USDA NRCS
Natural Resources Conservation Service

Shallow Water Development and Management

The inundation of lands to provide habitat for fish and/or wildlife.

Lifespan of Practice: 5 years

Tennessee Implementation Requirements No. TN-646

PLANS AND SPECIFICATIONS

The Shallow Water Development and Management practice provides habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians and other species that require shallow water for at least a part of their life cycle.

Apply this practice on lands where water can be impounded or regulated by diking, excavating, ditching, and/or flooding. Optimum sites typically occur on 2 percent or lesser slopes where the majority of the area develops acceptable water depths within reasonable economic constraints. Soils should allow for maintenance of proper water levels. Shallow water impoundments require an adequate water supply and a water control structure for removing water when necessary.

Engineering practices must follow appropriate NRCS conservation practice standards, specifications, and designs and must be designed and certified by someone with appropriate engineering job approval authority.

Landowner shall obtain all local, state, and federal permits necessary.

OPERATION AND MAINTENANCE RESPONSIBILITIES

Operation and maintenance shall include monitoring and management of structural components and habitat quality provided.

Actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance).

Waterfowl and shorebird feeding and resting areas that can be hydrologically controlled or have natural dry periods should be burned, disked or surface-disturbed every 3-5 years to set back succession and control undesirable plant growth. Such burning, disking, or surface disturbance shall be scheduled to encourage desirable habitat plants. Refer to NRCS conservation practice Prescribed Burning (338) and Early Successional Habitat Development/Management (647).

Planned maintenance, which may include the control of undesirable vegetation through disturbance practices such as disking, shredding, approved herbicide application, and/or prescribed burning, should be provided in terms of methods, frequency, timing, and duration of treatments. Refer to the practice standard for further information regarding O & M.

REFERENCES

NRCS TN Conservation Practice Standards:

- Code (315)-Herbaceous Weed Control
- Code (338)-Prescribed Burning
- Code (342)-Critical Area Planting
- Code (356)-Dike
- Code (386)-Field Border
- Code (393)-Filter Strip
- Code (533)-Pumping Plant for Water Control
- Code (587)-Structure for Water Control
- Code (647)-Early Successional Habitat Development/Management

Shallow Water Development and Management (646)

Land User: _____ **County:** _____ **Date:** _____

Farm No.: _____ **Tract No.:** _____ **Development No.:** _____

Assisted By: _____**Acres in Shallow Water Management:**_____

REQUIRED STRUCTURAL COMPONENTS ***(****See engineering design for details.****)***

Width and Height of Berm (if applicable):_____

Source of water (Check if required): ☐ Diversion ☐ Pond/reservoir ☐ Well with pump ☐ Dikes

☐ Water Control Structure ☐ Other source to be developed ☐ Surface water (flooding or runoff)

MANAGEMENT RECOMMENDATIONS

Target wildlife species (required):_____

☐ Slow drawdown starting on or about:

Year 1:_____ Year 2:_____ Year 3:_____ Year 4:_____ Year 5:_____

☐ Leave drained over summer for moist soil plants to grow.

☐ Allow shallow water area to gradually refill for migration, start refilling

Year 1:_____ Year 2:_____ Year 3:_____ Year 4:_____ Year 5:_____

☐ Maintain shallow water over winter. Vary water depth 6-8 inches from year to year.

MAINTENANCE PLAN

Dewater interval:_____years Berm maintenance interval**:**_____years

Weed control:

Biological:_____ ☐ Prescribed Burning. See Prescribed Burn Plan.

Disking:_____ ☐ Chemical. See Weed Control Plan.

Additional Notes:

_____

_____

_____

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☐ Plan maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment (if applicable), and areas that will not be disturbed attached.

☐ Other facilitating conservation practice standards and/or jobsheets attached, if applicable.

Landowner Signature:_____ Date:_____

Conservation Planner:_____ Date:_____

