

## **Appendix K: Guidance for Acquisition**

# **U.S. Fish and Wildlife Service (Service) - Region 3**

## **Strategic Growth of the Small Wetland Acquisition Program (SWAP)**

### **Guidelines for Fee and Easement Purchase**

#### **Introduction**

Project Leaders on Wetland Management Districts (WMD) within the major waterfowl breeding habitats of the United States are charged with the responsibility to identify tracts of land that meet the goals of the SWAP for inclusion in the National Wildlife Refuge System (NWRS). Of all the responsibilities Project Leaders carry, identifying lands to include in the NWRS has the longest lasting implications and is by far the most important.

The main goal of the SWAP has been, and still is, to purchase a complex of wetlands and uplands that provide habitat in which waterfowl can successfully reproduce. The basic concept has been to purchase in fee title key brood marshes that include adequate nesting cover on adjacent uplands while protecting under easement surrounding temporary and seasonal wetland basins as breeding pair habitat. It is important that lands purchased under the SWAP are the **preeminent waterfowl production habitats** within a Wetland Management District.

Delineation of lands for purchase as waterfowl production habitat is as much an art as it is a science. This requires meshing the opportunity to purchase and manage a particular tract of land with the biological needs of breeding waterfowl in a socially acceptable, cost effective and efficient manner.

#### **History**

The SWAP began in 1958 and accelerated rapidly in the early 1960's with passage of the Wetlands Loan Act. The original 1960's delineations were prepared for each fee title parcel based on their suitability to provide brood rearing habitat for waterfowl. These delineations designated wetlands as priority A, B, and C for fee title purchase. These tracts had few upland acres and only existing wetlands with no drainage facilities were considered for fee or easement purchase. In some locations, these original delineations have been reevaluated and revised. In Minnesota, a 1974 exercise produced maps showing proposed boundaries of each fee title delineation, as well as wetlands within a two-mile radius that were eligible for easement purchase. A 1984 effort produced maps of "significant wetland areas" for fee title purchase. Although dated, these efforts were biologically sound and provide valuable information in deciding which properties to purchase today.

Over the years our understanding of breeding waterfowl biology has increased and the landscape of the Upper Midwest has changed dramatically. The SWAP itself has evolved to include purchase of drained wetlands, increased upland acreage, and grassland easements along with new counties that include lands within intensely agricultural and urbanized landscapes.

Since the inception of the SWAP, most State Fish and Wildlife Agencies in primary waterfowl breeding habitats also conducted land acquisition programs that protected wetlands for waterfowl production.

In recent years, many new programs have been launched by Service partners that compliment the SWAP including U.S. Department of Agriculture's Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP), Wetland Reserve Program (WRP), Farmers Home Administration Inventory and Debt Restructure programs, State programs such as Reinvest in Minnesota (RIM) and the Permanent Wetland Preserve (PWP), as well as non government organization programs such as The Nature Conservancy (TNC) Preserves. In addition, the Service has recently established National Wildlife Refuges to protect native prairie tracts over an area that is closely aligned with the Prairie Pothole Region.

Project Leaders must consider these program changes when determining which lands to purchase under the SWAP.

### **Biological Considerations**

The following guidelines for the SWAP have been developed with the goal of directing acquisition of waterfowl production habitat for prairie nesting species ducks.

As one moves through the major waterfowl breeding habitats from Wisconsin to Iowa to Montana, the primary biological factor limiting waterfowl production varies with the landscape. In Iowa and southern Minnesota, the simple lack of any wetlands or upland cover tends to limit the occurrence of breeding waterfowl. In parts of Wisconsin, Michigan and western Minnesota, the low number of temporary and seasonal wetlands and diminished upland cover limit the number of breeding pairs that settle and successfully nest. In the parts of the eastern Dakotas where the wetland base is fairly intact, breeding waterfowl settle, but production can be limited by the lack of secure upland cover. In the central Dakotas and northern Montana, generally the wetland base and grassland cover are sufficient to attract and insure adequate nest success rates for breeding waterfowl populations. Acquisition programs should focus on providing the missing components for that particular landscape.

