



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: August 8, 2006
Comment Deadline: September 7, 2006
Corps Action ID #: SAW 2006 40282 128

The Wilmington District, Corps of Engineers (Corps) has received an application from the Town of Nags Head, seeking Department of the Army authorization to excavate 4.6 million cubic yards of beach-quality sediment from an offshore borrow source, and deposit the material along approximately 10 miles of ocean shoreline, in the Town of Nags Head, Dare County, North Carolina.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: Town of Nags Head
Post Office Box 99
Nags Head, North Carolina 27959

Agent: Coastal Science and Engineering
Post Office Box 1643
Morehead City, North Carolina 28557

Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

Location

The project site is located off NC Highway 12, on Bodie Island, adjacent to the Atlantic Ocean, in the Town of Nags Head, Dare County, North Carolina. The proposed project totals approximately 10 miles of ocean shoreline beginning approximately 1 mile from the town's northern limit and extending south to the town line adjacent to the Cape Hatteras National Seashore. The proposed borrow area is located in the Atlantic Ocean approximately 2-3 miles offshore of the project site. See attached plans and drawings for specific information.

Existing Site Conditions

The Town of Nags Head encompasses approximately 11 miles of ocean shoreline on a barrier island located at the northern end of North Carolina's Outer Banks. Variations in beach sediment grain size vary in the near shore zone, with the majority ranging between 0.17 millimeters (mm) to 0.23 mm. Sediments become coarser proceeding seaward in water depths greater than 30 feet approaching area S1 about 1-3 miles offshore. These sediments are thought to be associated with relic deposits from former inlets and barrier ridges from earlier sea-level stands. The near shore zone is highly dynamic with exchanges of sand between the bar and the beach, resulting in a predominance of finer type sand.

The width of the berm of the island's dune system varies considerably with location along the town's beach and with the season. Along most of the project area, the winter berm is non-existent due to continuing erosion processes. Dune habitat is currently decreasing due to excessive erosion of the base or toe of the dunes by waves that travel unimpeded over eroded wet beach to directly impact dunes.

Beach and terrestrial communities are considered sparsely populated due to the harsh conditions, including salt spray, wind, shifting sands, and soils with low water retention. Extensive coastal development is another factor that could limit species diversity and abundance. Vegetation along the uppermost portions of the dry beach includes beach spurge, sea rocket, and pennywort. The upper dune areas are more stabilized with vegetation consisting of American beach grass, panic grass, sea oats, broom straw, and salt meadow hay.

Organisms in the high-energy sandy inter-tidal zones include mole crabs, coquina clams, amphipods, isopods, and polychaetes. These species are not commercially important, but serve as an important food source for surf-feeding fish and shore birds. According to data collected from the project area, the invertebrate community of the inter-tidal beaches is strongly seasonal.

Applicant's Stated Purpose

The Town of Nags Head intends to nourish their island's ocean shoreline to restore eroded areas to a condition that would be able to sustain chronic erosion and the short-term impact of storms for at least 4-5 years, protect upland property, infrastructure, and tax base, and widen the recreational beach by 50-125 feet waterward of the ordinary high water mark (OHWM).

Project Description

The proposed project consists of excavating by hydraulic dredge up to 4.6 million cubic yards of beach-quality sediment from ocean borrow area(s) situated approximately 2-3 miles offshore of the project area. Sediment would be pumped onto the beach between the toe of the existing dune and the low water line and shaped by bulldozers into a profile

that closely matches the contours and elevations of the natural beach. Approximately 50 percent of the excavations would be deposited by run-out from the discharge point between mean low water and the outer bar located approximately 500 feet offshore. Typical fill sections would add approximately 60-160 cubic yards of beach and advance the shoreline 50-125 feet waterward of the OHWM. The work would be performed continuously, covering all or portions of each of four designated reaches according to the following plan (subject to local funding availability).

