

**NATURAL RESOURCE CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**WILDLIFE WATERING FACILITY**

(No.)  
CODE 648

**DEFINITION**

Develop, improve, or modify watering places and systems for wildlife.

(356), and/or Structure for Water Control (587).

**PURPOSE**

- To provide adequate drinking water, during critical periods, for wildlife.
- To create or expand suitable habitat for wildlife.
- To improve water quality and accessibility for wildlife.

- Design shall be sized to accommodate the expected and/or anticipated consumptive rates of target and non-target species.

Site investigation. Site suitability and design shall be based on adequate investigations and surveys as described in the National Engineering Field Handbook for Conservation Practices, Chapter 11, Ponds and Reservoirs. Watering facilities shall be constructed in soils that are capable of maintaining a supply of water during normal rainfall years.

**CONDITIONS WHERE PRACTICE APPLIES**

In areas where new, additional, or improved watering places are needed to increase the range, distribution, improve the habitat of, or attract wildlife by meeting their water requirements.

Side slopes. Earthen watering facilities shall be constructed with stable side slopes. For excavated facilities, the side slopes shall not be steeper than one and one half (1 & 1/2) horizontal to one (1) vertical. Access will be provided so that one-half (1/2) of the total perimeter slopes are no steeper than three (3) horizontal to one (1) vertical.

Where lack of adequate water has been identified as the limiting habitat component.

Size. Wildlife watering facilities shall be as small as practical but not less the following dimensions. The bottom width shall be at least ten feet wide with a minimum length at the design surface of 50 feet. The facility shall be designed such that in a normal year, the water depth shall not be less than three feet.

**General Criteria Applicable to All Purposes**

- Because each facility is unique to species, habitat, topography, and climate; watering facilities must be planned and installed according to a plan and adapted to the specific site. Wildlife watering facilities shall be constructed where perennial water is not available within one-half (1/2) mile of the area under consideration. Problems associated with congregation (i.e., parasite and/or disease transmission, predation, etc.) can be largely overcome by randomly dispersing facilities throughout the habitat.
- Methods used will be designed to protect the soil resource from erosion. Wildlife watering facilities shall be designed in conformance with NRCS conservation practice standards; Pond (378), Spring Development (574), Dike

Inlet Protection. If surface water enters the pond in a natural or excavated channel, the side slope shall be protected against erosion.

Excavated material. The material excavated from the facility shall be placed so that its weight will not endanger the stability of the side slopes and will not erode back into the facility. It should be disposed of in one of the following ways:

1. Uniformly spread to a height that does not exceed three feet, with the top graded to a continuous slope away

- from the facility.
2. Uniformly placed or shaped reasonably well, with side slopes assuming a natural angle. The excavated material will be placed at a distance equal to the depth of the pond but not less than 15 feet from the edge of the facility.
  3. Shaped to a designed from that blends visually with the landscape.
  4. Used for low embankment and leveling.
  5. Utilized in the construction of small diversions to collect surface runoff in order to provide greater recharge for the facility.
  6. Removed from the site.
- Facilities shall be protected from livestock damage with the use of fencing when appropriate. Fences should be constructed a minimum of 50 feet from the waterline utilizing the NRCS conservation practice standard for Fencing (382).
  - The facility must provide permanent, accessible, dependable, suitable quality water for the critical period.
  - The distribution and spacing of facilities shall be based on topography, required travel distance to water and the home range, territory size, and distribution of the target species. For white-tailed deer and Eastern wild turkey, perennial surface water should ideally be located one-half (1/2) mile apart within all portions of the habitat. The minimum distance for doves and other bird species may slightly exceed this distance and still meet ideal habitat requirements.
  - Ramps shall be installed in open water troughs and tanks when necessary for access and escape. For mourning doves and some other bird species, the immediate edge surrounding the water sources should be relatively clear of tall, dense vegetation to encourage use.
  - Design shall include appropriate safety features to minimize the hazards of the facility.

- Management measures shall be provided to control invasive species and noxious weeds.
- Facilities shall be designed and installed in compliance with all State and federal laws including water rights and permits if needed.
- Disturbed areas shall be vegetated according to a revegetation plan using native plant materials. These sites should be vegetated in accordance with NRCS conservation practice standard; Critical Area Planting (342).

## **CONSIDERATIONS**

### **General Considerations**

- Consider the effects on the target species and the ecosystem by concentrated grazing, predation, hunting, etc.
- Consider the accessibility of the site for installation and maintenance.
- Landowners shall obtain local, state, and federal permits as necessary.
- Consider the effects upon natural springs and associated unique flora and fauna.
- Consider the aesthetic of the installation.

### **Water Quantity Considerations**

- Consider the effects on downstream flows or groundwater that could affect other water users or associated aquatic sites.

### **Water Quality Considerations**

- Consider the effects on wetlands or other aquatic sites.
- Consider the existence and maintenance of suitable water quality for the target species.

## **PLANS AND SPECIFICATIONS**

Plans and specifications shall be prepared in accordance with the criteria of this standard and shall describe the requirements for applying the practice to achieve its intended use.

## OPERATION AND MAINTENANCE

Facilities shall be checked periodically to insure proper function. Repair and maintain as needed.

Inspect the area adjacent to the facility to make sure the area is well protected with desirable vegetation and not subject to erosion or deposition. Correct as needed.

Facilities not designed to withstand or operate during freezing weather shall be winterized prior to winter conditions.

Periodically monitor water quality to insure acceptable water quality. Maintain as needed.

## REFERENCES

National Engineering Field Handbook for Conservation Practices, Chapter 11, Ponds and Reservoirs.

NRCS Conservation Practice Standards

Pond, Code 378

Spring Development, Code 574

Dike, Code 356

Structure for Water Control, Code 587

Upland Wildlife Habitat Management, Code 645

Critical Area Planting, Code 342

Fencing, Code 382