



North Carolina Department of Environment and Natural Resources  
**Division of Coastal Management**

Michael F. Easley, Governor

**James H. Gregson, Director**

William G. Ross Jr., Secretary

July 12, 2007

**MEMORANDUM**

**I&S-07-14**

**TO:** Implementation and Standards Committee  
**FROM:** Bonnie Bendell  
**SUBJECT:** Estuarine Shoreline Stabilization Draft Rules

At the May 2007 CRC meeting, staff presented the I&S Committee with draft changes to the estuarine shoreline stabilization general permit rules. These changes are to implement Goal 3 Recommendation 3.4 of the CHPP, which is to “protect fish habitat by revising estuarine and public trust shoreline stabilization rules using best available information, considering estuarine erosion rates and the development and promotion of incentives for use of alternatives to vertical stabilization measures.”

These rule changes proposed today, hope to accomplish this by:

- Permitting vertical structures landward of their previously permitted alignment.
- Permitting riprap structures further waterward of their previously permitted alignment to promote the use and benefits of rock.
- Allowing more flexibility in how groins are permitted.
- Allowing breakwaters to be built without the requirement of planting marsh. This allows another alternative to bulkheads for shoreline stabilization.

**Rule Updates since the May CRC Meeting:**

In an effort to avoid unintended consequences, meetings were held at each of the four (4) district offices and with the Division of Water Quality staff to discuss the implications of the proposed rule changes. With this input the draft rules have been revised. Below are the proposed General Permit rules and their major content changes from the version presented at the May meeting.

**07H .1100 General Permit for Bulkheads and Riprap**

At the May meeting, the I&S Committee agreed that bulkheads should be moved landward as feasibly possible to: a) take them out of public trust waters in an effort to minimize/reduce the impacts or degradation of the local habitats and b) allow natural processes to exist for as long as possible, however short lived that may be. Staff originally proposed to move bulkheads five (5) feet landward of normal high water or normal water level to accomplish this. After further

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discussions with field staff and the Division of Water Quality, it was determined that the most landward that bulkheads can be pushed is normal high water or normal water level. While moving bulkheads inland five (5) feet would be ideal from a public trust perspective, it unfortunately makes the rule complicated and impractical due of the numerous exceptions that would be required.

Staff considered the following in developing the alternatives:

- DWQ objected to the proposed changes because moving 5 foot landward:
  - Reduces the area of the Water Quality Zone 1 Buffer by approximately 16%. DWQ Zone 1 is intended to be undisturbed vegetation.
  - Does not avoid or minimize impacts to the riparian buffer, one of the major components of any requested activity in DWQ's Neuse and Tar-Pamlico Buffer.
  - Is no longer streambank stabilization. It is activity in the buffer and is adding impervious surface in Zone 1, which is prohibited in the buffer rules, and is only permittable through a Major Variance from the EMC.
- Cutting into a bluff or high sediment bank to install a bulkhead was not deemed a practical location for shoreline stabilization.

At this time, staff would like the I&S Committee to consider the following options for New Bulkhead placement (.1105(a)(1)):

- A. The bulkhead alignment shall achieve an average approximation of the NHW/NWL. The alignment shall not exceed five (5) feet waterward of NHW/NWL at any place along its alignment.
- B. The bulkhead alignment shall achieve an average approximation of the NHW/NWL. The alignment shall not exceed five (5) feet waterward of NHW/NWL at any place along its alignment. Any new bulkhead constructed shall be required to place riprap for bulkhead toe protection waterward of the bulkhead in an effort to reduce scour and preserve the local habitat.
- C. The bulkhead alignment shall approximate a maximum average of two (2) feet waterward of NHW/NWL. The alignment shall not exceed five (5) feet waterward of NHW/NWL at any place along its alignment. (This is what is currently allowed under the Bulkhead General Permit.) Any new bulkhead constructed waterward of NHW/NWL shall be required to place riprap for bulkhead toe protection waterward of the bulkhead in an effort to reduce scour and preserve the local habitat.
- D. *In the General Permit:* The bulkhead alignment shall achieve an average approximation of the NHW/NWL. The alignment shall not exceed five (5) feet waterward of NHW/NWL at any place along its alignment. The “mitigative” measure of incorporating riprap placement for bulkhead toe protection would be incorporated into the Major Permit 7H(.0208).

### **Terminology**

As a result of discussion at the May I&S meeting, the term “riprap” will be changed to “riprap revetment” to be more consistent with proper coastal engineering terms.

