



# Hamden Slough

National Wildlife Refuge

## SUMMARY

### Draft Comprehensive Conservation Plan

August 2012

## We Invite Your Comments

The U.S. Fish and Wildlife Service (Service) has completed a Draft Comprehensive Conservation Plan (CCP) that describes draft goals, objectives, and strategies that could guide management of Hamden Slough National Wildlife Refuge (NWR, Refuge) for the next 15 years. The Draft CCP is now available for review and comment. This public review period is an opportunity for everyone who cares about Hamden Slough NWR and its future to review the proposed management direction and comment on it.



Following public review and comment on the draft document, revisions will be made as needed and the final plan will be prepared and distributed. Completion of the final plan is expected for fall 2012.

This booklet contains a summary of key parts of the Draft CCP including vision and goals, issues addressed, major proposed changes, and alternatives considered. We encourage you to read over this summary booklet and to look at the full text and appendices. We welcome your comments. Information on how to obtain the complete document and how to submit comments is provided on page 2.

### Contents

We Invite Your Comments.....	1
Where to find the Draft CCP.....	2
How to Provide Input.....	2
Refuge Background.....	3
Refuge Vision .....	4
Refuge Goals.....	4
Issues Addressed in Planning.....	5
What the CCP Calls For .....	7
Alternatives Considered .....	9
Who We Are .....	11

## Where to find the Draft CCP

**Online:** Available in portable document format (pdf) for viewing or download at the Hamden Slough NWR planning website: <http://www.fws.gov/midwest/planning/HamdenSlough>.

**At the library:** Paper copy and compact disk (CD) are available for viewing at the Detroit Lakes Public Library.

**By request:** We will send you a CD or paper copy of the CCP on request through either of the following:

- Hamden Slough NWR; c/o Detroit Lakes Wetland Management District ; 26624 N. Tower Road; Detroit Lakes, MN 56501; (218) 847-4431
- The Hamden Slough NWR planning website:  
<http://www.fws.gov/midwest/planning/HamdenSlough>

## How to Provide Input

We encourage you to share your thoughts with us. The most useful comments will be about specific content in the CCP. Please tell us what you do or do not like about the vision or a particular goal, alternative, etc. We are also looking for important points we may have missed. We will consider your comments as we write the final plan, scheduled for release in late 2012. To be considered in preparing the Final CCP, your comments must be received by September 28, 2012.

**Online via e-mail at:** [r3planning@fws.gov](mailto:r3planning@fws.gov) (Please enter "Hamden Slough CCP Comment" in the subject line).

**Deliver to the Refuge:** In person or by U.S. Mail

Hamden Slough National Wildlife Refuge  
Attention: CCP Comment  
c/o Detroit Lakes WMD  
26624 N. Tower Road  
Detroit Lakes, Minnesota 56501

**At an Open House event:**

- Thursday, September 6, from 3 p.m. to 7 p.m. in the Cormorant Room of the Holiday Inn, 1155 Highway 10 East, Detroit Lakes, Minnesota:

Refuge staff and Service planning staff will be available during the open houses to visit with you about the Draft CCP and future management direction for the Refuge. Copies of the full document will be available for viewing. Forms for submitting written comments also will be available.

