

**VENICE INLET MANAGEMENT STUDY
IMPLEMENTATION PLAN**

CERTIFICATE OF ADOPTION

WHEREAS the Department of Environmental Protection, in partnership with the City of Venice has conducted a study of Venice 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 64,620 cubic yards on an average annual basis.**
- 2) **Conduct a feasibility study regarding the possible impacts to the updrift and downdrift shorelines if the ebb shoal, flood shoal, or channel is utilized as a borrow source.**
- 3) **Conduct a feasibility study regarding the realignment of the jetties to the north and south and methods to improve mechanical bypassing.**
- 4) **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.**
- 5) **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, Venice Inlet Management Plan, Coastal Planning and Engineering, Inc., April 1994, studies conducted by the U.S. Army Corps of Engineers, and comments provided by public

agencies and the citizenry of Sarasota County. 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 Venice Inlet.

APPROVED FOR ADOPTION


Virginia B. Wetherell, Secretary
Department of Environmental Protection

9-16-98
Date

**VENICE INLET MANAGEMENT STUDY
SUMMARY OF FINDINGS REPORT
and
RECOMMENDED IMPLEMENTATION PLAN**

Introduction

The Department of Environmental Protection, in partnership with the City of Venice, sponsored an inlet management study of Venice Inlet. The study, Venice Inlet Management Plan, Coastal Planning and Engineering, Inc., April 1994, was conducted under the provisions of Section 161.161, Florida Statutes, for the purposes of evaluating the erosion impact of the inlet on adjacent beaches, and to recommend corrective measures to mitigate identified impacts.

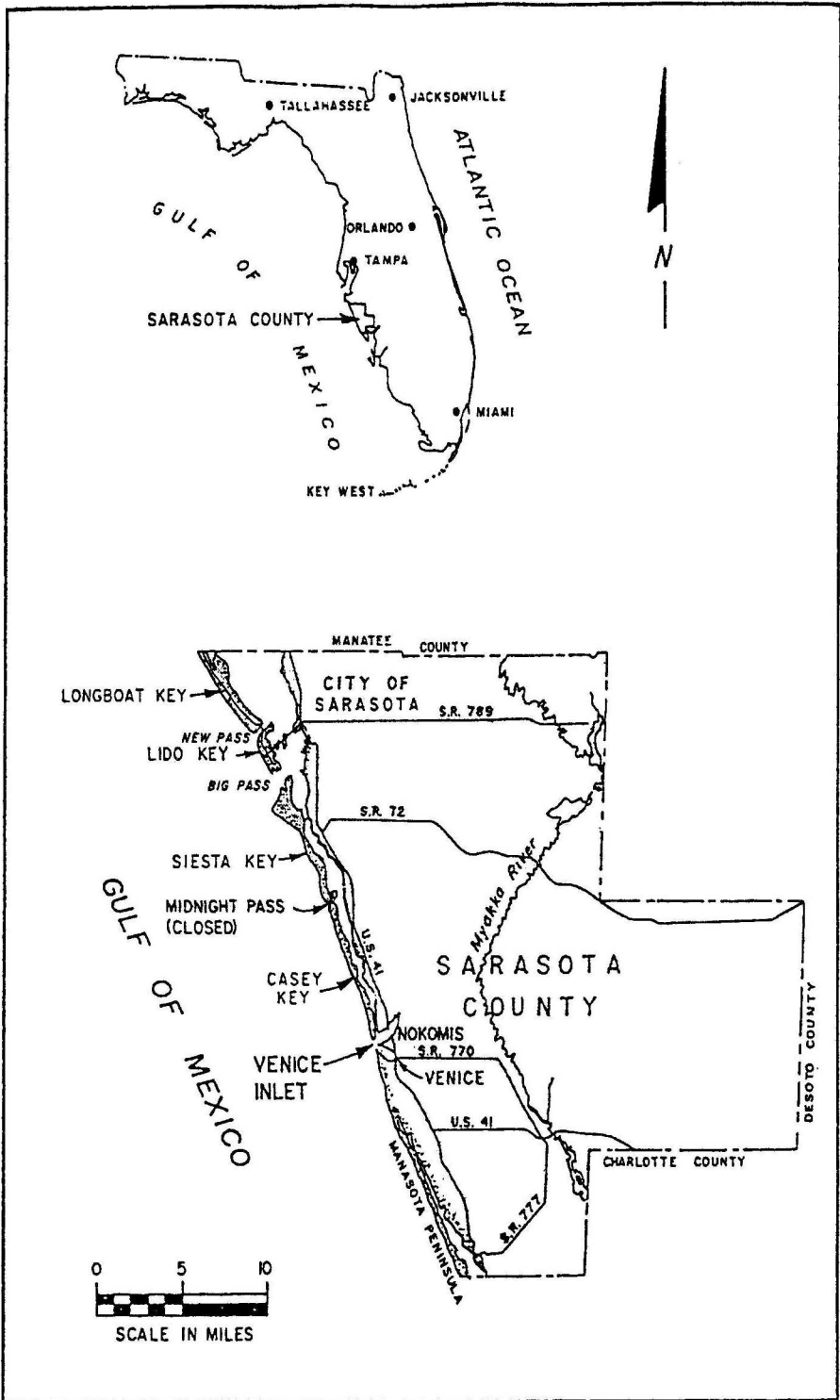
The study has been evaluated by the staff of the Bureau of Beaches and Coastal Systems as it relates to the Bureau's statutory responsibilities and program objectives. As a result of that evaluation, the Bureau has developed a recommended implementation plan. Adoption of the plan will facilitate and 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 inlet management activities authorized in the plan.

