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**STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION**

P. O. BOX 5051
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July 24, 1989

ENGINEER-DIRECTOR
R. E. STOTZER, JR., P.E.

Gulf Intracoastal Waterway Advisory Committee

IN REPLY REFER TO:
File D-10P
(512) 465-7412

TO: RESOURCE CONTACT ORGANIZATIONS

The next meeting of the Gulf Intracoastal Waterway Advisory Committee is scheduled for 9:00 a.m., Friday August 4, 1989. We will again meet in Room 200 of the Materials and Tests Building, (No. 5) at 38th and Jackson Streets.

The May 5, 1989 minutes are enclosed and will be subject to committee approval at the August 4th meeting. Also enclosed is the August 4th agenda.

We look forward to seeing you at the meeting.

Sincerely,

A handwritten signature in cursive script, reading "Alvin R. Luedecke, Jr.".

Alvin R. Luedecke, Jr., P. E.
State Transportation
Planning Engineer
Chairman, Gulf Intracoastal
Waterway Advisory Committee

JGR/dt
Attachments

GULF INTRACOASTAL WATERWAY ADVISORY COMMITTEE

August 4, 1989 9:00 A.M.

Building 5, Room 200, S.D.H.P.T., Camp Hubbard

AGENDA

1. Opening Remarks - Al Luedecke, SDHPT
2. Coastal and Ocean Management Seminar,
Charleston, S.C. - B. C. Gersch, Jr., P. E.
3. Closing of the McCabe's Cut - King Fisher, King
Fisher Marine Service & GICA
4. Other Business
5. Adjourn

M I N U T E S
Gulf Intracoastal Waterway Advisory Committee
State Department of Highways and Public Transportation
Camp Hubbard Office Building No. 5, Room 200
9:00 a.m. May 5, 1989

List of Attendees

<u>Name</u>	<u>Agency</u>
Al Luedecke	State Department of Highways and Public Transportation
Bob Cuellar	State Department of Highways and Public Transportation
B. C. Gersch	State Department of Highways and Public Transportation
Leland Roberts	Texas Parks and Wildlife Department
Hal Irby	Texas General Land Office
Barto Arnold	Texas Antiquities Committee
Donald Moore	National Marine Fisheries Service, Galveston
Jennifer Bjork	National Park Service, Padre Island National Seashore
Fred T. Werner	U. S. Fish & Wildlife Service
Sid Tanner	Corps of Engineers
Herbie Maurer	Corps of Engineers
Don Dial	State Department of Highways and Public Transportation
Joann Riester	State Department of Highways and Public Transportation
Willie Younger	Texas Agriculture Extension Service/Texas Sea Grant
Carlos Swonke	State Department of Highways and Public Transportation (D-8E)
Bill Hood	State Department of Highways and Public Transportation (D-8E)
Rick Medina	Corps of Engineers
Sal Archidiacono	Corps of Engineers
R.H. 'Bob' Parker	Parker Bros. & Co. Inc.; President, GICA

CALL TO ORDER AND MINUTES APPROVAL

Al Luedecke, chairman, called the meeting to order at 9:10 a.m. The Advisory Committee then approved the January 6, 1989 minutes as written.

OPENING REMARKS

Chairman Luedecke noted his meeting in April with the Assistant Secretary of the Army, Robert Page. Luedecke met with Assistant Secretary Page and others at the Galveston District Corps of Engineers. The Assistant Secretary is aware of the erosion problems

facing Sargent Beach. Page indicated that a Texan from the marine-industry could possibly be appointed to the Inland Waterways Users Board.

The Inland Waterways Users Board, created by the Water Resources Development Act of 1986, is comprised of eleven members selected from inland waterways shippers and carriers. The Board makes recommendations to the Secretary of Army regarding construction and rehabilitation priorities and spending levels on the commercial navigation features and components of the inland waterways. Thus far, there has been no representative on the Board from the Gulf Coast area.

