PUBLIC MEETING

ON

MOBILE COUNTY, ALABAMA

(INCLUDING DAUPHIN ISLAND)

MOBILE, ALABAMA

31 July 1973

U. S. ARMY ENGINEER DISTRICT, MOBILE
CORPS OF ENGINEERS
MOBILE, ALABAMA

PUBLIC MEETING AT MOBILE, ALABAMA

31 JULY 1973 AT 7:00 P.M. IN THE COUNTY COURTHOUSE

ON

BEACH EROSION AND HURRICANE PROTECTION

FOR

MOBILE COUNTY, ALABAMA (INCLUDING DAUPHIN ISLAND)

TABLE OF CONTENTS

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

REPLY TO
ATTENTION OF: SAMEN-PD

5 July 1973

ANNOUNCEMENT OF PUBLIC MEETING ON A SURVEY OF THE SHORES OF MOBILE COUNTY, ALABAMA (INCLUDING DAUPHIN ISLAND) FOR THE PURPOSE OF BEACH EROSION CONTROL AND HURRICANE PROTECTION

MEETING TO BE HELD AT 7:00 P.M., C.D.T.

ON 31 JULY 1973

IN COUNTY COMMISSION MEETING ROOM
THIRD FLOOR, MOBILE COUNTY COURTHOUSE
MOBILE, ALABAMA

The Corps of Engineers is studying the salt-water shorelines of Mobile County, including the western shore of Mobile Bay, the northern shore of Mississippi Sound, and all of the shorelines of Dauphin Island and Petit Bois Island, to determine what steps, if any, can be justifiably taken to provide beach erosion control and hurricane protection. The study was requested by the U. S. Congress in a resolution adopted by the Senate Public Works Committee on 27 October 1970.

In order that the study may be responsive to the desires and needs of everyone affected, a public meeting will be held as indicated above. (Enter the Courthouse through the Royal Street entrance and take the elevator to the third floor.) We invite you to attend the meeting and to participate in the exchange of information concerning the study, the water resource and related problems involved, and possible solutions. We are also interested in knowing about ecological and environmental conditions and problems in the study area. A map of the study area is attached.

Generally, the problems we are aware of include:

(a) Extensive shoreline recession and bluff erosion along most of the western shoreline of Mobile Bay;

(b) Severe erosion of the Gulf beach on the eastern end of Dauphin Island; and

(c) Continued erosion of the eastern tip of Petit Bois Island causing excessive widening of Petit Bois Pass.

Local interests desire alleviation of these conditions.

All interested individuals, groups, and agencies are invited and urged to be present or represented at this meeting. Everyone will be given an opportunity to express his views and furnish specific data on all aspects of the study, including technical, economic, social, and ecological and environmental material. Statements should be supported by factual material insofar as practicable.

For accuracy of record, all important facts and statements should be submitted in writing. Written statements may be handed to the presiding officer at the meeting, or may be mailed beforehand to:

District Engineer
U. S. Army Engineer District, Mobile
P. O. Box 2288
Mobile, Alabama 36628

Statements so mailed should indicate that they are in response to this announcement. All statements, both oral and written, will become part of the official record on this study and will be made available for public examination.

Full consideration will be given to the views presented prior to making a recommendation to higher authority. However, this cannot be taken as an indication that the Federal Government will undertake any improvements or programs. Although the study may result in recommendations for undertakings by the Federal Government, their accomplishment would depend upon subsequent authorization and funding by the Congress.

Please bring this announcement to the attention of anyone you know who is interested.

Drake Wilson

1 Incl
Map

DRAKE WILSON
Colonel, CE
District Engineer


MOBILE
MOBILE BAY
MOBILE SHIP CHANNEL
Study Area
SCALE IN MILES
8 4 0
SURVEY REPORT
MOBILE COUNTY, ALABAMA
(INCLUDING DAUPHIN ISLAND)
BEACH EROSION & HURRICANE PROTECTION
CORPS OF ENGINEERS
DIVISION: SOUTH ATLANTIC
DISTRICT: MOBILE
1 JULY 1971

PUBLIC MEETING

ON

BEACH EROSION AND HURRICANE PROTECTION

FOR

MOBILE COUNTY, ALABAMA, (INCLUDING DAUPHIN ISLAND)

31 JULY 1973

LIST OF PERSONS ATTENDING

Corps of Engineers, Mobile District:

Col. Drake Wilson, District Engineer.
Mr. Frank Deming, Chief, Engineering Division.
Mr. W.L Dolive, Chief of Harbor Development Section.
Mr. W.W. Burdin, Civil Engineer of Harbor Development Section.
Mr. J.T. Merwin, Civil Engineer of Harbor Development Section.
Mr. Bill Strain, Chief, Office of Administrative Services.
Mr. O.H. Tabb, General Service Branch.
Mr. Jack C Mallory, Ecologist, Environmental Quality Section.
Mr. A. James Chamberlin, Public Affairs Officer.

Federal, State and Local Officials:

Mr. Earl L. Norton, District Conservationist, 3038 Springhill Ave., Mobile, Ala.
Mr. Hugh A. Swingle, Alabama Department of Conservation, P.O. Box 188, Dauphin Island, Ala.
Mr. Bay Haas, Mobile County Commissioner, P O. Box 1443, Mobile, Ala.
Mr. Richard A. Stokes, Gulf Islands National Seashore National Park Service, P.O. Box T, Ocean Springs, Mississippi.

Other Local Interests:

Mr. and Mrs. Marcea Osborne, 1753 Limrick St., Mobile, Ala.
Mr. Charles B. Schwind, home owner, Route 1, Box 622, Coden, Ala.
Mr. E.J. McCormick, P.O. Box 450, Route 1, Theodore, Ala.
Mr. Noel Read Stowe, University of South Alabama, 1305 Ridgewood Drive, Mobile, Ala.
Mr. and Mrs. A.C. Taylor, 1311 Lola St., Mobile, Ala.

Mr. Ray D. Rushlow, Land owner (property owner) 4009 Bay Front Road, Mobile, Ala.

Mr. and Mrs. Charles M. Griffin, prospective owner on Coden Beach, 7102 Cottage Hill Road, Mobile, Ala.

Mr. and Mrs. Arthur E. Rigas, 12 Princess Anne Road, Mobile, Ala.

Mr. James M. Griffin, Route 3, Box 564, Theodore, Ala.

Mr. L. Daniel Harless, Jr., home owner, Route 3, Box 559 Theodore, Ala.

Mr. and Mrs. Michael Durette, 904 Super Street, Mobile, Ala.

Mr. and Mrs. E. Harrington, Route 1, Box 454, Salt Aire Road, Theodore, Ala.

Attorney P. Hollis, property owner, Route 1, Box 8, Coden, Ala.

Mr. Hollis B. Parris, Coden Beach Campsites, Route 1, Box 24, Coden.

Mr. and Mrs. Mark Trenier, home owner, 1408 Cedar Park Dr. Mobile.

Mrs. F.J. Spencer, 39 Washington Place, Mobile,Ala.

Mr.Robert B. Eastman, 608 Lesesne Street, Mobile,Ala.

Mr. and Mrs. William A. Jefferson, Route 1, Box 729, Coden, Ala.

Mr. and Mrs. Sokolosky, home and property owner, 4051 Bay Front Road, Mobile, Ala.

Mrs. Merle Tucker, Anderson Development Ltd. Box 187, Dauphin Island,Ala.

Mrs. Margaret Cox, 2505 S. Vaughan Drive, Mobile, Ala.

Mr. Michael Feore, Marine Development Inc. 10½ S. McGregor Street, Mobile, Ala.

Mr. and Mrs. Frederick Wheeler, 188 South Street, Mobile, Ala. (Summer Camp Hollinger's Island)

Dr. L.E. Carroll, Utopia Club, Inc., 558 St. Francis St., Mobile, Ala.

Mr. William W. Dowling, Retired from State of Alabama, 118 Kilmarnock Street, Mobile,Ala.

Mr. W.H. Martin, 4257 Michael Blvd. Mobile,Ala.

Mrs. Rita Johnson, Alabama Seafood and Pro. Association, Box 412 Coden, Ala.

Mr. Francis Lagman, 103 Margaret Street, Mobile, Ala.

Mrs. Frank Weatherford, Route 1, Box 710, Mobile, Ala.

Mr. and Mrs. Clement R. Boney, Bay Front Road, Mobile, Ala.

Mr. Wilson Gaillard, Dentist, 309 South Sage Ave. Mobile, Ala.

Mr. John E. Murphy, Sr., 5663 S. Vanderbilt Dr. Mobile, Ala.

Mr. P.R. Burgdorf, Shell Oil Company, Two Shell Plaza, Houston, Texas.

Mr. Ernest Chachere, Jr., 4739 Warrington Dr. New Orleans, La.

Mr. Richard C. Bradley, 7006 Cottage Hill Rd. Mobile, Ala.

Mr. Douglas Inge Johnstone, Alabama Conservancy, P.O. Box 1988, Mobile, Ala.

Local Interests (Cont'd)

Mr. Hugh A. Swingle, Marine Resources Division, Alabama Department of Conservation and Natural Resources, P. O. Box 188, Dauphin Island, Alabama.

Mr. Earl L. Norton, USDA Soil Conservation Service, 3038 Springhill Avenue, Mobile, Alabama.

Mr. David T. Gordon, 4011 Bay Front Road, Mobile, Alabama.

Mr. Don Soto, Press Register, Mobile, Alabama.

Mrs. Anna L. Busby, I456 North Cloverleaf Circle, Mobile, Alabama.

Mrs. Virginia Blunt, I3I2 Doyle Avenue, Mobile, Alabama.

Mrs. Mattie M. Davidson, Route I, Box I87, Bay Front Road, Mobile, Alabama.

Mr. Charles W. Beverly, 3I55 Ward Road, Mobile, Alabama.

Mr. and Mrs. John F. Lyle, Route 3, Box 560, Theodore, Alabama.

Mr. Robert A. Runderson, I656 Waterford Street, Mobile, Alabama.

Mr. James A. Howard, I954 Jones Avenue, Mobile, Alabama.

Mr. Cranford H. Burns, 2500 Oakview Drive, Mobile, Alabama.

Mr. and Mrs. Elkana Curtis, 756 South Conception Street, Mobile, Alabama.

Mr. Edward Fraide, Route I, Box 45I, Theodore, Alabama.

Mr. R.L. Williams, 4300 Highway 90 Drive, Mobile, Alabama.

Mrs. Ann Geiser Heimer, Box I59 Bay Road, Mobile, Alabama.

Mrs. Helen E. Amos, I74 N. Lafayette Street, Mobile, Alabama.

Mr. and Mrs. Arthur Amos, I74 N. Lafayette Street, Mobile, Alabama.

Mr. and Mrs. Fred R. Berry, Jr., 3975 E. Byronell Drive, Mobile, Alabama.

Mr. J.C. Martin, Mobile County Board of Health, 248 Cox Street, Mobile, Alabama.

Mr. Ben Buerger, Ship and Shore Sport Shop, Route 3, Box 626, Bellefountain, Alabama.

Mr. Jesse Acree, Box 7334, Mobile, Alabama.

Mr. B.C. Owen, Box 8546, Mobile, Alabama.

Mr. Jerry W. Rushing, Postal Employees Social Club, 454 Lott Road, Mobile, Alabama.

Mr. J. Tyler Turner, Dauphin Island Businessmen's Association, Box 72I4, Mobile, Alabama.

Local Interests (Cont'd)

Rev. Oliver E. Adams, 906 Garrity Street, Mobile Alabama.
Mr. Robert Stumpf, Catholic Diocese of Mobile, Box I966, Mobile, Alabama.
Mr. William T. Gallagher, Route I, Box 625,Coden, Alabama.
Mr. Louis H. Chateau, 705 Montclaire Way, Mobile, Alabama.
Mr. A.C. Daves, Box 6102, Bienville Realty, Mobile, Alabama.
Mr. Bay Haas, Mobile County Commissioner, Box I445, Mobile, Alabama.
Mr. Dale Hardin, Geography Department, University of South Alabama, Mobile, Alabama.
Mr. Conrad A. Gazzier, 55 Childress Avenue, Bayou La Batre, Alabama.
Mr. Ben W. Riall, 3904 Woodmont Drive, Mobile, Alabama.
Mr. L.M. Curtis, 60I South Carolina Street, Mobile, Alabama.
Mr. Andra Poiroux, Bayou La Batre, Alabama.
Mrs. T.E. Renick, 4II5 Skyline Drive, Mobile, Alabama.
Mrs. R.S. Ford, Land Owner, Box I306 Pascagoula, Mississippi.
Mr. Roy W. Pike, P.O. Drawer I469, Pascagoula, Mississippi.
Mrs. J. Ford, Land Owner, 8I5 Beach Blvd. Pascagoula, Mississippi.
Mrs. Miriam S. Hall, I0I0 Rotterdam Street, Mobile, Alabama.
Mr. Joseph V. Dust, University of Alabama, 5425 Forest Oaks Drive, Mobile, Alabama.
Mr. H.M. Stein, Jr., Alabama Power Company, 3406 Rivere Du Chien Road, Mobile, Alabama.
Mr. E.L. Toenes, Home Owner, Box I8I B , Mobile, Alabama.
Mrs. Verda Horne, State League of Women Voters, 708 Fairhope Avenue, Fairhope , Alabama.
Mr. George F. Crozier, Alabama Sea Grant Office, Box 256, Irvington, Alabama.
Mr. Thomas Renick, 4II5 Skyline Drive, Mobile, Alabama.
Mr. O.L.Adams, Chamber of Commerce, 55 Oakland Avenue, Mobile, Alabama.
Mr. A. Harold Winn, Merchants National Bank, P.O. Box 2527, Mobile, Alabama.
Mr. Joe Pearson, Alabama Wildlife Federation, Mobile County Wildlife, Mobile, Alabama.
Mr. W.W. Winter, 25I7 River Road, Mobile, Alabama.

Local Interests (Cont'd)

Dr. M.H. Rowell, Route Box 528, Theodore, Alabama, Dentist.
Mrs. Katherine E. Simon, Box 64, Mobile, Alabama.
Mr. and Mrs. Joseph M. Allen, Box I233, Mobile, Alabama.
Mr. C.A. Bogue, Route 3, Box 444 B, Mobile, Alabama.
Mr. Cecil Padgett, 206I Bucker Road, Mobile, Alabama.
Mr. and Mrs. A.L. Ramsey, Home Owner, Theodore, Alabama.
Mr. and Mrs. Philip G. Austin, Land Owner, 3I7 Park Avenue, Mobile, Alabama.
Mrs. Elizabeth A. Hinkle, Personal, I3I0 Brown Street, Mobile, Alabama.
Mrs. William Bolton, 523 Newport Drive, West, Mobile, Alabama.
Mrs. Helen Whitinger, I3I0 Brown Street, Land Owner, Mobile, Alabama.
Mr. and Mrs. C.G. Daughdrill, 4I28 Beacon Lane, Mobile, Alabama,
Mr. Richard Stokes, Box T, Ocean Springs, Mississippi.
Mr. and Mrs. James B. Loftis, Electrician, I370 Ridge Street, Mobile, Alabama.
Rev. and Mrs. William R. Hill, St. James Episcopal Church, P.O. Drawer AK, Fairhope, Alabama.
Mr. Leo Cain, I356 River Drive, Mobile, Alabama.
Mr. and Mrs. F.S. Bryant, Corp of Engineers, 446I Park Road, Mobile, Alabama.
Mr. and Mrs. H.E. Brewton, Jr., ILA No. I459, I9I4 Old Government Street, Mobile, Alabama.
Mrs. C.N. Worthington, Route I, Box I92, Mobile, Alabama.
Mr. Leo Cain, Sr., Home Owner, I365 Salt Aire Road, Theodore, Alabama.
Mr. W.H. Tucker, Box 638, Grove Hill, Alabama.
Mr. E. Howard Smith, Howard Real Estate, Route 1, Box 181 C, Mobile, Alabama.
Mr. Harry J. Champagne, I600 Darwood Drive, Mobile, Alabama.
Mr. Louis Raue, I09 Beverly Court, Mobile, Alabama.
Mr. G.H. Howard, Route I, Box I66, Mobile, Alabama.
Mrs. Diane M. Vulevich, Route 3, Box 636, Belle Fountaine, Theodore, Alabama.

Local Interests (Cont'd)

Mr. and Mrs. E.E. Slobig, I8I0 Rosedale Road, Mobile, Alabama.
Mrs. T.J. Judge, Dauphin Island Garden Club, Dauphin Island, Alabama.
Mr. T.J. Judge, Dauphin Island Water and Sewer Board, Box 39I, Dauphin Island, Alabama,
Mr. E. Gerald Blackwell, Mobile County Board of Health, 590I Chalet Drive, Mobile, Alabama.
Mrs. D. Wilson, 37I6 Claridge Road, Mobile, Alabama.
Mr. Robert Howell, 2520 Eatraway Drive, Mobile, Alabama.
Mrs. Pearlie B. Howell, Fairway Drive, 2520, Mobile, Alabama.
Mr. John H. Benthal, Route I, Box I59, Mobile, Alabama.
Mrs. Julius Durett, Box 279, Coden, Alabama.
Mr. and Mrs. T.S. Vereen, Jr., Route I, Box I57 C, Mobile, Alabama.
Mr. J.S. Garner, First Homes Realty and Builders, Route I, Box I57, Mobile, Alabama.
Mr. and Mrs. John Conthlan, 52I6 Border Drive, North, Mobile, Alabama.
Mrs. Ruth McDonnell, I820 Yuille Street, Daphne, Alabama,
Mr. Thomas Reed, 526 Crawford Lane, Mobile, Alabama.
Mr. Thomas Ford, Jr., Box 4235, Mobile, Alabama.
Mr. Tom Lilley, Tom Lilley Company, Inc., Mobile, Alabama.
Mr. Carl Krause, Tom Lilley Company, II0 S. Catherine Street, Mobile, Alabama.
Mr. Thomas Galloway, Dauphin Island Park and Beach Board, Box 4492, Mobile, Alabama.
Mrs. Doris Naylor, Route 2, Box 596, Daphne, Alabama.
Mr. Roy Thigpen, Thigpen Photography, Box 9242, Mobile, Alabama.
Dr. E.E. Ashbee 28I7 Springhill Avenue, Mobile, Alabama.
Mr. John L. Finley, Conrades Club, Inc., I388 David Avenue Mobile, Alabama.
Dr. W.L. Russell, Utopia Club, Inc., I0II Davis Avenue, Mobile, Alabama.
Mr. and Mrs. Walter Rice, III, Home Owner, 806 Elmira Street, Mobile, Alabama.
Mr. Robert A. Vogtner, City Engineers Department, 2455 Karagan Drive, Mobile, Alabama.

Local Interests (Cont'd)

Mrs. Hilda S. Parks, Property Owner, I963 Calmes Street, Mobile, Alabama.
Mr. and Mrs. Marshall Tew, Property Owner, 962 Augusta Street, Mobile, Alabama.
Mr. and Mrs. J.W. Naylor, Property Owner, I666 Springhill Avenue, Mobile, Alabama.
Mr. Charles Sullivan, Jr., Campbell Piping Company, Mobile, Alabama.
Mr. Frank Lundell, Route 2, Box 629, Coden, Alabama.
Mrs. Elizabeth Raley, 4467 Park Road, Mobile, Alabama.
Mr. and Mrs. Luther Hayes, Route I, Box 833 A, Mobile, Alabama.
Mr. and Mrs. Cyril B. Batchelor, I370 W. Riviera Drive, Mobile, Alabama.
Mr. Walter Stevenson, Alabama Development Office, State Planning Division, Room 532, Montgomery, Alabama.
Mr. Roy Boddy, 509 Santa Barbara Drive, Mon Louis Island.
Mrs. Daisey Carpenter, 9I0 Virginia Street, Mobile, Alabama.
Mr. Leroy Jones, 842 Easterling Street, Prichard, Alabama.
Mr. and Mrs. H.A. Guthans, 220I Springhill Avenue, Mobile, Alabama.
Mrs. John Benthal, Route I, Box I59, Mobile, Alabama.

