

# Shallow Water Development and Management

## Virginia Conservation Practice Job Sheet

646



### Definition

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

### Criteria

Soils must have low permeability or seasonal high water table to inhibit subsurface drainage and allow for maintenance of proper water levels.

Verify water supply for flooding the area during periods of planned inundation. Potential water supplies include floodwaters, upland runoff, groundwater or a pumped source.

Maintain water levels between 1 to 18 inches in depth over the majority of the area during periods of planned inundation.

Dikes used to impound 18" of water or less must be the Virginia Conservation Practice *Dike* (Code 356) and have 6" of freeboard. If the water impounded against the dike is greater than 18" in depth, the embankment must meet the Virginia Conservation Practice *Dike* (Code 356).

Plan and develop a point of access to facilitate management activity where active habitat management is planned (such as disking or water level management).

Plan early and ongoing control of invasive species, federal/state listed noxious plant species, and nuisance species.

### Criteria for Waterfowl Habitat

Provide gradual flooding of areas containing food plants to an average depth of 6 to 10 inches for waterfowl feeding and resting habitat.

### Criteria for Shorebird Habitat

Provide exposed mudflats and areas with 1 to 4 inches of water during seasonal periods of shorebird use.

### Criteria for Amphibian Habitat

Plan inundation to last throughout the local breeding period of at least one endemic amphibian species.

Establish surrounding upland habitat of sufficient quality and quantity to support the complete life-cycle requirements of at least one endemic amphibian species.

Design structures to prevent fish access to areas planned for amphibian breeding habitat.

**Note: This summary does not address all requirements and considerations in the VA Shallow Water Development and Mgt Conservation Practice Standard (VA-646). Consult the Conservation Practice Standard for further details.**

# VA Shallow Water Development and Mgt - Practice Certification

646

Landowner:	Farm #:
Field(s):	Tract #:
Acres:	Date:

<b>Purpose :</b>	
<input type="checkbox"/> Wildlife Habitat	Species:

<b>Shallow water development and mgt Plan Summary (project goals, objectives, fish and wildlife habitat criteria to be met):</b>

<b>Wetland Classification (original wetland may not be present):</b>			
Cowardin Classification Original Wetland	Acres	After Development	Acres
HGM Classification Original Wetland	Acres	After Development	Acres
The wetland will provide the following functions/values:			
<input type="checkbox"/> Recharge of Groundwater	<input type="checkbox"/> Nutrient Management		
<input type="checkbox"/> Discharge of Groundwater	<input type="checkbox"/> Habitat for Fish		
<input type="checkbox"/> Flood Control	<input type="checkbox"/> Habitat for Wildlife		
<input type="checkbox"/> Water Quality Control	<input type="checkbox"/> Biomass Production and Export		
<input type="checkbox"/> Stabilization of Sediment			

<b>Soil Description of Shallow Water Area:</b>			
Hydric Soils Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Dominant Hydric Soils		High Water Table	
Series	Drainage Class	Depth	Months
Problem Soils		High Water Table	
Series	Drainage Class	Depth	Months
Will the site support the shallow water development?			

Hydrology Condition of Shallow Water Area:		
	Existing (% of area)	Planned (% of area)
Ponded		
Saturated		
<6" depth		
6-24" depth		
>24" depth		
Area floods _____ times a year; during the month(s) of _____.		
Stays inundated and/or saturated (circle one or more) for approximately _____ days.		
Will the wetland project have off-site impacts? (If yes, a written permit or consent letter is required.)		

Existing or Planned Water Source:				
<input type="checkbox"/> Flooding	<input type="checkbox"/> Precipitation	<input type="checkbox"/> Runoff	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Other
Engineering Practice to Achieve Water Source (if needed):				Units:
Dike (Code 356)				
Water Control Structure (Code 587)				
Ditch Plug (Code 657)				
Crush Tile (Code 657)				
Seasonal Pools (Code 657)				
Pumping Plant (Code 533)				
Diversion (Code 362)				
Well (Code 642)				
Pond (Code 378)				

Water Management:
<input type="checkbox"/> Slow drawdown starting on or around: _____
<input type="checkbox"/> Leave drained over summer for moist soil plants to grow.
<input type="checkbox"/> Allow shallow water area to gradually refill for migration, start refilling on: _____
<input type="checkbox"/> Maintain shallow water over winter. Vary water depth from year to year.
<input type="checkbox"/> Disk at the start of the growing season as necessary to stimulate annuals.
<input type="checkbox"/> No active management (natural water regime).