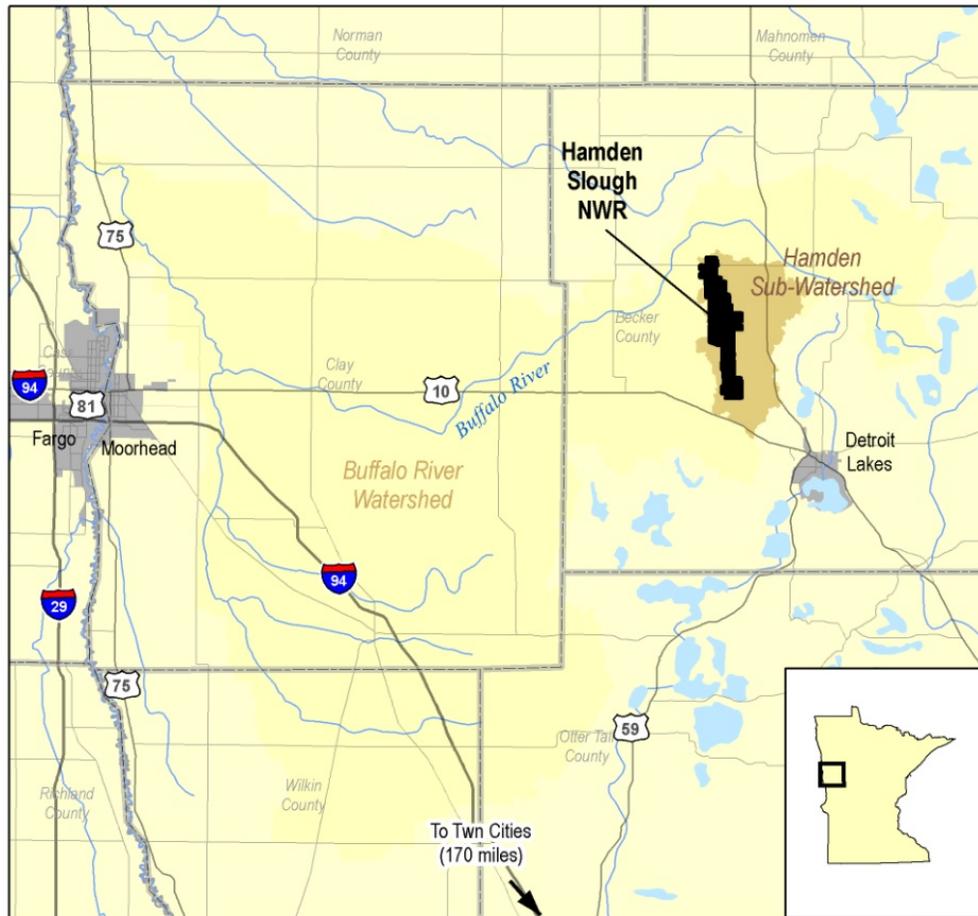
## Refuge Background

Located about seven miles northwest of Detroit Lakes, Minnesota, Hamden Slough NWR was approved in 1989 by the Migratory Bird Conservation Commission. The Service is authorized to acquire 5,944 acres of land within the Buffalo River watershed to restore a piece of the prairie-wetland ecosystem that historically existed there. About 3,200 acres of Hamden Slough NWR have been acquired so far.

More than 200 temporary and seasonal wetlands have been restored by scraping sediment deposits and plugging surface ditches. Two major wetland restoration projects added significant semi-permanent and permanent wetland habitat back to the Refuge. More than 1,500 acres of former crop fields have been planted to native grasses and forbs. The area once again is recognized as an outstanding place to see migratory birds. More than 200 species have been recorded including 20 species of shorebirds, nearly every major waterfowl species, and many grassland-dependent birds.

Refuge staff was located onsite until 2006, headquartered in a farmhouse at the south end of the Refuge. At that time, due to budget cuts and reorganization, responsibility for Hamden Slough NWR was transferred to the Detroit Lakes Wetland Management District.

**Figure 1: Location of Hamden Slough NWR**



## Refuge Vision

“In the morning if it was still and a little foggy, my grandfather said you could hear the prairie chickens drumming, also the trumpet swans, whooping cranes, geese, loons and many species of ducks. He said it sounded like a symphony.” *(by Donald P. Larson)*

Hamden Slough NWR has a rich history defined by its remarkable abundance of wildlife and deep connection with the people who visited the area and called Hamden their home. The Refuge was established to provide habitat for a diversity of migratory birds and native wildlife. The vision for



Hamden Slough NWR is a fulfillment of this purpose—a lasting legacy bestowed upon future generations.

Hamden Slough NWR is located on the eastern edge of the Prairie Pothole Region in the Northern Tallgrass Prairie ecosystem. Wetlands and shallow lakes surrounded by tallgrass prairie are nestled within a working landscape rich in agriculture, industry, conservation and tight-knit communities. We will continue to restore, protect, and manage habitats for wildlife, resulting in shared benefits that

are relevant in the daily lives of our Refuge neighbors and local communities. This collaboration will foster an appreciation for a landscape in balance and deepen their personal connection with nature.

