqueness lies in the millions of depressional wetlands that constitute one of the richest wetland systems in the world. These "prairie potholes," and their surrounding grasslands, are highly productive and support an incredible diversity of bird life. The Prairie Pothole Region provides breeding habitat for a myriad of wetland and grassland birds, and also supports significant numbers of spring and fall migrants.

Once a vast region of mixed-grass prairie and small, shallow wetlands, the Prairie Pothole Region is now an agrarian system dominated by cropland. Changes in land use have, for the most part, been detrimental to the migratory birds that use the Prairie Pothole Region. Many wetlands have been drained or degraded, and the loss of native prairie, particularly in the eastern portion of the Prairie Pothole Region, has been extensive. Despite these losses, millions of wetlands and large tracts of native prairie still remain. The Prairie Pothole Region is one of the most altered, yet also one of the most important, migratory bird habitats in the Western Hemisphere. It is the backbone of North America's "duck factory," and supplies critical habitat for many wetland- and

grassland-dependent migratory birds.



### Priority Prairie Pothole Region Focus Area

The area that makes up the Priority Prairie Pothole Region Focus Area is 7,609,848 acres, or 17% of the North Dakota land area. This focus area is the "best of the best" of the U.S. portion of the Prairie Pothole Region. Prairie/wetland complexes with densities of up to 150 wetland basins per square mile can support more than 65 duck pairs per square mile. It is currently the priority area for Service Realty acquisitions, as well as conservation efforts by Ducks Unlimited, a major partner. It is also a North Dakota State Wildlife Action Plan Focus Area.

### Priority Species

- American wigeon
- Mallard
- Lesser scaup
- Piping plover (Threatened)
- Upland sandpiper
- Marbled godwit
- Wilson's phalarope
- Black tern
- LeConte's sparrow

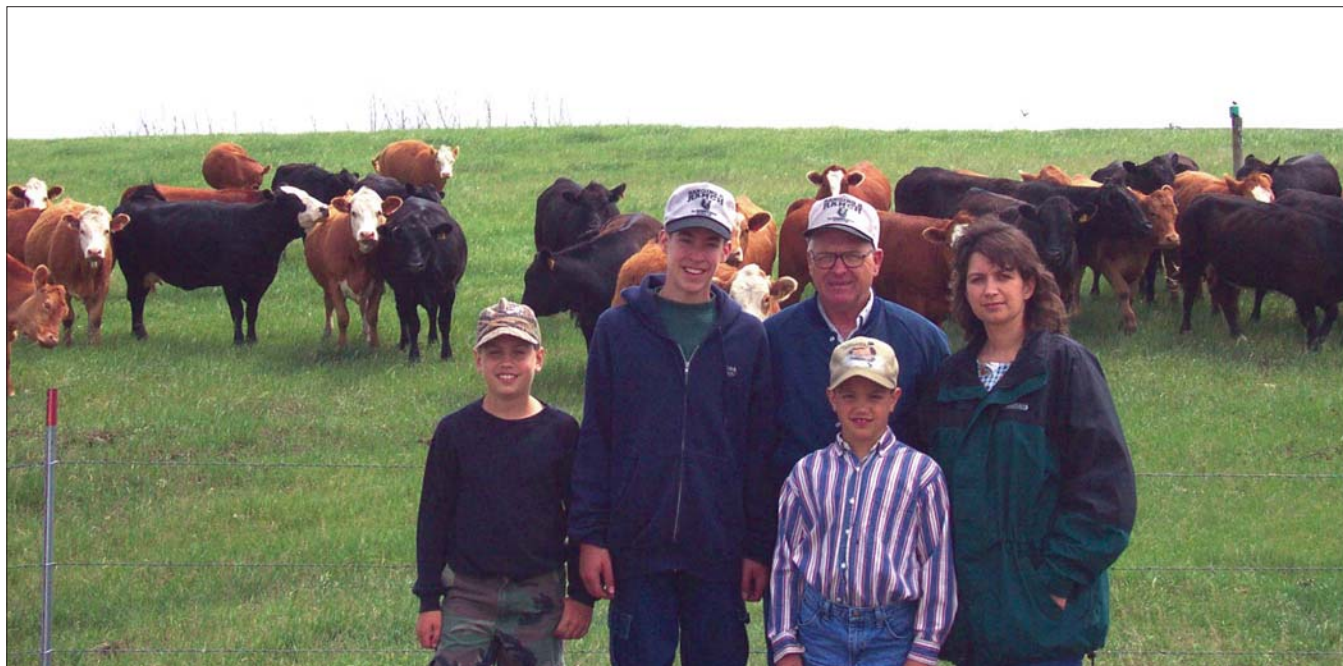
*"When the Service offered to help restore this wetland, we decided that this was a way we could leave a wildlife legacy for generations to follow."*

