DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

May 21, 1992

REPLY TO
ATTENTION OF:

Plan Development Section

Honorable Richard Shelby
438 U.S. Courthouse
Mobile, Alabama 36602

Dear Senator Shelby:

This is in response to your letter of May 7, 1992, enclosing a letter from Mr. Michael Henderson regarding Section 14 approval and changes to the Corps' policy on sand placement from navigation channels in that vicinity. Copies of that correspondence are enclosed for your convenient reference.

As Mr. Henderson pointed out, we are now investigating the erosion problems at Dauphin Island under the authority of Section 14 of the 1946 Flood Control Act. That section provides for emergency shoreline protection for public facilities. By letter dated February 28, 1992, we reported to you that funds for these studies had been allocated. While it is too early to be positive, we are optimistic about the results of these studies.

You are aware that economic requirements frequently constrain our actions. In the case of the Mobile Harbor Entrance Channel, we intend to add littoral zone disposal south of Sand Island as an option in all future maintenance contracts. Actual use of that area will depend on the contractor and the size of the dredge which executes the contract.

Material dredged from the Fort Gaines Channel is usually placed on Little Dauphin Island. This is, by far, the most inexpensive location for material placement. In addition, it serves to bolster Little Dauphin Island, which is also eroding. We recently deepened that channel by two feet and offered to place the material from that operation south of Fort Gaines at a differential cost of $25,000. No one was willing or able to assume that expense.

PD-FP-Subject File Copy

We are acutely aware of Mr. Henderson's problems and are sympathetic to his needs. As I mentioned above, however, we are constrained in our actions by law and policy. Much of what Mr. Henderson requests is obviously uneconomical, and we are required to have economic justification for our actions. Moreover, we do not concede that our maintenance work for the channels serving this area is affecting the island.

We will keep you informed as the Section 14 study progresses. However, if you need any additional information at this time, please feel free to contact me.

Sincerely,

Dennis W. Heuer
Major, Corps of Engineers
Acting District Engineer

Burdin/2[illegible]2/mw/PD-FP

[illegible] Willis/PD-FP

Enclosure

Copy Furnished:

Honorable Richard Shelby
United States Senate
Washington, DC 20510-0103

DD

DE

May 21, 1992

RICHARD SHELBY
ALABAMA

COMMITTEE ON ARMED SERVICES
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SPECIAL COMMITTEE ON AGING

○ 313 HART BUILDING
WASHINGTON, DC 20510-0103
(202) 224-5744

United States Senate

WASHINGTON, DC 20510-0103

STATE OFFICES:

○ 1800 FIFTH AVENUE NORTH
321 FEDERAL BUILDING
BIRMINGHAM, AL 35203
(205) 731-1384

○ HUNTSVILLE INT'L AIRPORT
1000 GLENN HEARN BOULEVARD
BOX 20127
HUNTSVILLE, AL 35824
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○ 113 ST. JOSEPH STREET
438 U.S. COURTHOUSE
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MONTGOMERY, AL 36104
(205) 223-7303

○ 1118 GREENSBORO AVENUE #240
TUSCALOOSA, AL 35401
(205) 759-5047

May 7, 1992

Col. Michael Thuss
U.S. Corp of Army Engineers
Post Office Box 2288
Mobile, Al 36628-0001

Dear Col. Thuss:

I am enclosing a copy of a letter I received from Mr. Michael Henderson regarding Section 14 approval and in changes to the Corps' basic policy of sand removal from Fort Gaines Channel and the Main Ship Channel.

Any information you may have regarding this matter would be appreciated in order that I may be able to respond to my constituent's inquiry.

Yours very truly,

Richard Shelby

Richard Shelby

RS:cb

Enc.

Please reply to my state office:
438 U.S.Courthouse
Mobile, AL 36602

Dauphin Island Park and Beach Board

P. O. Box 97 • Dauphin Island, Alabama 36528 • 205-861-3607

Elizabeth A. Gebsen (Chairman)
C. M. Roberts (Member)
Henderson Young (Member)
Michael Henderson (Executive Director)

1992

April 10, 1992

Honorable Richard Shelby
United States Senate
Washington, D.C. 20515

SUBJECT: Beach Erosion on Dauphin Island, Alabama

Dear Senator Shelby:

As I mentioned in my letter (March 16, 1992), I would keep you advised when ADECA's 12-month study of Dauphin Island's erosion situation was published. Please see the excerpts of this report attached.

As shown, Dr. Douglas feels two of our worse erosion problems directly relate to the Corps' method of deepening and dredging two channels - the Main Ship Channel and Fort Gaines Channel.

One striking aspect of this study is the documentation of sand removed by the Corps that would have otherwise been deposited onto Dauphin Island. Earlier publications had estimated 15 million cubic yards of sand had been permanently removed from Alabama's coastal system by this method. Dr. Douglas proves this figure is closer to 50 million cubic yards or on the average of 1 million cubic yards per year!

