

Chapter 4—Project Implementation



Donna Dewhurst / USFWS

Canvasback drakes rest in a prairie wetland.

After a summary of the land protection options that the Service considered during the planning process, the remainder of the chapter outlines the implementation procedures for the DGCA and provides Service staff with guidance and direction for purchasing wetland and grassland easements in the project area.

Land Protection Options

During development of alternatives for this project, the Service considered the following options:

- Voluntary landowner zoning
- County zoning
- Acquisition or management by others
- Short-term easements
- Expansion of the project
- Fee-title acquisition

The Service determined that none of the above options met the purpose, need, or objectives for the DGCA, and these options were not analyzed in the

EA. A full description of the options is in the EA (appendix C, section 2).

Two alternatives were chosen for analysis in the EA: (1) no action; and (2) establishment of an easement program. The Service selected the second alternative—establishing the DGCA easement program—after finding the consequences of inaction unacceptable, as summarized below.

No Action

Habitat protection will continue at current levels under SWAP, using the authorities of the Migratory Bird Hunting and Conservation Stamp Act (Federal Duck Stamps) and the North American Wetlands Conservation Act. Without more money, half of the remaining habitat within the designated project area may be converted to other uses over the next 34 years. At current budget levels and using only SWAP, it would take the Service 150 years to protect the remaining wetland and grassland habitat in the proposed DGCA.

The use of Federal Duck Stamp dollars requires approval by the State Governor, and the Service

will continue to use this money for conservation easements in the State of South Dakota. In North Dakota, the State has established limits on the number of wetland acres in each county that can be protected with perpetual Service easements. Federal Duck Stamp dollars are not currently available in North Dakota to buy easements in several counties, because the acreage limits have been reached. Therefore, the Service has limited means to acquire more wetland and grassland easements in North Dakota.

EASEMENT PROGRAM

Wetland and grassland easements are the most cost-effective, socially and politically acceptable means to ensure protection of critical habitats in the project area. Although habitat protection through fee title remains an option in some locations, the Service sees easements as the most viable way to conserve lands at the landscape scale necessary to protect wildlife values in the DGCA. The Service views a strong and vibrant rural lifestyle, of which ranching is the dominant land use, as one of the key components to ensuring habitat integrity and wildlife resource protection.

This project allows the purchase of critical wetland and grassland easements using primarily LWCF as a funding source. North Dakota and South Dakota has a waiting list of well over 800 landowners interested in selling wetland and grassland easements. The only thing restricting the Service from protecting the more than 300,000 acres on the

waiting list is limited money. The DGCA project objective to conserve up to 240,000 acres of wetlands and 1.7 million acres of grassland will augment the efforts of other conservation agencies and groups.

Project Objectives and Actions

The Service has established the DGCA in the eastern parts of North Dakota and South Dakota, which cover all counties north and east of the Missouri River except those within the existing Dakota Tallgrass Prairie Wildlife Management Area (refer to chapter 1, figure 2). Within the project boundary, the Service will strategically identify and acquire from willing sellers the identified wetland and grassland conservation easements on privately owned lands.

The Service bases identification of areas considered for wetland and grassland easements on models developed by the Bismarck HAPET office, which identify the extent and location of grasslands and wetlands required to help meet the PPJV goals for migratory bird populations and habitat protection objectives of the SWAP.

The Service plans to buy or receive donated wetland and grassland easements on these identified areas within the project boundaries. These wetland and grassland conservation easements will connect and expand existing lands under conservation protection.

DGCA OBJECTIVES

Based on anticipated levels of landowner participation, the objectives of the DGCA project are to protect 240,000 acres of wetland and 1.7 million acres of critical grassland habitat.

EASEMENT TERMS AND REQUIREMENTS

Easements bought under the authority of the DGCA, as well as those acquired to date, will be administered according to policy and procedures in the Easement Manual (USFWS 2011a). Following the policy and procedures in the manual, the Service evaluates and administers all requests for uses or activities restricted by an easement (for example, agricultural, utility, commercial, or industrial uses). This review process applies not only to easements bought under the DGCA project but also to those easements the Service had acquired earlier.

All land under easement remains in private ownership. Property tax and land management, including control of noxious weeds and other invasive plants and trees, remains the responsibility of the landowner. Control of public access to the land remains under the control of the landowner.