– Ray Heupel,  
3rd generation farmer  
near Medina, ND



Wetland densities in the Prairie Pothole Region of North Dakota commonly reach 100-150 basins per square mile. USFWS Photo.





Three generations of this ranching family will benefit from Partners Program assistance in developing a long-term rotational grazing system. Projects like this keep grasslands from being converted to cropland. USFWS Photo.

### Priority Prairie Pothole Region Focus Area Five-year Targets

#### Habitat

- Wetland Restoration: 750 acres
- Wetland Establishment: 100 acres
- Grassland Restoration/Enhancement: 22,250 acres

#### Partnerships

- Number of new landowner partners: 200
- Amount of technical assistance: 150 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations, to promote and assist landowners with Farm Bill conservation programs including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
- Percentage of leveraging:
  - 47% North American Wetlands Conservation Act grant funds
  - 38% other partner (North Dakota Game and Fish Department, nongovernmental organizations)
  - 10% landowner cash and in-kind
  - 5% Service funds

#### Related Plans

- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Northern Prairie and Parkland Waterbird Conservation Plan
- Prairie Pothole Joint Venture Implementation Plan
- North Dakota State Wildlife Action Plan



Whooping cranes and tundra swans take advantage of wetland habitat, restored by the Partners Program, on their fall migration to Texas. Photo by Jerome Negaard.

**Priority Species**

- American wigeon
- Mallard
- Northern pintail
- Ferruginous hawk
- Yellow rail
- Marbled godwit
- Black tern
- Common tern
- Short-eared owl
- Sedge wren
- Sprague’s pipit
- Baird’s sparrow
- Grasshopper sparrow
- Chestnut-collared longspur
- Bobolink



with prairie/wetland complexes having densities of up to 80 wetland basins per square mile, can support more than 20 duck pairs per square mile. This area includes the bulk of identified Partners in Flight Bird Conservation Areas, covers key areas of habitat for federally listed threatened and endangered species, and includes 10 of the 14 primary focus areas in the North Dakota State Wildlife Action Plan.

**General Prairie Pothole Region Focus Area**

The area that makes up the General Prairie Pothole Region Focus Area is 13,345,454 acres, or 29% of North Dakota’s land area. This focus area contains some of the highest quality wetland habitat in the United States. The General Prairie Pothole Region Focus Area,



Shallow prairie potholes restored by the Partners Program provide important breeding and migration habitat to mallards and many other species of wildlife. USFWS photo.

**General Prairie Pothole Region Focus Area Five-year Targets**

**Habitat**

- Wetland Restoration: 1,100 acres
- Wetland Establishment: 150 acres
- Grassland Restoration/Enhancement: 33,500 acres

**Partnerships**

- Number of new landowner partners: 300
- Amount of technical assistance: 200 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations, to promote and assist landowners with Farm Bill conservation programs, including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
- Percentage of leveraging:
  - 47% North American Wetlands Conservation Act grant funds
  - 38% other partner (North Dakota Game and Fish Department, nongovernmental organizations)
  - 10% landowner cash and in-kind
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**Related Plans**

- North American Waterfowl Management Plan
- U.S. Shorebird Conservation Plan
- Northern Prairie and Parkland Waterbird Conservation Plan
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*This 3.5 acre wetland, established by the Partners Program, is indicative of the type of projects and habitat in the Northern Great Plains Focus Area. Photo by Monte Ellingson, USFWS.*



**Northern Great Plains Focus Area**

The area that makes up the Northern Great Plains Conservation Focus Area is 6,329,561 acres, or 14%, of the North Dakota land area. The focus area is characterized by transitional zones of mixed cropland and grassland that are threatened by cropland conversion.