The first credo of breeding waterfowl habitat is "the abundance of wetlands (especially temporary and seasonal) within a given landscape during the spring/summer correlates directly with the number of breeding duck pairs."

The second credo of breeding waterfowl habitat is "as grassland acreage (idle grassland, hayland, pasture, road rights-of-ways, etc.) within a given landscape increases, waterfowl nest success increases.

The third credo of breeding waterfowl habitat is "as the predator component within a given landscape approaches the naturally occurring compliment (i.e., coyotes vs. red fox), waterfowl nest success increases."

When delineating lands for purchase under the SWAP, Project Leaders must view current conditions as well as anticipated future developments. Since the home range of most prairie nesting species of waterfowl covers roughly four-square miles, delineations need to be viewed as part of a larger landscape within a two-mile radius. The "perfect" 4-square mile tract would consist of a complex of

wetlands spread across the landscape intermingled with greater than 30% grassland cover on the uplands and few, if any, trees or forested areas. The wetland complex on this “perfect” 4-square mile landscape would be made up of four or more larger brood marshes and 150 or more temporary and seasonal wetlands.

### **Delineation Criteria for Fee Title Purchases**

Delineations will be prepared to show the eventual boundary of a Waterfowl Production Area after all tracts have been acquired.

Size of WPA: 80 - 1,000 acres

Upland/Wetland Ratio: 4:1

Wetland Types: Delineate only a wetland complex. This complex will have at least one PEMF brood marsh of significant size. There must be a scattering of PEMA and PEMC wetlands throughout the area.

Soils: Heavy, fertile, alkaline clay loam, or loam Mollisol soils. These soil types evolved under geographic regions that were predominantly prairie grassland.

1. Omit buildings and building sites when they are not critical to the management of the WPA.
2. A minimum of 20 percent of the entire delineation should be wet. (Use restorable drained, as well as existing basins in determining percent wetland.)
3. Maximum of 50 percent of the entire delineation may be wetland.
4. Written justification and approval of the Refuge Supervisor is needed when the size of the WPA purchased is under 80 acres or exceeds 1,000 acres.
5. Limit number of Waterfowl Production Areas to 4-5 per township.

### **Delineation Criteria for Habitat Easements**

Grassland easements should be obtained on lands where a suitable wetland complex exists, but additional upland cover is necessary to provide adequate waterfowl breeding habitat (i.e., overlying a wetland easement).

Grassland easements must be within 2,600 feet of a wetland that provides brood habitat. If requested by the owner, delineations may exclude one small tract (1-5 acres) on the exterior boundary and/or in a corner for parking and/or a building.

Generally roads and trails should not be allowed on habitat easements. If an access trail is absolutely necessary, the delineation should show the approximate route.

### **Delineation Criteria for Wetland Easements**

It is preferred that wetland easements be obtained on all PEMA, PEMC, PEMF, and PEMG wetlands within two miles of fee title Waterfowl Production Areas or any other permanently protected brood marsh. Wetland easement maybe taken to permanently protect good brood marshes that would be otherwise unprotected.

Wetlands should be delineated to water levels that approximate the Ordinary High Water mark (i.e 100 year rainfall event).

All drained wetlands restored under the Partners for Wildlife, CRP, or other similar wetland restoration programs that are lacking permanent protection should be considered for wetland easement protection. Where easements include wetland restorations structures (ditch plugs, tile risers, culverts, etc) Project Leaders should consider requesting recorded mean sea level elevations.

Wetlands with drainage facilities (i.e. un-maintained ditches or tiles) that exhibit PEMC, PEMF or PEMG characteristics maybe delineated for easement purchase. In these situations the landowner(s) forfeit their rights to maintain the drainage facilities so the entire wetland should be placed under easement to eliminate any third party drainage rights. Restoration of partially drained wetlands to historic water levels is preferred and should be explored with the landowner prior to taking an easement.

Do not place artificial or created wetlands under easement (i.e., dugouts, stock dams, dams on natural streams/riparian areas).

### **Delineation Criteria Applicable to all SWAP Acquisitions**

Avoid purchasing land with problems that will significantly affect the tract's biological integrity, diversity, and environmental health.