**07H .1400 General Permit for Groins**

After further consideration and discussions with field staff, it was decided that the proposed change to make both the riprap and sheetpile groins consistent in height was not necessary since it was primarily a construction issue. Staff proposes that the original heights of 2 feet for riprap and 1 foot for sheetpile above normal high water or normal water level be retained.

**07H .2100 General Permit for Marsh Enhancement Breakwaters**

Staff is proposing an additional content change to this General Permit. The change would remove the requirement that breakwaters must be constructed in conjunction with wetland vegetation. This change would allow another method of shoreline stabilization as an alternative to bulkheads (shoreline hardening). Breakwaters without marsh grass would help dissipate the wave energy and still allow the shoreline to be left in its natural state. This type of breakwater would be beneficial in locations with high occurrence of boat wakes such as the ICWW. In these locations, the breakwater would act as a wave dissipater/wave attenuator, which would then in turn help to stabilize the shoreline.

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**SECTION .1100 - GENERAL PERMIT FOR CONSTRUCTION OF BULKHEADS AND ~~THE~~  
~~PLACEMENT OF RIPRAP~~ REVETMENTS FOR SHORELINE PROTECTION IN ESTUARINE AND  
PUBLIC TRUST WATERS AND OCEAN HAZARD AREAS**

**15A NCAC 07H .1101 PURPOSE**

A permit under this Section shall allow the construction of bulkheads and ~~the placement of riprap~~ riprap revetments for shoreline protection in the public trust waters and estuarine waters AECs according to authority provided in Subchapter 07J .1100 and according to the Rules in this Section. This permit shall not apply to shoreline protection along the oceanfront or to waters and shorelines adjacent to the Ocean Hazard AEC with the exception of those shorelines that feature characteristics of the Estuarine Shoreline AEC. Such features include the presence of wetland vegetation, lower wave energy and lower erosion rates than the adjoining Ocean Erodible Area.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. April 1, 2003.*

**15A NCAC 07H .1102 APPROVAL PROCEDURES**

(a) The applicant shall contact the Division of Coastal Management and complete an application form requesting approval for development. The applicant shall provide information on site location, dimensions of the project area, and his name and address.

(b) The applicant shall provide:

- (1) ~~confirmation~~ that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or
- (2) ~~confirmation~~ that the adjacent riparian property owners have been notified by certified mail of the proposed work. Such notice shall instruct adjacent property owners to provide written comments on the proposed development to the Division of Coastal Management within ten days of receipt of the notice, and, indicate that no response shall be interpreted as no objection. ~~DCM staff~~ the Division of Coastal Management shall review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If ~~DCM staff~~ the Division of Coastal Management determines that the project exceeds the guidelines established by the General Permit Process, the applicant shall be notified that ~~he must submit~~ an application for a major development permit shall be required.

(c) No work shall begin until an on-site meeting is held with the applicant and appropriate Division of Coastal Management representative so that the proposed ~~bulkhead~~ alignment can be ~~appropriately~~ marked. Written authorization to proceed with the proposed development may be issued during this visit. Construction of the bulkhead or riprap ~~structure~~ revetment shall be completed within ~~90~~ 120 days of ~~this visit~~ issuance of the permit or the general authorization shall expire and it shall be necessary to re-examine the alignment to determine if the general authorization can be reissued.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. September 1, 2006; January 1, 1990; December 1, 1987.*

**15A NCAC 07H .1103 PERMIT FEE**

The applicant shall pay a permit fee of two hundred dollars (\$200.00) for riprap revetments and bulkheads structures sited at or above normal high water or normal water level, or a permit fee of four hundred dollars (\$400.00) for bulkhead and riprap ~~revetments structures~~ sited below normal high water or normal water level. Permit fees shall be paid by check or money order payable to the Department.

*History Note: Authority G.S. 113A-107; 113A-113(b); 113A-118.1; 113A-119; 113-119.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. September 1, 2006; August 1, 2000; March 1, 1991.*

**15A NCAC 07H .1104 GENERAL CONDITIONS**

- (a) This permit authorizes only the construction of bulkheads and ~~the placement of~~riprap revetments conforming to the standards herein.
- (b) Individuals shall allow authorized representatives of the Department of Environment, ~~Health,~~ and Natural Resources to make periodic inspections at any time deemed necessary in order to ~~be sure~~ ensure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
- (c) There shall be no ~~significant~~ interference with ~~the navigation or~~ use of the waters by the public by the existence of the bulkhead or the riprap revetment authorized herein. Bulkheads and riprap revetments authorized in this Rule shall not interfere with the established or traditional rights of navigation of the waters by the public.
- (d) This permit ~~will~~ shall not be applicable to proposed construction where the ~~Department~~Division of Coastal Management 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 ~~must~~ shall be consistent with all local requirements, AEC rules, and local land use plans current at the time of authorization.