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

History of Venice Inlet

Venice Inlet (Figure 1) was historically a natural inlet separating Casey Key and Manasota Key named Casey's Pass which migrated periodically. The inlet was first improved in 1937 when two sheet pile jetties were constructed 300 feet apart. Shortly after being installed these were lengthened and a 988 foot revetment added to the south. Also at this time, the channel was dredged to nine (9) feet deep and 100 feet wide. The pass has since been dredged in 1963, 1966, 1971, and 1980. In 1995-96 the beach south of the inlet for 1.6 miles was restored using sand from offshore borrow sites.

The inlet modifications have caused the interruption of longshore sand transport along the adjacent shorelines. The area of influence of the inlet in its current configuration is one (1) mile to the north and five (5) miles to the south. A sediment budget, developed as part of the study, estimates the need to bypass 64,620 cubic yards annually to offset the impacts of the inlet. The sediment budget is based primarily on data from 1974 through 1987.



COASTAL PLANNING & ENGINEERING, INC.

Figure 1

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 four principle elements involving sand bypassing and inlet improvements.

1. Continue to implement the existing federal plan of nourishment of Venice Beach from the inlet south 3.2 miles.
2. Utilize the ebb shoal as a borrow source for sand bypassing.
3. Conduct a feasibility study on the merits of a jet pump or mobile jet pump bypassing system.
4. Conduct a feasibility study on realignment of jetties by shortening each 100 feet or creation of curved extensions (Figures 2a and 2b).

Consistency Determination and Comments

Each of the four 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. Implementation of the existing federal plan 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.