## Refuge Goals

### Wildlife and Habitat

Habitats on Hamden Slough National Wildlife Refuge will be restored, protected, and actively managed to provide a diversity of native wetland and grassland habitats. These efforts will be further leveraged by partnerships and conservation actions outside the Refuge, resulting in a resilient and balanced landscape, meeting the needs of migratory birds, threatened and endangered species, and other wildlife in an uncertain future.

### People

The Service will engage the public, build relationships, and encourage awareness of a landscape in balance. The Refuge will provide compatible wildlife-dependent recreation that connects people to the land and demonstrates the societal benefits of a restored prairie-wetland system.

## Issues Addressed in Planning

Issues play an important role in planning. Issues focus the planning effort on the most important topics and provide a base for considering alternative approaches to management while evaluating the consequences of managing under these alternative approaches. Significant issues addressed in the CCP are summarized below.

### Habitat and Wildlife

#### **Wetlands**

##### *Prairie pothole wetlands*

About 85 percent of Minnesota's prairie pothole wetlands have been drained and the trend continues today as subsurface tile drainage systems improve. More than 200 pothole wetlands on the Refuge have undergone at least partial restoration. Individual wetlands have not been inventoried as to size, watershed, or hydrologic regime; and monitoring of wetland condition has been minimal.

##### *Managed wetlands*

Natural water level cycles that historically maintained long-term wetland and wildlife productivity were heavily altered by ditches and drainage tiles in the early 20<sup>th</sup> century. Wetlands that historically captured



and held water were converted to a flow-through system.

Some control of water levels now is possible on several of these larger wetlands, although capability is limited.

Water levels are managed primarily for migrating spring shorebirds and breeding waterfowl but also may be manipulated for fall shorebirds, overwintering resident wildlife, protection of roads, control of invasive species (especially hybrid cattail and fathead minnows), or to alleviate

downstream flooding. The Refuge does not have an integrated wetland management plan.

##### *Relict glacial lake restoration*

Two of the largest relict glacial lakes—Pierce Lake and Hamden Lake—are still drained. All of Pierce Lake and some of Hamden Lake remain as private inholdings within the approved Refuge boundary.

Restoration of Pierce Lake must be completed first before Hamden Lake can be restored.

#### **Prairies**

Many restored prairies on the Refuge have fairly low diversity of native plant species and invasive non-native plants including parsnip, spurge, knapweed, crown vetch, and tansy have been found on the Refuge. Irreplaceable remnants of unbroken tallgrass prairie are degraded and could be lost to invasive and/or woody vegetation if not given management attention soon. Fire and grazing regimes that historically sustained prairie diversity have been disrupted.

Grassland birds show a variety of habitat preferences based on vegetation height, cover density, grass/forb ratio, soil moisture, litter depth, woody vegetation, and plant species composition. It is important to maintain a mosaic of habitat conditions to meet the varying needs of grassland bird species of concern.

### ***Management tools***

About 50 acres are farmed as wildlife food plots to mitigate crop depredation on neighboring lands, but little information is available on depredation levels or use of the food plots by target species. The cropped areas increase habitat fragmentation and do not provide critical habitat for Refuge resources of concern. Erosion from the fields may be increasing sedimentation in the wetlands below. All farming must be compliant with new Regional policy that limits use of genetically-modified corn and soybeans.

Rotational grazing by cattle was used as a management tool in the early years of the Refuge to emulate the historic disturbance effects of bison, but was phased out as other management techniques became available. Reinstating a grazing program and integrating it with fire and haying programs could increase prairie diversity, improve wildlife habitat, and provide economic benefit to local landowners.

### ***Watershed***

Historically, the matrix of prairie and wetlands in the Hamden Slough watershed slowed surface water runoff, allowing soil infiltration and groundwater recharge. This ecosystem provided wildlife habitat, maintained water quality, and helped mediate downstream flooding. Now, however, row crop production dominates the watershed. Ditches and tile lines have accelerated water drainage and dried up wetlands. It is likely that elevated concentrations of contaminants are being transported onto the Refuge. Restoration of sustainable plant communities, wildlife habitat, and ecological processes (such as flood storage and groundwater recharge) on the Refuge will require restoration of more natural patterns of waterflow into, through, and out of the area.