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. May 1, 1990; December 1, 1987;  
RRC Objection due to ambiguity Eff. May 19, 1994;  
Amended Eff. August 1, 1998; July 1, 1994.

**15A NCAC 07H .1105 SPECIFIC CONDITIONS**

- ~~(a) This general permit is applicable only along shorelines void of wetland vegetation including marsh grass and wooded swamp, or where all construction is to be accomplished landward of such vegetation.~~
- ~~(b) Bulkheads and riprap material shall be positioned as follows:~~
- ~~(1) Bulkheads shall be positioned so as not to exceed more than an average distance of 2 feet waterward of the normal high water mark, or the normal water level contour, whichever is applicable. In no case shall the bulkhead be positioned more than 5 feet waterward of the normal high water or normal water level contour at any point along its alignment.~~
  - ~~(2) Riprap shall be positioned so as not to exceed a maximum of 5 feet waterward of the mean high water mark or normal water level contour at any point along its alignment. Where there is an existing bulkhead structure, riprap shall be allowed to extend a maximum of 10 feet offshore. This location standard shall take into consideration the height of the area to be protected (i.e. bulkhead height, water depth) and the alignment shall allow for a slope no flatter than 2 feet horizontal per 1 foot vertical and no steeper than 1½ feet horizontal per 1 foot vertical.~~
- ~~(c) Along shorelines within upland basins, canals, and ditches, bulkheads or riprap material must be positioned so as not to exceed more than an average distance of 5 feet waterward of the normal high water mark or the normal water level contour, whichever is applicable. In no case shall the bulkhead or riprap be positioned more than 10 feet waterward of the normal high water or normal water level contour at any point along its alignment. For the purpose of these Rules, the Atlantic Intra-coastal Waterway (AIWW) is considered a natural shoreline and development shall occur as described in 07H .1105(b).~~
- ~~(d) Construction authorized by this general permit shall be limited to a maximum shoreline length of 500 feet.~~
- ~~(e) All backfill material shall be obtained from an upland source.~~
- ~~(f) The bulkhead shall be constructed, or the riprap shall be in place prior to any backfilling activities.~~
- ~~(g) The bulkhead or riprap shall be structurally tight so as to prevent seepage of backfill materials through the structure.~~
- ~~(h) Riprap material shall be free from loose dirt or any other pollutant. It shall be of a size sufficient to prevent its movement from the site by wave or current action.~~

- ~~(i) Riprap material shall consist of clean rock or masonry materials such as but not limited to granite or broken concrete. Materials such as tires, car bodies, scrap metal, paper products, tree limbs, wood debris, organic material or similar material, are not considered riprap.~~
- ~~(j) The bulkhead shall be solid and constructed of treated wood, concrete slabs, metal sheet piles or other suitable materials approved by department personnel. No excavation is permitted except for that which may be required for the construction of the bulkhead wall, riprap, deadmen cables, etc. This permit does not authorize any excavation waterward of the approved alignment.~~
- ~~(k) Bulkheads or riprap shall not extend beyond established alignments nor restrict the original width of the canal or basin.~~
- ~~(l) If one contiguous acre or more of property is to be excavated or filled, an erosion and sedimentation control plan shall be filed with the Division of Land Resources, Land Quality Section, or appropriate local government having jurisdiction. This plan shall be approved prior to commencing the land disturbing activity.~~
- (a) Along shorelines void of wetland vegetation:
- (1a) ALTERNATIVE LANGUAGE A: New bulkheads shall be positioned to approximate normal high water or normal water level. The bulkhead position shall not exceed a distance of 5 feet waterward of normal high water or normal water level at any point along its alignment.
- (1b) ALTERNATIVE LANGUAGE B: New bulkheads shall be positioned to approximate normal high water or normal water level. The bulkhead position shall not exceed a distance of 5 feet waterward of normal high water or normal water level at any point along its alignment. Riprap for bulkhead toe protection shall be placed waterward of the bulkhead.
- (1c) ALTERNATIVE LANGUAGE C: New bulkheads shall be positioned a maximum average of two (2) feet waterward of the normal high water or normal water level. The bulkhead position shall not exceed a distance of 5 feet waterward of normal high water or normal water level at any point along its alignment. Riprap for bulkhead toe protection shall be placed waterward of the bulkhead for any alignment that averages waterward of normal high water or normal water level.
- (1d) ALTERNATIVE LANGUAGE D: New bulkheads shall be positioned to approximate normal high water or normal water level. The bulkhead position shall not exceed a distance of 5 feet waterward of normal high water or normal water level at any point along its alignment.
- (2) New bulkheads or riprap revetments on shorelines within manmade upland basins, canals, and ditches, shall be positioned an average distance of two (2) feet and maximum distance of five (5) feet waterward of normal high water or normal water level.
- (3) When replacing an existing bulkhead, the new alignment shall be positioned a maximum distance of two (2) feet waterward of the current bulkhead alignment. To tie into a like structure on the adjacent property, replacement bulkhead position shall not exceed a maximum distance of five (5) feet waterward of the current bulkhead alignment. When replacing a bulkhead where lands landward of the bulkhead were lost in the last year, bulkheads shall be positioned a maximum of two (2) feet waterward of the original/existing alignment.
- (4) Riprap revetments shall be positioned so as not to exceed a maximum distance of 10 feet waterward of the normal high water or normal water level at any point along its alignment
- (b) Along shorelines with wetland vegetation, bulkheads and riprap revetments shall be positioned so that all construction is to be accomplished landward of such vegetation.
- (c) Bulkheads shall be constructed of vinyl, or steel sheet pile, concrete, stone, timber, or other suitable materials approved by the Division of Coastal Management.
- (d) Riprap revetments shall be constructed of granite, marl, riprap, concrete without exposed rebar, or other suitable materials approved by the Division of Coastal Management.
- (e) Revetment material shall be free from loose dirt or other pollutants
- (f) Revetment material shall be of sufficient size to prevent movement from the site by wave action or currents.
- (g) Construction design for riprap revetments shall take into consideration the height of the area to be protected (i.e. bulkhead height, escarpment height, water depth) and the alignment shall allow for a slope no flatter than three (3) horizontal per one (1) foot vertical and no steeper than 1 ½ feet horizontal per one (1) foot vertical.
- (h) All backfill material shall be obtained from an upland source pursuant to 15A NCAC 07H .0208. The bulkhead or riprap revetment shall be constructed prior to any backfilling activities and shall be structurally tight so as to prevent seepage of backfill materials through the structure.

