

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

WETLAND WILDLIFE HABITAT MANAGEMENT

(Ac.)

CODE 644

DEFINITION

Retaining, developing or managing wetland habitat for wetland wildlife.

PURPOSE

To maintain, develop, or improve wetland habitat for waterfowl, shorebirds, fur-bearers, or other wetland dependent or associated flora and fauna.

CONDITIONS WHERE PRACTICE APPLIES

On or adjacent to wetlands, rivers, lakes, and other water bodies where wetland associated wildlife habitat can be managed. This practice applies to natural wetlands and/or water bodies as well as wetlands that may have been previously restored as in Conservation Practices 657, Wetland Restoration; enhanced as in 659, Wetland Enhancement, and created in 658, Wetland Creation.

CRITERIA

A habitat evaluation or appraisal, approved by the NRCS state office, shall be used to identify habitat-limiting factors in the planning area.

Application of this practice shall remove or reduce limiting factor(s) in their order of significance, as indicated by results of the habitat evaluation.

Application of this practice alone, or in combination with other supporting and facilitating practices, shall result in a conservation system that will enable the planning area to meet or exceed the minimum quality criteria for wildlife habitat established in Section III of the electronic Field Office

Technical Guide (eFOTG).

Identify wildlife species management goals and objectives. For the desired species, identify the types, amount and distribution of habitat elements, and the management actions necessary to achieve the management objectives.

Native plants will be used wherever possible.

Sites containing hazardous waste will be cleaned prior to the installation of this practice.

Invasive plant species and federal and state listed noxious and nuisance species shall be controlled on the site.

CONSIDERATIONS

Consider effects management will have on disease vectors such as mosquitoes.

Consider effects on downstream flows or aquifers that would affect other water uses or users.

Consider effects on fish and wildlife habitats that would be associated with the practice.

Establishing vegetative buffers on surrounding uplands can reduce the delivery of sediment and soluble and sediment-attached contaminants carried by runoff and/or wind.

The nutrient and pesticide tolerance of the species planned should be considered where known nutrient and pesticide contamination exists.

Consider effects on temperature of water resources to prevent undesired effects on aquatic and wildlife communities.

Soil disturbance associated with the installation of this practice may increase the potential of

invasion by unwanted species.

Adding dead snags, tree trunks, or logs can provide structure and cover for wildlife and serve as a carbon source for food chain support.

For discharge wetlands, consider underground upslope water and/or ground water source availability.

When determining which species to plant, consider microtopography and different hydrology levels.

Consider effects of management actions on compliance with state and federal hunting regulation (e.g., baiting).

Water level draw-downs may increase the potential for turtle and mussel mortality.

Consider effects of livestock grazing on runoff, infiltration, wetland vegetation, and nesting success.

Adding artificial nesting structures that are appropriate for the region can increase utilization of these areas.

Locating this practice adjacent to existing wetlands and other water bodies will provide connectivity to these cover types.

The improved habitat that results from the installation of this practice may lead to increased crop depredation by wildlife on adjacent cropland.

Consider adjacent wetlands or water bodies that contribute to wetland system complexity and diversity, decrease habitat fragmentation, and maximize use of the site by wetland-associated wildlife.

PLANS AND SPECIFICATIONS

Document how habitat needs will be provided for the desired kinds of wildlife:

- Required depth of water during the different seasons;
- Types and sizes of structures required;
- Desired native plant species and the means of establishing and maintaining them.

Specific information may be provided using appropriate job sheets or written documentation in the conservation plan.

Vegetative re-establishment will be comprised of native species that occur on the wetland type that is managed. On former wetland sites and moist soil areas, a hydrophytic plant seedbank may exist in the soil that will promote permanent native vegetation establishment where the wetland hydrology is restored.

Natural hydrology from surface runoff, flooding, or subsurface sources is the preferred design. A hydrology study can identify sources and quantity of water. Ground water or subsurface pumping is less preferable for providing hydrology due to expense and water resource conservation. Pumping can provide timely water availability for benefit of seasonal migratory bird use.

Creative borrowing of wetland basin areas in naturalistic serpentine-shaped depressions, can provide diversity of plant communities and hydroperiods. This technique attempts to emulate natural floodplain scouring that often occurs where trees and other obstructive debris, allows scouring to diversify and wetland basin areas. Various wetland wildlife are benefited from the variety of wetland hydroperiods provided by different depths. Shallow shaped side slopes of depressional areas can provide increase areas of habitat for migratory or resident shorebirds (slopes can range from 10 to 20:1).

OPERATION AND MAINTENANCE

A plan for operation and maintenance at a minimum should include monitoring and management of structural and vegetative measures.

Land management activities such as prescribed burning, planned grazing, brush management, tree harvest, haying, soil disturbance, controlled water levels, and selective pesticide use can be used to manage for specific successional plant communities and wildlife assemblages. The plan will identify the methods, timing and intensity of those activities, and the desired effects on wetland plants and wildlife.

For the management of hydrology on "Green Tree Reservoir" wetlands, vary the inundation of bottomland hardwood trees, during the dormant seasons from year to year. A manager should

flood bottomland hardwood areas on the average of no more than eight inches during the trees dormant season.

Haying and livestock grazing plans, if haying or livestock grazing is used as a needed wildlife management tool, will be developed to allow the establishment, development, and management of wetland and associated upland vegetation for the intended wetland and/or wildlife purpose.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible.

Added water depth and duration may be utilized as a method to control unwanted vegetation (e.g., reed canary grass).

REFERENCES

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- Helmets, D.L. 1992. Shorebird management manual. Western Hemisphere Shorebird Reserve Network, Manomet, MA, 58 pp.
- Payne, Neil F. 1992. Techniques for wildlife habitat management of wetlands. McGraw-Hill, Inc. 549 pp.
- Smith, Loren M. and Roger L. Pederson. 1989. Habitat management for migrating and wintering waterfowl in North America. Texas Tech University Press, 574 pp.
- Melvin III, Norman C., et al, Wetland Restoration, Enhancement, and Management, January 2003, USDA-NRCS Wetland Science Institute.