

As of the time of writing this report (December, 1988), the U.S. Army Corps of Engineers is still maintaining a limited navigation capability through operation of the hopper dredge with the placement of dredged material in water depths exceeding 6 m.

CASE STUDY III - CUMBERLAND ISLAND

Introduction

Cumberland Island National Seashore is the southernmost island along the Georgia coastline. The waterway along the southern end of Cumberland Island is St. Marys River; the outlet to this river is protected by two long navigational jetties. As shown in Figure 28, the community of Kings Bay, GA is on the mainland to the west of Cumberland Island and approximately 8 km north of the south tip of Cumberland Island. Kings Bay has been designated as a homeport for the Ohio Class submarines.

Channel modifications necessary to accommodate these submarines include substantial deepening, widening and lengthening of the current navigational channel. The total initial construction dredging is in excess of ten million cubic meters. The EIS prepared in conjunction with the project predicted an annual maintenance dredging requirement of 1.4 million cubic yards. Later more detailed estimates performed by the Coastal Engineering Research Center have yielded a substantially lower value, i.e. 788,000 cubic yards per year.

Concerns of the National Park Service

Due to the large quantities of dredging being considered, the NPS has concerns over the effects on inner and outer shorelines of Cumberland Island, on the marsh ecosystem on the western side of Cumberland Island and on the biota in the interior waters. These concerns led to negotiations with the Navy which eventually culminated in a five-year comprehensive monitoring and evaluation program. This program is reviewed briefly below.

Monitoring Program

Responsibilities for the monitoring program are shared by the Waterways Experiment Station (WES) of the U.S. Army Corps of Engineers and the National Park Service. The WES program includes a Coastal Assessment component and a