



Estuarine Shoreline Development Policy and Regulations in North Carolina

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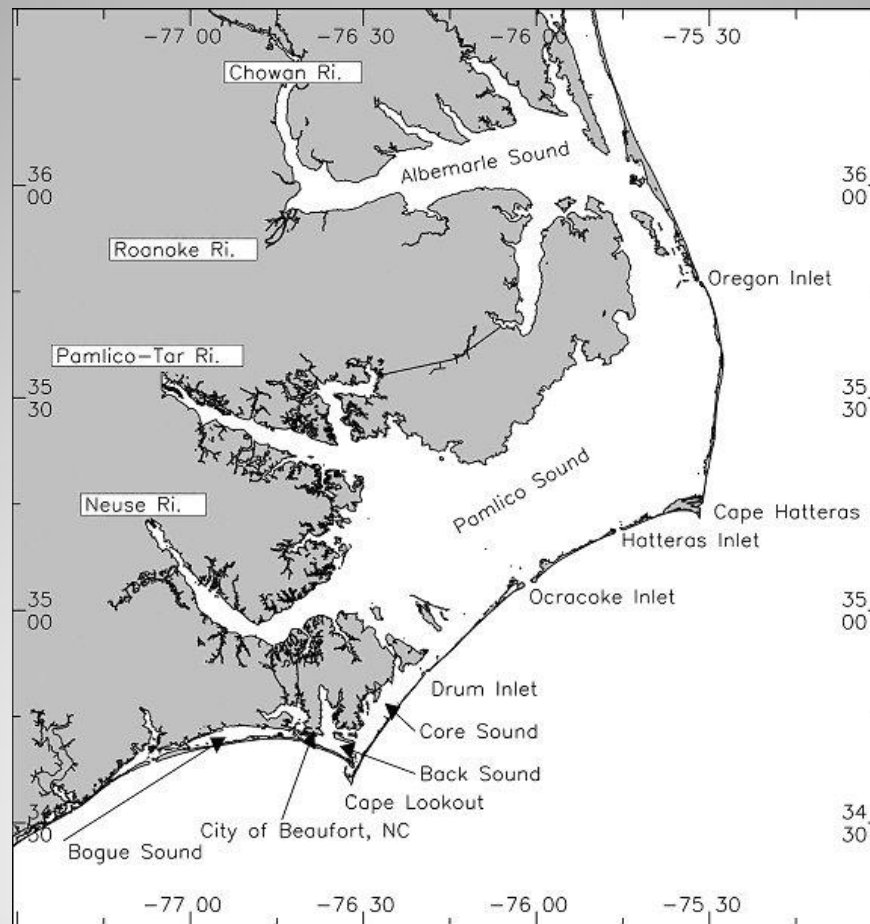
N.C. Sea Grant and

N.C. Coastal Resources Law, Planning, and Policy Center

APNEP Science and Technical Advisory Committee Meeting

July 23, 2013

Snapshot



Map courtesy of NOAA



Estuarine Shoreline Stabilization Challenges

- How can N.C. accommodate future shoreline development, while also better preserving the natural environment that attracts residents and tourists?
- How can types of living shoreline be utilized more frequently to help prevent loss of vegetated inter-tidal habitat, which promotes long-term health of the estuary?



N.C. Policies on Stabilization Methods

- N.C. policy and rules permit a variety of methods.
 - Bulkheads
 - Revetments
 - Marsh sills
- All types of shoreline stabilization may be permitted in N.C., with streamlined permitting available for some methods.
- In most cases, federal approval is also required, e.g., Corps through CWA Section 404, RHA Section 10.



What/Who Has Informed N.C. Estuarine Shoreline Policy?

- Coastal Habitat Protection Plan
- N.C. Estuarine, Biological, and Physical Processes Work Group
- Virginia's living shorelines work
- DCM's 2011 Marsh Sill Assessment
- Estuarine Shoreline Mapping Project (future policy?)



What Are N.C.'s Rules?

- New projects require either a general permit or major permit.
 - General- allows for expedited process, due to well-understood and predictable impacts.
 - Major- for projects outside the scope and conditions of a general permit.
- Major permits require consultation with with 10 state agencies and up to 4 federal agencies.
- N.C. has general permits for bulkheads, revetments, marsh sills, and others.



Where Do I Find The Rules?

- Groin General Permit- 15A NCAC 7H. 1400.
- Sheetpile sill General Permit- 15A NCAC 7H. 2100.
- Marsh toe revetment General Permit- 15A NCAC 7H. 2400.
- Marsh sill General Permit- 15A NCAC 7H. 2700.



What Are the Differences?

- GP conditions for marsh sills are more numerous than for bulkheads and revetments (29 conditions).
 - Concurrence with DMF*;
 - Coordination with Dept. of Administration; and
 - Requires the permit applicant to contact DWQ* and the Corps for additional requirements.
- DCM approval for bulkhead and revetments- one to two days.
- DCM approval for marsh sill- three weeks or longer.
- Federal approval can increase permit processing time.



Why The Differences?

- N.C. agency concerns about marsh sills
- Office of the Attorney General concerns
- Homeowner concerns and preferences
- Marine contractor education



A Comparison- State Level

MULTI-STATE COMPARISON OF STATE PERMIT PROCESSING TIME

State	Average Permit Time	Bulkhead Average Permit Time	Revetment Average Permit Time	Marsh Sill
Delaware	90 days	90 days	90 days	
Maryland	90 days	90 days	90 days	
Virginia	90-105 days	90-105 days	90-105 days	
North Carolina	1-2 days	1-2 days	15-20 days (up to 120) (CAMA General Permit only) 75-80 days (Major)	

From forthcoming inner coast report from the N.C. Coastal Resources Law, Planning, and Policy Center



A Comparison- Federal Level

MULTI-DISTRICT COMPARISON OF USACE PERMITTING TIMEFRAMES

District	Average time to 404 permit for marsh sill
Wilmington (NC)	45-60 days (for 291 GP); 90-120 (individual)
Norfolk (VA)	60 days
Baltimore (MD)	60+ days
Philadelphia (DE)	60 days

From forthcoming inner coast report from the N.C. Coastal Resources Law, Planning, and Policy Center



Does N.C. Want “Equal Footing”?

- Disparity over permitting time likely to continue.
 - N.C. timeframe for marsh sill permit comparable to other states.
 - N.C. fastest for bulkheads, but highly unlikely the state would seek to increase permitting timeframe.
- Focus on keeping DCM staff educated about all forms of shoreline stabilization.
- Focus on education of property owners and training of marine contractors.
- Continue to work with federal and state agencies on potential avenues for streamlining the process.



2011 Marsh Sill Assessment Findings

- Not found to pose a navigation risk.
- Observed to provide erosion protection where installed.
- Often built in combination with other structures.
- Use of gap or overlap design observed to better provide water, fish, and other nekton access to area behind the sill vs. dropdown design.
- Unclear if marsh sill cause erosional impacts.
- Mound material used in marsh sills often colonized with oysters.
- Observed support for marsh grass and doesn't appear to create new uplands.
- No observed impacts to water quality.



Questions?