Duane C. Anderson / USFWS

Canada geese find food, cover, and nesting habitat in DGCA wetlands.

The easement contract will specify perpetual protection of habitat for trust species by restricting the conversion of wetland and grassland to other uses. Alteration of the natural topography, conversion of native prairie to cropland, and drainage of wetland will be prohibited. Wetland easements will prohibit the draining, burning, filling, or leveling of protected wetland. Furthermore, conversion of grassland to crop production or other uses that destroy vegetation will be prohibited.

While the easement contract specifies perpetual protection, it does not eliminate all activities. Protected wetland basins may be hayed or grazed without restriction and farmed when dry from natural causes. Grassland easements do not restrict grazing in any way, and haying is permitted after July 15 each year.

Service staff at the following wetland management districts in the DGCA area administer and monitor the easement program:

- North Dakota wetland management districts—Arrowwood, Audubon, Chase Lake, Crosby, Devils Lake, J. Clark Salyer, Kulm, Long Lake, Lostwood, Tewaukon, and Valley City
- South Dakota wetland management districts—Huron, Lake Andes, Madison, Sand Lake, and Waubay

Monitoring will include a periodical review of land status through correspondence or meetings with the landowners or land managers to make sure provisions of wetland and grassland easements are being met. The Service will use photo documentation at the time of easement establishment to document baseline conditions.

CONTAMINANTS AND HAZARDOUS MATERIALS

Level 1 pre-acquisition site assessments will be conducted on individual tracts before purchase of any land interests. The Service's environmental contaminants specialists from the Ecological Services offices in North Dakota and South Dakota will be contacted to make sure policies and guidelines are followed before acquisition of conservation easements.

PROJECT COSTS

The per-acre cost for the wetland and grassland easements in the DGCA will vary considerably according to geographic location. Wetland and grassland easements are valued using the adjusted assessed land value (Service policy 341 FW 6). To figure out the market value of land, a multiplier is

calculated to adjust the land value assessed by the local tax authority. The multiplier is determined by analyzing and comparing land sales to assessed land values in a defined market area. Once the multiplier is established, the multiplier adjusts the assessed land value of the parcel; a percentage is applied to this "adjusted assessed land value" to calculate the per-acre value of the easement. The 2010 estimated values for wetland and grassland easements are as follows:

- Grassland easements in northwestern North Dakota—\$250 per acre
- Wetland easements in northwestern North Dakota—\$300 per acre
- Wetland and grassland easements in southeastern South Dakota—\$900 per acre

The one-time, initial cost for the purchase of wetland and grassland conservation easements is about \$588 million. The entire project area is within an active SWAP area already approved to use Federal Duck Stamp money. Costs for annual compliance flights, landowner contacts, and staff time will be divided among existing resources and will have very little effect on the amount of staff and overhead already needed for other easement management. In 2009, the annual cost for administration, enforcement, operations, and maintenance of existing easements was estimated to be \$0.30 per acre; additional management costs for the project are expected to be minimal because enforcement procedures are similar and will be performed in concert with other administrative efforts.

ACQUISITION FUNDING

The Service will acquire wetland and grassland easements in the DGCA principally with LWCF money, although money from several sources and authorities could be used for the acquisition and management of wetland and grassland easements (table 2).

LWCF

These funds are derived primarily from oil and gas leases on the Outer Continental Shelf, motorboat fuel taxes, and the sale of surplus Federal property. This money is not derived from general taxes. While LWCF money is intended for land and water conservation projects, funding is subject to annual appropriations by Congress for specific acquisition projects. When evaluating and acquiring wetland and grassland easements with LWCF money, the Service will use the process in place for acquiring easements under the SWAP.

Table 2. Acquisition authorities of the Dakota Grassland Conservation Area (DGCA) and approval components.

