

# Chapter 4 — Project Implementation

This chapter discusses the Service's action to increase the acquisition authority of the Rainwater Basin.

## Land Protection Alternatives

The alternatives considered by the Service during the EA process were no action, short-term contracts, county zoning, or acquisition by the Service (proposed action).

### NO ACTION

The consequences of the no-action alternative were considered unacceptable. Under this alternative, the Service would continue to acquire wetlands until it reaches its current authorization of 24,000 acres. After the authorization level had been reached, any additional acres in the Rainwater Basin that would come under Service ownership would come from donations or gifts from landowners, conservation organizations, and other government agencies.

Management of Service lands would continue as described in the 2007 Rainwater Basin Comprehensive Conservation Plan. WPAs with portions of the wetland in private ownership would not reach their full potential. The ability to use management tools such as prescribed burning, pumping, and grazing would be greatly limited because of split ownership. Refuge revenue sharing payments would continue to be made to counties with Service lands.

Many of the privately owned wetlands that are currently vulnerable to drainage or other destruction would be lost. The burden to protect wetlands without compensation would rest more heavily on private landowners. Future wetland protection would rely primarily on the Wetlands Reserve Program and conservation organizations such as Ducks Unlimited. Although their contributions are significant, they are not expected to be enough to meet waterfowl needs in the region. Conservation work by a wider spectrum of conservation partners would be needed.

These unacceptable consequences resulting from the no-action alternative led to the selection of the proposed action to expand land acquisition to 38,177 acres.

### SHORT-TERM CONTRACTS

One alternative considered was developing a program similar to CRP that would pay landowners for protecting their wetlands from being altered or destroyed for a period of 10 years. The contract would be available for renewal every 10 years. This alternative would not ensure the protection of wetlands for the long term. Like CRP lands, wetlands would become vulnerable to drainage when crop prices make it profitable to convert such wetlands to cropland. Furthermore, the Service has an active Partners for Fish and Wildlife Program in the area, which can be used if acquisition is not an option for a landowner.



USFWS

*Upland grassland restoration brings back the diversity found in native grasslands.*

## COUNTY ZONING

In a traditional approach used by counties and municipalities, the local government would use zoning as a means of designating what type of development could occur in an area. Nebraska law grants cities and counties the authority to regulate land use, and engaging in planning and zoning activities is therefore optional. However, zoning may be subject to frequent changes and would not ensure the long-term protection of wetlands.

## Action and Objectives

The Service will increase its land acquisition goal within the Rainwater Basin Wetland Management District from 24,000 to 38,177 acres. All the lands will be acquired from willing sellers, with acquisition occurring over as many years as is necessary to reach the new goal. Wetlands that have characteristics that are biologically important to migratory birds will be targeted. These characteristics include the potential hydrology and location of the wetland in relation to other important wetlands (figure 7). Factors such as the presence of roads and power lines will also be considered when wetlands are prioritized.

Property will be purchased by one of two methods: fee-title and easement. Fee-title acquisition will total 9,177 acres and will target two types of wetlands: those currently sharing partial ownership by the Service and larger wetlands located within a complex of smaller wetlands.

Conservation easements will be purchased for 5,000 acres. Approximately 2,500 of these acres will be wetlands, with the remaining 2,500 being surrounding upland buffers. Easements will be purchased from willing sellers and will be restricted to those wetlands located near State and Service-owned wetlands.

Both fee-title acquisition and conservation easements will be done strategically using GIS technology to identify those wetlands that have the highest potential for waterfowl habitat. Wetlands will be prioritized by rating wetland and landscape characteristics that are critical for waterfowl.

## PRIORITY AREAS

A rating system that considers the various characteristics important to migratory birds has been developed by the Rainwater Basin Joint Venture and area biologists. Using GIS technology, a priority map was created that identifies individual wetlands as well as complexes of wetlands that provide the most benefit to birds (figure 7).

