



**Natural Resources Conservation Service**  
**CONSERVATION PRACTICE STANDARD**  
**WETLAND WILDLIFE HABITAT MANAGEMENT**

**CODE 644**

**(ac)**

**DEFINITION**

Retaining, developing or managing wetland habitat for wetland wildlife.

**PURPOSE**

This practice is used to accomplish one or more of the following purposes—

- 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**

This practice applies on or adjacent to wetlands, rivers, lakes and other water bodies where wetland associated wildlife habitat can be managed.

This practice is applicable to natural wetlands and/or water bodies as well as wetlands that may have been previously restored, Virginia Conservation Practice Standard *Wetland Restoration (Code 657)*; enhanced, *Wetland Enhancement (Code 659)*; or created, *Wetland Creation (Code 658)*.

This practice does not apply to managing ponds or other areas for fish habitat.

This practice does not apply to tidal wetlands or stream systems.

**CRITERIA**

**General Criteria Applicable to All Purposes**

Use 190-V-NBM, Amend. VA1 (wildlife habitat evaluation worksheet) to identify habitat-limiting factors (food, water, cover, spatial arrangement) in the planning area.

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

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 meet or exceed the minimum quality criteria for wildlife habitat established in Section III of the FOTG.

Native plants wherever possible.

Clean sites containing hazardous waste prior to the installation of this practice.

Control invasive species, federal/state listed noxious plant species, and nuisance species (e.g., those whose presence or overpopulation jeopardize the practice) on the site. This may include the manipulation of water levels to control unwanted vegetation. Discourage the establishment and/or use of non-native plant species where possible.

## **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 the nutrient and pesticide tolerance of the species planned, where known nutrient and pesticide contamination exists.

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

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

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

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

Consider the impact that water surface draw-downs will have on concentrating aquatic species, such as turtles, into diminished pool area resulting in increased 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.

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**

Use the Wetland Development and Management Job Sheet to 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

VA NRCS staff is encouraged to work closely with the NRCS Biologist and biologists from the U.S. Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries or Ducks Unlimited in developing site specific plans and specifications.

Plans shall be reviewed by staff with the appropriate training in management of wetland wildlife habitat.

Use the practice job sheet to plan and certify this practice.

## **OPERATION AND MAINTENANCE**

A plan for operation and maintenance at a minimum should include monitoring and management of structural and vegetative measures. The Operation and Maintenance Plan is included in the Wetland Development and Management Job Sheet.

Any use of fertilizers, mechanical treatments, prescribed burning, pesticides and other chemicals shall assure that the intended purpose of the wetland shall not be compromised.

Management actions shall maintain vegetation, and control undesirable vegetation. Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) shall be implemented where available and feasible. Management of water depth and duration may be utilized to control unwanted vegetation.

Haying or grazing shall be used as appropriate to manage vegetation. Minimize disturbance to ground nesting species, especially during the primary nesting season.

The depth of accumulated sediment should be measured and the accumulations removed when the planned project objectives are jeopardized.

Timing and level setting of water control structures is required for the establishment of desired hydrologic conditions, for management of vegetation and for optimum wildlife and fish use.

## REFERENCES

Helmets, D.L. 1992. Shorebird management manual. Western Hemisphere Shorebird Reserve Network, Manomet, MA 58 pp.

NRCS Wildlife Habitat Management Institute, Shorebirds, Fish and Wildlife Habitat Management Leaflet No. 17, 2000.

NRCS Electronic Field Office Technical Guide. <http://www.nrcs.usda.gov/technical/eFOTG>

NRCS Virginia Biology Technical Note – Aquatic Systems #1. <http://www.nrcs.usda.gov/technical/eFOTG>

NRCS, General Manual – 190, Part 410, “Compliance with NEPA”, Subparts A, B, and C.

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.