## HILLSBORO INLET MANAGEMENT STUDY IMPLEMENTATION PLAN

## **CERTIFICATE OF ADOPTION**

WHEREAS the Department of Environmental Protection, in partnership with the Hillsboro Inlet District, has conducted a study of Hillsboro Inlet, under the provisions of Section 161.161, Florida Statutes, for the purposes of evaluating the erosive impact of the inlet on adjacent beaches, and

WHEREAS the Department has developed an implementation plan which contains corrective measures to mitigate the identified impacts of the inlet, and

WHEREAS the implementation plan is consistent with the Department's program objectives under Chapter 161, Florida Statutes,

The Department does hereby adopt the following implementation actions:

- 1) Place all beach compatible maintenance or offshore dredged material on downdrift beaches in areas of greatest need. The combined total of material from all sources shall equal or exceed 120,000 cubic yards on an average annual bases.
- 2) Construct the exterior sand trap.
- 3) The sediment budget contained in the study report is adopted as an interim measure and shall be formally validated or redefined in subsequent revisions of the plan based on a comprehensive monitoring plan by December 31,2001.
- 4) Implement a comprehensive inlet, beach, and offshore monitoring program subject to approval of the Department.

This plan is based on the supporting data contained in the study report, <u>Hillsboro Inlet</u> <u>Management Plan Addendum. Coastal Systems International, Inc. March. 1995</u> and studies conducted by the U.S. Army Corps of Engineers. Each implementation action contained in this plan is subject to further evaluation, and subsequent authorization. Any action that may affect navigation associated with the inlet shall be consistent with all applicable federal requirements and subject to authorization from the U.S. Army Corps of Engineers.

It is the intent of the Department to assist in the implementation of the plan through the provision of funds granted under the Florida Beach Erosion Control Program. The Department's financial obligations shall be contingent upon sufficient legislative appropriations.

Nothing in this plan precludes the evaluation and potential adoption of other alternatives or strategies for management at Hillsboro Inlet.

APPROVED FOR ADOPTION

Virginia B. Wetherell, Secretary Department of Environmental Protection

## HILLSBORO INLET MANAGEMENT STUDY SUMMARY OF FINDINGS REPORT and RECOMMENDED IMPLEMENTATION PLAN

### Introduction

The Department of Environmental Protection, in partnership with the Hillsboro Inlet District, sponsored an inlet management study of Hillsboro Inlet. The study, <u>Hillsboro Inlet Management Plan Addendum</u>, <u>Coastal Systems International, Inc. March. 1995</u> was conducted under the provisions of Section 161.161, Florida Statutes, for the purposes of evaluating the erosive impact of the inlet on adjacent beaches, and to recommend corrective measures to mitigate identified impacts.

The study has been evaluated by the staff of the Bureau of Beaches and Coastal Systems as it relates to the Bureau's statutory responsibilities and program objectives. As a result of that evaluation, the Bureau has developed a recommended implementation plan. Adoption of the plan will facilitate and streamline the coastal construction permitting process during its implementation by providing a basis for consistency determination, and enable governmental entities to seek financial assistance from the Department to conduct management activities authorized in the plan.