Legislative Update

Whether the SDHPT receives General Revenue Funds for the purchase of disposal sites, will be known only when the Governor signs the final Appropriation Bill. The Department has requested \$1.35 million for the '90-91 biennium for the acquisition of disposal areas.

Another means of funding is likely to be made available: nondedicated Highway Funds generated by revenues other than the fuel tax. More latitude on purchasing is predicted from this arrangement; however, it is perceived as an inroad into the Highway Fund, which is strictly a dedicated users' fund.

DUANE ORR RECOGNITION

Chairman Luedecke recognized James Duane Orr, P.E., of Corpus Christi, for his many years of interest in and promotion of the GIWW. The Advisory Committee members agreed that a resolution should be prepared to express the committee's appreciation for Duane Orr's efforts.

CORPS' SECTION 216 STUDY

Sid Tanner, Acting Chief of Planning for the Galveston Corps of Engineers, briefed the Advisory Committee on the Galveston District's on-going Section 216 Study. Under authorization of the 1970 Federal Flood Control Act to review a completed project, the Corps will focus on two acute problems along the GIWW: the Sargent area and the Aransas National Wildlife Refuge area. In the first phase of the study, a twelve-month reconnaissance effort (11/88 - 11-89) will identify one fully implementable alternative, although not necessarily the final recommended solution. In the second step of the study, the feasibility phase will evaluate the number of different alternatives for each problem area.

A list of the waterway's other needs, like environmental, operational, and etc., will be addressed in the future. Interviews with users and coordination with resource agencies and others will help develop the list. The Corps will also systematically prioritize funding to study problem areas like the Brazos River flood gates,

Colorado River locks, McFadden National Wildlife Refuge area, San Bernard National Wildlife Refuge area, Port Isabel area and etc.

For the Sargent area reconnaissance phase, the Corps has coordinated with the U. S. Fish & Wildlife Service, State Department of Highways and Public Transportation and others, and has determined to evaluate the alternative of halting erosion, i. e. developing a plan to protect the waterway in its existing location near Sargent.

Tanner noted that erosion rates since 1974 in the Sargent area have exceeded 50' per year. A storm could speed up that rate of loss, a serious problem where in one area only 650' remains. At 50' per year, a breach could occur in only 12 years. It will be about seven years before the first stabilization piling could be driven, or construction of a realignment, depending on study recommendations. During those seven years, the following would be accomplished: the reconnaissance report, feasibility report, reviews, coordinations and authorization of the project, project design, development of plans and specifications, advertisements, and bids.

For the reconnaissance phase on the Aransas National Wildlife Refuge area, the Corps has met with the "Whooping Crane Committee" and decided to study a realignment of the GIWW north of the Refuge and the Critical Habitat of the Whooping Crane. Currently, a realignment is being evaluated, including cost estimates, but may not be the final recommended solution.

After the reconnaissance phase, the feasibility stage of the Sargent area and the Aransas Refuge area will proceed independently of one another.

The cost-sharing arrangement for this feasibility study is atypical to the usual 50/50, federal to nonfederal participation. The Gulf Intracoastal Waterway is one of 27 designated waterways on the inland waterways system of the United States. Users of these waterways pay a 10 cents per gallon fuel tax (escalating to 20 cents in 1995) which is deposited into the Inland Waterways Trust Fund. The Gulf Intracoastal Waterway will, therefore, be eligible for funds from the Trust Fund that will cover the feasibility stage. In addition, the Trust Fund will pay 50% of any construction resulting from the Section 216 Study, while 50% would also come from the General Treasury. Construction, defined in the 1986 Water Resources Development Bill, includes planning, designing, construction, provision of land, easements, right of way, relocations, and disposal areas for the new work.

Discussion

Jennifer Bjork inquired when the public review process would begin.

Tanner replied that public review would occur during the feasibility stage. The Corps is compiling a mailing list now and welcomes suggestions.

B. C. Gersch inquired whether funding for the relocation or restructuring of bridges would be under the same interpretation as construction.

