



## 646 – SHALLOW WATER AREA DEVELOPMENT AND MANAGEMENT IMPLEMENTATION REQUIREMENTS

<b>Name:</b>	<b>Farm No./Tract No.:</b>
<b>Address:</b>	<b>Field Number(s):</b>
<b>Assisted by:</b>	<b>Financial Assistance Program:</b>
<b>Date:</b>	<b>Contract Number:</b>

**Practice Purpose:** To provide 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.

The area will be managed to provide habitat for the following wildlife: (check all that apply)

- Dabbling Ducks   
  Geese   
  Shorebirds, Wading Birds   
  Songbirds   
  Fur-bearers  
 Frogs, Turtles   
 Other \_\_\_\_\_

Permit required?  Yes  No

### Associated Practices

This practice may be applied alone or in combination with other supporting Delaware conservation practice standards to provide the following habitat elements: (check all that apply)

- Food for the desired wildlife species  
 Cover for nesting, feeding, resting, protection, and/or travel corridors  
 Water for reproducing, feeding, resting, and protection

The following practices are needed, and have been or will be implemented: (check all that apply)

- Conservation Cover (327)  
 Dike (356)  
 Pond (378)  
 Riparian Herbaceous Cover (390)  
 Riparian Forest Buffer (391)  
 Structure for Water Control (587)  
 Wetland Restoration (657)  
 Other practices (specify):  
 No associated practices are needed.

### Practice Specifications

#### Shallow Water Area Development and Management Layout

- Practice location(s) is/are shown on the conservation plan map.

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<b>Management Specifications</b>
Management requirements are provided as follows: <input type="checkbox"/> Delaware NRCS Fact Sheet - Shallow Water Areas (attached) <input type="checkbox"/> Other fact sheet(s) or wildlife habitat management plan (attached) <input type="checkbox"/> Other specifications (described below)
<b>Water Level Management</b>
<b>Natural</b> – Allow natural precipitation and drying cycles to control the water level. <input type="checkbox"/> Will be used on _____ acres <input type="checkbox"/> Optional on _____ acres <input type="checkbox"/> Not used
<b>Active</b> – Utilize water control structures and/or water pumps to control the water level. (check all that apply) <input type="checkbox"/> Will be used on _____ acres <input type="checkbox"/> Optional on _____ acres <input type="checkbox"/> Not allowed/used  <input type="checkbox"/> Drawdown gradually starting: _____ over: _____ weeks  <input type="checkbox"/> Re-flood gradually starting: _____ over: _____ weeks, to manage food access at water depth: _____ inches  <input type="checkbox"/> Return control structure to normal (full) position no later than: _____ <ul style="list-style-type: none"><li>• For drawdown with box inlets, remove a board and wait a few days before removing the next one. For pipe inlets, rotate the pipe downward a few inches at a time. Reverse the procedure for gradual re-flooding.</li><li>• The earlier the water control structure is set to the normal (full) position, the greater the potential to capture runoff and prevent nutrients and sediments from leaving the site.</li><li>• Leave the site flooded through the winter.</li></ul>
<b>Vegetation Management</b>
<b>Natural</b> – Allow natural succession to occur; no active management or maintenance. <input type="checkbox"/> Will be used on _____ acres <input type="checkbox"/> Optional on _____ acres <input type="checkbox"/> Not used
<b>Perennial Herbaceous</b> – Maintain perennial grasses, sedges, rushes, and other herbaceous plants to provide food and cover. <input type="checkbox"/> Will be used on _____ acres <input type="checkbox"/> Optional on _____ acres <input type="checkbox"/> Not used <ul style="list-style-type: none"><li>• If needed, spot mow or burn occasionally to reduce encroachment of trees and shrubs. Flash grazing by livestock may also be used. To protect wildlife, do not mow or burn between April 15 and August 15.</li></ul>
<b>Trees/Shrubs</b> – Maintain a predominance of trees, shrubs, and other woody plants to provide food and cover. <input type="checkbox"/> Will be used on _____ acres <input type="checkbox"/> Optional on _____ acres <input type="checkbox"/> Not used <ul style="list-style-type: none"><li>• If needed, less desirable species (e.g., sweetgum, red maple) may be selectively removed or girdled.</li></ul>

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**Vegetation Management (continued)**

**Moist Soil Management** – Disturbance to encourage naturally-occurring annual moist-soil plants.

Will be used on \_\_\_\_\_ acres     Optional on \_\_\_\_\_ acres     Not allowed/used

- Every three years, lightly disk the pool area at the start of the growing season (after drawdown).
- Do not fertilize the moist-soil area. Natural moist-soil plants do not need additional fertilizer.