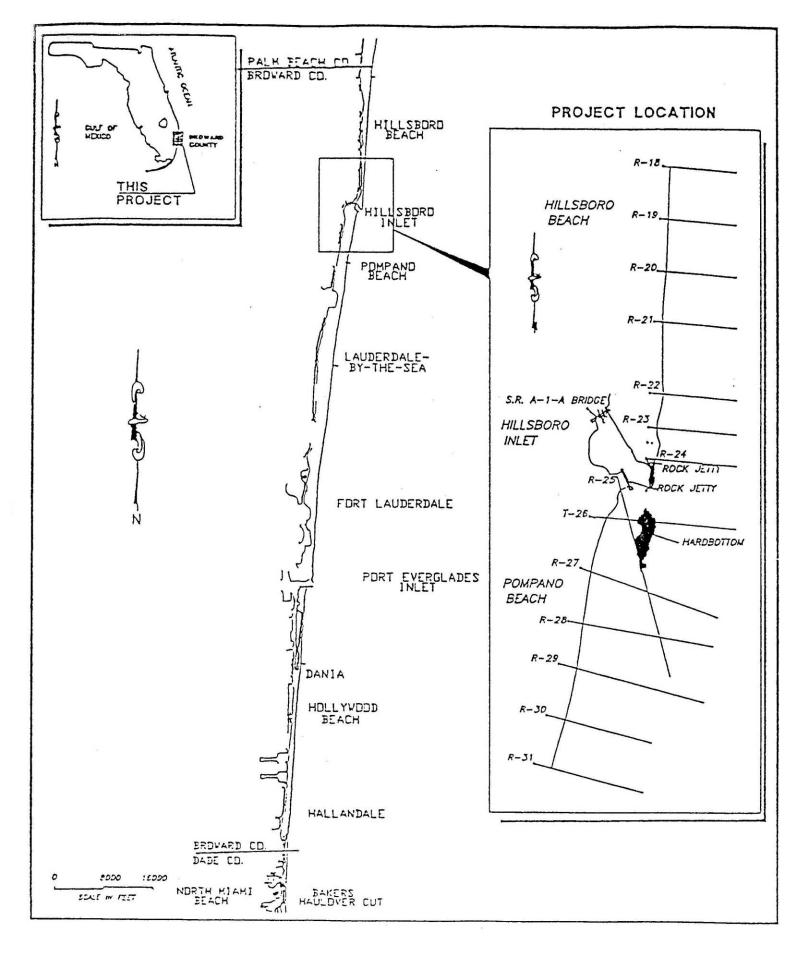
This report contains a brief history of Hillsboro Inlet, a summary of the Inlet study findings, and a consistency determination. The report also contains the recommended implementation plan.

## History of Hillsboro Inlet

Hillsboro Inlet was historically a meandering natural passage to the Atlantic Ocean in Broward County (Figure 1). In 1930 the inlet was first improved with the construction of a 200 foot rock jetty on the north side. in 1952 a 500 foot timber jetty was constructed on the south side of the channel. In 1964 a cribbed rock structure was built to reinforce the south jetty and a 225 foot detached breakwater extension was built on the north side of the jetty, thus creating a weir section between the original and new jetty. At the same time the inlet channel was deepened so that the channel was 175 feet wide and 10 feet deep.

Currently the inlet district maintains the existing channel and interior sand trap. Based on dredging records 100,000 cubic yards on average per year has been mechanically bypassed from 1980 to 1994.

The inlet modifications have caused the interruption of longshore sand



# Figure 1

Coastal Systems International, Inc. transport along the adjacent shorelines. The area of influence of the inlet in its current configuration is 5,540 feet to the north and 5,700 feet to the south. A sediment budget, developed as part of the study, estimates the need to bypass 120,000 cubic yards annually to offset the impacts of the inlet (Figure 2). The sediment budget is based primarily on data from 1980 to 1994.

# Study Summary

To accomplish the plan objectives, the study evaluated numerous potential management activities in terms of environmental impacts, permitting constraints, fiscal concerns, and potential achievability. The study recommends two principle elements involving sand bypassing and inlet improvements (Figure 3).

- 1) Continuation of the existing maintenance dredging program.
- 2) Construction of the exterior sand trap.

# **Consistency Determination and Comments**

Each of the two primary recommendations have been evaluated for consistency with program objectives under Chapter 161, Florida Statutes. The consistency determination is based solely upon the recommendation as presented in the study report. A determination does not preclude further study of other potential management alternatives. Comments regarding each recommendation are as follows.

- 1) Continued maintenance dredging with beach disposal is consistent. Management efforts should be undertaken with the State, the Corps of Engineers, and the local sponsor to ensure that maintenance dredged and offshore material is placed onto downdrift beaches in an optimal manner. Disposal sites should be located in areas of greatest need based on results from long term monitoring and be subject to Department approval.
- 2) Construction of an exterior sand trap is consistent and has been authorized by a Department of Environmental Protection permit.

# Recommended Implementation Plan

The Bureau recommends the following implementation plan be adopted to meet the requirements of Chapter 161, Florida Statutes:

- Place all beach compatible maintenance or offshore dredged material on downdrift beaches in areas of greatest need. The combined total of material from all sources shall equal or exceed 120,000 cubic yards on an average annual bases.
- 2) Construct the exterior sand trap.