Tanner said that bridges would probably still be governed by the criteria as before and would probably be the responsibility of the nonfederal sponsor.

Fred Werner noted the difficulty of using traditional benefit/cost ratios to justify a project in the Aransas National Wildlife Refuge.

Tanner agreed, but foresees that acquiring funds for the erosion problem in the Aransas National Wildlife Refuge and Critical Habitat of the Whooping Crane will rank high in priorities.

Don Moore said that the National Marine Fisheries Service has concerns that rerouting the GIWW around the Aransas National Wildlife Refuge would impact the fresh water sources for area bays and marshes. Moore provided a letter dated April 29, 1989 to the Corps detailing concerns and recommendations. (Attached.)

Jennifer Bjork asked if the feasibility study will evaluate the economic impact of maintaining a reach of the waterway, and if there would be any reaches that would not warrant maintaining.

Tanner affirmed that economics and environmental aspects would be addressed for reaches of the GIWW, but equipment and other logistics may be a limiting factor to studying every reach.

Meeting Announcement

Don Moore said the Subcommittee on Water Resources of the House Public Works Committee would be meeting in Port Lavaca on May 15, 1989 to hear testimonies on the erosion of wetlands and the coastline.

GIWW DEEPENING/WIDENDING STUDY

Tanner also gave an update on the study of deepening and widening the waterway between New Orleans and the Houston Ship Channel. The study is finished and the improvements will not be forthcoming.

The study, authorized in 1962 has been studied by the Corps of Engineers, New Orleans District, since 1976. However, the lack of interest to continue pushing the project to actual construction, along with dim economic prospects from it, have terminated the study.

Tanner speculated that in the future, widening the waterway may be advantageous, but with the Graham-Rudman Bill it will be harder to convince Congress of the need.

Fred Werner questioned if the study would be placed on a deauthorization list, to which Tanner confirmed it would.

ARCHEOLOGICAL STUDIES/SPINS

Rick Medina updated the committee on the Corps' archeological investigation of two proposed disposal sites within the bounds of the ~~South~~ Padre Island National Seashore (SPINS). The proposed sites would be alternatives to open water disposal areas for the GIWW. One site is located north of Bird Island Basin and one is south of Bird Island Basin, tentatively labeled DA182A and 187A, respectively.

As part of the National Environmental Policy Act requirements, an archeological assessment of the proposed sites was conducted. A 4-member crew conducted 464 shovel tests and surveyed the sites for 30 days, covering transects of 200 meters in width and 1 - 2.2 kilometers in length. The intensive survey to locate past recorded sites, as well as identify new archeological sites, resulted in no archeological findings. A contractor report is due in June and the Corps will circulate the report to review-agencies for comments.

A topographical survey will soon determine where the dredged materials would flow on the proposed sites. The National Park Service will be focusing on this information in their review. The Corps hopes the National Park Service will approve use of the northern area, DA187A, for the upcoming maintenance job, which has been delayed until after September 1, 1989, and approve the southern area, DA182A, for later maintenance work.

Discussion

Jennifer Bjork of the National Park Service, Padre Island National Seashore, told the Advisory Committee that the issue has been sent to the Regional Office of the National Park Service for a decision. The areas have received increased recreational use, and the Park Service is currently evaluating a Recreational Use Management Plan for the expansion of recreational use to include the areas of the proposed disposal sites.

Rick Medina noted that if the proposed sites, identified in 1986 by an interagency task force including Park Service personnel, are determined unavailable for disposal, the Corps will have to use authorized, historically-used sites to maintain the GIWW during the September, 1989 dredging and until alternates can be arranged.

Don Moore said he was not on the original investigation of the sites, but said sites have been identified on the King Ranch. Moore recognized that for the September, 1989 job's time frame, the Corps will have to use current sites. However, he recommended that the King Ranch sites' analysis be reexamined for future needs.

* Fred Werner inquired about the material content of the waterway in the Upper Laguna Madre area. Medina said the content was poor, consisting of very little sand.