<i>Acquisition authority (standard program¹)</i>	<i>Alternative in the EA²</i>	<i>State approval component</i>	<i>MBCC³ approval component</i>	<i>Acres counted in the DGCA acquisition goal</i>
Migratory Bird Hunting and Conservation Stamp Act of 1934 (SWAP)	No action	Yes	No	No
North American Wetlands Conservation Act of 1968	No action	No	Yes	No
Fish and Wildlife Act of 1956 (LWCF)	Proposed action	No	No	Yes
Migratory Bird Conservation Act of 1929 (NWRs)	Proposed action	Yes	Yes	Yes
Donation (multiple authorities ⁴)	Proposed action	Dependent on authority requirements	Dependent on authority requirements	Dependent on authority

¹SWAP=Small Wetland Acquisition Program; LWCF=Land and Water Conservation Fund; NWRs=National Wildlife Refuge System.

²EA=environmental assessment.

³MBCC=Migratory Bird Conservation Commission.

⁴Acquisition authority for each donation will be determined at the time of acceptance, but will primarily be one of the authorities listed above.

SWAP

The Service will continue SWAP acquisitions and use Federal Duck Stamp and NAWCA monies as appropriate and available. However, interest in easements within the project area far exceeds the money available. There is an urgent need for the DGCA due to the imminent and ongoing threats to the habitat; therefore, the Service needs a substantial increase in funding to protect the remaining wetland and grassland.

Other Sources

Money from other sources may also be used in the project area. Management activities associated with easements may be funded through sources such as The Nature Conservancy, Partners for Fish and Wildlife, and other private and public partners. Additionally, the Service will consider accepting voluntary donations of easements.

Protection Priorities

In addition to identifying the habitat necessary to maintain current population levels of nesting ducks, the HAPET computer models generated maps of breeding pair concentrations (“thunderstorm” maps). As shown in figure 2 (chapter 1), the concentration of nesting ducks is an important factor in separating the highest priority tracts of land for pro-

tection from the lowest priority tracts. The priority zone in the DGCA is habitat accessible to more than 25 duck pairs per square mile plus a 1-mile buffer of grassland; the priority zone encompasses 8.5 million acres in the DGCA. Consequently, biologists and realtors use these models daily as tools for evaluating each tract offered for purchase to decide where it ranks in priority against other available tracts.

Information from the models also helps the Service to use valuable staff time most efficiently by targeting outreach materials for landowners who own lands with the greatest resource value and giving them information about the conservation easement program.

PRIORITY AREAS

The Service and its partners recognize a tremendous opportunity exists to expand current blocks of conservation lands in the project area. This includes landownership and other rights of State and Federal agencies (fee-title ownership and easements), other conservation agencies, and nongovernmental organizations: North Dakota Game and Fish Department; South Dakota Game, Fish and Parks; Ducks Unlimited; The Nature Conservancy; and the National Audubon Society. These existing conservation lands serve as good anchors for building and expanding the easement program to increase habitat connectivity and reduce fragmentation.

Less than 7 percent of the land in the DGCA has been bought primarily for wildlife purposes. There are three categories of wildlife land protection—Federal, State, and private landownership. The following approximate acreages are for areas already under protection within the project area:

Federal Landownership (2,420,414 acres)

The Service is the primary Federal wildlife landowner.

- Waterfowl production areas and national wildlife refuges—608,000 acres
- Grassland easements—713,000 acres
- Wetland easements—1,088,000 acres
- FHA easements managed by the Service—11,414 acres

State Landownership (238,706 acres)

The South Dakota Game, Fish and Parks and the North Dakota Game and Fish Department are the primary State landowners.

- South Dakota Game, Fish and Parks—81,873 acres
- North Dakota Game and Fish Department—156,833 acres

Private Landownership (38,550 acres)

- Ducks Unlimited—9,300 acres
- National Audubon Society—2,250 acres
- Nature Conservancy—17,000 acres

EVALUATION OF EASEMENT POTENTIAL

Acquisition of wetland and grassland easements within the DGCA is not a new tool for effecting conservation. The Service has more than 50 years of experience acquiring wetland easements and 20 years of experience acquiring grassland easements within the project area.

Landscape modeling efforts completed by the Service's HAPET office have generated "thunderstorm" (nesting bird concentration) maps that show areas of greatest importance to nesting ducks, shorebirds, other waterbirds, and grassland birds. Biologists and realty specialists use these tools to accurately rank and identify an individual tract's importance and value for conserving the "best of the best" habitat to affect the widest array of trust resources. The model criteria have been incorporated into the tract evaluation form, which the Service completes as part of the evaluation of each tract of land offered by a private landowner for easement acquisition. Figures 5 and 6 display the evaluation criteria for wetland and grassland conservation easements. This detailed evaluation process makes sure that easement acquisitions target the highest priority habitat available.