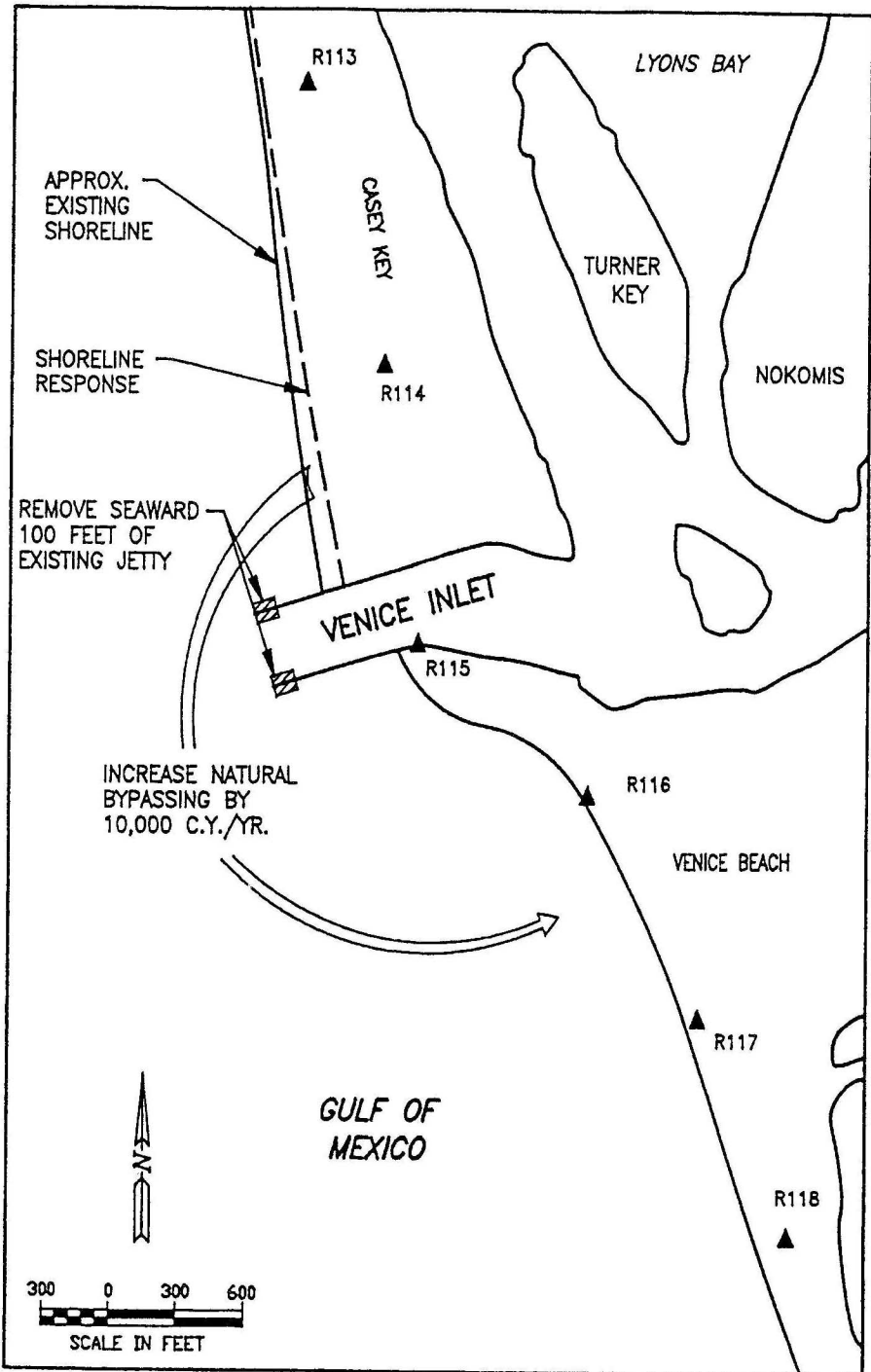
2. Conduction of a feasibility study to determine the possible effects upon the shoreline of utilizing the ebb and/or flood shoals is consistent.

3&4. Conduction of a feasibility study to examine modification of the jetties or of alternate mechanical bypassing systems is consistent.