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(i) No excavation, grading or fill shall be permitted except for that which may be required for the construction of the bulkhead and/or riprap revetment. This permit shall not authorize any excavation waterward of the approved alignment.

(j) Runoff from construction shall not visibly increase the amount of suspended sediments in adjacent waters. Appropriate sedimentation and erosion control devices, measures or structures shall be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, sand fence, etc.).

(k) If one contiguous acre or more of property is to be excavated or filled, an erosion and sedimentation control plan shall be filed with the Division of Land Resources, Land Quality Section, or appropriate local government having jurisdiction. This plan shall be approved prior to commencing the land-disturbing activity.

(l) For the purpose of these Rules, the Atlantic Intracoastal Waterway (AIWW) is considered a natural shoreline.

(m) Construction authorized by this general permit shall be limited to a maximum shoreline length of 500 feet.

*History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. April 1, 2005; December 1, 1991; January 1, 1989; December 1, 1987.*

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**SECTION .1400 - GENERAL PERMIT FOR CONSTRUCTION OF ~~WOODEN~~ GROINS IN ESTUARINE AND PUBLIC TRUST WATERS AND OCEAN HAZARD AREAS**
**15A NCAC 07H .1401 PURPOSE**

A permit under this section shall allow the construction of ~~wooden and riprap~~ groins in the estuarine and public trust waters AECs according to the authority provided in Subchapter 07J .1100 and according to the rules in this Section. This general permit shall not apply to the oceanfront shorelines or to waters and shorelines adjacent to the Ocean Hazard AEC with the exception of those shorelines that feature characteristics of the Estuarine Shoreline AEC. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than the adjacent Ocean Erodible Area.

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Temporary Amendment Eff. December 1, 2002;  
Amended Eff. August 1, 2004; April 1, 2003.

**15A NCAC 07H .1402 APPROVAL PROCEDURES**

(a) The applicant ~~must~~ shall contact the Division of Coastal Management and complete an application form requesting approval for development. The applicant shall provide information on site location, dimensions of the project area, and his name and address. ~~Such notice shall instruct adjacent property owners to provide written comments on the proposed development to the Division of Coastal Management within 10 days of receipt of the notice. The notice shall also indicate that no response shall be interpreted as no objection.~~

(b) The applicant ~~must~~ shall provide:

- (1) confirmation that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or
- (2) confirmation that the adjacent riparian property owners have been notified by certified mail of the proposed work. Such notice shall instruct adjacent property owners to provide written comments on the proposed development to the Division of Coastal Management within ten (10) days of receipt of the notice, ~~and~~ —The notice shall also indicate that no response shall be interpreted as no objection. ~~DCM staff~~ the Division of Coastal Management shall review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If the Division of Coastal Management staff determines that the project exceeds the guidelines established by the General Permit Process, the applicant shall be notified that an application for a major development permit shall be required.