1. Try to avoid purchasing lands within city limits or adjacent to commercial or rural housing developments. Do not use the SWAP just to prevent commercial or rural development.
2. Do not purchase lands when a legal ditch(s) passes through the major brood marsh unless specific detail is provided that insures future water levels will be adequate (i.e., cleanout depths are agreed to by drainage authority or legal process for impoundment of water, or abandonment occurs concurrently with purchase).
3. Evaluate any recorded or unrecorded outstanding third party rights (i.e., ditches, tiles, access trails, mineral rights) and do not purchase lands when these rights substantially affect future management.

4. Avoid purchasing tracts without access.
5. Avoid purchasing tracts with costly future management problems (i.e., contaminants, flashy watershed with frequent flood damages, fish lakes, extensive invasions of exotic species, etc.).
6. Avoid purchasing tracts that are the recipient of sewage lagoon discharge or feedlot runoff.
7. Where management problems may develop and public uses significantly differ, avoid intermingling Service lands with other agency/NGO lands.
8. As they approve tracts for purchase, Project Leaders should consider the goal acres for each county to insure they are not exceeded before all essential tracts are purchased.

### **Prioritizing Acquisitions & Other Considerations**

Priority should be given to fee title and habitat easement purchases using the SWAP Acquisition Priority Scorecard (Exhibit 2). Round-outs to existing fee title Waterfowl Production Areas should receive priority over other tracts. Wetland Easements will be assigned a high, medium or low priority and should be based on criteria similar to habitat easements and fee title tracts. Priority will be given to wetland easements covering previously drained wetlands that have been restored.

In targeting and prioritizing SWAP tracts Project Leaders should use Geographic Information System data including thunderstorm maps, land cover maps (grassland acreage), landscape characteristic maps and data on predator populations. Project Leaders also need to evaluate potential purchases for tracts where future management actions will significantly contribute to increased waterfowl production (i.e., purchase of a 100+ acre drained wetland that will be restored and managed for hemi-marsh conditions and over water nesting species of ducks).

In prioritizing tracts for purchase under the SWAP other wildlife benefits may help determine priority. These may include presence of large tracts of native prairie, endangered or threatened species, or colonial nesting birds, expanding and protecting large tracts of grassland as Grassland Bird Conservation Areas and resident species benefits (i.e., pheasant wintering marsh).

### **Format**

All SWAP acquisitions will have the SWAP Acquisition Proposal cover sheet with fee title and habitat easement tracts including the SWAP Acquisition Priority Scorecard (Exhibit 2). The Project Leader's signature at the bottom of the SWAP Acquisition Proposal form represents approval for inclusion of the lands into the NWRS.

All SWAP delineations will be made on the most recent digital ortho quadrangles using the Wetland Management District Geographic Information System (GIS) acquisition format with the following standard colors (during FY02, field stations will transition from the pen and ink format to GIS.):

Boundary: Proposed Purchases (Fee or Easement): White

WPA: Existing - green

Wetland Easement: Existing - yellow

Habitat Easement: Existing - dark blue Flowage Easement: Existing - light blue

FmHA Easement: Existing - red

Wetlands: blue

Show all drainage (tile, open ditch, county, and judicial ditches) with lines and arrows.

Show roads, railroads, and other rights-of-ways.

Show building sites within and adjacent to delineated areas.

All wetland easement delineations will have the USFWS Wetland Easement Field Form attached (Exhibit 3).

### **Suggested Reading**

Greenwood, Raymond J., Alan B. Sargeant, Douglas H. Johnson, Lewis M. Cowardin, and Terry L. Shaffer. 1995. Factors associated with duck nest success in the Prairie Pothole Region of Canada. *Wildlife Monographs* 128:1-57. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. <http://www.npwrc.usgs.gov/resource/othrdata/nestsuc/nestsucc.htm> (Version 02JUN99).

Krapu, Gary L., Raymond J. Greenwood, Chris P. Dwyer, Kathy M. Kraft, and Lewis M. Cowardin. 1997. Wetland use, settling patterns, and recruitment in mallards. *Journal of Wildlife Management* 61(3):736-746. Northern Prairie Wildlife Research Center Home Page. <http://www.npwrc.usgs.gov/resource/othrdata/wetlndus/wetlndus.htm> (Version 14NOV97).