The Service ranks tracts offered by private landowners for easement purchase using the evaluation forms for wetland and grassland easement acquisition that are contained in the Easement Manual (USFWS 2011a). Using the criteria and priorities in these forms to separate tracts that are "the best of the best" for land conservation, the Service's acquisition biologists and realty specialists are able to choose from among the tracts offered, when the costs for protecting those tracts exceed the money available.

In general, wetland evaluation values tracts that occur in areas with potential to attract more than 25 breeding duck pairs:

- *Threat Priority*—Priority 1 is wetland embedded in cropland. Priority 2 is wetland associated with a grassland easement.
- *Wetland Size Priority*—Priority 1 is temporary, seasonal, or semipermanent wetland larger than 1 acre. Priority 2 is other wetland larger than 25 acres.
- *Threatened and Endangered Species Priority*—Yes or No.
- *Wetland-dependent Migratory Bird Priority*—Yes or No.

Grassland evaluation values the following:

- An individual tract's attractiveness to duck breeding pairs—Priority 1 has more than 60 pairs of breeding ducks. Priority 2 has 40–60 pairs of breeding ducks. Priority 3 has 25–40 pairs of breeding ducks. Priority 4 has less than 25 pairs of breeding ducks.
- A tract's importance to threatened and endangered species—Yes or No.
- A tract's designation as a grassland bird conservation area—Yes or No.

Ecosystem Management and Landscape Conservation

To carry out the project, the Service will engage the Plains and Prairie Potholes LCC (landscape conservation cooperative)—a recent developing initiative that reaches across broad landscapes and involves many partners, functioning at a scale necessary to address wildlife adaptation in response to climate change. The Plains and Prairie Potholes LCC is dedicated to the conservation of a landscape unparalleled in importance to breeding waterfowl and many species of wetland and grassland birds. In addition, the area is habitat for resident and nongame

