



Wetland Restoration Job Sheet

Applicable to Conservation Practice 657 Wetland Restoration

USDA Natural Resources Conservation Service - North Dakota

March 2004

What is a wetland restoration?

Restoration is the return of a degraded wetland or former wetland to its pre-existing, naturally functioning condition, or a condition as close to that as possible. Ideally, a successfully restored wetland will mimic the functions of a healthy natural wetland.

Where the practice applies: This practice applies to altered landscapes which once supported wetland habitat and has the potential to be restored to a naturally functioning wetland.



Restored wetland

How it helps the land and wildlife: Long regarded as wastelands, wetlands are now recognized as important features in the landscape that provide numerous benefits to people, and fish and wildlife.

Restoring our lost and degraded wetlands to their natural state is essential to ensure the health of America's watersheds and to improve wildlife populations that depend on them. Unless we reverse the tide of wetland loss (about 60,000 acres each year nationally), the quality of our waters will continue to be threatened, and a part of our natural heritage will be lost. Fifty percent of North Dakota's original wetlands have been lost. Many of the wetlands that remain today continue to be degraded.

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). Research on carbon sequestration shows they provide the best method of removing carbon because of the lush vegetation.



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 restoration projects require planning, implementation, monitoring, and management. Many projects require a team with expertise in ecology, hydrology, soils, engineering, and environmental planning. Details for implementing this practice and providing habitat for wildlife are recorded in the Wetland Restoration 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:



Small ditch plug in Pembina County

- The landowner will need to obtain all necessary local, State, and Federal permits before restoration begins.
- Determine the restoration goals and objectives of targeted natural wetland functions for the wetland type and site location.
- Select plant species and varieties best adapted to the climate and the 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 the wetlands use and colonization by flora and fauna.
- Proper management of the restored area is essential to achieve and maintain the full potential of the site for the desired habitat type. Refer to *NRCS Practice 644 - Wetland Wildlife Habitat Management*.

Maintaining your restored wetland:

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

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



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