Damages are done to the Island in two main ways:

The eastern tip of the Island is simply starved for sand. The Corps removes it before it can be naturally deposited in this location. Therefore, we now have waves breaking within 15' of the walls of Historic Fort Gaines itself as well as other damages to the road and property.

Secondly, tremendous erosion damages are the result in changes to both the shape and location of "Sand Island". This almost sand bar type island lies just offshore to the south of Dauphin Island. Dr. Douglas documents the changes to Sand Island are a result of sand starvation again caused by the dredging process.

I have also included recent press coverage of this site. Besides losing public facilities, the author of ADECA's 12-month study states he feels this location is now unsafe for swimming due to the effects of erosion.

Although we are looking into options, we will most likely have to soon ban swimming at this location. Not only do we have over $600,000.00 in public facilities here, but it has been the main public beach on Dauphin island since about 1959.

On a more positive note, thanks to your efforts the Corps of Engineers have begun their Section 14 study of some of our erosion problems. As I understand it, this could result in a one time project with federal funding up to $500,000.00

They are looking into two separate projects. The first involves a seawall protection of the eastern end including Historic Fort Gaines. Not only would it provide permanent protection, but would result in a much more desirable appearance than present.

Of course, the protection element is crucial because the public lands and the Fort itself are endangered. As way of documentation on the national importance of Fort Gaines, I have included excerpts from a report just published by the American Association of Museums. It was written by one of their experts from South Carolina and is a result of a grant we received to examine this site and make recommendations as to its improvement. During his inspection visit he told me several times how impressed he was with the Fort and our efforts of preservation and encouraging tourism.

The second project the Corps is considering provides help for the location of the main public beach and the Dauphin Island Fishing Pier. It would involve dredging a pass through the northeastern tip of "Sand Island" to change the current which is quickly destroying the public facilities. The dredged sand would be placed on the public beach and the new pass would naturally continue to place sand in this location.

As I have pointed out before, soon the last line of dunes will be lost at this point. It is only about 1/8 of a mile to the other side of the Island. Within this short space are restaurants, gift shops, two hotels, etc. In fact, it has the second highest concentration of Island businesses and provides access to miles of beach homes along the east end of Dauphin Island. The Dauphin Island Fishing Pier is one of two deep water Gulf piers in the state. The only other is part of Gulf Shores State Park.

Recently, Jim Griggs, the Director of State Lands, met with Congressman Bevill concerning our problems because he is on the appropriation committee funding the Corps. Congressman Bevill asked I provide him with the same background material given your staff earlier as well as ADECA's 12-month study. Later, I also provided his office with copies of material I gave the Corps in support of those two Section 14 projects.

In support of a seawall protecting Fort Gaines, excerpts from the following studies were provided:

1. Optimal Use of Selected Public Access Areas to Saltwater in Mobile and Baldwin Counties by Dr. Semoon Chang, Center for Business and Economic Research, University of South Alabama, 1989.

2. Dauphin island East End Management Plan Phase I, Auburn University, Economic Development Institute, 1990.

3. Summary of Existing Coastal Engineering Data for Dauphin Island, Alabama, Coastal Research and Development Institute, University of South Alabama, 1991.

4. Coastal Processes of Dauphin Island, Alabama, Dr. Scott Douglas, Grant from ADECA, 1992.

In support of dredging a pass through Sand Island, the study by the Coastal Research and Development Institute was again used. All these studies were paid for with taxpayers money and were under no bias to any group or interest.

In conclusion, we would appreciate your support toward the approval of both Section 14 projects and in changes to the Corps' basic policy of sand removal from Fort Gaines Channel and the Main Ship Channel. As you can see from ADECA's 12-month study, it draws the same basic conclusions as the Corps' own study published in 1978. One important difference is whereas the Corps study states 264,000 cubic yards of sand was being removed per year back in 1978, Dr. Douglas shows this amount has now increased to an average of 1 million cubic yards a year is being removed.

As always thank you for your time and efforts toward these goals. If I can provide further information, please let me know.