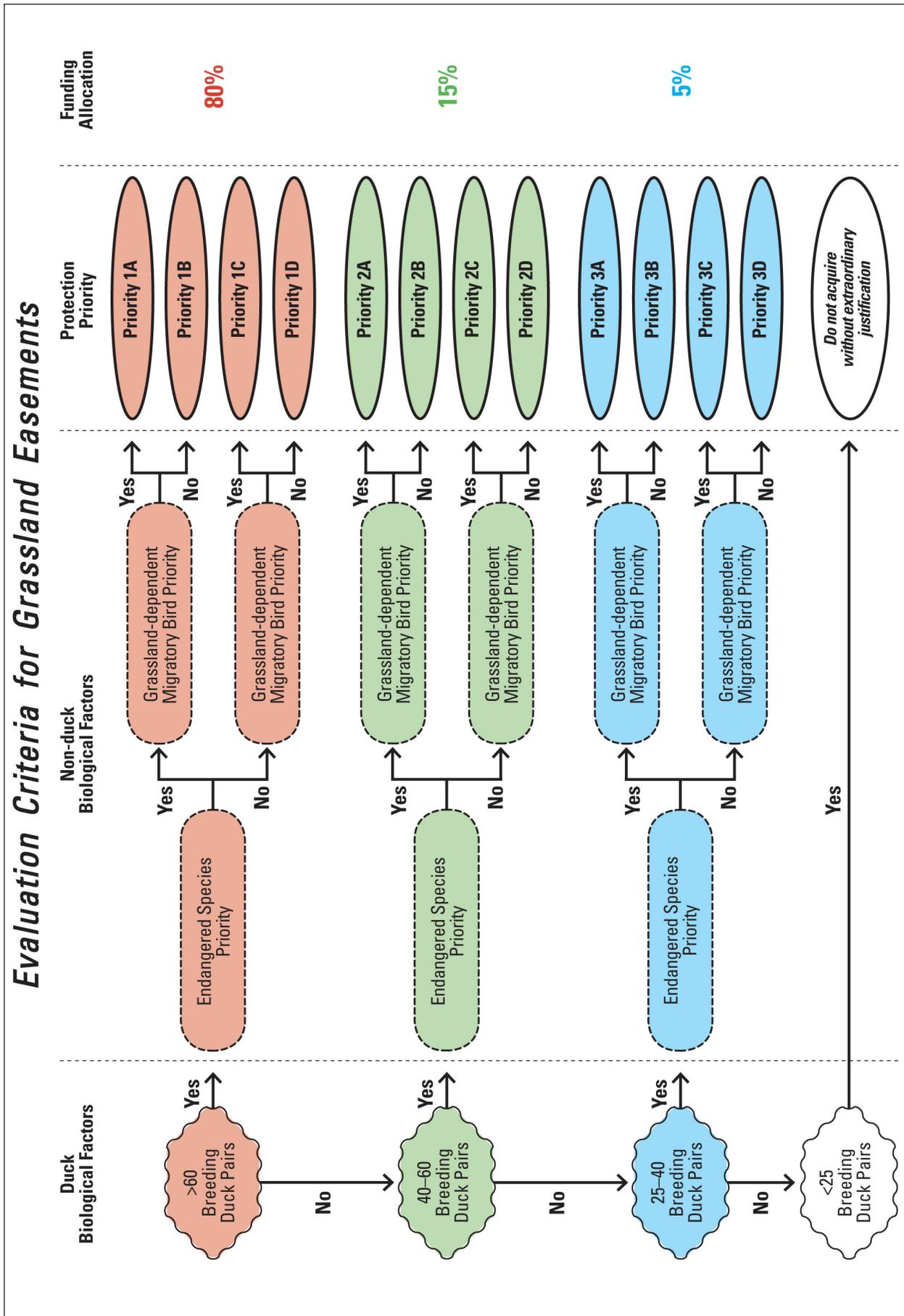


Figure 5. Chart of evaluation criteria for acquiring grassland conservation easements.