Overall, the project will focus on fee-title acquisition in two types of wetlands. The highest priority will be to acquire portions of wetlands that adjoin existing

WPAs, which will allow for better management of the entire wetland. Management practices such as prescribed burning, grazing, and water delivery are more effective when the entire wetland can be managed. The second type of wetlands that will be considered for acquisition will be larger wetlands located within a complex of smaller wetlands. Waterfowl prefer using wetlands within a complex of wetlands. A complex provides different wetlands for different needs, such as feeding, loafing, and roosting.

Easement acquisition will target smaller wetlands close to a larger, publicly owned wetland. This strategy will allow the numerous small wetlands to remain in private ownership while still protecting the integrity of the wetland complex. Easements will protect the wetlands from future alteration and keep the adjoining upland in grassland. The landowner will retain access, grazing, and haying rights.

## MANAGEMENT

Acquired lands will be managed by the Rainwater Basin Wetland Management District, as described in the 2007 Comprehensive Conservation Plan. Easement monitoring will include periodic review of land status through correspondence and meetings with landowners or managers to ensure that the stipulations of the easement are being met.

Payment in lieu of taxes from the Refuge Revenue Sharing Act will be paid to counties for lands in fee-title ownership by the Service. Taxes on lands containing a conservation easement will continue to be paid by the landowner.

## CONTAMINANTS AND HAZARDOUS MATERIALS

Surveys for contaminants will be conducted before any land interests are acquired. Fieldwork for the preacquisition surveys will be conducted on a tract-by-tract basis. Any suspected problems or contaminants requiring additional surveys will be referred to a contaminant specialist located in the Service's Ecological Services office in Grand Island, Nebraska.

## Acquisition Alternatives

The Service proposes to acquire conservation easements mostly by using funds appropriated under the Land and Water Conservation Act, which derives funds from royalties paid for offshore oil and gas leasing; the Migratory Bird Hunting and Conservation Stamp Act, which derives funds from the sale of Federal Duck Stamps; the North American Wetlands Conservation Act, which derives funds from congressional appropriations; other funding as identified; or through donations. These funds are intended for the protection of recreational and natural resource lands.

