



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

CRC-18-26

MEMORANDUM

TO: Coastal Resources Commission
FROM: Daniel Govoni
SUBJECT: Fiscal Analysis and Amendments to 15A NCAC .2700 GP for the Construction of Marsh Sills

DCM has undertaken substantial efforts to advance marsh sills and other forms of living shorelines as alternatives to traditional bulkheads for estuarine shoreline stabilization in North Carolina. Marsh sills maintain existing connections between upland, intertidal, estuarine, and aquatic areas while providing shoreline erosion control. Marsh sills typically use native materials such as marsh plants, oyster shells, and occasionally minimal amounts of structural materials (e.g. stone) to stabilize estuarine shorelines, minimize erosion, and enhance habitats.

General Permit (15A NCAC 7H .2700)

During the 2003 legislative session, the North Carolina Legislature approved House Bill 1028, which directed the Coastal Resources Commission (CRC) to adopt temporary and permanent rules to establish a general permit for the construction of “riprap sills.” The general permit was implemented as a temporary rule in 2004 and became a permanent rule on April 1, 2005. Significant discussions on the relative merits and use standards for this general permit took place during its development, including important issues such as the distance offshore that sill structures could be built, the consequences of trading one type of habitat (shallow bottom) for another (marsh protected by riprap), navigational and public trust concerns, the suitability of such structures along different types of shorelines, and the permitting requirements of other agencies such as the U.S. Army Corps of Engineers (USACE) and the N.C. Division of Water Resources (DWR). Due to these concerns, the existing general permit for the construction of marsh sills (15A NCAC 7H.2700) requires coordination with the N.C. Divisions of Marine Fisheries (DMF), DWR, and the USACE before issuance, which can take more time than is normally associated with other CAMA General Permits. Over that past few years, DCM has led interagency and stakeholder discussions focused on improving and streamlining the marsh sill general permit.

In 2016, the USACE submitted a federal consistency determination to DCM for the reissuance of USACE Nationwide Permits (NWP). NWPs are issued by the USACE on a national basis every



five years, and often include region-specific conditions. NWP's are designed to streamline USACE authorization of routine projects that produce minimal impacts to the nation's aquatic environment. Included in DCM's consistency review was a new USACE NWP 54 for living shorelines. NWP 54 requires additional inter-agency consultation through a Pre-Construction Notification (PCN), even for small-scale marsh sill structures that can be permitted under the existing General Permit 15A NCAC 7H .2700. A PCN requirement can add additional processing time to the CAMA General Permit process.

To address concerns with the PCN requirement and other interagency review issues, DCM worked with a stakeholder group that included the USACE, marine science community, DWR, DMF, N.C. Coastal Federation, NC Sea Grant, and the National Oceanic and Atmospheric Administration (NOAA) to determine how best to move forward with creating a more streamlined permitting process for marsh sills. For there to be an efficient streamlined general permit, all federal and state agency concerns must be addressed within the final CRC permit conditions. In early 2017, DCM compiled all of the comments and recommendations from the stakeholder group and drafted an amended general permit 15A NCAC 7H .2700. In 2018, the USACE used the draft amended GP .2700 as guidance in the development of a Regional General Permit (RGP) for Marsh Sills that would eliminate the PCN requirement and allow DCM to issue General Permits for marsh sills without a case-by-case federal review prior to issuance.

On September 5, 2018 the USACE issued a public notice proposing to authorize a RGP for the construction, maintenance, and repair of marsh sills. The USACE also submitted a federal consistency determination to DCM on October 22, 2018 to allow the state's official review of the RGP. As proposed, the RGP for the construction and maintenance of marsh sills includes all conditions that were agreed upon at the stakeholder meetings. DCM expedited the federal consistency review and determined that the proposed RGP is consistent with North Carolina's approved coastal management program on November 7, 2018.

Also, in October 2018, S.L. 2018-132 directed the CRC to adopt temporary rules to revise the CRC's general permit 15A NCAC 7H .2700 to be consistent with the proposed USACE RGP. Temporary rulemaking allows the Commission to adopt a rule with a shorter public comment period, expedited review by the Rules Review Commission (RRC), and no requirement for developing a fiscal analysis. The N.C. Administrative Procedure Act allows temporary rulemaking under specific criteria, including when directed by the General Assembly. Once the temporary rule language is approved, the Commission is required to:

- Submit the rule language and notice of hearing to the Office of Administrative Hearing (OAH) at least 30 business days prior to adopting the rule;
- Notify interested parties of the Commission's intent to adopt a temporary rule;
- Accept public comment for at least 15 business days;
- Hold a public hearing on the proposed rule no less than five business days after the rule and notice have been published.

The RRC will review the temporary rule within 15 days of adoption and the temporary rules will expire 270 days after publication in the NC Register or upon the effective date of a permanent rule.