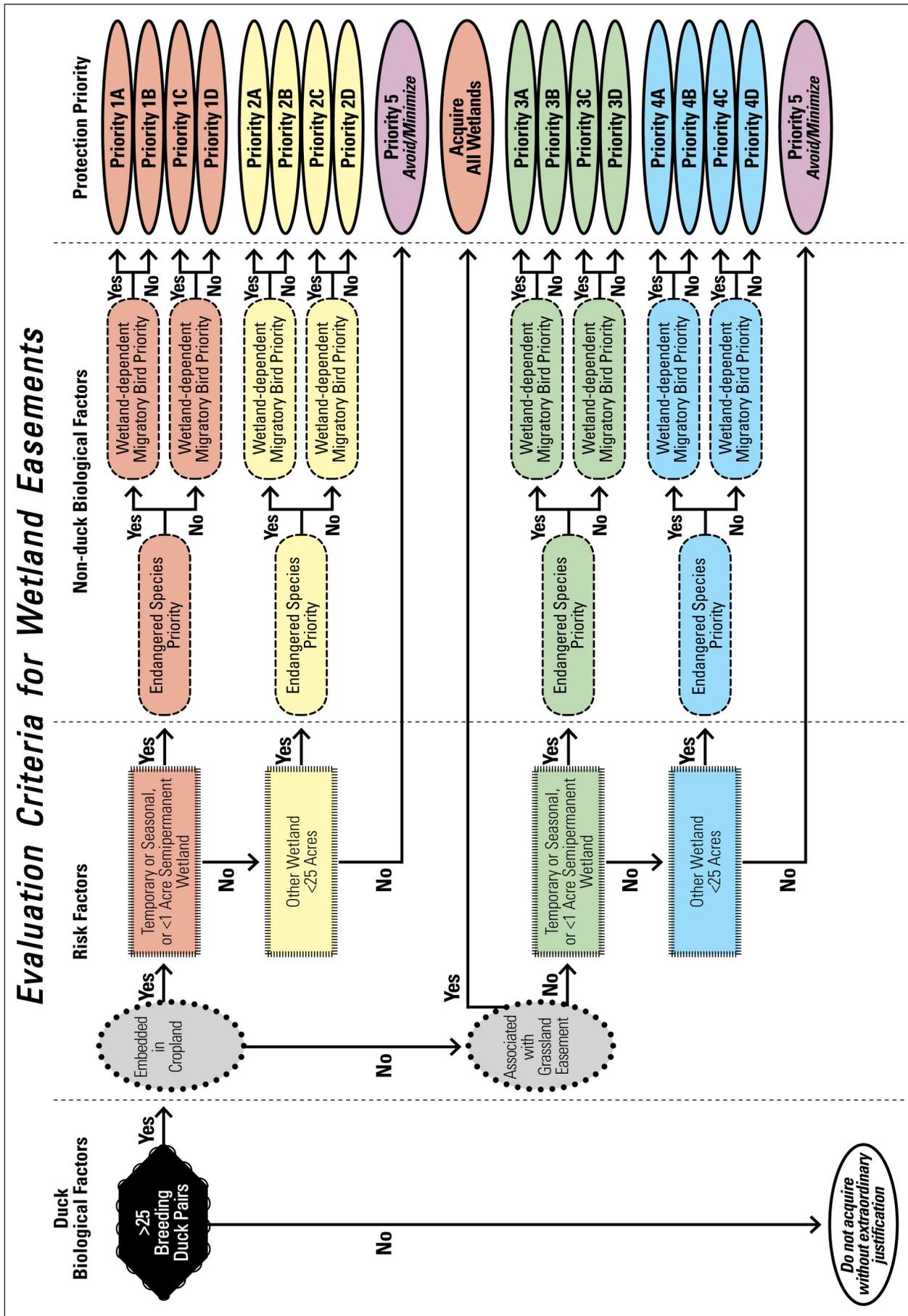


Figure 6. Chart of evaluation criteria for acquiring wetland conservation easements.

wildlife, and its waters are home to many unique aquatic species such as the Topeka shiner. Efforts by the LCC will be integral to the long-term success of landscape-scale conservation through the DGCA project.

The Service is working to involve a diverse array of partners in the LCC including the State fish and wildlife agencies as well as Native American tribes. The LCC may expand to include Canadian Federal and provincial organizations as partners. Ducks Unlimited, Pheasants Forever, The Nature Conservancy, Delta Waterfowl, and many other nongovernmental organizations are long-standing partners in this landscape, and the Service envisions these organizations taking part in the LCC. The Missouri River recovery efforts include partnerships with Federal agencies such as the U.S. Army Corps of Engineers, five States, many tribes, and many nongovernmental organizations. The Service's existing focus on wetland and grassland includes partnerships with The Nature Conservancy and the World Wildlife Fund.

The Service's capacity for science and strategic conservation planning includes the following:

- HAPET office in Bismarck, North Dakota
- U.S. Geological Survey, which runs the Northern Prairie Wildlife Research Center and the South

Dakota State University Cooperative Research Unit and is planning to establish the Intermountain West Regional Climate Change Hub

- Other public and private partners with potentially important science resources

The Service will work with the LCC partners to develop the scientific tools necessary to figure out how climate change, coupled with existing stressors such as conversion of native prairie for agriculture, may affect the health and productivity of populations of Federal trust species in the landscape.

STRATEGIC HABITAT CONSERVATION

The DGCA project is a landscape-scale effort to conserve populations of priority species in a highly diverse and endangered ecosystem over an area of approximately 29.6 million acres. Therefore, it is important to incorporate the elements of strategic habitat conservation (SHC) to ensure effective conservation. SHC entails strategic biological planning and conservation design, integrated conservation delivery, monitoring, and research at ecoregional scales (figure 7). Some elements of SHC have been addressed in migratory bird management plans in the PPR.