Mr. Richard C. Bradley, 7006 Cottage Hill Road, Mobile, Alabama.
Mr. and Mrs. Fred L. Lorge, 3700 Bay Front Road, Mobile, Ala.
Mr. Don C. Griffin, 404I Bonway Drive, Pensacola, Florida.
Mr. John L. Devery, Jr., Candidate for Public Works Commission, 900 West David Langan Drive, Mobile, Alabama
Mr. B.M. Guthrie, P.O. Box 24, Mobile, Alabama.
Mrs. Theresa Washington, Beta Eta Chapter of Alpha Pici Omea, 2304 Demetropolis Road, Mobile, Alabama.
Mr. and Mrs. C.D. Haig, Jr., Route I, Box 452, Theodore, Ala.
Capt. and Mrs. John Tvedt, 4I0I Bay Front Road, Mobile, Ala.
Mr. and Mrs. E. Rankin, Route I, Box 457, Theodore, Alabama.

Local Interests (Cont'd)

Mr. and Mrs. Henry C. Williams, 309 North Catherine Street, Mobile, Alabama.
Mr. Ray B. Hartwell, Jr., 4I49 Bay Front Road, Mobile, Ala.
Mr. Lancelot Chachere, 4739 Warrington Drive, New Orleans, Louisiana.
Mr. Smith D. Pickett, Jr., Dauphin Island Property Owner's Association, P.O. Box 96, Dauphin Island, Alabama.
Mr. Robert G. Dean, Shell Oil Company.
Mr. William Polewchak, Shell Oil Company, Two Shell Plaza, Houston, Texas.
Mr. George C. Chachere, 4739 Warrington Drive, New Orleans, Louisiana.
Mrs. Jack W. Sawyer, 4067 Bay Front Road, Mobile, Alabama.
Mr. Bernard Crabtree, Safety Inspector, Route 3, Box 596, Theodore Alabama.
Miss Minnie Lee Heath, Personal property owner, 4I6 Wisconsin Avenue, Mobile, Alabama.
Mr. Vernon Chestang, Chestang Beach, I503 Fairfield Drive, Mon Louis Island.
Mr. Claude Doublet, I206 Hannon Road, Mobile, Alabama.
Mr. Julius Marx, Julius Marx Realtors, Mobile, Alabama.
Mr. Joseph W. Jacob, Jr., Delta Chapter, National Serra Club, I325 Iberville Street, Ocean Springs, Mississippi.
Mr. U.S. Evans, P.O. Box 64, Mobile, Alabama.
Mr. Albert J. Tully, Isle Dauphin Country Club, P.O. Box 47, Mobile, Alabama.
Mr. Lawrence Johnson, President of Alabama Seafood Pro. Assn. Coden, Alabama.
Mrs. Roy H. Boddy, 509 Santa Barbara Drive, Mon Louis Island.
Mr. O.M. Cox, 2505 S. Vaughan Drive, Mobile, Alabama.

PUBLIC MEETING

ON

BEACH EROSION AND HURRICANE PROTECTION

MOBILE COUNTY, ALABAMA (INCLUDING DAUPHIN ISLAND)

FOR

31 JULY 1973

LIST OF SPEAKERS

Name		
Col. Drake E. Wilson	District Engineer for Mobile	Mobile, Ala.
Earl Norton	District Conservationist, Soil Conservation United States Department of Agriculture	Mobile, Ala.
Hugh Swingle	Asst. Chief Marine Biologist	Dauphin Island
Bernard I. Crabtree	Home Owner	Dauphin Island
Minnie Lee Heath	Home Owner	Belle Fountain Ala.
Vernon M. Chestang	Chestang Beach	Mobile, Ala.
Joseph Jacobs	Serria Club	Ocean Springs, Miss.
Julius Marx	Julius Marx, Inc. Realtors	Mobile, Ala.
Jimmy Chestang	Home Owner	Mobile, Ala.

List of Speakers (Cont'd)

Albert Tully	Isle Dauphine Country Club	Dauphin Island Alabama.
Lawrence Johnson	Home Owner	Mobile, Ala.
Mrs. Roy Boddy	Home Owner	Mon Louis Isl.
Mr. O.M. Cox	Home Owner	Mobile, Ala.
Mrs. Jack W. Sawyer	Home Owner	Mobile, Ala.
Mr. George C. Chachere		New Orleans, Louisiana
Mr. William Polewchak	Shell Oil Co.	Houston, Texas
Professor Robert Dean	Shell Oil Co.	Gainesville, Fla.
Mr. Smith Pickett, Jr.,	Property Owner	Dauphin Island
Mr. Ray B. Hartwell, Jr.		Mobile, Ala.
Mrs. C.D. Haig, Jr.		Theodore, Ala.
Mr. Charles Schwind	Home Owner	Coden, Ala.
Mr. E.J. McCormick		Theodore, Ala.
Mr. Noel Read Stowe	University So. Alabama	Mobile, Ala.
Mrs. Max Taylor	Home Owner	Mobile, Ala.
Mr. Charles Griffin	Property Owner	Coden, Ala.
Mr. John L. Devery, Jr.	Candidate	Mobile, Ala.
Mrs. Poiroux		Mobile,Ala.
Mr. George Crozier	Alabama Sea Grant Office	Irvington, Ala.

PUBLIC MEETING

ON

BEACH EROSION AND HURRICANE PROTECTION

FOR

MOBILE COUNTY, ALABAMA (INCLUDING DAUPHIN ISLAND)

31 JULY 1973

LIST OF EXHIBITS

Exhibit No.	Description
1	Letter from Congressman Jack Edwards
2	Letter from United States Department of Agriculture, Grove Hill, Alabama, W.H. Tucker
3	Letter from Sierra Club, Delta Chapter, Ocean Springs, Mississippi, Joseph Jacob, Jr.
4	Statement from the Department of Conservation and Natural Resources, Hugh A. Swingle
5	Letter from the United States Department of the Interior, Jack E. Hemphill
6	Letter from the Mobile Area Chamber Of Commerce, Craig L. Mason
7	Statement submitted by, Mr. and Mrs. B.I. Crabtree, Mr. and Mrs. Alfred Ramsey, Mrs. Betty Lamb, Dr. and Mrs. George Burner and Mr. and Mrs. J.J. Martins
8	Letter from Julius E. Marx, Inc., Julius Marx
9	Letter from William W. Dowling
10	Letter from Albert J. Tully
11	Letter from Thomas O. Bower
12	Letter from The University Of Alabama, Louis J. Williams, Professor of Biology

Exhibit No:	Description
13	Letter from The Mobile Bay Audubon Society, Alicia V. Linzey, President
14	Letter from Mrs. Robert E. Kirby
15	Statement from Peter K. Sokolosky
16	Letter from Mr. and Mrs. Pat McIlwain
17	Photograph submitted by Mrs. Jack W. Sawyer
18	Letter from Mrs. John F. Lyle
19	Statement of Congressman Jack Edwards
20	Letter from Mr. George L. Seeley

PUBLIC MEETING HELD AT MOBILE, ALABAMA

31 July 1973

on

BEACH EROSION and HURRICANE PROTECTION

for

MOBILE COUNTY, ALABAMA

(Including Dauphin Island)

COL. DRAKE E. WILSON: Good evening, ladies and gentlemen. I am Colonel Drake Wilson and I am the newly appointed District Engineer for the Mobile District for the Corps of Engineers. I have been here for thirty days, now. I am delighted to be in Mobile and I am delighted to see this number of people turn out for this meeting this evening.

What we plan to do tonight is to follow a resolution entered by Senator John Sparkman, which directed the Corps of Engineers to prepare a survey report on the shores of Mobile County, including Dauphin Island. This report will determine the advisability of providing Beach Erosion Control and Hurricane Protection for the salt water shorelines of the County.

I would like to ask you, if you have not already done so to make sure to register before you leave this evening, so we have on one of our cards your name and address and so forth. We want this for purposes of the record. We also want it for the purposes of putting you on our mailing list, for further communications that we will be sending out, from time to time, as the study progresses.

Now, for what the study is, this is the first of what would normally be three public meetings, that we would hold on this subject. The first one, the one tonight, is to generate from you as much as we can, information about damages that have occurred, about remedies that may appear correct to you, about conditions of the climate, of the environment and of the fish and wildlife. Also, any other factor that you think is pertinent to our study, that we can bring out and consider at this point.

Now then, after we complete the public meeting tonight we will start, in earnest on our study. That involves gathering quite a lot of data, doing quite a lot of analysis and comparing the data, determine what has actually happened, physically to the shores and trying to see if there are feasible ways of correcting or arresting the damage.

Now, when I say feasible, I must say to you that the laws require us to show that a project must be feasible economically before we can proceed on it. We must also consider other factors, but on the economic factor we must consider what are the damages or what are the losses that occur, versus what the costs of correcting these or any solution we might consider. And, the losses would be physical damage or, for instance, it would prevent such as damage to property, emergency and business losses avoided, and enhancement of property values and increased recreational usages. Then, when we consider the cost, we must consider the first cost of the project, converted to an annual basis, that is converted to the life of the project and what it would cost us at standard interest rates to acquire the money, to build it and to pay the interest and to pay back the money over the life of the project. To this, we must also add the cost of maintaining the project, both Federal and State.

Now, since this is a beach erosion and hurricane protection project, they are a little different from the normal Corp of Engineers projects on flood controls or navigation. There are some particular features of the law, particularly as they pertain to the local participation that are different and that I would like to bring out at this point. When we talk about the cost, we are talking about both the Federal cost and the local cost. The construction cost is apportioned between Federal and local interests, on the basis of land ownership and use at the time of construction. The maximum levels of Federal aid, for construction cost is as follows:

a. Federally owned shores - 100 percent. That is, of course, we have a Federal installation, we bear all of the costs.

b. Publically owned, Non-Federal parks and conservation areas - 70 percent.

c. Publically owned shores, other than parks and conservation areas - 50 percent.

d. Privately owned shores where protection will result in public benefits - 50 percent, reduced by the ratio of private benefits to total benefits. I think that's a little complicated.

e. Privately owned shores without public benefits - 0.

Now, that last portion that I just read to you pertains to beach erosion control. That which is established as hurricane protection comes under

slightly different provisions, which I will read to you now.

The first cost of protective features, including lands, easements, rights-of-way, and relocations is apportioned at least thirty percent to non-Federal interest and no more than seventy percent to the Federal Government, with the exception of preauthorization surveys and navigational aids, which are entirely at Federal expense. All cost of maintenance, operation and replacement items of the hurricane protection features would be the responsibility of non Federal interests.

We have been talking in the office, for the last few weeks about this problem, about the various solutions that might be apparent and we don't have any preconceived notions. Some of the more or less standard solutions don't seem to quite fit the problem, yet. We don't know yet what would appear to be the best solution so we solicit your comments here tonight and we will assure you that we will study them in detail. We will study your views and we will study physical features before we come up with the next proposal.

A PERSON FROM THE AUDIENCE: May I ask a question before you go any further?

COL. WILSON: Surely.

A PERSON FROM THE AUDIENCE: You stated that private beaches without any public benefits that would be zero percent, is that correct?

COL. WILSON: That's correct.

A PERSON FROM THE AUDIENCE: We have information that according to the State of Alabama that all beaches in the State are public. That we only have use of those beaches as that they cannot keep anyone off of the beaches as

long as they don't cut across our property to get to the beaches. As long as they come in from the water we could not keep them from off our beaches, so in that case all of the beaches involved would be beaches that are available to the public.

COL. WILSON: This is an interpretation that we anticipate actually, in projects of this type, before and what I think actually reads is from the high water mark seaward is public property. How you get to that beach is something else again. And, along Dauphin Island there is a large area where access would be difficult, because you would have to go through private property and if you are a property owner there through the trespass law you could prevent that access. You could not legally, as we understand it, prevent somebody from walking down along the beach provided he were below the high water mark.

There have been solutions in the past and I am not saying this is the direction we would be going, where we would stake out the high water mark at the time of the onset of construction and that would mark the limit of private property. Then, a beach replenishment program, for example, would go seaward of that, that would all then be public beach. This solution, when it has been worked out in the past, normally also includes with it access by the public to that public beach at intervals of approximately a mile and a half to two miles.

Now, I am not trying to propose a solution at this point. I am just trying to answer your question with an example.

Okay. After we complete the meeting tonight and the study I am referring to, we will come and call for, in all probability, another public meeting

about two years from now, provided funding goes along at the rate we expect. At this point we would expect to show you a variety of solutions that we can show as feasible and again get your views on those that we think are feasible from an engineering standpoint. We would also be talking about other factors, enviromental factors, fish and wildlife factors, and so forth that impacted on the use of solutions. On the other hand its possible that we may find no solution which appears to be feasible, and which case we have to so report.

There are some more seats up here in the jury box, ladies and gentlemen, if you would like to come forward. Please don't exercise your right as a jury but --. I have also been asked to announce that the Court would not like us to smoke in this room, because of the cork floors and they are inflamable.

After analyzing the results of the second public meeting, we would narrow it down to a solution and we would call a third public meeting, which would discuss the solutions that we were prepared to recommend. This would be a fairly coordinated solution, at that time with the State and other Federal agencies. And, however, we would still solicit your comments and be able to change it as your comments indicate at that point. Let me say that the study has to be forwarded to the office of the Chief of Engineers, in Washington and then if everything else is favorable we start the procedure of getting funding for construction. It's a little bit too far in advance to go into the details of that, at this time.

Now, next I would like to acknowledge the letters that we have already received and state that everything that has come to us in writing will be

inserted in the record and will be considered. We have received a letter from Congressman Jack Edwards, essentially he is just saying that he concurs with the fact that we are holding the meeting in the place and the time. We received a letter from a Professor Williams from the University of Alabama, who suggests that we look hard at non-structual solutions, that is, planting grass rather than bulkheads. He goes into some other items here as well. We have received a letter from Mr. Jack Hemphill, Deputy Regional Director of the United States Department of the Interior, Fish and Wildlife Service, who indicates he will be studying the fish and wildlife implications of the project at the same time that we are studying the other aspects.

We received a letter from Mr. Thomas O. Bower, from Mobile, who talks about his home on Dauphin Island Parkway and discusses the damages that he suffered on his land and is valuable to us as history and part of the damages that have taken place.

We received a letter from Mrs. -- excuse me I don't know whether its Mrs. or Miss. Alicia V. Linzey, President of the Mobile Bay Audubon Society, who says she will be very interested in the project, as it develops and reserves comments until she finds out more about what it is that we are proposing.

We received a letter from Julius E. Marx, who is a Realtor and, I believe is from Dauphin Island. He has enclosed some very interesting photographs taken some years ago of Dauphin Island and urges us to find a solution.

We received a letter from Mrs. Robert E. Kirby, who describes damages to her property on Bay Road and Hollingers Island and also some conservation service analysis and a contractors bid, which she felt was

matter and silt. Unless the materials are stabilized by vegetation they would not remain along the shore line for any great length of time. We know that many people would object to having this "mud-like" material along their shore lines. This has recently been the case at the mouth of Perdido and Bayou La Batre areas.

We know also that Dauphin Island Beach is certainly more critically eroding than most areas of Mobile County and is probably a more difficult area to stabilize. We know that the eastern end seems fairly well stabilized due to the groins that have been constructed there sometime in the past but, from the Isle Dauphine Club westward, as much as four hundred feet of beach has been lost in the past twelve years. We know that beach sands are being continuously carried to the west by the current, resulting in the westward migration of the island, which Dauphin Island is approximately four miles longer now than in I85I. We know that the jetties would probably help reduce the rate of erosion but, if they are placed in a certain areas without a good deal of study we know it could possibly cause greater erosion in one area while protecting another, which has been the case in several places along the Atlantic Coast. So, that's the reason that we certainly feel that a very detailed study is needed of the beach erosion processes at Dauphin Island and all of Mobile County. One of the biggest problems we have is the pass between Dauphin Island and Petit Bois Island. This has widened from a width of one point five miles in I85I, to about five miles today. This has increased and exposed Bayou La Batre and Coden to more severe wind action -- I mean wave action from hurricane winds and a particular importance to our commercial fishing. This has resulted in a complete destruction of the oyster fishery in Portersville Bay which at one time was a substantial fishery. This is

a result of the salt water intrusion into the Bay. We know that Petit Bois Island is a National Wildlife Refuge and is one of the Gulf Islands National Seashores. It has certainly in the public interest that Federal funds be used to protect these public lands by stabilizing the eastern end of Petit Bois Island.

So, it is the Department of Conservations belief that the Corp of Engineers, who have the experts to determine the most feasible methods of beach stabilization of the Mobile County shore line and on the stabilization of the eastern end of Petit Bois Island.Thank you.

COL. WILSON: Unless we missed somebody here that was the last Federal or State Agency that we have. I would call your attention to this point that if you chose you can simply give us a written statement and we will enter it into the record and we will study it and you don't need to read it. You have that privilege of reading it if you chose. Going simply by random order -- do we have any representatives of the County Commissioners that would like to make a statement.

PERSON FOR THE AUDIENCE: We are here but we don't need to make a statement.

COL. WILSON: Thank you. Next I will call on Mr. Bernard I. Crabtree from Route 3, Box 596, Theodore, Alabama, Mr. Crabtree.

BERNARD I. CRABTREE: Col. Wilson, ladies and gentlemen, we submitted a statement on our particular problem. Now, our program is localized, we realize that, but we want to present it to give everybody an idea how much trouble the people are having in trying to protect their own property. We talked earlier about the high water mark well, we haven't got a high water mark.

The water is constantly lapping up against our bulkhead. We haven't got a beach. It's due simply because a creek that drains into the bay has altered it's course of drainage and it now drains parallel to the beach line. Now, due to the natural migration of sand, which is a shore line drift, due to the southeastern winds, which we normally received, a sand bar has formed approximately I00 feet from our normal beach line. Now, due to this shore configuration that we now have with this sand bar, I00 feet from where our beach should be and the drainage of the creek that is now along our bulkhead, where our beach should be, we are constantly receiving deeper erosion and sooner or later erosion is going to take place under our bulkhead and if this happens then, we have no other choice but to construct another bulkhead and to try to regain our land. Now, we are talking about cost and feasibility it would seem that the study should take into consideration also what can be done in localized areas as well as the entire beach area. Now, the area that I am speaking of is only about five or six hundred feet of beach and I know that is a minor part of the whole coastline. And, there is one other point I would like to bring out, since I have lived on the property, I grew up on the bay, I can remember constantly having to go out there and try to reclaim our land, once we have lost it. We have lost, over the period of years, approximately fourteen or fifteen trees and approximately fifty feet of our land and we have reclaimed land time and time again. So, what we would like to stress is a study of localized problems as well as the problems concerning the whole bay front.

Now, one other thing, we talk about private property owners protecting their own land. Well, there are

areas on the bay where there is a property owner who has sufficient financial capabilities of building a bulkhead but that bulkhead is not going to do him any good unless his neighbor on the left and right construct one also, because if the people on the left and right, if their land is eroded well, your bulkhead is not going to do anything because eventually it is going to erode around your bulkhead. So, we live on Laurinstider Road and we welcome this investigation or this study into the problem, but we would sure like to see it accomplished a heck of a lot sooner than two years.