The attached draft revision to the existing General Permit and fiscal analysis is provided below for consideration by the Commission. Staff recommends that the Commission approve the fiscal analysis and the rule revisions for temporary rulemaking, and initiate the permanent rulemaking process. I look forward to discussing these amendments at our upcoming meeting.

SECTION .2700 – GENERAL PERMIT FOR THE CONSTRUCTION OF MARSHRIPRAP SILLS FOR WETLAND ENHANCEMENT IN ESTUARINE AND PUBLIC TRUST WATERS

15A NCAC 7H .2701 PURPOSE

A general permit pursuant to this Section shall allow for the construction of marshriprap sills for wetland enhancement and shoreline stabilization in estuarine and public trust waters as set out in Subchapter 7J .1100 and according to the rules in this Section. Marsh sills are generally shore-parallel structures built in conjunction with existing, created, or restored wetlands. This general permit shall not apply within the Ocean Hazard System AECs or waters adjacent to these AECs with the exception of those portions of shoreline within the Inlet Hazard Area AEC that feature characteristics of Estuarine Shorelines. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area.

*History Note: Authority G.S. 113A-107; 113A-118.1;
Temporary Eff. June 15, 2004;
Eff. April 1, 2005.*

15A NCAC 7H .2704 GENERAL CONDITIONS

- (a) Structures authorized by a permit issued pursuant to this Section shall be marshriprap or stone sills conforming to the standards in these Rules.
- (b) Individuals shall allow authorized representatives of the Department of Environmental and Natural Resources (DENR) Quality (DEQ) to make periodic inspections at any time deemed necessary in order to insure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed in these Rules.
- (c) The placement of marshriprap or stone sills authorized in these Rules shall not interfere with the established or traditional rights of navigation of the waters by the public.
- (d) This permit shall not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity's impact on adjoining properties or on water quality, air quality, coastal wetlands, cultural or historic sites, wildlife, fisheries resources, or public trust rights.
- (e) This permit does not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit shall be consistent with all local requirements, AEC Guidelines as set out in Subchapter 7H. 0200, and local land use plans current at the time of authorization.

*History Note: Authority G.S. 113A-107; 113A-118.1;
Temporary Eff. June 15, 2004;
Eff. April 1, 2005.*



15A NCAC 7H .2705 SPECIFIC CONDITIONS

- (a) A general permit issued pursuant to this Section shall be applicable only for the construction of ~~marsh~~ ~~riprap or stone~~ sill structures built in conjunction with existing, created or restored wetlands. Planted wetland vegetation shall consist only of native species.
- (b) ~~This general permit shall not apply within the Ocean Hazard System Areas of Environmental Concern (AEC) or waters adjacent to these AECs with the exception of those portions of shoreline within the Inlet Hazard Area AEC that feature characteristics of Estuarine Shorelines. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in the adjoining Ocean Erodible Area.~~
- (c) ~~On shorelines where no fill is proposed, the landward edge of the sill shall be positioned no more greater than 5 30 feet waterward of the waterward depth contour of locally growing wetlands or to the mid-tide depth contour, the normal high water or normal water level or five feet waterward of the existing wetlands whichever distance is greater.~~
- (d) ~~On shorelines where fill is proposed, the landward edge of the sill shall be positioned no more than 30 feet waterward of the existing mean high water or normal high water line.~~
- (e) (c) The permittee shall maintain the authorized sill including wetlands and tidal inundation and existing or planted wetlands in conformance with the terms and conditions of this permit, or the remaining sill structures shall be removed within 90 days of notification from the Division of Coastal Management.
- (f) (d) The height of sills shall not exceed six twelve inches above normal mean high water, normal water level, or the height of the adjacent wetland substrate, whichever is higher greater.
- (g) (e) Sill construction authorized by this permit shall be limited to a maximum length of 500 feet.
- (h) ~~Sills shall be porous to allow water circulation through the structure.~~
- (i) (f) The sills shall have at least one five-foot ~~drop-down or~~ opening every 100 feet and may be staggered or overlapped or left open as long as the five-foot ~~drop-down or~~ separation between sections is maintained. Overlapping sections shall not overlap more than 10 feet. Deviation from these drop-down opening requirements shall be allowable following coordination with the N.C. Division of Coastal Management the N.C. Division of Marine Fisheries and the National Marine Fisheries Service.
- (j) (g) The ~~sill~~ ~~riprap~~ structure shall not exceed a slope of a one and a half foot ~~rise~~ horizontal distance over a one two foot vertical rise ~~horizontal distance and a minimum slope of a one and a half foot rise over a one foot horizontal distance~~. The width of the structure on the bottom shall ~~be no not~~ exceed wider than 15 12 feet.
- (k) ~~For the purpose of protection of public trust rights, fill waterward of the existing mean high water line shall not be placed higher than the mean high water elevation.~~
- (l) ~~The permittee shall not claim title to any lands raised above the mean high or normal water levels as a result of filling or accretion.~~
- (m) (h) For water bodies ~~more narrower~~ than 150 feet, no portion of the structures shall ~~not~~ be positioned offshore more than one sixth (1/6) the width of the waterbody.
- (n) (i) The sill shall not be within a navigation channel or associated setbacks marked or maintained by a state or federal agency.
- (o) (j) The sill shall not interfere with leases or franchises for shellfish culture.
- (p) (k) All structures shall have a minimum setback distance of 15 feet between any parts of the structure and the adjacent property owner's riparian access corridor, unless either a signed waiver statement is obtained from the adjacent property owner or the portion of the structure