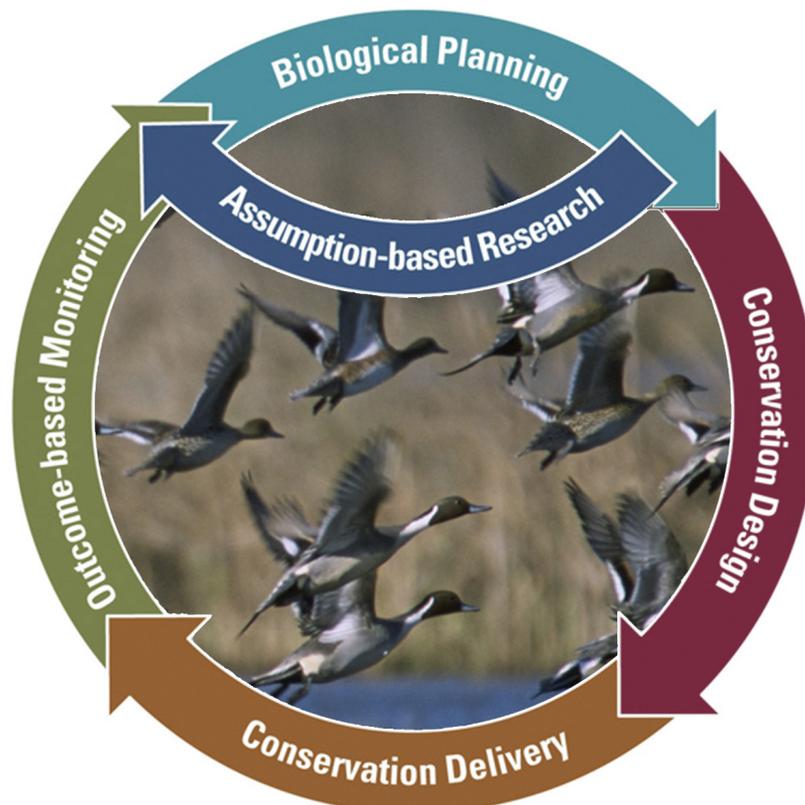


Figure 7. Graphic of the elements of strategic habitat conservation.

Strategic Biological Planning

The PPJV, Partners in Flight, and The Nature Conservancy have identified priority species for the PPR (table 1 in chapter 2): 8 species of waterfowl, 22 species of shorebirds, 10 species of other waterbirds, and 20 species of grassland birds (landbirds). Five of the priority waterfowl species are upland-nesting duck species—mallard, northern pintail, gadwall, northern shoveler, and blue-winged teal.

Habitat loss due to conversion of wetland and grassland to cropland is the primary limiting factor for all priority species in the DGCA. Loss of these habitats reduces carrying capacity and nest success (Herkert et al. 2003, Reynolds et al. 2001).

Conservation Design

Grassland accessible to the greatest number of pairs of breeding ducks is the primary determinant for acquiring grassland conservation easements. Long-term protection objectives include all grasslands accessible to more than 25 duck pairs, plus a 1-mile buffer of grassland that affects nest success. These objectives were set to rank grasslands accessible to moderate to high numbers of breeding ducks. The Service identified three grassland categories:

- Grassland accessible to more than 60 duck pairs
- Grassland accessible to 40–60 duck pairs
- Grassland accessible to 25–40 duck pairs

The Service will use the grassland flowchart (figure 6), along with the wetland flowchart (figure 7) from the Easement Manual (USFWS 2011a). The criteria in these flowcharts helps Service staff prioritize areas for protection based on spatial models for waterfowl, threatened and endangered species, grassland birds, shorebirds, and other waterbirds (USFWS 2011a).

Integrated Conservation Delivery

Wetland and grassland easements represent a means to conserve habitat. The habitat conservation strategies for grassland wildlife including migratory birds (many of which are addressed by other bird initiatives) will not differ substantially from those strategies carried out to meet the needs of waterfowl (Ringleman 2005). As understanding of the functional relationships between priority species and habitats increases, the Service will adapt the strategies to target the most influential parcels for meeting the population objectives of the priority species listed in table 1 (chapter 2).

Over time, SWAP has used different criteria to guide the acquisition process; however, habitat quality has always been the major criterion. The best waterfowl-breeding habitat in the PPR is intermixed wetland complexes and quality grassland-

nesting habitat. Generally, landscapes with high numbers of wetlands attract high numbers of waterfowl breeding pairs, and landscapes with a large percentage of perennial grassland cover exhibit higher nest success. This combination of wetland and grassland is important for many other nonwaterfowl species including shorebirds, other waterbirds, and grassland birds (Beyersbergen et al. 2004, Johnson et al. 1994, Niemuth et al. 2008). These two elements—large numbers of wetlands in association with priority grassland habitat—are the cornerstones of the habitat conservation program.

This LPP provides the information necessary to carry out the conservation action of acquiring the “best of the best” habitat for priority species. The Service’s Division of Realty will continue to refer to the LPP in assessing opportunities to acquire the highest priority habitat.