The focus area is arid to semi-arid and mostly unglaciated. Relatively few natural wetlands exist on the landscape. Grazing is a primary

land use in the area. Numerous wetlands have been established for livestock and wildlife. This area of shortgrass and mixed-grass prairie has been dramatically altered in the last 100 years, due primarily to human intervention. Once common, native grasslands are now seriously threatened, and many bird species are declining. The goal of the Partners Program is to assist landowners in maintaining their lands in grassland agriculture, primarily by providing needed water sources (wetland restoration and establishment) associated with livestock production.

- Priority species**
- Mallard
  - Ferruginous hawk
  - Marbled godwit
  - Black-billed cuckoo
  - Short-eared owl
  - Burrowing owl
  - Loggerhead shrike
  - Sedge wren
  - Sprague’s pipit
  - Baird’s sparrow
  - Grasshopper sparrow
  - Chestnut-collared longspur
  - Bobolink



*Nearly all Partners Program projects start at the landowner’s kitchen table. Photo by Jared Newton, Ducks Unlimited.*

### Northern Great Plains Focus Area Five-year Targets

#### Habitat

- Wetland Restoration: 75 acres
- Wetland Establishment: 1,125 acres
- Riparian Restoration: 3 miles

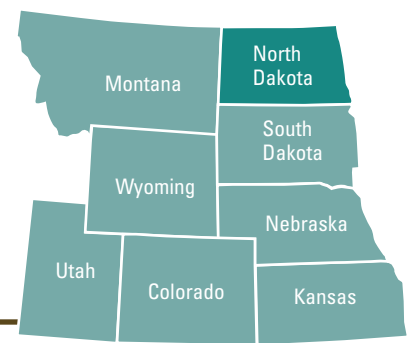
#### Partnerships

- Number of new landowner partners: 200
- Amount of technical assistance: 150 staff days
  - Partners Program staff provide a significant level of technical assistance, through close coordination with the U.S. Department of Agriculture, North Dakota Game and Fish Department, and various nongovernmental organizations to promote and assist landowners with Farm Bill conservation programs including the Conservation Reserve, Wetlands Reserve, Wildlife Habitat Incentives, Environmental Quality Incentives, and Grassland Reserve programs.
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# North Dakota Statewide Goals and Biological Outcomes



## Improve Information Sharing and Communication

### Five-year Targets

Communication and outreach are integral to the success of the Partners Program. In this regard, the program has two primary objectives:

- Maintain and develop strong and positive partnerships.
- Increase landowner interest in the Partners Program.

In order to develop strategies for these objectives, Partners Program staff looked to a process begun in 2005, in which the Partners Program asked cooperating landowners how they heard about the program. Of 400 responses generated thus far, cooperating landowners heard about the Partners Program in the following ways:

- Prior cooperator, or heard from a neighbor or saw a project: 33%
- Partners Program outreach (news articles, direct mailings, presentations): 25%
- Referral from a USDA county office: 20%
- Referral from a partner organization or agency: 12%
- Informed by Partners Program or refuge staff when considering a Service easement: 10%

These findings are the basis for strategies to improve information sharing and communication over the next five years. Strategies for the two objectives will be outlined in a Partners Program outreach plan, developed and maintained by the Partners Program state coordinator, on an annual basis. Components of the outreach plan will include the following, at minimum:

- Measurable objectives for Partners Program field biologists to revisit prior cooperators.
- Measurable objectives for news articles, direct mailings, and participation/presentation tasks with agricultural groups.
- Establishment of demonstration sites in highly visible areas.
- Measurable objectives for contact events and program updates with partners, particularly the U.S. Department of Agriculture, North Dakota Game and Fish Department, and Ducks Unlimited at the state and local level.
- Development and use of outreach materials to promote the Partners Program.



Partners Program staff actively participate in USDA Natural Resources Conservation Service State Technical Committee meetings, one of many technical assistance activities undertaken by the Partners Program. Photo by NRCS.



## Enhance Our Workforce

Partners Program staff are some of the most dedicated and highly-motivated personnel in the Service. Their positions require that they have a general knowledge of many aspects of wildlife management, agriculture, contract negotiation and administration, as well as an uncommon ability to "sell" the program to private landowners. Providing adequate training opportunities, and maintaining high morale, are integral to retaining a highly skilled, highly motivated Partners Program workforce.