## **People**

### ***Hunting***

A late-winter deer muzzleloader season and a one-day youth waterfowl hunt are available on the Refuge. There are public concerns about the safety of the muzzleloader hunt and the pressure on the deer herd. Some would like to see the hunting program eliminated to provide a sanctuary for wildlife.

### ***Wildlife observation and photography***

Current opportunities include roadside viewing, one wetland overlook, one hiking trail, and a seasonal observation blind. Demand for additional visitor access outside these areas is low, but disturbance could become an issue if opportunities and/or demand increase. We want to encourage visitor connections to the Refuge while minimizing wildlife and habitat disturbance.



### ***Environmental education and interpretation***

Environmental education and interpretive activities and materials on the Refuge are limited due to lack of staff. Few outdoor opportunities for school groups are available in the area. Development of a strong environmental education program is a high priority for the Refuge as resources become available.

### ***Outreach and community partnerships***

Current outreach methods include news releases, media interviews, and group presentations. Partnership with the volunteer group “Friends of the Detroit Lakes Wetland Management District” increases awareness of both the District and the Refuge. Additional outreach and partnership efforts are

desirable, but priorities must be set to make best use of limited resources and to generate the most benefits for the Refuge and the local area.

## What the CCP Calls For

The Draft CCP establishes two goals and 22 objectives for meeting those goals. Some of the objectives proposed are departures from current management. This summary of the Draft CCP gives an overview of significant management changes. Please see chapter 4 of the Draft CCP for more information on these changes, a description of all of the objectives and strategies being proposed, and the rationale behind each objective.

### Wetland Restoration and Management

These objectives call for full restoration of Pierce Lake over the next 15 years through land acquisition, easements, and conservation programs. Land will continue to be acquired from willing sellers only. Water levels in managed wetlands will better emulate the natural seasonal and long-term variability that historically sustained diverse plant and animal communities. The natural hydrology of all prairie pothole wetlands will be restored and maintained.

### Tallgrass Prairie Restoration

These objectives call for increasing the diversity of native plants on about 500 acres of restored prairie and 20 acres of unplowed remnant prairie. A cattle grazing program will be implemented. The integrated use of grazing, fire, haying, and tree removal as management tools will emulate historic disturbance patterns and maximize benefits of Refuge habitat. A mix of tall, medium, and short habitat structure will be maintained to meet the diverse needs of grassland-dependent birds and nesting waterfowl.



### Agriculture

These objectives call for converting all wildlife food plots (about 50 acres) to appropriate native prairie vegetation. Newly-acquired cropland also will be converted to prairie within five years of acquisition. Some short-term farming will still be used to prepare seedbeds on prairie restoration sites.