- Reach 1 - Stations 500+00 to 790+00 – 5.5 miles – up to 1.74 million cubic yards
- Reach 2 – Stations 790+00 to 920+00 – 2.5 miles – up to 1.3 million cubic yards
- Reach 3 – Stations 920+00 to 1010+00 – 1.7 miles – up to 1.44 million cubic yards
- Reach 4 – Stations 1010+00 to 1025+00 – 0.3 miles – up to 120,000 cubic yards

The proposed borrow area(s) are portions of offshore area S1, the boundary of which is designated by the USACE (2000) in the federal Dare County Project. Several sub areas within S1 have been sampled and tested for sediment compatibility. Sediments have been confirmed over a 2-3 square-mile area within area S1 (approximately 10 square miles) to a section thickness averaging approximately 8 feet. This yields potentially greater than 20 million cubic yards of beach-quality sediment. Water depths in the borrow areas are approximately 40-55 feet. The anticipated optimal equipment for excavations will be ocean-certified, self-contained hopper dredges. Such equipment typically excavates shallow trenches (approximately 2-3 foot sections) in each pass (leaving narrow undisturbed areas at the margin of each cut), then travels to a buoyed pipeline anchored close to shore. Discharge to the beach is via submerged pipeline across the surf zone, then by way of shore-based pipe positioned along the dry beach. Only a small area of borrow area S1 will be required to provide up to 4.6 million cubic yards of beach quality material.

The applicant is coordinating the specific area for use in the proposed project with the Corps with the following understanding: (1) the final borrow area required for the emergency beach nourishment project can be limited to the equivalent of a 0.9 square-mile (approximately 575 acres) area, (2) the borrow area used will be contiguous rather than a series of small impact areas, (3) once used, the borrow area will no longer be available for use, consistent with the Dare County Project, and (4) the borrow area will be delineated so as to avoid ongoing biological monitoring stations established by the Corps in connection with the Dare County Project.

The project will be built in approximate 1-2 mile sections, optimizing the disposition of pipeline. Sections will be pumped into place with the aid of temporary dikes pushed up by bulldozers in the surf zone. Daily operations will impact approximately 500-1,000 linear feet of shoreline as work progresses in either direction from the submerged pipeline. Upon completion of a section, the submerged pipe and beach-building equipment will be shifted to the next section.

As construction progresses, sections will be graded to final contours, dressed to eliminate low areas, and opened for use by the public. Support equipment will be shifted out of

completed sections as soon as practicable, so that construction activities in a particular reach will not disrupt normal beach use for only a month or so at any locality. The finished sections will be allowed to adjust to natural processes for several months. The final process will include the placement of dune fencing and/or dune plantings as needed or required.

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Ms Cyndi Karoly by September 7, 2006.

The applicant has not provided to the Corps, a certification statement that his/her proposed activity complies with and will be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2(b)(2), the Corps can not issue a permit for the proposed work until the applicant submits such a certification to the Corps and the North Carolina Division of Coastal Management (NCDQM), and the NCDQM notifies the Corps that it concurs with the applicant's consistency certification.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project may adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service. There are a number of listed species that frequent some portion of the project area during their life cycle. Some of these species may be affected by impacts to trust resources, including impacts on bottom substrates, marine water column, and benthic environments.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined there may be species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. A final determination on the effects of the proposed project will be made upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidate State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered

species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, September 7, 2006. Comments should be submitted to Mr. Raleigh Bland, Washington Regulatory Field Office, Post Office Box 1000, Washington, North Carolina 27889, telephone (252) 975-1616, extension 23.