(c) ~~Approval of individual projects shall be acknowledged in writing by the Division of Coastal Management and the applicant shall be provided a copy of this Section. No work shall begin until an on-site meeting is held with the applicant and appropriate Division of Coastal Management representative(s) so that the proposed groin alignment can be marked. Written authorization to proceed with the proposed development may be issued during the visit. Construction of the groin shall be completed within 120 days of issuance of the permit or the general authorization shall expire and it shall be necessary to re-examine the alignment if the general authorization can be reissued.~~

~~(d) Construction must be completed within 90 days of the approval of the permit or the permit expires.~~

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. August 1, 2004; May 1, 1990; January 1, 1990.

**15A NCAC 07H .1403 PERMIT FEE**

The applicant shall pay a permit fee of two hundred dollars (\$200.00) by check or money order payable to the Department.

*History Note:* Authority G.S. 113A-107; 113A-113(b); 113A-118.1; 113A-119; 113A-119.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. September 1, 2006; August 1, 2000; March 1, 1991.

**15A NCAC 07H .1404 GENERAL CONDITIONS**

- (a) Structures authorized by a general permit in this Section shall be ~~timber, wooden sheetpile,~~ or riprap groins conforming to the standards in this Rule.
- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources to make periodic inspections at any time deemed necessary in order to ~~be sure~~ ensure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
- (c) The placement of ~~wooden or riprap~~ groins authorized in this Rule 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~~ Division of Coastal Management 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 shall~~ not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit ~~must shall~~ be consistent with all local requirements, AEC rules, and local land use plans current at the time of authorization.

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Amended Eff. May 1, 1990;  
RRC Objection due to ambiguity Eff. May 16, 1994;  
Amended Eff. August 1, 1998; July 1, 1994;  
Temporary Amendment Eff. December 1, 2002;  
Amended Eff. August 1, 2004.

#### 15A NCAC 07H .1405 SPECIFIC CONDITIONS

- (a) Groins shall be perpendicular to the shoreline and shall not extend more than 25 feet waterward of the normal high water or normal water level.
- (b) Riprap groins shall not exceed a base width of ten (10) feet.
- (c) Groins shall be set back at least 15 feet from the adjoining property lines as measured from the closest point of the structure. This setback may be waived by written agreement of the adjacent riparian owner(s) or when two adjoining riparian owners are co-applicants. Should the adjacent property be sold before construction of the groin commences, the applicant shall obtain a written agreement with the new owner waiving the minimum setback and submit it to the ~~permitting agency~~ Division of Coastal Management prior to initiating any development of the groin.
- (d) The height of ~~wooden sheetpile~~ groins shall not exceed one (1) foot above normal high water or the normal water level and the height of riprap groins shall not exceed two (2) feet above normal high water or the normal water level.
- (e) ~~Riprap groins shall be constructed of materials~~ Material used for groin construction shall be free from loose dirt or any other ~~pollutant~~ pollutant. ~~It~~ Groin material must be of sufficient size to prevent its movement from the site by wave action or ~~current~~ action currents.
- (f) ~~The riprap material must consist of clean rock or masonry materials such as, but not limited to, granite or broken concrete.~~
- (g) ~~No more than two structures shall be allowed per 100 feet of shoreline unless the applicant can provide evidence that more structures are needed for shoreline stabilization. Structure spacing shall be two (2) times the groin length as measured from the centerline of the structure. Spacing may be less than 2 times the groin length around channels, docking facilities, boat lifts, or boat ramps and when positioned to prevent sedimentation or accretion in a particular area.~~
- (h) ~~"L" and "T" sections shall not be allowed at the end of groins.~~
- (i) ~~Groins shall be constructed of granite, marl, concrete without exposed rebar, timber, vinyl sheet pile, steel sheet pile or other suitable materials approved by the Division of Coastal Management.~~

*History Note:* Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b); 113A-118.1; 113A-124;  
Eff. March 1, 1984;  
Temporary Amendment Eff. December 1, 2002;  
Amended Eff. August 1, 2004.