COL. WILSON: Thank you very much for those comments. The next one that I come to here is Miss Minnie Lee Heath, 416 Wisconsin Avenue, Mobile, Alabama. Miss Heath.

MINNIE LEE HEATH: I have a home in the area immediately below Fowl River, as it empties into the bay. I am the sixth house down, and my deed reads one quarter of a mile, so that gives you an idea. But, we have absolutely lost all of our beaches, every one of them on that shore line. We are extremely glad that somebody is making a study and, like Mr. Crabtree, we sure hope that a solution will be found that will be helpful to us in less than two years. I have personally measured and I have lost thirty five feet of land, that use to have grass and trees on it.

COL. WILSON: Mr. Vernon M. Chestang, of Chestang Beach, Am I pronouncing that right.

VERNON M. CHESTANG: That was one of my neighbors and she said about as much as I can say, we are losing rapidly. I don't want it to be like the Tennessee-Tombigbee. I guess that's about as much as I can say about it. Thank you.

COL. WILSON: Thank you. I would like to point out that the Tennessee-Tombigbee is under construction, now.

Next, Mr. Claude G. Doublet, I206 Hannon Road, Mon Louis Island.

A PERSON FROM THE AUDIENCE: He had to leave.

COL. WILSON: Thank you. Next, please, Mr. Joseph W. Jacob, Jr., I325 Iberville Street, Ocean Springs, Mississippi, representing the Delta Chapter National Sierra Club

JOSEPH W. JACOB, JR: Well, I am not representing myself and I am living in Mississippi so, you are probably wondering what I am doing here. But, the group that I am representing is the National Sierra Club. Some people are thinking right now, well, there is an enviromental freak. You are right. The islands off the coast of Mississippi and Dauphin Island -- not including Dauphin Island I am sorry, have been areas that people settled on since almost the beginning of time -- well, I say since the beginning of time, since the Spanish came over. Dauphin Island, by a map that I saw recently, in I732 was a lot wider that it is now and Petit Bois Island didn't even exist. So, some scientists speculate that Petit Bois Island, at one time was part of Dauphin Island but has migrated westward.

Now, I am sure most people in here may know this, that these islands do move from the east to the west but very few people realize that these islands get most of their original sand supply from the Appalachian Mountains. So now, we are really starting to talk about a complex situation.

I am here representing the Sierra Club who was instrumental in making Petit Bois, Horn Island and Ship Island part of a national seashore. Now,

you all might say, wow that's great. But, each one of these people in this room own part of that island and it is set aside for you through the efforts of these enviromental freaks who took a little concern and decided we needed to save some place for future generations.

Now, I have been a student at LSU for nine years. I am a Ph.D Candidate right now, so I like to think I know a little bit of what I am talking about. I do, in this particular written statement I have given to you, I have a reference that cites some of the information as being scientific facts. The thing I am concerned about is something that I am sure that none of you all are. That's Petit Bois Island. It seems like everybody is worried about their property value. Well, in the first place I doubt seriously if man really belongs in the coastal zone. It seems that we can't live in peaceful co-existence with it. We have to change it. It seems to be human way, if things aren't the way he likes, well, let's change them.

The thing that I would like to propose for Petit Bois Island, I don't know about your solutions around here in Mobile County but it's a situation you see over and over and over again. You rob Peter to pay Paul. One of your sand supplies is east of Mobile Point. You can bet Mobile Ship Channel has had some effect on the sediment supply to Mobile County. It's impossible for it not to be. You can bet that some of the sediment supply came down the Mobile River.Well, you dredge Mobile River, you deepen it, the sediment supply goes off shore and you loose some of your sediment supply to the Mobile County. That's fine, it does you no good but I am just trying to show you something. The thing we call Progress tends to be a snake that turns around and bites us. We all have this problem. You have to realize that living in the coastal zone you have no control over it. We all the time ask what has happened to our

commercial fisheries and why don't we catch the fish we used to catch and the shrimp we used to catch. And yet, we pat people on the back to go in with a dredge and fill up an estuary or dredge it to make a boat canal. They say we need these, we need these for progress but, what happened to the fish. We wonder about places we use to go swimming you know, good Lord, I could go to Mobile Bay eat all the oysters I wanted to, sit down on the reef for days and pack my stomach. Now, I can't do it. The reason for it is insufficient sewage treatment and those kind of things. So, that is the price you have to pay for progress.

The thing I would like to see the people here concern themselves in the study is not man made structures to use as a solution to the problem. One thing, you can decide on right now, some how you have got to let the sense of life come down from the southern ppalachian ountains. If you build industrial firms on the rivers east of Mobile Point to get progress, so that you can leave the lights on in the bathroom all night and not worry about turning them off. You are going to have this problem of sand supply. And the other thing is, and this is a cut at the Corps. I am sorry about it. The islands, as long as they have been there have eroded on the eastern end and have built up on the western end. They have continuously migrated westward. The problem with Petit Bois Island right now is the western end, as the Pascagoula Ship Channel is being maintained by the Corp and a little impoundment area where they take all of this sand that would normally go westward and they just pile it up in this impounding area. So, instead of the island maintaining its original -- well, I say original size, close to its square footage it is just migrating, changing locations across the coast. It can't, because its being locked on the western end.

So. it doesn't fill up the ship channel so that you don't get your bananas and they don't send the wheat to Russia. Got to have that ship channel, but if the ship channel was not there Petit Bois would be allowed to continue to move westward, the eastern end that was eroded would roll up to the western end and the island would just migrate toward Louisiana. Of course, I wouldn't like to see it wind up in Louisiana, either. But, you wouldn't lose it.

One other thing-- and I am from Louisiana, by the way. One other thing. Maybe I shouldn't have said I was from LSU, that's a bad thing. I forgot about Alabama. One other thing someone mentioned, a Professor from the University of Alabama, who has a good remark to make about using grasses to stabilize beaches. The dumb British--the British have used a plant called Spartina townsendii. They have stopped lots of erosion just by planting grasses.

In Grand Isle, Louisiana, Grand Isle was eroding on the eastern end. The Corps put a rock jetty. It cut off the sand supply to the western end, so they built a multi-million dollar rock jetty on the western end, now the center of the island is starting to erode. Lord knows what they are going to do now. These things are multi-million dollar jetties. If they would take one tenth of that money, it seems ridiculous, plants could have done just as much as to prevent the erosion as a multi-million dollar jetty, of course, there may have been some politics involved, especially in Louisiana.

People are enviromentally conscious now days. How many times has the older generation told the younger generation you cannot continue to rob Peter to pay Paul. If you want further electricity, if you want to drive your car, without paying the price of forty two point nine cents per gallon of gas you are

going to have to suffer the consequence. Progress has a price. Sometimes I wonder if two automobiles are really worth the air we breath and the hectic pace like that we lead to get to some place quicker. Think about it. What is your concept of the problem of the environment.

I hope your beach erosion problems do get resolved. I am here, just like I said to try to see that Petit Bois Island stays around for our folks and our younger generation to see. By the way, this winter Petit Bois and Horn Island are being looked at and studied and the Sierra Club will promote this to see if they should be designated as wilderness area, which means that man will not be able to go in and alter this island. That means that my children will see the Horn Island like I saw it today and get the sunburn that I got today. Thank you.

COL. WILSON: Thank you very much. I assure you that we appreciate all views.

Next, we have Julius E. Marx from Julius E. Marx Inc. Realtor.

JULIUS E. MARX: Colonel, as I wrote you it seems, and I am certainly no expert at this, it seems to me that planting grasses is the main solution to it. I am pleased to have read this booklet that the engineers have gotten out, where they are studying the marsh grass that we can plant. My question to you is have they attempted to put, with dragging lines, put down a marsh grasses as it was growing, instead of planting it from seed and so forth? Has any attempt been made to put it down by the scoop full--I would certainly think that would be worth your effort to try, because I believe that through growing things, as has been said here several times we could maybe save some of these islands. I am

thinking about Sand Island and Pelican Island. Pelican Island has already disappeared. As you know I would hope that the Government would bring that back. Sand Island keeps moving along, as has been said, from east to west. It certainly does deserve stabilization. As far as the beach erosion is concerned that would help Dauphin Island that way but it would also be a tremendous detriment in hurricanes.

I think most of you read McDonnell's article, Sunday, which quoted Peyton Norville years ago wanting to put these islands down in the Bay and Dr. Gaillard has since then advanced the idea of marsh islands along the bay. All of these things would certainly be a good idea, if we can get this growing. There is plenty of marsh grass around, if it just could be moved. I am sure there are a lot of people who would be glad to have canals put in to give up the marsh grass. I do think, that while you have this many interested people here, Colonel it would be a good idea to ask them, by show of hands whether or not they would be willing to have grasses grow in front of their places on the beach. It would be good to find out whether they wanted that or not.

JIM CHESTANG: There has been a lot of talk of offshore islands but where we are living pilings won't hold in front, much less marsh grasses. I think the Corp of Engineers studied these things.

COL. WILSON: Next, we have Mr. U.S. Evans. Has Mr. Evans departed. Next we have Mr. Albert J. Tully, from Mobile, Alabama, from the Isle Dauphine Country Club.

ALBERT J. TULLY: Colonel Wilson, ladies and gentlemen, I represent the Isle Dauphine Country Club and have

been requested by the President to speak on behalf of the membership of the Club. I would like to file a written statement and, in the interest of time will not read it aloud, but I would like to supplement remarks in that statement by this further observation.

I fully subscribe to the beneficial effects of channelization, harbor improvement and works of navigation. They are not only beneficial but they are essential to the general well-being of the area. I suggest however, and this is a continuing thread, in this report that along with these works of harbor improvement there should be concurrently executed a program of restoration of eroded areas, by using dredging materials. This, I believe,would be a valuable balance of one work with another. Now, I am partly familiar with the special acts that you have mentioned and the traditional approach to these things regarding channelization is one thing and hurricane protection as something else and beach erosion as something else and environmental restoration as something else. I suggest, sir, that this traditional approach on a segmented view on each phase of these things no longer serves the public need but rather, we need to regard it all as an integrated program in which your channelization and harbor improvement works is concurrently balanced with the program of restoration of the environment. It is my opinion that the Environmental Policy Act was designed to foster such programs as this. I do not believe that under that act amateur environmentalist nor a narrow and restricted view of separate pieces of Legislation can be used to convert the Corps of Engineers into an agency for the suppression of a scientific restoration of the environment. This, I urge upon you. Thank you very much.

COL. WILSON: Thank you , Mr. Tully. Mr. Lawrence Johnson, President of the Alabama Seafood Protection Agency.

LAWRENCE JOHNSON: Colonel Wilson, I just would like to bring up two points and then we will have more later on, to just show people here tonight what happened to the seafood in this erosion. Now, one mistake that we have made in opening the cut-off down here at Cedar Point. It is filling our Heron Bay up and due to that, we don't have the fish. The sportsman cannot fish there. The commercial fisherman cannot fish there because there is not as many fish and shrimp there and also oysters.

Now, you will have some of them say well, that's a channel. True, that's a channel, it will be short-cut to Mobile Bay, but nowadays we have faster boats. Most of these sport fishermen have boats as fast, also as the commercial fishermen, their boats are fast, so a little more time to get around won't hurt us anyway. Because what this causes in Heron Bay is pollution out of Mobile Bay. We all know that Mobile Bay has a lot of pollution. One third of it is polluted to commercial fishing, and that hurts us. I suggest on that, to the Corps before they do anything we need this in a hurry. But, I suggest that we put some kind of flood gates in there and not just fill it up and say well, that's going to take care of it. That's what we done this time. We opened it up and said that's going to take care of it. Let's have something, if we are going to build it where we can move it too, if it's doing harm before it's too late.

Also, on Petit Bois Pass would be the same thing. To us, it's too wide and a certain time of the year in the summertime it puts in too much salt water and it kills our oysters in Portersville Bay, which has already been stated by the Marine Resources. Let's don't go out there and throw rocks or ships or junk and put it out there, if we are going to put anything,

let's put it where we can control it and not just put something there that we can't do nothing about and it would take some doing to get it undone. That's all I have, at this time.

COL. WILSON: Thank you very much. Mrs. Roy H. Boddy, from Mon Louis Island.

MRS. ROY H. BODDY: I am Mrs. Roy H. Boddy. I don't have a speech to make. I just want to say that we have lost so much of our footage out there -- down there, on account of hurricanes. Every day we have a hurricane we lose at least ten or twelve feet. We have a twenty foot bluff and we just can't afford to put a bulkhead up there and I know grass wouldn't do us any good down there.

COL. WILSON: Thank you very much. Mr. O.M. Cox, 2505 South Vaughan Drive.

O.M. COX: I am O.M. Cox and I live on South Vaughan Drive in Mobile on Dog River. I have a piece of property on Mon Louis Island. It's the third house off of the mouth of Fowl River. Miss Heath has already discussed our beach problem. We don't know where our beach is going. We do know that we don't have any floundering or any crabbing anymore, because the waters stay cloudy all the time. We don't know whether that is caused from the dredging going on up the stream or whether it's from this erosion that's going on, but we also have this other problem of the people next door to us are not doing anything about their water front. Now, this emergency loan is available. I took advantage of it. I am having a bulkhead built but the people next door moved their house back thirty foot, naturally their footage has gone back thirty foot. I am going to have to build a thirty foot along side my property or build another bulkhead. I am wondering if this program can do anything about notifying people of the importance

of trying tc save their waterfront and try to get some of this here Federal help.

COL. WILSON: Well, we will certainly look into that aspect too, Mr. Cox. Thank you very much. Mrs. Jack W. Sawyer from Bay Front Road.

MRS. JACK W. SAWYER: While I am speaking I would like for you to look at these pictures that were made of our property , during one of the storms that we had during March, you know, when the weather bureau said we were having winds up to eighteen to twenty two miles an hour. If that was caused by winds eighteen to twenty two miles per hour I would hate for us to have winds of one hundred miles an hour.

We have many problems, north of Dog River on Mobile Bay with both beach erosion and build up. By that, I mean that sometimes we have a beach and sometimes we don't because of the wave action. One week your bulkhead, the base of it, will be up out of the sand and the other end will be buried. The following week the end of it was buried the week before will be up out of the ground and the other end will be buried, however, our main problem is logs. We feel that the spoil islands created by dredging the ship channel create our log problems. Also, with sixty five percent of the river system of this State of Alabama entering into Mobile Bay we have a tremenduous siltation problem, with the western side becoming more and more shallow. With our side of the bay becoming more shallow we are plagued with ships pumping their bilges , of course, this is against the law and they don't do it, but it comes from somewhere so it has to come from there and no water to disperse this oil mixture -- by the way we don't get any help from the Coast Guard on this. Last year, you remember when they had the accident out

in the Bay and they spilled the ninety thousand gallons of gasoline the Coast Guard told us that they didn't want to alarm anyone by reporting this, of course, it was alright for our dogs to get out in it and drink the gasoline soaked water and get sick and have to take them to the Vet. The bulkhead gets soaked with gasoline. You don't know where it is coming from , you know, don't say anything about it and then you won't worry about it. At first they even refused to admit there was a gasoline spill.

We really need someone to figure out something to do about these logs, with the outside of the Bay being so shallow, possibly caused by the siltation, the logs land up on these islands. You have a strong southeast wind, high water, here come the logs up on your land. We lost one hundred sixty feet of bulkhead in March. Along that one hundred sixty feet of bulkhead we lost any where from three to twenty feet of land. After Camille we hauled in over three hundred loads of dirt to fill in that area of our property to try to stop some of the logs -- well, after Camille we really had a problem. Our neighbor, who is sitting over here, the logs we had bulldozed and stacked up trying to burn them, they had been burning for two and a half months, they landed up against their house stacked up. Of course, we were rid of them but then they had to worry with them. It's just a constant process. Now the Board of Health says you can't burn logs. The County has instituted this program, you know, air pollution. Great. I am all for keeping the air clean. I like to breath too, but I would also like to be able to walk out in my yard. The State won't help us. They say that the property from the high water mark out belongs to them. Anybody can use it. Well, I say if that land and that water belongs to the State --

it must belong to them because they are the one that got the money for the oil leases. We didn't get any of it and we are not going to get any help from them when they have an oil spill. But, if that land belongs to them and if that Bay belongs to them well, those logs belong to them and I say "come and get them off my land". (Picture, Exhibit 17)

JULIUS MARX: In reference to the logs, I wonder if you would state whether you could use these logs, by burying them and help prevent some of this erosion.

COL. WILSON: We will take a look at that. Next Mr. George C. Chachere, of New Orleans.

GEORGE C. CHACHERE: I am George C. Chachere and I am from Mobile, originally. I am just here representing myself and my family. I have in my hand a deed that my family has owned land in Mobile Bay since 1910. I happen to come over here from New Orleans today and just before I came to the meeting , I measured off the property. We have lost over one hundred twenty feet of land. All I have to say is that if we have and we are tax paying citizens of the United States of America, the richest country in the world and we can spend funds every month and every year to restore foreign countries. I say let's don't take two years to study what we can do for the Mobile County shores. Thank you.

COL. WILSON: Thank you. Now, Mr. William Polewchak.

MR. WILLIAM POLEWCHAK: Colonel Wilson, ladies and gentlemen, my name is Bill Polewchak, I am manager of Engineering for the Shell Oil Company, Land Investments Department in Houston, Texas.

We got involved in this project when we became owners of about twenty three hundred acres of Dauphin Island about two year ago. About six weeks ago the State of

Texas said hey go out there and find out what's going on. So, the Director says go out there and find out what's going on. So, we did find out that there was some erosion taking place on the island and we had to take some activities. So, we have only been involved in this for about the past six weeks.

I utilized, about three weeks ago, an airplane and I utilized the services of a Professor from the University of Florida, a specialist in this field. To round out the consortium of the three of us, I also hired the District Engineer for Howard, Needles, Tammen and Bergendoff. They are one of the largest consulting engineers in the United States.

Well, what I have to say tonight, is that perhaps you would be interested in knowing that our interest is greatly of a local nature, not just because we are located in Houston. We are world wide, as you know. So, we are interested in the total islands stability. And, just to show and to indicate to you what we have done in just three weeks time I would like to make just a few statements. Besides the air and the boat survey, in three weeks as I mentioned, I called upon Dr. Robert Dean, Professor of Civil And Coastal Engineering, University of Florida, to join with us to find out what is going on. I have him with me tonight and I would like him to give you just a few ideas about what he has found out from the date that we have been able to uncover. Now, this data we have made inroads to the Coast and Geodetic in Washington D C. This group is now called the National Ocean Survey. So, we have gotten maps, we have gotten aerial photographs of 1960, 1956, 1966. We took out own aerial photographs three weeks ago and we have some that were taken in April of this year. And, by making these mosaic maps, stretched out to a large scale, we have been able to discern a little

bit of what's going on.

So I come to you tonight as a representative from the Shell Oil Company on a technical venture, so to speak. We thought you would like to know what we learned in just six weeks, about your problem that you have lived with all your life, and we want to become part of it. So, I would like now to introduce Professor Robert Dean, just to give you a few of the technical things that we found out that I know are of interest to you and Colonel Wilson.

PROFESSOR ROBERT DEAN: As Mr. Polewchak mentioned, we have only been associated with this problem, at least I have for approximately four weeks. So, a lot of the data which we are working with and some which we don't have we are unable, of course, to report on tonight. But, because the meeting here is concerned with beach erosion I would like to comment first of all on the direction and the magnitude of the predominate littoral drift. Some of the things I am going to say have been said before here tonight and for that I apologize but I think that perhaps it may be worthwhile from the standpoint of continuity. As has been mentioned, the winds in that part of the northern Gulf of Mexico are predominately from the east and therefore cause waves propagating from east to west. These waves constitute the principle agent for sand transport along the shore line.