Yours truly,

Michael Henderson
Executive Director

MH/bgp
Enclosures

Study says erosion on Island both natural, man-made

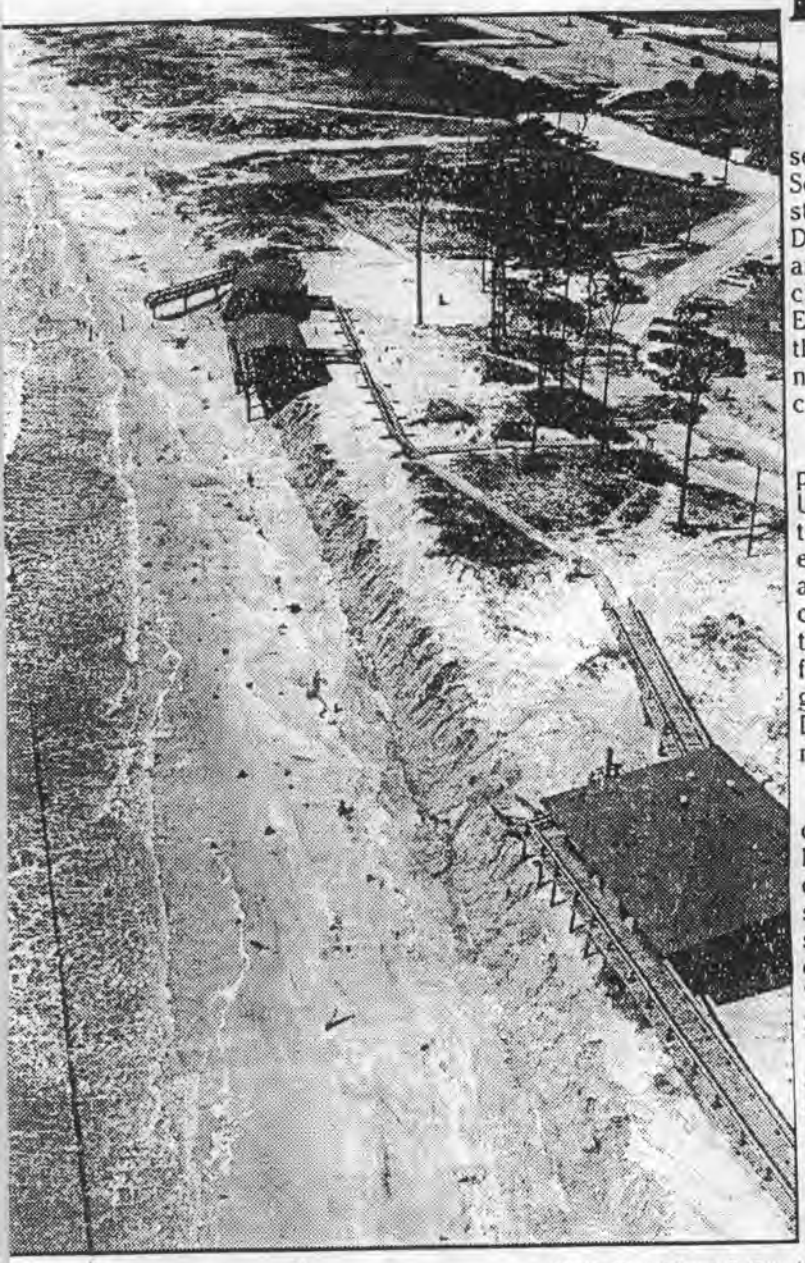

Photo by Andrew C. Dees

ıblic swimming facilities stand precariously on the edge of ıuphin Island where erosion has rapidly eaten away the ast. According to Dr. Scott Douglass, assistant professor of vil engineering at University of South Alabama, the two ıblic swimming locations are the most dangerous locations the island. He suggested public beaches be moved away om the area which typically receives tidal currents of four iles per hour. He said tidal currents are much more danger- ıs than rip currents.

PHOTO SHOWS PRESENT SHORELINE - BUT KEEP IN MIND THIS IS AFTER MOBILOIL PLACED 20,000 CYD. OF SAND HERE LAST JULY & WE SPENT 10,000.00 REPAIRING BOARDWALKS DURING SAME PERIOD.

HIGH LIGHTS ON PHOTO SHOW ORIGINAL LENGTH OF BOARDWALKS & LIFEGUARD STAND NOW LOST.

By RENEE STUART
For The Mobile Press Register

DAUPHIN ISLAND, Ala. — Researchers at the University of South Alabama, after a year-long study into the possible causes of Dauphin Island's severely eroded and receding shoreline, have concluded the U.S. Army Corps of Engineers' dredging practices of the Mobile Ship Channel may have negatively affected the island's coastal processes.

Dr. Scott Douglass, assistant professor of civil engineering at USA and principal investigator for the study, said Dauphin Island has experienced changes which can be attributed to natural coastal processes modified by man's activities. Douglass was commissioned for the study by the Coastal Programs division of the Alabama Department of Economic and Community Affairs.

"Without man's intervention over the past century, the shoreline position today would, undoubtedly, be different," Douglass said, "But, it is equally improper to state either 'the erosion has been caused by man's intervention' or 'the erosion has been caused by natural processes.'"

In the final report submitted to ADECA on "Dauphin Island Coastal Processes," Douglass said although natural coastal processes have been at work shaping the island for thousands of years, man has had a significant impact on the natural coastal process for at least the past century. Man's influence over these natural processes, he said, followed the construction of Fort Gaines' protective barriers in the 1890s and the dredging maintenance of Mobile Pass.

ADECA's probe of conditions was prompted by severe recession and erosion of the island's shoreline, especially on the eastern end.

Most affected by erosion and recession are the east end on the Sea and Air Rescue Coast Guard base, the east end of Dauphin Island Sea Lab, the fourth tee on the south end of Isle Dauphine Golf Club course, the southwest corner of Fort Gaines, and the Park and Beach Board Public Fishing Pier and Beach.

Douglass said his research revealed diminishing shoreline was partly the result of Dauphin Island's westward migration, which is probably due to the shift in position of bordering Sand Island.