Vegetative Plantings:			
Riparian Herbaceous Cover (Code 390)	Acres:	Year:	
Riparian Forest Buffer (Code 391)	Acres:	Year:	
Critical Area Planting (Code 342)	Acres:	Year:	
Other:	Acres:	Year:	
Species:	Rate:	Species:	Rate:

Vegetation Management:		
Early Successional Habitat Development (Code 647)	Acres:	Year:

Prescribed Burning (Code 338)	Acres:	Year:
Herbaceous Weed Control (315)	Acres:	Year:
Brush Management (314)	Acres:	Year:
Other:	Acres:	Year:
	Acres:	Year:

<b>Fencing</b> (if needed: Code 382)	<b>Type:</b> _____	<b>Feet:</b> _____
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<b>Operation and Maintenance</b>
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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 the growth of undesirable plants.

Any use of fertilizers, mechanical treatments, prescribed burning, pesticides and other chemicals shall not compromise the capability of the practice to provide habitat for the target species.

Include the following actions in the O&M Plan:

- Timing and setting of water control structures for establishment of planned water levels and management of vegetation.
- Management requirements to maintain vegetation, including control of unwanted plants.
- Periodic cleanout of sediment may be needed, especially for excavated areas.

**Site Specific O&M Requirements (include any additional actions necessary that have not been addressed):**


<b>Planner Certification</b>
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The Shallow Water Development and Management practice planned in this job sheet meets the requirements of Virginia NRCS Conservation Practice Standard 646.

\_\_\_\_\_  
Signature Title Date

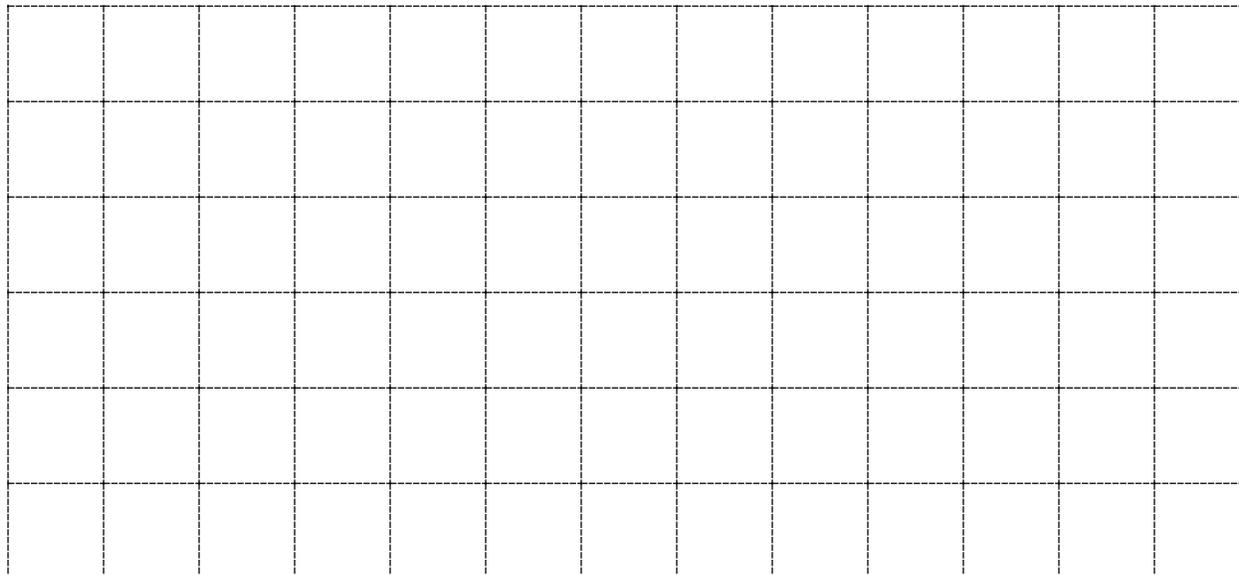
<b>Certification of Practice Completion</b>
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The Shallow Water Development and Management practice planned in this job sheet has been completed and maintained according to Virginia NRCS specifications (indicate in Practice Specifications any changes to the planned activities and acreage.)

\_\_\_\_\_  
Signature Title Date

If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Scale 1"= \_\_\_\_\_ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")



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