Nags Head Emergency Beach Restoration Project

Town of Nags Head, NC

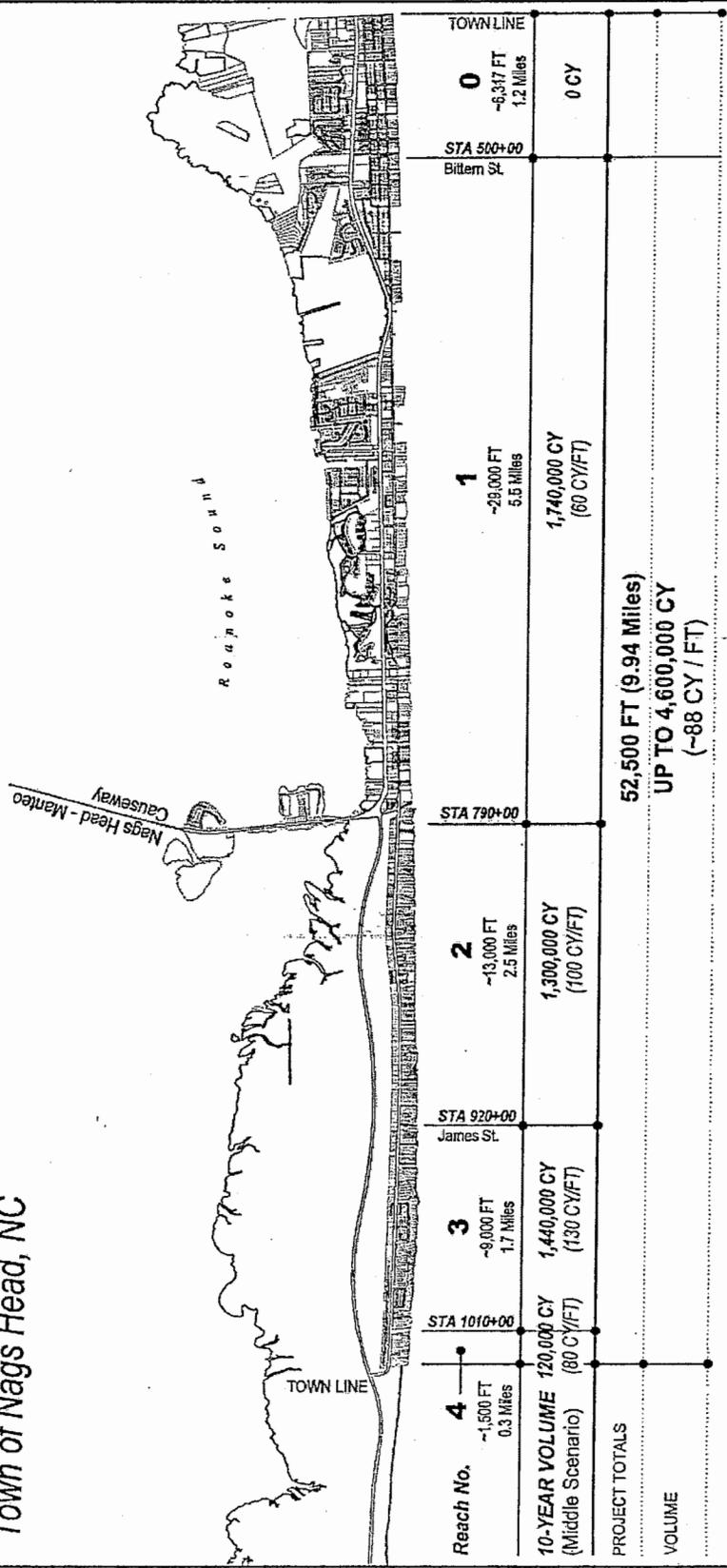


FIGURE 7. Proposed emergency beach nourishment project for Nags Head showing the maximum fill volumes by reach.