Douglass said his speculation prior to completion of the study that changes in Sand Island have been influenced by the dredging of the Mobile Ship Channel was substantiated.

Prior to dredging, sand followed a 'U'-shaped path from the beaches of Fort Morgan peninsula onto the Dixie Bar shoals across to Sand Island shoals to Dauphin Island," Douglass said. "The same general physical forces, tidal currents and waves, are at work today and the sand paths are the same today with one exception. The dredging of the ship channel breaks the 'U'-shaped path at the bottom of the 'U.'"

The problem, Douglass emphasized, is not dredging itself, but the practice of removing sand and placing it so far outside the shoreline system that it can no longer nourish the beach.

Douglass recommended to ADECA that the state and the town of Dauphin Island take a more active role, demanding responsible management of Alabama's coastline. He said residents could help by strongly encouraging the legislative delegation to instruct the U.S. Army Corps of Engineers to conduct a comprehensive study on the impact of dredging as well as maintain a long term monitoring program to document future changes in the shoals which shelter Dauphin Island.

Phillip Hinesley, coastal program planner for the Planning and Development Division, ADECA, said one of the main problems Dauphin Island has encountered is the lack of a beach management and restoration program.

Hinesley said Alabama does not have an agency to solely address the problem of erosion and beach recession.

According to Hinesley, ADECA has no authority to take action. It can only present the problem to state agencies along with findings and recommendations provided by Douglass and his research team.

COASTAL PROCESSES OF DAUPHIN ISLAND, ALABAMA

Scott L. Douglass & Daniel R. Haubner
College of Engineering Report No. 92-1

Department of Civil Engineering
University of South Alabama
Mobile, Alabama 36688

prepared for
Coastal Programs Office
Alabama Department of Economic and Community Affairs
401 Adams Avenue
Montgomery, Alabama 36103-5690

February 25, 1992

generally accreting, i.e. the beaches are getting wider. Within this stretch are two large accretionary shoreline bulges with smaller pockets of shoreline recession immediately to the west of each bulge. The shoreline is receding at rates of up to 50 ft./year along the half mile of beaches centered on the fishing pier. Farther to the west, the measured shoreline changes do not show any clear trends. Along these open Gulf beaches, more than one year of data will be needed to reliably measure shoreline change trends. However, within the past decade, these beaches appear to be generally stable.

The shoreline changes on Dauphin Island can be explained in terms of the sand transport paths. The shoreline recession along the easternmost mile of beaches is due to sand starvation of the entire eastern end of the island. The sand which has eroded from these beaches has moved westward via wave driven longshore sand transport onto the accreting beaches between Audubon St. and the country club. The shoreline recession around the fishing pier is caused by the northerly migration of Sand Island during the 1980's. Pelican Passage is being diverted farther north into Dauphin Island than at any time in the past century.

The beaches of Dauphin Island are linked with the ebb-tidal shoals of Mobile Pass. The ebb-tidal shoal system includes Sand Island, the shallow waters extending from Sand Island to the lighthouse, and the Dixie Bar area. Dauphin Island and the Mobile Pass shoals are part of the same littoral system. Sand moves from Sand Island to Dauphin Island via migrating sand bars to the west of the fishing pier. Thus, the shoals provide both sand for the Dauphin Island beaches and wave sheltering to those beaches.

Man's intervention has significantly modified the natural coastal processes of Dauphin Island. The seawall and groins at the east end of the island have successfully protected the

sand around Fort Gaines and prevented that sand from moving west. The 1980 beachfill at the eastern end of the island migrated westward and provided some protection to the easternmost mile of beaches during the early 1980's. The dredging for construction and maintenance of the Fort Gaines channel has contributed to the sand starvation at the east end. The dredging practices for the Mobile Ship channel have affected the coastal processes of Dauphin Island several ways. The impacts of the dredging, which has been increasing in rate, may become more severe over the next several decades. The shift of sand from the easternmost mile of beaches to the west has probably been exacerbated indirectly by the dredging. The dredging, through simple sand starvation, probably caused the erosion of the both the shoals around the lighthouse and the Dixie Bar shoals in the last two decades. The Dauphin Island beaches have, thus, been exposed to increased wave energy from the south and southeast.

Dredging of the Mobile Ship Channel has removed about 15 million cubic yards of beach quality sand from the littoral system of the State of Alabama since 1974. Perhaps as much as 50 million cubic yards of sand have been permanently removed this century. The dredging has completely blocked the natural, long-term source of sand for Mobile County (Dauphin Island). Prior to dredging, sand followed a "U" shaped path from the beaches of Fort Morgan Peninsula onto the Dixie Bar shoals across to the Sand Island shoals to Dauphin Island. The sand paths are the same today with one exception. The dredging of the ship channel breaks the "U"-shaped path at the bottom of the "U." The sand is dredged from the bottom of the "U" and dumped in deep water outside the littoral system.