Monitoring and Research

Conservation efforts in the PPR focus on the protection and restoration of grassland and wetland, and there is great potential for providing benefits for multiple species. HAPET has developed standalone, single-species models to provide the ability to target different priority species, a combination of species, the treatment types, various locations, or specific funding requirements. Furthermore, this approach gives the Service a rapid response tool for specific decision support and for adaptive changes in models as new information became available.

The Service annually monitors waterfowl, breeding shorebirds, other waterbirds, grassland birds, and raptors in the project area. In addition, the Service is working with partners to develop a more comprehensive marshbird-monitoring program.

HAPET has provided valuable information through current monitoring programs that has been used to develop models of population-habitat relationships for priority waterfowl, shorebirds, grassland birds, and some raptors (Niemuth et al. 2005, Niemuth et al. 2008a, Reynolds et al. 2001, Reynolds et al. 2006). These efforts will be expanded to include other species as resources and methods are developed.

Sociocultural Considerations

The human population is generally sparse and towns are widely scattered in the project area. The farm and ranch ownerships vary widely in size, ranging from 160- to 30,000-acre blocks that help maintain an intact landscape. The ranchers’ livelihoods depend on natural resources—grass, water, and open space—and the key to protecting the DGCA lies primarily in sustaining the current pattern of ranching and low-density use.

Residents and county governments have expressed concerns about the amount of taxes paid to the counties when land is acquired in fee title. Because the project is an easement program, the land remains in private ownership; therefore, taxes paid to a county by the landowner are not affected. Over the short-term, money paid by the Service for the wetland or grassland easement becomes another source of income for the landowner and, logically, a part of those dollars likely will be spent locally in the local area. Proximity to protected easement lands may enhance the property value of adjoining lands.

The easement program is not expected to cause any adverse changes to the sociocultural climate in the project area but, rather, will help sustain the current condition. Unlike many other areas in the country, the key to protecting native prairie lies primarily in sustaining the current land use of livestock ranching.

Public Involvement and Coordination

The Service has involved the public, agencies, partners, and legislators throughout the planning process for the easement program.

SCOPING

At the beginning of the planning process, the Service initiated public involvement for the DGCA proposal to protect habitats primarily through acquisition of wetland and grassland conservation easements for management as part of the Refuge System. The Service spent time discussing the proposed DGCA project with landowners; conservation organizations; Federal, State and county governments; tribes and other interested groups and individuals.

The Service held three open-house meetings on December 14, 15, and 16, 2010—at Minot, North Dakota; Jamestown, North Dakota; and Huron, South Dakota; respectively. The objective of this scoping process was to gather the full range of comments, questions, and concerns that the public has about the proposed action. This information helped the Service identify issues to analyze for the proposed project. There were 93 landowners, citizens, and elected rep-

resentatives that attended the meetings and most expressed positive support for the project.

Additionally, individuals and groups submitted by mail or through the project Web page 24 letters and 1,469 emails about the proposed project. The Service field staff contacted local government officials, other public agencies, sportsmen and women's groups, and conservation groups. The public scoping report is in appendix D.

PUBLIC REVIEW OF THE DRAFT EA AND LPP

The Service released the draft EA and LPP on June 20, 2011, for a 30-day public review period. The draft documents were made available to Federal elected officials and agencies, State elected officials and agencies, 32 Native American tribes with aboriginal or tribal interests, and other members of the public that were identified during the scoping process.

In addition, two public meetings were held in Bismarck, North Dakota, and in Miller, South Dakota, on June 28 and 29, 2011, respectively. Approximately 50 landowners, citizens, and elected representatives attended the meetings. The Service received 10 letters from agencies, organizations, and other entities, and 347 general public comments. After all comments were received, each was reviewed and incorporated into the administrative record. Detailed comments and the Service's responses are in appendix D.

LPP Distribution and Availability

The Service sent copies of the LPP to sent to Federal and State delegations, tribes, agencies, landowners, private groups, and other interested individuals.

Additional copies of the document are available from the following Web site and office:

- Project Web site: www.fws.gov/mountain-prairie/planning/lpp/nd/dkg/dkg.html
- U.S. Fish and Wildlife Service
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