Barto Arnold informed the committee that mitigation of archeological resources, although expensive, occurs frequently. The presence of

archeological resources probably will not prevent use of the proposed sites, whereas recreational use and water resources may.

Bob Cuellar asked whether the National Park Service would consider not only the short-term negative impacts of disposal to recreational use, but also the overall benefit of disposal to the beach.

Bjork said the Park Service will consider that. She also said that the Park Service has previously allowed temporary use of the Seashore near Port Mansfield.

Sal Archidiacono noted that the disposal area near Port Mansfield was there at the jettys on both sides before the Park Service.

FLAMINGO ISLES

In 1988 the Advisory Committee's Task Force investigated an area along West Bay, on the mainland, just west of the Galveston Causeway and called Flamingo Isles. A leveed disposal area there had been constructed for the Highland Bayou Diversion Channel and is now under consideration for GIWW maintenance disposal to help minimize bay disposal. The Corps is in the process of determining the useability and capacity of the old disposal area. To survey the disposal site, the 10-foot high vegetation and the levees are now being cleared. The Corps thinks the site may have a significant use-life.

Al Luedecke noted that Leland Roberts brought the site to the Advisory Committee's attention.

Leland Roberts inquired whether a small, triangular piece would also be evaluated for use. Rick Medina said the existing site would probably provide adequate capacity, and it would be better to use an area already impacted by disposal.

PUBLISHED REPORT ON GIWW ECONOMICS

Willie Younger informed the Advisory Committee of the publication of a report, "Economic Impact of the Gulf Intracoastal Waterway System in Texas," April, 1988. Copies of the report and also a pamphlet on the waterway may be obtained free from Mr. Willie Younger, Texas Agricultural Extension Service/Sea Grant College Program, Room 326 - Courthouse, Bay City, Texas, 77414 or call (409) 244-7650.

Younger requested that the report's availability be publicized in newsletters or similar media.

Al Luedecke noted the outstanding efforts of Younger to get the report published, and that he would send a copy to the Texas Department of Commerce.

Willie Younger announced that the Water Resources Subcommittee of the House Public Works Committee would have a hearing in Port Lavaca on May 15, 1989. Public comments and expert testimony will be taken regarding wetland losses and erosion along the Texas coast.

Update on Experimental Sheet Flow Project in 1986

Willie Younger reported on the 1986 experimental, sheet-flow project along East Matagorda Bay (Baer Estate). Some grasses that were not planted as part of the experiment have sprung up and did better than the planted, salt-tolerant plants. The soil salinity has stayed very high because of drought. Several kinds of grasses have been planted but haven't fared well. One kind of grass, from South America just showed up and is doing well, but isn't very good cattle forage. Other grasses will be tried, but may have to wait until the soil salinity drops down further. With normal rainfall, the salinity would be low enough already, Younger said.

OTHER BUSINESS

Task Force

Al Luedecke scheduled the next Task Force trip to the Corpus Christi area in order to complete identifying possible disposal sites south of Corpus Christi. The trip is set for July 31 - August 1, 1989.

Disposal Site Acquisitions Update

Al Luedecke reported that likely, ten of the twelve sites approved for acquisition will go to condemnation court. One of the sites was state owned property, which has been cleared for use by the General Land Office. Two sites have hearings scheduled for July, 1989, the other remaining sites will be scheduled for court later. During the next biennium, the Department will proceed with the Commission Public Hearing process for new sites, now being identified by the task force.

LISA Meeting Announcement

The Louisiana Intracoastal Seaway Association met in Lafayette, LA on May 11-12, 1989 in conjunction with the Gulf Intracoastal Waterway Coordinating Committee.

