



## Wetland Creation Fact Sheet

Applicable to conservation practices 658 Wetland Creation and 644 Wetland Wildlife Habitat Management

USDA Natural Resources Conservation Service - North Dakota

March 2004



*Created wetland on Wetlands Reserve Program land in southwestern North Dakota*

**What is a wetland creation?** It is a newly created wetland on a site which historically was not a natural wetland. Ideally, a successfully created wetland will mimic functions of a healthy, natural wetland.

**Where the practice applies:** This practice applies to landscapes where no natural wetlands occurred and where hydrologic conditions can be approximated by modifying drainage and/or artificially flooding the site.

**How it helps the land and wildlife:** Created wetlands help improve the health of America's watersheds. Fifty percent of North Dakota's original wetlands have been lost. The quality of our water will continue to be threatened unless we reverse the tide of wetland loss. Many wetlands remaining today continue to be degraded and wetland creations can help offset this loss.

Wetland functions include water quality improvement, erosion control, water storage, ground water recharge, fish and wildlife habitat, aesthetics, and biological productivity. Wetlands help remove excess carbon dioxide gas from the atmosphere (a growing global concern), and research on carbon sequestration shows they provide the best method of removing carbon because of the lush vegetation.

Wetlands provide beneficial habitat to many wildlife species, not only waterfowl. Wetlands and associated riparian areas are critical habitat for most resident wildlife in North Dakota during the harsh winters of the northern plains.

*All programs and services are offered on a nondiscriminatory basis.*



*Wetlands are some of the most biologically productive natural ecosystems in the world, comparable to tropical rain forests and coral reefs in their productivity and the diversity of species they support. Abundant vegetation and shallow water provide diverse habitats for fish and wildlife. Often called “nurseries of life,” wetlands provide habitat for thousands of species of both aquatic and terrestrial plants and animals.*

**To apply this practice:** All wetland creation projects require planning, implementation, monitoring, and management. Many projects require a team with expertise in ecology, hydrology, soils, engineering, and environmental planning. Details for planning and implementing this practice are listed in the Wetland Creation Design and Installation Guide and the Practice Standard, which can be found in Section IV of the NRCS Field Office Technical Guide. Planning considerations should include the following:

- Obtain all necessary local, State, and Federal permits before restoration begins.
- The goal should be to create as much shallow water area as possible to maximize wildlife benefits.
- Select native plant species and varieties best adapted to the climate and soils in the field being established to permanent vegetative cover.
- Consider establishing vegetative buffers on associated uplands to reduce the movement of sediment, and provide nesting cover. Minimum buffer width for wildlife is 100'.
- Consider the long-term use, objectives, and wildlife species to benefit in selection of the vegetative community to be established.
- Consider linking wetlands by corridors, wherever possible, to enhance wetland use and colonization by flora and fauna.
- Proper management of the created area is essential to achieve and maintain full potential of the desired habitat type. Refer to *NRCS Practice 644 - Wetland Wildlife Habitat Management*.

#### **Maintaining your created wetland:**

Document the operation and maintenance requirements in a plan to ensure that the practice is functioning as intended. Operation and maintenance items in the plan should include:

- appropriate management and monitoring of vegetative cover, both within the wetland basin and surrounding upland
- monitoring of hydrologic conditions (i.e., maintaining embankment, sediment removal)
- control of sediment delivery to the wetland
- management of weed infestations
- compatible uses (i.e., haying, grazing, burning)



Wilson's Phalarope *Phalaropus tricolor*

**Where to get help:** For assistance in planning, designing, and establishing wetland creations on your farm, contact your local NRCS or SCD office for a site-specific plan.