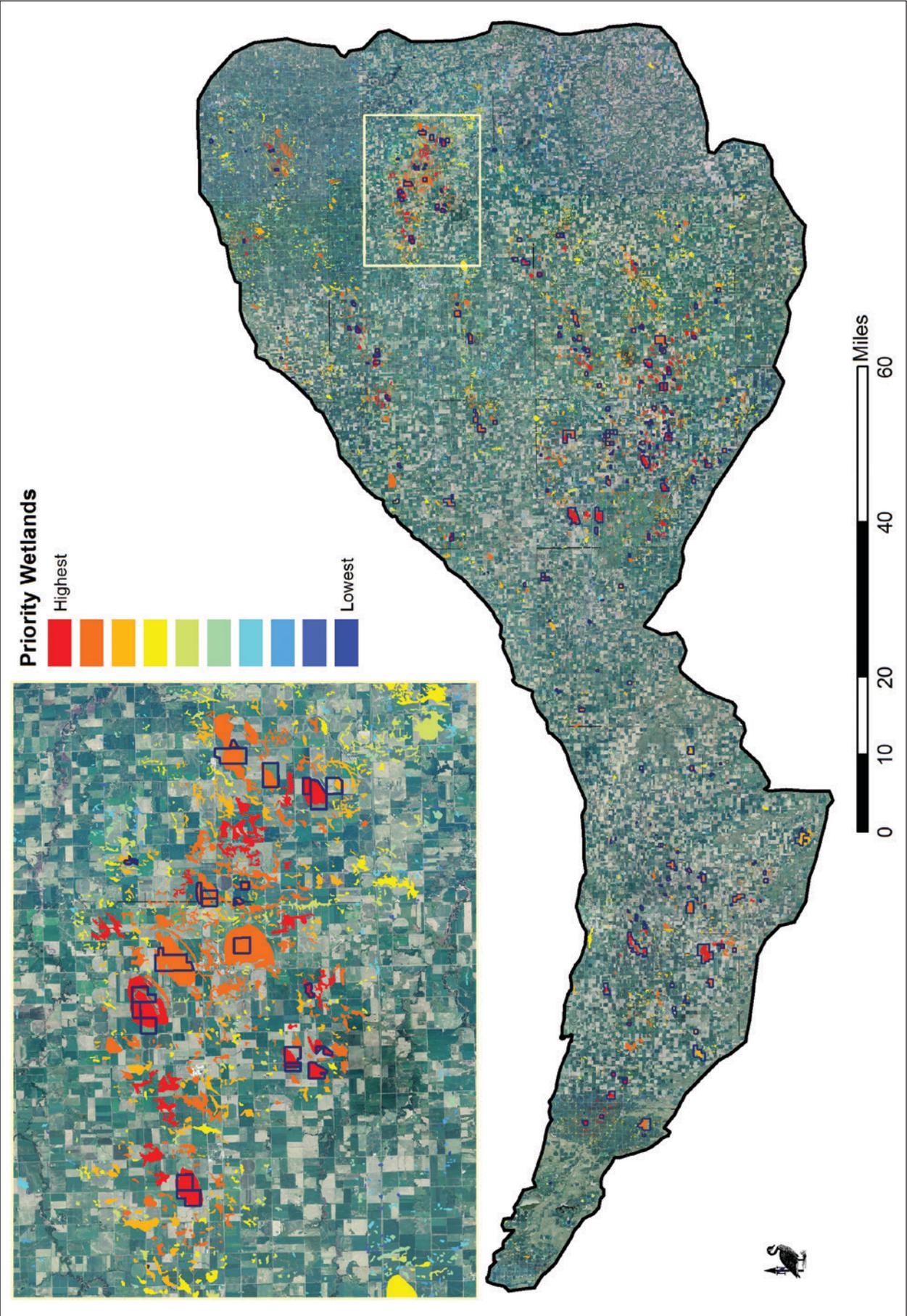


Figure 7. Priority wetland basins for migratory bird use in the Rainwater Basin.

Funding is subject to annual appropriations by Congress for specific acquisition projects.

Monies from other sources may also be used within the project area. Funding for management of acquired properties will come from Congress as appropriated to the Refuge System.

## Strategic Habitat Conservation and Landscape Conservation Cooperatives

SHC (strategic habitat conservation) is a means of applying adaptive management across large landscapes. LCCs (landscape conservation cooperatives) will facilitate strategic habitat conservation (USFWS 2008).

### STRATEGIC HABITAT CONSERVATION

The Rainwater Basin expansion proposal will apply the strategic habitat conservation framework outlined in the National Ecological Assessment Team report (National Ecological Assessment Team 2006). SHC involves an ongoing cycle of biological planning, conservation design, conservation delivery, outcome-based monitoring, and assumption-based research (figure 8). It is the process by which the Service continues to develop and apply science that is focused on improving the ability to apply conservation delivery actions that result in landscapes capable of supporting populations of priority species at desired levels. Additionally, SHC provides the framework by which the Service develops and applies science to inform and

continually improve conservation delivery by addressing landscape-level population-limiting factors in an adaptive manner.

The Service's Region 6 Refuges Program has established a GIS office in Grand Island that works closely with the Rainwater Basin Joint Venture and the Rainwater Basin Wetland Management District to provide support for the biological planning, conservation design, conservation delivery, and monitoring/research elements of SHC necessary to implement the proposed action. This environmental assessment addresses the four key SHC elements: planning, design, delivery, and monitoring and research.