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**SECTION .2100 - GENERAL PERMIT FOR CONSTRUCTION OF ~~MARSH ENHANCEMENT~~  
BREAKWATERS FOR SHORELINE PROTECTION IN ESTUARINE AND PUBLIC TRUST WATERS  
AND OCEAN HAZARD AREAS**

**15A NCAC 07H .2101 PURPOSE**

A general permit pursuant to this Section shall allow the construction of offshore parallel breakwaters, ~~made constructed from wood, plastic lumber, or metal timber, vinyl, or steel sheet piling sheetpiles~~ for shoreline protection ~~in conjunction with existing or created coastal wetlands~~. This permit shall only be applicable ~~where a shoreline is experiencing erosion~~ in public trust areas and estuarine waters according to authority provided in 15A NCAC 07J .1100 and according to the procedures and conditions outlined in this subchapter. This permit shall not apply to oceanfront shorelines or to waters and shorelines adjacent to the Ocean Hazard AEC with the exception of those shorelines that feature characteristics of Estuarine Shorelines. Such features include the presence of wetland vegetation, lower wave energy, and lower erosion rates than in adjoining Ocean Erodible Area.

*History Note: Authority G.S. 113A-107; 113A-118.1;  
Eff. June 1, 1994;  
Amended Eff. April 1, 2003; August 1, 2000.*

**15A NCAC 07H .2102 APPROVAL PROCEDURES**

(a) The applicant shall contact the Division of Coastal Management and request approval for development. The applicant shall provide information on site location, dimensions of the project area, and his name and address.

(b) The applicant ~~+~~shall provide:

- (1) confirmation that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or
- (2) confirmation that the adjacent riparian property owners have been notified by certified mail of the proposed work. Such notice shall instruct adjacent property owners to provide written comments on the proposed development to the Division of Coastal Management within 10 days of receipt of the notice, and, indicate that no response shall be interpreted as no objection. ~~DCM staff~~the Division of Coastal Management shall review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If ~~DCM staff~~the Division of Coastal Management determines that the project exceeds the guidelines established by the General Permit Process, the applicant shall be notified that ~~he must submit~~ an application for a major development ~~permit~~permit shall be required.

(c) No work shall begin until an on-site meeting is held with the applicant and appropriate Division of Coastal Management representative so that the proposed breakwater alignment can be appropriately marked. Written authorization to proceed with the proposed development may be issued during this visit. Construction of the breakwater shall be completed within 90/120 days of ~~this visit~~issuance of the permit or the general authorization shall expire and it shall be necessary to re-examine the alignment to determine if the general authorization can be reissued.

*History Note: Authority G.S. 113A-107; 113A-118.1;  
Eff. June 1, 1994;  
Amended Eff. September 1, 2006; August 1, 2000.*

**15A NCAC 07H .2103 PERMIT FEE**

The applicant shall pay a permit fee of two hundred dollars (\$200.00). This fee shall be paid by check or money order made payable to the Department.

*History Note: Authority G.S. 113A-107; 113A-118.1; 113A-119.1;  
Eff. June 1, 1994;  
Amended Eff. September 1, 2006; August 1, 2000.*

**15A NCAC 07H .2104 GENERAL CONDITIONS**

(a) This permit authorizes only the construction of breakwaters conforming to the standards herein.

- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources to make periodic inspections at any time deemed necessary in order to ~~be sure~~ensure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
- (c) ~~The placement of breakwaters authorized in this Rule shall not interfere with the established or traditional rights of navigation of the waters by the public. There shall be no significant interference with navigation or use of the waters by the public by the existence of the breakwater authorized herein.~~
- (d) This permit ~~will~~shall not be applicable to proposed construction where the ~~Department~~Division of Coastal Management 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~~shall not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit ~~must~~shall be consistent with all local requirements, AEC rules, and local land use plans current at the time of authorization.

*History Note:* Authority G.S. 113A-107; 113A-118.1;  
RRC Objection due to ambiguity Eff. May 19, 1994;  
Eff. July 1, 1994;  
Amended Eff. August 1, 1998.