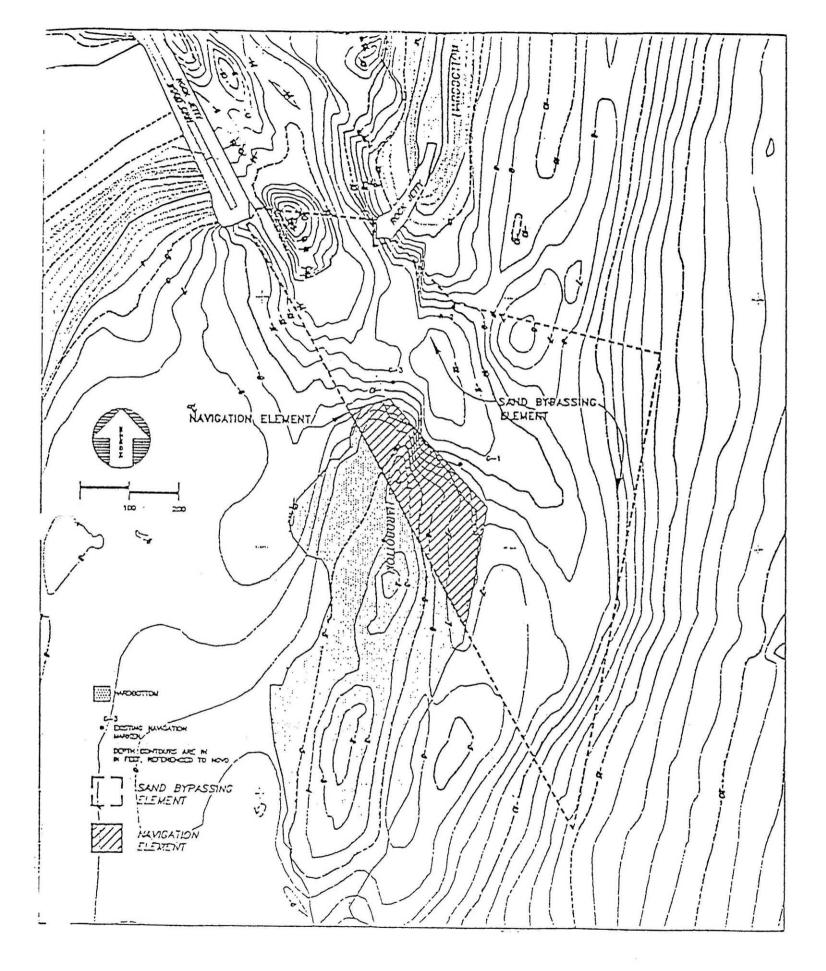


Figure 3

Coastal Systems International, Inc.

- 3) The sediment budget contained in the study report is adopted as an interim measure and shall be formally validated or redefined in subsequent revisions of the plan based on a comprehensive monitoring plan by December 31, 2001.
- 4) Implement a comprehensive inlet, beach, and offshore monitoring program subject to approval of the Department.

This plan is based on the supporting data contained in the study report, <u>Hillsboro Inlet Management Plan Addendum. Coastal Systems International.</u> <u>Inc. March. 1995, studies conducted by the U.S. Army Corps of Engineers</u> and comments provided by public agencies and the citizenry of Broward County. Each implementation action contained in this plan is subject to further evaluation, and subsequent authorization or denial, as part of the Department's environmental permitting and authorization process. Any action that may affect navigation associated with the inlet shall be consistent with all applicable federal requirements and subject to authorization from the U. S. Army Corps of Engineers.

The implementation activities identified above shall be eligible for state financial participation subject to Department approval and an appropriation from the Florida Legislature. The level of state funding shall be determined based upon the activity being conducted and Department policy. The Department may choose not to participate financially if the proposed method for implementation is not cost effective or fails to meet the intent of Section 161.142, Florida Statutes.

Nothing in this plan precludes the evaluation and potential adoption of other alternatives or strategies for management at Hillsboro inlet.