

the Draft Environmental Impact Statement (EIS) will be received until December 26, 2003.

ADDRESSES: Copies of comments and questions regarding the Draft EIS may be addressed to: U.S. Corps of Engineers, Wilmington District, Regulatory Division. ATTN: File Number 2001-00632, Post Office Box 1890, Wilmington, NC 28402-1890.

FOR FURTHER INFORMATION CONTACT: Questions about the proposed action and DEIS can be directed to Mr. Mickey Sugg, Wilmington Regulatory Field Office, telephone: (910) 251-4811.

SUPPLEMENTARY INFORMATION: 1. *Project Description.* The Town of Emerald Isle, located along the western 11.2 miles of Bogue Banks, North Carolina, is proposing to reposition the main ebb tide channel (or bar channel) through Bogue Inlet as a means to address a severe erosion problem that is threatening development and town infrastructure located on the west end of the town in an area known as The Pointe. The severe erosion at the Pointe is occurring as a result of the eastward migration of the main ebb channel of Bogue Inlet. An analysis of historic photographs of the inlet indicates that the midpoint of the channel has experienced movements to both the west and east with the latest trend being toward the east. Since September 1981, the channel midpoint migrated a total of over 3,900 feet to the east, however, a majority of this movement occurred between September 1981 and February 1984. From February 1984 to September 2001, the channel moved slightly more than 1,500 feet to the east, which represents an annual rate of 104 feet/year. The eastward movement of the channel has been accompanied by erosion of the Bogue Banks shoulder of the inlet (the Pointe shoreline) with the rate of erosion of the shoreline averaging 56 feet/year between February 1984 and September 2001. If this rate of erosion of the Pointe shoreline continues unabated, it is estimated that 30 to 50 structures could be lost or severely damaged during the next 5 to 10 years. In addition, 300 to 600 feet of Inlet Drive could be lost along with side streets and utilities serving the Pointe subdivision.

Secondary features of the proposed project includes using a portion of the dredged material to close the existing ebb channel with the balance of the material used to nourish approximately 24,000 linear feet (5.0 miles) of beach along the west end of the Town of Emerald Isle. In this regard, the Town of Emerald Isle presently has permits to nourish 51,100 (9.68 miles) of ocean

shoreline using offshore borrow areas. Approximately 5.8 miles of this shoreline was nourished between January and March 2003. The Emerald Isle beach nourishment project is part of an island-wide project sponsored by Carteret County. The County project covers approximately 16.8 miles of ocean shoreline and begins at the east town limits of the Town of Pine Knoll Shores and ends at a point 8,000 feet (1.5 miles) east of Bogue Inlet.

2. *Proposed Action.* The primary purpose of the channel relocation project is to create a stable channel that will divert tidal flow away from the Pointe area of Emerald Isle. Therefore, the design focus is on developing channel dimensions that will capture the majority of the ebb tidal flow through the inlet. An added feature of the overall design would be the closure of the existing channel by using approximately 200,000 cubic yards of material to construct a sand dike across the existing channel in the vicinity of the Pointe. The dimensions of the relocated channel are sized to capture the tidal prism of Bogue inlet and to divert flow away from the Point shoreline. The optimum channel has been determined to have a channel depth of -13.5 feet NGVD and a maximum width of 500 feet. The construction of the new channel would require the removal of approximately 1,009,500 cubic yards of feet.

The material to be removed has a mean diameter of 0.30 mm, compared to 0.22mm native beach material, and contains 1.25% silt and minimal shell content.

Apart from the channel dimensions, the new channel must be positioned so that it does not cause adverse impacts on the adjacent shorelines or result in unacceptable loss of estuarine habitat. The selection of a channel location was based on detailed geomorphic analysis of the inlet and adjacent shorelines, conducted by Dr. William J. Cleary, University of North Carolina at Wilmington. The geomorphic analysis will utilize an assortment of aerial photographs of the inlet covering the period from 1938 to 2001. However the primary emphasis will be on changes in the inlet and the adjacent shorelines between 1973 and 2001. The geomorphic analysis consists of an evaluation of the following: (a) Location of the channel midpoint relative to the Pointe, (b) the orientation of the inlet's ebb tide delta channel, (c) the configuration of the ebb tide delta *i.e.*, the percent of the ebb tide delta east and west of the main ebb channel, (d) inlet shoulder changes (the Pointe shoreline and the west tip of Bear Island), (e)

changes in the ocean shoreline on the west end of Bogue Banks and the east end of Bear Island (Hammocks Beach State Park), and (f) changes in the interior marsh islands (primarily Dudley Island and Island 2). The measured changes the adjacent shorelines, inlet shoulders, and the interior marshes will be related to changes in the physical makeup of the inlet including the position and orientation of the ebb tide delta channel and the configuration of the ebb tide delta.

Geomorphic analysis indicates that the cumulative shoreline changes on each island were averaged over 3,500 feet of shoreline immediately adjacent to the inlet. When the percent of the ebb tide delta on the Bogue Banks side is small, as it was between 1984 and 2001, the bar channel was located close to Bogue Banks and the portion of the delta on the Bogue Banks side was providing some degree of wave sheltering for the west end of the island. This particular ebb tide delta configuration resulted in a considerable amount of accretion along the 3,500-foot shoreline immediately east of the inlet while Bear Island experienced an almost mirror image response on its ocean shoreline, *i.e.* erosion. Even though the present ebb tide delta configuration is favorable for the extreme west end of Emerald Isle, the eastward migration of the inlet channel that led to the existing inlet configuration also caused the inlet shoreline of Bogue Banks (the Pointe shoreline) to erode. Not only has the Bogue Banks inlet shoreline eroded in response to the eastward movement of the channel, so has the Bear Island ocean and inlet shorelines. Based on these and numerous other comparisons, the preliminary results of the geomorphic analysis indicates that a centrally located channel, approximating the position and orientation of the channel in 1978, may be beneficial to the inlet shoreline on Bogue Banks (the Pointe shoreline) and the east end of Bear Island.

3. *Alternatives.* Several alternatives have been identified and evaluated through the scoping process, and further detailed description of all alternatives is disclosed in Section or Chapter 3 of the Draft EIS.

The applicant's preferred alternative is to relocate the channel to a central location and to utilize the dredged material to nourish approximately 5.0 miles of beach.

4. *Scoping Process.* A public scoping meeting was held on October 29, 2002 and a Project Delivery Team (PDT) was developed to provide input in the preparation of the EIS. The PDT is comprised of local, state, and federal