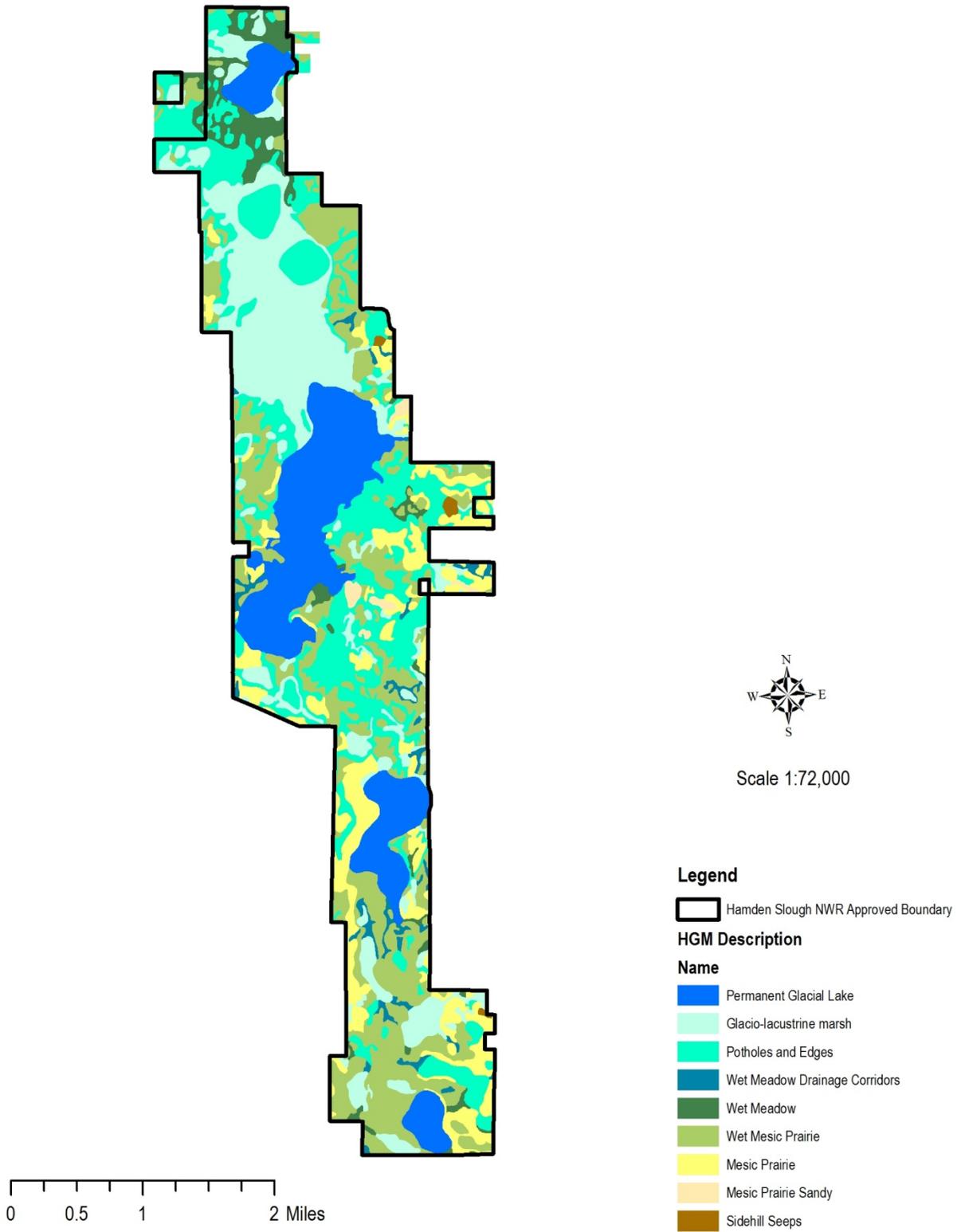
### Watershed

Under this objective, Refuge conservation partnership efforts would focus on increasing soil and water retention and restoring natural waterflow corridors within the Hamden Slough watershed.

### Visitor Services

Under these objectives, a high priority will be placed on expanding environmental education opportunities at the Refuge in partnership with local schools and community groups. The deer and waterfowl hunts will continue. There may be opportunities to improve the deer hunt by redefining hunting areas, clarifying boundaries, and redesigning the hunting brochure. Changes will primarily aim to decrease conflicts between deer hunting and other priority public uses.

Figure 2: Potential future vegetation communities at Hamden Slough NWR



## Alternatives Considered

This section summarizes the three alternatives considered by the planning team to achieve the proposed vision and goals and to address the issues. These alternatives include continuation of current management (Alternative A) and the planning team's proposed action (Alternative C). Additional information, including a comparison of the environmental effects of each alternative, is included in Appendix A of the Draft CCP.

### Alternative A: Current Management Direction (No Action)

This alternative reflects the current management of Hamden Slough NWR. It provides the baseline against which to compare other alternatives. Under this alternative, current management practices would not change. A detailed description of existing programs and uses contained in this alternative is found in chapter 3 of the Draft CCP.

These are some key elements of Alternative A:

- Maintain existing quality and quantity of migratory bird habitat.
- Focus wetland water management on drawdowns in spring for migrating shorebirds and flooding in summer for breeding waterfowl, with target water levels determined on a year-by-year basis.
- Continue prairie restoration on newly-acquired agricultural lands. The primary management tool will be prescribed fire in the spring. Continue farming of wildlife food plots (about 50 acres), limited haying, and tree removal.
- Land acquisition from willing sellers will continue within the approved Refuge acquisition boundary.
- Partnerships, community outreach, and visitor services will remain at present levels.
- Current conservation partnership efforts will continue.