ADJOURN AND NEXT MEETING

The meeting was adjourned at 11:30 a.m. The next meeting was set for Friday August 4, 1989.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, FL 33702

April 24, 1989 F/SER112/DM:ov
409/766-3699

Colonel John A. Tudela
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77553-1229

Dear Colonel Tudela:

This is in response to Mr. William G. Wooley's April 4, 1989 letter with accompanying maps requesting our comments on your proposed alignments for relocation of the Gulf Intracoastal Waterway around the critical habitat of the whooping crane. These two new proposed routes, developed as part of a Section 216 Study would pass to the north and west of both the Aransas National Wildlife Refuge and the critical habitat.

The National Marine Fisheries Service (NMFS) is very concerned about the hydrological impacts as well as the dredging and dredged material disposal impacts from these new channel alignments. The hydrological impacts to San Antonio, Aransas, Copano, St. Charles and Espiritu Santo Bays, as well as the marshes south of Reach 1A, need to be fully addressed. Some of those potential impacts include transfer of freshwater inflows, turbidity, nutrients, detritus and sediment between estuaries as well as interdiction of some of the freshwater tributaries of St. Charles Bay and the marshes south of Reach 1A.

Special attention is needed to determine what impacts these alternate routes will have on the residence time of river inflows as well as the salinity gradients of San Antonio Bay. Over two decades ago it was noted in a study including San Antonio Bay that "Estuaries that have proved to be important nursery areas possess a well defined salinity gradient between river mouth and tidal pass, accommodating a large variety of species". More recently the Texas Parks and Wildlife Department² and Texas Department of Water Resources, now Water Development Board, have indicated the quantity, quality and timing of inflows needed to sustain current average fishery productivity in San Antonio, Bay.

In view of the potential hydrological changes to several bodies of water, we recommend that hydrological modeling of the proposed channels be performed and that locks or other gates be seriously considered for installation just landward of each shoreline



crossing in San Antonio Bay. Also, inverted siphons under the GIWW should be seriously considered in reaches 1, 1A, 3, 3A, 4 and 4A for maintaining all the tributary inflows to St. Charles Bay and the marshes south of Reach 1A, including Welder Flats State Coastal Preserve.

Upon examining the proposed alignments across Aransas, Copano and San Antonio Bays we are concerned that the proposed channels may physically remove or degrade fish and crustacean habitats, remove most of one oyster bed, in Reach 2, and be close enough to several other oyster beds in Reaches 2, 2A, 4, 4A and 5 for barges that may be blown out of the channel during gales to ground upon these beds. In San Antonio Bay along Reach 2 one bed is in and to the north of the channel and another is just to the south while two other beds are illustrated to be just south of Reach 2A. In Copano Bay the Reach 4A channel bend passes close to a large oyster bed, shown just to the west. In Aransas Bay the channel bend in reach 4 would pass close to a bed to the east, while the channel in reach 5 would pass close to one bed to the west at the junction with Reaches 4 and 4A and another just to the east of the proposed channel opposite Aransas County Airport. Additional physical degradation or removal of fish, crustacean and oyster habitats could be avoided if the material dredged from those bays were deposited on uplands or in the Gulf of Mexico.

While the oyster beds were denoted on Mr. Wooley's enclosed maps, the abundant seagrass beds and marshes were not. Therefore, before any alternate route is proposed the general location of its reaches across the bays will need to be examined for aquatic vegetation to help enable identification of least damaging channel alignments. Thank you for the opportunity to provide these preliminary comments. Please continue to keep NMFS apprised of further developments regarding this study.

Sincerely yours,


Andreas Mager, Jr.

Acting Assistant Regional Director
Habitat Conservation Division

1. Copeland, B. J. 1966. Effects of decreased river flow on estuarine ecology. Journal Water Pollution Control Federation. pp. 1831-1839.
2. Childress, R., E. Bradley, E. Hagen and S. Williamson. 1975. The effects of freshwater inflows on hydrological and biological parameters in the San Antonio Bay system. Coastal Fish. Br., Tex. Parks & Wildl. Dept., Austin, Texas. 190p.
3. Texas Department of Water Resources. 1980. Guadalupe Estuary: a study of the influence of freshwater inflows. LP-107. Tex. Dept. Water Res., Austin, Texas. 320p.