Proper data have not been collected to fully evaluate the environmental impacts of the dredging of the Mobile Ship Channel on the littoral system including the shoals and the

yards of sand dredged from the Fort Gaines Channel in 1980. The fate of this beachfill was qualitatively described in Section 4.2.

Ft. Gaines channel and the jetties and revetment on both sides have separated the northeast corner of Dauphin Island into two littoral systems. Previously, sand was free to move back and forth across this area. The sand being removed from the channel comes off the adjacent beaches. Probably most of the sand comes from Dauphin Island. By continually moving all the dredged sand to the new Little Dauphin Island, the channel has behaved as a one-way valve draining sand from Dauphin Island but not returning any.

Little Billy Goat Hole, the small boat basin which is also locally called the Ft. Gaines boat ramp or Murphy Bay, is a 0.7 acre basin which is only several feet deep. Mobile County is responsible for the maintenance of the basin. The origin of the basin is unknown to the authors. The basin predates 1940 when it is visible on an air photo.

4.4 Mobile Ship Channel

Dredging of the Mobile Ship Channel is the largest coastal engineering feat in the vicinity of Dauphin Island. This section of the report presents original arguments concerning the environmental impacts of this dredging on Dauphin Islands beaches. The dredging has probably seriously impacted the beaches of Dauphin Island several ways. Almost all of the dredged material, sand, has been permanently removed from the littoral system of the Alabama coast. The littoral system of Dauphin Island has not received any littoral drift from east of Mobile Pass in at least fifty years. Also, the wave climate on Dauphin Island and the

hydraulics of the tidal currents through Mobile Pass have probably been changed by the dredging and the effects of the dredging on the Sand Island shoals.

This present study did not focus on evaluating the effects of the dredging on the littoral system. However, within the framework of trying to understand and document the coastal processes of Dauphin Island, it became obvious that the Dauphin Island shoreline position is inexorably linked with changes on the ebb-tidal delta. The following can be considered as a brief, preliminary investigation of the effects of the dredging on the littoral system. The results are alarming enough to indicate that an expanded, comprehensive study of the environmental impacts of the dredging which addresses the issues raised below is warranted.

The Mobile Ship Channel is over 30 miles long. This report discusses only the southern 5 miles of the channel which crosses the ebb-tidal delta system of Mobile Pass. The Corps has been maintaining the channel at progressively deeper depths since at least 1910 and probably longer. Navigation charts from around the turn of the century clearly show a navigation channel. The channel depths have increased from 27 ft. in 1910, to 36 ft. in 1936, to 42 ft. in 1974 and 49 ft. in 1989. The width of the channel is presently 600 ft. in the southern section across the ebb-tidal shoal bar.

Table 3 is an attempt to summarize the Corps' dredging records for Mobile Pass since 1974. Dredging records prior to 1974 were not obtained but may be available. Over 15 million cubic yards of sand have been removed from the Pass since 1974. The average rate of sand removal has thus been about 1 million cubic yards per year during the past 15 years. Almost all of this sand has been removed from the littoral system of Alabama to deepwater

Table 3. Dredging of Mobile Pass

Year	Volume (yd^3)
1974	350,000
1975	980,000
1976	1,360,000
1977	1,270,000
1979	710,000
1980	190,000
1981	610,000
1983	310,000
1984	560,000
1985	1,390,000
1987	660,000
1990	6,760,000

MAP I REPORT

FORT GAINES HISTORIC SITE

DAUPHIN ISLAND, ALABAMA

RODGER E. STROUP
DIRECTOR OF COLLECTIONS
AND INTERPRETATION
SOUTH CAROLINA STATE MUSEUM

MARCH 5, 1992

On February 10 & 11, 1992 I conducted a MAP I survey at the Fort Gaines Historic Site on Dauphin Island, Alabama. Fort Gaines is one of the two major coastal fortifications that guards the entrance to Mobile Bay and the city of Mobile. Construction began on the fort about 1821 and by 1860 the defenses were formidable and presented a major obstacle to the Union forces attempting to capture Mobile Bay. After the Civil War Fort Gaines continued to serve as part of the coastal defense system on the Gulf of Mexico until 1921.

The fort itself is an extremely well preserved brick fortification located at the mouth of the bay across from Fort Morgan. Typical of the coastal fortifications constructed during the first half of the nineteenth century, Fort Gaines is perhaps one of the least disturbed examples of these forts and is certainly one of the best preserved. In addition to the structure itself, including many surviving interior structures, the site houses a 1,250 square foot museum in one of the former magazines. The museum focuses on the history of the fort, especially during the Civil War years.

PURPOSE AND PLANNING

One of the most important documents any historic facility can have is a clear, concise *statement of purpose*. The statement of purpose should be drafted carefully and approved by the governing body of the organization. As the members of the governing body change and staff members leave there needs to be a clear statement outlining the major purposes of the organization and the primary focuses of the facilities themselves. Without this guidance organizations often flounder without clear direction and then change course as new individuals become involved. In the MAP I questionnaire a statement of purpose is cited which has a clear focus for Fort Gaines, but there is no evidence it has been adopted by the governing board. A document approving a statement of purpose should be drafted and adopted by the board as the first step of a strategic planning program.

