



PAT MCCRORY
Governor

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Secretary

CRC-16-31

June 28, 2016

MEMORANDUM

TO: Coastal Resources Commission
FROM: Daniel Govoni
SUBJECT: Public Comment and Adoption of 15A NCAC .2700 GP for the Construction of Marsh Sills

The current general permit for the construction of marsh sills requires coordination with the Division of Marine Fisheries, the Division of Water Resources (DWR), and the U.S. Army Corps of Engineers (USACE) before issuance. This process can take more time than normally associated with other CAMA general permits. Since its inception, there has been an ongoing effort to modify the marsh sill general permit to remove unnecessary and time-consuming conditions. Since several marsh sill studies have been concluded and numerous sills have been constructed, DMF has agreed that there is no longer a need for DMF review of each potential marsh sill general permit. Also, DWR has revised and re-issued their General Water Quality Certification, which no longer requires written concurrence for marsh sill projects that receive a CAMA general permit. The currently-proposed amendments would remove these agency coordination requirements, and would also remove conditions pertaining to fill for wetland plantings and other redundant or unnecessary conditions.

One public comment (attached) was received from the North Carolina Coastal Federation (NCCF) regarding the proposed rule amendments. The comment primarily concerns 7H .2705 (b), which limits the landward edge of marsh sills to no more than five feet waterward of locally growing wetlands. NCCF states that numerous projects exist demonstrating the success of marsh restoration landward of existing sills, including those where the sills were constructed as much as 30 feet channelward of existing wetlands. NCCF recommends limiting the landward edge of sills to 30 feet waterward of normal or mean high water, or existing coastal wetlands, whichever is greater. NCCF also recommends clarifying terms with regard to minimum slopes and exceeding slope, and recommends amending the proposed language in .2705 (o) to read "...filling, other than that necessary for the proper design and construction of the sill structure and associated wetland plantings."

The USACE is currently in the process of reissuing their Nationwide Permits (NWP). Included in this process is a proposal to create a separate NWP to authorize the construction and maintenance of living shorelines, in order to provide an efficient mechanism for authorizing living shoreline structures such as marsh sills. The proposed living shoreline NWP could become effective by March 2017. Staff will soon be meeting with the USACE regarding this



proposed NWP, and intend to coordinate conditions so that your general permit for the construction of marsh sills is efficient and consistent with the proposed USACE NWP.

Staff recommends that the Commission adopt the current rule amendments. Additional rule amendments may be proposed at a later date after conclusion of the Division's discussions with the USACE on the construction and maintenance of living shorelines.

**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 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.~~

~~(e)~~(b) ~~On shorelines where no fill is proposed,~~ The landward edge of the sill shall be positioned no more than 5 feet waterward ~~of the waterward depth contour of locally growing wetlands or to mid-tide depth contour, whichever is greater.~~ Where no wetlands exist, in no case shall the landward edge of the sill be positioned greater than 30 feet waterward of the ~~mean high water or~~ normal high water or normal water line.

~~(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 over a one ~~two~~ foot horizontal distance and a minimum slope of a one and a half foot rise over a one ~~two~~ foot horizontal distance. The width of the structure on the bottom shall be no 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. 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.

~~(r)~~ (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.

~~(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.

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

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

~~(v) (p)~~ 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) (q)~~ 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) (r)~~ 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.

History Note: Authority G.S. 113A-107; 113A-118.1;

Temporary Eff. June 15, 2004;

Eff. April 1, 2005;

Amended Eff. August 1, 2012 (see S.L. 2012-143, s.1.(f)).



North Carolina
Coastal Federation
Working Together for a Healthy Coast

May 12, 2016

Braxton Davis, Director
N.C. Division of Coastal Management
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Morehead City, N.C. 28557

Frank Gorham, Chairman
Coastal Resources Commission
N.C. Division of Coastal Management
400 Commerce Avenue
Morehead City, N.C. 28557

**RE: North Carolina Coastal Federation Comments on Proposed Changes to 15A NCAC 07H .2700,
General Permit for the Construction of Marsh Sills**

Dear Mr. Davis and Mr. Gorham,

On behalf of the North Carolina Coastal Federation, please accept these comments on the proposed changes to the General Permit (GP) for the Construction of Marsh Sills (15A NCAC 07H .2700). The majority of the proposed changes to this general permit are favorable and will benefit those seeking to construct a sill project. We find the removal of a number of the arduous conditions that require consultations with the Division of Water Quality (DWQ) and the Division of Marine Fisheries (DMF), as well as other unnecessary restrictions, to be a very positive step in encouraging the selection of sill projects as alternatives to traditional hardening approaches.

Although we support the majority of changes to the sill GP, we have significant concerns about the proposed changes to Section .2705 (b), and offer the following recommendations and proposed edits to this and other specific conditions:

Section .2705 (b)- The proposed limitation of marsh sills to five feet channelward of locally growing wetlands unnecessarily prohibits the potential for significant restoration/enhancement of native coastal wetlands landward of a proposed sill. Numerous projects exist in N.C. to demonstrate the success of marsh restoration landward of existing sills, including those where the sills were constructed as much as 30' channelward of existing wetlands.



Without exception, constructing sill projects with wider restored marshes landward of the structure enhances the erosion control, long-term resiliency and habitat functions of the shoreline.

In addition, recent research focused on the impacts of sill projects conclude that sill projects with restored marsh plantings are superior to traditional hardening approaches in terms of erosion control performance, longevity of the structures, storm resiliency, and habitat functions. Finally, our experience working with university and NOAA researchers has shown that sill projects that maintain a non-vegetated zone of 5 to 20 feet landward of the proposed sill, combined with an existing or restored marsh zone, is superior for fish usage, and submerged aquatic vegetation (SAV) establishment, and does not sacrifice shoreline stabilization function.

It is very important that the abundance of scientific evidence drive the design process of these sill projects, and that the permit process encourage wetlands restoration as a critical component of the projects. As such, we recommend that the limitation for the landward edge of sills approvable by this GP be **30 feet waterward of normal or mean high water or existing coastal wetlands, whichever is greater.**

If the concern is for failure of the project, then an additional condition limiting the design to include no more than 20' of non-vegetated intertidal areas between existing/restored wetlands and the landward edge of the constructed sill would be preferable to the current proposed limitation. This will allow for designs to include both marsh restoration and open, non-vegetated areas landward of the sill.

Section .2705 (g)- We recommend clarifying terms here with regard to minimum slopes and exceeding slope. As written, it could be misinterpreted from the proposed intent.

Section .2705 (o)- We recommend that the proposed language read "...filling, other than that necessary for the proper design and construction of the sill structure and associated wetlands plantings."

We appreciate the opportunity to provide comments to the proposed sill general permit, and thank you in advance for your consideration of our recommendations. If you have any questions regarding our comments, please feel free to call me at (910) 231-6601 at any time.

Sincerely,

Tracy Skrabal, Coastal Scientist
North Carolina Coastal Federation