### BIOLOGICAL PLANNING

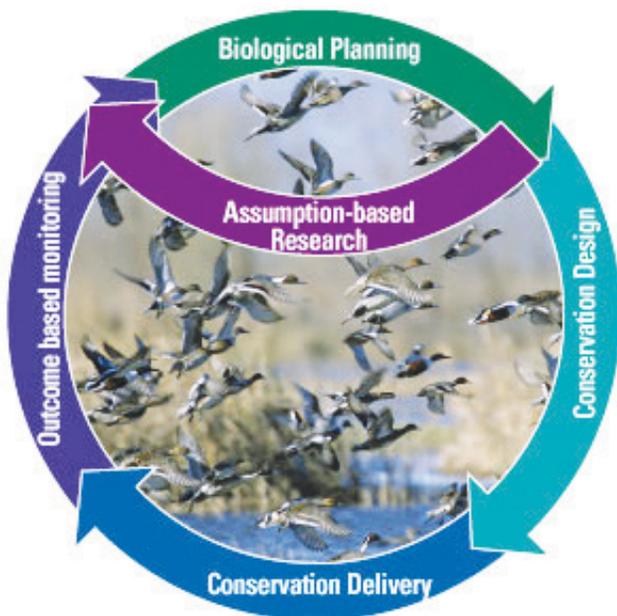
Priority resources were described in earlier chapters of this document. Biological planning requires the identification of priority species, development of population objectives, and identification of landscape-level limiting factors that keep the populations of priority species below desired levels. Initial biological planning was done using dabbling ducks and a subset of goose populations as focal species. This approach was based on the assumption that protection and management of wetlands in a manner that meets the biological needs of the focal species will also adequately meet the needs of other wetland species.

Conceptual and quantitative models have been developed to identify specific wetlands and wetland complexes. Priority species will continually be defined and updated throughout the implementation of the project, and additional landscape models will be developed for priority species. Biological planning will continue into the future, engaging partners in the population objectives and developing biological models that will be directly linked to conservation delivery actions.

### CONSERVATION DESIGN

Land acquisition is most effectively completed using biologically driven, spatially explicit models. During the past decade, the Service, in cooperation with the Rainwater Basin Joint Venture, has used GIS to extensively map the Rainwater Basin region. Modeling has identified and ranked each hydric soils area, including both drained and existing wetlands. Key spatial and biological characteristics of each area were scored to determine which wetlands are cost effective to acquire and restore. The analysis considered the impacts of geographic features such as the proximity of other wetlands, roads, and power lines to each individual wetland. Color-coded maps reflect an individual wetland's priority for fee-title acquisition, easement, and other types of conservation programs.

The information obtained from the model was also used in conjunction with the management history of existing WPAs to identify where roundout acquisition is most needed.



**Figure 8.** The elements of strategic habitat conservation.

## CONSERVATION DELIVERY

The Rainwater Basin Wetland Management District has worked with neighboring landowners, conservation organizations, and government agencies for almost 5 decades to preserve and enhance wetlands throughout the region. Beginning in the early 1990s, Partners for Fish and Wildlife biologists have worked with the same partners to bring conservation programs to wetland owners regardless of their proximity to existing Service properties. Application of the SHC framework will build on existing partnerships and support the development of new partnerships for delivering conservation throughout the ecoregion.

It is recognized that the past practice of opportunistic acquisition will not result in the best use of conservation dollars. The function of some wetlands can best be used or enhanced by short-term conservation programs. Computer modeling of waterfowl energetic needs and wetland priority mapping allow for greater flexibility, increased responsiveness, and improved efficiency in meeting Service and partner conservation delivery needs.

Conservation design will continue to involve the development of spatially explicit decision support tools for targeting conservation delivery actions. Research and monitoring will help update the modeling parameters that will be used to develop future conservation priorities.

## MONITORING AND RESEARCH

The success of the proposed action will depend on its ability to adapt to new and better information gathered through research and monitoring. Currently, monitoring and research are being done on a variety of subjects to provide for better decision making in the future. At the end of each growing season, wetlands are examined to assess the response of plant communities and seed production to different management actions. This information is being used to develop a strategic decision-making matrix to guide future management. Bird use associated with wetland juxtaposition is being analyzed to confirm if our current understanding of wetland complexes aligns with what actually occurs in the field. A study of the relationship between groundwater recharge and wetland characteristics was recently completed. A major research project related to grazing intensity and its impact on the control of reed canarygrass is beginning its final year. Information from these studies and future work on landscape ecology will be incorporated into the SHC process to further refine biological planning.