In breaking, these waves place sand in suspension and also cause a very weak current directed in the direction of wave propagation. Although these currents by themselves would not be sufficiently strong to cause sand transport, the fact that the sand has been placed in suspension by the turbulence of the breaking waves makes the system very effective in transporting the sand. Sand transported in this

manner also is called littoral drift.

Now, we might examine very briefly why we are interested in littoral drift direction and magnitude. I think the reason is pretty obvious, very briefly if we have a segment of beach that we are interested in and we consider the amount of littoral drift, that is sand transported into the segment and sand transported out, if by some --- let's say these two, sand transport in and out balance, and if we somehow alter this balance a slight amount then we can have quite a bit of erosion results. It's much like a bank account. If you put as much in as you take out then your balance is okay but, if you put in a little bit less, for some reason or another, of course, your bank account decreases.

What I would like to look at the sand transport processes, in the area that we are concerned about tonight. It pretty much is a system and a system in which we have to account for all of the sand transport components.

Well, it's quite clear, I think, that the predominant littoral drift direction in this area is from east to west. Although the amount is not clearly established it's probably on the order of one hundred thousand to two hundred thousand cubic yards per year, directed towards the west. The bases for this, I think, are several. First of all we, that is the University of Florida, have recently completed studies on Santa Rosa Island. There we have narrowed down the littoral drift, more or less, to this magnitude. It would appear that the littoral drift in this area would be roughly the same bec use again the shore line is effected by more or less the same wave system.

Secondly, we might cite the experience, with the jetties at Perdido Pass, although I do understand that the Mobile District is still working with littoral drift in this area. From other, earlier work it looks like the littoral drift is generally of that magnitude.

Secondly, I would like to turn attention to the sand transport processes in the vicinity of an inlet, such as the entrance Mobile Bay. There are several ways in which this sand, that we talked about being transported from east to west, can be transported or carried across the entrance. But, basically because we do have the presence of the inlet, we do have a new force that has to be contended with. Of course, This force is the tidal current. So now, in addition to the waves the currents play a very principle role. Of course, if the tidal currents were not present then the inlet would close.

In the case of the entrance to Mobile Bay, we don't have a chart up here that has all of the contours on it, but it's pretty evident that the primary mode of sand by-passing, that is the transport of the littoral drift, is by a mechanism that is called bar by-passing. There is quite a large bar that extends out from Fort Morgan over to the eastern end of Dauphin Island. This bar is quite shoal, in its' natural state, in fact, it has to be shoal in order to let the waves to essentially work on the sand, to transport it across the inlet. If some new agent is brought into the place, such as the channel is deepened, of course, this does act as a transport for the sand. This brings in the third phase that I would like to mention and that is man's effect on the system. By deepening the channel ---entrance channel to Mobile, then, of course, the natural sand transport processes, from the east to the west, are impeded and this is very much like taking

out one component of the transport system. In essence it's sort of a leak in the system or sand budget, if you wish. So one of the recommendations that I would certainly make with regard to the study and with regard to the mode of operation in the future, is that when dredging is done within the entrance channel, the quality of that sand be examined very carefully to see whether it is suitable for beach purposes and if it is, of course, it would be ideal to place that on the beaches or near the beaches where the waves could transport it back into the system. I do realize this is more expensive, but, I think the technology exists, in fact in Florida it has been used, whereas before the sand that was dredged in the entrance channel was spoiled into deep water by a hopper dredge. Most recently, the entrance to Port of Palm Beach Entrance, the sand has been dredged by pipeline dredging and placed on the beaches.

Another point I would like to bring up, with regard to this sand that's normally within the beach system, that is right on the beach face and within the surface, is that this may look like ordinary sand, if we don't look at it too carefully, but in fact it's generally much coarser than what you find off shore. So, if you take a handful of beach sand, let's say and then somehow take this out of the system and say we can always replace that by dredging off shore, this just isn't true. In Florida, we have this year approximately six million dollars worth of beach restoration projects. Each one of these they are dredging material from off shore and putting it within the littoral zone, as we might call it. In every one of these except, possibly -- I guess two out of three, I should say they have been unable to find quality sand off shore that could compare with the sand

within the surf zone. So I think, that we have in our evaluation of cost and benefits and evalue the sand within the surf zone. We must take into account that this is a highly -- this sand has already gone through a very highly selective process. And, the reason that it is within the surf zone is that it has certain characteristics which are simply coarser than you find elsewhere.

We have also looked at some of the problem areas of Dauphin Island. I think the primary problem areas are on the eastern end where some of the groins that are around Fort Gaines have been planted. This simply, I think, adds up to a sand deficiency. Near the golf course there has been erosion in some areas and my response to that is that it probably is a response to the erosion of Pelican Island. And some of the sand -- some of the beach that was normally protected by Pelican Island has now moved to the east and there is some accretion there.

If I could, I would like to look ahead and try to think about the eventual effect and I should say here that erosion in Florida, I think, is much worse than it is in Mobile County. So, I think you are starting at a good point in your concern about the beach erosion. I think that by implementing action at this stage there are good prospects that the erosion will not get worse, in fact, it can be forestalled, to a good degree at least.

I would like to comment I think a little bit with regard to solutions. There have been comments made with regard to non-structual solutions. I agree that groins do not add to the esthetics of the beach and from that point of view it's a lot better

to nourish a beach. But, I think in many cases nourishment of the beach may be prohibitively expensive. So, it may not be what we would like to see but whether or not we would trade off a beach with structures as opposed to no beach without structures or a rapidly eroding region. But, I do think that groins have to be used very carefully.

Finally, I am not sure how familiar all of you are with Dauphin Island, but the migrating sand dunes on Dauphin Island, I think, are very severe problem. As other people have pointed out, I think this is an ideal situation where vegetation could be used very effectively, because the sand dunes are moving back away from the beach. These do not only represent problems for people that are forced to cope with the migrating dunes but they also, of course, represent a drain of sand on the beach system and, if those dunes could be stablized near the shore rather than letting them migrate back, then during times of high water, extreme storms and so on the dunes would act as a reserve, if you wish. They could put back into the system. That's really nature's way and I suppose those dunes did start migrating because they were denuded of vegetation.

We have some exhibits that maybe some of you would like to see later. Thank you very much.

COL. WILSON: I would like to compliment the Shell Oil Company and their selection of an expert. We find that Mr. Dean is well-known to us already in the beach erosion field and we are delighted with the presentation. Next, I would like to call on Mr. Smith D. Pickett, from Dauphin Island.

SMITH D. PICKETT: Thank you Colonel. I am Smith D. Pickett, Jr. I am representing the Dauphin Island Property Owners Association, twenty six hundred lot owners with a potential population on Dauphin Island of seven thousand people.

The Property Owners Association, of course, is concerned with what's happening and does concur with what Mr. Albert Tully briefly spoke about. I would like to make a part of the record the adoption of his statement about the Property Owners Association.

We urge the Corps to start the study and to protect the property values on the island which includes the military installation and public properties and private properties. As an afterthought, I am Chief Appraiser for First Federal. We have mortgages on about half of these properties that are washing away. Please do something.

COL. WILSON: Thank you. Next Mr. Ray B. Hartwell, Jr., from Mobile, Alabama.

MR. RAY B. HARTWELL, JR: Ladies and gentlemen, I speak as an individual. I represent no group of people. But, however, as I sat here this evening I noticed that my problems are very similar to a lot of other individuals who live along the western shore of the bay. I think I heard a remark here tonight that more or less that perhaps man was not meant to live with the sea or by the water, because of some reason we can't get along with it. I heard another fellow jokingly remark perhaps we could all move to high land, higher ground. I think there is probably merit in what he says, however, the fact that remains that we live on the bay. It is our home and we want, as much as possible, to protect what we have. I live on the bay, north of Dog River.

I might state that I live between the road and the bay. I believe Mr. Crabtree earlier, one of our first speakers, stated a problem and I heard it reiterated a number of times here tonight, that having a sea wall alone is not enough, if you don't have sea walls along the entire area to protect it. This is very true. Our problem, along there, especially where I live between the road and the bay. One gentleman on Mon Louis Island said that his neighbor moved his house back thirty feet. I can't. I would be across the road and I don't own the property on the other side of the road. Nevertheless, we have property owners along there who consider what the erosion is, well let it erode. When it erodes and gets to the street --Bay Front Road then the City will come along and put in a sea wall to protect the road. Fine. I imagine if my house was not on that side of the road I would have the same opinion. But, still on all of those that do happen to live between the street and the bay, when this property next to you without a sea wall goes, man there you are sticking out like a sore thumb. It's a hopeless situation. It's got to be a complete participation with everybody or it's almost hopeless. And it sometimes seems like a real hopeless situation. The other situation as my neighbor, Mrs. Sawyer, mentioned was the tremendous amount of logs that we get. And I mean logs. Big ones. Hell, they are four feet in diameter, it seems like that washes up there. They lay on the beach, you get these strong southeast winds, in the spring of the year or during hurricane season and if the logs are left to remain, what sea wall you do have is battered to pieces. The logs belong to the State but hell they won't get them. We used to come along and burn them but now our City Fathers say man if you burn that and pollute the air, you have had it. So, we can't even burn the logs legally anymore. We leave them lay there and wait for a storm to batter our sea wall.

I think it's a pitiful situation, almost on the entire western shore of Mobile. Mobile, the City that sits at the head of the bay, the beautiful water and everything. There is not a decent public facility or place that I know of on this entire western shore. I think our County Commission and I think our City Commission are remiss in this. We have got a park down there that the jetties sticks out in the bay. I can't even recall the name of the park -- McNally Park. This jetty, of course, I think has caused the bay to fill in back behind the jetty. If, we got out sea walls in there we would have protection. What do you have. I can remember a little more than four years ago when I would walk out in the bay and I could soft shell. Actually I could catch soft shells. There were grasses growing in the bay. There was a hard sand bottom. Now, you walk out and it appears sandy but there is about four inches of just pure muddy muck that you sink into if you try to walk along the bay. Is this caused from channel dredging, this progress that creates all of our jobs? I don't know, but sure makes what you think is ideal living very convenient and disheartening many times. Thank you.

COL. WILSON: I have a card here for another Mr. Chachere, almost the same address as the one previously. Is he still here. Mr. and Mrs. Henry C. Williams, from Mobile.

MR. HENRY C. WILLIAMS: I pass.

COL. WILSON: Mr. and Mrs. C. E. Rankin from Theodore, Alabama. Capt. John J. Tvedt, from Bay Front Road, Mobile. Mr. and Mrs. C.D Haig, Jr., Theodore, Alabama.

MR. C.D. HAIG, JR: Colonel Wilson, ladies and gentlemen it's a little difficult to follow these distinguished speakers on a proposition that's as narrow as this one. There aren't too many elements involved. Actually, there is a statement of the Corps that we are talking about hurricane protection, beach erosion and someone has already stolen my thunder, because I was going to add log protection.

I would like to observe for the Corps that Mobile Bay is a navigable stream. It's therefore a public body of water and that these logs are definitely a public hazard. They are somewhat like a highway. I feel like the public authorities should erect a stop sign against these logs to prevent their encroaching private property. I also concur in the statements of several of the speakers, it is absolutely useless and worthless for any individual to erect a sea wall on his own property and believe that he has any protection whatsoever. I have had that experience and what happened? Mobile Bay just simply bypasses my sea wall and comes in around the other way and it does get in. I suppose, in a few words we are talking about a matter that is not a private matter in the strict sense but requires, what I would term community action. A sea wall or bulkhead all the way down would do the trick.

I think, and I recommend strongly to the Corps that the essence of this hearing tonight is the opinion of the people who are property owners on the bay and that their views should have paramount attention over the views of others who have an abstract notion of what is good for Mobile Bay.

COL. WILSON: Mrs. Theresa Washington, Mr. B.M. Guthrie from Mobile. Mr. and Mrs. Marcea Osborne. Charles B. Schwind.

MR. CHARLES B. SCHWIND: First of all I work for Mr. Arnold Debrow, the Tax Assessor and I had the unpleasant task of surveying the western shoreline of Mobile Bay, immediately after Camille to assess for property damages to try to afford relief to the people. Well, number one from all the way down from the Mississippi Line all the way down to Dog River we seen extensive damage. They were losses of houses and the erosion of the beach was anywhere from thirty foot down to some people had bulkheads and they only lost five or six feet. But over the years the Bay has been eroding at approximately a foot a year, naturally in hurriance or adverse weather like we had this spring the erosion is greater and the more noticable. In 1952, when I was stationed at the Ammunition Dump we wrote a letter to the Corps of Engineers when they were going to deepen the channel of Mobile from thirty-six-foot to forty-foot, which it presently is at in depth, to put the spoil along the entire west bank of Mobile Bay, contouring it to the rise and fall of the bluffs. Then tapering it off to make hurricane type beach, where the wind and water erosion would break and roll as opposed to hitting a solid wall, such as some of the high bluffs that the people talked about here. At that particular time the Corps of Engineers said that the expense of taking and putting spoil pipe lines to the western bank would approximately cost some three million dollars more than the project would allow it and they couldn't afford it. Since that time they have taken the spoil and put in some six hundred yards on the western shore of the channel, which normally lets the silt filter to our western shore, any how, sludging out like we have the problem, now. This ruins the floundering and oystering and crabbing that some of the people mentioned, But, in effect, we get the sludge and the bay gets shallower every year on the western side. Now, I have seen a map that dates back to a survey made by some Army engineer

back in I8I7 when the depth of the whole bay was approximately eight foot and that the western shore line showed a depth of eight foot, about a quarter of a mile out. Now, you can walk a mile to a mile and a quarter and never get into water three foot deep. What I still propose, I would like to see what the engineers could come up with in a feasibility of still spoiling the channel spoils to the west end, contouring it to the rise and fall of the bluff and then planting in these grasses and marsh grasses that they are talking about to entice the crustacea type like, back into these shallow waters of the bay. We would improve our crabbing, our floundering and our fishing Above all, I would sure like to see them let Radcliff take his dredge, as the article in the Mobile Press Register, out of the upper reaches of the bay and put it where they said they were originally going to put it, north of the Causeway on those dead reefs that are under the mud, instead of attacking the live reefs that put out the span and spat to propagate the reefs further on down to propagate the sea life in the bay. I am sure if Radcliff would move that thing down there, where they are supposed to , everybody would be happy and that bay, as far as the sludge problem you are having now, as far as your floundering and crabbing,would be alleviated. I sure would like them to look into the feasibility and I am sure the property owners would go along with this, of putting that spoil on the western bank. Number one, as they explained, the rights of the people for the use of the water, starts at the high tide water. But, there was a man here that says I have a deed that covers X foot of land, a hundred and ten foot of which is now in Mobile Bay. So, in effect he is paying local tax on that water in the bay and getting no use of it. His high water mark is one hundred

ten feet out in Mobile Bay. The rest of the land owners, if they checked their deeds except in one location, on Hollingers Island where the drift of the silt from Dog River has filled up and added to, a man has been given property. But normally and generally, on the western bank people have lost. And, if they have a survey they will find that they own quiet a bit of property in Mobile Bay, by putting the spoil up on that western bank they are going to give us back the property we lost. Make it a usable item for the taxpayer so that he can further pay taxes on it. If he is given extra land let him purchase it and make it a revenue producing piece of land for the benefit of the County, the State, and the United States Government. I thank you.

COL. WILSON: Thank you. Next, Mr. E.J. McCormick, from Theodore, Alabama.

MR. E.J. McCORMICK: I have nothing to say, either. It's all been said very well. Mr. Haig, is a neighbor of mine and he expressed it very thoroughly, I think.

COL. WILSON: Noel Read Stowe, from the University of South Alabama.

NOEL READ STOWE: My name is Read Stowe. I am an archaeologist at the University of South Alabama.

My main interest probably differs from most of you here. I am interested in the heritage of Southern Alabama. I am interested in the archaeological sites along the west shore of Mobile Bay, the sites on Little Dauphin Island, and sites on Dauphin Island, and the sites on the Mississippi Sound. During the

last three years, we have conducted an archaeological survey of the area and we have found approximately one hundred prehistoric sites and maybe fifty important historical sites. One interesting fact that I might mention is that some of the so-called dead shell reefs that are off shore on the western side of the Bay are probably submerged Indian Village areas. There has been a tremendous amount of erosion there, as you all know during the past three or four thousand years. Our survey indicates man occupied this area for a little more than four thousand years, however, he has only been having problems with it for about the past two hundred years. The aboriginals who lived in this area were able to co-exist quite well, I think. Their large village areas attest to this, however, when this proposed construction projects or whatever projects are carried out on the western shore of Mobile Bay, Mississippi Sound and down on Dauphin Island, I hope the Corps or any other agency will take into consideration these sites and that we can preserve them or, if they have to be destroyed will be able to excavate the more important sites. Thank you very much.

COL. WILSON: Mr. and Mrs. Taylor, from Lola Street.

MRS. TAYLOR: We have had the Soil Conservation Service down there twice. Our area is real pitiful and a bulkhead was put up by twelve or fifteen property owners --

COL. WILSON: Mrs. Taylor, I am sorry, but we haven't been able to record your statement. If you would like to come on up and repeat portions of it we can get it on the record, I think we have noted the bulk of it unless you would like to come up and say it one more time.

MRS. TAYLOR: I am Mrs. Maxine Taylor. The situation in our area is really pitiful. Everybody has tried very hard to secure what they have but they have lost in vain and the logs, we have them by the truck loads. And concerning the bulkhead, Mr. Norton and Mr, O'Connor -- Mack Connor at least has sent us literature concerning as to how to prepare sand and get away with this sugar clay, or something like they call it that dissolves, and put in new material. Different ones did try that, but now the bulkhead is gone, so what good will that do? That won't do any good at all.

Now, so far as the children are concerned, anything in the world you want to know about they have it down there in our area. They have put automobiles over the cliff. They have put all types of old trash over the cliff and they have also brick bats, stoves, anything you can think of, logs, but really and truly I am mostly interested in some way or another we could have a decent beach for our smaller generation, because it's pitiful with the way their little feet have to sink down in that mud and pull them back out to try to go out and have a little fun.

Well, I thank all of you.

COL. WILSON: Mr. Richard C. Bradley, from Cottage Hill Road, Mobile --- Douglas Johnstone from the Alabama Conservancy -- Mr. Ray D. Rushlow.

RAY D. RUSHLOW: I pass.

COL. WILSON: Mr. and Mrs. Charles M. Griffin.

MR. CHARLES GRIFFIN: Colonel, the only thing I would like to add is what would the feasibility be of possibly using this log situation as a self paying project. Has it been exploited as to what we could use the

logs along the Bay, way up in the river. Looks to me like we have an energy crisis, if we could use something like that looks to me like we could solve it.

COL. WILSON: We will take a look at that. I can't answer the question right now. Okay. Mr. and Mrs. Arthur E. Rigas.

MR. ARTHUR RIGAS: I pass.

COL. WILSON: Mr. and Mrs. Fred L. Lorge.

MRS. FRED L. LORGE: I will tell you what's on my mind is the Tombigbee ---

COL. WILSON: Could you come up, please.