### Alternative B: Wetland Focus

This alternative would focus on increasing the quantity and quality of habitat for waterfowl. Acquisition and full restoration of Pierce Lake would be emphasized over the next 15 years. Water level management would better emulate natural seasonal and long-term variability. More diverse, sustainable wetland vegetation patterns would be restored. This alternative would build on the wetland and waterfowl focus developed when the Refuge was first established.

These are some key elements of Alternative B:

- Continue land acquisition from willing sellers, with Pierce Lake as the highest priority.
- Restore and maintain the natural hydrology of all prairie pothole wetlands. Conduct baseline inventory of each site to guide management decisions.
- Implement additional restoration of managed wetlands where appropriate and feasible. Develop an integrated wetland management plan.

- Construct nesting islands and over-water nesting structures to provide additional waterfowl nesting habitat.
- Continue prairie restoration on newly-acquired agricultural lands. Use fire, grazing, haying, and tree removal to manage uplands for nesting waterfowl. Continue farming of food plots but with alternative crops and locations to maximize waterfowl benefits.
- Focus conservation partnership efforts on increasing soil and water retention and restoring natural waterflow corridors in the Hamden Slough watershed.
- Eliminate the deer hunt; continue the waterfowl hunt. Expand other visitor services programs as resources allow.

### **Alternative C: Wetland and Prairie Focus (Preferred Alternative)**

This alternative would focus on increasing the quality and quantity of habitat for waterfowl and grassland birds. Acquisition and full restoration of Pierce Lake would be emphasized over the next 15 years. Water level management would better emulate natural and seasonal long-term variability. More diverse, sustainable wetland and prairie vegetation patterns would be restored. This alternative would expand the wetland and waterfowl focus of Alternative B to include an additional focus on tallgrass prairie and grassland birds.

These are some key elements of Alternative C:

- Continue land acquisition from willing sellers, with Pierce Lake as the highest priority.
- Restore and maintain the natural hydrology of all prairie pothole wetlands. Conduct baseline inventory of each site to guide management decisions.
- Implement additional restoration of managed wetlands where appropriate and feasible. Develop an integrated wetland management plan.
- Increase focus on restoring diverse prairie vegetation on former agricultural lands. Plant diversity will include a mix of native grasses, sedges, and forbs tailored to the specific characteristics of each site. Conduct baseline inventory of each site to guide management decisions. Convert wildlife food plots to native vegetation.
- Implement a grazing program used in combination with fire, haying, and tree removal to create the varied habitat structure needed by grassland birds and upland-nesting waterfowl.
- Focus conservation partnership efforts on increasing soil and water retention and restoring natural waterflow corridors in the Hamden Slough watershed.
- Continue deer and waterfowl hunt programs; consider opportunities to improve hunt quality. Expand environmental education opportunities. Increase other visitor services programs as resources allow.

## Who We Are

The Refuge is administered by the U.S. Fish and Wildlife Service, the primary federal agency responsible for conserving, protecting, and enhancing the nation's fish and wildlife populations and their habitats. The Service oversees the enforcement of federal wildlife laws, management and protection of migratory bird populations, restoration of nationally significant fisheries, administration of the Endangered Species Act, and the restoration of wildlife habitat such as wetlands. The Service also manages the National Wildlife Refuge System (Refuge System), which was founded in 1903 when President Theodore Roosevelt designated Pelican Island in Florida as a sanctuary for Brown Pelicans.



Today, the Refuge System is a network of more than 550 refuges covering over 150 million acres. Most these public lands and waters (over 80 percent) are in Alaska. Approximately 16 million acres are located in the lower 48 states and several island territories. Overall, the Refuge System provides habitat for more than 5,000 species of birds, mammals, fish, and insects. Refuges also provide unique opportunities for people. When it is compatible with wildlife and habitat conservation, they are places where people can enjoy wildlife-dependent recreation such as hunting, fishing, wildlife observation and photography, and environmental education and interpretation.



**The mission of the U.S. Fish & Wildlife Service** is working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.

**The mission of the National Wildlife Refuge System** is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.