

Constructed Wetland Permitting Considerations



Purpose of a Constructed Wetland

A constructed wetland is an engineered ecosystem that mimics natural processes, using soil, vegetation and microbes to treat wastewater, manage stormwater, ease erosion and flooding while also creating habitat and enhancing biodiversity.



Scoping Meeting

Created wetland projects vary widely based on site conditions and design. Early coordination with resource agencies helps identify potential concerns and permitting constraints. Conduct the scoping meeting during the planning phase, once conceptual plans are developed.

PURPOSE OF A SCOPING MEETING:

- Present the project concept to reviewing agencies
- Receive early technical feedback and recommendations
- Identify potential permitting challenges
- Refine project design prior to CAMA permit application submission



How to Request

Contact the Environmental Assistance Coordinator in the appropriate Department of Environmental Quality (DEQ) regional office (Washington or Wilmington):

<https://www.deq.nc.gov/about/divisions/environmental-assistance-and-customer-service/environmental-assistance-coordinators>

Describe Current Site Conditions

Clearly depict existing conditions in application materials.

Site and Property Information

- Parcel boundaries for the project and adjacent properties (include ownership)
- Riparian setbacks for each property boundary

Include Existing Hydrology and Jurisdictional Features

- Delineation of normal high water line (NHW), mean high water line (MHW) or normal water level (NWL)
- Waterbody classifications (e.g. outstanding resource waters (ORW), primary nursery areas (PNA))
- Boundaries of CAMA areas of environmental concern (AECs)
- Applicable buffer requirements (e.g., 30-ft coastal shoreline buffer, 50-ft Tar-Pamlico/Neuse buffers)
- Presence of any habitats such as wetlands (including Section 404), coastal wetlands, submerged aquatic vegetation (SAV) or shellfish habitat
 - Mapped extent (footprint) of each habitat type
 - Inventory of existing wetland and SAV plant species



Develop a Comprehensive Proposed Design

Each constructed wetland will be different, but all applications should address the following core components.

Grading and Site Preparation

- Depict all permanent and temporary impacts (e.g., access routes, wetland mats)
- Identify if the site will be filled or excavated, and identify disposal location for excavated material (if applicable)
- Provide cross-sections (existing vs. proposed grades)
- Describe best management practices (BMPs) for erosion control and stabilization

Changes to Jurisdictional Features

If altered show both existing and proposed:

- NHW/MHW/NWL lines
- CAMA AEC boundaries
- Buffer limits

Planting Plan

- Species list or planting table
- Planting methods:
 - Seeds vs. mature plants
 - Hand vs. mechanized installation
 - Plant spacing

Monitoring and Adaptive Management

- Monitoring duration
- Success criteria and performance standards
- Methods for evaluation
- Adaptive management actions if criteria are not met

Additional Resources

- Field Representative Map Tool:
<https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1a5881ec85ca40679988982e02665b51>
- DCM Permitting Information:
<https://www.deq.nc.gov/about/divisions/coastal-management/coastal-management-permits/types-permits>
- CAMA Major Permit Application Checklist:
<https://ncdeq.dynamics365portals.us/knowledgebase/article/KA-01017/en-us>



**Disclaimer: This document is intended as a general reference to support early planning for constructed wetland projects. It does not guarantee permit approval or substitute for formal regulatory review. Applicants should coordinate with DCM and their assigned field representative for project-specific guidance.*