MRS. FRED L. LORGE: Well, it doesn't have to be on the record ---

COL. WILSON: As a matter for your information, we have a model of the Mobile Bay that has been constructed for us at the Vicksburg Waterways Experiment Station. I am going there Friday, as a matter of fact, and we are going to do a series of studies on this model, which we hope will show for us the effects of certain construction measures on the bay, on the currents in the bay and on the sedimentation and erosion in the bay. We will be looking, in that model, as part of this day and as part of other studies as well. Thank you. Next, Mr. John L. Devery, Jr.

JOHN L. DEVERY, JR: Colonel, ladies and gentlemen. I didn't hear about this meeting until tonight over television. And, I beat it on out to the Engineers Office out there. I was late getting here, but I understand that pretty much the situation here is that the citizens of Mobile, Alabama, and

Mobile County are quiet concerned about the erosion of Mobile Bay. I have been concerned for years. My family settled in Mobile in 1843. I am here, almost, by right of conquest.

Now, I have placed my name as a candidate for Public Works Commissioner for the City of Mobile and that is a Commissioner responsible for this type of work. I do not intend to make this a political situation nor take advantage of the situation, because I have already stated in several speeches before now that it is my intention to open up the Bay Front Road again to the citizens of Mobile. And, in the process of opening it up, to seek the advice of the U.S. Engineers and those people responsible who have the know how to reclaim that part of our beach, in Mobile, by establishing a sea wall or whatever is the device of the engineers. This is one of the planks of my platform. I thought I would take advantage of it. Thank you.

COL. WILSON: Those are very fitting closing remarks. I assure you I didn't put that card last on purpose. It just came out that way.

At this point I would like to call on anyone else who would like to make a statement, anyone that we haven't covered yet.

MR. Poiroux: I have got a place at Alabama Port. I have got one hundred-sixty-three feet of frontage and the summer before Camille come I fixed it where I didn't lose no land and it cost me two hundred dollars. But a lot of you all wouldn't do what I done. I fixed my land on a forty-five, the land

is about six foot high. So I put it on a forty-five, sloped it on a forty-five and I mixed my own cement with a hoe. You all wouldn't do that, and I put cement three inches of cement on a forty-five. On top I built a wall about thirty inches all the way along the sea wall. During the Camille when the logs had washed over and piled up on my land, big logs, like that, but I never did lose no land. I had four brothers. They built theirs out of wood, you know, posts and two-bys, you know straight up like that and it washed everything and piled it on my land. They lost from ten to twelve feet of their land, you know, so now I am ahead of them. So one of my brothers, he built his now on a forty-five next to me, but the other side is still open. So I am going to get a post hole digger and dig a trench and fill it with cement, so if the storm comes it won't wash mine. So, I got to take mine, so that's the onlyest way I can is by using cement. I used ninety four sacks of cement and I don't know how many tons of sand I mixed it with a hoe. Me and my boy. I protect my land that way. Ever since, I haven't lost an inch of land since then. Thank you.

COL. WILSON: Thank you. Anyone else.

H.A. GUTHANS: My name is H.A. Guthans. I have some property down in Belle Fountaine that we bought in I935. In the early days we lost at least thirty or forty feet of frontage. When you walked out off of the shore you went down to above your ankles in muck. Now, what happens I happen to be an engineer and I made a study and we finally stabilized our frontage, but only

at a great cost, however, there are a few things that are important to those who build bulkheads. For instance, looking at the map here, the prevailing southeast winds in the summertime hit the shore and they work up in a northerly direction. And, if you are going to build a bulkhead put a rock crib on each end and break up that movement that is undercutting your banks. And then in the wintertime, with the north winds, the movement is in the reverse direction but it's not near as great because of the low tide. There are times when you can walk out a couple of hundred feet without hardly wetting your shoes. But, as I said we built up our beach and my neighbors may not like it but I have built these rock cribs and Camille come along and all but destroyed them but we still have got plenty rock there to break up the movement of the current. I just wanted to get that one point over. Thank you.

COL. WILSON: Do we have any further statements.

GEORGE CROZIER: My name is George Crozier, I am the Associate Director of the Mississippi-Alabama Sea Grant Program and the Chief Scientist at the Dauphin Island Sea Lab.

I speak, representing in a sense the property owners, from point of view and also someone with a reasonable background in the field. I have listened to the most of the comments and am aware of many of these problems. The Dauphin Island Sealab which is a facility of the Marine and Enviromental Sciences Consortium, has lost about forty feet of beach in one year, on the east end of Dauphin Island between the groins.

And certainly, the criticism of groins is valid. We are playing with programs, studying the effects of mixing real grasses and artifical grasses in addition to groins as sand trapping agents, to try to see if we can approve the efficiency of groins on our own property.

I must reiterate the effectiveness of marsh grasses in stablizing beach front property. Programs on the Texas coast have had artifical plantings survive hurricanes, whereas exposed properties have been lost in very large amounts. The comparison to pilings really isn't fair. Marsh grasses are very small but the area of contact with the beach is absolutely immense. There is no comparison with pilings.

Now, there is no way to avoid the fact that sand migration is a monstrously dynamic phenomenon. You are reminded in a sense of the legendary King of Wales that presumed to have drowned trying to stop the tide from coming up on the coast of England. It makes me wonder how much we can talk about stopping erosion in a dynamic system. We can slow things down. We can modify them. I think one problem, and I don't want to involve the Corps in this, but this is a question that has been talked about on nourishment of the beaches and bay, utilizing dredge spoil and et. As the lady pointed out, the dredge spoil and the maintenance dredging it not satisfactory material for beach nourishment. There is no way, at least I don't believe there is any way, that we can approach this particular problem from a beach point of view. I could very well be wrong. It's simply an opinion at this point. We have suggested, and by that I mean the personnel of the Marine Science Program, have suggested the creation of Marsh Islands, not across the path of the current of Mobile and this is in relation to the Theodore project, as originally suggested, but in line

and again tested on the model belonging to the Corps of Engineers in terms of configuration to best program the current flow. And, it may very well be an off shore protective device can be utilized to modify sedimentation on shore. We have also proposed the use of artifical grasses as an intermediate stage, while trying to establish natural grasses. We have in the past suggested the establishment of artifical" kelp lands ", which is a large macroalgae, of the west coast off of Dauphin Island. This is an energy absorbing unit. Again, this is very speculative. It has never been tried on our- the energy level of our coastline and it may not be only hurricane protection but perhaps some sediment transported in this particular project. I am not a sedimentary geologist or an engineer. These are rather, off the top of our heads suggestions from past experience playing with the marine enviroment.

Part of our problem, I think, is that we are going to have to establish a viable program of management in the coastal zone. There are several bills before the Legislature of this State now, with regard to coastal zone management. Some of these are good. Some are bad. They all need your analysis. If you are concerned with the problem of erosion in Mobile Bay or in the two Counties in Alabama, then, you all need to become aware of the bills that are in the Legislature, with regard to coastal zone management including -- I can't help plugging a little bit the entire dune buggy and recreational vehicle bill, which is from our Mobile Delegation. We have precious few sand dunes in Alabama and these are daily being destroyed by the activity of recreational vehicles.

Now, I don't pretend to have solutions to these problems, but I think that I must endorse, whole-heartedly, from the point of view from the Universities in the State and the Marine Enviromental Sciences Consortium, the effort by the Corps of Engineers, in surveying this problem. I do hope that they can come up with an answer to our problems. Thank you.

COL. WILSON: Any further statements.

A PERSON IN THE AUDIENCE: I would like to ask a question about the map.

COL. WILSON: Surely.

A PERSON FROM THE AUDIENCE: I would like to ask about the channel shown running southeast from the Ammunition Dump. It's not in yet.

COL. WILSON: No. That's correct.

A PERSON FROM THE AUDIENCE: What do you propose to do with all the spoilage and silt that you are going to dredge up out of there.

COL. WILSON: That is one of the things that the model is designed to help us look at. That is authorized but not yet funded project, to go on in to Theodore Channel. We are still studying it, the economics of the area have changed a little bit since it was authorized. We can't even state, for example that it would be funded but that's one of the studies that we are specifically undertaking with the model at Vicksburg. Yes, please.

A PERSON FROM THE AUDIENCE: I would like to ask the gentleman from the Tax Assessors Office, who talked about adding this spoil onto our land and the property owner being able to claim this land. I don't know how many people are here, or who is aware of it but according to the Title Insurance Company,

Alabama is almost unique in it's law concerning land appreciation, in that appreciated land belongs to the State of Alabama, not to the adjoining property owners. Therefore, if this tax is paid I suggest that Congressman Edwards, since he is interested in this and also Senator Sparkman, that they get together with the proper State Officials and see to it that this appreciated land be made available to the property owners.

COL. WILSON: Thank you. Would you please come forward to the microphone.

JOSEPH W. JACOB, JR: I want you folks to learn something and I have got to tell you the importance of this marsh grass. We all know how reproduction occurs. A man and woman gets together, there is a baby. We all know about that but, I bet you that ninety percent of the people sitting out there don't know where the seafood comes from. It's marsh grasses. That grass decomposes in the water, bacteria break it up. You have small animals that live on the bacteria and some of the decomposition material and some large animals feed off of them and more feed off of them. All of a sudden you have shrimp and you have fish. You take away those marsh grasses and you don't have them. That's why I am against so much dredging and filling.

Now, you have heard some people -- I am a Phd. candidate and you have heard a fellow who is with the Sea Grant Program, you heard Dr. Swingle, who is with the State, they tell you - marsh grasses, it will help, of course, they don't look that good but they serve two functions. They keep your

property and they give you back the seafood. That's something you have to consider.

One other thing I will mention about this dredging project north of Mobile. I will teach you a little lesson about hydrology. You take a ball and you put it on a board, you raise that board here and you let that ball run down to the floor. If, you hold that board down here it will take a longer time, it will be slower for that ball to get to the floor. The same thing works with water. The greater the channel depths is the faster the current. The faster the flow out to the Gulf. Sediments distribute according to the velocity of the water currents. The faster the currents the more sand that is picked up are kept in suspension and gets carried out. So, the deeper you channelize the more that you take this heavy stuff, that you are looking for and you are dumping it out in the Gulf, where it is not needed. Thank you --Colonel Wilson has got a problem. He just assumed command and we tend to put all of our anxieties upon him and I feel for you.

COL. WILSON: Thank you. Anyone else.

RICHARD STOKES: My name is Richard Stokes. I represent Gulf Islands National Seashore, who now owns Petit Bois, Horn and Ship Islands and the water surrounding that area and I would like for the record to show that we were represented tonight to hear this discussion, also that we were not officially notified. I was notified by the Sierra Club out of New Orleans. Thank you.

COL. WILSON: We will add you on the roster of people here and we will send you all of our further notices.

A PERSON FROM THE AUDIENCE: Colonel Wilson, I would like to say that the marsh grasses may be good for the fish but it will ruin your beach, you will have snakes.

COL. WILSON: Do you have anymore statements for the record -- ladies and gentlemen. In concluding this meeting this evening, I would like to ask those of you who may not have,to fill out our card and register so that we can send you notices of further meetings. I would also like to say that people from the Mobile District will be coming to see several of you, who have an interest or some knowledge of the problem, in our continuing study to try to find the best solution. I thank you very much for your patience and your attendance.Thank you very much.

JACK EDWARDS
1st District, Alabama

2439 House Office Building
Telephone: 225-4931

District Offices:
First Federal Tower, Suite 606
Bel-Air Mall
Mobile, Alabama 36606
Telephone: 471-1851

Grove Hill, Alabama 36451
Telephone: 275-3344

Congress of the United States
House of Representatives
Washington, D.C. 20515

Committee on
Appropriations

Subcommittees:
Transportation
Treasury, Post Office
and General Government

June 13, 1973

LTC Terrence J. Connell
Acting District Engineer
USA Corps of Engineers
Post Office Box 2288
Mobile, Alabama 36628

Dear Colonel Connell:

Thank you for your letter of June 11 concerning the proposed public meeting on July 31 concerning the beach erosion study.

The time, place and date sound fine to me and I appreciate your posting me in this regard.

Sincerely,

Jack Edwards

Jack Edwards, M. C.

JE:sjh

EXHIBIT 1

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P. O. Box 638, Grove Hill, Alabama 36451

July 31, 1973

Colonel Drake Wilson
District Army Engineer
P. O. Box 2288
Mobile, Alabama 36628

Dear Colonel Drake:

The Soil Conservation Service recognizes shoreline erosion as a serious problem. Our local office in Mobile County has received numerous requests through the Mobile County Soil and Water Conservation District for assistance to land users along Mobile Bay and Dauphin Island.

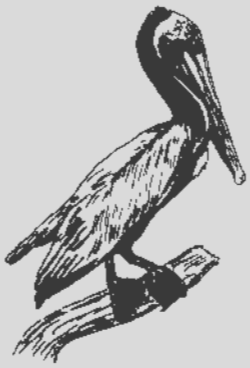
The Soil Conservation Service hopes that your study will reveal effective ways to reduce or eliminate shoreline erosion. Through our Plant Materials program we are selecting and studying plants that might be used to control erosion along the beaches. We will be pleased to provide you the information that we gather.

Sincerely yours,

W H Tucker

W. H. Tucker
Area Conservationist

EXHIBIT 2



SIERRA CLUB, DELTA CHAPTER

1325 Iberville Street

Ocean Springs, Mississippi 39564

July 31, 1973

Col. Drake Wilson, District Engineer

Army Corps of Engineers, Mobile District

P.O. Box 2288

Mobile, Alabama 36628

In Re: Announcement of Public Meeting on a Survey of the Shores of Mobile County, Alabama (Including Dauphin Island) for the Purpose of Beach Erosion Control and Hurricane Protection; ATTENTION OF: SAMEN-PD

Dear Col. Drake,

I am here tonight representing the Delta Chapter of the National Sierra Club. The Delta Chapter is made up of Sierra Club members in the states of Louisiana and Mississippi. As you may know, the Chapter was instrumental in the creation of the Gulf Islands National Seashore. Although this hearing mainly deals with Mobile County, Petit Bois Island (a member island of the Gulf Islands National Seashore) is within the scope of tonight's subject.

The longest war waged on this planet has been between the sea and the continents. The shoreline is the battle ground for this conflict. Man, in his attempts to show his dominance, has chosen this area for a place to live. Before the era of industrialization, the war raged on while man and his effects were casted aside. His impact was insignificant in comparison to winter storms and hurricanes. Now that man has weapons in the form of dredges, groins, jetties and bulldozers, he is no longer insignificant in his impact on the shore environment. He may temporarily win a battle, but with time, the relentless swells from storms many miles away and occassional hurricanes alter his impact so that it is no longer favorable to his existence on the shore. To consider the shore environment as a permanent landform subject to intensive development and exploitation can only lead to more and more necessary but, paradoxically, unsuccessful and costly programs in beach stabilization.

EXHIBIT 3

SIERRA CLUB, DELTA CHAPTER

The problems that face Mobile County are not new. They have occurred all over the world. Several years ago, the Corps of Engineers constructed a jetty on the eastern end of Grand Isle, Louisiana in an attempt to stop erosion on that end of the Island. It worked for a while, but then residents noticed that the western end of the Island was starting to erode. Well, the Corps rallied to the call again, and constructed a rock jetty at the western end of the Island. So it seems that the problems have been solved, but they haven't. Geologists and Coastal Morphologists at Louisiana State University now predict that a more central region of the Island will be the next area to give way to wave attack. The irony is that the only bridge leading to Grand Isle is located on the western end. If the western-central area erodes as predicted, either a great deal of dredging will occur to replace the sand being eroded or another bridge will have to be built for the residents on the eastern end. Needless to say, two multi-million dollar rock jetties, continuous dredging to replace eroded beach, and/or another bridge are quite costly to the tax payer.

Another region of the United States with the same problem is Long Island. Because of its nearness to New York City, the real estate values are among the highest in the world (Schuberth, 1971). Improper construction and use of such shore structures as groins and jetties have resulted in the loss of millions of dollars to beachfront owners.

Barrier islands, such as Ship, Horn, and Petit Bois, are constantly moving westward. The process is simple. The sediment supply for these islands is the Southern Appalachian Mountains. Sand size particles come to the Gulf by way of the many rivers that empty into the shallow waters east of Mobile Point (Cooperative Gulf of Mexico Estuarine Inventory and Study, Mississippi, 1973). After reaching the coast, the sand is carried westward by along shore or littoral currents. This sand supply is the umbilical cord of the islands. Cut off the nutrient supply, and the fetus dies. Although the eastern ends of the islands erode, the migrating sand builds up the western ends. This process is as old as time. What happened to the western end of Grand Isle is that the jetty constructed by the Corps on the eastern end cut off the supply of migrating sand. A similar situation occurs with Petit Bois Island. As late as 1732, Petit Bois Island was a part of Dauphin Island (Richmond, 1962). Continued westward

SIERRA CLUB, DELTA CHAPTER

drift of the Island has occurred until the dredging of the Pascagoula Ship Channel. An impounding area to catch littoral drift on the western end of the Island prevents the normal westward drift of the migrating sand particles. Thus, the eastern end is eroding, but the western end is not moving westward.

There are three solutions to the problem; however, it means that man must look on as an observer and not try to force his dominant trait:

1. The flow of sand from the Appalachian Mountains must not be impaired. The process must be allowed to proceed as it has for centuries without interference from man and his schemes to control his environment.

2. The impounding area and active dredging at the western end of the Island must cease. If the sand particles are allowed to move westward, the Island will not completely erode, instead, it will merely change its location.

3. Money spent for such activities as dredging and construction of jetties would be better spent by insuring the stabilization of drifting sand by naturally occurring flora.

The influence of man and his activities in the coastal zone are becoming more obvious each day. We wonder what has happened to the abundant seafood that used to be caught with little effort, and yet, we continue to dredge and fill the estuarine nursery grounds where the young stages of these organisms live and grow. We wonder why bodies of water that used to be safe to swim in are now closed to the public, and yet, we continue to dump improperly treated sewage and insecticides into these water bodies. We wonder why the barrier islands are decreasing in size, and yet, we continue to cut off their sand supply or prevent them from migrating westward. Man's activity in the coastal zone can be compared to a child playing with fire. He strikes the match, but he doesn't understand why his house burned to the ground.

Those of us who live along the coast must realize that we are intruders in a war that we have no control over. We can try to demonstrate our powerfulness, but the war will continue as it has since the beginning of time. We can most

SIERRA CLUB, DELTA CHAPTER

benefit by trying our best to be compatible with the coastal environment; observing with wonder the miraculous events that take place.

Sincerely yours,

Joseph W. Jacob, Jr.

Joseph W. Jacob, Jr.
Acting Chairman
Gulf Coast Sierra Club Group

cc Michael Osborne, Chapter Chairman
Donald Bradburn, Chapter Conservation Chairman

REFERENCES

Christmas, J.Y., Ed. 1973. Cooperative Gulf of Mexico Estuarine Inventory and Study, Mississippi. Gulf Coast Research Laboratory; Ocean Springs, Mississippi; 434 pp.

Richmond, E. Avery. 1962. The Fauna and Flora of Horn Island, Mississippi. Gulf Research Reports, 1(2): 59-106.

Schuberth, Christopher J. 1971. Long Island's Ocean Beaches. Sea Frontiers, 17(6): 350-362.

SIERRA CLUB

STATE OF ALABAMA

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

P. O. Box 188 - Dauphin Island, Alabama 36528

July 23, 1973

DIVISION OF MARINE RESOURCES
WILLIAM F. ANDERSON, DIRECTOR

Statement Presented at a Public Hearing for the Purpose of Beach Erosion Control and Hurricane Protection in Mobile County, Mobile, Alabama July 31, 1973.