### Five-year Targets

- Annually assist Partners Program staff to plan and schedule training opportunities.
- Maintain close coordination, at least biweekly, among the Partners Program state coordinator, North Dakota refuge program supervisors, and Partners Program staff.
- Initiate an effort, whereby Partners Program biologists spend one week minimum with a Partners Program biologist in another geographic area to share ideas and methods and build intra-staff support.
- Increase all-staff meetings from one to a minimum of two, per year.
- Continue sharing weekly schedules/comments among Partners Program staff.
- Continue to provide high quality project training and materials to Partners Program staff.
- Initiate a statewide traveling Partners Program award program to annually recognize the most accomplished Partners Program staff person.



*This landowner stands proudly before a 59-acre grass restoration project accomplished in partnership between the North Dakota Game and Fish Department and Partners Program.  
Photo by Dan Duchschere, USFWS.*



*A successful mallard nest in restored grassland is the reward for Partners Program biologists.  
Photo by Charles Loesch, USFWS.*



## Increase Accountability

The Partners Program will direct its efforts in identified geographic focus areas, and prioritize habitat restoration projects based on the level of contribution to the conservation of federal trust resources. Consideration will also be given to state-listed species of concern and related habitat needs as identified in the North Dakota State Wildlife Action Plan.

### Five-year Targets

- Provide more frequent and in-depth summary updates to major partners.
- Increase the number of return visits made to prior cooperators to assure completed projects are functioning as intended, gather anecdotal information on wildlife use, and cooperate in additional projects that will enhance what has already been done.
- Increase HabITS reporting speed, efficiency, and photo submission.
- Work with South Dakota Partners Program staff and the HAPET office in modeling wildlife benefits of Partners Program projects.



*North Dakota consistently ranks between first and third each year, nationwide, in production of eight major crops. Because of the emphasis on agriculture, Partners Program accomplishments are often measured one acre at a time. Photo by Kevin Willis, USFWS.*

## Biological Outcomes

### **Estimated waterfowl breeding pair and recruitment benefits for Partners Program wetland and grassland projects in North Dakota focus areas for 2007-2011. (4 May 2007)**

The North Dakota Partners Program continues to work closely with a variety of wildlife researchers to quantify biological outcomes in specific focus areas. Most notably, Partners Program staff have collaborated with the USGS Northern Prairie Wildlife Research Center and the Service's Region 6 Habitat and Population Evaluation Team (HAPET) office to estimate duck recruitment on Partners Program projects in both the Priority PPR and General PPR focus areas. Published data and peer reviewed HAPET models were used to forecast the recruitment of five key waterfowl species (mallard, gadwall, blue-winged teal, northern shoveler and northern pintail) in these two focus areas. It is estimated that Partners Program projects completed in the next five years will result in positive recruitment benefits to over 250,000 ducks during the course of the Partners Program Wildlife Extension Agreements. HAPET continues its work on new models that will be applied to Partners Program project data to estimate benefits to other avian species including waterbirds, shorebirds, and grassland songbirds. More specific recruitment outcomes are described by Partners Program focus area and conservation practice type in the following table.