RECOMMENDATIONS

1. The development of a statement of purpose should be the first step in the drafting of a *strategic plan* for Fort Gaines. With an approved purpose the board and staff should then began a planning process which will culminate in a written strategic plan outlining the goals, both short and long term, the site wants to accomplish. It is not the role of this report to suggest the contents of such a plan, but I would recommend that the process begin with a compilation of all know information about the fort and the drafting of a complete history, with appropriate documentation, of Fort Gaines. A second major component of the strategic plan should be

2. From my brief visit on Dauphin Island I was intrigued with what I saw. The possibilities of acquiring support from private foundations and corporations would seem to be a natural for the Park and Beach Board, especially for the programs at Fort Gaines. Local and statewide support would potentially be available if an effort was made in that direction. Since I am not familiar with the local area I cannot make any specific recommendations, but would suggest that an effort in this direction would be worthwhile.

3. There are several government agencies which have grant programs that would be helpful at Fort Gaines. The Institute For Museum Services provides general operating support grants for museums and historic sites equal to 10% of the annual operating budget. These grants are extremely competitive and some improvements in the museum would be needed before Fort Gaines would be in a position to receive a grant. In addition, the IMS provides conservation survey grants which provide assistance in identifying conservation needs. The National Trust for Historic Preservation provides assistance for structures, primarily in the area of planning rather than capital funds. The addresses of these and other organizations are in the appendix of this report.

4. The special events sponsored by Fort Gaines provide important income for the Park and Beach Board. I would suggest exploring the possibility of renting the fort for special events to appropriate organizations. Because of the nature of the property, the Park and Beach Board would want to establish a clear set of guidelines regarding the rental of the fort. This should include the type of groups that can use it. As a quasi-governmental body it would be necessary to establish written guidelines that would not discriminate against particular groups. However, by clearly prohibiting certain types of events it is possible to exclude the types of groups that you do not want. In addition, detailed guidelines on what can and cannot be done would need to be drafted. Attached is a copy of the facility rental policy of the South Carolina State Museum to provide guidance in the types of issues that need to be addressed.

FACILITIES AND SECURITY

The physical plant consists of the brick fortification and the associated buildings on the inside of the fort. Completed shortly before the outbreak of the Civil War, Fort Gaines is a brick fort located on the western approach to Mobile Bay. With it counterpart, Fort Morgan, on the eastern approach, the two forts controlled the entrance to the bay and played a significant role in the defense of the port of Mobile during the Civil War. In the late nineteenth century the fort received an additional battery of more modern coastal defense artillery. The concrete mounts for

these "disappearing" cannons are still extant and document the importance of the fort well after the Civil War.

Within the fort are several surviving structures, including the officer's quarters, guard house, bakery, several ammunition magazines and quartermaster's offices. Several of these are restored to their original appearance, while others serve as staff offices, gift shop, storage rooms and the museum. The 1,250 square foot museum is located in one of the magazines. Because of the nature of the fort, the only spaces with any heat or air conditioning are the office and gift shop.

The fort is protected with an electronic security system and fire detection system which signals a central station when a fire or intrusion is detected. Additionally, the artifact cases in the museum are alarmed 24 hours and any interference with these cases results in the sounding of a local alarm as well as notification of the central station. Finally, there is an apartment on site which is usually occupied by a staff member or someone approved to live at the fort. This presence also serves as a deterrent to any possible problems.

RECOMMENDATIONS

1. The most important aspect of Fort Gaines is the structure itself and it should be the top priority in everything that is done. I have visited several coastal forts on the east coast of the United States and Fort Gaines is in the best condition of any I have seen. With the exception of the installation of the "disappearing" cannon mounts, the fort structure is almost exactly like it was during the Civil War. The preservation of the original fabric of the fort should be paramount in any renovation work that is contemplated. Additionally, the growth of plants and trees in and around the fort should be carefully monitored to insure that the root systems do not cause damage to the foundation or the walls themselves.

I would recommend that an expert on coastal fortifications be retained to review and evaluate the fort and all of its components. Additionally, a preservation architect should be engaged to conducted a survey of the fort and make recommendations for its future preservation. Possible funding for the architectural survey might be available from the National Trust for Historic Preservation, while a coastal fortification expert might be located through the Council on America's Military Past or the National Park Service (addresses are in the appendix).

2. The museum needs to have a climate control system installed as soon as possible. Because of its location on the water, the temperature and humidity at the fort fluctuate rapidly over short periods of time. The artifacts in the museum need to be protected

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

MAY 15 1992

REPLY TO
ATTENTION OF:

Plan Development Section

Honorable Doris Anderson
Mayor, Town of Dauphin Island
Post Office Box 610
Dauphin Island, Alabama 36528

Dear Mayor Anderson:

This is in response to your letter of May 1, 1992, expressing your concern with shoreline erosion on Dauphin Island, Alabama.