#### 15A NCAC 07H .2105 SPECIFIC CONDITIONS

- (a) The breakwater shall be positioned no more than 20 feet waterward of the ~~mean-normal~~ high water or normal water level ~~contour (whichever is applicable)~~ or 20 feet waterward of the waterward edge of existing wetlands at any point along its alignment. For narrow waterbodies (canals, creeks, etc.) the breakwater alignment shall not be positioned offshore more than one sixth (1/6) the width of the waterbody.
- (b) Breakwaters authorized under this General Permit shall be allowed only in waters that average less than three (3) feet in depth along the proposed alignment as measured from the ~~mean-normal~~ high water or normal water ~~level~~ ~~contour-level~~.
- ~~(c) Where Department Staff determine that insufficient wetland habitat exists along the permittee's shoreline to provide adequate shoreline stabilization, the permittee shall be required to plant appropriate wetland species landward of the breakwater structure as directed by Department Staff.~~
- ~~(d)(c)~~ Construction authorized by this general permit ~~will~~shall be limited to a maximum length of 500 feet.
- ~~(e)(d)~~ The breakwater shall be constructed with an equal gap between each sheathing board totaling at least one inch of open area every linear foot of breakwater. The breakwater shall have at least one five (5) foot opening at every 100 feet. The breakwater sections shall be staggered and overlap as long as the ~~five-foot~~five-foot separation between sections is maintained. Overlapping sections shall not overlap more than 10 feet.
- ~~(f)(e)~~ The height of the breakwater shall not exceed six inches above ~~mean-normal~~ high water or the normal water level.
- ~~(g)(f)~~ Offshore breakwater sections shall be set back 15 feet from the adjoining property lines and the riparian access dividing line. The line of division of riparian access shall be established by drawing a line along the channel or deep water in front of the property, then drawing a line perpendicular to the line of the channel so that it intersects with the shore at the point the upland property line meets the water's edge. The set back may be waived by written agreement of the adjacent riparian owner(s) or when the two adjoining riparian owners are co-applicants. Should the adjacent property be sold before construction of the breakwater begins, the applicant shall obtain a written agreement with the new owner waiving the minimum setback and submit it to the Division of Coastal Management prior to initiating any construction of the breakwater.
- ~~(h)(g)~~ Breakwaters shall be marked at ~~50-foot~~50-foot intervals with yellow reflectors extending at least three feet above mean high water.
- ~~(i)(h)~~ No backfill of the breakwater or any other fill of wetlands, estuarine waters, public trust areas, or highground is authorized by this general permit.
- ~~(j)(i)~~ No excavation of the shallow water bottom, any wetlands, or high ground is authorized by this general permit.
- ~~(k)(j)~~ The breakwater ~~must be constructed of treated wood, plastic lumber, metal sheet~~ shall be constructed of vinyl, or steel sheet pile, formed concrete, timber, or other suitable materials approved by the Division of Coastal Management. ~~piles or materials approved as similar by Department personnel.~~

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- (l) Perpendicular sections, return walls, or sections ~~which-that~~ would enclose estuarine waters or public trust areas shall not be allowed under this permit.
- (m) The permittee will maintain the breakwater in good condition and in conformance with the terms and conditions of this permit or the remaining breakwater structure shall be removed within 90 days of notification from the Division of Coastal Management.

*History Note:* Authority G.S. 113A-107; 113A-118.1;  
Eff. June 1, 1994;  
Amended Eff. August 1, 2000.

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**SECTION .2400 – GENERAL PERMIT FOR PLACEMENT OF RIPRAP FOR WETLAND PROTECTION  
IN ESTUARINE AND PUBLIC TRUST WATERS**

**15A NCAC 07H .2401 PURPOSE**

The general permit for placement riprap for wetland protection in estuarine and public trust waters shall allow the placement of riprap immediately adjacent to and waterward of wetlands. This permit shall only be applicable where a shoreline is experiencing erosion in public trust areas and estuarine waters according to authority provided in 15A NCAC 07J .1100 and according to the rules in this Section. This permit shall not apply to oceanfront shorelines or to waters and shorelines adjacent to the Ocean Hazard AEC with the exception of those portions of shoreline 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;  
Eff. August 1, 2000;  
Amended Eff. April 1, 2003.*

**15A NCAC 07H .2402 APPROVAL PROCEDURES**

(a) The applicant ~~must~~shall contact the Division of Coastal Management and request approval for development. The applicant shall provide information on site location, dimensions of the project area, and his name and address.

(b) The applicant must provide:

- (1) confirmation that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or
- (2) confirmation that the adjacent riparian property owners have been notified by certified mail of the proposed work. Such notice shall instruct adjacent property owners to provide any comments on the proposed development in writing for consideration by permitting officials to the Division of Coastal Management within ten (10) days of receipt of the notice, and, indicate that no response ~~shall will~~ be interpreted as no objection. ~~DCM staff~~The Division of Coastal Management shall will review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If ~~DCM staff~~the Division of Coastal Management finds ~~that the comments are worthy of more in depth review,~~determines that the project exceeds the guidelines established by the General Permit Process, the applicant ~~shall will~~ be notified that ~~he must submit~~ an application for a major development permit shall be required.

~~(c) DCM staff shall review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project meets the requirements of the rules in this Section. If DCM staff finds that the comments are worthy of more in depth review, the applicant shall be notified that he must submit an application for a major development permit.~~

~~(d)~~(c) No work shall begin until an on-site meeting is held with the applicant and appropriate Division of Coastal Management representative so that the wetland protection structure can be appropriately marked. Written authorization to proceed with the proposed development may be issued during this visit. Construction of the wetland protection structure must be completed within 90~~120~~ days of ~~this visit~~issuance of the permit or the general authorization expires and it shall be necessary to re-examine the alignment to determine if the general authorization can be reissued.