Estimated Waterfowl Breeding Pair and Recruitment Benefits – North Dakota Focus Areas, 2007-2011											
State	Focus Area	Project Type	Class	Target Number	Target Acres	Term (Yrs)	Annual Pairs <sup>1</sup>	Cumulative Pairs <sup>2</sup>	Annual Productivity <sup>3</sup>	Cumulative Productivity <sup>4</sup>	
North Dakota	Priority PPR (>60 Duck Pairs)	Wetland Restoration	Temporary	51	35	10	42	416	55	509	
			Temporary	94	65	99	77	7,641	102	10,052	
			Seasonal	70	210	10	260	2,599	345	3,185	
			Seasonal	130	390	99	483	47,785	640	62,861	
			Semipermanent	5	17	10	12	120	16	147	
			Semipermanent	10	33	99	23	2,308	31	3,036	
		<b>Totals</b>	<b>360</b>	<b>750</b>			<b>60,868</b>		<b>79,790</b>		
		Wetland Creation	Semipermanent	25	100	30	71	2,119	94	2,738	
			<b>Totals</b>	<b>25</b>	<b>100</b>			<b>2,119</b>		<b>2,738</b>	
		Grassland Restoration <sup>5</sup>	New		65	2,650	10			575	5,751
					10	350	99			76	7,519
		<b>Totals</b>	<b>75</b>	<b>3,000</b>						<b>13,270</b>	
	Grassland Enhancement <sup>6,7</sup>	Maintenance		35	17,500	10			3,798	37,975	
			<b>Totals</b>	<b>35</b>	<b>17,500</b>					<b>37,975</b>	
	General PPR (>20-60 Duck Pairs)	Wetland Restoration	Temporary	75	51	10	43	435	58	533	
			Temporary	140	94	99	80	7,937	106	10,442	
			Seasonal	105	315	10	279	2,787	369	3,415	
			Seasonal	195	585	99	518	51,234	686	67,399	
			Semipermanent	5	19	10	9	88	12	108	
			Semipermanent	10	36	99	17	1,646	22	2,165	
<b>Totals</b>		<b>530</b>	<b>1,100</b>			<b>64,127</b>		<b>84,062</b>			
Wetland Creation		Semipermanent		35	150	30	69	2,078	92	2,686	
			<b>Totals</b>	<b>35</b>	<b>150</b>			<b>2,078</b>		<b>2,686</b>	
Grassland Restoration		New		95	3,975	10			863	8,626	
				15	525	99			114	11,279	
<b>Totals</b>		<b>110</b>	<b>4,500</b>						<b>19,904</b>		
Grassland Enhancement		Maintenance		50	17,500	10			3,798	37,975	
			<b>Totals</b>	<b>50</b>	<b>17,500</b>					<b>37,975</b>	
Wetland Restoration Wetland Creation			890	1,850			124,995		163,851		
		<b>Totals</b>	<b>950</b>	<b>2,100</b>			<b>129,192</b>		<b>169,275</b>		
Grassland Restoration Grassland Enhancement			110	4,500					33,174		
		<b>Totals</b>	<b>160</b>	<b>22,000</b>					<b>109,124</b>		
<b>Grand Totals</b>				<b>1st 10 Years</b>			<b>1,982</b>	19,818	<b>11,850</b>	117,851	
				<b>10-30 Years</b>			<b>1,337</b>	26,748	<b>1,963</b>	39,114	

**Considerations:**

When reviewing the totals, note that the distribution of wetland and/or grassland resources in limited term versus perpetual agreements can significantly affect the cumulative benefits. Similarly, the target distribution of wetland classes will also affect the numbers of pairs that are modeled to benefit from the projects.

<sup>1</sup> Duck breeding pair values per acre of wetland were estimated for each focus area by summing the number of total pairs for the focus area by wetland class, and dividing by the total acres of wetland for the respective class.



<sup>2</sup> The estimated cumulative value of wetland related private lands projects for breeding pairs is PAIRS = ((Acres of Wetland) \* (Pair Value) \* (Agreement Duration)).

<sup>3</sup> Recruits related to the acres of wetland restored or created are calculated using the estimated number of pairs attracted to project wetlands and subsequent recruitment derived from Four Square Mile Breeding Waterfowl data 1998-2006 (Wangler and Reynolds 2007). Recruits related to the acres of grassland restored or protected from loss by implementing grazing systems (i.e., enhanced) were derived from simulating grassland change using the mallard model for areas in central North and South Dakota and subsequent changes in duck recruitment. These results were extrapolated to 4 other upland nesting duck species.

<sup>4</sup> The estimated cumulative recruitment value of wetland and grassland related private lands projects for ducks is WETLAND PROJECT BASED RECRUITS = ((Number of Breeding Duck Pairs) \* (Recruitment Value) \* (Agreement Duration) - (# of PAIRS because there are no 1st year benefits)); GRASSLAND PROJECT BASED RECRUITS = ((Acres of Grassland) \* (Recruitment Value) \* (Agreement Duration)).

<sup>5</sup> Recruits associated with grassland restoration are considered new recruits to the population.

<sup>6</sup> Recruits associated with grassland enhancement (i.e., grazing systems) are considered existing recruits protected for the duration of the agreement (i.e., prevention of population decline).

<sup>7</sup> The value of grassland and impacts on recruitment is related to the breeding duck density for the area where the grass is either restored or enhanced. The models used for recruitment were derived for areas with relatively high duck density; consequently, the recruits associated with lower duck density priority areas may be overestimated.

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