We are now investigating the erosion problems at Dauphin Island under the authority of Section 14 of the 1946 Flood Control Act. That section provides for emergency shoreline protection for public facilities. While it is too early to be positive, we are optimistic about the results of these studies.

If I can be of further assistance, please let me know.

Sincerely,

Burdin/2772/mw/PD-FP
Willis/PD-FP

CF:
CESAD-P
CECW-P
DX

Dennis W. Heuer
Major, Corps of Engineers
Acting District Engineer

PD-F
DX
DD
DE

PD-F-SUBJECT FILE COPY

Town of Dauphin Island
P.O. Box 610
Dauphin Island, AL 36528

May 1, 1992

DE
DD
DX
DS

(Action)

Colonel Michael F. Thuss
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, AL 36628

Dear Colonel Thuss:

The Town Council and all of our citizens and property owners are most concerned and distressed over the tremendous erosion of our beaches on Dauphin Island. Preliminary studies have been made, but the real impact of this problem is not evident until it is seen in person.

This problem affects all phases of our Town life - diminishing tourism, lessened income for business and the Town of Dauphin Island, impending destruction of public facilities. Though the properties involved are not owned by the Town (ownership rests with the Federal Government, the Park and Beach Board of Mobile County and the Dauphin Island Property Owners Association), the impact of the problem rest with the Town and the problem is "ours".

Please give this matter your attention and advise us on remedial measures that can be taken. We welcome your visit and would like to meet with you.

Sincerely,
FOR THE TOWN COUNCIL

Doris Anderson

Doris Anderson
Mayor

DA/jlj

Doris Anderson, Mayor
Town Council: Billy Patronas - Jim Boone - Georgia Mallon - Jeff Collier - Claude Brown

File - DI sec 145
B

Dauphin Island Park and Beach Board

P. O. Box 97 • Dauphin Island, Alabama 36528 • 205-861-3607

Elizabeth A. Gebsen (Chairman)
C. M. Roberts (Member)
Henderson Young (Member)
Michael Henderson (Executive Director)

April 17, 1992

Mr. Walter W Burdin
Study Manager
Mobile District, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628-0001

Dear Walter,

During our last conversation you mentioned the Corp's need to document the economic justification of Federal funding for erosion repairs.

I have already provided information on the national importance and excellent condition of Historic Fort Gaines so I will not go into that now. Instead let me give some overall tourism information and cost.

To begin with, after Hurricane Frederick, the government spent 32 million dollars to rebuild the bridge providing the only land access to Dauphin Island. As was repeatedly documented at the time, this huge investment was not provided for the small number of actual residents living here. It was justified due to the economic and recreation impact provided the state and nation as a whole.

Interstate 10 is one of the nations main highways connecting the east coast to the west coast. Because the island is so close to the major thorough fare, there are four separate exits off I-10 to Dauphin Island.

Due to the success of the Mobile Bay Ferry operation, a tremendous number of upper income tourism families and retirees daily drive onto Dauphin Island in order to use the ferry and have a more coastal route of travel. Ferry brochures are distributed in seven states.

According to State Highway Dept. figures, well over a million people drive onto Dauphin Island yearly.

The Audubon Bird Sanctuary here is their only sanctuary in all of Mississippi and Alabama. Its fresh water lake, gulf beaches, walking trails, etc are provided because we are on one of the major flyways between South America and Canada for birds and butterflies.

The annual (28th year) Dauphin Island sailing regatta is the largest single day sailing race in America.

The Alabama Deep Sea Fishing Rodeo has been hosted here for over 50 years and is one of the largest and oldest in the nation. Overall fishing is so good that a total of six separate fishing rodeos are held on Dauphin Island each year.

The Dauphin Island Fishing Pier is one of only two in the entire state giving access to deep water gulf fishing. Our public boat launches give fisherman access to the open gulf within 5 minutes of launching.

The quality of the Special Event Weekends hosted at Fort Gaines are such that they have been featured in publications ranging form Southern Living to National Geographic.

Dauphin Island offers an airport, an excellent golf course and country club on the gulf, numerous resturants, gift shops, charter boats, marina, hotels, condos, beach house rentals, two public fishing piers, etc, etc,. Now that we have incorporated as a town, the potential for controlled development of family tourism and retirees relocating is unlimited.

As a tourism base, within a short drive is located the city of Mobile, beautiful Bellingrath Gardens and the USS Alabama. These last sites are listed as among the top tourist attractions in the entire state.

By its nature, tourism is the best industry for spreading the wealth by way of creating jobs. One study showed the average tourism dollar turns over seven times in that community. No other industry creates the opportunities for small new business to provide support services.

In conclusion, compare our current and future potential with the public perception we are beginning to get from erosion damages. Media headlines stating "Dauphin Island Beaches Now unsafe For Swimming Due To Erosion Changes" are doing tremendous harm. One realtor told me in the last 2 weeks he has received 25 calls from people renting beach houses either to cancel or voice concern over beach problems.

