

NATURAL RESOURCES CONSERVATION SERVICE  
VIRGINIA CONSERVATION PRACTICE STANDARD  
WETLAND WILDLIFE HABITAT MANAGEMENT

(Acre)

Code 644

## DEFINITION

Retaining, developing, or managing habitat for wetland wildlife.

## PURPOSE

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

## CONDITIONS WHERE PRACTICE APPLIES

This management practice may be applied on or adjacent to wetlands, shallow water areas, ponds, and other water bodies where wetland associated wildlife habitat can be managed. This practice applies to natural wetlands and water bodies as well as wetlands that may have been previously restored (see Virginia Conservation Practice Standard *Wetland Restoration (Code 657)*), enhanced (see Virginia Conservation Practice Standard *Wetland Enhancement (Code 659)*), or created (see Virginia Conservation Practice Standard *Wetland Creation (Code 658)*).

This practice does not apply to managing ponds or other areas for fish habitat. (Refer to Conservation Practice Standard *Fishpond Management (Code 399)*). It also does not apply to tidal wetlands or stream systems.

## CRITERIA

Identify species management goals and objectives. For the desired species or species group, identify the types, amount, and distribution of habitat

elements and the management actions necessary to achieve the management objectives.

The following elements shall be considered when assessing existing and planned wildlife habitat. Not all elements may apply to every habitat type.

- Food – types of food, quantity, quality, distribution, and seasonal availability
- Cover – types of cover (for nesting, brood rearing, resting, roosting, escape from predators, summer shade, winter protection, travel corridors), quantity, quality, and distribution
- Water – quantity, quality, accessibility, and seasonal availability and depth
- Interspersion and Connectedness – distance and connections to food, cover, and water

Where habitat is lacking or less than optimum, provide nesting, feeding, resting, and/or protective cover, travel corridors, and water sources as needed. Be sure to evaluate areas surrounding the wetland complex to provide buffer as well as complete core habitat needs. Note that many wetland wildlife species have specific terrestrial habitat requirements. Standards that can be used include, but are not limited to, those listed below:

1. *Shallow Water Management for Wildlife (Code 646)*
2. *Wetland Restoration (Code 657)*
3. *Wetland Creation (Code 658)*

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

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4. *Upland Wildlife Habitat Management (Code 645)*
5. *Riparian Forest Buffer (Code 391)*
6. *Riparian Herbaceous Cover (Code 390)*
7. *Filter Strip (Code 393)*
8. *Pond (Code 378)*

Wetland wildlife habitat management shall consist of managing water and/or vegetation to provide the desired wetland habitat conditions.

Periodically manipulate one or both of the following habitat components:

1. Manage water levels to provide the surface water and soil saturation needed for wildlife food, cover, and/or reproduction. Water control structures, pumping and/or natural seasonal variation shall be used to manage the depth and duration of water needed by the desired wildlife species.
2. Manage vegetation in or adjacent to the water/wetland to provide the desired plants for wildlife food and/or cover. Moist soil management, burning, light disking, mowing, selective cutting, and planting of annual food plots shall be used as appropriate.

If aquatic weed control is necessary, preference shall be given to mechanical (including water level control) rather than chemical methods, whenever feasible. Frequent monitoring of the wetland and adjacent areas should minimize the need to control invasive plant species. Noxious weeds shall be controlled as required by state law.

All areas managed for wetland wildlife habitat shall be protected, insofar as practicable, from the adverse effects of agricultural, commercial, and residential activities. Livestock and other domestic animals shall be excluded from wetlands, shallow water areas, ponds, adjacent buffers, and core habitat components.

Management and maintenance activities shall be conducted at times when there will be minimal disturbance of wildlife and their habitat.

Contamination by pesticides, herbicides, and other chemicals and toxicants shall be avoided. Refer to the Virginia Wetland Wildlife Habitat Management/Shallow Water Area for Wildlife Job

Sheet for specific design and management criteria for selected groups of wildlife species.

Native plants will be used wherever possible.