Mr. Chairman, ladies and gentlemen,

I am Hugh A. Swingle, Assistant Chief Marine Biologist, Marine Resources Division, Alabama Department of Conservation and Natural Resources. I have lived and worked on Dauphin Island for approximately 6 years.

Beach stabilization is both a complex and expensive problem. The westward transport of sand from the barrier islands and subsequent erosion of the shoreline is a natural phenomenon, as is the erosion of shorelines of the bays and sounds. Man is able to slow or accelerate this process by man-made structures and beach nourishment. Simple observations clearly demonstrates that bay shorelines with established marsh grasses are more stable by far than unvegetated areas. Very little of the shorelines of Portersville and Grand Bays have an erosion problem except in the Coden and Sans Souci Beach area where there is no marsh vegetation. Establishing marsh grasses along the shorelines of the bay would greatly reduce the rate of erosion, however, few waterfront property owners seem to want these grasses blocking their access to the water. Bulkheads, which are at least a temporary solution, are perhaps more attractive from the property owners point of view.

Approximately 6.5 million cubic yards of spoil material is removed

EXHIBIT 4

annually from the Mobile Harbor and Outer Bar. Spoil from channel maintenance is primarily fine materials which are high in organic matter and silt. Unless stabilized by vegetation this material would not remain along the shoreline for any great length of time. Its "mud-like" nature would most likely be objectionable to waterfront property owners. This has recently been the reaction of property owners in the Coden-Bayou La Batre area and those at the mouth of the Perdido Bay channel when this was proposed.

Erosion control of the Dauphin Island beach is certainly more critical and more difficult than stabilization of inside shorelines. The eastern end seems fairly well stabilized by the groins but from the Isle Dauphine Club westward as much as 400 feet of beach has been lost during the past 12 years. Beach sands are being continuously carried to the west by the currents resulting in the westward migration of the island which is 4 miles longer now than in 1851. Jetties would perhaps slow the rate of loss but without adequate information on littoral drift and currents they may accelerate the rate of erosion in one area while reducing it in another. We certainly need a thorough study of the beach erosion process of Dauphin Island.

The pass between Dauphin and Petit Bois Islands has widened from 1.5 miles in 1851 to about 5 miles today. The increasing width of the Pass has caused Bayou La Batre and Coden to become more exposed to wave action from hurricane winds and has caused the complete destruction of the oyster fishery in Portersville Bay by increasing saltwater intrusion into the bay. Petit

Bois is a National Wildlife Refuge and is one of the Gulf Islands National Seashores administered by the U. S. Parks Service. It is certainly in the public interest that federal funds be used to protect these public lands by stabilizing the eastern end of Petit Bois Island.

In concluding, I believe that a thorough study should be made by the U. S. Corps of Engineers, who have the expertise, to determine the most feasible methods of beach stabilization of Dauphin Island and the western shore of Mobile Bay and the stabilization of the eastern end of Petit Bois Island.

Thank you.

United States Department of the Interior
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE
17 EXECUTIVE PARK DRIVE, N. E.
ATLANTA, GEORGIA 30329

July 19, 1973

District Engineer
U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628

Dear Sir:

We appreciate receiving your notice of public meeting to be held on July 31, 1973, in the Mobile County Courthouse at Mobile, Alabama, on a survey of the shores of Mobile County (including Dauphin Island) for the purpose of beach erosion control and hurricane protection. Your study is being conducted at the request of the U.S. Congress in a resolution adopted by the Senate Public Works Committee on October 27, 1970.

This Bureau will not be represented at the meeting. However, we will review project plans in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and if necessary provide recommendations for the protection, mitigation, or enhancement of fish and wildlife resources. These studies will be made in cooperation with appropriate State conservation agencies. It is requested that you provide information on project planning as it progresses so we may carry out investigations and report in accordance with your schedule.

Sincerely yours,

Deputy Regional Director

E-5-1

EXHIBIT 5

MOBILE AREA CHAMBER OF COMMERCE
P. O. BOX 2187 • MOBILE • ALABAMA 36601 • AREA 205 • 432-6951

July 31, 1973

Colonel Drake Wilson
District Engineer
U. S. Army Engineer District, Mobile
P. O. Box 2288
Mobile, Alabama 36628

Dear Colonel Wilson:

Attached is the statement of the Mobile Area Chamber of Commerce in response to your announcement on a survey of the shores of Mobile County, Alabama for the purpose of beach erosion control and hurricane protection.

The Chamber, of course, offers its continual cooperation with the Corps of Engineers in anyway necessary for the benefit of our community.

Cordially

Craig L. Mason

Craig L. Mason
Research Director

CLM:sj

Enc:

EXHIBIT 6

STATEMENT OF MOBILE AREA CHAMBER OF COMMERCE
AT U. S. ARMY CORPS OF ENGINEERS' PUBLIC HEARING
7:00 P.M., 31 JULY 1973
ON A SURVEY OF THE SHORES OF MOBILE COUNTY FOR THE
PURPOSE OF BEACH EROSION CONTROL AND HURRICANE PROTECTION

The Mobile Area Chamber of Commerce is pleased that the Corps of Engineers is studying the salt water shore lines of Mobile County to determine what steps can be taken to provide beach erosion control and hurricane protection.

We have noted with concern over the past several years the extensive erosions on the west shore line of Mobile Bay and the Gulf shore line of Dauphin Island. We have intense interest in both of these areas.

As you know, we have actively supported the construction of the Mobile Bay model at the Waterway Experimental Station at Vicksburg, Mississippi and earnestly solicit you to use this model for whatever means practicable to study this problem.

We understand that two methods of dredging a 40-foot ship channel into the Theodore Industrial Park are presently being tested on the model. It is our feeling that either of the two channels being tested, if constructed, would have a beneficial effect on beach erosion on the western shore of Mobile Bay. Further, both channels involve disposition of spoil that could be beneficial in retarding beach erosion on the western shore. We urge that these considerations be programmed into the current testing of these channels.

As you know, Dauphin Island was developed by the Mobile Area Chamber of Commerce, so our interest in beach erosion along its southeastern shore is somewhat proprietary. We offer for your consideration (keeping in mind that tests on the aforementioned Mobile Bay model could provide substantial data) that the prevailing winds along our coast are southeasterly and produce a predominantly western current. For years this westerly current has carried a large volume of sand from south of the Fort Morgan area and, we believe, has created the white beaches of Dauphin Island. Is it conceivable that the cutting of the ship channel has impeded this natural flow of material --- as would seem evident by the frequencies and amounts of dredging necessary to keep the channel open? We understand that now most of the spoil from the lower channel maintenance is hopper dredged out into the Gulf. We offer for your consideration, and possible testing on the Mobile Bay model,

the concept that future disposition of this spoil to the west of the ship channel, in the area between Dauphin and Pelican Islands, may replenish the southeastern beaches of Dauphin Island.

We are also interested in determining what effect the outbound current from Mobile Bay, diverted by the west Gulf current, is having on the southern shore of Dauphin Island and the impact, if any, that could be created by the construction of a jetty of substantial length extending from the southeastern end of Dauphin Island toward Sand Island. The present riprap groins on the southern side of the Island have apparently failed to preserve the beach and are rapidly becoming islands completely detached from the beach. By a jetty of "substantial length" we mean at least 2,500 feet initially with the most ultimate, practical length to be determined by model testing.

What we have proposed in this statement are merely some of our thoughts. We would be happy to discuss them further with you when you desire. And, as in the past, the Mobile Area Chamber of Commerce offers the Corps of Engineers its assistance in solving these persistent problems. The solutions we believe today lie in further adaptation (if necessary) and testing on the Mobile Bay model. We urge you to pursue this as rapidly as possible while we still have some beaches to save.

CLM - 7/31/73

BEACH EROSION

Submitted on: July 31, 1973

EXHIBIT 7

BEACH EROSION

In August 1969 Hurricane Camelle seriously altered the shore line configuration along the private property of owners on Lawrence Steiner Rd. Most of the property owners reclaimed their land by construction of bulkheads and fill. Jetties were also constructed for the purpose of regaining their beaches. Until March 1973 their investments and labors had paid off substancially.

Following heavy rains in March 1973 a small creek draining into the bay altered its course and began draining parallel to the beaches. This drainage has caused serious erosion. Whereas before only one foot of the bulkheads were exposed and high tides never reached the bulkhead; now three to four feet of the bulkheads are exposed and high tides constantly lap against them.

Slowly more erosion is taking place and fear is rising that eventually the erosion maycut under the bulkheads and begin again the erosion of land. Efforts of the property owners have been futile in attempting to alter the creek's drainage.

Due to the long shore migration of sand caused by southeastern winds and the drainage of the creek, a large sandbar has contained the creek and has forced a steady flow of drainage parallel to the beaches. Subsequently the spilling of the creek has not allowed the sand to eventually migrate inward and rebuild the beaches. (Picture found at the top of page 2)

It is apparent to the property owners that some type of structural design is needed to contain and channel the drainage of the creek. It is also quite apparent to the owners that such a structural design is costly; most probably outside their financial capabilities. The possibility that a design constructed by the property owner might alter the natural migration of sand has thus far prevented action on their part. Although certain they can alleviate their personal problems, consideration concerning possible damage to other property has stalled most activity in pursuit of correction of said drainage.

Although this is most definately a localized problem, it serves to indicate the difficulties faced by the property owners in struggling to protect their land. Without exception each property owner has lost a great deal of his land. (Supporting land survey of one property owner is attached. Note survey was taken after Hurricane Camelle and reclaiming of same land.)

For years the owner has faced this problem. Finances and personal skills and talents are not unlimited, it is time help was given.

Submitted by:

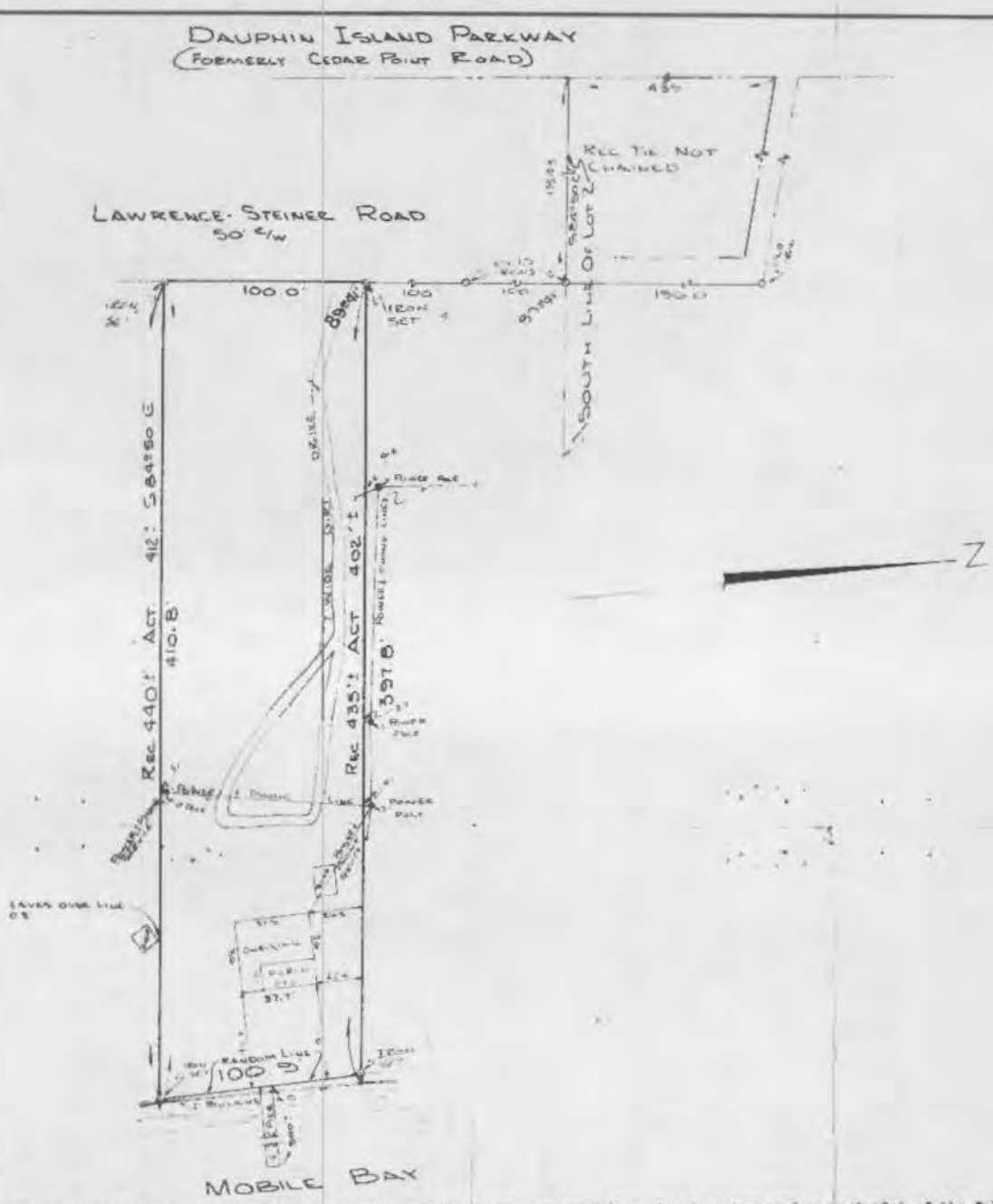
Mr. & Mrs. B. I. Crabtree

Mr. & Mrs. Alfred Ramsey

Mrs. Betty Lamb

Mr. & Mrs. George Bruner, DDM

Mr. & Mrs. J. J. Martins



STATE OF ALABAMA)
COUNTY OF MOBILE)

I, F. W. Rowe, a registered Land Surveyor in the State of Alabama, hereby certify that the foregoing is a true and correct plat of the following described property, to wit:

Part of Lot 1 of a Subdivision in Section 2, Township 6 South, Range 1 West, known as the Lelande Claim, according to plat recorded in Map Book 1, page 17 of the records in the office of Judge of Probate, Mobile County, Alabama, more particularly described as follows: FROM an intersection of the East right-of-way line of Cedar Point Road, with the South line of Lot 2 of said Subdivision, run South 84°-50' East 1843 feet to the East line of a 50 foot roadway, granted by A. C. Denby and wife to Mobile County by instrument dated 28 December 1950 and recorded in Deed Book 522 N.S., page 231 thence with a deflection angle of 89°-41' to the right, run Southwardly along the East line of said 50-foot roadway 200 feet to the point of beginning of the property herein described, thence continue Southwardly along the East line of said 50 foot roadway 100 feet to a point, thence South 84°-50' East along a line parallel with the South line of said Lot 2 of the Lelande Claim 412 feet, more or less, to the Western Shore Line of Mobile Bay, thence Northwardly along the meanders of said Western Shore Line 100.9 feet, more or less, to a point which bears South 84°-50' East 402 feet, more or less, from the point of beginning, thence North 84°-50' West 402 feet, more or less, to the point of beginning, said land being identified as parcel 3 on the map recorded with the right-of-way deed from A. C. Denby and wife to Mobile County above referred to.

I further certify that the buildings now erected on said lot are within the boundaries of same; that there are no encroachments by buildings of adjoining property except as shown; that there are no rights-of-way, easements or joint driveways, over or across said land visible on the surface except as shown; that there are no electric or telephone wires (excluding wires which serve the premises only) or structures or support therefor, including poles, anchors and guy wires, on or over said premises except as shown.

F. W. Rowe

F. W. Rowe, Registration No. 1965

ROWE SURVEYING & ENGINEERING COMPANY, INC.

MOBILE, ALABAMA

SCALE: 1" = 50' January 3, 1972.

231/23-23 COWLEY E-7-5 Randy Agency

JULIUS E MARX, INC. (Established 1927) Realtors

INDUSTRIAL - COMMERCIAL - LANDS - DAUPHIN ISLAND
ACCREDITED MANAGEMENT ORGANIZATION OF THE INSTITUTE OF REAL ESTATE MANAGEMENT
900 COMMERCE BUILDING - AREA CODE 205 432-1854
MOBILE, ALABAMA
36602

July 13, 1973

District Engineer
Department of the Army
Mobile District, Corps of Engineers
P. O. Box 2288
Mobile, Alabama 36628

Attention:SAMEN-PD

Dear Sir:

Thank you for studying the situation in Mobile Bay and Dauphin Island.

The beach has been badly eroded and we have many pictures we can show you indicating this.

On the enclosed I have drawn a red line around an area that has smoothed out as you will see in more recent pictures.

I believe that if you would stabilize Sand Island which picutres show is moving westwardly, that this would do the seashore a great deal of good. However you stabilize it, if it is with scrap material or with growing vegetation, would certainly not matter. But if you could make vegetation grow there on the waters edge, it would be good environment for fish hatching, etc. Also Pelican Island, which was above the water a couple of years ago, it now entirely below the water. Certainly it would be well to bring this back to life and stabilize it.

As far as I know, the Government owns Sand Island, and although Pelican Island is assessed to the Webb Estate, I am sure that title to that could be gotten easily. Therefore, these two islands could be made into public parks, if that is necessary.

Also in many places on the north part of Dauphin Island and in the bays which are shallow, I believe you should study barging in large amounts of saw grass and deposit-

EXHIBIT 8

ing them in an effort to let them grow, thereby building up the area, protecting the shores, the causeway, etc., and providing growing places for fish and crabs.

Thanking you, I am

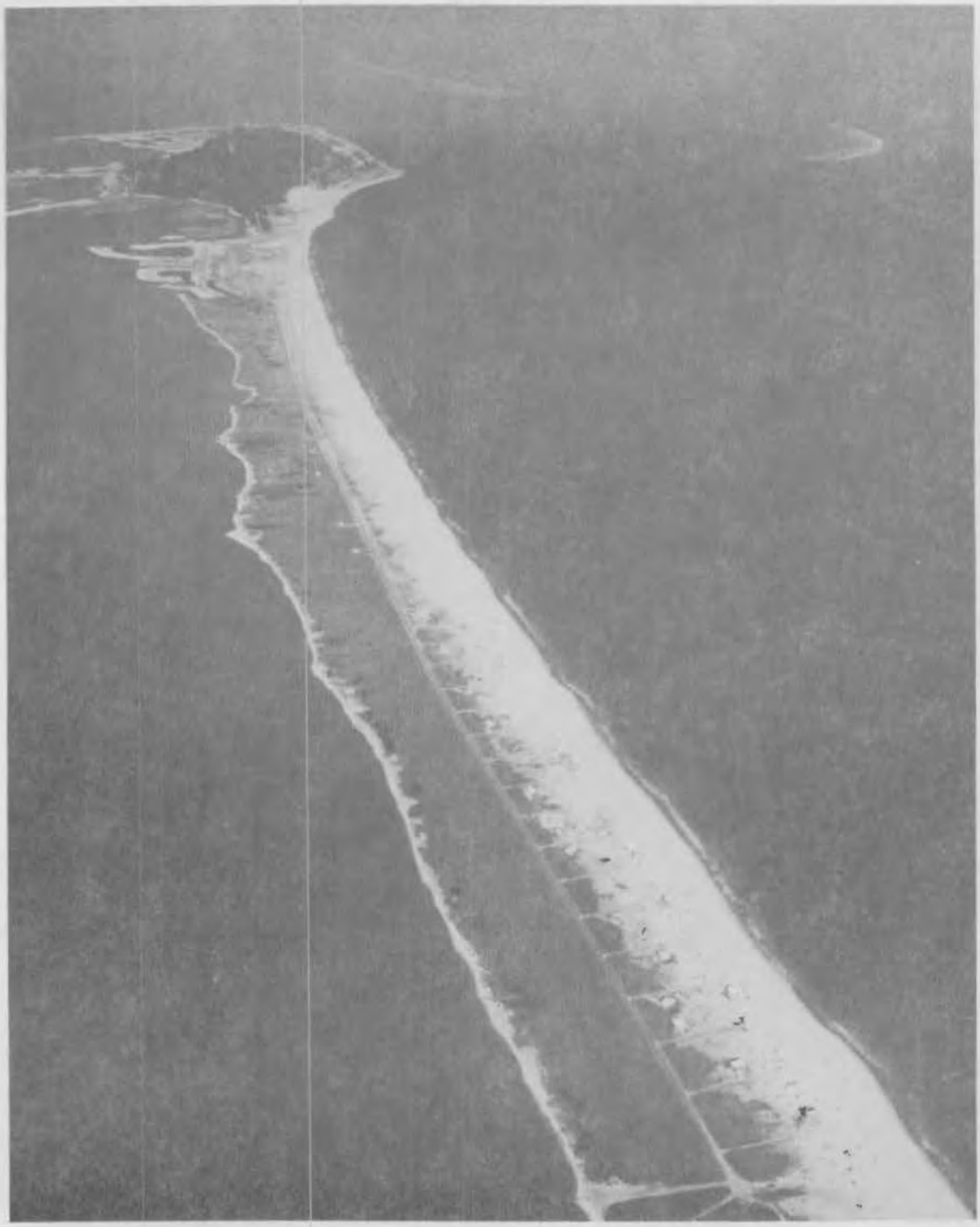
Yours very truly,

JEM:jh
Encl.