As the Corps' own study has stated, not only is erosion causing an increasing loss of income, the dune line protection from hurricanes is becoming non-existent in places. Without their sheltering effect, the taxpayer cost of hurricane destruction will be much higher than from past storms of this nature.

Although Corps projects require that initial investment, without these actions, the taxpayer will undoubtedly suffer much more in the future.

Yours Truly,

Michael H Henderson
Executive Director

MHH/jg

PD-F

RICHARD SHELBY
ALABAMA

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June 24, 1991

Colonel Michael F. Thuss
U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628

Dear Colonel Thuss:

I am very concerned about the current erosion problems on Dauphin Island. I have read with increasing concern the reports of massive erosion on the Island.

I am writing you today to encourage you to closely examine the Corps' role in causing the erosion problem. It is my understanding that many area residents believe that a major cause of the current erosion problem stems from the Corps of Engineers' methods of maintaining the Mobile ship channel. If the current erosion problem is not corrected historic, Fort Gaines will be threatened along with many homes and the popular public beaches in the area.

I hope the Corps of Engineers will closely assess their actions in the Dauphin Island area. In addition, I believe that the Corps should immediately begin studying possible solutions to the current erosion problem regardless of who or what is to blame for this situation.

Thank you for you prompt attention to this matter.

Sincerely,

Richard Shelby

Richard Shelby

RCS/tjy

PD-F (Actm)
Copy to PD-E

Dauphin Island Park and Beach Board

P. O. Box 97 • Dauphin Island, Alabama 36528 • 205-861-3607

Elizabeth A. Gebsen (Chairman)
C. M. Roberts (Member)
Henderson Young (Member)
Michael Henderson (Executive Director)

June 28, 1991

Chief N.D. McClure IV
Planning & Environmental Division
Corps of Engineers
Mobile, Alabama 36628-0001

Dear Chief Mc Clure,

Let me begin by apologizing for not answering your letter of June 17th sooner. This refers to the $24,600.00 needed to have sand removed from the Fort Gaines channel placed on the public beaches outside Fort Gaines instead of isolated little Dauphin Island.

My delay is due in trying to find these monies. Unfortunately, the Dauphin Island Park & Beach Board can simply not afford it. We are advertising for bids ,at this time, to re-design and build some of the boardwalk system lost to erosion and to reinforce pavilion pilings at our main beach site. These unforeseen cost may be similar to the amount you require. Further more, because of erosion around the pilings of our 850' main fishing pier, we are having to budget some emergency funds in case piling reinforcement is needed there.

The Town of Dauphin Island recently informed me they could not help, as did the State Coastal Programs Department and the Alabama Department of Economic and Community Affairs. We are still waiting on word from the county and governor's office, but I am not optimistic.

Although I'm continuing to search for these funds, once again I want to state for the record we feel this is an unfair situation. We realize the Corps' primary directive is to maintain the navigation depth of the channels they are responsible for, but we can not understand why we are asked to pay to remedy negative side effects of this policy.

For example, in the ADECA Funded Study, Summary of Existing Coastal Engineering Data for Dauphin Island, Alabama published in 1991, it refers to this exact project.

On page 27 it states " another impact of man on the shoreline of Dauphin Island is the channel cut to Billy Goat Hole on the north side of the east end (Fort Gaines Channel) . Before this cut, sand was able to move along the beaches from Little Dauphin Island to the east end of Dauphin Island during times when waves and winds were from the north. Dredging this channel removed a path of sand transport onto the east end".

Besides other mentions of this project, it states many times the dredging and maintenance of the Mobile ship channel has removed Dauphin Island's source of sand from the east.

It further states on page 33, "the mechanism exists within the law whereby erosion of adjacent beaches caused in part by federal navigation projects must be fixed by the Federal Government. A logical and cost effective fix would be the direct pumping of sand onto Dauphin Island beaches."

On a wider level the Corps of Engineer's own 5 year study published in 1978 makes basically the same conclusions and solution.

Chief McClure, erosion problems on Dauphin Island are rapidly approaching an emergency situation. On a normal day we have waves breaking within about 30' of the walls of Historic Fort Gaines ! The public beach there has about disappeared and high seas regularly cover the paved access road. The gulf beaches behind the Sea lab, Coast Guard, campground, Audubon Bird Sanctuary, Isle Dauphin Golf Course and Country Club, etc. are littered with downed pine trees where once there was beautiful beach.

At the main public beach site we are on the verge of losing pavilions built on top of the dune line there. Once this narrow section of natural barrier is breached, it's only about 1/8th of a mile of flat land til you reach the sound on the north side.

If our rate of erosion continues in this area the island will soon be cut in two where the second highest number of businesses are located and access to the entire occupied west end will be cut.

I'm sorry if I'm drifting from the purpose of your June 17th letter. I do appreciate the time and effort you and other Corps staff have given me on this problem. As I said , I'm continuing to try to find a source of funds and I know you are facing a deadline to put out bids. I would appreciate your advising me of a cut off date as to when you must know if matching funds are available.

Yours truly,

Michael H. Henderson
Executive Director

MHH/jg