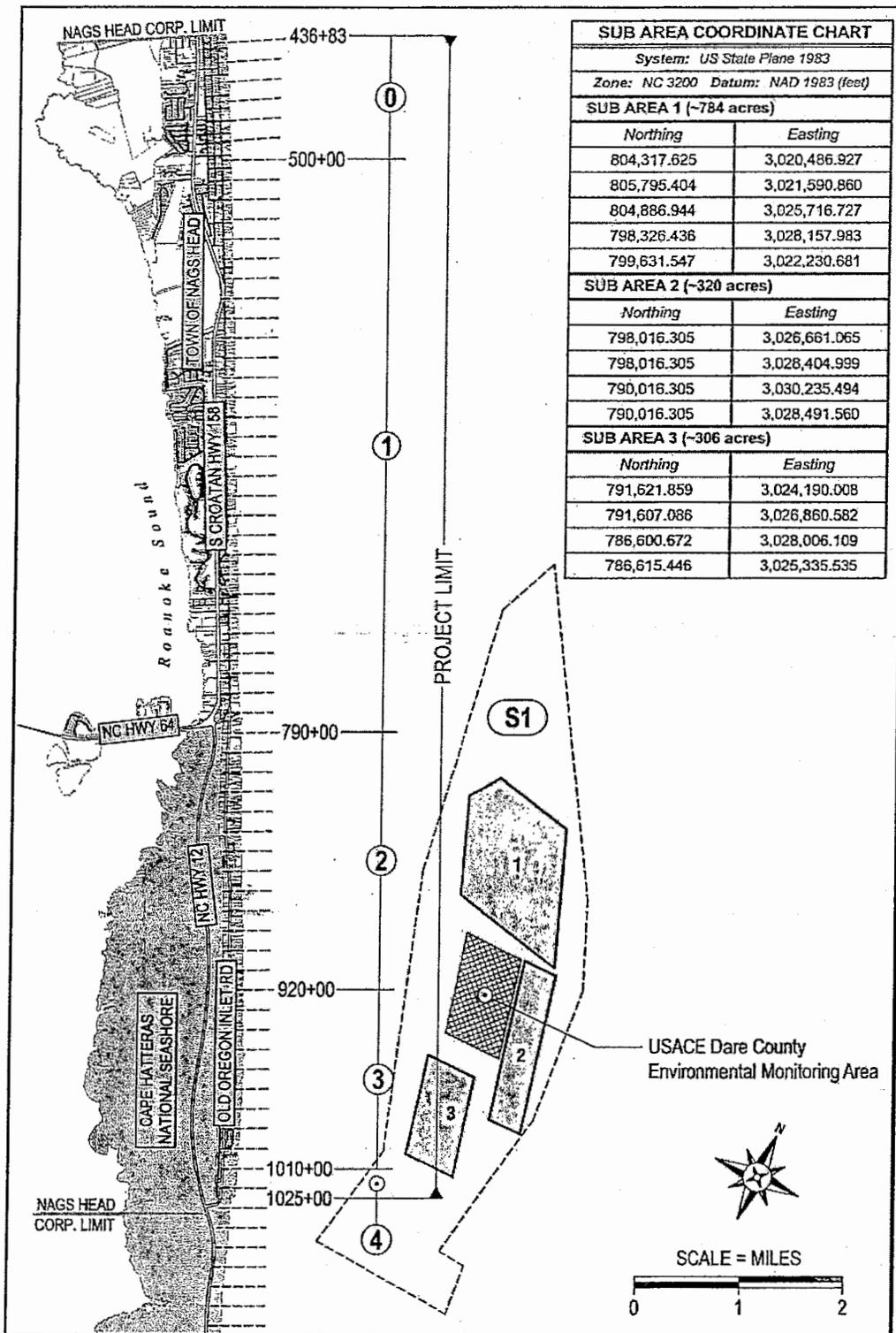


FIGURE 2.1. Proposed emergency beach nourishment project limits for Nags Head using borrow sand from offshore area S1 (designated by USACE 2000). Work would consist of excavation and placement of up to 4.6 million cubic yards by hydraulic dredge within Reach 1 through Reach 4 (~10 miles). Subareas 1, 2, and 3 contain >20 million cubic yards of beach-quality sediment to ~8 ft. Final borrow area selection will be in coordination with the USACE so as to avoid federal environmental monitoring stations. Only a portion of subareas 1, 2, or 3 would be used in the project, leaving undisturbed subareas for future projects.