P.S. Also enclosed are two air pictures, one in 1965 and one in 1973.

1954

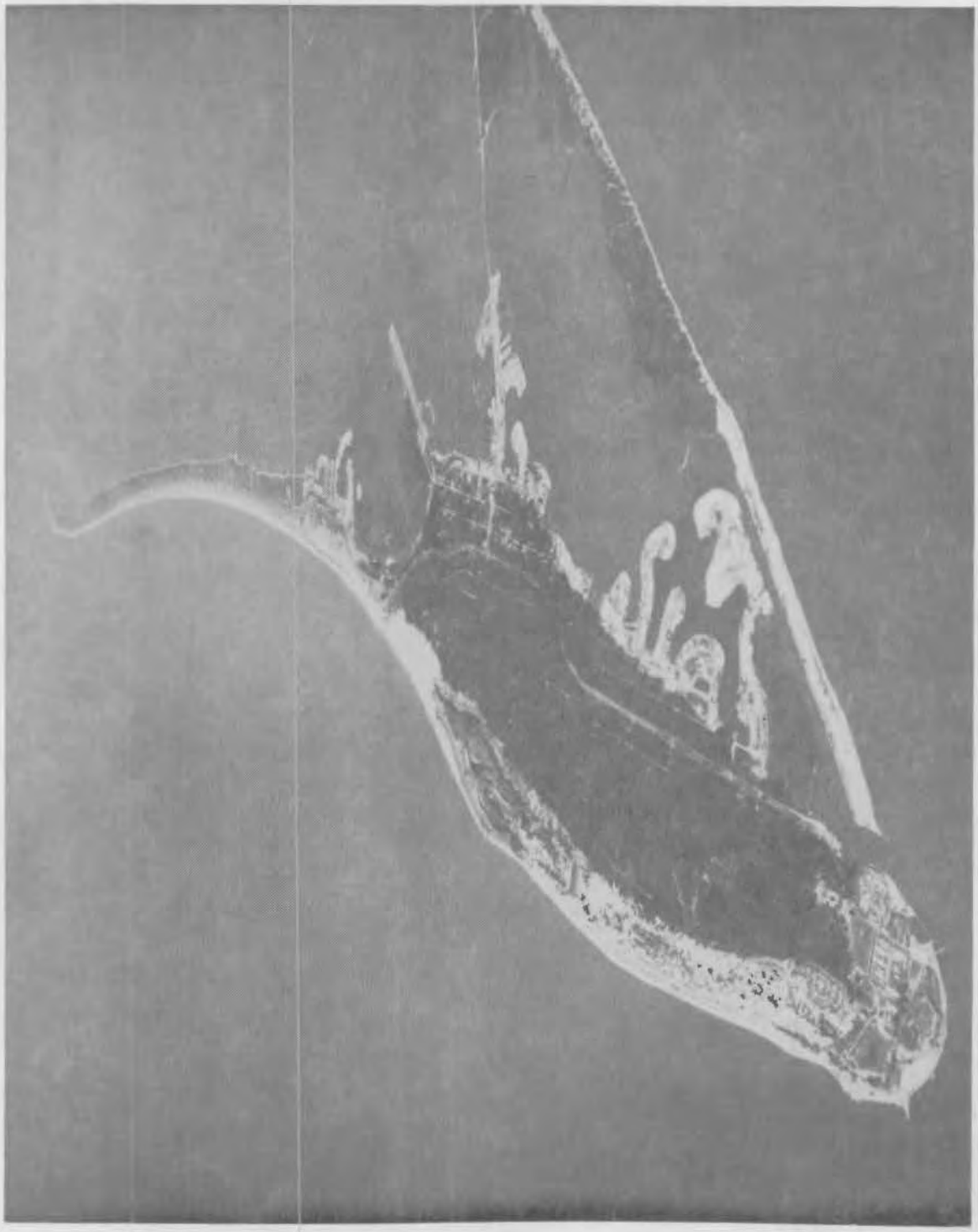
DAUPHIN ISLAND - FACING WEST



1965

DAUPHIN ISLAND - FACING EAST

E-8-4



1973

DAUPHIN ISLAND - FACING WEST

E-8-5

Mobile, Alabama.
July 30, 1973.

Gentlemen:

We own property on Mon Luis Island, and this lot is approximately 73 feet wide, and fronts on Mobile Bay. Our home is wooden frame constructed with tongue and groove siding - suitable for summer, as is uninsulated. It is a comfortable, well built medium sized house, but if the erosion continues in the future as it has in the past, we will have no home as it will be in Mobile Bay. When this house was originally built it was far, far inland. The original owners had no fear that it would be washed in to the bay. We have owned this property for almost 11 yeare, and since we bought it we have lost about 40 to 45 feet of bank and beach. Even this past winter we have lost big chunks of bank to the winter storms, especially to the February blizzard. We had a nice wharf and pier when we bought the place but Betsy and Camille completely destroyed it, and these two hurricanes also were responsible for taking about 30 feet of our beach and bank..If we had not been in a high spot, about 13 to 20 feet above the bay, we would have had no house.. Just a guess, but about correct, that in about 8 years, provided no hurricanes, or home will either be in the bay or dangerously close..But one or two mor hurricanes would just about do it..One more like Camille will probably take our home.. On Mon Luis Island Camille did reach well over hurricane force, not as violent as the Mississippi coast, but plenty bad enough. We have built bulkhead after bulkhead, planted trees and bushes etc to try and stop the erosion, only to have them battered down and washed away year after year. We, and am sure all the coast line residents, would appreciate any help you could get for us.

Sincerely,

William W. Dowling

118 Kilmarnock St.,
Mobile, Ala., 36604.

EXHIBIT 9

LAW OFFICES
HOLBERG AND TULLY
1107 COMMERCE BUILDING
P O BOX 47
MOBILE, ALABAMA
36601

RALPH G. HOLBERG, JR.
ALBERT J. TULLY
RALPH G. HOLBERG, III
JACK W. MORGAN

JOEL F. DANLEY

TELEPHONE
432-6863

July
30th
1973

Corps of Engineers
Mobile District
P. O. Box 2288
Mobile, Alabama 36628

To Attention Of:- SAMEN-PD

Dear Sirs:

This statement is filed on behalf of the membership of the Isle Dauphine Country Club, located on Dauphin Island, Alabama. Membership, including all classes and their families, constitutes about 2,000 persons.

The Isle Dauphine Country Club is a non-profit corporation organized under the Laws of Alabama. Its lands and properties have a current fair market value in excess of $1,000,000.00. The lands include some 4,500 feet of Gulf beach frontage. The club is an essential part of the Dauphin Island complex.

The writer has more than 45 years of personal knowledge of Dauphin Island and the Southern half of Mobile Bay. He has read numerous publications on the littoral and marine environment; is a member of the American Littoral Society and of the International Oceanographic Foundation; is a Past President of the Isle Dauphine Country Club; and for several years has been and currently is Chairman of the Isle Dauphine Country Club Committee on Erosion. He pretends no expertise in, only a familiarity with, the subject.

The following statements represent the opinion of the writer.

THE WEST SHORE OF MOBILE BAY

The Problem

The West shore of the Southern part of Mobile Bay has eroded badly over an undetermined period of years. About one mile

offshore from Alabama Port there is the pipe of a well drilled many years ago on land. This suggests the erosion loss of land averages about 50 feet per year. The eroded material contributes to sedimentary deposits on oyster beds and in channels. Loss of the shore now threatens the one highway affording access to Dauphin Island, and constitutes a substantial land loss.

The Causes

Without testimony more reliable than memory and vision, it is risky to be specific but it seems to the writer the most severe erosion has occurred South of the Theodore Ship Channel and that the most rapid rate of erosion took place in the 30-odd years since that channel was dredged. The following are believed by the writer to be the principal causes.

(1) Starvation of the West shore due to entrapment by the Theodore Ship Channel of natural nourishment. If this is a cause, it will be aggravated by the new and deeper channel.

(2) The main Mobile Bay Ship Channel, directing silt-bearing water away from the shore.

(3) Reduced siltation of flood waters by upstream dams which, in turn, reduces the supply of shore building material.

(4) Short term erosion by wind-and-ship-generated waves.

(5) Rising sea level.

The Cures

(1) Use dredging spoil to replace lost shore land.

(2) Although much of the dredge spoil may be slurry, the quality of the material could be an advantage, being suitable for various plantings. By establishing vegetation (serpentina patens, serpentina alterniflora, and/or selected rhizomes have been used successfully in similar intertidal zones) there would be restored a productive estuarine marsh highly beneficial to the commercial and sports seafood industry, as well as to the shores.

(3) To the extent feasible and where most needed, install protective walls and groins.

LITTLE DAUPHIN ISLAND

This is a separate island, presently undeveloped, lying North of the Eastern portion of Dauphin Island. It, together with Dauphin Island, forms the protected harbors for commercial and sport boating in Dauphin Bay and Aloe Bay. It is an important part of the estuarine system. Although it has some areas of moderate elevation, supporting several acres of large pine tree growth, it is primarily a marsh and sand island.

The Problem

The Northeastern shore of Little Dauphin Island has suffered a severe erosion. Ultimate loss of Little Dauphin Island will in turn lead to destruction of the protected harbors, and will expose to the elements the North shore of Dauphin Island which supports federal and state marine laboratories, a large marina, and a substantial amount of residential and commercial development.

The Causes

The causes are believed to be the same as those stated in respect of the Western Shore, which causes are here adopted.

The Cures

Although the dredge spoil material obtained from deepening and maintenance dredging of the nearer portions of the Mobile Ship Channel are likely to consist primarily of sand, with a small percentage content of clay and silt, the cures are believed to be the same as those suggested for the Western Shore.

DAUPHIN ISLAND

Dauphin Island is situated at the confluence of Mobile Bay, Mississippi Sound and the Gulf of Mexico. The East half is economically developed to a substantial degree. Development is in part residential, with several hundred permanent homes, second homes and condominiums. There is a 100-room Holiday Inn as well as a number of smaller motels and apartment complexes. It is the

site of an important sport and commercial seafood industry and of valuable recreational facilities, including a large marina. It has a number ofpublic areas and facilities, including trailer parks, picnic areas, camping areas, bathing beaches and fishing piers. It has a Coast Guard base, radar base, Bar Pilots base, and a marine institute operated by a consortium of some 16 universities.

The Problem

Skipping over geological history when the sea level was some 400 feet lower, charts and other records covering the past 350 years or more give the following coastal picture.

On the East side of the mouth of Mobile Bay there was the currently existing peninsula, with a chain of small sand islands extending Southwardly from the Westward tip of that peninsula. Mobile Bay discharged Southwardly across relatively shallow sand flats. On the West side of the discharge route there was a single large island, now called Dauphin Island, but which at that time extended Westwardly to a point approximately South of Pascagoula Bay. A large peninsula extended Southwardly from Dauphin Island, with another and smaller island, now known as Sand Island, lying a slight distance Southward of the Southern tip of this peninsula. Dauphin Island, its Southern peninsula, and Sand Island formed a protected harbor, deep enough for the ocean-going vessels first of Spain, then of France, and as recently as Farragut's fleet. Both the peninsula and Sand Island, as well as Dauphin Island, supported a heavy growth of large trees. During early European settlement buildings existed on all these areas.

It is of course true that instability and change are the characteristics of a coastal environment. Sand is constantly in motion:- sometimes in, sometimes out, sometimes from one place to another. There is a general Westward littoral current that bears sand with it. However, there does not appear to have been noticeable changes from natural causes prior to man-made developments, perhaps because sand moved out of the subject area by the littoral current was replaced by sand brought in on the same current from areas to the East.

When a coastal area becomes developed, it is frequently the case that sand moves from places where it is wanted or needed to places where it is neither wanted nor needed. The line of small sand islands running Southward from the Fort Morgan peninsula disappeared, perhaps due in part to the rising sea level. (At Pensacola a rise of 6.24 inches in the last 47 years was measured, and at Eugene Island, Louisiana, the rise has averaged almost 1/2 inch annually for the past 30 years.) Perhaps at least in part because of the loss of this protective barrier, the large single island broke into four separate pieces which became known as Dauphin Island, Petit Bois Key, Petit Bois Island, and Pelican Island.

Sand Island lost its houses and trees and began a Westward migration. Pelican Island lost its houses and trees, and sank beneath the waves. Petit Bois Key disappeared. What was Dauphin Island after its break-up into pieces since has undergone a thinning and lengthening process. The present island is now about one-half its North-South depth of less than 100 years ago, while, during the same period, its Westward terminus has extended Westwardly more than 30,000 feet.

Historically the East half and most valuable part of Dauphin Island has been sheltered by Sand Island and by Pelican Island and by the shoals remaining when Pelican Island went under. Currently, not only has Sand Island migrated Westwardly but it has severely deteriorated. Pelican Shoals also appear to be migrating. Although the prevailing littoral current is Westward, there is strong evidence of an eddy within the Sand Island, Pelican Shoals and Dauphin Island circumference producing an Eastward littoral current along this portion of the South shore of Dauphin Island. Within the past ten years there has been a rapid and substantial land loss in this area.

It appears to the writer and a good many others that an accelerated rate of erosion has occurred within the last half century. Within the same time frame the Mobile Ship Channel has been widened and deepened, and there appears to have been an increase in the annual volume of water discharged by the river systems into Mobile Bay and, via the ship channel, into the Gulf.

The Causes

(1) Severe erosion of the South shore of Dauphin Island, reducing the Island to less than one-half its former width.

(2) Elimination of substantial beach areas between the water and constructed improvements, increasing peril of storm damage to developed areas.

(3) Erosion and migration of Sand Island, and Pelican Island, increasing the exposure of Dauphin Island to storm damage.

(4) Substantial reduction in, if not elimination of, natural rebuilding forces. The ship channel is a sediment trap for sand that otherwise would be carried naturally by the littoral current from areas to the East into the area now being eroded.

(5) Apparent creation of a whirlpool South of the Eastern portion of the island. The ship channel runs along the Eastern side of the Sand-Pelican-Dauphin basin. Discharge down this side creates an eddy in the remainder of the basin.

(6) Short term erosion by wind-and-ship-generated waves.

(7) Rising sea level.

The Cures

(1) Replenish the South beach of Dauphin Island by off-shore dredging. While this can be done more economically by dredging from the North side of Dauphin Island, and pumping across, it is doubtful the dredge can find an adequate supply of acceptable material in this area. It probably will be necessary for the dredge to sweep from the Gulf at a suitable distance from the shore.

(2) Install a pump-out station on the West side of the channel, near the East end of Dauphin Island, and use channel spoil to create feed banks from which material can be carried to the beaches by the littoral currents.

(3) Stabilize the re-established beach areas by the installation of groins and by the planting of vegetation.

(4) Re-establish the East end of Sand Island and rebuild the island by dredging and by the use of channel spoil to the extent available.

Conclusion

It should be noted that the recommended cures are not to create something that never before existed but, to the contrary, call for at least a partial restoration of environmental conditions pre-dating man-caused as well as natural changes. The Environmental Policy Act was designed to foster exactly such programs as this. That Act was not intended to be used by incoherent pseudo-ecologists to convert the Corps of Engineers into an agency for the suppression of scientific restoration and development of the environment. While the dollar cost of such procedures may slightly exceed the dollar cost of wasteful deposit at sea of dredging spoil, there would be a substantially improved ~~cross~~ cost benefit ratio in an integrated program which would include both necessary channel dredging and necessary environmental restoration and protection.

Respectfully submitted,

Albert J. Tully, Chairman
Beach Committee on Erosion
Isle Dauphine Country Club

AJT/n

CC: Mr. W. D. Blacksher
President
Isle Dauphine Country Club

EN

July 11, 1973

District Engineer
U. S. Army Engineer District, Mobile
P. O. Box 2288
Mobile, Alabama 36628

Dear Sir:

I am in receipt of your announcement of a public meeting for the purpose of beach erosion control and hurricane protection.

I have a home on Dauphin Island Parkway at Bay View on Judith Point, one and a half miles North of Alabama Port. I have owned this home for approximately 21 years. During this time, I have lost about 50 foot of bluff on the bay - 15 foot to Camille. About 1 foot a year is lost to erosion due to rainwater. All of my neighbors have suffered the same loss.

It won't be too many years before my home will fall into Mobile Bay unless something is done to stop erosion and storm damage.

While dredging the channel, why could not a road and sea wall similar to Biloxi Beach be built from Brookley Field to Cedar Point?

Sincerely,

Thomas O. Bower

Thomas O. Bower

TOB/ab

T. O. Bower
2410 Sans Souci Road
Mobile, Alabama

EXHIBIT 11

THE UNIVERSITY OF ALABAMA
COLLEGE OF ARTS AND SCIENCES
UNIVERSITY, ALABAMA 35486

DEPARTMENT OF BIOLOGY
P. O. BOX NO. 1927

FREIGHT, EXPRESS AND TELEGRAPH
ADDRESS TUSCALOOSA ALA.

14 July 1973

To: Public Hearing on July 31, 1973, at 7:00 pm CDT at the County Commission Meeting Room. Third Floor, Mobile County Court House.

Ref.: (1) Required of U. S. Congress, 27 October 1970
(2) Announcement of this hearing, 5 July 1973, by the District Engineer, Mr. Drake Wilson, of the U. S. Army Corps of Engineers, Mobile District.

Subject: Beach Erosion Control and Hurricane Protection for the Western shores of Mobile Bay and shores of Dauphin Island and Petit Bois, Islands.

From: Dr. Louis G. WILLIAMS, Prof. of Ecology, Dept. of Biology, P. O. Box 1927, UNIVERSITY, Alabama 35486.

Myself and several of my graduate students have done a great deal of research in the area of this hearing over the past several years, especially pertaining to the Spartina-Juncus salt marshes and the areas being devastated associated with dune vegetation. I also have done extensive research in this kind of work in marine habitats in North Carolina.

If the solution is to bulk-head these areas to control washout from water and wind, much consideration must be given to the destruction of most valuable marsh vegetation and the sand-binding grass of the dunes, Uninola paniculata. The best solution would be to study the real causes of beach erosion, which permits further damage from tides and hurricanes. Marsh and beach vegetation can hold sand and marsh muds if allowed to get a foothold by the NATIVE VEGETATION. Any other methods have been tried, such as at Kitty Hawk, North Carolina, but all ended in failure.