within 15 feet of the adjacent riparian access corridor is located no more than 25 feet from the normal mean high or normal water level. The riparian access corridor line is determined by drawing a line parallel to the channel, then drawing a line perpendicular to the channel line that intersects with the shore at the point where the upland property line meets the water's edge (as defined in NCAC 07H. 1205 paragraph t). Additionally, the sill shall not interfere with the exercise of riparian rights by adjacent property owners, including access to navigation channels from piers, or other means of access.

~~(q)~~ The sill shall not interfere with the exercise of riparian rights by adjacent property owners, including access to navigation channels from piers, or other means of access.

~~(+)~~ (l) Sills shall be marked at 50-foot intervals with yellow reflectors extending at least three feet above normal mean high water or normal water level and must be maintained for the life of the structure.

~~(s)~~ (m) If the crossing of wetlands with mechanized construction equipment is necessary, temporary construction mats shall be utilized for the areas to be crossed. The temporary mats shall be removed immediately upon completion of the construction of the sill/riprap structure. Material used to construct the sill shall not be stockpiled on existing wetlands or in open water unless fully contained in a containment structure supported by construction mats.

~~(+)~~ (n) Sedimentation and erosion control measures shall be implemented to ensure that eroded materials do not enter adjacent wetlands or waters.

~~(+)~~ (o) No excavation or filling other than that necessary for the construction and proper bedding of the sill structure of any native submerged aquatic vegetation is authorized by this general permit.

~~(+)~~ (p) Sills shall not be constructed within any native submerged aquatic vegetation. If submerged aquatic vegetation is present within a project area, a submerged aquatic vegetation survey should be completed during the growing season of April 1 thru September 30. All sills shall have a minimum setback of 10 feet from any native submerged aquatic vegetation.

~~(+)~~ (q) Sills shall not be constructed within any habitat that includes oyster reefs or shell banks. All sills shall have a minimum setback of 10 feet from any oysters, oyster beds, or shell banks.

~~(+)~~ (r) No excavation of the shallow water bottom or any wetland is authorized by this general permit

~~(w)~~ No more than 100 square feet of wetlands may be filled as a result of the authorized activity.

~~(x)~~ Backfilling of sill structures may be utilized only for the purpose of creating a suitable substrate for the establishment or reestablishment of wetlands. Only clean sand fill material may be utilized.

~~(y)~~ (s) The sill/riprap material shall consist of clean rock, marl, oyster shell, or masonry materials such as granite or broken concrete or other materials that are approved by the N.C. Division of Coastal Management. Sill/Riprap material shall be free of loose sediment or any pollutant, including exposed rebar. The sill material structures shall be of sufficient size and slope to prevent its movement from the approved alignment site by wave or current action.

~~(z)~~ If one or more contiguous acre of property is to be graded, excavated or filled, an erosion and sedimentation control plan shall be filed with the Division of Energy, Mineral, and Land Resources, or appropriate government having jurisdiction. The plan must be approved prior to commencing the land disturbing activity.

~~(aa)~~ In order to ensure that no adverse impacts occur to important fisheries resources, the Division of Marine Fisheries shall review and concur with the location and design of the proposed project prior to the issuance of this general permit.



(bb) Prior to the issuance of this general permit, Division staff shall coordinate with the Department of Administration's State Property Office to determine whether or not an easement shall be required for the proposed activity.

(cc) Following issuance of this general permit, the permittee shall contact the N.C. Division of Water Quality and the U.S. Army Corps of Engineers to determine any additional permit requirements. Any such required permits, or a certification from the U.S. Army Corps of Engineers appropriate agency(s) that no additional permits are required, shall be obtained and copies provided to the Division of Coastal Management prior to the initiation of any development activities authorized by this permit.