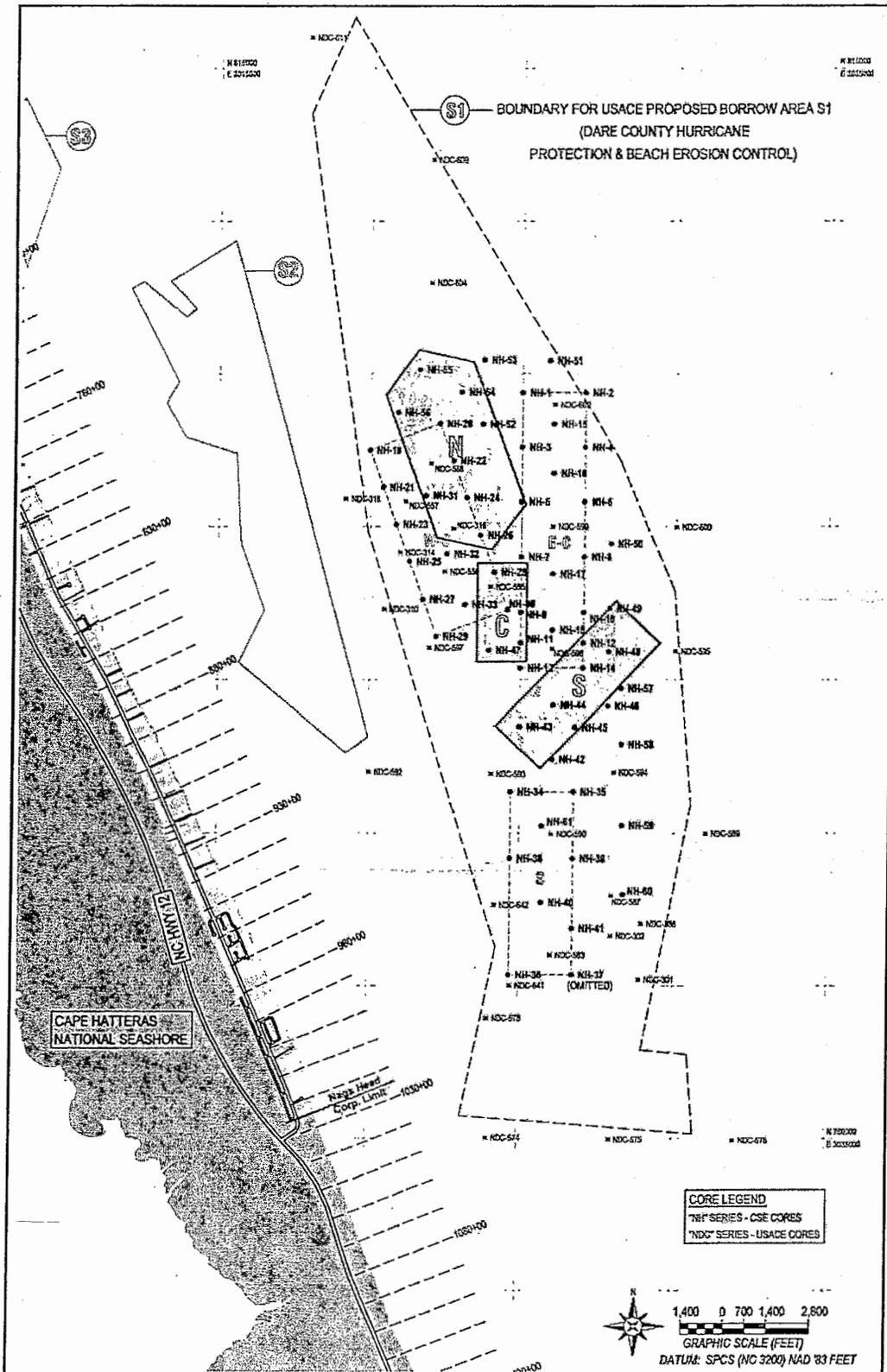


FIGURE 4.16-3. Location of offshore area S1 (delineated by USACE 2000), various subareas, and the grid of cores obtained in CSE's (2005–August) study. Subareas W–C, E–C, and S were the basis of CSE's survey grid. Subgroups N, C, and S (red) were delineated based on sediment test results. [From CSE 2005–August]