All kinds of motor vehicles, such as beach buggies and motor cycles must be outlawed. Any kind of digging out and piling out of dredge material to produce areas above the high tide level, would destroy valuable spawning, and breeding habitats, and protection of juvenile commercial and other aquatic organisms important to the economy of the area.

Having explored these areas under consideration over a several years and with acceptable scientific methods I would hope that relative value judgements would be acceptable to the decision makers for alternative ways to save these valuable marine resources for now and future resources.

Sincerely,

Louis G. Williams

Louis G. Williams, Ph. D.,
Aquatic Ecologist
Professor of Biology

EXHIBIT 12

THE MOBILE BAY AUDUBON SOCIETY

Box U-581
Mobile, Alabama 36688

30 July 1973

District Engineer
U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628

Dear Sir:

Please include this letter in the hearing record of the public meeting on a survey of the shores of Mobile County (including Dauphin Island) for the purpose of beach erosion control and hurricane protection.

The potential for comments as to the environmental effects of such control is limited by lack of information as to what measures such control would involve. All must be cognizent of the fact that much of this erosion and damage is a natural phenomenon and measures to control it would necessarily have to be drastic. Any large scale dredging and filling would have significant detrimental effects on the Mobile Bay estuary. Undoubtedly there are land use practices that contribute significantly to shore erosion and these should be controlled at their source.

When more specific information becomes available regarding methods to be employed for beach erosion control and hurricane protection, citizens should again have the opportunity to comment.

Yours truly,

Alicia V. Linzey

Alicia V. Linzey
President

EXHIBIT 13

Rt 1, Box 185A
Bay Road
Mobile, AL 36605
18 July 1973

District Engineer
U. S. Army Engineer District, Mobile
PO Box 2288
Mobile, AL 36628

Dear Sir:

I am interested in your announcement of the public meeting on a survey of the shores of Mobile County, Alabama.

I own a home on Bay Road, Hollinger's Island; the lot is approximately 62' by 675'. There has been extensive shoreline recession and erosion the past few years -- since Hurricane Camille.

During Camille, we lost approximately five large pine trees along the shoreline and quite a bit of our beachfront. We hired a contractor to fill in with beach clay (or clay from out in the Bay) and pack it with a bulldozer, after we had hauled in rocks for drainage (or, rather gravel), then topped this with red clay and top soil and seeded it.

During heavy rains and high tides in January 1970, this washed badly. We had clay hauled in after my husband had installed tiles for drainage.

In early May 1972, we received the worst loss of beachfront. It seemed as if the tides were pulling the soil from below surface of the soil and that the heavy rains were washing through yard with swiftness of a river. I had a gentleman from the Soil Conservation Department to give me an evaluation; I followed his advice by having the bank along the shore cleaned and leveled and packed with a bulldozer, filled in and packed approximately 12 loads of clay, covered with two loads of good topsoil, seeded and fertilized and sodded with Centipede. This time, we thought we had it made. The bank was very firm, grass growing well.

Then came the high tides and rains of March and April 1973. Attached is an evaluation by the Soil Conservation Department. To construct a concrete bulkhead would cost $3900 (see estimate) and a wooden bulkhead would cost $3400. This is entirely too much.

EXHIBIT 14

My yard has continued to sink, as if the tides are pulling the soil from underneath.

I applied for a loan through the SBA to help, but I think the estimates I have received for a bulkhead are too much; and, besides that, the SBA will not finance for a bulkhead as I did not have one previously. I feel that filling in with clay again would be a waste of money to the Government if they gave me a grant.

I would like to see the Engineers evaluate our entire beachfront and help us. It doesn't do any good if one person fills in unless the homeowners on either side fills in in like manner. In other words, if one beachfront is filled in higher than the other, that's no good.

I appreciate your interest in this.

Sincerely,

Mrs. Robert E. Kirby

MRS. ROBERT E. KIRBY

Office telephone: 460-2350
Home telephone: 666-0952

SOIL CONSERVATION SERVICE

INVENTORY & EVALUATION

* (INDIVIDUAL / GROUP / UNIT OF GOVERNMENT)

REQUESTED BY Mrs. Robert E. Kirby LOCATION Hastings Dr. Co. 2 Bay ~~Front~~ Road

ASSISTED BY E. L. Norton, M. G. Mattox DATE 6-6-73

SITUATION: Shoreline erosion on Mobile Bay

INVENTORY: Caving bank one-foot to three feet high on slope from lot to shore. Slope was shaped and seeded as a critical area summer of 1972. Caving occurred during heavy seas in April and May, 1973.

INTERPRETATIONS: Vegetated banks cannot withstand heavy wave action.

SUGGESTED SOLUTION(S):

1. Shape and revegetate and expect future damages to occur and repairs to be needed.

2. Construct a bulkhead to protect from wave pounding and backfill to bulkhead and revegetate remaining slope.

* Circle appropriate category.

SCS-CONS-5
6-78
FILL CODE CONS-14-5

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

INVENTORY & EVALUATION

* (INDIVIDUAL / GROUP / UNIT OF GOVERNMENT)

REQUESTED BY Mrs. Robert E. Kirby LOCATION Hwy. [illegible]

ASSISTED BY Ed [illegible] Norton NRCS DATE 11-6-[illegible]

SITUATION: Excess water during heavy rains

INVENTORY: Depression exists in middle of lot. Front and rear of lot are higher than house area. Board lined ditch was installed to remove water to drain along Bayfront Road. Lining of ditch has deteriorated with age and is breaking.

INTERPRETATION: Lined ditch is no longer adequate to transport

SUGGESTED SOLUTION(S):

1. Repair lined ditch

2. Replace lined section of ditch with non-perforated plastic tubing (4-inch or larger) on a minimum grade of 0.2 feet per hundred feet.

* Circle appropriate category.

Peter K. Sokolosky
4051 Bay Front Road
Mobile, Alabama 36605

I. Extensive shoreline recession and bluff erosion along most of the western shoreline of Mobile Bay.

A. Problem

1. Predominately southeast wind creating waves over a a large area..

2. Storm high tides saturates the shore soil and storm waves wash the soil away

3. Result.

a. A new equilibrium shore with a new slope as a result of redeposition of eroded material near shore.

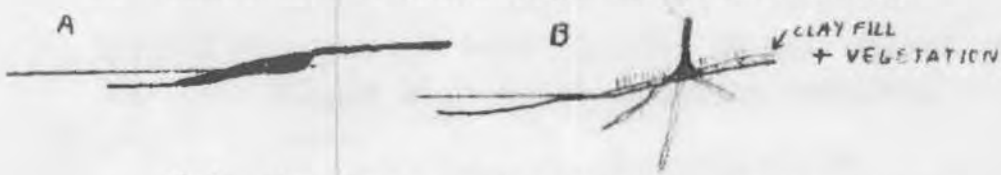
b. More storms result in the recession of the shoreline.

B. Solutions

1. Make a manmade gentle slope to the water

a. Use a clay to silt size fill.

b. Thick well rooted vegetation is needed.



(1) Use trees and Saint Agustine grass.

D. Hurricane protection

1. Depending upon the storms wind direction, there is certainly offshore transport of sand by storm waves, and maybe some severe longshore current transport. There might be some redeposition of sand over the time between storms by gentle wave motion.
2. Sand Island makes some protection.
3. Offshore manmade barrier or island to break the waves before they hit the shore.
   a. Either rock or old ships to create a fishing reef.
   b. This could stop the longshore current and stop storm erosion.

III. Continued erosion of the eastern tip of Petit Bois Island causing excessive widening of Petit Bois Pass.

A. Problem

1. Petit Bois Pass will continue to widen since the transport of material by the Dauphin Island longshore current and the eastern tip of Petit Bois Island continues

B. Solution

1. Same as Dauphin island

C. Hurricane protection

2. Same as Dauphin Isalnd

July 30, 1973

District Engineer,
U. S. Army Engineer District, Mobile,
P. O. Box 2288,
Mobile, Ala. 36628

Dear Sir:

We built a home at Belle Fontaine, Ala. in 1964, our lot at that time was 360 feet deep. The stakes showing the property line were put there by surveyors. Today our lot is 285 feet deep, using the same stakes as our markers. That is a loss of 85 feet in depth in approximately 10 years. Our lot is 50 feet wide so you can see there is quite a bit of property loss.

Sincerely,

Mr and Mrs Pat Mc Ilwain
1852 Canal St.
Mobile, Ala. 36606

Pat H. McIlwain
Mrs Pat McIlwain

EXHIBIT 16

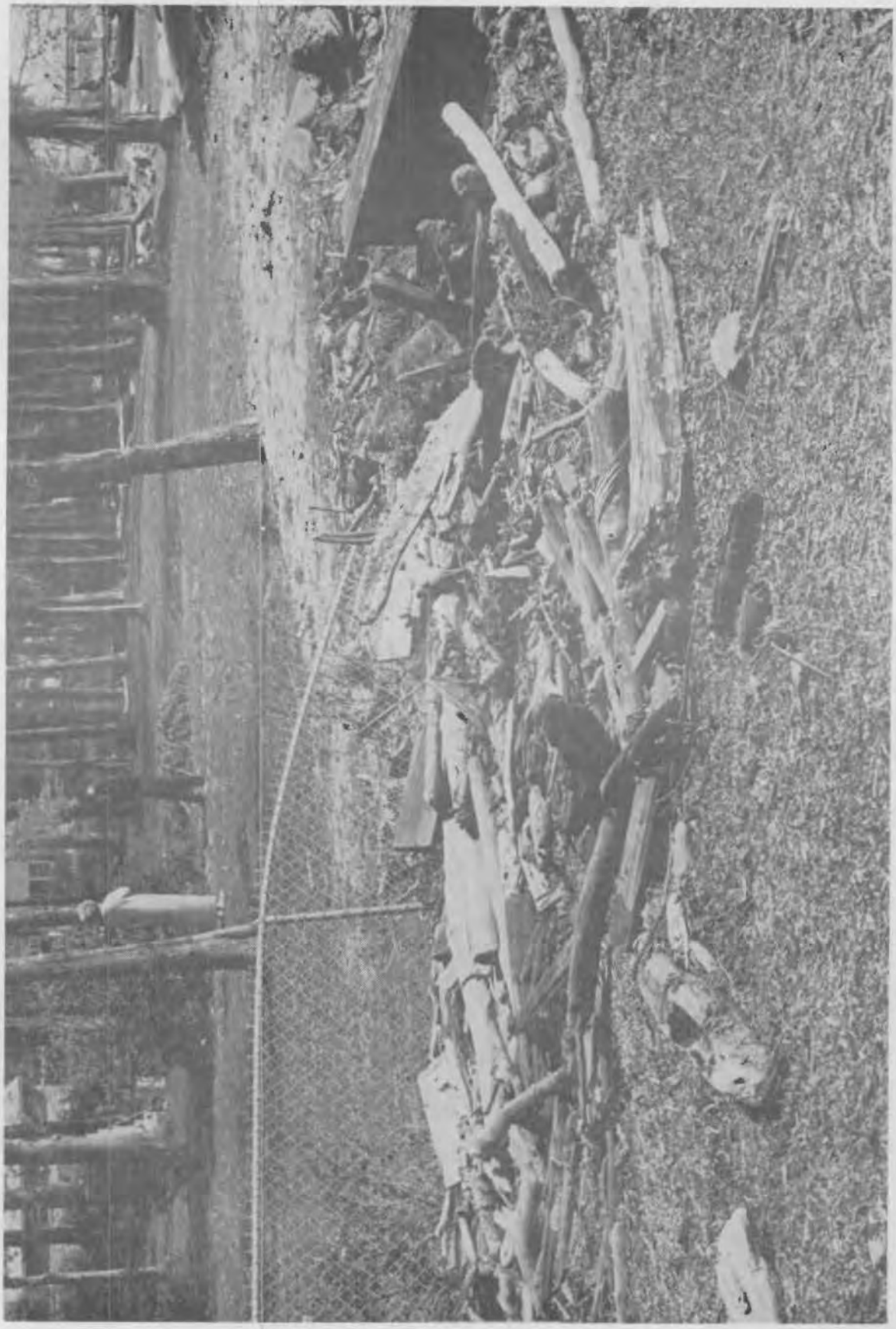


EXHIBIT 17

PHOTOGRAPH SUBMITTED BY MRS. SAWYER

E-17-1

Mrs. John F. Lyle
Bellefontaine Rt. 3, Box 560
Theodore, Alabama 36582

August 20, 1973

Colonel Drake Wilson
U. S. Engineers
2301 Airport Blvd.
Mobile, Ala.

Dear Colonel Wilson:

My husband and I were present at the hearing which you conducted on July 31 at Mobile County Court House. The many experiences related there regarding erosion were very interesting and some quite sad.

We did not make a statement at the hearing because we were quite uncertain as to what was expected of us. Since then after giving much thought to it we believe you should have a record of our experiences also.

When we bought our place at Bellefontaine on the Ba Front just north of Greer Road the former owners had just a year or so before graded the bank to a forty-five degree angle and seeded it with Bermuda grass. Unfortunately the first storm cut away about half of the angle and made a fissure straight in about half way of our 192 foot lot. This fissure came back to the top of the bank. We immediately started trying to fill it in and to stop further erosion at the bottom. We put grass clippings, dirt, sand, garbage, driftwood into the fissure and later planted day lillies at the top. It held fairly well but remained lower that the rest of the bank. Across the bottom we piled pine straw and pushed driftwood up against it from the beach. Eventually we were able to plant this with St. Augustine grass and various shrubs almost to the beach - about 2½ feet above the sand. We also planted pine seedlings and left those that came up wherever there was a space.

Later - I do not remember the year but not too long after we moved here we were startled one morning to look out and notice the whole bank from Greer Road past our place had sunk about 2-4 feet. The pines, shrubs, grass everything was in place but lower. Our neighbor at that time Commander Phillips in the Coast Guard had some engineers study the situation and they concluded it happened because of the saturation of the fine blue clay base here. Blue clay holes turned up 50-100 feet out in the bay which had not been there before.

We continued to lose a little land with every storm and abnormally high tide but Camille really robbed us. We lost the whole bank we had been working on up to the top, at least 25 feet twelve large pines and all of the other planting. The fissure reappeared deeper than ever. A professional estimate of the damage uninsured was $23,500.00. Two cypress posts

which held our lawn swing are now the entrance to the pier. Incidentally we were told when we moved here these posts were the remains of a scuppernong arbor which existed when Colonel Damrell's daughter lived here.

The pier was rebuilt after Camille but since bulkheads seemed to be even more expendable than piers and useless without cooperation of the entire bay front we put up a makeshift affair of posts and tin roofing salvaged after the storm. It was low and we hoped in time to cover it with sand and/or beach grass. But before building this we were able to bulldoze large logs on the beach up against the bank and push or scopp sand until they were covered and we again had a slope though unstable. Rye grass was immediately planted and sprinkled with cottonseed meal. The gras grew and held the sand and since then weeds and tree seedlings have appeared. All was left and in addition weeds and grasses pulled from the flower borders and the vegetable garden were placed wherever a depression appeared. We had a stand of gap grass, some switch cane and beach grass which seems to be native to the area. Everything that grew up on the grounds that was excess we tucked in wherever we could find a place.

Now the third week in March of this year we had some bad weather with an abnormally high tide and strong south winds. The end of the pier was washed away about 20 feet, the bulkhead went and about ten feet of the bank together with the grass etc., where we had tried to rebuild. The corner of our lot on the northeast was much higher than the lot next to us. The whole corner washed out.

Now part of our trouble commonly called acts of God we know is beyond human control but that caused by soil and water manipulation is not. Since nothing effective seems feasible unless it involves the entire Bay front it ceases to be something for a private landowner to handle. This plus the fact that the state owns to the high water line (does that mean our front lawn at times) leads us to believe the state and nation should do something about this.

If there is any doubt about this land being public you should have been here the morning after Camille. Before property owners along the beach could attempt to salvage pier materials there were trucks driven by strangers loading up apparently by daylight. We came back from spending the night at Spring Hill about 9:00. People from side roads who never lost a board were carrying off whatever could be grabbed. I later saw stacks of it in their yards. Even in good weather nothing of any value can be left on the beach because people walking by regard it as public property. When we rebuilt our pier we had to carry lumber from the front lawn each morning because if left on the beach it disappeared.

If you would add this letter to your records we would appreciate it. We also would welcome any of your people surveying the problem. While we have had losses of course indirectly so had Mobile County, the State of Alabama and the National shore line. After listening to the hearing It would seem to us that several things are needed. Perhaps the sea wall, beach restoration, spoil islands and a different way of taking care of the ship channel along with a more comprehensive study of natural currents.

Sincerely,

Elmer P Lyle

STATEMENT OF U.S. REPRESENTATIVE JACE EDWARDS

PUBLIC MEETING ON
BEACH EROSION STUDY

BY THE
U.S. ARMY CORP OF ENGINEERS
MOBILE DISTRICT

MOBILE COUNTY COURTHOUSE
MOBILE, ALABAMA
JULY 31, 1973

I make this statement to express my support of and keen interest in this much needed survey of beach erosion.

The Corps is aware of the many reasons why it is imperative to halt beach erosion and why it is important that we take all necessary steps to preserve our nation's seashores. Beaches and dunes are the primary line of defense against the destructive power of the sea for many inland areas contiguous to our coasts. No less a purpose than the protection of lives and property is thus served by the preservation of our beaches.

To an American public with more and more leisure time, it is important that recreational opportunities be expanded and that existing facilities be protected. Beach preservation can serve this purpose by enhancing the beauty and usefulness of our shores. The aesthetic value of beaches has been described more precisely by poets, artists, and writers than I could do here, but I think we are all aware of the need to preserve the great natural beauty of our country. Certainly some of the greatest areas of this natural beauty are those localities where the sand and sea come together.

Many areas of Mobile County's shore line have serious erosion problems. It is important that a study be undertaken which will identify the problem areas and which will

evaluate the forces of wind, waves and littoral currents in the area. The need for sand replacement in problem areas should be identified and quantified, and recommendations should be made to abate the degradation of the beaches in the area. The Mobile Bay area should received top priority in shore erosion prevention because of the threat from hurricanes and other weather hazards, the active possibility of loss of outstanding recreational areas for the people of the area as well as tourists, and the menace to some of the most beautiful beaches in the world.

I urge the Corps of Engineers to place this project high on its list of priorities and to move without delay to complete it so that the necessary steps to provide erosion control and hurricane protection can be taken.

GEORGE L. SEELEY
ROUTE 3, BOX 520
THEODORE, ALABAMA 36582

July 30th, 1973

District Engineer,
U. S. Army Engineer District, Mobile,
P. O. Box 2288,
Mobile,
Alabama 36628.

Dear Sir:-

Thank you, Sir, for the notice of the Public Meeting to be held July 31st covering beach erosion control and other matters along the western shore of Mobile Bay.

Our copy of the announcement was sent to our old home address, -- P. O. Box 333, Citronelle, Alabama 36522.

We have a home on Mobile Bay, -- Belle Fontaine. The Post Office address is the one at the top of this sheet.

Most of our time is spent here on the Bay, -- water front property.

We are very interested in your work for our home here has suffered severe damage from hurricanes and there is much drift wood that comes to rest on our beach.

Unfortunately we are unable to attend the meeting but we are, indeed, interested and will greatly appreciate your reports, -- and anything that can be done to protect us against erosion.

Sincerely yours,

George L. Seeley