

5 May 1993

MEMORANDUM FOR DISTRICT ENGINEER

SUBJECT: Dauphin Island Shoreline, Alabama, CWIS 92752 -
Detailed Project Report--FOR SIGNATURE

1. PROBLEM. This study was conducted to analyze an erosion problem at the Main Beach Park on Dauphin Island, Alabama. An extensive public involvement program was not conducted because this study was performed under the authority of Section 14, Emergency Shoreline Protection for Public Structures, and the study time did not permit such a program. All appropriate Federal and state agencies are being coordinated with and a 30-day public notice period has just been given. SAD has agreed to review the final report with an unsigned EA and FONSI to expedite approval. We find that a Section 14 project to protect the park is justified.

2. RECOMMENDATION. That the District Engineer sign this report recommending an erosion control project consisting of 350 feet of heavy stone riprap on the shoreline and a 30-foot wide by 3-foot thick stone blanket beneath the fishing pier for its entire length, a distance of about 665 feet.

APPROVED _____ SEE ME _____ OTHER _____

3. BACKGROUND AND DISCUSSION. The Gulf of Mexico shoreline on Dauphin Island, Alabama, is experiencing severe erosion at a reach roughly centered on the Dauphin Island Park and Beach Board (DIPBB) Main Beach Park. A major feature of that park is a public fishing pier. The park is public property administered by the DIPBB. The park provides one of the two public access points on the island to the Gulf of Mexico beach. The loss of sand combined with strong currents has made the beach unsafe and it has been closed. Numerous sharp tree trunks have been uncovered by the erosion and protrude through the beach, increasing the hazard. At the park, erosion from Hurricane Andrew left two pavilions that had been built on top of the dune hanging over the beach beyond the edge of the erosion scarp. Andrew's passage also left the gulf edge of the bath house with the public restrooms out over the erosion scarp. Erosion over the winter has further eroded the dune and the gulf edge of the bath house is now well out over the beach. The fishing pier is being undermined by the shoreward movement of the beach profile as it recedes. If the present rate of erosion continues, we estimate that the shallow pilings in that section will no longer have adequate bottom penetration by the end of 1993 and that at the pilings on the gulf end the bottom will pass safe penetration depth by the end of 1994. We cannot say definitely that the pier will be destroyed in that time frame, but the safety factors on the piling penetration will certainly be exceeded, rendering the pier unsafe.

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4. IMPACTS. Approval of this report and allocation of funds will permit construction of a project which will protect the park from further erosion; and will have no significant environmental impacts.

5. COORDINATION.

PD-FE	Concur/Nonconcur	_____	()	_____
PD-F	Concur/Nonconcur	_____	()	_____
PD-E	Concur/Nonconcur	_____	()	_____
PD	Concur/Nonconcur	_____	()	_____
EN-Y	Concur/Nonconcur	_____	()	_____
EN-F	Concur/Nonconcur	_____	()	_____
EN	Concur/Nonconcur	_____	()	_____
RE-P	Concur/Nonconcur	_____	()	_____
RE	Concur/Nonconcur	_____	()	_____
DX	Concur/Nonconcur	_____	()	_____
DD	Concur/Nonconcur	_____	()	_____

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