**Annual Crops** – Plant food plots or leave areas of unharvested grain crops to provide food for wildlife.

Will be used on \_\_\_\_\_ acres     Optional on \_\_\_\_\_ acres     Not allowed/used

Plant the following annual crops for waterfowl: (specify site prep, planting method, species or mix, and lbs/ac)

- Fertilize only if needed, based on a soil test.
- To the extent possible, minimize the use of pesticides on the site. Most annuals weeds (except for noxious weeds or invasive plants) are acceptable and are readily utilized as food by waterfowl.
- Utilize water level management to control waterfowl access to seed. Mowing or knocking-down of mature seed-bearing plants in areas where waterfowl will be hunted is considered baiting and is illegal under federal and state law.

**Crop Residue Management** – Flood residue from harvested crops for waterfowl use.

Will be used on \_\_\_\_\_ acres     Optional on \_\_\_\_\_ acres     Not used

- Plant and harvest conventional row crops, as usual.
- To the extent possible, minimize the use of pesticides on the site.

**Additional Recommendations/Notes**

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<b>Operation and Maintenance</b> (check all that apply)		
<input type="checkbox"/> Inspect the management area at least annually to determine whether the desired vegetation is present in suitable quantity, quality, and distribution to meet the objectives of the project.		
<input type="checkbox"/> Inspect all embankments and structures at least once per year and after every major storm. Promptly remove trash and obstructions, fix leaks, and make other repairs as needed.		
<input type="checkbox"/> On embankments to be maintained in herbaceous cover, spot mow or burn infrequently (not more than once every 2 to 3 years) if needed to reduce encroachment of trees and shrubs. Flash grazing by livestock may also be used. To protect wildlife, do not mow or burn between April 15 and August 15.		
<input type="checkbox"/> Control noxious weeds and other invasive plants by spot treatment, using mechanical methods, or approved herbicides. Control of noxious weeds is required by state law. Noxious weed control can be conducted during the primary nesting season (April 15 to August 15), but may require prior approval if the site is enrolled in a financial assistance program. Contact your local weed control specialist concerning recommendations for spot-treating the weed problem.		
<input type="checkbox"/> Deter colonization of undesirable plants (e.g., cocklebur, phragmites, cattails, red maple, sweetgum) by conducting regular site inspections and spot treatment, using mechanical methods or approved herbicides. If undesirable plants become established, disk 2 or 3 times by mid-summer, then immediately flood, if possible, until the following spring.		
<input type="checkbox"/> Nuisance animals such as beavers and muskrats may be removed in accordance with state game regulations. Geese can be discouraged by minimizing areas of open water and promoting the growth of tall vegetation in the shallow water area and adjacent buffers.		
<input type="checkbox"/> Avoid noisy activities, such as mowing or use of recreational vehicles, in or near the shallow water area when waterfowl are present. To the extent possible, do not allow livestock and other domestic animals to have uncontrolled access to the site.		
<input type="checkbox"/> Avoid the use of pesticides on the site to prevent harm to wildlife that use the shallow water area.		
<input type="checkbox"/> Acceptable uses (e.g., flash grazing, cropping, timber production, hunting, nature preserve, etc.) and time of year or frequency of use restrictions, if any (list):		
<input type="checkbox"/> Other requirements, or follow-up needed (describe):		
<b>Plan Approval</b>		
Certified Planner Signature	Title	Date
<b>Plan Received and Accepted</b>		
Client Signature	Date	
<b>Certification of Practice Completion</b>		
<b>This Shallow Water Area Practice has been implemented and meets the requirements of Delaware NRCS Conservation Practice Standard 646. Any changes to the planned practice are noted in Practice Specifications.</b>		
Certified Planner Signature	Title	Date