*NOTE: Specific cost-sharing programs or other funding sources may impose management criteria in addition to, or more restrictive than, those specified in this standard. Federal, state, and local regulations may significantly limit management activities in, or adjacent to, wetlands and other aquatic areas. Permits or approvals from federal, state, or local government agencies may be needed before any work is performed.*

## CONSIDERATIONS

The following items will be considered when managing an area for wetland wildlife:

- Effects of movement of dissolved substances on groundwater and on downstream surface waters.
- Surrounding landscape and its effects and contributions to overall integrity of the wetland system and to habitat needs.
- A complex of wetland sizes and depths with varying amounts and types of vegetation generally provides more habitat than a single wetland. Consider adding additional wetland sizes and types to an existing wetland system.
- Site conditions such as soils, available water sources, quality and quantity, and existing vegetation.
- The effects of hazardous materials expected or known to occur on the site on wildlife or human use related to wildlife.
- The effects of management actions on compliance with state and federal hunting regulation (e.g., baiting).
- The effects of management on non-target fish and wildlife species and Threatened and Endangered Species.
- The need for using artificial nesting structures that are designed for the region.

- The impact of elevated wildlife uses on adjacent lands (e.g., crop depredation).
- The effect of volumes and rates of runoff, infiltration, evaporation, and transpiration on the water budget.
- Effects on downstream flows or aquifers that would affect other water uses or users.
- Adjacent and nearby 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.
- The effects on movement of sediment and soluble and sediment-attached substances carried by runoff and/or wind.

## PLANS AND SPECIFICATIONS

Plans and specifications for this practice will be prepared in accordance with the previously listed criteria. Plans and specifications shall contain sufficient detail concerning management of water and/or vegetation to ensure successful implementation of this practice. Information shall be recorded using approved job sheets, written documentation in the conservation plan, or other documentation.

At a minimum, develop plans and specifications based on the habitat requirements for selected wetland wildlife species, or groups of species, as described in the Virginia Wetland Wildlife Habitat Management/Shallow Water Area for Wildlife Job Sheet.

NRCS staff is encouraged to work closely with the NRCS Biologist and/or 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. Requirements for the operation and maintenance of the practice shall be incorporated into site specifications.

## OPERATION AND MAINTENANCE

An operation and maintenance plan shall be developed that is consistent with the purposes of this practice, its intended life, and the criteria for its design.

Actions will be carried out to ensure this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice (operation) and repair and upkeep of the practice (maintenance).

This practice will be inspected periodically and restored as needed, to maintain the stated purpose. Additional operation and maintenance requirements will be developed on a site-specific basis to assure performance of the practice as intended.

The following activities will be addressed in the plan:

1. Timing and level setting of water control structures (if applicable) required for establishment of desired hydrologic conditions or for management of vegetation
2. Inspection schedule of any embankments and structures for damage assessment
3. Management needed to maintain vegetation, including control of unwanted vegetation

## REFERENCES

1. Cross, D. H., Waterfowl Management Handbook, Fish and Wildlife Leaflet 13, U.S. Fish and Wildlife Service, 1988.
2. Frederickson, L. H., and T. S. Taylor, Management of Seasonally Flooded Impoundments for Wildlife, Resource Publication 148, U.S. Fish and Wildlife Service.
3. Helmers, D. L., Shorebird Management Manual, Western Hemisphere Shorebird Reserve Network, 1992.
4. NRCS Wildlife Habitat Management Institute, Shorebirds, Fish and Wildlife Habitat Management Leaflet No. 17, 2000.
5. Wings of Americas/The Nature Conservancy, North American Shorebirds, Wings Information Resources/Species Information and Management Abstracts.

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6. NRCS, Engineering Field Handbook, Chapter 6, "Structures" and Chapter 13, "Wetland Restoration, Enhancement, or Creation".
7. NRCS, VA, Field Office Technical Guide (FOTG), Section IV.
8. NRCS, General Manual--190, Part 410, "Compliance with NEPA", Subparts A, B, and C, VA Amendment 4 (Includes Form VA-EE-1).

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**Approved Practice Narratives**

(Acre)

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644 D1 Wetland Wildlife Habitat Management: An existing wetland will be managed to improve habitat for waterfowl and other wildlife by use of such measures as timed water level manipulations. Specifications, as well as an operation and maintenance plan, will be provided.

644 D2 Wetland Wildlife Habitat Management: A wetland will be improved for use by wetland wildlife. Specifications, as well as an operation and maintenance plan will be provided.

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