## LANDSCAPE CONSERVATION COOPERATIVES

The Service will use LCCs as a means of implementing strategic habitat conservation. LCCs will be formal scientific and management partnerships between the Service, the U.S. Geological Survey, other Federal

agencies, States, tribes, nongovernmental organizations, universities, and others to increase the capacity for applied conservation science in support of fish and wildlife management in specific landscapes (Secretarial Order Number 3289). The tools developed by the LCCs will allow Service offices and their many partners to implement on-the-ground actions in the most effective locations to meet conservation goals.

The Rainwater Basin Expansion Project is part of the Great Plains LCC, which was recently developed. The project meets the main criterion of the LCC initiative: cooperation among private landowners; other Federal, State, and local agencies; and nongovernmental organizations. In addition to fostering partnerships, the LCCs provide science support to managers.

In 2009, the Secretary of the Interior outlined the importance of LCCs as a response to climate change (USFWS 2009). LCCs reach across broad landscapes, involve many partners, and function at a scale necessary to address wildlife adaptation in response to climate change. The Rainwater Basin Expansion Project would contribute to the wetland protection projects of Ducks Unlimited, NGPC, natural resource districts, and the U.S. Department of Agriculture.

These cooperatives will continue to grow as a means of delivering strategic habitat conservation. The Service and the U.S. Geological Survey have signed a memorandum of understanding to strengthen the science-management relationship in landscape-level conservation. This further commitment to strategic habitat conservation will improve the effectiveness of the type of landscape conservation being proposed.

## Coordination

The Service has discussed the proposal to expand land acquisition in the Rainwater Basin with landowners; conservation organizations; other Federal agencies; tribal, State, and county governments; and other interested groups and individuals. Approximately 170 fact sheets were mailed out, and project information was also made available at the wetland management district and regional planning Web sites during the public scoping period.

The Service held two public meetings to provide information and discuss the proposal with landowners and other interested citizens. Information on the proposal has been made available to county commissioners in each of the 13 counties included in the project area.

The Service released the draft EA and LPP on May 31, 2011, for a 30-day public review period. This period was extended 2 weeks until July 15, 2011, allowing a 45-day public review period. In total, the Service received 7 letters from agencies, organizations, and other entities, 58 comments from the general public, and 3

phone calls. After all the comments were received, each one was reviewed and incorporated into the administrative record. A separate request for further discussion with the Clay County Board of Supervisors was met on August 16, 2011.

At the Federal level, information was provided to the Congressional delegation as well as to representatives from the U.S. Department of Agriculture, Natural Resources Conservation Service. At the State level, information was provided to Governor Heinemann's staff and Nebraska's senators. Information was also provided to 21 tribes with aboriginal interest in the project during the entire planning process.

Nongovernmental conservation groups are vital to the success of the proposed action. The Service has coordinated with partner organizations such as The Nature Conservancy, natural resource districts, and Ducks Unlimited.

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## Summary of Proposed Action

The Service intends to purchase an additional 14,177 acres of wetlands and associated uplands for the benefit of migratory birds, primarily waterfowl and shorebirds. Fee-title acquisition will be used to acquire 9,177 acres. Conservation easements will be used to protect the remaining 5,000 acres. Purchases will be from willing sellers and will strategically target those wetlands that most benefit migratory birds. Fee-title

acquisition will be on two types of wetlands, those partially in private ownership but part of a WPA, and larger wetlands that serve as the core wetland in a complex of smaller wetlands. Easements will be purchased on biologically significant wetlands that lie close to State or Federally owned wetlands.

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## Distribution and Availability

Copies of this LPP were sent to Federal and State legislative delegations, tribes, agencies, landowners, private groups, and other interested individuals.

Additional copies of the document are available from the following offices and Web sites:

U.S. Fish and Wildlife Service  
Rainwater Basin Wetland Management District  
P.O. Box 8  
Funk, Nebraska 68940  
308 / 263 3000  
<http://rainwater.fws.gov>

U.S. Fish and Wildlife Service  
Region 6, Division of Refuge Planning  
Branch of Land Protection Planning  
P.O. Box 25486-DFC  
Denver, Colorado 80225  
303 / 236 4345  
303 / 236 4792 fax  
<http://mountain-prairie.fws.gov/planning/lpp.htm>

