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January 27, 2005

Mr. Eugene Tomlinson, Chairman
North Carolina Coastal Resources Commission
Division of Coastal Management
Department of Environment and Natural Resources
1638 Mail Service Center
Raleigh, NC 27699-1638

CRC-05-01

Dear Chairman Tomlinson:

Since 2000, multiple projects ranging from beach nourishment to sea turtle habitat restoration to dredged material disposal have placed sediment on North Carolina oceanfront beaches. In some cases the size of this material has been excessively coarse (i.e., shell hash, rock cobbles, and large-diameter mud balls) and/or excessively fine (unconsolidated mud remaining suspended in the water column). Existing rule language promulgated by the Coastal Resources Commission (CRC) states that "Sand used for beach nourishment shall be compatible with existing grain size and type." Even though material that is either excessively coarse or fine is considered by most to be incompatible with the beach, the rule language is vague and, therefore, ineffective.

In March 2002, the CRC Science Panel on Coastal Hazards began a discussion of the problems related to the aforementioned projects and the adequacy of existing standards. The result, which I am pleased to present to you today, is a comprehensive set of sediment criteria recommendations for beach nourishment and dredged material disposal projects on the North Carolina oceanfront shoreline.

These recommendations include a section on post-nourishment monitoring and mitigation. The goal of scientific monitoring is to develop a better understanding of the biological and physical responses to nourishment activities in order to increase our knowledge and decrease the adverse impacts and cost. This monitoring will yield important information on possible secondary and cumulative impacts of nourishment and dredged material disposal on our oceanfront beaches.

During the course of its sediment criteria discussions, the Science Panel has also developed a broader set of informal recommendations. The relevant state agencies are encouraged to: 1) continue conducting and sponsoring active research, compiling and analyzing these data, and providing open public access to these data and results; 2) engage qualified parties (e.g., geologists, engineers, biologists) from academia, private industry or other state, county, local and/or federal agencies to review and advise the decision and policy making process when addressing issues that are out of the State's expertise; 3) provide increased support for the professional development of its employees

so it can continue to attract and retain a workforce with the qualifications and expertise expected by the citizens of North Carolina.

The Science Panel looks forward to discussing these recommendations with the Commission.

Sincerely,

John S. Fisher, PhD, PE, Chairman
CRC Science Panel on Coastal Hazards

The Science Panel:

Steve Benton, DCM retired
Bill Cleary, UNCW
John Fisher, NCSU
Tom Jarrett, USACE retired
Margery Overton, NCSU
Pete Peterson, UNC IMS
Orrin Pilkey, Duke
Stan Riggs, ECU
Spencer Rogers NC Sea Grant
John Wells, VIMS
Greg Williams, USACE