Recommended Implementation Plan

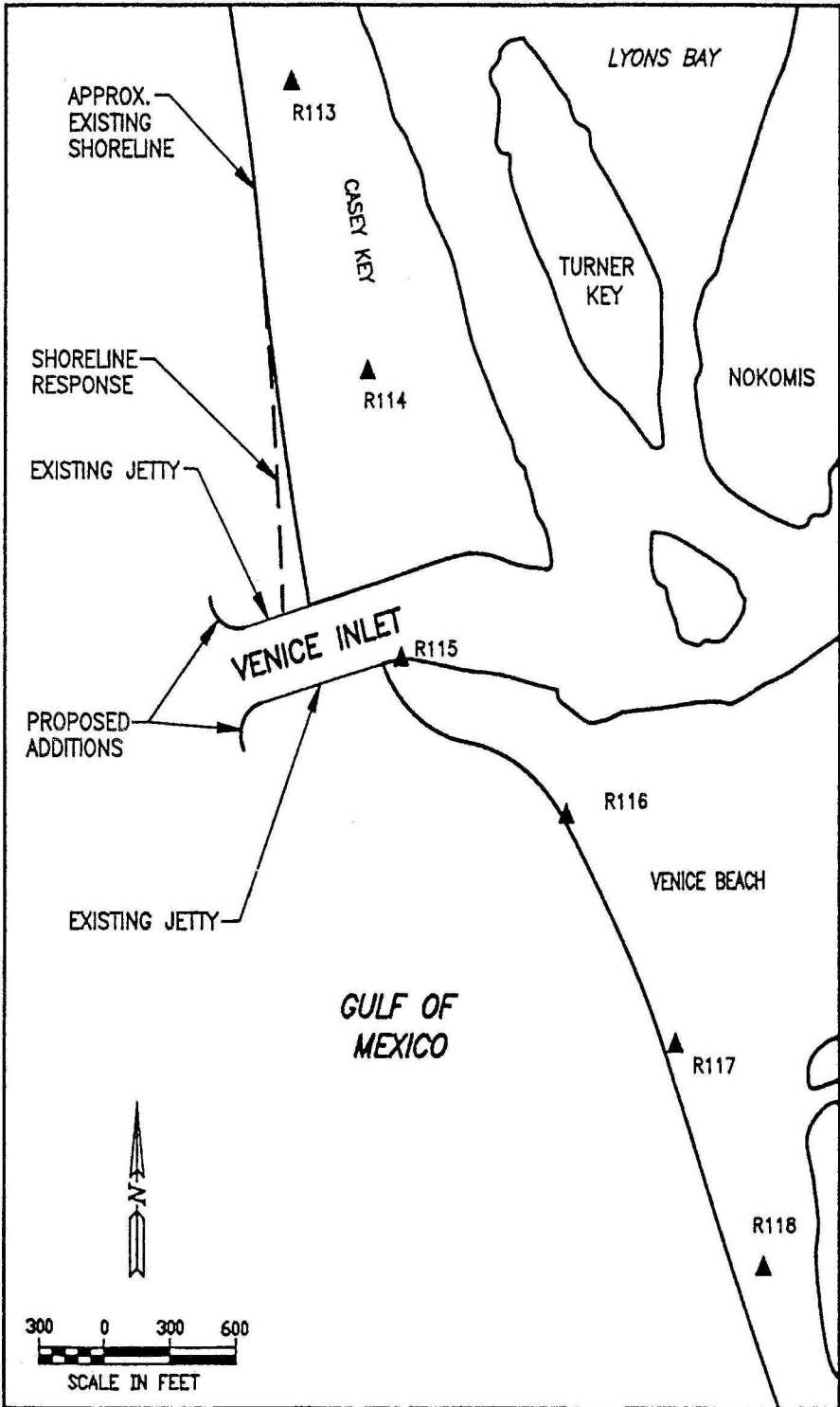
The Bureau recommends the following implementation plan be adopted to meet the requirements of Chapter 161, Florida Statutes:

- 1) Place all beach compatible maintenance or offshore dredged material on downdrift beaches in areas of greatest need. The



COASTAL PLANNING & ENGINEERING, INC.

Figure 2a



COASTAL PLANNING & ENGINEERING, INC.

Figure 2b

combined total of material from all sources shall equal or exceed 64,620 cubic yards on an average annual basis.

- 2) Conduct a feasibility study regarding the possible impacts to the updrift and downdrift shorelines if the ebb shoal, flood shoal, or channel is utilized as a borrow source.
- 3) Conduct a feasibility study regarding the realignment of the jetties to the north and south and methods to improve mechanical bypassing.
- 4) 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.
- 5) 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, Venice Inlet Management Plan, Coastal Planning and Engineering, Inc., April 1994, studies conducted by the U.S. Army Corps of Engineers and comments provided by public agencies and the citizenry of Sarasota 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 Venice Inlet.