Johnson, Douglas. H. and James W. Grier. 1988. Determinants of breeding distributions of ducks. *Wildlife Monographs* 100:1-37. Jamestown ND: Northern Prairie Wildlife Research Center Home Page. <http://www.npwrc.usgs.gov/resource/distr/birds/distduck/distduck.htm> (Version 15APR98).

Cowardin, Lewis M., Terry L. Shaffer, and Kathy M. Kraft. 1995. How much habitat management is needed to meet mallard production objectives? *Wildlife Society Bulletin* 23(1):48-55. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. <http://www.npwrc.usgs.gov/resource/othrdata/marshbrd/marshbrd.htm> (Version 16JUL97).

Reynolds, Ronald E., Danny R. Cohan, and Michael A. Johnson. 1996. Using landscape information approaches to increase duck recruitment in the Prairie Pothole Region. Transactions of the North American Wildlife and Natural Resource Conference 61:86-93. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/othrdata/incduck/incduck.htm>  
(Version 16JUL97).

Johnson, Douglas H. and James W. Grier. 1988. Determinants of breeding distributions of ducks. Wildlife Monographs 100:1-37. Jamestown ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/distr/birds/distduck/distduck.htm>  
(Version 15APR98).

Sargeant, Alan B., Raymond J. Greenwood, Marsha A. Sovada, and Terry L. Shaffer.

1993. Distribution and abundance of predators that affect duck production - Prairie Pothole Region. U.S. Fish and Wildlife Service, Resource Publication 194. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/distr/others/predator/predator.htm>  
(Version 16JUL97).

Cowardin, Lewis M., David S. Gilmer, and Charles W. Shaiffer. 1985. Mallard recruitment in the agricultural environment of North Dakota. Wildlife Monographs 92:1-37. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/othrdata/recruit/recruit.htm>  
(Version 02JUN99).

Winter, Maiken, Douglas H. Johnson, Therese M. Donovan, and W. Daniel Svedarsky. 1998. Evaluation of the Bird Conservation Area Concept in the Northern Tallgrass Prairie. Annual Report: 1998. Northern Prairie Wildlife Research Center, U.S. Geological Survey, Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/1999/bcarprt/bcarprt.htm>  
(Version 18MAY99).

Kantrud, Harold A., Gary L. Krapu, and George A. Swanson. 1989. Prairie basin wetlands of the Dakotas: A community profile. U. S. Fish and Wildlife Service, Biological Report 85(7.28). Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwr.usgs.gov/resource/othrdata/basinwet/basinwet.htm>  
(Version 16JUL97).

# SWAP ACQUISITION PROPOSAL

Exhibit 1

**To:**

**From:**

Tract Name: \_\_\_\_\_ Size: \_\_\_\_\_

County: \_\_\_\_\_ Township/Section: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Interested Individual when not owner: \_\_\_\_\_

Acquisition Type: Fee \_\_\_\_\_ Wet Ease \_\_\_\_\_ Flow Ease \_\_\_\_\_

Habitat Ease: Total \_\_\_\_\_ Hay \_\_\_\_\_ Graze \_\_\_\_\_ Hay and Graze \_\_\_\_\_

Priority: Fee & Habitat Easement: Round-out \_\_\_\_\_ Score \_\_\_\_\_

Wetland Easement: Restoration \_\_\_\_\_ High \_\_\_\_\_ Medium \_\_\_\_\_ Low \_\_\_\_\_

Comments:

Delineation Contact:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

E-mail: \_\_\_\_\_ Fax: \_\_\_\_\_

Approved \_\_\_\_\_ Date \_\_\_\_\_

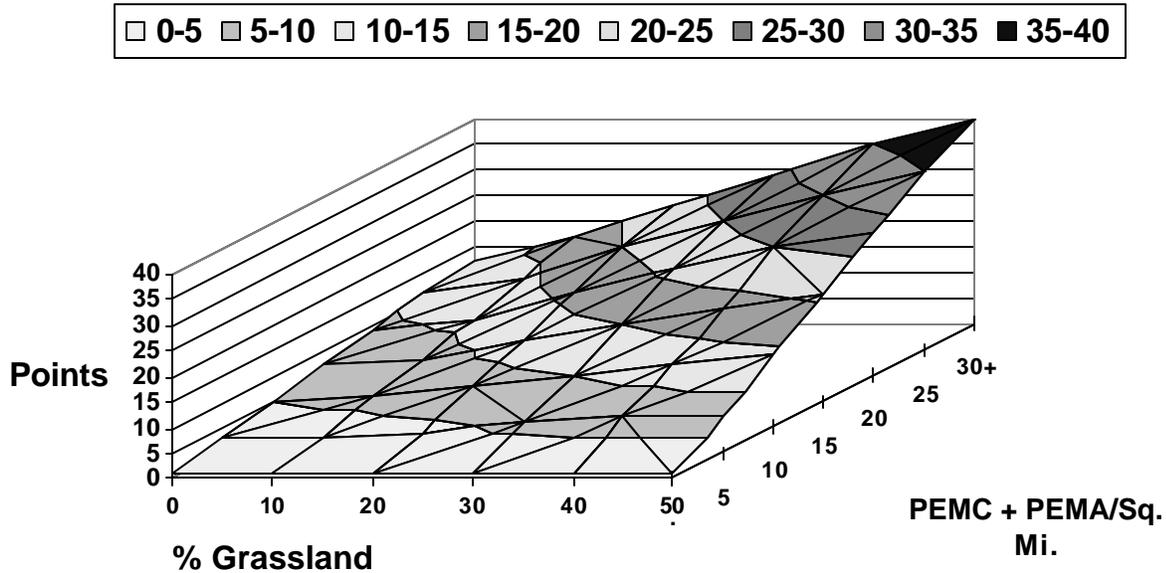
Project Leader

# SWAP FEE & HABITAT EASE ACQUISITION PRIORITY SCORECARD

Exhibit 2

**Landscape Setting Score - within 2 mile radius of center of delineation (maximum of 40)** \_\_\_\_\_

PEMA + PEMC - Include existing and permanently protected restorable temporary & seasonal wetlands.



% Grassland - Include all pasture, hay land, CRP, idle grass and other grassland.

**WPA Delineation Score ( maximum of 50)** \_\_\_\_\_

Final Size of WPA

80-160 ac. - 2 pts	160-320 ac. - 5 pts	320-640 ac - 8 pts	640+ ac - 10 pts
--------------------	---------------------	--------------------	------------------

Wetland Density (existing + restorable within eventual boundary)

0-10/sq mi - 2 pts	10-20/sq mi - 5 pts	20-30/sq mi - 8 pts	30+/sq mi.- 10 pts
--------------------	---------------------	---------------------	--------------------

Wetland to Upland Ratio (within eventual boundary)

1:1 - 2 pts	1:2 - 5 pts	1:3 - 8 pts	1:4 - 10pts
-------------	-------------	-------------	-------------

Wetland Type Ratio (number of PEMF to PEMA+PEMC basins)

≤1:10 - 1 pt	1:10 - 1:20 - 2 pts	1:20 - 1:30 - 4 pts	≥1:30 - 5 pts
--------------	---------------------	---------------------	---------------

100+ acre PEMF that naturally or with a w/c structure installed provides hemi-marsh conditions for over-water nesting species of diving ducks -	10 pts
---	--------

Soils:

Tract contains 75% or greater Mollisol Series Soils -	5 pts
---	-------

**Other Factors Score (5 pts. each maximum of 10 pts.)** \_\_\_\_\_

- Native Prairie within delineation (minimum size 40 acres)
- Presence of Endangered or Threatened Species
- Presence of breeding population of Colonial Nesting Birds
- Within Boundary of Identified GBCA or Shorebird CA
- Provides "Substantial Benefit" to local population(s) of Resident Species
- Adjacent to permanently protected waterfowl habitat (i.e. WRP, RIM, state easement)

**Total Score (maximum of 100)** \_\_\_\_\_

