

3.0 PROJECT ALTERNATIVES

Project alternatives designed to respond to the erosion threat associated with the eastward migration of the Bogue Inlet ocean bar channel have been identified. The alternatives ranged from no action, abandon and/or relocate threatened homes, to relocation of the inlet ocean bar channel to a central position between Bogue Banks and Bear Island.

3.1 RATIONALE

The alternatives were developed and evaluated based on the assumption that the inlet shoreline would continue to erode over the next 10 years in response to the continued eastward migration of the inlet bar channel. This would position the inlet shoreline 600 to 900 feet east of its present location (see Appendix B). This potential shoreline migration zone is well within the present Inlet Hazard Area as established by the North Carolina Division of Coastal Management. In this regard, the Inlet Hazard Area was established based on historic changes in the inlet position. For Bogue Inlet, the Inlet Hazard Area (see Figure No. 4 and 5) includes most of the western tip of Bogue Banks beginning at a point approximately 3,000 feet east of the existing inlet. Alternatives A through H, described in detail below, have been identified during the scoping process under the following considerations: environmental consequences, feasibility, logistics, cost, and applicable laws.

3.2 DESCRIPTION OF ALTERNATIVES

3.2.1 Alternative A – No Action Project Alternative

The No Action Alternative was evaluated to determine the impacts associated with continued channel migration to the east over a 10-year period. The current response to the erosion threat has included the construction of temporary sandbag revetments by individual property owners and the Town of Emerald Isle to provide interim protection to threatened homes and roads. The No Action Alternative assumes that no such measures would be implemented during the analysis period. Under this alternative, threatened homes and roads would simply be abandoned and demolished with all of the debris transported to existing sanitary landfills or the structures would be allowed to fail and fall into the inlet. Erosion rates of the Emerald Isle inlet shoreline have ranged from 60 to 90 feet per year since the mid-1980's; however, the No Action Alternative was evaluated using an erosion rate of 60 feet/year. The tax value of real property located within the area that would be impacted by continued inlet shoreline erosion over the 10-year evaluation period totals almost \$11.0 million. In addition to impacts to real property and the associated impact on the town and county

Bogue Inlet Channel Erosion Response Project
 Draft Environmental Impact Statement

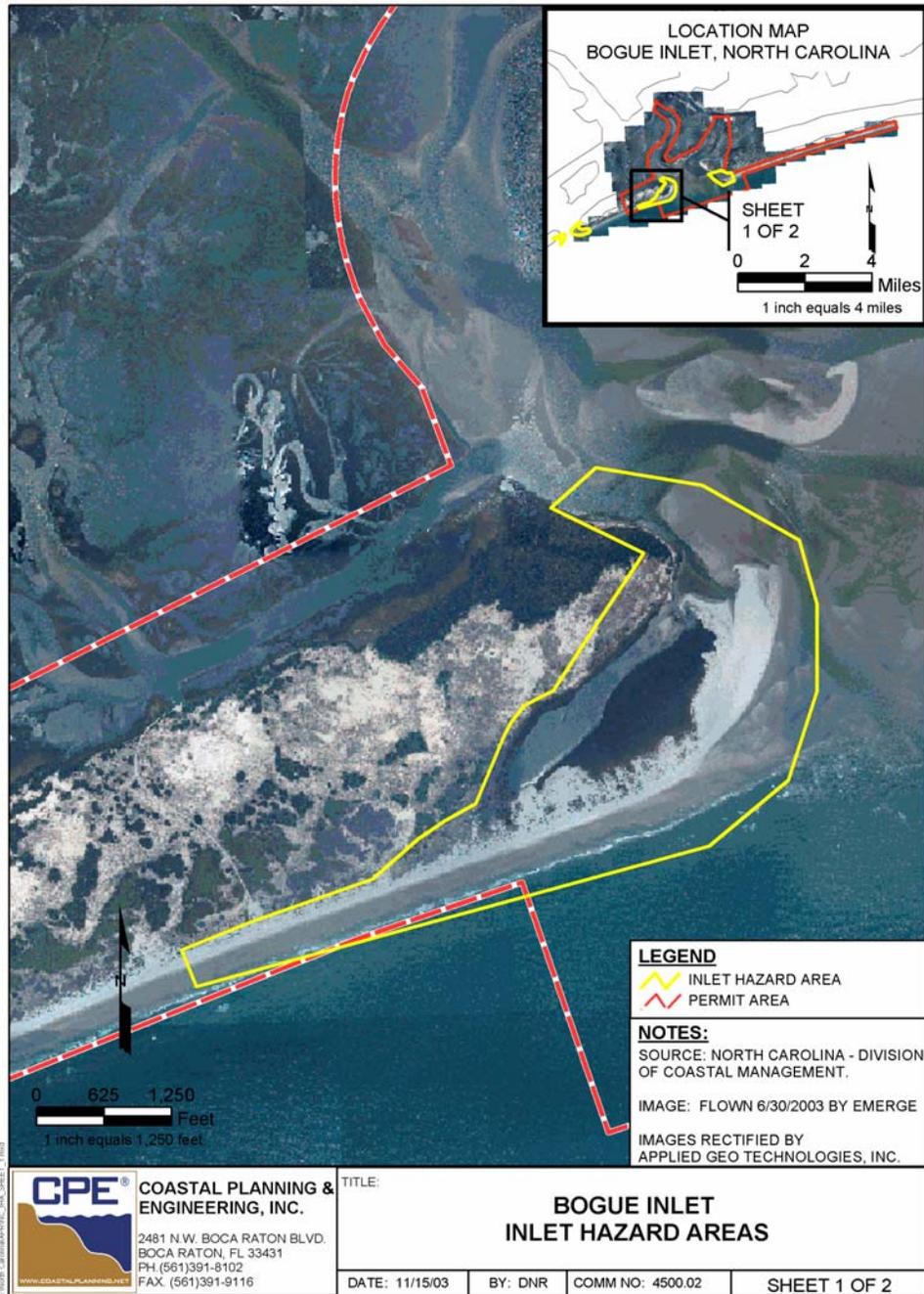


Figure No. 4 – Inlet Hazard Area on Bear Island