Fiscal & Regulatory Impact Analysis

Marsh Sills

Amendments to 15A NCAC 07H .2700, .2701, .2704, .2705
General Permit For The Construction of Marsh Sills General and Specific Conditions

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November 7, 2018



Basic Information

Agency	DEQ, Division of Coastal Management (DCM) Coastal Resources Commission (CRC).
Title	General Permit for the Construction of Marsh Sills
Citation	15A NCAC 07H .2700
Description of the Proposed Rule	7H .2700 defines the specific development requirements for the construction of marsh sills. The proposed amendments will remove unnecessary coordination requirements and would also remove redundant and/or unnecessary conditions.
Agency Contact	Daniel Govoni Coastal Policy Analyst Daniel.Govoni@ncdenr.gov (252) 808-2808 ext. 233
Authority	113A-107(a) & (b); 113A-118.1
Necessity	The CRC is proposing to amend its rule governing the construction of marsh sills in order for this general permit to become consistent with other general permits that govern construction of shoreline stabilization methods such as bulkheads.
Impact Summary	State government: No Local government: No Substantial impact: No Federal government: No Private property owners: No



Summary

DCM has undertaken substantial efforts to advance marsh sills and other forms of living shorelines as alternatives to traditional bulkheads for estuarine shoreline stabilization in North Carolina. Living shorelines include a suite of options for shoreline erosion control that maintain existing connections between upland, intertidal, estuarine, and aquatic areas which are necessary for maintaining water quality, ecosystem services, and habitat values. Unlike vertical stabilization measures such as bulkheads, living shoreline techniques typically use native materials such as marsh plants, oyster shells, and occasionally minimal amounts of structural materials (e.g. stone) to stabilize estuarine shorelines, minimize erosion, and enhance habitats.

During the 2003 legislative session, the North Carolina Legislature approved House Bill 1028, a bill which authorized the Coastal Resources Commission to adopt temporary and permanent rules to establish a general permit for the construction of “riprap sills.” This was implemented as a temporary rule in 2004 and became a permanent rule on April 1, 2005. Significant discussions on the relative merits of this general permit were discussed during its development. Due to these concerns, the current General Permit for the construction of marsh sills requires coordination with the Division of Marine Fisheries (DMF), the Division of Water Resources (DWR), and the United States Army Corps of Engineers (Corps) before issuance. This coordination can take more time than normally associated with other CAMA General Permits for shoreline stabilization. During the intervening years, there has been an ongoing effort to modify the marsh sill general permit to remove the more time-consuming conditions.

In 2016, DCM began working with a stakeholder group that included representatives from the Corps, the marine science community, DWR, DMF, N.C. Coastal Federation, N.C. Sea Grant, and the National Oceanic and Atmospheric Administration to develop a streamlined permitting process for marsh sills that addresses all interested parties’ concerns within the permit conditions. Since several marsh sill studies have been concluded and numerous sills have been constructed, DMF agreed that there is no longer a need for DMF review of each potential marsh sill general permit. Also, DWR has revised their General Water Quality Certification, which no longer requires written concurrence for marsh sill projects that receive a CAMA General Permit. Additionally, on September 5, 2018 the Corps issued a public notice proposing to authorize a Regional General Permit (RGP) based on recommendations from the stakeholder group meetings. A RGP will remove coordination requirements with the Corps for marsh sill projects that receive a CAMA General Permit. The proposed rule amendments remove these agency coordination requirements and other redundant or unnecessary conditions.

Description of Rule Amendment

15A NCAC 7H. .2700, .2701, .2704. and .2705 include the Title, General and Specific Use Standards for the construction of marsh sills. The proposed amendments provide additional options in the construction materials of marsh sills, clarify how to measure width and height of sills, corrects ambiguous language, removes resource agency coordination requirements, and addresses wording changes to provide consistency with other CRC rules. By removing the



coordination requirements, the proposed amendments will reduce the permit processing time and all this general permit to be consistent with other shoreline stabilization general permits, such as bulkheads, that do not require any coordination.

Affected Parties

Private Property Owners:

DCM does not anticipate any increased costs to private property owners as a result of the proposed rule amendments. There will not be any increase in permit fees nor change in permit receipts.

NC Department of Transportation (DOT):

Pursuant to G.S. 150B-21.4, the agency declares that the proposed amendments to 15A NCAC 7H .0205 will not affect environmental permitting for the NC Department of Transportation.

Local Government:

DCM does not anticipate any increased costs to Local Governments as a result of the proposed rule amendments. There will not be any increase in permit fees.

Division of Coastal Management:

DCM permit review process will be reduced. The Division will not experience any change in permit receipts.

Cost/Benefits Summary

The Division of Coastal Management does not anticipate any increase in expenditures in the government or private sector as a result of this action. The proposed amendments will reduce conditions and remove resource agency coordination thus allowing this General Permit to become consistent with other General Permits. Therefore, staff does not anticipate any significant increase in the number of GPs sought under these rules as a result of the proposed amendments. Since the inception of this General Permit in 2005, DCM estimates that no more than four permits for this activity have been issued a year. DCM does not foresee any change in project costs for either design or construction as a result of this action.