*History Note: Authority G.S. 113A-107; 113A-118.1;  
Eff. August 1, 2000.*

**15A NCAC 07H .2403 PERMIT FEE**

The applicant shall pay a permit fee of two hundred dollars (\$200.00). This fee shall be paid by check or money order made payable to the Department.

*History Note: Authority G.S. 113A-107; 113A-118.1; 113A-119.1;  
Eff. August 1, 2000;  
Amended Eff. September 1, 2006.*

**15A NCAC 07H .2404 GENERAL CONDITIONS**

- (a) This permit authorizes only the construction of wetland protection structures conforming to the standards herein.
- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources (DENR) to make periodic inspections at any time deemed necessary in order to ~~be sure ensure~~ that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
- (c) ~~The placement of riprap authorized in this Rule shall not interfere with the established or traditional rights of navigation of the waters by the public. There shall be no unreasonable interference with navigation or use of the waters by the public by the existence of the riprap structure authorized herein.~~
- (d) This permit shall not be applicable to proposed construction where the ~~Department~~Division of Coastal Management 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 ~~shall does~~ not eliminate the need to obtain any other required state, local, or federal authorization.
- (f) Development carried out under this permit ~~shall must~~ be consistent with all local requirements, AEC Guidelines, and local land use plans current at the time of authorization.

*History Note:* Authority G.S. 113A-107; 113A-118.1;  
Eff. August 1, 2000.

**15A NCAC 07H .2405 SPECIFIC CONDITIONS**

- (a) This general permit shall only be applicable along shorelines possessing wetlands, ~~and~~ which exhibit an identifiable ~~erosion~~ escarpment.
- (b) ~~The structure shall be constructed of granite, marl, riprap, concrete without exposed rebar, or other suitable materials approved by the Division of Coastal Management.~~
- (~~b~~)(c) The height of the erosion escarpment shall not exceed three feet.
- (~~e~~)(d) The riprap shall be placed immediately waterward of the erosion escarpment.
- (~~d~~)(e) The riprap ~~must shall~~ be positioned so as not to exceed a maximum of ~~five six (6)~~ feet waterward of the erosion escarpment at any point along its ~~alignment~~alignment with a slope no flatter than 3 feet horizontal per 1 foot vertical and no steeper than 1 ½ feet horizontal per 1 foot vertical.
- (~~e~~)(f) The riprap ~~must shall~~ be positioned so as not to exceed a maximum of six inches above the elevation of the adjacent wetland substrate.
- (~~f~~)(g) Where ~~Department staff~~the Division of Coastal Management determine that insufficient wetlands ~~or coastal marsh~~vegetation exists along the permittee's shoreline to provide adequate shoreline stabilization, the permittee shall be required to plant appropriate ~~coastal marsh or wetland species~~wetland vegetation landward of the riprap structure as directed by ~~Department staff~~the Division of Coastal Management.
- (~~e~~)(h) Construction authorized by this general permit will be limited to a maximum length of 500 feet.
- (~~h~~)(i) No backfill or any other fill of wetlands, submerged aquatic vegetation, estuarine waters, public trust areas, or highground areas is authorized by this general permit.
- (~~h~~)(j) No excavation of the shallow water bottom, any wetlands, or high ground is authorized by this general permit.
- (j) ~~The riprap must not be placed in such a manner as to impede water flow into or out of any natural channel or stream.~~
- (k) ~~The riprap~~Riprap material ~~used for construction must shall~~ be free from loose dirt or any ~~pollutant~~pollutant and ~~be. It must be~~ of a size sufficient to prevent its movement from the site by wave ~~action~~ or ~~current~~action: currents
- (l) ~~Riprap material must consist of clean rock or masonry materials such as marl, granite or broken concrete. Materials such as tires, car bodies, scrap metal, paper products, tree limbs, wood debris, organic material or similar materials are not appropriate riprap for the purposes of this General Permit.~~
- (~~m~~)(l) If the crossing of wetlands with mechanized or non-mechanized construction equipment is necessary, temporary construction mats shall be utilized for the area(s) to be crossed. The temporary mats shall be removed immediately upon completion of construction of the riprap structure.
- (~~m~~)(m) The permittee shall maintain the structure in good condition and in conformance with the terms and conditions of this permit or the remaining riprap structure shall be removed within 90 days of notification from the Division of Coastal Management.

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

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*Eff. August 1, 2000-*