

Wetland Creation

Virginia Conservation Practice Job Sheet

658



Definition

The creation of a wetland on a site location that was historically non-wetland.

Criteria

The purpose, goals, and objectives of the creation shall be clearly defined in the creation plan, including soils, hydrology, vegetation and fish and wildlife habitat criteria that are to be met and are appropriate for the site and the project objectives. The creation plan is part of the Job Sheet for this practice.

The soils, hydrology and vegetative conditions existing on the site, the adjacent landscape, and the contributing watershed shall be documented in the planning process.

The nutrient and pesticide tolerance of the plant and animal species likely to occur shall be considered where known nutrient and pesticide contamination exists. Sites suspected of containing hazardous material shall be tested to identify appropriate remedial measures. If remedial measures are not possible or practicable, the practice shall not be planned.

Water rights, if applicable, shall be assured prior to creation.

Upon completion, the site shall meet the appropriate wetland criteria and provide wetland functions as defined in the project's objectives.

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Invasive species, federal/state listed noxious plant species, and nuisance species (e.g., those whose presence or overpopulation jeopardize the practice) shall be controlled on the site. The establishment and/or use of non-native plant species shall be discouraged.

Do not create wetlands on sites with T&E species unless it is demonstrated that the impact will benefit the species at risk. Consultation with the appropriate regulatory agency or agencies is required.

If the wetland is adjacent to a cold water stream, obtain input from Virginia Department of Game and Inland Fisheries Biologist to ensure that there is no effect on water temperature.

Criteria for Soils

Created wetlands shall be located in landscape positions and soil types capable of supporting the planned wetland functions.

Criteria for Hydrology

The Virginia Conservation Practice Standards *Dike (Code 356)*, *Pumping Plant (Code 533)*, and *Structure for Water Control (Code 587)* will be used as appropriate. Refer to the National Engineering Handbook, Part 650, Engineering Field Handbook, Chapter 6, "Structures," for additional design information.

Dikes used to impound water must use the Virginia Conservation Practice Standard *Dike (Code 356)*. If there is 18 inches or less of water impounded against the dike, the minimum freeboard requirement is 6 inches.

The hydroperiod, hydrodynamics, and dominant water source shall meet the project objectives. The creation plan shall document the adequacy of available water sources based on groundwater investigation, stream gage data, water budgeting, or other appropriate means.

The work associated with the wetland shall not adversely affect adjacent properties or other

water users unless agreed to by signed written letter, easement or permit.

Timing and level setting of water control structures required for the establishment and maintenance of vegetation, soil, and wildlife and fish habitat functions shall be determined.

Other structural practices, macrotopography and/or microtopography may be used to meet the planned objectives.

Macrotopographic features, including ditch plugs installed in lieu of re-filling surface drainage ditches, shall meet the requirements of other practice standards to which they may apply due to purpose, size, water storage capacity, hazard class, or other parameters. If no other practice standard applies, they shall meet the requirements for Virginia Conservation Practice *Dike (Code 356)* unless there is no potential for damage to the feature or other areas on or off site due to erosion, breaching, or overtopping.

Water control structures that may impede the movement of target aquatic species or species of concern shall meet the criteria in Virginia Conservation Practice *Fish Passage (Code 396)*.

Criteria for Vegetation

Hydrophytic vegetation planned to meet the selected wetland functions shall be compatible with the planned soil and hydrologic conditions. Preference shall be given to native wetland plants with localized genetic material (200 mile radius).

Where natural colonization of acceptable species can realistically be expected to occur within five

years, sites may be left to revegetate naturally. If not, the appropriate species will be established by seeding or planting.

Adequate substrate material and site preparation necessary for proper establishment of the selected plant species shall be included in the plan.

To achieve habitat diversity and minimize the adverse effects of climate, disease, and other limiting factors, several species adapted to the site will be established:

- On sites that are predominantly herbaceous vegetation, establish a minimum of 4 species on projects restored to one ecological site (i.e., wet meadow, shallow marsh, or slough eco-sites, etc.). For projects where there are two or more ecological sites, establish at least three native species on each site.
- On sites that are predominantly forest or woodland community types, vegetation establishment will include a minimum of 6 species.

Use the Virginia Plant Establishment Guide to determine vegetative species, seeding rates and dates.

This summary does not address all requirements and considerations in the VA Wetland Creation Conservation Practice Standard (VA-658). Consult the Conservation Practice Standard for further details.

<i>Landowner:</i>	<i>Farm #:</i>
<i>Field(s):</i>	<i>Tract #:</i>
<i>Acres:</i>	<i>Date:</i>

Purpose:

- To establish wetland hydrology, vegetation and wildlife habitat functions on soils capable of supporting those functions

Creation Plan Summary (project goals, objectives, fish and wildlife habitat criteria to be met...):

Wetland Classification:

Cowardin Classification After Creation	Acres	HGM Class After Creation	Acres
Once created, 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			

Soil Description of Area:

Hydic Soils Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Dominant Hydic 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 Area:		
	Existing (% of area)	Planned (% of area)
Ponded		
Saturated		
<6" depth		
6-24" depth		
>24" depth		
Will the wetland project have off-site impacts? (If yes, a written permit or consent letter is required)		

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:	
<i>Species:</i>	<i>Rate:</i>	<i>Species:</i>	<i>Rate:</i>

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:

Fencing (if needed: Code 382)	Type: _____	Feet: _____
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Operation and Maintenance Requirements are located in a separate document (658-VA-O&M Plan) and must be included with the job sheet in the case file.

Planner Certification		
The Wetland Creation practice planned in this job sheet fulfills minimum requirements of Virginia NRCS Conservation Practice Standard 658.		
_____	_____	_____
Signature	Title	Date
Certification of Practice Completion		
The Wetland Creation 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

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